SONY®

VIDEO COMMUNICATION SYSTEM

PCS-G70
PCS-G70P
PCS-G50
PCS-G50P

SYSTEM INTEGRATION MANUAL
3rd Edition
Version 2.6

⚠警告

このマニュアルは，サービス専用です。

お客様が，このマニュアルに記載された設置や保守，点検，修理などを行うと感電や火災，人身事故につながることがあります。

危険をさけるため，サービストレーニングを受けた技術者のみご使用ください。

⚠ WARNING

This manual is intended for qualified service personnel only.

To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠ WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.

Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠ AVERTISSEMENT

Ce manuel est destiné uniquement aux personnes compétentes en charge de l'entretien. Afin de réduire les risques de décharge électrique, d'incendie ou de blessure n'effectuer que les réparations indiquées dans le mode d'emploi à moins d'être qualifié pour en effectuer d'autres. Pour toute réparation faire appel à une personne compétente uniquement.

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Section 1
Installation

1-1. Caution on Installation

1-1-1. Videoconferencing Room Layout

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

Shooting range of camera unit

▒▒▒ represents the shooting area of the camera unit 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 the videoconference room.

Top view
(horizontal range at maximum zoom-out)

1.5 m (4.92 ft)
100°   100°
4 m (13.12 ft)
65°
5.1 m (16.73 ft)

Side view
(vertical range at maximum zoom-out)

3.1 m (10.17 ft)
25°
42°
25°
4 m (13.12 ft)
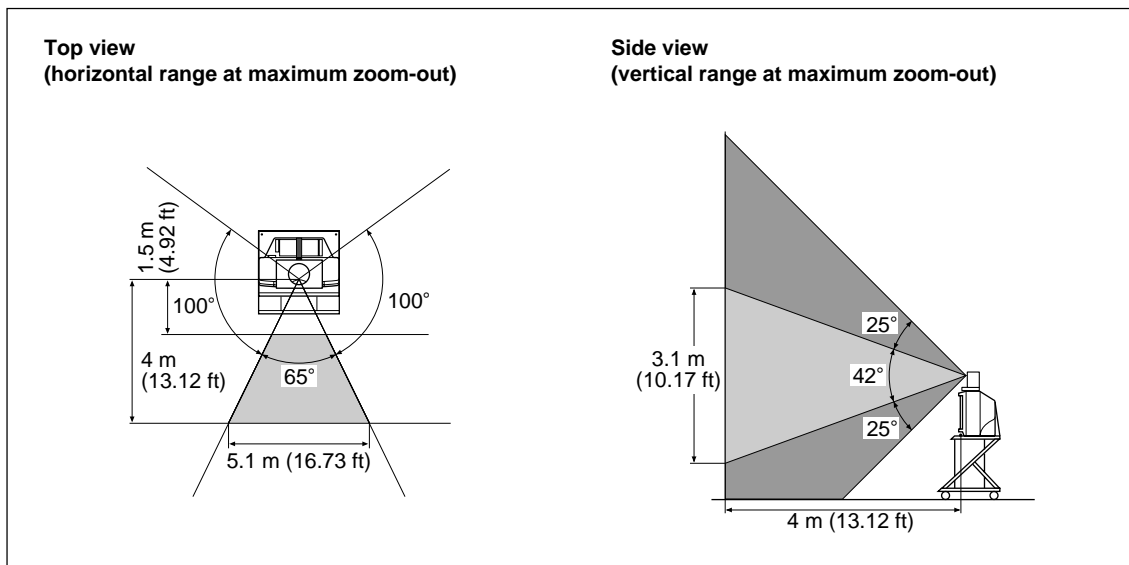
Directional range and layout examples of microphone

Extension microphone (PCS-A300 or PCSA-A3)

PCS-A300 or PCSA-A3

120° 0.5 to 1 m

Camera unit

Extension microphone (PCS-A1)

PCS-A1

Camera unit

0.5 to 1.2 m
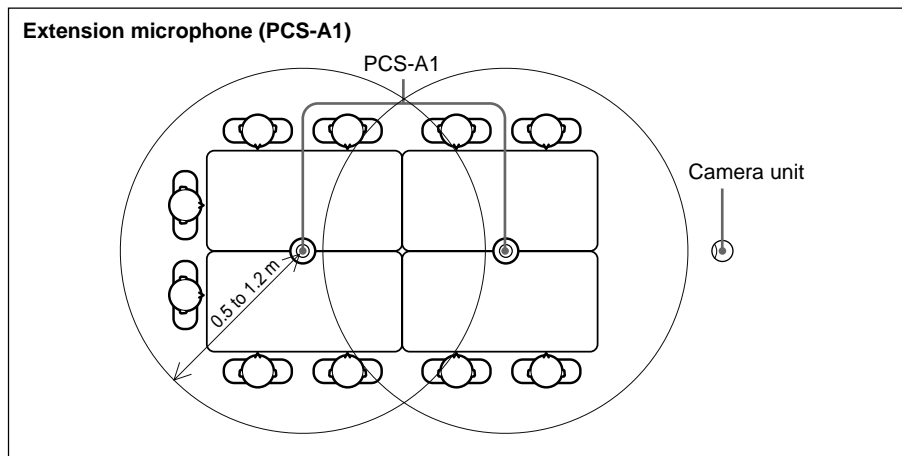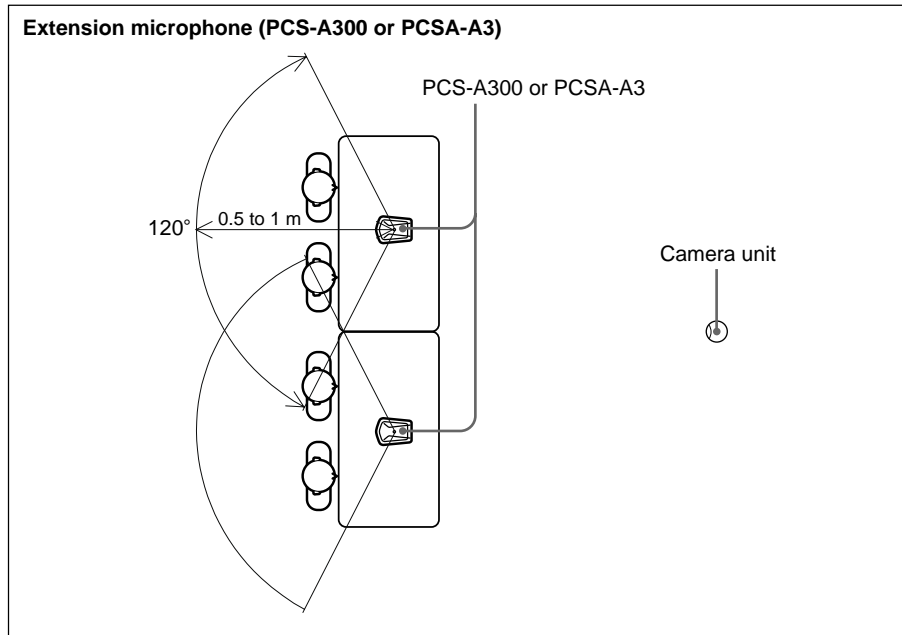
Microphone layout example using a communication transducer

Camera unit

CTE-600
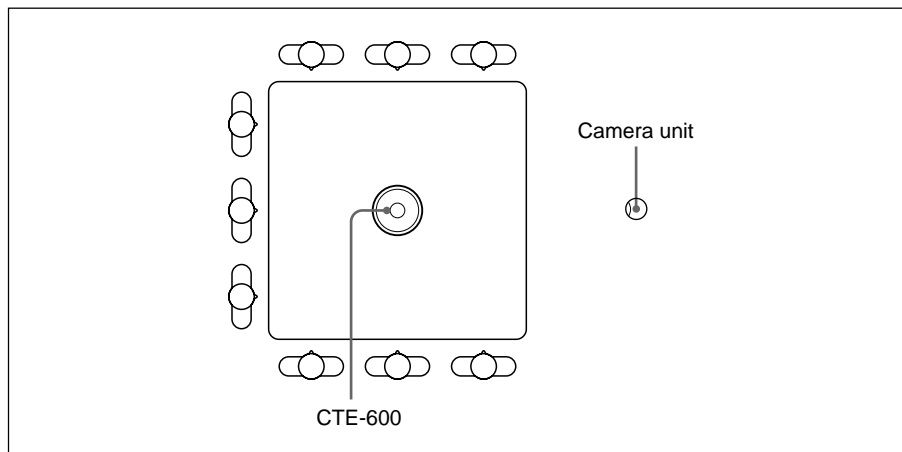
Layout example using cancelling microphone

Echo cancelling microphone (PCS-A7)

PCS-G70/G70P/G50/G50P

PCSA-A7
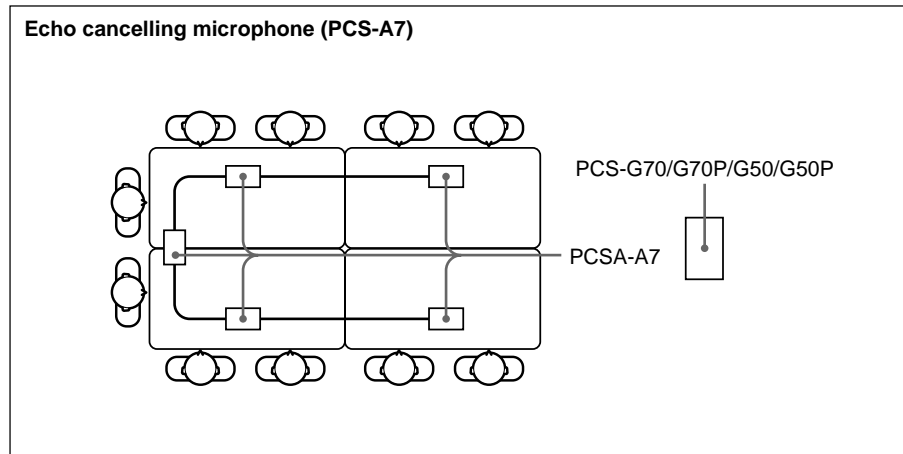
1-1-2. Operating Environment

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.
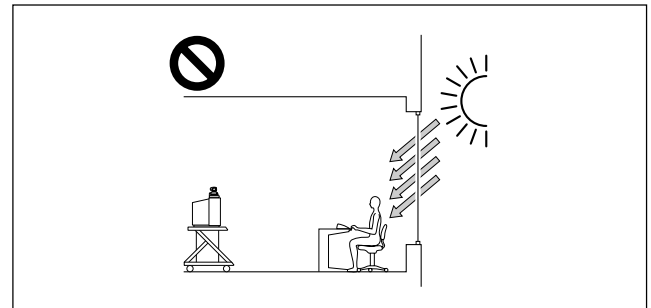
Adjust room lighting so that it falls on the participants. Avoid direct light on the TV monitor. Light intensity on faces should be about 300 lux or more.
If an inverter type or brightness-adjustable type of fluorescent lamp is used, the sensitivity of the remote commander may deteriorate.
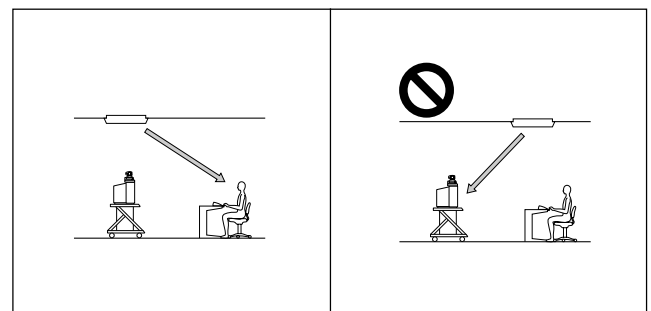
1-2. Flowchart of Installation

```
┌─────────────────────────────────┐
│          Place used             │   <Refer to "1-1. Caution on Installation" on page 1-1.>
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│          Unpacking              │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│   Check of supplied accessories │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│  Power and cable connection, and│   <Refer to "1-3. System Connections" on page 1-5.>
│  preparation                    │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│  Start the power of the system and│  <Refer to "1-4. Initialization" on page 1-9.>
│  initialize.                    │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│  Initialize the related block.  │   <Refer to "1-5. System Setting" on page 1-17.>
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│             End                 │
└─────────────────────────────────┘
```
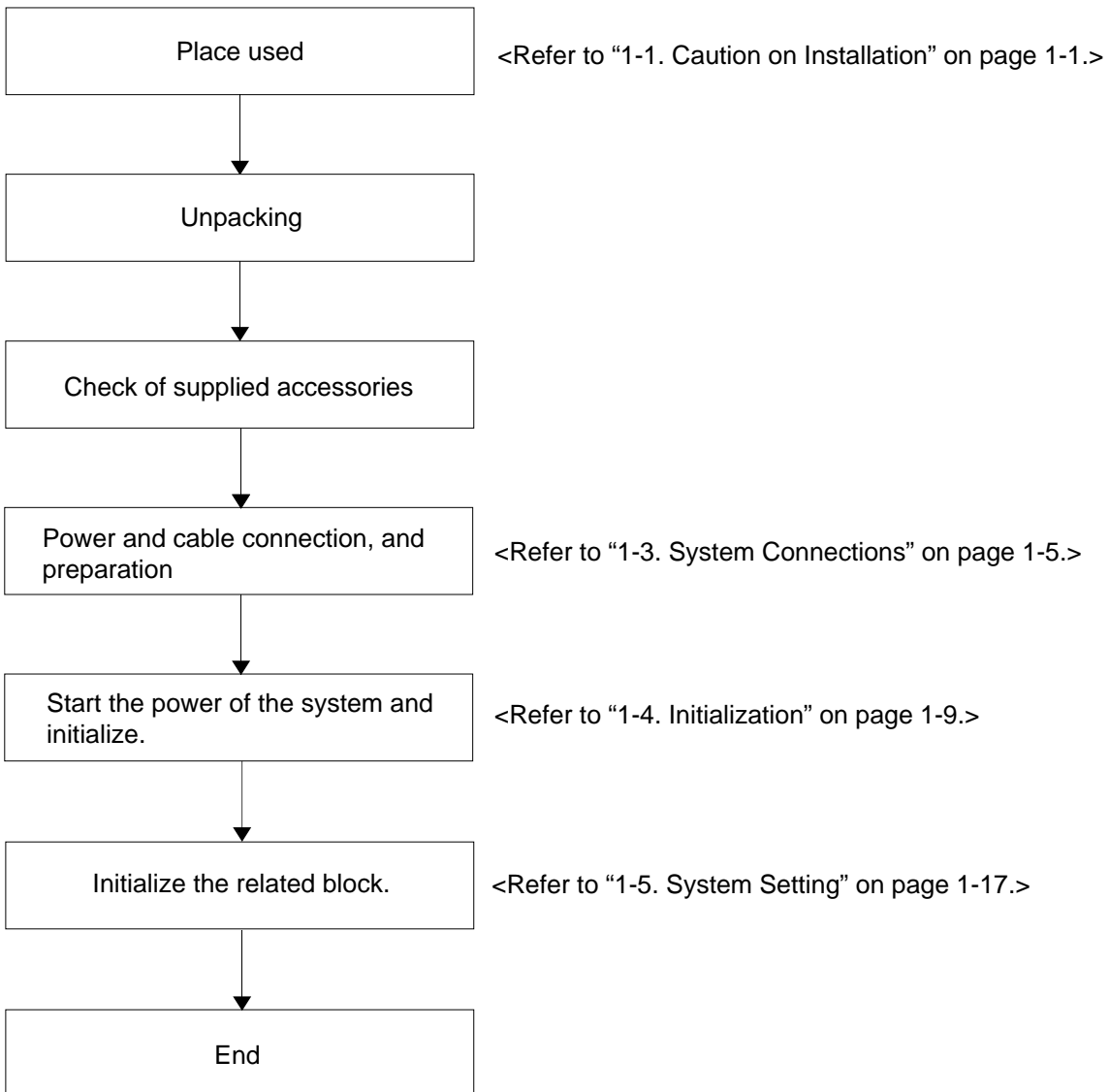
1-3. System Connections

1-3-1. PCS-G70/G70P

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 with the power on. Doing so may damage the camera unit or communication terminal.
・ 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.

1. When used in LAN (100BASE-TX/10BASE-T) (with one Camera and one Monitor)

Notes

・ If the system uses only one camera, be sure to connect it to the MAIN CAMERA connector.
・ The AUDIO OUT (MIXED) jack is used to make an audio recording of a conference. This is not used during regular conferences.

2. When used in ISDN (with one Camera and one Monitor)

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 ISDN unit.
- 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.

Notes

- If the system uses only one camera, be sure to connect it to the MAIN CAMERA connector.
- The AUDIO OUT (MIXED) jack is used to make an audio recording of a conference. This is not used during regular conferences.
- PCS-B384, PCS-B768 or PCSA-PRI is available for an ISDN unit.

1-3-2. PCS-G50/G50P

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 with the power on. Doing so may damage the camera unit or communication terminal.
· 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.

1. When used in LAN (100BASE-TX/10BASE-T) (with one Camera and one Monitor)

Note

The AUDIO OUT (MIXED) jack is used to make an audio recording of a conference. This is not used during regular conferences.

2. When used in ISDN (with one Camera and one Monitor)

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 ISDN unit.

• 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.

Note

The AUDIO OUT (MIXED) jack is used to make an audio recording of a conference. This is not used during regular conferences.

1-4. Initialization

1-4-1. Inserting Batteries into the Remote Commander

Most of the operations with the video communication system can be controlled with the supplied remote commander.

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.

Notes

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 the remote commander is not used for a long period of time, remove the batteries from it.

· If battery leakage occurs, clean the battery compartment and replace all the batteries with new ones.

PCSA-RG1

1. Remove the battery compartment cover.
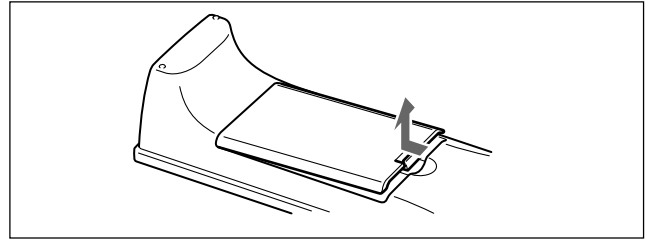
2. Insert two size AA (R6) batteries (supplied) with correct polarities into the battery compartment.
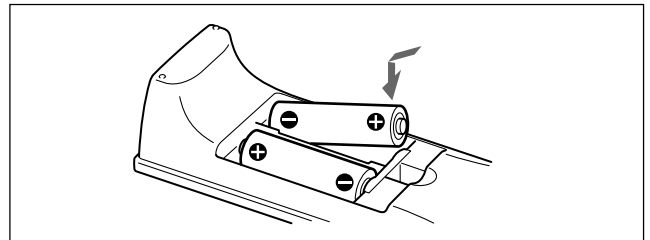
3. Attach the cover.

PCS-RG70

1. Remove the battery compartment cover.
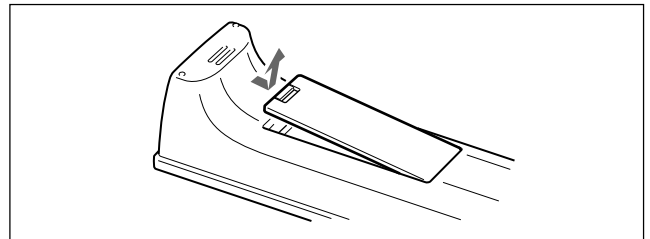
2. Insert two size AAA (R03) batteries (supplied) with correct polarities into the battery compartment.
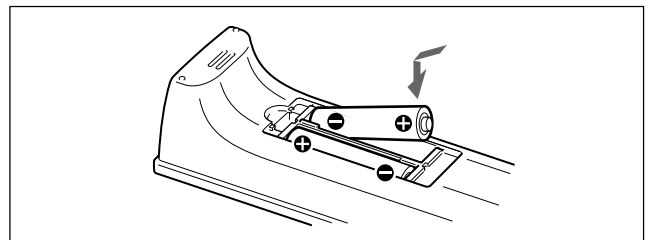
3. Attach the cover.

1-4-2. Turning On/Off the TV Monitor Together with the Communication Terminal

If a Sony TV monitor is used, insert the IR repeater under the remote sensor of the TV monitor. Once the IR repeater is set, the TV monitor will turn on or go to standby together with the communication terminal by pressing the I/⏻ button on the supplied remote commander.

to IR OUT

Remote sensor

IR repeater (supplied)
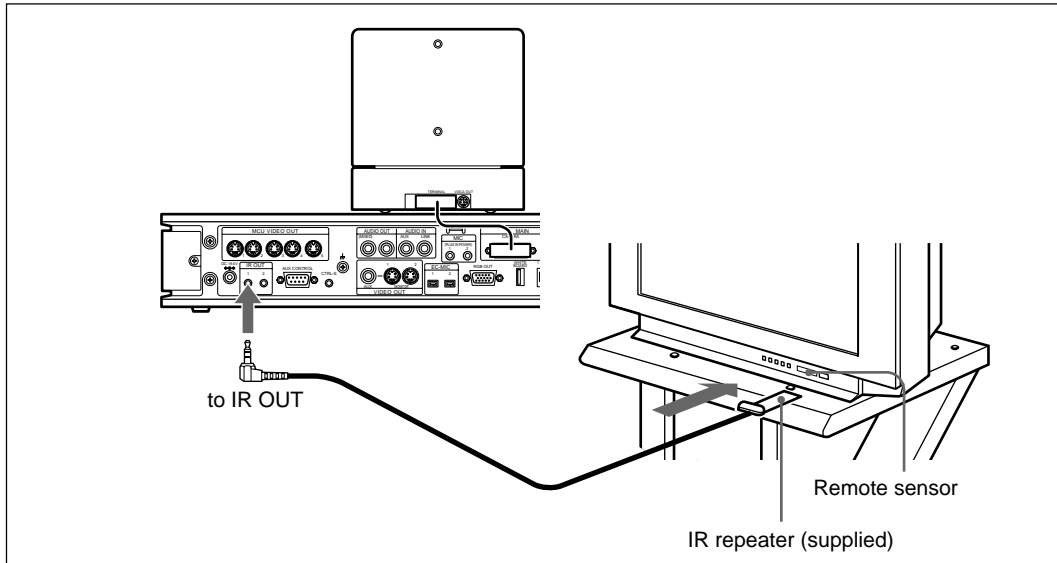
Using a remote control receiver

The remote control receiver of this unit is located at the bottom of a camera unit (PCS-CG70/CG70P). However, a remote control receiver can be installed in the optimum place using a supplied remote control unit. Use a remote control unit in the following cases.
・ When it is difficult to perform operation with the camera unit and monitor television kept apart and
・ When an obstacle exists around a camera unit and a remote control signal cannot be sent

Notes

・ The control receiver of a camera unit does not operate when a remote control unit is connected.
・ Install a remote control unit so that mark R is put in the front position (control receiver surface).
・ Attach a supplied film to the control receiver surface for improvement when it is difficult to receive a remote control signal because of the influence of an inverter fluorescent lamp. (In this case, be sure to install a remote control unit in the vertical direction.)

To CTRL-S

Remote sensor
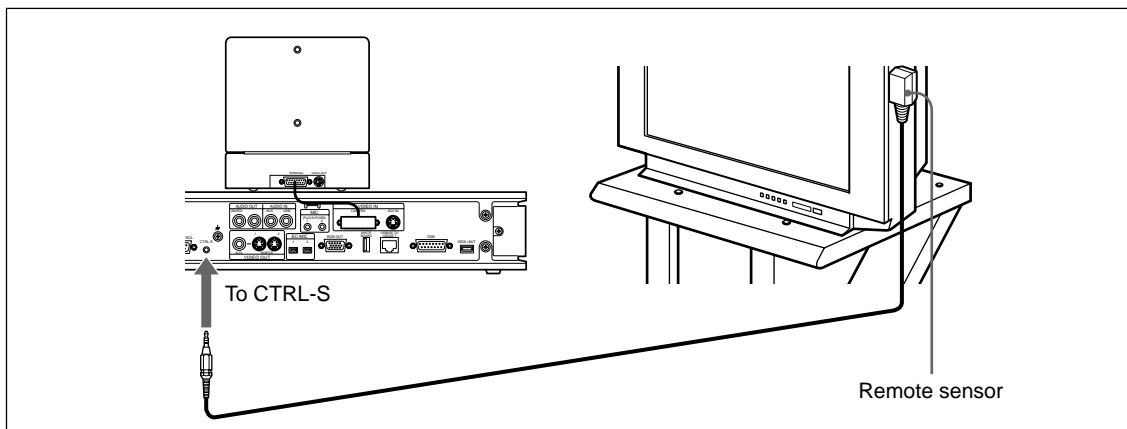
1-4-3. When the Power is First Turned On after Installation

Turning On

Turn on the communication terminal in the following procedure.

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, then set the power switch on the right side to the on position (I).

POWER indicators
(Light green.)
Power switch
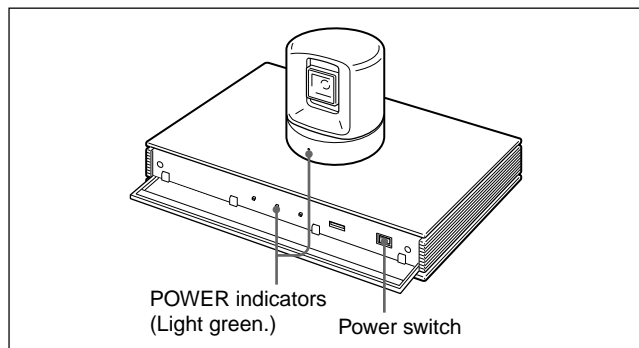
The communication terminal turns on after a while. Three indicators on the front of the communication terminal and the POWER indicator on the camera light, then only the POWER indicators on both units remain on in green.

Notes

- After the power is turned on, the camera unit moves automatically for trial operation. Be careful not to catch your finger.
- If the camera is obstructed forcefully while it is moving, it may not resume moving or output a signal to the communication terminal. In this case, turn off the terminal, and turn it on again.
- A Sony TV monitor may not turn on if the "IR Repeater Mode" setting does not meet the TV monitor specifications. In this case, turn on the TV monitor manually or by using its remote controller, perform the setup wizard of the communication terminal, and then change the "IR Repeater Mode" setting in the General Setup menu.

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

When the power is first turned on after installation, the wizard for initialization is displayed if self-diagnosis is completed. Register according to the wizard.
The items set according to the wizard can also be later changed on the menu screen.

Notes

- The wizard for initialization is also displayed when the ISDN unit is newly installed after system installation. Similarly, register according to the wizard in this case.
- When the communication terminal and the camera are separately installed, point the remote commander to the camera unit for operations.
- Press the button with the remote controller put toward the remote sensor of the remote control receiver when a remote control receiver is connected.

1. Use the ↑ or ↓ button on the remote controller to select the language displayed in the menus or messages.
   Language:
   Select one of the desired language from English, French, German, Japanese, Spanish, Italian, Simplified Chinese, Portuguese, Korean, Dutch, Swedish, Danish, Finnish, Polish, Russian, Arabic, or Thai.
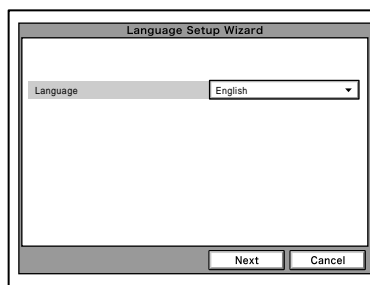
2. Select "Next" using the ↑, ↓, ←, or → button on the remote commander, then press the PUSH ENTER button.
   The Monitor Setup Wizard is displayed.

3. Set a monitor that outputs a signal.

Note

No menus other than the selected monitor(s) will be displayed.
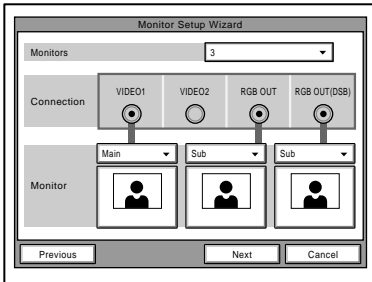
Monitors:

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:

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.

4. Select "Next" using the ✦, ✦, ✦, or ✦ button on the remote commander, then press the PUSH ENTER button.

The ISDN Setup Wizard is displayed when the ISDN unit is connected.

When the ISDN unit is not connected, the LAN setting wizard is displayed. Proceed to step 11.

5. Set the country/region and protocol in which an ISDN line is used.
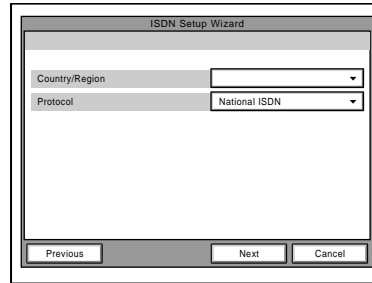
Country/Region:

Select the country or region in which this system is used.

Protocol:

Select the protocol of the ISDN line used.

6. Select "Next" using the ✦, ✦, ✦, or ✦ button on the remote commander, then press the PUSH ENTER button.

7. Enter the telephone number(s) of the ISDN line used by the system.
When the ISDN unit PCSA-B384S/B768S is used, enter the same number in the text boxes A1 and A2 for one line (except for the U.S.A. and Canada).

Area Code:
Enter the area code.
Do not enter the first "0" of an area code.
Local Number:
Enter the telephone number.

Notes

• By pressing the PUSH ENTER button with a blank text box selected, the content in the text box above will be copied to the selected text box.
• When the ISDN unit PCSA-B384S is used to connect two or three ISDN lines, enter the telephone numbers in the text boxes B1 to C2.
• When the ISDN unit PCSA-B768S is used to connect two to six ISDN lines, enter the telephone numbers in the text boxes B1 to F2. To open the menu with the text boxes D1 to F2, select "Next" and press the PUSH ENTER button.
• When the ISDN unit PCSA-PRI∗ is used, Ch1 to Ch23 (T1), or Ch1 to Ch30 (E1) are displayed. Enter the telephone numbers according to the number of channels to be used.

8. Select "Next" using the ▲, ▼, ◄, or ► button on the remote commander, then press the PUSH ENTER button.

9. Enter the sub-address(es).
Only numeric characters are available for a sub-address.
When the ISDN unit PCS-B384/B768 or PCSA-B384S/B768S is used, enter the same number in the text boxes A1 and A2 for one line.

Notes

• When the ISDN unit PCSA-B384S is used to connect two or three ISDN lines, enter sub-addresses in the text boxes B1 to C2.
• When the ISDN unit PCSA-B768S is used to connect two to six ISDN lines, enter sub-addresses in the text boxes B1 to F2. To open the menu with the text boxes D1 to F2, select "Next" and press the PUSH ENTER button.
• When the ISDN unit PCSA-PRI∗ is used, Ch1 to Ch23 (T1), or Ch1 to Ch30 (E1) are displayed. Enter the sub-addresses according to the number of channels to be used.

10. Select "Next" using the ▲, ▼, ◄, or ► button on the remote commander, then press the PUSH ENTER button.
The LAN Setup Wizard is then displayed.

Note

When the LAN is not used, select "Next" and proceed to step 13.

11. Set the following items on LAN.
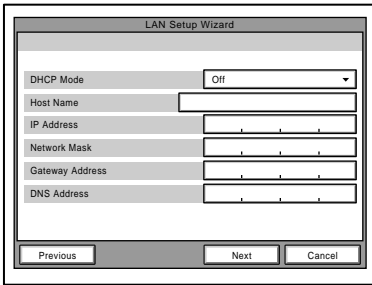
DHCP Mode:

Sets DHCP (Dynamic Host Configuration Protocol).

AUTO: Automatically assigns an IP address, net-work mask, gateway address, and DNS address.

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

Host Name:

Enter a host name.

IP Address:

Enter an IP address for the communication terminal.

Network Mask:

Enter a network mask.

Gateway Address:

Enter a default gateway address.

DNS Address:

Enter a DNS (Domain Name System) server address.

Notes

· If the "DHCP Mode" has been set to "AUTO", the automatically assigned IP address can be confirmed in the launcher menu or information menu.

· If you do not know how to setup the LAN, check with a network administrator for connecting-network.

12. Select "Next" using the ↑, ↓, ←, or → button on the remote commander, then press the PUSH ENTER button.

A confirmation message is then displayed.

Notes

· **To stop the setting**

Select "Cancel" using the ↑, ↓, ←, or → button on the remote commander, then press the PUSH ENTER button.

· **To return to the preceding wizard**

Select "Return" using the ↑, ↓, ←, or → button on the remote commander, then press the PUSH ENTER button.

13. Select "Save" using the ↑, ↓, ←, or → button on the remote commander, then press the PUSH ENTER button.

The settings are saved, and then the launcher menu will be displayed.
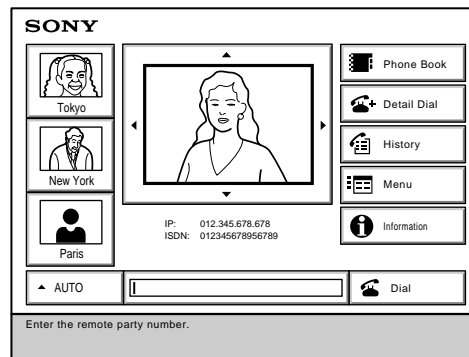
Launcher menu

Note

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 recov-ered, consult a Sony dealer.

Standby Mode Function

To save power, the communication terminal will enter
standby mode if it is not operated for a specified period of
time.
When the communication terminal is in standby mode, the
POWER indicator lights in orange.
Once the communication terminal receives a call, the
standby mode is automatically released.

To release the standby mode

Press the I/⏻ button on the remote commander.

To specify the standby time

Specify the time that you want the system to remain on
before entering the standby mode (1 to 99 minutes) using
"Standby Time" in the General Setup menu. To make the
system not enter the standby mode, set "Standby Mode" in
the General Setup menu to "Off".

> **Notes**

- The POWER indicator on the camera goes off when the
  system enters standby mode.
- If the IR repeater is installed under the remote sensor of
  a SONY TV monitor, the TV monitor will enter standby
  mode together with the communication terminal.

Setting the Video Communication System to Standby Mode

The video communication system can be turned on with
the I/⏻ button on the remote commander when it is in
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. Select "OK" with the ◆ or ◆ button on the remote
   commander, then press the PUSH ENTER button.
   Alternatively, press the I/⏻ button on the remote
   commander.

POWER indicator
(Not lit.)

POWER indicator
(Lights orange.)

I/⏻ button

◆/◆ buttons and PUSH ENTER button
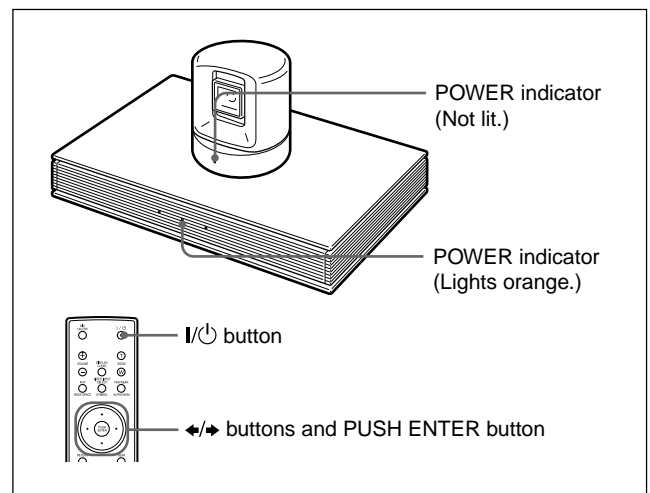
The video communication system enters standby mode
and the POWER indicator on the communication
terminal lights in orange. The POWER indicator on
the camera unit goes out.
If the IR repeater is installed under the remote sensor
of a Sony TV monitor, the TV monitor will go into
standby together with the video communication
system.

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.

Turning Off

1. Open the front panel of the communication terminal,
   and then slide the power switch on the right to the off
   position (◯).
2. Turn off the power of other equipment used for the
   videoconference.

1-4-4. Adjust the Volume of TV Monitor

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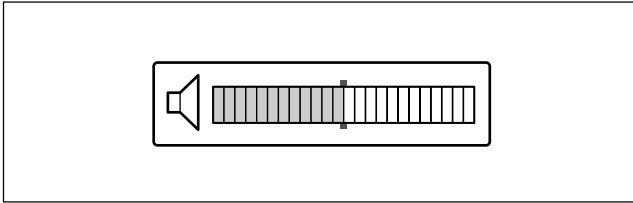
2. Adjust the volume on the TV monitor so that you can properly hear a remote party speaking.

To adjust the picture on the TV monitor

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

Notes

· For details on picture adjustments, refer to the operating instructions of the TV monitor.
· 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.

1-5. System Setting

1-5-1. Menu Configuration

Launcher menu

Phone Book/Private Phone Book

Detail Dial

History

Still Image menu

Setup Menu

Camera menu

Information

Memory Stick menu

Setup menu (for Administrator)

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
▭	Setup menu
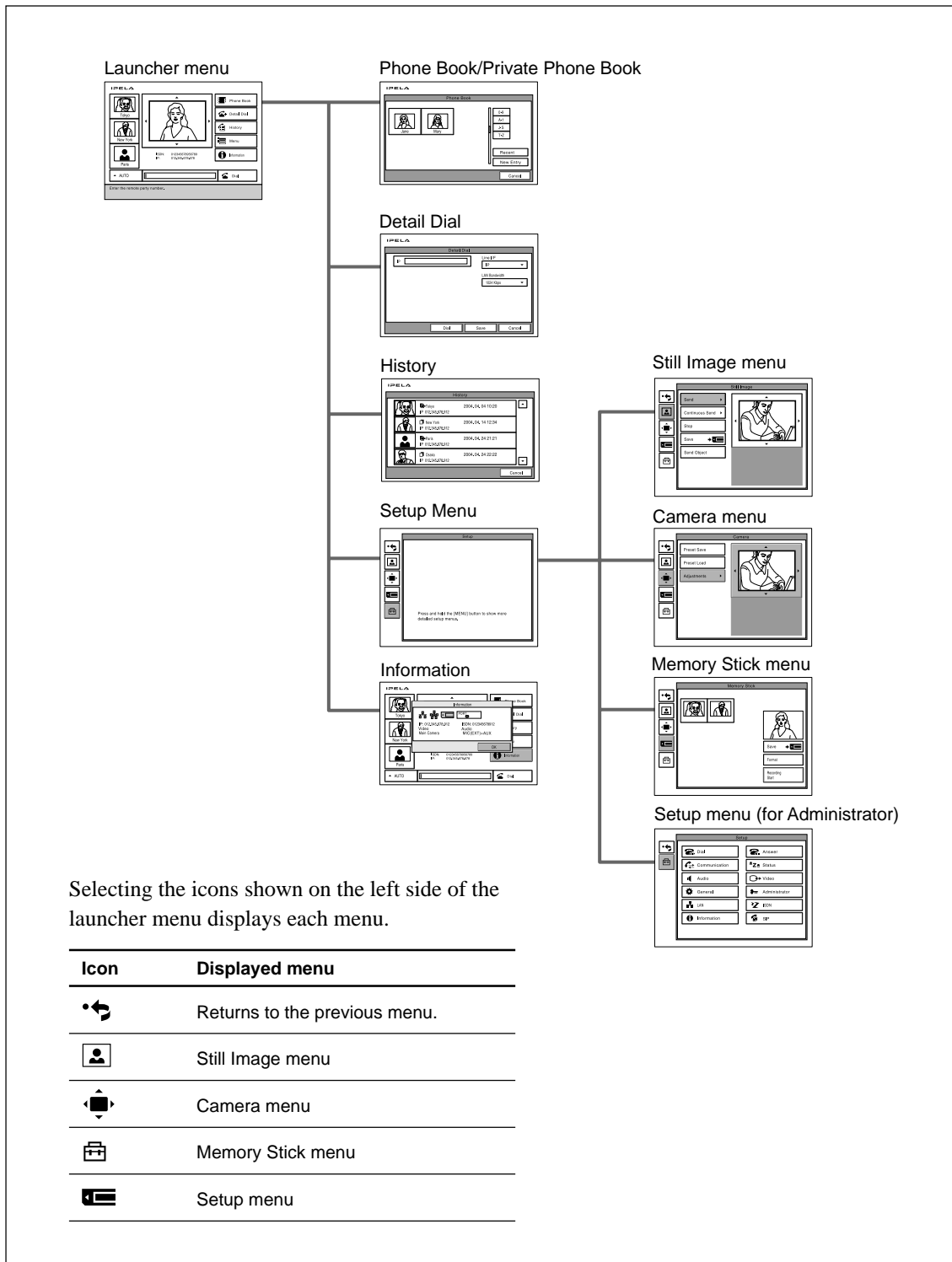
1-5-2. System Setting Table

1. PCS-G70/G70P

Menu	Page	Item	Description	Default
Dial Setup	1/2	Line I/F	Select line interface [IP, SIP, ISDN, or ISDN (Telephone)] used.	IP
		Bonding	Select bonding mode in which remaining lines can also be connected by only dialing one line when multiple ISDN lines are used. Select "On" when connecting a line in the bonding mode. Select "Auto" when automatically adjusting a line to remote party.	Auto
		Telephone Mode	Select audio compression system during voice meeting.	Auto
		More Options Enable	Set to "On" when you want to set items in the dial setup menu for each dial list. Set to "Off" when you do not.	Off
		User Name Input	Set to "On" when recording user name in communication log before communication. Set to "Off" when not recording it.	Off
	2/2	Prefix	Set prefix number used when connecting using an ISDN line.	Prefix-None
		Prefix-A	Set ISDN prefix (dial number).	Blank
		Prefix-B		
		Prefix-C		
		Select LAN Prefix	Set "Enabled" when using prefix for connection using a LAN line. Set "Disabled" when not using it.	Disabled
		LAN Prefix	Set LAN prefix (dial number).	Blank
Answer Setup	1/1	Auto Answer	Select "On" to connect automatically according to a call. Select "Off" to confirm connection.	On
		ISDN MSN	Select "On" when using multiple subscriber numbers during connection (answering) with an ISDN line. Select "Off" when not using them.	Off
		Mic on Answer	Select "On" to enable microphone when answering a call. Select "Off" to disable it.	On
		Reject Answer [*1]	Select "On" to reject connection when a call is received during conference. Select "Off" to make connection.	Off
Communication Setup	1/5	Individual Setting	Select "On" to set communication mode individually for dialing, answering, and for multipoint [*1]. Select "Off" to set it collectively.	Off
		Number of Lines	Select the number of ISDN lines used for ISDN communication from 1B (64 K) up to 30B (1920 K).	30B
		LAN Bandwidth	Select bandwidth (bit rate) when communicating via a LAN line.	1024 Kbps
	2/5	Video Mode	Select video coding format.	Auto
		Interlace Mode [*2]	Select "On" when using interlace SIF mode. Select "Off" when not using it.	Auto
		4CIF Mode [*2]	Select "On" when using 4CIF mode. Select "Off" when not using it.	Auto
		Video Frame	Select maximum number of video transmission frames (15 fps or 30 fps).	Auto
		Audio Mode	Select audio coding format.	Auto
		Restrict	Select transmission rate (Auto or 56K) when connecting using an ISDN line. Two rates (64 Kbps and 56 Kbps) are used in some countries (USA, etc.) and regions.	Auto

∗1: Setting is added when H.320 or H.323 MCU Software is installed.
∗2: These items are automatically set when the Video Mode setting is set to "Auto".

(Continued)

(PCS-G70/G70P)

Menu	Page	Item	Description	Default
Communication Setup	3/5	Far End Camera Control	Select "On" when controlling camera on the remote party. Select "Off" when not controlling it.	On
		T.120 Data	Select "On" when having data conference conforming to T.120 using NetMeeting. Select "Off" when not having it.	Off
		H.239 Presentation	Select "On" when using presentation function conforming to H.239. Select "Off" when not using it.	On
		H.239 Live	Select "On" when using dual-video function conforming to H.239. Select "Off" when not using it.	On
	4/5	H.239 Ratio	In the bandwidth that is shared by the camera images and H.239 presentation data, select the ratio of the bandwidth to be used for H.239 presentation data transmission from 1/3, 1/2 or 2/3.	2/3
	5/5∗3	Multipoint Mode	Select "On" when having multipoint videoconference. Select "Auto" when switching automatically.	Auto
		Broadcast Mode	Select "Split" when displaying video of all connected terminals on the split window. Select "Voice Activate" when switching video to be distributed by audio detection.	Split
		Split	Select "Automatic" to switch between 4-split window (for 1 to 3 terminals) and 6-split window (for 4 to 6 terminals), or "Six-screen Mosaic" to always display 6-split window.	Automatic
		Sender Screen	Select monitor video displayed on sending terminals during multipoint videoconference.	Full Screen
		Submonitor Output	Allows you to select the video to be displayed on the submonitor from "Local picture" or "Speaker picture" during a multipoint videoconference with multiple monitors connected.	Local picture
Status			Display current communication status. ISDN line status, LAN line status, and LAN communication status are also displayed according to the line interface used.	
Audio Setup	1/2	Input Select	Select the audio input (MIC, AUX, or MIC + AUX).	MIC
		Mic Select	Select microphone to be used (MIC, DSB MIC, LINE or EC-MIC).	MIC
		CTE	Select whether to use the communication transducer CTE-600 and select input connector to be connected. Select "Off" when not using CTE-600. Select "LINE" when inputting to LINE connector of the communication terminal, and select "DSB AUX IN" when inputting to AUX IN connector of the data solution box. **Note** When CTE-600 is set to be used, "Input Select", "Mic Select", and "Echo Canceller" are automatically determined and cannot be changed.	Off
		Echo Canceller	Select "On" when using an echo canceller. Select "Off" when not using it.	On
		Lip Sync	Select "On" when using a lip sync function that synchronizes the lip motion and voice of a speaker. Select "Off" when not using it.	Off
		Recording Mute	Select "On" when outputting audio signal to AUDIO OUT (MIXED) connector. Select "Off" when not outputting it.	On

∗3: Setting is added when H.320 or H.323 MCU Software is installed. (Continued)

(PCS-G70/G70P)

Menu	Page	Item 1	Page	Item 2	Description	Default
Audio Setup	2/2	Beep Sound			Select "On" to generate beep sound from pressing the remote commander button. Select "Off" not to generate.	On
		Sound Effect			Select "On" to generate effect sound at system start up and conference start/end. Select "Off" not to generate.	On
		Dial Tone			Select "On" to generate ring-back tone or busy tone during dialing. Select "Off" not to generate.	On
		Ringer Tone			Select "On" to generate ringer tone with an incoming call. Select "Off" not to generate	On
Video Setup	1/1	Video Input	1/1	Dual Video	Select "On" when distributing 2-channel moving picture simultaneously from the beginning of conference. Select "Off" when not distributing it. **Note** This function is not available in the system version 1.00 to 1.02.	Off
				Split	Select "Vertical or "Horizontal" when splitting the screen into two. Select "Off" when not splitting it.	Off
				MAIN	Select video picture of video input 1.	CAMERA
				SUB	Select video picture of video input 2.	CAMERA
		Custom Input Label	1/1	Main Camera	Enter the name when "Main Camera" is selected on the video input selection window.	Blank
				IR1	Enter the name when "IR1" is selected on the video input selection window.	Blank
				AUX1	Enter the name when "AUX1" is selected on the video input selection window.	Blank
				Sub Camera	Enter the name when "Sub Camera" is selected on the video input selection window.	Blank
				IR2	Enter the name when "IR2" is selected on the video input selection window.	Blank
				AUX2	Enter the name when "AUX2" is selected on the video input selection window.	Blank
		Monitor Out	1/1	Monitors	Select the number of monitors connected to the communication terminal.	1
				Connection	Select connectors connecting to the monitors. You can select them up to the number specified in "Monitors".	VIDEO1
				Monitor	Select "Main" or "Sub" for connected monitors to be used as. Only one "Main" monitor can be selected. When 1 or 3 monitors are used, VIDEO1 is always "Main" monitor.	Main
General Setup	1/1	Device Setup	1/2	Terminal Name	Enter terminal name to be notified to MCU.	PCS-G70
				Standby Mode	Select "On" when using standby mode. Select "Off" when not using it.	Off
				Standby Time	Set the time (1 to 99 minutes) required until the unit is put into standby mode when standby mode is set to "On".	Blank
				Last Number Registration	Select "On" when registering the remote user in Phone Book after a conference ends. Select "Off" when not registering it.	On
				Control by Far End	Select "On" when receiving camera control command from the remote party. Select "Off" when not receiving it.	On

(Continued)

Menu	Page	Item 1	Page	Item 2	Description	Default
General Setup	1/1	Device Setup	2/2	Language	Select language of menu and message displayed on the screen.	English
				IR Repeater Mode	Select mode to put the monitor into standby state or to turn on power when a Sony's monitor is used. Usually, set to "MODE 1".	MODE1
				T.120 PC Address	Enter the IP address of computer used when data conference conforming to T.120 is made using NetMeeting.	Blank
				Digital Zoom	Select "On" when using Digital Zoom. Select "Off" when not using it.	Off
		1/1	Clock Set	1/1	SNTP	Select "On" when obtaining clock information from the server with SNTP. Select "Off" when not obtaining it.	Off
				Time Zone	Select the country or region where you are using the communication terminal.	Blank
				Summer Time	Select "On" during summer time. Select "Off" when not in summer time.	Off
				SNTP Server	Input the server address to obtain the clock information from.	Blank
				Clock Set	Enter the current data and time.	Blank
		1/1	Menu Screens	1/3	Time Display	Select "On" when displaying elapsed time at upper right of the screen during conference. Select "Off" when not displaying it.	On
				Display Terminal Name	Select whether to display the connected terminal name on the screen.	Show temporarily
				Character Input Help	Select "On" when displaying balloon help appearing when entering alphanumeric characters. Select "Off" when not displaying it.	On
				Number Display	Allows you to select the identification of the local system, such as the IP or SIP number, to displayed in the launcher menu.	IP
				Packet Loss Indicator	If a packet loss occurs on a network, select "On" when displaying the "Packet Loss" indicator on the display and select "Off" when not displaying it.	On
			2/3	Phone Book Button	Select "On" when displaying Phone Book button on the launcher screen. Select "Off" when not displaying it.	On
				Detail Dial Button	Select "On" when displaying Detailed Dial button on the launcher screen. Select "Off" when not displaying them.	On
				Menu Button	Select "On" when displaying Menu button on the launcher screen. Select "Off" when not displaying it.	On
				Information Button	Select "On" when displaying Information button on the launcher screen. Select "Off" when not displaying it.	On
				History Button	Select "On" when displaying History button on the launcher screen. Select "Off" when not displaying it.	On
			3/3	Direct Phone Book Button	Select "On" when displaying Direct Phone Book button on the launcher screen. Select "Off" when not displaying it.	On
				Direct Dial	Select "On" when displaying Direct Dial text box on the launcher screen. Select "Off" when not displaying it.	On
				Guide	Select "On" when displaying the guide at the bottom of the launcher screen. Select "Off" when not displaying it.	On
				Background	Selects the background pattern of a menu.	Pattern 1

(Continued)

(PCS-G70/G70P)

Menu	Page	Item 1	Page	Item 2	Description	Default
General Setup	1/1	Whiteboard	1/1	Whiteboard Attachment	Select whether to attach Whiteboard "mimio-Xi" vertically or horizontally.	Vertical
				Whiteboard Size	Select the size (height × width) of Whiteboard used.	3'0" × 4'0"
				Whiteboard Size Measurement	Select whether to show the Whiteboard size in inches or meters.	Inches
	1/1	Network Camera	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.	On
				Bit Rate	Allows you to select the bit rate for video sent from network cameras. This bit rate does not include the audio transfer rate. Auto: Give priority to the setting on the network camera. 32 to 2048 kbps: Connect to network cameras at the specified bit rate. **Notes** • When connecting network cameras at H.264, the bit rates from 32 kbps to 1536kbps are selectable. If the rate 2048 kbps is selected, it will be changed to 1536 kbps automatically. • When connecting network cameras at MPEG4, the bit rates from 64 kbps to 2048 kbps are selectable. If you set the rate to 32 kbps, it will be changed to 64 kbps automatically.	Auto
				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: (In case of connecting to NTSC cameras) Send pictures at a maximum rate of 30 frames per second. (In case of connecting to PAL cameras) Send pictures at a maximum rate of 25 frames per second. **Note** Even if 30fps is selected, the rate is automatically set to 15fps (NTSC) or 12fps (PAL) if the mode is H.264 and the transmission mode is TCP 15fps: (In case of connecting to NTSC cameras) Send pictures at a maximum rate of 15 frames per second. (In case of connecting to PAL cameras) Send pictures at a maximum rate of 12 frames per second.	Auto
				Mode	Allows you to select the compression format for video sent from network cameras. Auto: Give priority to the setting on the network camera. **Notes** • If the setting on the network camera is JPEG single codec, connection is made by automatically changing it to H.264 single codec. • If the setting on the network camera is dual codec, connection is made by automatically changing it to H.264 single codec. H.264: Send video based on the H.264 standard. MPEG4: Send video based on the MPEG4 standard.	Auto

(Continued)

(PCS-G70/G70P)

Menu	Page	Item 1	Page	Item 2	Description	Default
General Setup	1/1	Network Camera	1/1	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. **Note** • If the setting on the network camera is 640 × 480 (VGA), connection is made by automatically changing it to the image size 320 × 240 (QVGA). 160 × 120 (QQVGA): Connect to network cameras at QQVGA image size (160 pixels × 120 lines). 320 × 240 (QVGA): Connect to network cameras at QVGA (320 pixels × 240 lines).	Auto
Administrator Setup	1/1	Password	1/3	Administrator Password	Set the administrator password. Administrator can modify the setup menu (for administrator) and phone book menu.	Blank
				Phone Book Modification Password	Set the password used to modify the phone book.	Blank
				Save Settings Password	Set the password used to save various settings.	Blank
				Remote Access Password	Set the password used to access the system through the Web browser. Access is available with a password for administrator or for superuser.	Blank
				Streaming Password	Set the password required when browsing the streaming-distributed conference.	Blank
				Network Camera Password	Set the password used to access the network camera list.	Blank
			2/3	Dial Setup	Select "Enable" when password is required to save the dial setup settings. Select "Disable" when it is not required.	Enable
				Answer Setup	Select "Enable" when password is required to save the answer setup settings. Select "Disable" when it is not required.	Enable
				Transmission Mode	Select "Enable" when password is required to save the communication setup settings. Select "Disable" when it is not required.	Enable
				Audio Setup	Select "Enable" when password is required to save the audio setup settings. Select "Disable" when it is not required.	Enable
				Video Setup	Select "Enable" when password is required to save the video setup settings. Select "Disable" when it is not required.	Enable
				General Setup	Select "Enable" when password is required to save the general setup settings. Select "Disable" when it is not required.	Enable
			3/3	LAN Setup	Select "Enable" when password is required to save the LAN setup settings. Select "Disable" when it is not required.	Enable
				ISDN Setup	Select "Enable" when password is required to save the ISDN setup settings. Select "Disable" when it is not required.	Enable
				Encryption Setup	Select "Enable" when password is required to save the Encryption setup settings. Select "Disable" when it is not required.	Enable
				SIP Setup	Select "Enable" when password is required to save the SIP setup settings. Select "Disable" when it is not required.	Enable
				Shared Phone Book	When saving the Shared Phone Book, select "Enable" when requiring the password to save settings and select "Disable" when not requiring it.	Enable

(Continued)

(PCS-G70/G70P)

Menu	Page	Item 1	Page	Item 2	Description	Default
Administrator Setup	1/1	Phone Book	1/3	Save Phone Book	Save phone book data in Memory Stick. Memory Stick must be inserted in the communication terminal. When another data is already saved in the Memory Stick, it is overwritten.	
				Load Phone Book	Load phone book data saved in Memory Stick to the communication terminal. Memory Stick must be inserted in the communication terminal. When phone book data is already registered in the communication terminal, it is overwritten.	
				Clear Phone Book	Delete phone book data registered in the communication terminal.	
				Save Network Camera List	Allows you to overwrite and save the data for network camera lists onto a "Memory Stick".	
				Load Network Camera List	Allows you to load the data for network camera lists from a "Memory Stick". The current network camera list on the system is then overwritten.	
				Clear Network Camera List	Allows you to delete the network camera lists on the system.	
			2/3	Auto Dialing	Select whether to automatically dial to a person in the list specified by private phone book created in Memory Stick when Memory Stick is inserted.	On
				Create Private Phone Book	Create a new private phone book in Memory Stick. Memory Stick must be inserted in the communication terminal.	
				Delete Private Phone Book	Delete private phone book saved in Memory Stick. Memory Stick must be inserted in the communication terminal.	
				Copy to Private Phone Book	Copy phone book list saved in the communication terminal to Memory Stick as private phone book. Memory Stick must be inserted in the communication terminal.	
			3/3	Shared Phone Book	Select "On" when using the Shared Phone Book on the server and select "Off" when not using it.	On
	1/1	Streaming/ recording	1/2	Streaming	Selects whether to enable the streaming broadcast of video and audio.	Disabled
				Recording	Selects whether to enable the recording of video/audio from a videoconference to a "Memory Stick".	Enabled
				Video	Selects the bit rate of streaming and recording video.	128Kbps
			2/2	Multicast address	Enter the address to be distributed for streaming.	230.0.0.1
				Audio port number	Enter the audio port number to be distributed for streaming.	49501
				Video port number	Enter the video port number to be distributed for streaming.	49500
				Hop	Enter the hop count for streaming distribution in the range of 0 to 255.	1
	1/1	Other Settings	1/2	Web Monitor	Select "On" when allowing conference monitoring function (auto-update of JPEG images) from the Web browser. Select "Off" when inhibiting it.	Off
				Web access	Selects whether to enable access from Web or Telnet to this unit.	Enabled
				Save Setup	Saves each setting data in "Memory Stick". Each set data in "Memory Stick" is overwritten.	
				Load Setup	Loads each setting data from "Memory Stick". Each setting data of this unit is overwritten.	

(Continued)

(PCS-G70/G70P)

Menu	Page	Item 1	Page	Item 2	Description	Default
Administrator Setup	1/1	Other Settings	2/2	AMX Device Discovery	Select "On" when exporting the AMX Device Discovery information onto the network periodically and select "Off" when not exporting it.	On
				HOP	Set (enter) the HOP count (0 to 255) for the data to be exported.	Blank
LAN Setup	1/1	General	1/2	DHCP Mode	Select "Auto" when using DHCP (Dynamic Host Configuration Protocol). Select "Off" when not using it. When "Auto" is set, IP address, net mask, gateway address, and DNS address are automatically acquired.	Off
				Host Name	Enter host name.	Blank
				IP Address	Enter IP address when DHCP mode is set to "Off".	Blank
				Network Mask	Enter network mask when DHCP mode is set to "Off".	Blank
				Gateway Address	Enter gateway address when DHCP mode is set to "Off".	Blank
				DNS Address	Enter DNS (Domain Name System) server address when DHCP mode is set to "Off".	Blank
			2/2	LAN Mode	Select interface type and communication mode for LAN connection.	Auto Negotiation
		Gatekeeper	1/1	Gatekeeper Mode	Select "On" when using a gatekeeper and set to "Off" when not using it. Select "Auto" when automatically searching a gatekeeper.	Off
				Gatekeeper Address	Set IP address of gatekeeper.	Blank
				User Alias	Set user name (H.323 alias) to be registered in a gatekeeper.	Blank
				User Number	Set user number (E.164 number) to be registered in a gatekeeper.	Blank
		SNMP	1/1	SNMP Mode	Select "On" when enabling service of SNMP (Simple Network Management Protocol) agent. Select "Off" when disabling it.	Off
				Trap Destination	Set IP address of SNMP manager that transmits a trap.	Blank
				Community	Set community name that SNMP manager manages. Usually, set to "public".	public
				Description	This is the description of this device. Entered as "Videoconference Device". This cannot be changed.	Videoconference Device
				Location	Set the place where this unit is installed.	Blank
				Contact	Set information on the administrator of this unit.	Blank

(Continued)

(PCS-G70/G70P)

Menu	Page	Item 1	Page	Item 2	Description	Default
LAN Setup	1/1	PPPoE	1/2	PPPoE	Select PPPoE termination On/Off using this unit.	Off
				PPPoE User Name	Enter PPPoE connection user name (account) acquired from provider.	Blank
				PPPoE Password	Enter PPPoE connection password acquired from provider.	Blank
			2/2	Fixed IP for PPPoE	Select "On" when fixed IP address for PPPoE connection is acquired from provider. Select "Off" when automatically acquiring it for each session.	Off
				Fixed IP Address for PPPoE	Enter fixed IP address acquired from provider when "Fixed IP for PPPoE" is "On".	Blank
				PPPoE DNS	Select "Obtain automatically" when acquiring IP address of DNS server from the server during PPPoE connection. Select "Specify" when fixed IP address exists.	Obtain Automatically
				Primary DNS	Enter IP address of primary DNS server when "PPPoE DNS" is "Specify".	Blank
				Secondary DNS	Enter IP address of secondary DNS server when "PPPoE DNS" is "Specify".	Blank
	1/1	NAT/Port/ Firewall	1/2	NAT Mode	Select "On" when connecting this unit to local network using NAT (Network Address Translation). Select "Off" when not connecting it.	Off
				NAT Address	Set IP address on the global side that NAT uses.	Blank
				Port Number Used	Select whether to fix TCP port number and UDP port number. Custom: The port number that the user sets is used. Default: Default port number is used. TCP port number 2253 and UDP port number 49152 are set.	Default value
				TCP Port Number	Set TCP port number when "Port Number Used" is "Custom".	2253
				UDP Port Number	Set UDP port number when "Port Number Used" is "Custom".	49152
			2/2	NAT/Firewall Traversal	Select "On" when traversing firewalls to conduct conferences with terminals on other networks using H.460 and select "Off" when not traversing firewalls.	Off
	1/1	QoS	1/1	Hybrid	Select "On" when automatically switching FEC function, packet resend request function, and adaptive rate control function according to network status. Select "Off" when not switching them.	On
				Forward Error Correction	If the received packets contain errors, select "On" when correcting errors on the receiving side and select "Off" when not correcting errors.	On
				Packet Resend Request	Select "On" when making a resend request due to packet loss when "Hybrid" is set to "Off". Select "Off" when not making it.	On
				Adaptive Rate Control	Can be set when "Packet retransmission request" is set to OFF. Select "ON" when you always optimize the LAN band used. Select "OFF" when you do not optimize it.	On

(Continued)

(PCS-G70/G70P)

Menu	Page	Item 1	Page	Item 2	Description	Default
LAN Setup	1/1	TOS	1/4		Configure the TOS (Type of Service) field for video data.	
			2/4		Configure the TOS (Type of Service) field for audio data.	
			3/4		Configure the TOS (Type of Service) field for the RGB data output from the Data Solution Box.	
			4/4		Configure the TOS (Type of Service) field for the camera control signals and whiteboard pictures.	
			(Common to all pages)	TOS	Allows you to select how to define the TOS (Type of Service) field from "OFF", "IP Precedence" or "Diffserve".	Off
				IP Precedence	Enter IP Precedence values (0 to 7) when TOS is set to "IP Precedence".	0
				Low Delay	Select "On" when specifying bit rate of Low Delay in TOS field when TOS is set to "IP Precedence". Select "Off" when not specifying it.	Off
				High Throughput	Select "On" when specifying bit rate of High Throughput in TOS field when TOS is set to "IP Precedence". Select "Off" when not specifying it.	Off
				High Reliability	Select "On" when specifying bit rate of Reliability in TOS field when TOS is set to "IP Precedence". Select "Off" when not specifying it.	Off
				Minimum Cost	Select "On" when specifying bit rate of Minimum Cost in TOS field when TOS is set to "IP Precedence". Select "Off" when not specifying it.	Off
				Diffserve	Enter Diffserve value (0 to 63) when TOS is set to "Diffserve".	0
ISDN Setup	1/3	Country/Region			Select country/region in which this unit is used.	Not selected
		Protocol			Select ISDN line protocol to be used.	Euro ISDN
		CRC4∗4			Select "On" when enabling CRC4.	On
	2/3	Area Code			Enter area code of ISDN line used. **Note** Do not enter the first "0" of area code.	Blank
		Local Number			Enter telephone number (local number) of ISDN line used.	Blank
	3/3	Sub Address			Enter ISDN sub-addresses when registering it.	Blank
Information					Display versions of communication terminal and separately available dedicated equipment, as well as optional software used.	
Encryption Menu		Encryption Protocol			Select "OFF" when not using encryption. Select "Standard encryption" when using a standard encryption method. Select "Proprietary encryption" when using a Sony's original encryption method.	Off
		Encryption Mode∗5			Select "Encrypt Priority" when you want to connect with encryption to a remote party with standard encrypted connection enabled, or to connect without encryption to parties unable to connect with standard encryption or parties with encryption set to OFF.	Encrypt priority
		Encryption Password∗6			Sets the password required when conducting encrypted conference.	Blank

∗4: Displayed when PCSA-PRI (not sold within the country) is used.
∗5: Displayed when "Standard Encryption" is selected in "Encryption Protocol".
∗6: Displayed when "Proprietary encryption" is selected in "Encryption Protocol".

(Continued)

(PCS-G70/G70P)

Menu	Page	Item	Description	Default
SIP Setup[*7]	1/7	SIP Server Mode	Select whether to use a SIP server.	Off
		Transport Protocol	Select the protocol used in SIP.	UDP
		Port Number	Enter the port number used in SIP.	Blank
		SIP Domain	Enter the name of a SIP domain.	Blank
	2/7	Registrated User Name 1 to 3	Enter the user name of a terminal registered in a SIP server.	Blank
		Password 1 to 3	Enter the password of a terminal registered in a SIP server.	Blank
	3/7	Registrated User Name 4, 5	(Used when there are four terminals or more.) Enter the user name of a terminal registered in a SIP server.	Blank
		Password 4, 5	(Used when there are four terminals or more.) Enter the password of a terminal registered in a SIP server.	Blank
	4/7	Primary	Can be connected to four proxy servers and registry servers. Enter an address and port number for each server.	Blank
	5/7	Secondary		
	6/7	Trinity		
	7/7	Fourth		
Shared Phone Book Setup[*8]		SPB Mode	Select "On" when using the server managing the Shared Phone Book and select "Off" when not using it.	Off
		SPB Server Address	Enter the address book of the server managing the Shared Phone Book.	Blank
		SPB Auto Registration	Select "On" when automatically registering the information about terminals on the server managing the Shared Phone Book and select "Off" when not registering it.	Off
		SPB Server Password	Enter the password of the server managing the Shared Phone Book.	Blank

*7: Displayed when the SIP software PCSA-SP1 that is separately available is installed.
*8: Displayed when the "Shared Phone Book" in the Administrator Setup menu is set to "On".

2. PCS-G50/G50P

Menu	Page	Item	Description	Default
Dial Setup	1/2	Line I/F	Select line interface [IP, SIP, ISDN, or ISDN (Telephone)] used.	IP
		Bonding	Select bonding mode in which remaining lines can also be connected by only dialing one line when multiple ISDN lines are used. Select "On" when connecting a line in the bonding mode. Select "Auto" when automatically adjusting a line to remote party.	Auto
		Telephone Mode	Select audio compression system during voice meeting.	Auto
		More Options Enable	Set to "On" when you want to set items in the dial setup menu for each dial list. Set to "Off" when you do not.	Off
		User Name Input	Set to "On" when recording user name in communication log before communication. Set to "Off" when not recording it.	Off
	2/2	Prefix	Set prefix number used when connecting using an ISDN line.	Prefix-None
		Prefix-A	Set ISDN prefix (dial number).	Blank
		Prefix-B		
		Prefix-C		
		Select LAN Prefix	Set "Enabled" when using prefix for connection using a LAN line. Set "Disabled" when not using it.	Disabled
		LAN Prefix	Set LAN prefix (dial number).	Blank
Answer Setup	1/1	Auto Answer	Select "On" to connect automatically according to a call. Select "Off" to confirm connection.	On
		ISDN MSN	Select "On" when using multiple subscriber numbers during connection (answering) with an ISDN line. Select "Off" when not using them.	Off
		Mic on Answer	Select "On" to enable microphone when answering a call. Select "Off" to disable it.	On
		Reject Answer [*1]	Select "On" to reject connection when a call is received during conference. Select "Off" to make connection.	Off
Communication Setup	1/5	Individual Setting	Select "On" to set communication mode individually for dialing, answering, and for multipoint [*1]. Select "Off" to set it collectively.	Off
		Number of Lines	Select the number of ISDN lines used for ISDN communication from 1B (64 K) up to 12B (768 K).	30B
		LAN Bandwidth	Select bandwidth (bit rate) when communicating via a LAN line.	1024 Kbps
	2/5	Video Mode	Select video coding format.	Auto
		Interlace Mode [*2]	Select "On" when using interlace SIF mode. Select "Off" when not using it.	Auto
		4CIF Mode [*2]	Select "On" when using 4CIF mode. Select "Off" when not using it.	Auto
		Video Frame	Select maximum number of video transmission frames (15 fps or 30 fps).	Auto
		Audio Mode	Select audio coding format.	Auto
		Restrict	Select transmission rate (Auto or 56K) when connecting using an ISDN line. Two rates (64 Kbps and 56 Kbps) are used in some countries (USA, etc.) and regions.	Auto

*1: Setting is added when H.320 or H.323 MCU Software is installed.
*2: In the system version 1.02, these items are automatically set when the Video Mode setting is set to "Auto".

(PCS-G50/G50P)

Menu	Page	Item	Description	Default
Communication Setup	3/5	Far End Camera Control	Select "On" when controlling camera on the remote party. Select "Off" when not controlling it.	On
		T.120 Data	Select "On" when having data conference conforming to T.120 using NetMeeting. Select "Off" when not having it.	Off
		H.239 Presentation	Select "On" when using presentation function conforming to H.239. Select "Off" when not using it.	On
		H.239 Live	Select "On" when using dual-video function conforming to H.239. Select "Off" when not using it.	On
	4/5	H.239 Ratio	In the bandwidth that is shared by the camera images and H.239 presentation data, select the ratio of the bandwidth to be used for H.239 presentation data transmission from 1/3, 1/2 or 2/3.	2/3
	5/5*3	Multipoint Mode	Select "On" when having multipoint videoconference. Select "Auto" when switching automatically.	Auto
		Broadcast Mode	Select "Split" when displaying video of all connected terminals on the split window. Select "Voice Activate" when switching video to be distributed by audio detection.	Split
		Split	Select "Automatic" to switch between 4-split window (for 1 to 3 terminals) and 6-split window (for 4 to 6 terminals), or "Six-screen Mosaic" to always display 6-split window.	Automatic
		Sender Screen	Select monitor video displayed on sending terminals during multipoint videoconference.	Full Screen
		Submonitor Output	Allows you to select the video to be displayed on the submonitor from "Local picture" or "Speaker picture" during a multipoint videoconference with multiple monitors connected.	Local picture
Status			Display current communication status. ISDN line status, LAN line status, and LAN communication status are also displayed according to the line interface used.	
Audio Setup	1/2	Input Select	Select the audio input (MIC, AUX, or MIC + AUX).	MIC
		Mic Select	Select microphone to be used (MIC, DSB MIC, LINE or EC-MIC).	MIC
		CTE	Select whether to use the communication transducer CTE-600 and select input connector to be connected. Select "Off" when not using CTE-600. Select "LINE" when inputting to LINE connector of the communication terminal, and select "DSB AUX IN" when inputting to AUX IN connector of the data solution box. **Note** When CTE-600 is set to be used, "Input Select", "Mic Select", and "Echo Canceller" are automatically determined and cannot be changed.	Off
		Echo Canceller	Select "On" when using an echo canceller. Select "Off" when not using it.	On
		Lip Sync	Select "On" when using a lip sync function that synchronizes the lip motion and voice of a speaker. Select "Off" when not using it.	Off
		Recording Mute	Select "On" when outputting audio signal to AUDIO OUT (MIXED) connector. Select "Off" when not outputting it.	On

*3: Setting is added when H.320 or H.323 MCU Software is installed. (Continued)

(PCS-G50/G50P)

Menu	Page	Item 1	Page	Item 2	Description	Default
Audio Setup	2/2	Beep Sound			Select "On" to generate beep sound from pressing the remote commander button. Select "Off" not to generate.	On
		Sound Effect			Select "On" to generate effect sound at system start up and conference start/end. Select "Off" not to generate.	On
		Dial Tone			Select "On" to generate ring-back tone or busy tone during dialing. Select "Off" not to generate.	On
		Ringer Tone			Select "On" to generate ringer tone with an incoming call. Select "Off" not to generate	On
Video Setup	1/1	Video Input	1/1	VIDEO IN	Select video picture of video input 1.	CAMERA
		Custom Input Label	1/1	Main Camera	Enter the name when "Main Camera" is selected on the video input selection window.	Blank
				IR1	Enter the name when "IR1" is selected on the video input selection window.	Blank
				AUX1	Enter the name when "AUX1" is selected on the video input selection window.	Blank
		Monitor Out	1/1	Monitors	Select the number of monitors connected to the communication terminal.	1
				Connection	Select connectors connecting to the monitors. You can select them up to the number specified in "Monitors".	VIDEO1
				Monitor	Select "Main" or "Sub" for connected monitors to be used as. Only one "Main" monitor can be selected. When 1 or 3 monitors are used, VIDEO1 is always "Main" monitor.	Main
General Setup	1/1	Device Setup	1/2	Terminal Name	Enter terminal name to be notified to remote parties.	PCS-G50
				Standby Mode	Select "On" when using standby mode. Select "Off" when not using it.	Off
				Standby Time	Set the time (1 to 99 minutes) required until the unit is put into standby mode when standby mode is set to "On".	Blank
				Last Number Registration	Select "On" when registering the remote user in Phone Book after a conference ends. Select "Off" when not registering it.	On
				Control by Far End	Select "On" when receiving camera control command from the remote party. Select "Off" when not receiving it.	On
			2/2	Language	Select language of menu and message displayed on the screen.	English
				IR Repeater Mode	Select mode to put the monitor into standby state or to turn on power when a Sony's monitor is used. Usually, set to "MODE 1".	MODE1
				T.120 PC Address	Enter the IP address of computer used when data conference conforming to T.120 is made using NetMeeting.	Blank
				Digital Zoom	Select "On" when using Digital Zoom. Select "Off" when not using it.	Off
		1/1	Clock Set	1/1	SNTP	Select "On" when obtaining clock information from the server with SNTP. Select "Off" when not obtaining it.	Off
				Time Zone	Select the country or region where you are using the communication terminal.	Blank
				Summer Time	Select "On" during summer time. Select "Off" when not in summer time.	Off
				SNTP Server	Input the server address to obtain the clock infomation from.	Blank
				Clock Set	Enter the current data and time.	Blank

(Continued)

(PCS-G50/G50P)

Menu	Page	Item 1	Page	Item 2	Description	Default
General Setup	1/1	Menu Screens	1/3	Time Display	Select "On" when displaying elapsed time at upper right of the screen during conference. Select "Off" when not displaying it.	On
				Display Terminal Name	Select whether to display the connected terminal name on the screen.	Show temporarily
				Character Input Help	Select "On" when displaying balloon help appearing when entering alphanumeric characters. Select "Off" when not displaying it.	On
				Number Display	Allows you to select the identification of the local system, such as the IP or SIP number, to displayed in the launcher menu.	IP
				Packet Loss Indicator	If a packet loss occurs on a network, select "On" when displaying the "Packet Loss" indicator on the display and select "Off" when not displaying it.	On
			2/3	Phone Book Button	Select "On" when displaying Phone Book button on the launcher screen. Select "Off" when not displaying it.	On
				Detail Dial Button	Select "On" when displaying Detailed Dial button on the launcher screen. Select "Off" when not displaying them.	On
				Menu Button	Select "On" when displaying Menu button on the launcher screen. Select "Off" when not displaying it.	On
				Information Button	Select "On" when displaying Information button on the launcher screen. Select "Off" when not displaying it.	On
				History Button	Select "On" when displaying History button on the launcher screen. Select "Off" when not displaying it.	On
			3/3	Direct Phone Book Button	Select "On" when displaying Direct Phone Book button on the launcher screen. Select "Off" when not displaying it.	On
				Direct Dial	Select "On" when displaying Direct Dial text box on the launcher screen. Select "Off" when not displaying it.	On
				Guide	Select "On" when displaying the guide at the bottom of the launcher screen. Select "Off" when not displaying it.	On
				Background	Selects the background pattern of a menu.	Pattern 1
	1/1	Whiteboard	1/1	Whiteboard Attachment	Select whether to attach Whiteboard "mimio-Xi" vertically or horizontally.	Vertical
				Whiteboard Size	Select the size (height × width) of Whiteboard used.	3'0" × 4'0"
				Whiteboard Size Measurement	Select whether to show the Whiteboard size in inches or meters.	Inches

(Continued)

(PCS-G50/G50P)

Menu	Page	Item 1	Page	Item 2	Description	Default
General Setup	1/1	Network Camera	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.	On
				Bit Rate	Allows you to select the bit rate for video sent from network cameras. This bit rate does not include the audio transfer rate. Auto: Give priority to the setting on the network camera. 32 to 2048 kbps: Connect to network cameras at the specified bit rate. **Notes** · When connecting network cameras at H.264, the bit rates from 32 kbps to 1536kbps are selectable. If the rate 2048 kbps is selected, it will be changed to 1536 kbps automatically. · When connecting network cameras at MPEG4, the bit rates from 64 kbps to 2048 kbps are selectable. If you set the rate to 32 kbps, it will be changed to 64 kbps automatically.	Auto
				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: (In case of connecting to NTSC cameras) Send pictures at a maximum rate of 30 frames per second. (In case of connecting to PAL cameras) Send pictures at a maximum rate of 25 frames per second. **Note** Even if 30fps is selected, the rate is automatically set to 15fps (NTSC) or 12fps (PAL) if the mode is H.264 and the transmission mode is TCP 15fps: (In case of connecting to NTSC cameras) Send pictures at a maximum rate of 15 frames per second. (In case of connecting to PAL cameras) Send pictures at a maximum rate of 12 frames per second.	Auto
				Mode	Allows you to select the compression format for video sent from network cameras. Auto: Give priority to the setting on the network camera. **Notes** · If the setting on the network camera is JPEG single codec, connection is made by automatically changing it to H.264 single codec. · If the setting on the network camera is dual codec, connection is made by automatically changing it to H.264 single codec. H.264: Send video based on the H.264 standard. MPEG4: Send video based on the MPEG4 standard.	Auto
				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. **Note** · If the setting on the network camera is 640 × 480 (VGA), connection is made by automatically changing it to the image size 320 × 240 (QVGA). 160 × 120 (QQVGA): Connect to network cameras at QQVGA image size (160 pixels × 120 lines). 320 × 240 (QVGA): Connect to network cameras at QVGA (320 pixels × 240 lines).	Auto

(Continued)

(PCS-G50/G50P)

Menu	Page	Item 1	Page	Item 2	Description	Default
Administrator Setup	1/1	Password	1/3	Administrator Password	Set the administrator password. Administrator can modify the setup menu (for administrator) and phone book menu.	Blank
				Phone Book Modification Password	Set the password used to modify the phone book.	Blank
				Save Settings Password	Set the password used to save various settings.	Blank
				Remote Access Password	Set the password used to access the system through the Web browser. Access is available with a password for administrator or for superuser.	Blank
				Streaming Password	Set the password required when browsing the streaming-distributed conference.	Blank
				Network Camera Password	Set the password used to access the network camera list.	Blank
			2/3	Dial Setup	Select "Enable" when password is required to save the dial setup settings. Select "Disable" when it is not required.	Enable
				Answer Setup	Select "Enable" when password is required to save the answer setup settings. Select "Disable" when it is not required.	Enable
				Transmission Mode	Select "Enable" when password is required to save the communication setup settings. Select "Disable" when it is not required.	Enable
				Audio Setup	Select "Enable" when password is required to save the audio setup settings. Select "Disable" when it is not required.	Enable
				Video Setup	Select "Enable" when password is required to save the video setup settings. Select "Disable" when it is not required.	Enable
				General Setup	Select "Enable" when password is required to save the general setup settings. Select "Disable" when it is not required.	Enable
			3/3	LAN Setup	Select "Enable" when password is required to save the LAN setup settings. Select "Disable" when it is not required.	Enable
				ISDN Setup	Select "Enable" when password is required to save the ISDN setup settings. Select "Disable" when it is not required.	Enable
				Encryption Setup	Select "Enable" when password is required to save the Encryption setup settings. Select "Disable" when it is not required.	Enable
				SIP Setup	Select "Enable" when password is required to save the SIP setup settings. Select "Disable" when it is not required.	Enable
				Shared Phone Book	When saving the Shared Phone Book, select "Enable" when requiring the password to save settings and select "Disable" when not requiring it.	Enable

(Continued)

(PCS-G50/G50P)

Menu	Page	Item 1	Page	Item 2	Description	Default
Administrator Setup	1/1	Phone Book	1/3	Save Phone Book	Save phone book data in Memory Stick. Memory Stick must be inserted in the communication terminal. When another data is already saved in the Memory Stick, it is overwritten.	
				Load Phone Book	Load phone book data saved in Memory Stick to the communication terminal. Memory Stick must be inserted in the communication terminal. When phone book data is already registered in the communication terminal, it is overwritten.	
				Clear Phone Book	Delete phone book data registered in the communication terminal.	
				Save Network Camera List	Allows you to overwrite and save the data for network camera lists onto a "Memory Stick".	
				Load Network Camera List	Allows you to load the data for network camera lists from a "Memory Stick". The current network camera list on the system is then overwritten.	
				Clear Network Camera List	Allows you to delete the network camera lists on the system.	
			2/3	Auto Dialing	Select whether to automatically dial to a person in the list specified by private phone book created in Memory Stick when Memory Stick is inserted.	On
				Create Private Phone Book	Create a new private phone book in Memory Stick. Memory Stick must be inserted in the communication terminal.	
				Delete Private Phone Book	Delete private phone book saved in Memory Stick. Memory Stick must be inserted in the communication terminal.	
				Copy to Private Phone Book	Copy phone book list saved in the communication terminal to Memory Stick as private phone book. Memory Stick must be inserted in the communication terminal.	
			3/3	Shared Phone Book	Select "On" when using the Shared Phone Book on the server and select "Off" when not using it.	On
	1/1	Streaming/ recording	1/2	Streaming	Selects whether to enable the streaming broadcast of video and audio.	Disabled
				Recording	Selects whether to enable the recording of video/audio from a videoconference to a "Memory Stick".	Enabled
				Video	Selects the bit rate of streaming and recording video.	128Kbps
			2/2	Multicast Address	Enter the multicast for streaming broadcasts.	230.0.0.1
				Audio Port Number	Enter the audio port number for streaming broadcasts.	49501
				Video port Number	Enter the video port number for streaming broadcasts.	49500
				Hop Count	Enter a number from 0 to 255 as the HOP for streaming broadcasts.	1

(Continued)

(PCS-G50/G50P)

Menu	Page	Item 1	Page	Item 2	Description	Default
Administrator Setup	1/1	Other Settings	1/2	Web Monitor	Select "On" when allowing conference monitoring function (auto-update of JPEG images) from the Web browser. Select "Off" when inhibiting it.	Off
				Web access	Selects whether to enable access from Web or Telnet to this unit.	Enabled
				Save Setup	Saves each setting data in "Memory Stick". Each set data in "Memory Stick" is overwritten.	
				Load Setup	Loads each setting data from "Memory Stick". Each setting data of this unit is overwritten.	
				Function Extension Command	Enter a command for starting the use of an IPELA VC Link service. (Service used only in Japan)	Blank
			2/2	AMX Device Discovery	Select "On" when exporting the AMX Device Discovery information onto the network periodically and select "Off" when not exporting it.	On
				HOP	Set (enter) the HOP count (0 to 255) for the data to be exported.	Blank
LAN Setup	1/1	General	1/2	DHCP Mode	Select "Auto" when using DHCP (Dynamic Host Configuration Protocol). Select "Off" when not using it. When "Auto" is set, IP address, net mask, gateway address, and DNS address are automatically acquired.	Off
				Host Name	Enter host name.	Blank
				IP Address	Enter IP address when DHCP mode is set to "Off".	Blank
				Network Mask	Enter network mask when DHCP mode is set to "Off".	Blank
				Gateway Address	Enter gateway address when DHCP mode is set to "Off".	Blank
				DNS Address	Enter DNS (Domain Name System) server address when DHCP mode is set to "Off".	Blank
			2/2	LAN Mode	Select interface type and communication mode for LAN connection.	Auto Negotiation
	1/1	Gatekeeper	1/1	Gatekeeper Mode	Select "On" when using a gatekeeper and set to "Off" when not using it. Select "Auto" when automatically searching a gatekeeper.	Off
				Gatekeeper Address	Set IP address of gatekeeper.	Blank
				User Alias	Set user name (H.323 alias) to be registered in a gatekeeper.	Blank
				User Number	Set user number (E.164 number) to be registered in a gatekeeper.	Blank
	1/1	SNMP	1/1	SNMP Mode	Select "On" when enabling service of SNMP (Simple Network Management Protocol) agent. Select "Off" when disabling it.	Off
				Trap Destination	Set IP address of SNMP manager that transmits a trap.	Blank
				Community	Set community name that SNMP manager manages. Usually, set to "public".	public
				Description	This is the description of this device. Entered as "Videoconference Device". This cannot be changed.	Videoconference Device
				Location	Set the place where this unit is installed.	Blank
				Contact	Set information on the administrator of this unit.	Blank

(Continued)

(PCS-G50/G50P)

Menu	Page	Item 1	Page	Item 2	Description	Default
LAN Setup	1/1	PPPoE	1/2	PPPoE	Select PPPoE termination On/Off using this unit.	Off
				PPPoE User Name	Enter PPPoE connection user name (account) acquired from provider.	Blank
				PPPoE Password	Enter PPPoE connection password acquired from provider.	Blank
			2/2	Fixed IP for PPPoE	Select "On" when fixed IP address for PPPoE connection is acquired from provider. Select "Off" when automatically acquiring it for each session.	Off
				Fixed IP Address for PPPoE	Enter fixed IP address acquired from provider when "Fixed IP for PPPoE" is "On".	Blank
				PPPoE DNS	Select "Obtain automatically" when acquiring IP address of DNS server from the server during PPPoE connection. Select "Specify" when fixed IP address exists.	Obtain Automatically
				Primary DNS	Enter IP address of primary DNS server when "PPPoE DNS" is "Specify".	Blank
				Secondary DNS	Enter IP address of secondary DNS server when "PPPoE DNS" is "Specify".	Blank
	1/1	NAT/Port/ Firewall	1/2	NAT Mode	Select "On" when connecting this unit to local network using NAT (Network Address Translation). Select "Off" when not connecting it.	Off
				NAT Address	Set IP address on the global side that NAT uses.	Blank
				Port Number Used	Select whether to fix TCP port number and UDP port number. Custom: The port number that the user sets is used. Default: Default port number is used. TCP port number 2253 and UDP port number 49152 are set.	Default value
				TCP Port Number	Set TCP port number when "Port Number Used" is "Custom".	2253
				UDP Port Number	Set UDP port number when "Port Number Used" is "Custom".	49152
			2/2	NAT/Firewall Traversal	Select "On" when traversing firewalls to conduct conferences with terminals on other networks using H.460 and select "Off" when not traversing firewalls.	Off
	1/1	QoS	1/1	Hybrid	Select "On" when automatically switching FEC function, packet resend request function, and adaptive rate control function according to network status. Select "Off" when not switching them.	On
				Forward Error Correction	If the received packets contain errors, select "On" when correcting errors on the receiving side and select "Off" when not correcting errors.	On
				Packet Resend Request	Select "On" when making a resend request due to packet loss when "Hybrid" is set to "Off". Select "Off" when not making it.	On
				Adaptive Rate Control	Can be set when "Packet resend request" is set to OFF. Select "ON" when you always optimize the LAN bandwidth. Select "OFF" when you do not optimize it.	On

(Continued)

(PCS-G50/G50P)

Menu	Page	Item 1	Page	Item 2	Description	Default
LAN Setup	1/1	TOS	1/4		Configure the TOS (Type of Service) field for video data.	
			2/4		Configure the TOS (Type of Service) field for audio data.	
			3/4		Configure the TOS (Type of Service) field for the RGB data output from the Data Solution Box.	
			4/4		Configure the TOS (Type of Service) field for the camera control signals and whiteboard pictures.	
			(Common to all pages)	TOS	Allows you to select how to define the TOS (Type of Service) field from "OFF", "IP Precedence" or "Diffserve".	Off
				IP Precedence	Enter IP Precedence values (0 to 7) when TOS is set to "IP Precedence".	0
				Low Delay	Select "On" when specifying bit rate of Low Delay in TOS field when TOS is set to "IP Precedence". Select "Off" when not specifying it.	Off
				High Throughput	Select "On" when specifying bit rate of High Throughput in TOS field when TOS is set to "IP Precedence". Select "Off" when not specifying it.	Off
				High Reliability	Select "On" when specifying bit rate of Reliability in TOS field when TOS is set to "IP Precedence". Select "Off" when not specifying it.	Off
				Minimum Cost	Select "On" when specifying bit rate of Minimum Cost in TOS field when TOS is set to "IP Precedence". Select "Off" when not specifying it.	Off
				Diffserve	Enter Diffserve value (0 to 63) when TOS is set to "Diffserve".	0
ISDN Setup	1/3	Country/Region			Select country/region in which this unit is used.	Not selected
		Protocol			Select ISDN line protocol to be used.	
		CRC4*4			Select "On" when enabling CRC4.	On
	2/3	Area Code			Enter area code of ISDN line used. **Note** Do not enter the first "0" of area code.	Blank
		Local Number			Enter telephone number (local number) of ISDN line used.	Blank
	3/3	Sub Address			Enter ISDN sub-addresses when registering it.	Blank
Information					Display versions of communication terminal and separately available dedicated equipment, as well as optional software used.	
Encryption Menu		Encryption Protocol			Select "OFF" when not using encryption. Select "Standard encryption" when using a standard encryption method. Select "Proprietary encryption" when using a Sony's original encryption method.	Off
		Encryption Mode*5			Select "Encrypt Priority" when you want to connect with encryption to a remote party with standard encrypted connection enabled, or to connect without encryption to parties unable to connect with standard encryption or parties with encryption set to OFF.	Encrypt priority
		Encryption Password*6			Sets the password required when conducting encrypted conference.	Blank

*4: Displayed when PCSA-PRI (not sold within the country) is used.   (Continued)
*5: Displayed when "Standard Encryption" is selected in "Encryption Protocol".
*6: Displayed when "Proprietary encryption" is selected in "Encryption Protocol".
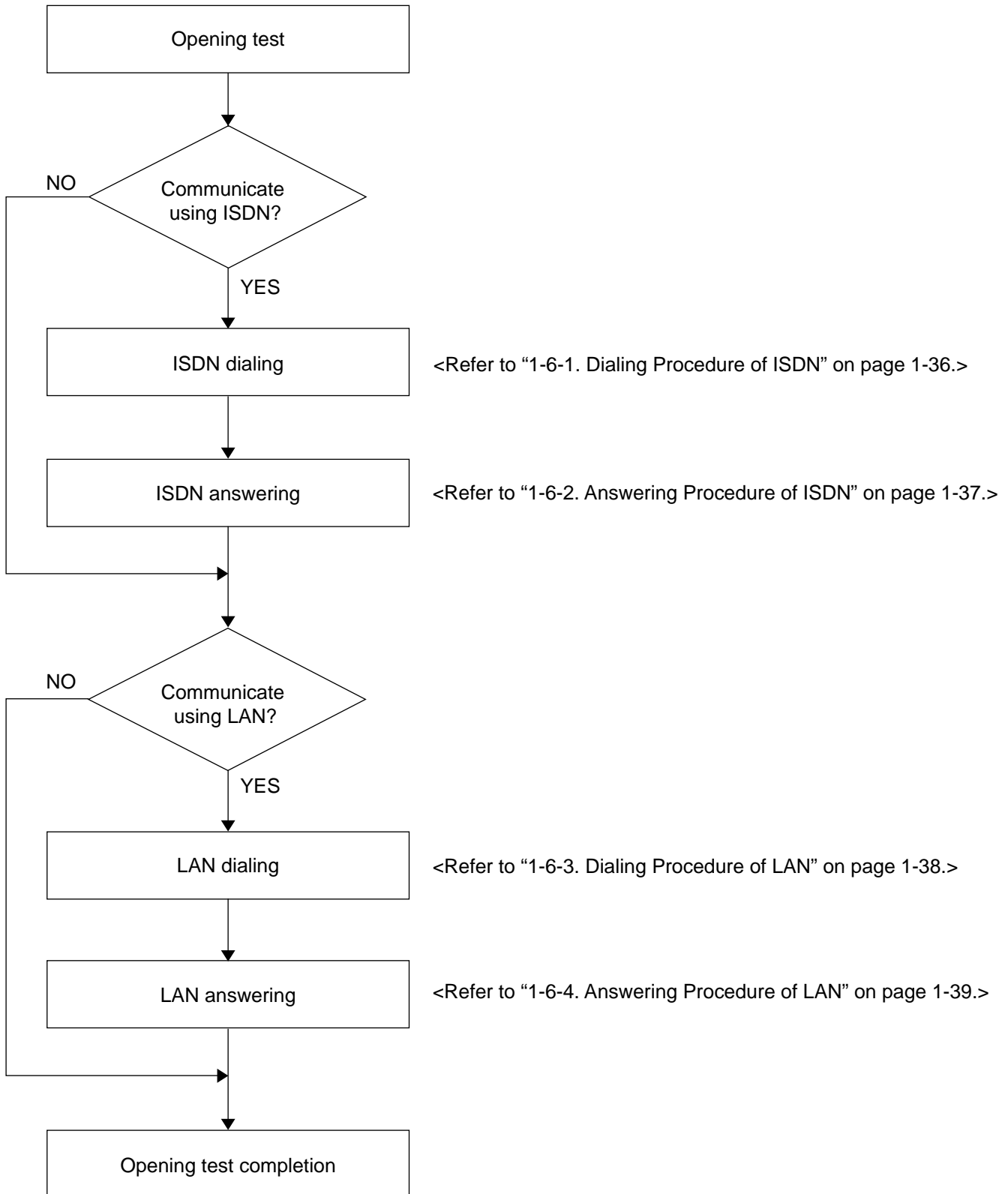
(PCS-G50/G50P)

Menu	Page	Item	Description	Default
SIP Setup*7	1/7	SIP Server Mode	Select whether to use a SIP server.	OFF
		Transport Protocol	Select the protocol used in SIP.	UDP
		Port Number	Enter the port number used in SIP.	Blank
		SIP Domain	Enter the name of a SIP domain.	Blank
	2/7	Registered User Name 1 to 3	Enter the user name of a terminal registered in a SIP server.	Blank
		Password 1 to 3	Enter the password of a terminal registered in a SIP server.	Blank
	3/7	Registered User Name 4, 5	(Used when there are four terminals or more.) Enter the user name of a terminal registered in a SIP server.	Blank
		Password 4, 5	(Used when there are four terminals or more.) Enter the password of a terminal registered in a SIP server.	Blank
	4/7	Primary	Can be connected to four proxy servers and registry servers. Enter an address and port number for each server.	Blank
	5/7	Secondary		
	6/7	Trinity		
	7/7	Fourth		
Shared Phone Book Setup*8		SPB Mode	Select "On" when using the server managing the Shared Phone Book and select "Off" when not using it.	Off
		SPB Server Address	Enter the address book of the server managing the Shared Phone Book.	Blank
		SPB Auto Registration	Select "On" when automatically registering the information about terminals on the server managing the Shared Phone Book and select "Off" when not registering it.	Off
		SPB Server Password	Enter the password of the server managing the Shared Phone Book.	Blank

*7: Displayed when the SIP software PCSA-SP1 that is separately available is installed.
*8: Displayed when the "Shared Phone Book" in the Administrator Setup menu is set to "On".

1-6. Flowchart of Opening Test

```
                  ┌─────────────────────┐
                  │    Opening test     │
                  └─────────────────────┘
                             │
                             ▼
                          ◇ Communicate
        NO ◄───────────── using ISDN? ◇
        │                    │
        │                   YES
        │                    │
        │                    ▼
        │         ┌─────────────────────┐
        │         │    ISDN dialing     │   <Refer to "1-6-1. Dialing Procedure of ISDN" on page 1-36.>
        │         └─────────────────────┘
        │                    │
        │                    ▼
        │         ┌─────────────────────┐
        │         │   ISDN answering    │   <Refer to "1-6-2. Answering Procedure of ISDN" on page 1-37.>
        │         └─────────────────────┘
        │                    │
        └────────────────────┤
                             ▼
                          ◇ Communicate
        NO ◄───────────── using LAN? ◇
        │                    │
        │                   YES
        │                    │
        │                    ▼
        │         ┌─────────────────────┐
        │         │    LAN dialing      │   <Refer to "1-6-3. Dialing Procedure of LAN" on page 1-38.>
        │         └─────────────────────┘
        │                    │
        │                    ▼
        │         ┌─────────────────────┐
        │         │   LAN answering     │   <Refer to "1-6-4. Answering Procedure of LAN" on page 1-39.>
        │         └─────────────────────┘
        │                    │
        └────────────────────┤
                             ▼
                  ┌─────────────────────┐
                  │ Opening test completion │
                  └─────────────────────┘
```

1-6-1. Dialing Procedure of ISDN

Note
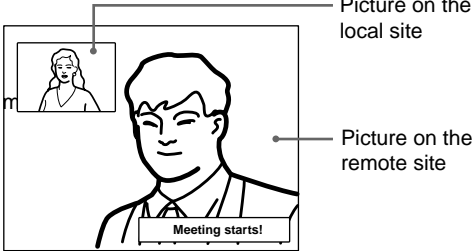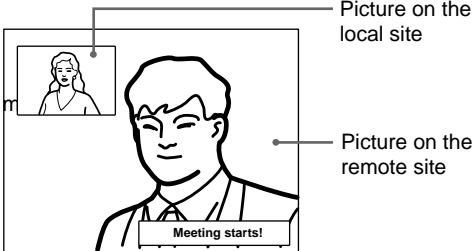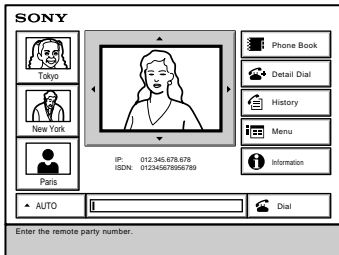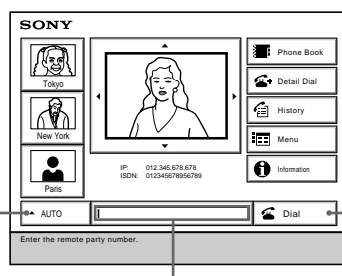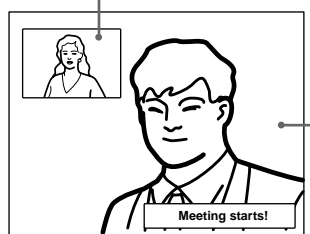
It is required that the line number used in the other end is entered in the area code and telephone number of the ISDN setup menu of the other end. The number of lines used when dialing is determined by the "Number of Lines" setting in "Communication Setup". The following describes direct-dialing procedure.

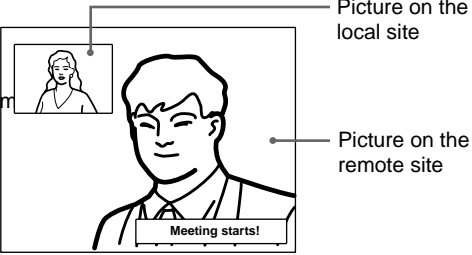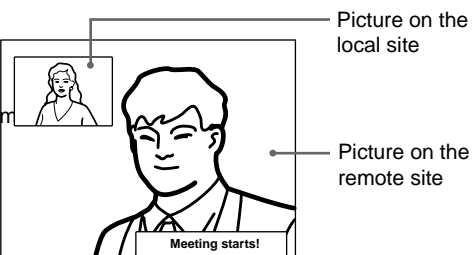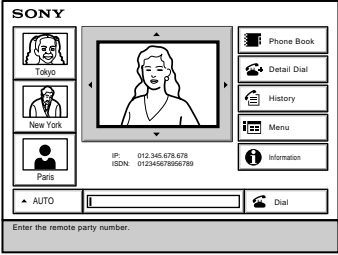| Item	Operation	Screen	Remarks (Confirmation item)
1.	Select "Line I/F" from the launcher menu using the ↑, ↓, ←, → buttons on the remote commander, and press the PUSH ENTER button. Select "ISDN" from the setting items using the ↑, ↓ buttons, and press the PUSH ENTER button.	 Line type Number text box Dial	An ISDN unit (not supplied) must be connected to the communication terminal.
2.	Select the number entry field using the ↑, ↓, ←, → buttons on the remote commander, and press the PUSH ENTER button.		
3.	Select "Dial" at the bottom of the menu using the ↑, ↓, ←, → buttons on the remote commander and press the Enter button, or press the CONNECT/DISCONNECT button on the remote commander.		"Dialing (ISDN)" is displayed on the screen, and the ONLINE indicator (blue) blinks.
4.	The remote party answers.	 Picture on the local site Picture on the remote site	The ONLINE indicator (blue) lights. "Meeting starts!" is displayed, and the remote party's voice and image are heard and displayed from/on the TV monitor.
5.	Disconnection Press the CONNECT/DISCONNECT button on the remote commander. A confirmation message on whether to disconnect a line is then displayed. Select "OK" using ← or → button on the remote commander, and press the PUSH ENTER button, or press the CONNECT/DISCONNECT button again.		The line is disconnected and the videoconference is terminated. The current display returns to the launcher menu.

1-6-2. Answering Procedure of ISDN

Note

It is required that the line number used in this unit is entered in the area code and telephone number of the ISDN setup menu before receiving a call from the remote party. The number of lines used when answering is determined by the "Number of Lines" setting in "Communication Setup".

Item	Operation	Screen	Remarks (Confirmation item)
1.	Calling from the remote party		A ringer tone occurs. "Incoming Call" is displayed on the screen.
2.	<For Auto Answer>	Picture on the local site / Picture on the remote site / Meeting starts!	"Meeting starts!" is displayed when connected, and the remote party's voice and image are heard and displayed from/on the TV
	<For Manual Answer>		A ringer tone occurs and the guide screen for incoming appears on the screen. Select "OK" using ← or → button on the remote commander, and press the PUSH ENTER button.
		Picture on the local site / Picture on the remote site / Meeting starts!	"Meeting starts!" is displayed when connected, and the remote party's voice and image are heard and displayed from/on the TV
3.	Remote disconnection		The line is disconnected and the videoconference is terminated. The current display returns to the launcher menu.

1-6-3. Dialing Procedure of LAN

Note

When dialing via LAN, it is required to change LAN setup in accordance with the environment used.
Perform proper environment setting referring to "Section 3 Compatibility in LAN Network". The LAN
bandwidth on the dialing side is determined by the "LAN Bandwidth" setting in "Communication Setup".
The following describes direct-dialing procedure.

Item	Operation	Screen	Remarks (Confirmation item)
1.	Select "Line I/F" from the launcher menu using the ↑, ↓, ←, → buttons on the remote commander, and press the PUSH ENTER button. Select "IP" from the setting items using the ↑, ↓ buttons, and press the PUSH ENTER button.	Line type Number text box Dial	Acquired IP must be displayed at the center of the screen.
2.	Select the number entry field using the ↑, ↓, ←, → buttons on the remote commander, and press the PUSH ENTER button. Then enter remote party's IP.		
3.	Select "Dial" at the bottom of the menu using the ↑, ↓, ←, → buttons on the remote commander, and press the PUSH ENTER button, or press the CONNECT/ DISCONNECT button on the remote commander.		"Dialing (LAN)" is displayed on the screen, and the ONLINE indicator (blue) blinks.
4.	The remote party answers.	Picture on the local site Picture on the remote site	The ONLINE indicator (blue) lights. "Meeting starts!" is displayed, and the remote party's voice and image are heard and displayed from/on the TV monitor.
5.	Disconnection Press the CONNECT/DISCONNECT button on the remote commander. A confirmation message on whether to disconnect a line is then displayed. Select "OK" using ← or → button on the remote commander, and press the PUSH ENTER button, or press the CONNECT/ DISCONNECT button again.		The line is disconnected and the videoconference is terminated. The current display returns to the launcher menu.

1-6-4. Answering Procedure of LAN

Note

When answering via LAN, it is required to change LAN setup in accordance with the environment used.
Perform proper environment setting referring to "Section 3 Compatibility in LAN Network". The LAN
bandwidth on the answering side is determined by the "LAN Bandwidth" setting in "Communication
Setup".

Item	Operation	Screen	Remarks (Confirmation item)
1.	Calling from the remote party		A ringer tone occurs when IP has been acquired. "Incoming Call" is displayed on the screen.
2.	<For Auto Answer>	Picture on the local site — Picture on the remote site	"Meeting starts!" is displayed when connected, and the remote party's voice and image are heard and displayed from/on the TV
	<For Manual Answer>		A ringer tone occurs and the guide screen for incoming appears on the screen. Select "OK" using ← or → button on the remote commander, and press the PUSH ENTER button.
		Picture on the local site — Picture on the remote site	"Meeting starts!" is displayed when connected, and the remote party's voice and image are heard and displayed from/on the TV
3.	Remote disconnection		The line is disconnected and the videoconference is terminated. The current display returns to the launcher menu.

1-7. Conducting a Videoconference Using the Dual Video Function

The dual video function allows the simultaneous sending and receiving of two images using two cameras.

| Note |

PCS-G50/G50P can be used for only reception.

1-7-1. System Configuration Using 2 Cameras and 3 Monitors

This section describes how to configure a system using 2 cameras and 3 monitors.

| Notes |

・ For connecting power cables and communication units/cables, refer to "1-3. System Connections".
・ Be sure to turn off all the equipment before making any connections.
・ Do not connect/disconnect the camera cable with the power on. Doing so may damage the camera unit or communication terminal.
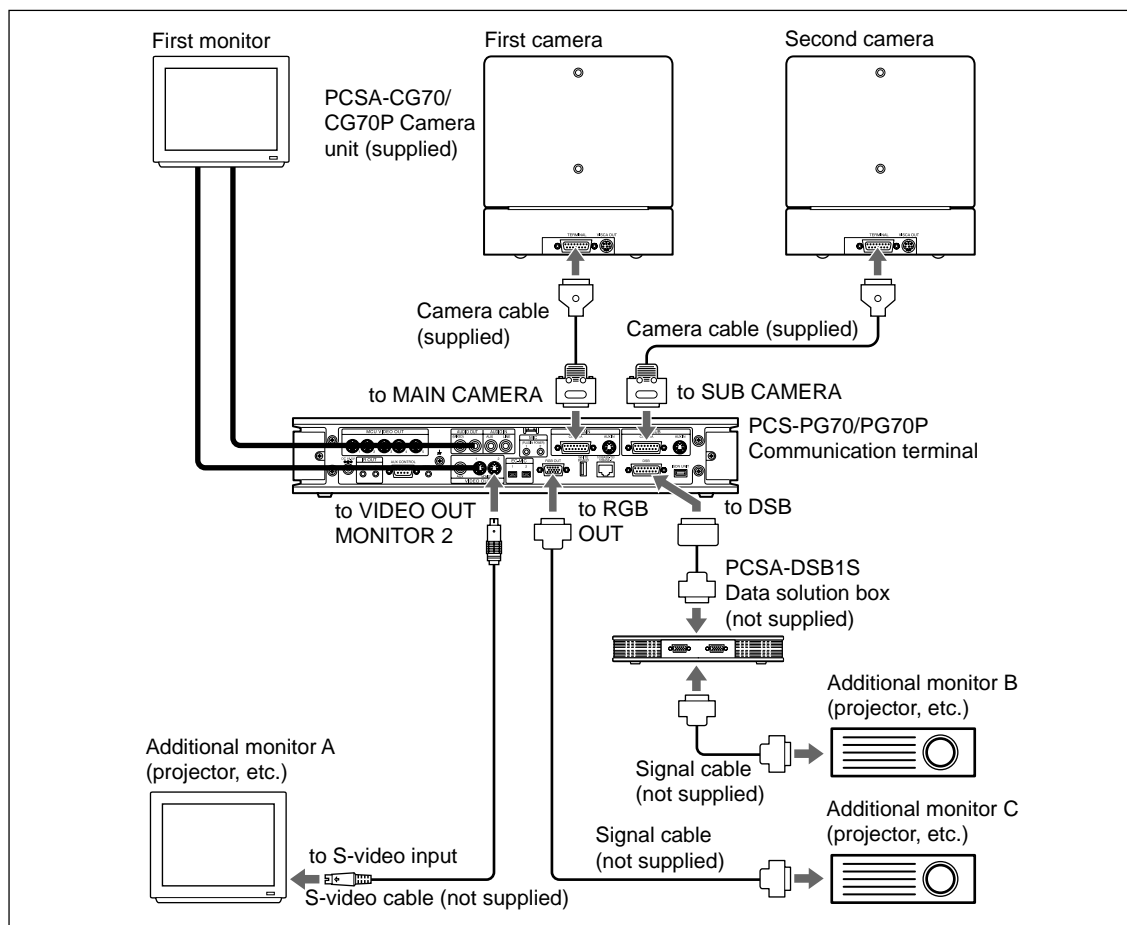

・ To conduct a videoconference using the dual video function, the H.239 setting of the Communication Setup menu of both local and remote terminals must be "On".
・ Up to four monitors can be connected to the system. However, only three monitors, including the first monitor, can be used at one time.
・ The dual video function can only be used in a two-point videoconference.

| Note |

PCS-DSB1 (not supplied) is also available for the data solution box.

Video Input Switching for Dual-Video Conference

Video input selection on the distribution side

Input 2 ＼ Input 1	Main camera	AUX1	IR1	Sub camera	AUX2	IR2
Main camera	—	—	—	—	—	—
AUX1	—	—	—	—	—	—
IR1	—	—	—	—	—	—
Sub camera	○	○	○	—	—	—
AUX2	○	○	○	—	—	—
IR2	○	○	○ (Note)	—	—	—

(Note) Same video picture is input into IR1 and IR2.

Input Control from Receiver Side

・ The receiver can switch Input 1 of the distribution side only.

・ Switching of only Main camera, AUX1, and IR1 is available.

・ Item "VTR" is not used when connecting to Sony video communication system, but is used when connecting to equipment of other companies.

1-7-2. Activating the Dual Video Function

The dual video function is activated when either starting or during a videoconference.

Notes

・ If the operation is transferred to a multipoint videoconference while the dual video function is in use, it automatically stops.

・ If images are sent through the data solution box PCSA-DSB1S or PCS-DSB1 while the dual video function is in use, it stops until the image transfer is complete, and then resumes.

To activate dual video when starting a videoconference

Set "Dual Video" in the Video Setup menu to "On".

Sending and receiving of dual video begins automatically when a videoconference is started.

Note

This function cannot be used in multipoint videoconference.

To activate dual video during a videoconference

While the videoconference is in progress, press the PUSH ENTER button on the remote commander to display the communication submenu, and then set "Dual Video" to "On".

Note

If the dual video function cannot be used, "Dual Video" does not appear on the communication submenu.

To change the monitor display

To switch the display of the first monitor, press the FAR/NEAR button on the remote commander. To change the display on another monitor, press the DISPLAY button on the remote commander. Each time you press the DISPLAY button, the display changes.

1-8. Connecting Four Camera Units (PCS-G70/G70P)

Up to four camera units can be connected to PCS-PG70/PG70P as illustrated below.

Notes

· The figure below shows connections of camera units only.

· Be sure to turn off all the equipment before making any connections.

· Do not connect/disconnect the camera cable with the power on. Doing so may damage the camera unit or communication terminal.
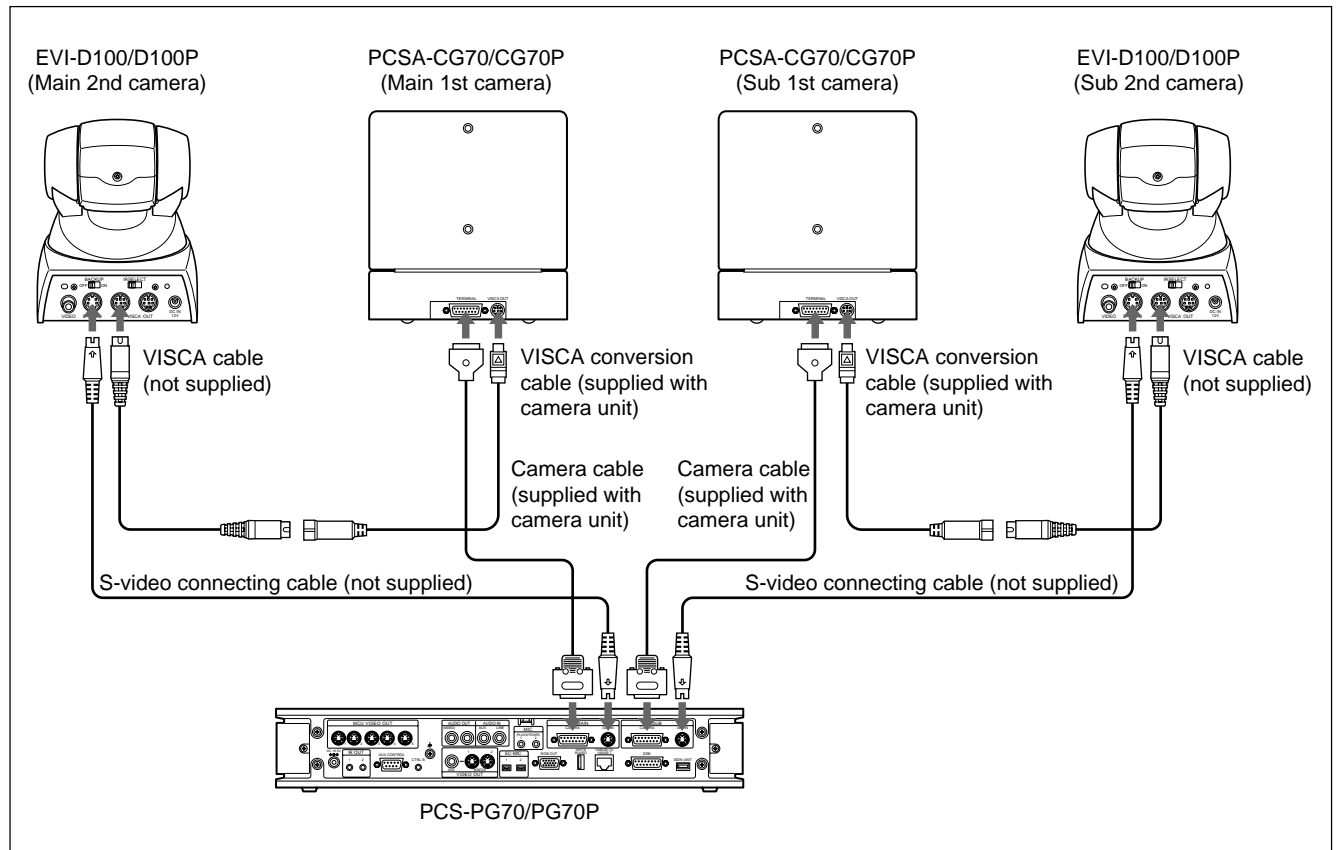
Note

Besides EVI-D100/D100P (not supplied), BRC-300/300P (not supplied) can also be used.

Using the tracking camera (PCSA-CTG70/CTG70P)

Notes

・ PCSA-CTG70/CTG70P is exclusively used for PCS-G70/G70P. It cannot be used for PCS-G50/G50P.
・ Only one PCSA-CTG70/CTG70P is connected to a main camera terminal for use.
  (Two PCSA-CTG70/CTG70P cannot be connected simultaneously.)
・ A second camera can be connected through the VISCA OUT terminal of PCSA-CTG70/CTG70P and
  you can gine pan, tilt, and zoom control for the second camera from PCS.
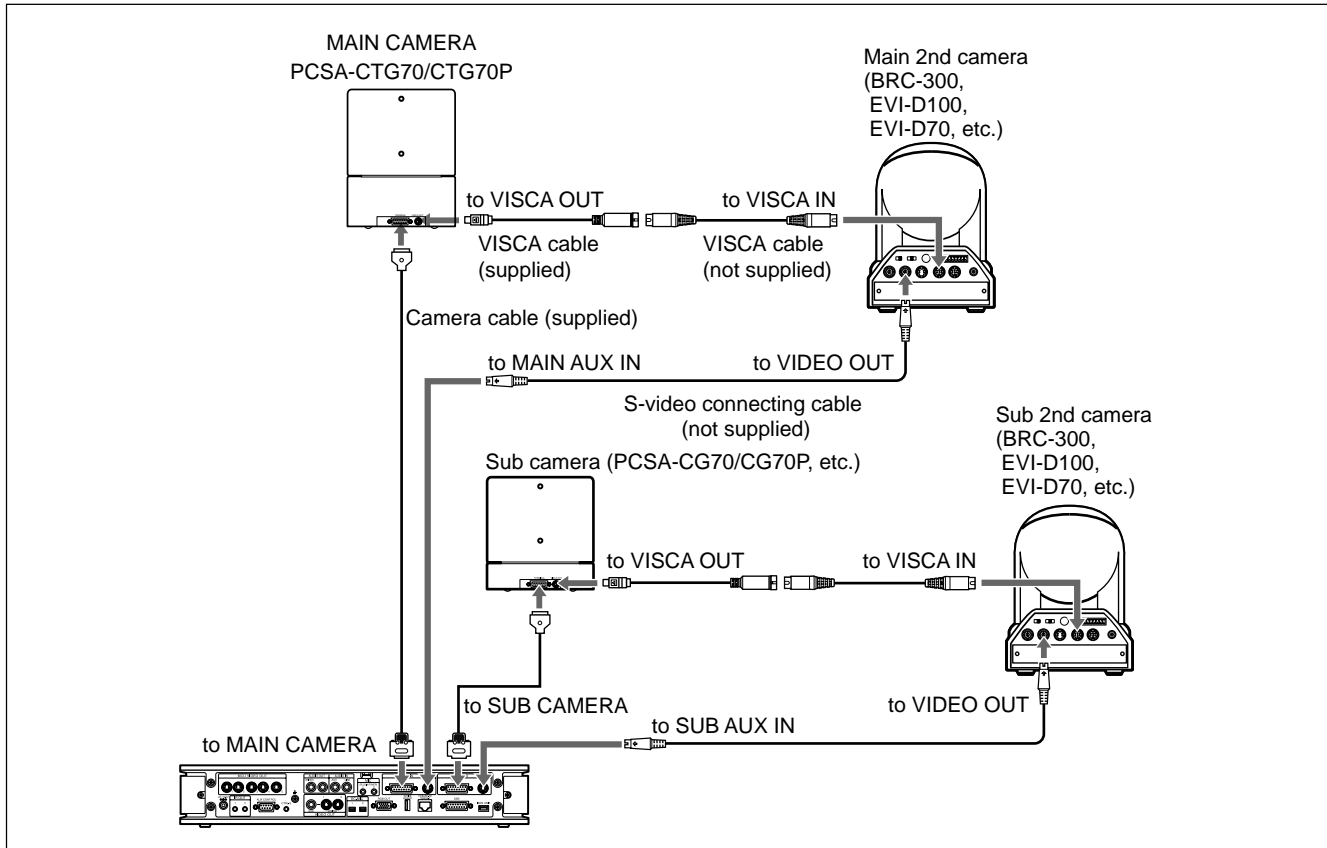
1-9. Connecting Two Camera Units (PCS-G50/G50P)

Up to four camera units can be connected to PCS-PG50/PG50P as illustrated below.

Notes

- The figure below shows connections of camera units only.
- Be sure to turn off all the equipment before making any connections.
- Do not connect/disconnect the camera cable with the power on. Doing so may damage the camera unit or communication terminal.
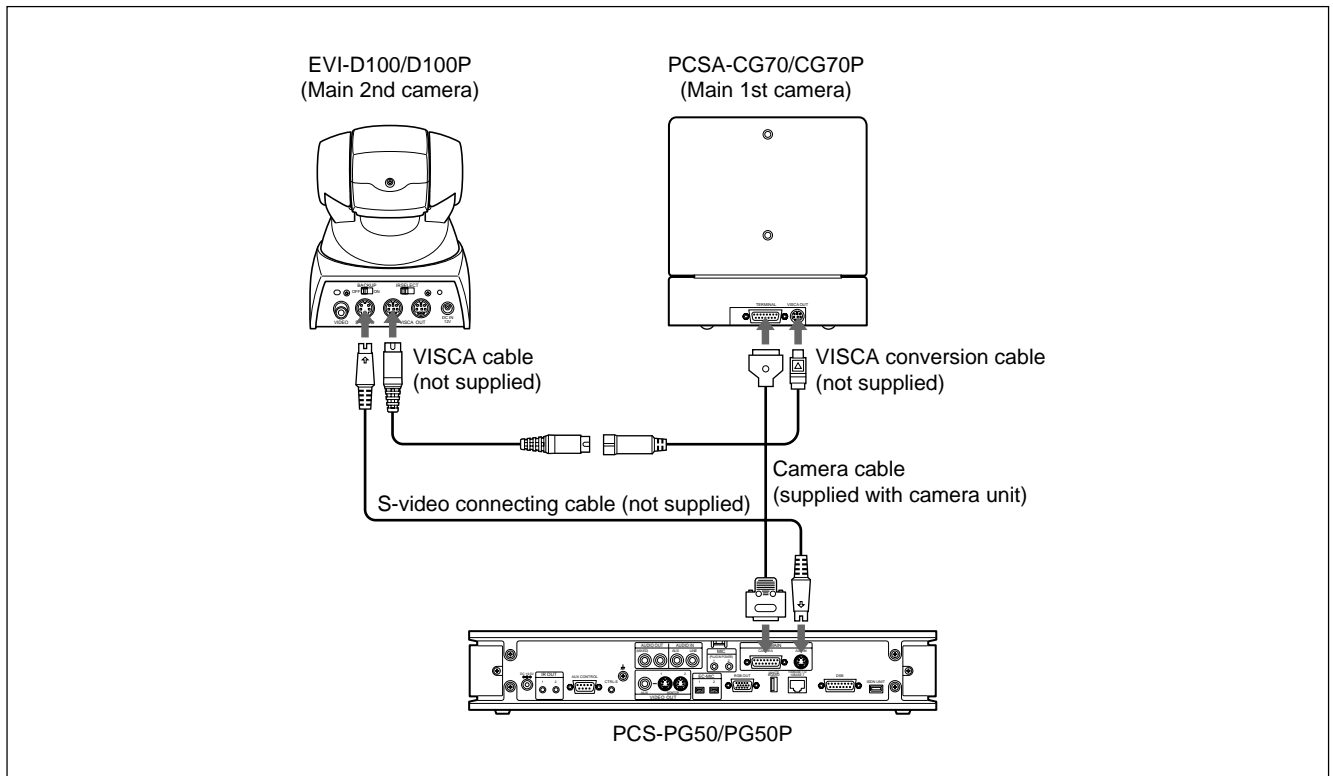
Note

Besides EVI-D100/D100P (not supplied), BRC-300/300P (not supplied) can also be used.

1-10. Multipoint Videoconference using 4CIF Mode

During a multipoint videoconference, a 4CIF image can be received by sub-terminals without installing the MCU software.

> **Notes**
> · All the broadcast modes do not support the 4CIF mode.
> · A 4CIF image cannot be received when PCS-1, PCS-11, PCS-TL30, and/or PCS-TL50 is used as sub-terminals.
> · An other company's endpoint that has a 4CIF reception capability is partially restricted in function when it is used as a sub-terminal.
> · When NTSC and PAL models are connected in the multipoint videoconference, some of functions are restricted.

1-10-1. Relation between 4CIF broadcast mode and video format

The broadcast mode of a multipoint conference and the video format used for display at each terminal are as shown in the table below.

Broadcast mode			Main terminal screen	Sub-terminal screen	Remarks
Split mode Split position (fixed) mode			Mosaic (4CIF)	Mosaic (4CIF)	Note 1
Voice Activate mode Broadcast mode	Broadcaster	Main terminal	Mosaic (4CIF) or Full screen (CIF)	Full screen (4CIF)	Note 2
		Sub-terminal	Full screen (CIF)	Broadcaster: Full screen (CIF) or Mosaic (4CIF)	Note 3
				Except broadcaster: Full screen (CIF)	

Note 1:
The figure below shows the example of a six-screen mosaic. A four-screen mosaic is also the same as shown below.

> **Note**
>
> As long as a sub-terminal has a 4CIF reception capability, it can receive the 4CIF mosaic even it is an other company's endpoint.
> Even when NTSC and PAL models are connected, a sub-terminal can receive the 4CIF mosaic.
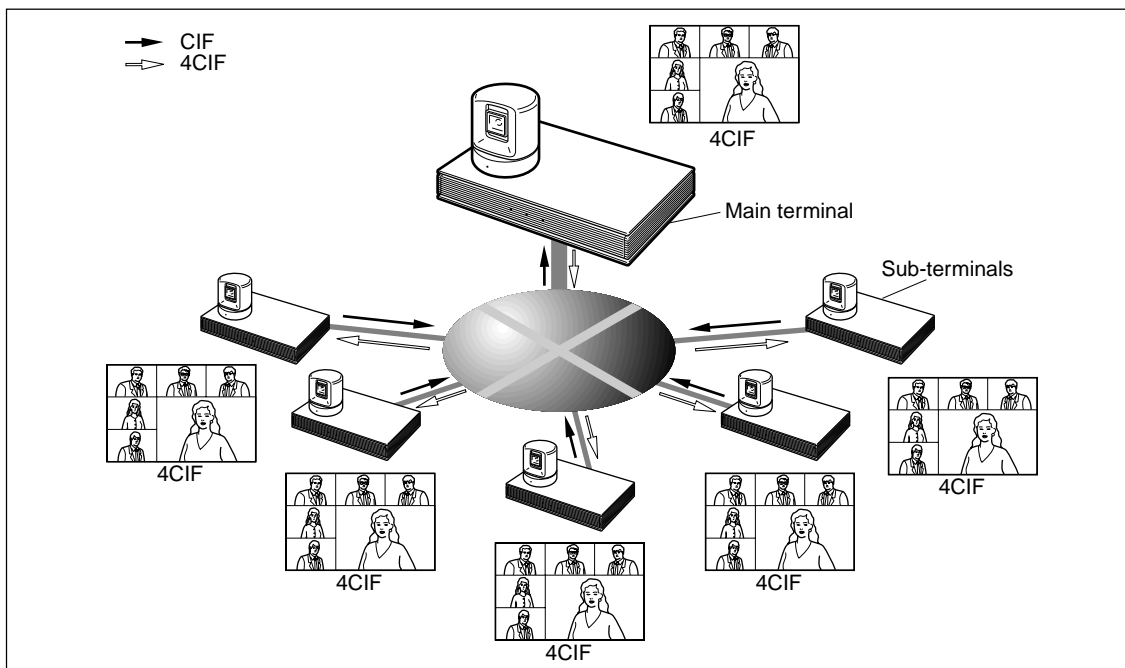
Note 2:

An other company's endpoint that has a 4CIF reception capability cannot receive a 4CIF full screen image as the sub-terminal. A CIF full screen image is received instead. (The Sony's 4CIF full screen image is not compatible with other company's endpoint.)

When NTSC and PAL models are connected, a sub-terminal receives the CIF full screen image.
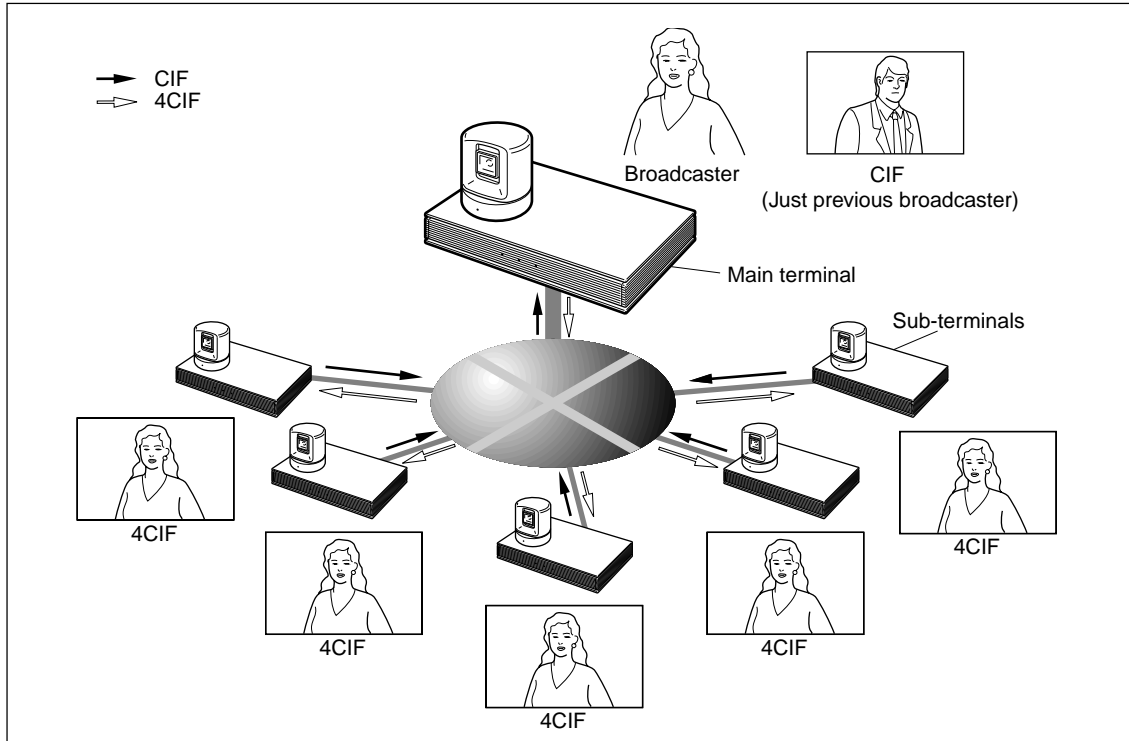
Note 3:

Both main and sub-terminals, receive a CIF full screen. The sub-terminal which broadcasts itself, however, can receive the 4CIF mosaic only when the split mode is selected.
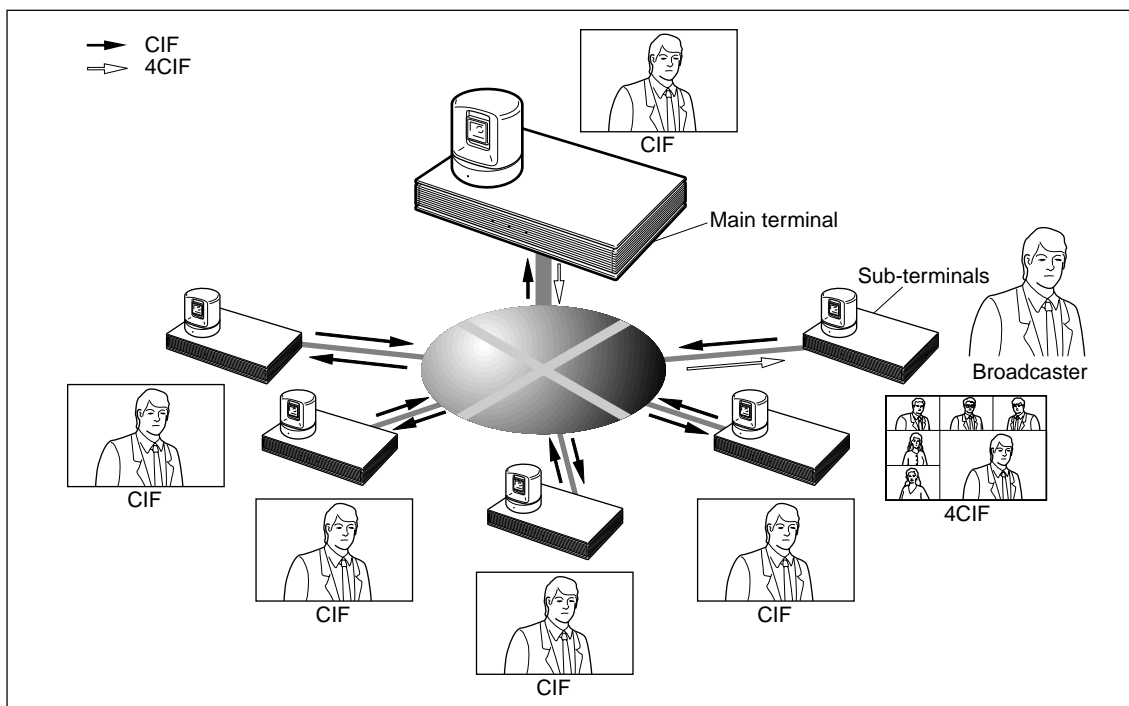
1-10-2. Pre-confirmation items

Confirm the following before installation.
・ 4CIF mode cannot be used for mixed connection of LAN and ISDN or LAN and SIP.
・ 4CIF mode cannot be used for cascade connection.

Notes
・ When DSB transmission is performed in the 4CIF mode, the following cases of screen image are
   automatically switched to the CIF mode.
   a) mosaic
   b) full screens when a main terminal is a broadcaster.
   It is returned to the state before transmission when DSB transmission stops.
・ When dual video transmission is performed in the 4CIF mode, the following cases of screen image are
   automatically switched to the CIF mode.
   a) mosaic
   b) full screens when a main terminal is a broadcaster.
   It is returned to the state before transmission when dual video transmission stops.
・ The output to the five monitors is not limited when five monitors are used on the main terminal side of
   PCS-G70/G70P.
・ A still picture is not limited in transmission.

1-10-3. Setting

Perform the 4CIF mode setting using the Communication Setup Menu.
Set the 4CIF mode of all terminals, which participate in a conference, to "ON" or "Auto".

Note
No change can be made during conference.
Notes
・ Turning on the Individual Settings allows you to perform transmission, reception and multipoint
   settings individually.
・ The setting of a 4CIF mode can be confirmed using the Communication Submenu during communica-
   tion.

Description of 4CIF mode
Auto: Automatically set to the 4CIF mode when the bandwidth per point is more than 384 Kbps in
        the split mode.
        Automatically set to the 4CIF mode for the full screen camera image when a main
        terminal is a broadcaster and the bandwidth is more than 1024 Kbps.
        (Factory setting: Auto)
ON: Set to the 4CIF mode irrespective of the bit rate.
OFF: Not set to the 4CIF mode irrespective of the bit rate.

Setting screen

Screen when the Individual Settings to select whether to perform transmission, reception, and multipoint settings individually is set to "OFF".

Communication
◄ Page: 2/4 ►

Video Mode	Auto ▼
Interlace Mode	Auto ▼
4CIF Mode	Auto ▼
Video Frame	Auto ▼
Audio Mode	Auto ▼
Restrict	Auto ▼

Save   Cancel

Screen when the Individual Settings is set to "ON".

Communication
◄ Page: 2/4 ►

Interlace Mode	Dial	Auto ▼
	Ringer	Auto ▼
4CIF	Dial	Auto ▼
	Ringer	Auto ▼
	Multipoint	Auto ▼

Save   Cancel

1-11. Connecting to Network Cameras

Note

In this section, PCS-G50/G70 refers to both the PCS-G50/G70 and PCS-G50P/G70P.

1-11-1. Overview

The Sony Visual Communication System PCS-G50/G70 is the first in the industry with features that allow connection with network cameras. These features allow you to connect to Sony network cameras as if you were calling a videoconference partner. In addition to viewing network camera images through the PCS-G50/G70, audio exchange is also possible between the PCS-G50/G70 and the network cameras, and pan, tilt and zoom operations can be performed on network cameras through the PCS-G50/G70. Furthermore, the cameras can be used to conduct multipoint conferences with a mixture of connections, such as IP and ISDN.

Video/Audio Types

H.264 and MPEG4 are supported for video (for single codec only).
G.711 is supported for audio.

You can monitor real-time network camera images and transmit voice data bi-directionally through the PCS-G50/G70 during a videoconference.

Easy Connection

Through the phone book (called the "network camera list") of the PCS-G50/G70, you can easily connect to a network camera using a procedure similar to that for videoconferencing. You can register up to 20 network cameras in the network camera list.
- The network camera list is separate from the 500 items in the ordinary phone book.
- Private and shared phone books are not supported.
- To register a network camera in the network camera list, see section 1-11-6.

Multipoint Connection

Up to 6 points (including the local site) can be connected, and split-screen viewing is possible. Multipoint connection in a mixed IP (H.323/SIP) and ISDN environment is possible for video communication terminals.
- For multipoint connection, MCU software for LAN connection (sold separately) is required.
- For multipoint connection in a mixed SIP and ISDN environment, SIP software and MCU software for ISDN connection (sold separately) are required.

Far End Camera Control

You can use the far end camera control function when connected to a network camera. The procedures for acquiring broadcast permission for the target network camera and for controlling the far end camera are the same as for when the PCS-G50/G70 is used at a remote site.
- To use the far end camera control function, you must have the proper permission settings.
  (See section 1-11-2.)
- If the far end camera control function is enabled by the PCS-G50/G70, it can also be used from video communication terminals as sub-terminals.
- The far end camera control function can be used in full screen display mode only.

Preset Function

You can use the preset function (from 1 to 6 preset positions) for the network camera connection. You can also register preset positions through the PCS-G50/G70. The procedures for registering and calling up the presets are the same as for when the PCS-G50/G70 is used at a remote site.
- To use the preset function, you must have the proper permission settings. (See section 1-11-2.)

Status Indication

As with the videoconferencing connection, you can use the Status menu for the network camera connection to check the communication status during communication, as well as the previous communication status while not in communication.
- When using a TCP connection, lost and recovered packet counts are not displayed.

Web Function

Using Microsoft® Internet Explorer® (version 5.0 or higher, 6.0 is recommended), you can access the PCS-G50/G70 to perform control and change settings for a network camera.

Terminal Name Indication

You can use the terminal name indication function for the network camera connection.
When this feature is enabled, the name of the title bar configured on the System Menu of the connecting network camera is displayed on the videoconferencing screen.

Other Precautions

You cannot perform the following PCS-G50/G70 functions when connected to a network camera (even between videoconferencing terminals):

・ Sending/receiving a presentation image
・ Sending dual video
・ Sending a still image
・ Encrypted conference
・ Cascade connection

For the reasons outlined below, do not connect to network cameras used for monitoring. It is recommended that network cameras be installed exclusively for videoconferencing.

・ The PCS-G50/G70 does not support JPEG. JPEG recording may stop when the PCS-G50/G70 is connected to a monitoring system where Sony Recorder Software (RealShot Manager, IMZ series), Sony Network Recorder (NSR series), etc. is used.
・ Connecting a video communication terminal to a network camera used for fixed monitoring and far-end controlling may result in a loss of monitoring information.

When the SNC-RX550N/RX550P is installed on a desktop, the video image will be displayed upside down. The PCS-G50/G70 has no vertical flip function.

Basic Specifications

Target Network Camera (As of December 2007)	Sony SNC-RX550N/ RX550P (software version 2.1) Sony SNC-RZ50N/ RZ50P (software version 2.1) Sony SNC-CS50N/ CS50P (software version 2.1) For the latest information on supported cameras and software versions, contact your Sony sales representative.
Transmission Mode	UDP (Unicast), UDP (Multicast), TCP ∗ UDP (Unicast) is recommended
Image Size∗1	320 × 240 (QVGA), 160 × 120 (QQVGA)
Mode∗2	H.264, MPEG4 (single codec only)
Audio Codec	G.711
Bit Rate	When using H.264: 32, 64, 128, 256, 384, 512, 768, 1024, 1536 kbps When using MPEG4: 64, 128, 256, 384, 512, 768, 1024, 1536, 2048 kbps
Frame Rate∗3	NTSC: 15fps, 30fps PAL: 12fps, 25fps
Type of Connection	Peer-to-peer, multipoint connection∗4 Up to 6 points (including the local site) can be connected for multipoint connection with the following configurations: ・ H.323 + network camera ・ H.320 + network camera ・ SIP + network camera ・ MIX MCU (mixture of the above patterns)

∗1: 640 × 480 (VGA) is not supported.
∗2: H.264, MPEG4 and JPEG dual codec and JPEG single codec are not supported.
∗3: Up to 15fps (NTSC) or 12fps (PAL) if the mode is H.264 and the transmission mode is TCP.
∗4: Multipoint connection requires optional MCU software for LAN connection.
    Multipoint connection for mixed SIP and ISDN environment requires optional SIP software and MCU software for ISDN connection.
    Cascade connection is not supported.

1-11-2. User Authority

Multiple users can be registered for a Sony network camera, and a name, password and authority can be specified for each user. Connection from the PCS-G50/G70 to a network camera is made using a pre-defined user name and password. The operation and settings for a network camera can be limited based on the user authority.

Network Camera User Authority

Table 1 shows the functions available for the administrator and user authorities.

| Note |

Only those functions related to PCS integration are listed.

Table 1

Authority / Function	Administrator	User				
		Full	Pan/Tilt	Preset Position	Light	View
Monitor live image	○	○		○	○	
Call up preset position*1	○	○		○	✕	
Perform pan/tilt/zoom operations	○	○		✕	✕	
Receive audio	○	○		○	○	
Control the setting menu*2	○	✕		✕	✕	

○: Function available, ✕: Function not available

∗1: Up to 6 preset positions can be used.
Through the PCS-G50/G70, you can call any of the six registered preset positions (No.1 to No.6) in the preset position table in the network camera's Preset Position Menu.

∗2: This function overwrites the network camera's settings. See the "Determined Communication Mode Based on Authority" section for details (Page 1-58).

Operating with Administrator Authority in PCS Integration

When you connect using the administrator authority, you can change the settings of a network camera from the PCS-G50/G70. You can change the settings through the Network Camera page in the PCS's General Setup menu. (For details, see section 1-11-5.) If "Auto" is selected for "Bit Rate," "Frame Rate," "Mode" and "Image Size," the connection is made using the settings of the connecting network camera.

If the connection is made using the administrator authority with the setting items set to "Auto," the connection can be made by properly changing the network camera settings even if a preconfigured item in the network camera setup is not supported by the PCS-G50/G70.

In addition, the far end camera control and preset functions can be used under the administrator authority.

When the network camera settings are changed via the PCS-G50/G70, the previously set network camera settings are automatically restored after communication has ended.

Notes

- Connections made using the administrator authority automatically change the network camera settings and may affect a monitoring system using the network camera, so you must consult with your system administrator beforehand.
- If a connection shuts down due to a failure such as a blackout, the settings cannot be restored. It is therefore recommended to save the camera's setting data in a file prior to connection. For details on how to save/restore the setting data, see the User's Guide that came with the network camera.

When a connection to a network camera is made using the administrator authority, the modes described below will automatically be changed.

- Audio Codec
  If the audio codec setting (used to send audio) of the network camera is G.726, it will automatically be changed to G.711.
- Audio (Bidirectional)
  If the audio upload setting of the network camera is disabled, it will automatically be enabled to perform voice communication from the video communication terminal to the network camera. If the microphone setting of the network camera is OFF, it will automatically be turned ON to perform voice communication from the network camera to the video communication terminal as well.

- Multicast Streaming
  If the multicast streaming setting of the network camera is OFF and the connection is made through UDP (Multicast), multicasting will automatically be turned ON for the connection using UDP (Multicast).
- Unicast Streaming
  If the network camera's unicast streaming setting (video or audio port number) overlaps with the port number used by the PCS-G50/G70, it will automatically be changed to another number for connection.

Operating with User Authority in PCS Integration

You cannot change the network camera setting items through the PCS-G50/G70. You must use the network camera to configure settings related to the connection with the PCS-G50/G70. (Settings configured through the Network Camera page in the PCS's General Setup menu will be disabled.)

To use the camera control and preset functions via the PCS-G50/G70, you must properly configure the network camera's User menu.

For details, see Table 1 mentioned above and section 1-11-8.

Determined Communication Mode Based on Authority

("PCS" in the table below refers to the main terminal of the PCS-G50/G70.)

Camera Menu Setting (on Network Camera)			Authority Used for Connection	
			Administrator	User
Mode	Single Codec	H.264	Connection is made using the PCS setting value regardless of the network camera setting.[*1] When the PCS setting is "Auto," however, the network camera settings are prioritized.	Connection is made using the network camera setting (H.264 single codec).
		MPEG4		Connection is made using the network camera setting (MPEG4 single codec).
		JPEG	Connection is made using the PCS setting value regardless of the network camera setting. When the PCS setting is "Auto," however, connection is made by automatically changing the network camera setting to a mode supported by the PCS (H.264 single codec).[*1]	Connection is not possible if no action is taken. To make the connection, use the network camera to switch the mode to one that is supported by the PCS.
	Dual Codec			
Audio Codec	G.711		Connection is made using G.711.	Connection is made using the network camera setting (G.711).
	G.726		Connection is made by automatically changing the network camera setting to the audio codec supported by the PCS (G.711) regardless of the network camera setting.[*1]	Audio is not available between the video communication terminal and network camera.[*2]
Image Size	QQVGA		Connection is made using the PCS setting value regardless of the network camera setting.[*1] When the PCS setting is "Auto," however, the network camera setting is prioritized.	Connection is made using the network camera setting (QQVGA).
	QVGA			Connection is made using the network camera setting (QVGA).
	VGA		Connection is made using the PCS setting value regardless of the network camera setting. When the PCS setting is "Auto," however, connection is made by automatically changing the network camera setting to an image size supported by the PCS (QVGA).[*1]	Connection is not possible if no action is taken. To make the connection, use the network camera to switch the image size to one that is supported by the PCS.
Bit Rate			Connection is made using the PCS setting value regardless of the network camera setting.[*1] When the PCS setting value is "Auto," however, the network camera setting is prioritized.[*3]	Connection is made using the network camera setting.
Frame Rate				
Transmission Mode (TCP/UDP)			Connection is made using the PCS setting value regardless of the network camera setting.[*1]	Connection is made using the PCS setting. In addition, the network camera setting is required.[*4] For details on the network camera setting, see "Streaming Tab" section in section 1-11-8.

*1: When the network camera settings are changed for the connection, the previously set network camera settings are automatically restored after communication has ended.

*2: Videoconferencing connection is possible, even if G.726 is selected. Upon connection, a message is displayed prompting the user to switch the audio codec.
  To use audio for videoconferencing, switch to G.711 on the network camera.

*3: Even if 30fps is selected, the rate is automatically set to 15fps (NTSC) or 12fps (PAL) if the mode is H.264 and the transmission mode is TCP.

*4: If the network camera setting is improper, a message is displayed prompting the user to make the proper setting.

How to Configure User Authority

User authority must be configured on both the network camera and the PCS-G50/G70.
This section provides an overview of the settings. For detailed information, see "1-11-8. Setting Network Camera itself" and "1-11-6. Registering/Editing Network Camera List" sections.

On Network Camera

Register users beforehand in the User menu in the Administrator menu.

On PCS-G50/G70

On the network camera list edit screen, enter a name and IP address for the camera you want to register, as well as the user name and password specified on the network camera.
(To connect using the administrator authority, the user name and password must be registered as "Administrator" in the network camera's User menu.)

1-11-3. Setting Procedures in PCS Integration

On PCS-G50/G70   On Network Camera

```
                                                    ┌──────────┐
                                                    │  START   │
                                                    └────┬─────┘
                                                         │
                                                         ▼
                                            ┌─────────────────────────┐
                                            │ Setting the user        │
                                            │ (User menu)             │
                                            │ See sections 1-11-2     │
                                            │ and 1-11-8              │
                                            └────────────┬────────────┘
                                                         │
                                                         ▼
┌──────────────────────────────────────┐   ┌─────────────────────────┐
│ Setting the network camera password  │◄──│ Setting the camera      │
│ (Administrator Setup Menu)           │   │ image/audio             │
│ See section.1-11-4                   │   │ (Camera menu)           │
│                                      │   │ See section 1-11-8      │
└──────────────────┬───────────────────┘   └─────────────────────────┘
                   │
                   ▼
┌──────────────────────────────────────┐
│ Setting the network camera setting   │
│ (General Setup Menu)                 │
│ See section 1-11-5                   │
└──────────────────┬───────────────────┘
                   │
                   ▼
┌──────────────────────────────────────┐
│ Registering/Editing the network camera│
│ list (in the Phone book)             │
│ See section 1-11-6                   │
└──────────────────┬───────────────────┘
                   │
                   ▼
┌──────────────────────────────────────┐
│ Test to connect to the registered network │
│ camera                               │
│ *For detailed procedures, see section│
│  1-11-7                              │
└──────────────────┬───────────────────┘
                   │
                   ▼
              ┌──────────┐
              │   END    │
              └──────────┘
```

1-11-4. Setting Network Camera Password

Registering the network camera password allows you to restrict some users to access to network cameras.
If registered, users will be asked to enter it every time accessing the network camera list in the Phone Book.

Note

A password saved here can be also used to access to the network camera list through the Web control function. (For details on the Web control function, see section 1-11-10.)

1. Select "Password" under "Administrator Setup" using ⬆ and ⬇ buttons on the remote commander and press the PUSH ENTER button.

```
                   Administrator Setup
            ┌─────────────────────────┐
            │ Password                │
            ├─────────────────────────┤
            │ Phone Book              │
            ├─────────────────────────┤
            │ Streaming/Recording     │
            ├─────────────────────────┤
            │ Other Settings          │
            └─────────────────────────┘


                              ┌──────────┐
                              │ Previous │
                              └──────────┘
```
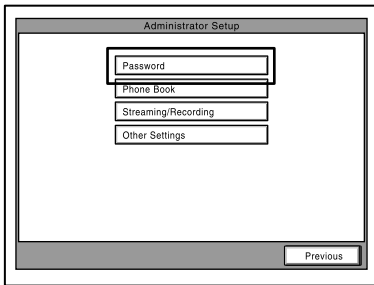
2. Select "Network Camera Password" using ⬆ and ⬇ buttons on the remote commander and set a password of up to 10 characters.

```
                   Administrator Setup
   ┌───────────────────────────────────────────────┐
   │ Password                                       │
   │    ┌──────────┐                                │
   │    │ Page: 1/3 ▶│                              │
   │    Administrator Password         [        ]   │
   │    Phone Book Modification Password [       ]   │
   │    Save Settings Password          [        ]  │
   │    Remote Access Password          [        ]  │
   │    Streaming Broadcast Password    [        ]  │
   │    Network Camera Password         [        ]  │
   │                        ┌──────┐ ┌──────┐       │
   │                        │ Save │ │Cancel│       │
   │                        └──────┘ └──────┘       │
   └───────────────────────────────────────────────┘
```
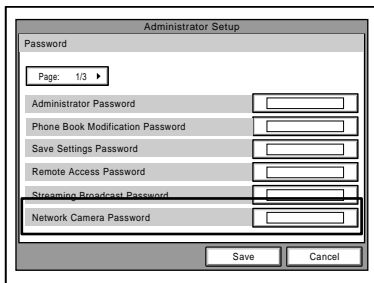
3. Select "Save" using ⬆ and ⬇ buttons on the remote commander and press the PUSH ENTER button.

1-11-5. Setting Network Camera Setting

With the Network Camera page, you can configure whether or not to connect network cameras and which transmission mode to use when connecting to cameras with administrator authority.
Turning on "Network Camera Connection", the network camera icon appears in the phone book and you can access the network camera list to dial.

1. Select "Network Camera" under "General Setup" using ⬆ and ⬇ buttons on the remote commander and press the PUSH ENTER button.

```
                       General Setup
            ┌─────────────────────────┐
            │ Device Setup            │
            ├─────────────────────────┤
            │ Clock Set               │
            ├─────────────────────────┤
            │ Menu Screens            │
            ├─────────────────────────┤
            │ Whiteboard              │
            ├─────────────────────────┤
            │ Network Camera          │
            └─────────────────────────┘

                              ┌──────────┐
                              │ Previous │
                              └──────────┘
```
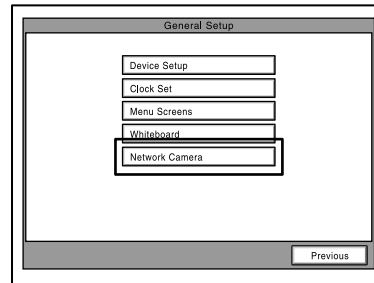
2. Select "Network Camera Connection" using ⬆ and ⬇ buttons on the remote commander and press the PUSH ENTER button. Then select "On" using ⬆ and ⬇ buttons and press the PUSH ENTER button.
    Turning on "Network Camera Connection" makes the network camera list icon appear on the phone book.

3. (In case of the use of administrator authority) Configure the appropriate Bit rate, Frame rate, Mode and Image Size for video sent from network cameras. Select "Bit rate," "Frame rate," "Mode," or "Image Size" using ⬆ and ⬇ buttons on the remote commander and configure the appropriate settings. (For details on each setting, see "General Setup" menu - "Network Camera" in "1-5-2. System Setting Table" section.)

```
                       General Setup
   ┌───────────────────────────────────────────────┐
   │ Network Camera                                 │
   │    ┌──────────┐                                │
   │    │ Page: 1/1│                                │
   │    Network Camera Connection  [ On    ▾] ─(2)  │
   │    Bit rate                   [ Auto  ▾]       │
   │    Frame rate                 [ Auto  ▾]       │
   │    Mode                       [ Auto  ▾] ─(3)  │
   │    Image Size                 [ Auto  ▾]       │
   │                        ┌──────┐ ┌──────┐       │
   │                        │ Save │ │Cancel│       │
   │                        └──────┘ └──────┘       │
   └───────────────────────────────────────────────┘
```
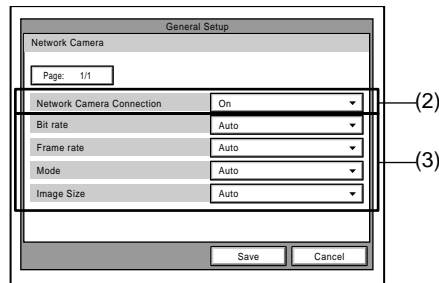
Note

In case of the use of user authority each of "Bit rate," "Frame rate," "Mode," or "Image Size" will be disabled if configured on this page. Also see "1-11-2. User Authority" section.

4. Select "Save" using ⬆ and ⬇ buttons on the remote commander and press the PUSH ENTER button.

1-11-6. Registering/Editing Network Camera List

To connect to network cameras, be sure to register your desired cameras in the network camera list in advance. Also you can save/load/delete the network camera list data collectively. Proceed as follows.

Notes

· You can register up to 20 network cameras in the network camera list.
· The network camera list is separate from 500 items in the ordinary phone book.
· Private and shared phone books are not supported.
· You can make a still image (JPEG) display in the network camera list.

Registering/Editing

1. Select "Phone Book" in the launcher menu using ⬆, ⬇, ⬅, and ➡ buttons on the remote commander and press the PUSH ENTER button. The Phone book appears.
2. Click the network camera icon using ⬆, ⬇, ⬅, and ➡ buttons on the remote commander and press the PUSH ENTER button. The network camera list appears.
    Notes
    · To make the network camera icon appear in the phone book, be sure to set "Network Camera Connection" to On under "Network Camera" in General Setup menu.
    · If you have set the network camera password, you are asked to enter it every time accessing the network camera list. (For details on the network camera password, see section 1-11-4.)
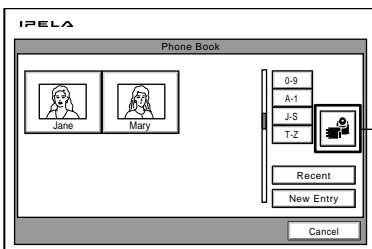
Network camera icon

3. Select the list to register to or edit using ⬆, ⬇, ⬅, and ➡ buttons on the remote commander and press the PUSH ENTER button. The submenu appears.

4. Select "Edit" using ⬆ and ⬇ buttons on the remote commander and press the PUSH ENTER button. The network camera edit screen appears.
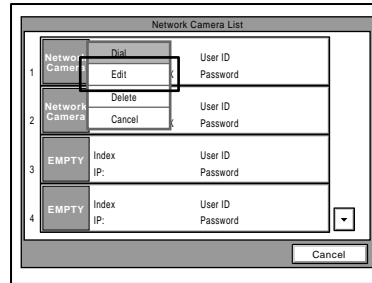
5. Enter "Name," "IP Address," "User Name," and "HTTP port number," "Admission" and "Transmission." And enter "Password" if necessary. (For details on each item, see "To Be Registered in Network Camera List" on the next page.)
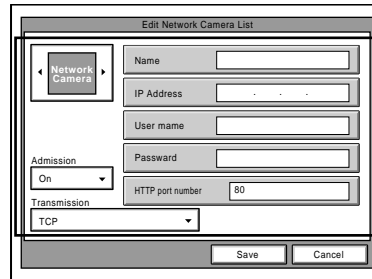
Notes

· Normally set "Admission" to On. If set to Off, registered user name and password will be deleted.
· Enter the same user name and password for "User Name" and "Password" respectively as those registered on a network camera in advance. Note that sequential operation differs depending on a type of user authority. For details, see "1-11-2. User Authority".
· For details on User menu and Camera menu on a network camera, see "1-11-5. Setting Network Camera Setting" section.

6. Select "Save" using ⬆ and ⬇ buttons on the remote commander and press PUSH ENTER button.

To Be Registered in Network Camera List

Item	Description	Default
Name	Enter a name of up to 38 characters to be displayed in the network camera list. Any characters can be used without restriction.	Blank
IP Address	Enter an IP address of a target network camera.	Blank
User Name	Required when "Admission" is set to On. Enter a user name of 5 to 16 1-byte alphanumeric characters. The user name entered here shall be the same as the one configured on the network camera itself with your desired authority	Blank
Password	Required when "Admission" is set to On.*1 Enter a password of 5 to 16 1-byte alphanumeric characters. The password entered here shall be the same as that configured for the desired user on the network camera itself.	Blank
HTTP Port Number	Enter an HTTP port number of a target network camera.	80
Admission	Specify whether or not a user is authenticated when connecting to a network camera.*1 **Notes** • Normally set to "Admission" to On. When set to On, be sure to also enter "User Name" as explained above. • When set to Off, with the network camera, set "Viewer authentication" under the User Menu to Off and select the viewer mode to be enabled without authentication. • The relationship between this "Admission" and camera's "Viewer authentication" is shown in the footnote*2.	On
Transmission	Select the transmission mode to be used when connecting a network camera, from "TCP", "UDP (Unicast)" and "UDP(Multicast)". **Notes** • The recommended mode is "UDP(Unicast)" • When UDP(Unicast) transmission is selected while connecting the camera with User authority, be sure to perform unicast streaming setting so that video and audio port numbers do not overlap with the main PCS-G50/G70's and also do not overlap with other network cameras' which are connected with the main PCS-G50/G70. • When UDP (Multicast) transmission is selected while connecting the camera with User authority, be sure to set "Multicast streaming" under the Streaming tab in the Camera Menu of the network camera to On.	TCP

*1: When "Admission" is set to "On" and "Password" is left blank, users are asked for the password every time dialing.
This enables you to restrict users to access to individual network camera.

*2:

Admission (On PCS)	Viewer authentication (On Network camera)	Description
On	On	Normally set both to On. You are authenticated every time dialing to connect to the network camera. Only when the user name and password stored in the network camera list match those stored in the User menu of the network camera at dialing (If the password in the network camera list is left blank, you are asked for the password when dialing.), the video communication terminal can connect the camera with the corresponding authority. If the administrator name and password are stored in the network camera list, the video communication terminal can connect the camera with the administrator authority.
On	Off	The settings of Admission = On and Viewer authentication = Off are not recommended although connection can be made. **Note** You are authenticated when dialing to connect to the network camera. When the user name and password stored in the network camera list match those stored in the User menu of the network camera at dialing and (If the password in the network camera list is left blank, you are asked for the password when dialing.), the video communication terminal can connect the camera with the corresponding authority, In the case of connection with user authority (not administrator), however, the video communication terminal cannot receive audio from the camera. When the user name and password stored in the network camera list do NOT match those stored in the User menu, the video communication terminal can connect the camera without authentication. In this case, the viewer mode selected under Viewer authentication = Off is enabled, and functions corresponding to the selected viewer mode can be used. (See Table 1 in section 1-11-2.)
Off	Off	Set both to Off when you want to connect to network cameras without authentication. Note that the video communication terminal cannot always receive audio from the network camera without authentication.
Off	On	Connection cannot be made. Change to any of the above-mentioned.

Saving/Loading/Deleting

With "Phone Book Page 1/3" under "Administrator Setup", you can save/load/delete the network camera list data collectively.

Note

• To activate "Save/Load/Clear Network Camera List" items, be sure to turn on "Network Camera Connection" under "General Setup" - "Network Camera" in advance, and insert Memory Stick into the memory stick slot.

```
                Administrator Setup
  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

                        Save        Cancel
```
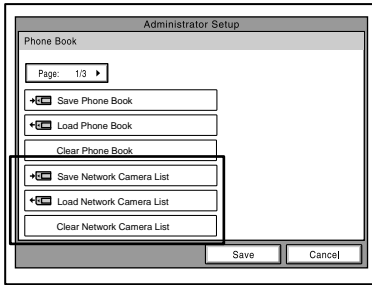
When "Save Network Camera List" is executed, files with the following file name/extensions will be saved in the following directory.

\MSSONY\PRO\TVCONF\CLST

File name: PCS_CLST.CSV, CLPxxxxx.JPF

1-11-7. Connecting Network Cameras

Notes

• You can dial the network cameras only from the network camera list ,.
  History menu, ordinary phone book, and number input box on the launcher menu are not supported.
• To connect multiple network cameras, dial one by one. Multipoint connection list is not supported, too.
• Call logs and call history with respect to network camera connection are not kept in the video communication terminal.

1. Select the "Phone Book" in the launcher menu using ▲, ▼, ◄, and ► buttons on the remote commander and press the PUSH ENTER button. The phone book menu appears.

2. Click the network camera icon using ▲, ▼, ◄, and ► buttons on the remote commander and press the PUSH ENTER button. The network camera list appears.

Note

If you have set the network camera password, you are asked to enter it every time accessing the network camera list. (For details on the network camera password, see section 1-11-4.)

3. Select the entry you want to dial using ▲, ▼, ◄, and ► buttons on the remote commander and press the PUSH ENTER button. The submenu appears.

4. Select "Dial" using ▲ and ▼ buttons on the remote commander and press the PUSH ENTER button. The system begins dialing the selected entry.

Note

If "Admission" is set to "On" and "Password" is left blank in the Network Camera List, a dialog box for password entry will appear. In this case, enter the password, select "Dial," and then press the PUSH ENTER button.

```
                  Network Camera List
  ┌───────┬──────────┬──────────────────┐
  │Network│  Dial    │  User ID         │
1 │Camera │  Edit    │  Password        │
  ├───────┼──────────┼──────────────────┤
  │Network│  Delete  │  User ID         │
2 │Camera │  Cancel  │  Password        │
  ├───────┼──────────┼──────────────────┤
  │       │ Index    │  User ID         │
3 │EMPTY  │ IP:      │  Password        │
  ├───────┼──────────┼──────────────────┤
  │       │ Index    │  User ID         │
4 │EMPTY  │ IP:      │  Password     ▼  │
  └───────┴──────────┴──────────────────┘
                              Cancel
```
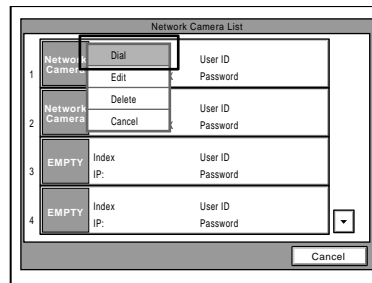
5. To dial another entry sequentially, press down the Dial/Disconnect button to display the communication submenu.

6. Select the "Phone Book" using ▲, ▼, ◄, and ► buttons on the remote commander and press the PUSH ENTER button and repeat the procedures 2 to 4 above.

1-11-8. Setting Network Camera itself

This section explains the setting options which can be set with the network camera's menu.

Camera Menu: Used to set the camera image and audio.

Connecting the network camera with Administrator authority

When each of "Bit Rate", "Frame Rate", "Mode" or "Image Size" is set to "Auto" on PCS-G50/G70, the Camera Menu setting is prioritized. Value not supported by PCS-G50/G70 is automatically changed to supported one if configured on the Camera menu. So you can configure an arbitrary value for each item. When each of "Bit Rate", "Frame Rate", "Mode" or "Image Size" is set to other than "Auto" on PCS-G50/G70, the settings of the Camera Menu are disabled if configured.

Connecting the network camera with User authority

Connection is made using the setting values of the Camera Menu. So be sure to configure the related parameters properly with the Camera Menu.

User Menu: Used to set the user name and password. Configure this setting first before connection.

System Menu: Used to set the name used as a terminal name indication. With this menu, you can also confirm the network camera's serial number and software version.

Camera Menu

Click "Camera" under Administrator menu, Camera menu appears.

This section describes settings required when you connect cameras with User authority.

Common Tab

Microphone: Select On for the video communication terminal to receive audio from the network camera.

  Note

  The following setting is also required with the User Menu if you connect the camera with User authority. For details, see "User Menu" section mentioned below.

  • Set "Viewer authentication" to On and check the "Audio" check box for the user with your desired authority.

Audio codec: Set to "G.711" to exchange audio.

Audio upload: Set to "Enable" for the network camera to receive audio from the video communication terminal.

Video codec Tab

Mode: Select the operation mode, "H.264" or "MPEG4" under Single codec.

Note

"JPEG" under Single codec and "Dual codec" are unavailable for connection with PCS-G50/G70.

Image Size: Select the image size "QVGA" or "QQVGA".

Note

"VGA" is unavailable for connection with PCS-G50/G70.

Frame rate, Bit rate:

Configure the appropriate values according to use environment.

Notes

- Connection cannot be made at 15fps or more (NTSC) and at 12fps or more (PAL) if the mode H.264 and transmission mode TCP are selected.
- When a multipoint connection is established, configure the frame rate so that it does not exceed the main PCS-G50/G70's frame rate limit.
  For details, see "1-11-9. Connection Mode for Multipoint Connection" section.

Streaming Tab
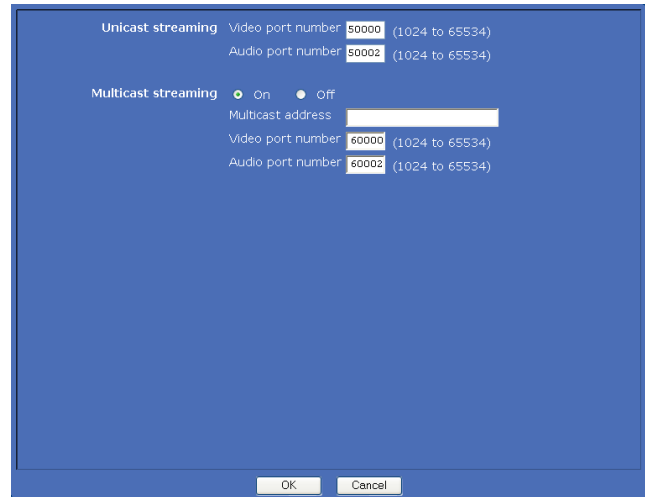
Unicast streaming: When UDP (Unicast) transmission is selected, set video and audio port numbers so that they do not overlap with the main PCS-G50/G70's, and also do not overlap with other network cameras' which are connected with the main PCS-G50/G70.

Multicast streaming: When UDP (Multicast) transmission is selected, set "Multicast streaming" to On and set "Multicast address", "Video port number" and "Audio port number" properly.

User Menu

When you click "User" in the Administrator menu, the User menu appears. Configure the following settings.

Administrator: Specify "User name" and "Password" for Administrator.

USER 1 to USER 9: Enabled when "Viewer authentication" is set to On.
You can register up to nine users which can be used when the PCS-G50/G70 connects the camera. Specify "User name" and "Password" for each user.

Audio: Enabled when "Viewer authentication" is set to On.
Select this check box when you want to receive audio from the camera with the video communication terminal. It can be determined by each user (Connection with Administrator authority can always receive audio.)

Viewer mode: Enabled when "Viewer authentication" is set to On.
Select the viewer mode which is enabled after the user is authenticated. It can be determined by each user. Functions available for each viewer mode differ.

Notes

• To enable the camera control function during connection to the PCS-G50/G70 after the user is authenticated, "Administrator", "Full" or "Pan/Tilt" authority is required.
• To enable the preset function during connection to the PCS-G50/G70 after the user is authenticated, "Administrator", "Full", "Pan/Tilt" or "Preset position" authority is required.

Viewer authentication: Set to On when the user is authenticated for connecting to the PCS-G50/G70. Normally set to On. When set to On, the above-mentioned "Viewer mode" will be enabled after the user is authenticated.
When "Viewer authentication" is set to Off, select the viewer mode from Full, Pan/Tilt, Preset position, Light or View from the selector on the left. The viewer mode selected here is enabled only when the video communication terminal connects the camera without authentication. When "Viewer authentication" is set to Off it is recommended that "Admission" in the network camera list of the PCS-G50/G70 be set to Off, too.

Notes

• During connection to the PCS-G50/G70 without authentication, video communication terminals cannot receive audio from the network camera.
• To enable the camera control function during connection to the PCS-G50/G70 without authentication, "Full" or "Pan/Tilt" authority is required.
• To enable the preset function during connection to the PCS-G50/G70 without authentication, "Full", "Pan/Tilt" or "Preset position" authority is required.

System Menu

When you click "System" in the Administrator menu, the System menu appears.
Configure the following settings.

System Tab

Title bar name: When the terminal name indication function is enabled by the PCS-G50/G70, the name of the title bar entered here is displayed on the videoconferencing screen as terminal name.
Up to 32 sigle-byte characters (up to 16 characters if duble-byte characters) can be saved here.

Note

When the name of the title bar is displayed on the videoconferencing screen, all characters to the end of title bar name may not be displayed depending on split-screen size or other conditions.

Serial number: The serial number of the camera is displayed.
Software version: The software version of this camera is displayed.

1-11-9. Communication Mode for Multipoint Connection

Up to 6 points (including the local site) can be connected and split-screen viewing is possible. Multipoint connection of mixed IP (H.323/SIP) and ISDN environment is possible for video communication terminals.

This section describes operational specifications and precautions when a multipoint connection is established.

General Precautions

- For multipoint connection, MCU software for LAN connection (sold separately) is required.
- For multipoint connection in a mixed SIP and ISDN environment, SIP software and MCU software for ISDN connection (sold separately) are required.
- You can specify the transmission mode used when connecting a network camera, from "TCP," "UDP (Unicast)" and "UDP (Multicast)." Multipoint connection allows single or mixed transmission mode.

Connection Example
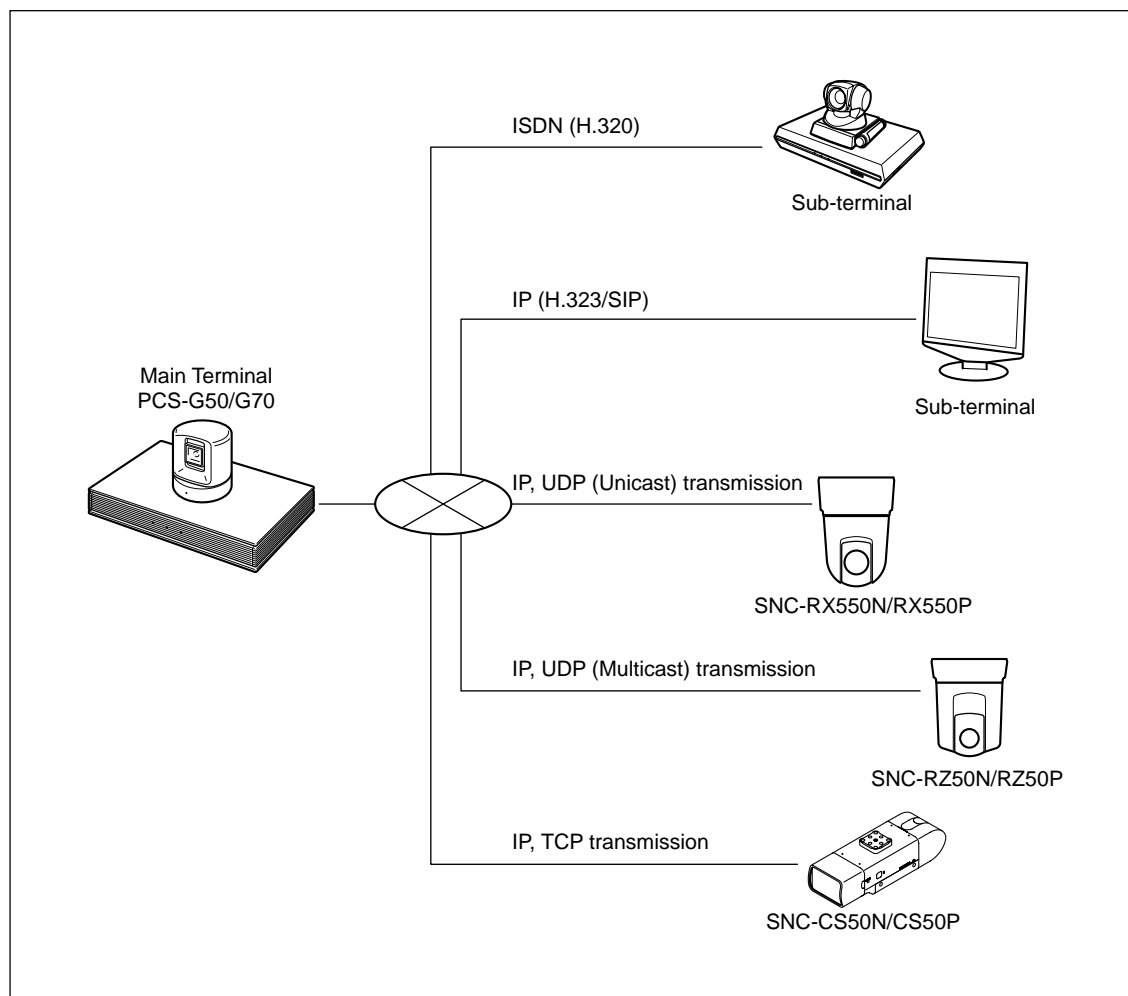
Operational Specifications 1: When only network cameras are connected as sub-terminals

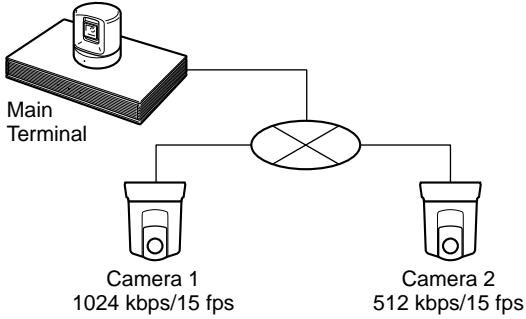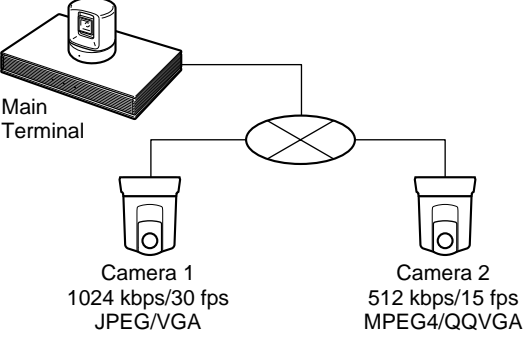| Operational Specifications			Connection
Condition		Determined Communication Mode	
	Authority		
1-a When sub-terminals are connected within the range of the LAN bandwidth of the main PCS	Administrator Authority	**When each setting on the main PCS's networkcamera page is set to a setting other than "Auto":** Connection is made using the setting values of the main PCS. The operation mode and image size are always determined by the PCS setting values. (They cannot be changed automatically.)	See example 1-a-1 (1)
		When each setting on the main PCS's network camera page is set to "Auto": In principle, operations follow each network camera's setting values.＊1	See example 1-a-1 (2)
	User Authority	**Regardless of the main PCS's network camera settings,** operations follow each network camera's setting values.	See example 1-a-2
	Mixed Administrator and User Authority	Cameras connected with the administrator authority and cameras connected with the user authority operate independently of each other, with the specifications described above.	
1-b When sub-terminals exceed the range of the LAN bandwidth of the main PCS	Administrator Authority	When the bit rate exceeds the PCS's LAN bandwidth, it is automatically changed to the optimum rate **regardless of the main PCS's network camera settings.**	See example 1-b-1
	User Authority	When the bit rate exceeds the PCS's LAN bandwidth, the mode is changed to "Voice Only" from the added camera **regardless of the main PCS's network camera settings.**	See example 1-b-2
	Mixed Administrator and User Authority	When the bit rate exceeds the PCS's LAN bandwidth, it is automatically changed to the optimum rate for cameras connected with the administrator authority, while the mode is changed to "Voice Only" for cameras connected with the user authority if capability exchange is required again, **regardless of the main PCS's network camera settings.**	See example 1-b-3

＊1: The PCS automatically switches communication modes not supported by the PCS (JPEG, dual codec, VGA, G.726,30fps on H.264 and TCP) to a supported one.
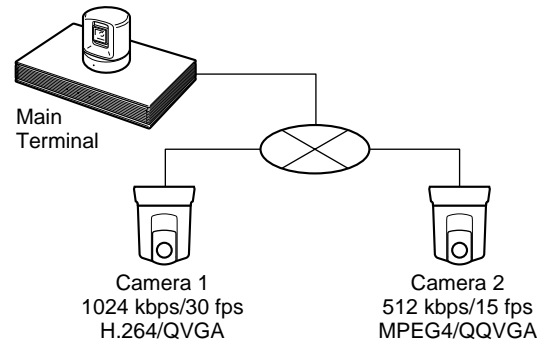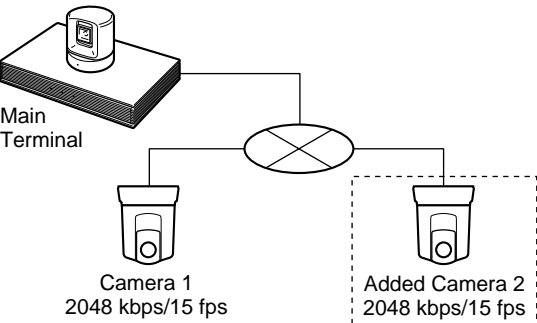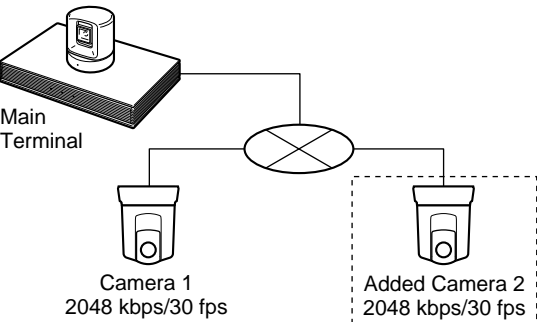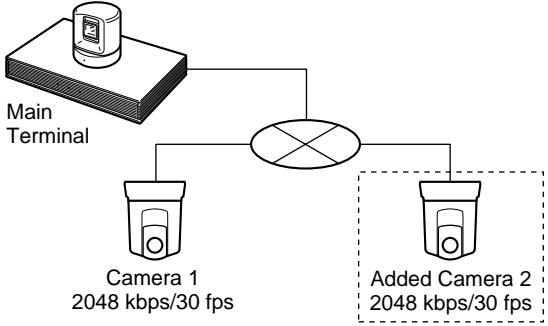
Operational Specifications 2: When network cameras and communication terminals are connected as sub-terminals

Operational Specifications				Connection
Condition			Determined Communication Mode	
		Authority		
2-a	When sub-terminals are connected within the range of the LAN bandwidth of the main PCS	Administrator Authority	When a communication terminal is connected as a sub-terminal, the current PCS rule is applied to the bit rate **regardless of the main PCS's network camera settings.**	See example 2-a-1
		User Authority	When a communication terminal is connected as a sub-terminal, the mode is changed to "Voice Only" for all cameras that require capability exchange again **regardless of the main PCS's network camera settings.**	See example 2-a-2
		Mixed Administrator and User Authority	Cameras connected with the administrator authority and cameras connected with the user authority operate independently of each other, with the specifications described above.	See example 2-a-3
2-b	When sub-terminals exceed the range of the LAN bandwidth of the main PCS	Administrator Authority	When a communication terminal is connected as a sub-terminal, the bit rate is changed to the optimum rate **regardless of the main PCS's network camera settings.**	See example 2-b-1
		User Authority	When a communication terminal is connected as a sub-terminal, the mode is changed to "Voice Only" for all cameras that require capability exchange again **regardless of the main PCS's network camera settings.**	See example 2-b-2
		Mixed Administrator and User Authority	Cameras connected with the administrator authority and cameras connected with the user authority operate independently of each other, with the specifications described above.	See example 2-b-3

Operational Specifications 3: When the frame rate limit is exceeded

If the frame rate limit has been exceeded, it means that 4 or more terminals with 30fps are connected.

Operational Specifications			Connection
Condition		**Determined Communication Mode**	
	Authority		
3-a When connection is made within the range of the main PCS's frame rate limit	Administrator Authority	**When each setting on the main PCS's network camera page is set to a setting other than "Auto":** Connection is made using the PCS setting values. **When each setting on the main PCS's network camera page is set to "Auto":** In principle, operation follows each network camera's setting values.[*1]	
	User Authority	**Regardless of the main PCS's network camera settings,** operation follows each network camera's setting values.	
	Mixed Administrator and User Authority	Cameras connected with the administrator authority and cameras connected with the user authority operate independently of each other, with specifications described above.	
3-b When the frame rate exceeds the main PCS's frame rate limit	Administrator Authority	When the frame rate exceeds the PCS's frame rate limit, it is automatically changed to the optimum rate **regardless of the main PCS's network camera settings.**	See example 3-b
	User Authority	When the frame rate exceeds the PCS's frame rate limit, the mode is changed to "Voice Only" for all cameras that **require capability exchange again regardless of the main PCS's network camera setup.**	
	Mixed Administrator and User Authority	Cameras connected with the administrator authority and cameras connected with the user authority operate independently of each other, with the specifications described above.	

*1: The PCS automatically switches communication modes not supported by the PCS (JPEG, dual codec, VGA, G.726, 30fps on H.264 and TCP) to a supported one.

Connection Example

Note
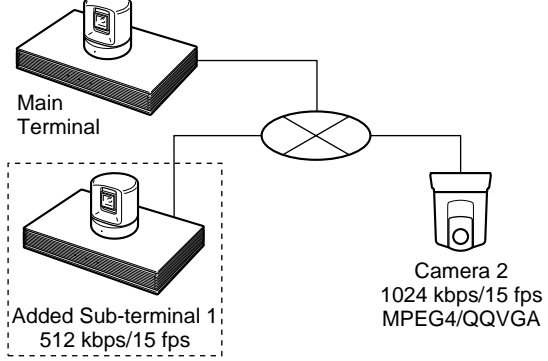
The determined bit rate and frame rate of the network cameras can be checked through the "Rate" and "Frame Rate" items in the PCS status menu (Page 1/3).
Note that "Rate" in the status menu includes the audio transfer rate.
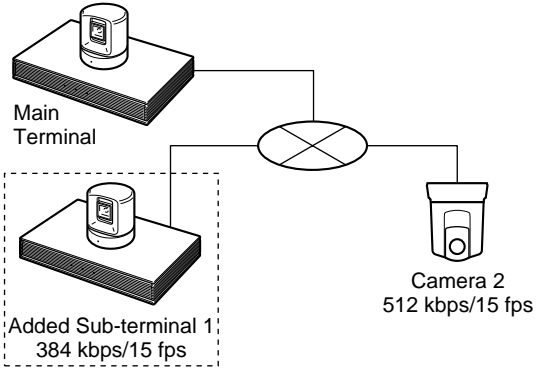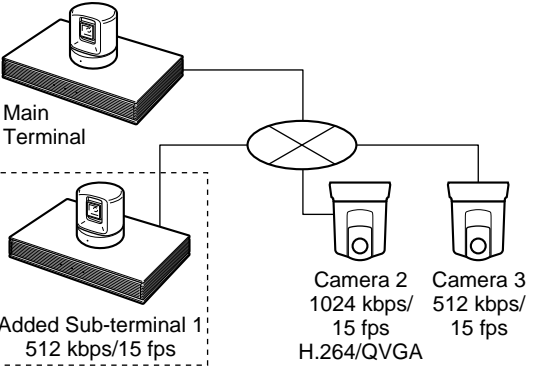
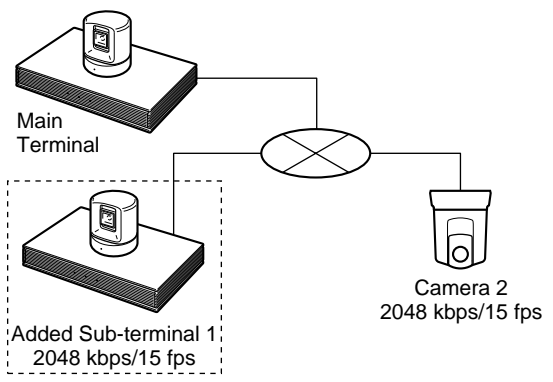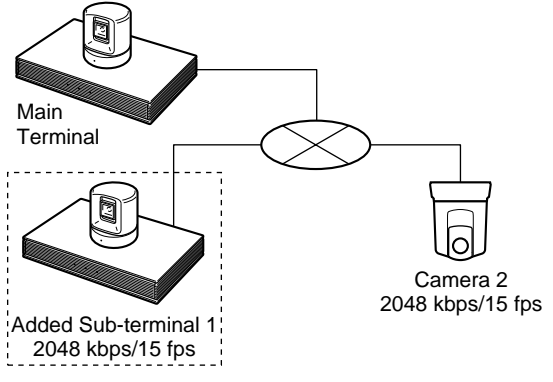| Example	Description	Setting Example/ Determined Communication Mode	
1-a-1(1)	 Main Terminal Camera 1 1024 kbps/15 fps Camera 2 512 kbps/15 fps When the sum of the network camera bit rates (1024 kbps + 512 kbps) **does not exceed the main PCS's LAN bandwidth (4 Mbps) and when each setting on the main PCS's network camera page is set to a setting other than "Auto,"** cameras 1 and 2 are connected using the PCS setting values. In the example above, camera 1 is configured via the network camera settings to have a 1024 kbps bit rate, but the rate is automatically changed to 512 kbps when connected to the PCS.	Settings on Main Terminal (PCS) **Communication Setup:** LAN Bandwidth: 4 Mbps **General Setup/Network Camera:** Bit Rate: 512 kbps Frame Rate: 15 fps Mode: H.264 Image Size: QVGA	
		Determined Com. Mode on Sub-terminal	
		Camera 1	Each camera is connected using the values (bit rate, frame rate, mode and image size) specified by main terminal.
		Camera 2	
1-a-1(2)	 Main Terminal Camera 1 1024 kbps/30 fps JPEG/VGA Camera 2 512 kbps/15 fps MPEG4/QQVGA When the sum of the network camera bit rates (1024 kbps + 512 kbps) **does not exceed the main PCS's LAN bandwidth (4 Mbps) and when each setting on the main PCS's network camera page is set to "Auto,"** cameras 1 and 2 operate using the network camera setting values. Communication mode settings not supported by PCS, however, are changed automatically. In the example above, camera 1 is configured as JPEG/VGA in the network camera settings. When it is connected to the PCS, it is automatically changed to H.264/QVGA. However, a mixture of different bit rates, frame rates, modes (H.264 or MPEG4), and image sizes (QVGA or QQVGA) can be used.	Settings on Main Terminal (PCS) **Communication Setup:** LAN Bandwidth: 4 Mbps **General Setup/Network Camera:** Bit Rate: Auto Frame Rate: Auto Mode: Auto Image Size: Auto	
		Determined Com. Mode on Sub-terminal	
		Camera 1	Bit Rate: 1024 kbps (No change) Frame Rate: 30 fps (No change) Mode: Changes from JPEG to H.264 Image Size: Changes from VGA to QVGA
		Camera 2	Bit Rate: 512 kbps Frame Rate: 15 fps Mode: MPEG4 Image Size: QQVGA (No change for any item)

Example	Description	Setting Example/ Determined Communication Mode
1-a-2	Main Terminal Camera 1 1024 kbps/30 fps H.264/QVGA Camera 2 512 kbps/15 fps MPEG4/QQVGA When the sum of the network camera bit rates (1024 kbps + 512 kbps) **does not exceed the main PCS's LAN bandwidth (4 Mbps),** cameras 1 and 2 operate using the network camera setting values. As shown above, a mixture of different bit rates, frame rates, modes (H.264 or MPEG4) and image sizes (QVGA or QQVGA) can be used.	Settings on Main Terminal (PCS) **Communication Setup:** LAN Bandwidth: 4 Mbps **General Setup/Network Camera:** (Disabled even if configured) Determined Com. Mode on Sub-terminal Camera 1: Bit Rate: 1024 kbps / Frame Rate: 30 fps / Mode: H.264 / Image Size: QVGA (No change for any item) Camera 2: Bit Rate: 512 kbps / Frame Rate: 15 fps / Mode: MPEG4 / Image Size: QQVGA (No change for any item)
1-b-1	Main Terminal Camera 1 2048 kbps/15 fps Added Camera 2 2048 kbps/15 fps When the sum of the network camera bit rates (2048 kbps + 2048 kbps) **exceeds the main PCS's LAN bandwidth (4 Mbps)** due to the connection of camera2*2, the bit rate is changed to the optimum value for cameras 1 and 2 regardless of the main PCS's network camera settings.	Settings on Main Terminal (PCS) **Communication Setup:** LAN Bandwidth: 4 Mbps **General Setup/Network Camera:** Bit Rate: Auto / Frame Rate: Auto / Mode: Auto / Image Size: Auto Determined Com. Mode on Sub-terminal Camera 1 / Camera 2: Bit rates are changed to the optimum value for each camera when they are connected.
1-b-2	Main Terminal Camera 1 2048 kbps/30 fps H.264/QVGA Added Camera 2 2048 kbps/30 fps When the sum of the network camera bit rates (2048 kbps + 2048 kbps) **exceeds the main PCS's LAN bandwidth (4 Mbps)** due to the connection of camera 2*2, the mode changes to "Voice Only" for the terminal (camera 2) that is exceeding the bandwidth. (Camera 1's image is displayed.)	Settings on MainTerminal (PCS) **Communication Setup:** LAN Bandwidth: 4 Mbps **General Setup/Network Camera:** (Disabled even if configured) Determined Com. Mode on Sub-terminal Camera 1: Bit Rate: 2048 kbps / Frame Rate: 30 fps / Mode: H.264 / Image Size: QVGA (No change for any item) Camera 2: Changes to "Voice Only" mode

*2: If the network camera bit rate is configured as 2048kbps for both cameras 1 and 2, the sum exceeds the 4Mbps of the PCS's LAN bandwidth because the network camera bit rate does not include audio (G.711 = 64kbps).
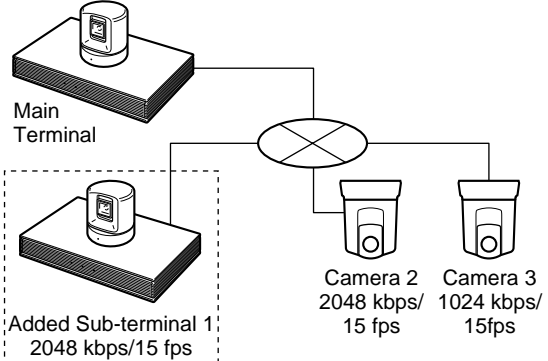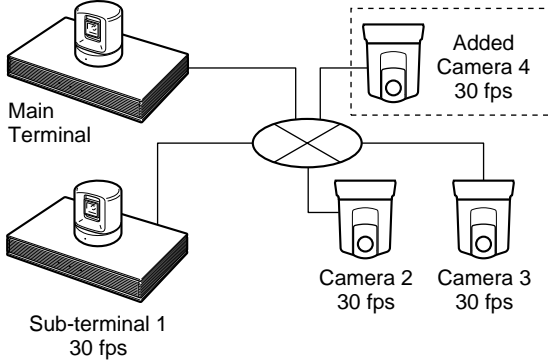
Example	Description	Setting Example/ Determined Communication Mode	
1-b-3	Main Terminal Camera 1 2048 kbps/30 fps — Added Camera 2 2048 kbps/30 fps ∗ In this example, the main terminal connects to camera 1 with the administrator authority and camera 2 with the user authority. When the sum of the network camera bit rates (2048 kbps + 2048 kbps) **exceeds the main PCS's LAN Bandwidth (4 Mbps)** due to the connection of camera 2∗2, the bit rate is changed to the optimum value for camera 1 regardless of the main PCS's network camera settings. The mode for camera 2 is changed to "Voice Only" because user authority access is allowed and capability exchange cannot be performed again.	Settings on Main Terminal (PCS)	
		Communication Setup: LAN Bandwidth: 4 Mbps **General Setup/Network Camera:** Bit Rate:　　Auto Frame Rate: Auto Mode:　　　Auto Image Size:　Auto	
		Determined Com. Mode on Sub-terminal	
		Camera 1	Bit rate is changed to the optimum value when connection is made.
		Camera 2	Changes to "Voice Only" mode
2-a-1	Main Terminal Added Sub-terminal 1 512 kbps/15 fps Camera 2 1024 kbps/15 fps MPEG4/QQVGA When a communication terminal is connected as a sub-terminal and if the sum of the bit rates of the sub-terminals (512 kbps for communication terminal + 1024 kbps for camera) **does not exceed the main PCS's LAN bandwidth (4 Mbps),** the current PCS rule is applied to the bit rate regardless of the main PCS's network camera settings. In the example above, the bit rate of camera 2 is automatically adjusted to that of sub-terminal 1.	Settings on Main Terminal (PCS)	
		Communication Setup: LAN Bandwidth: 4 Mbps **General Setup/Network Camera:** Bit Rate:　　Auto Frame Rate: Auto Mode:　　　Auto Image Size:　Auto	
		Determined Com. Mode on Sub-terminal	
		Terminal 1	LAN Bandwidth: 512 kbps Video Frame:　15 fps (No change for any item)
		Camera 2	Bit Rate: Changes from 1024 kbps to 512 kbps Frame Rate: 15 fps (No change) Mode: MPEG4 (No change) Image Size: QQVGA (No change)

∗2: If the network camera bit rate is configured as 2048 kbps for both cameras 1 and 2, the sum exceeds the 4 Mbps of the PCS's LAN bandwidth because the network camera bit rate does not include audio (G.711 = 64 kbps).

Example	Description	Setting Example/ Determined Communication Mode	
2-a-2	 Main Terminal Added Sub-terminal 1 384 kbps/15 fps Camera 2 512 kbps/15 fps When a communication terminal is connected as a sub-terminal and if the sum of the bit rates of the sub-terminals (384 kbps for communication terminal + 512 kbps for camera) **does not exceed the main PCS's LAN bandwidth (1024 kbps),** the current PCS rule is applied and the main PCS automatically tries to adjust the bit rate of camera 2 to that of sub-terminal 1. In this example, however, the mode for camera 2 is changed to "Voice Only" because user authority access is allowed and capability exchange cannot be performed again.	Settings on Main Terminal (PCS)	
		Communication Setup: LAN Bandwidth: 1024 Mbps	
		General Setup/Network Camera: (Disabled even if configured)	
		Determined Com. Mode on Sub-terminal	
		Terminal 1	LAN Bandwidth: 512 kbps Video Frame: 15 fps (No change for any item)
		Camera 2	Changes to "Voice Only" mode
2-a-3	 Main Terminal Added Sub-terminal 1 512 kbps/15 fps Camera 2 1024 kbps/ 15 fps H.264/QVGA Camera 3 512 kbps/ 15 fps ∗ In this example, the main terminal connects to camera 2 with the administrator authority and camera 3 with the user authority. When a communication terminal is connected as a sub-terminal and if the sum of the bit rates of the sub-terminals (512 kbps for communication terminal + (1024 kbps + 512 kbps) for cameras) **does not exceed the main PCS's LAN bandwidth (4 Mbps),** the current PCS rule is applied to the bit rate regardless of the main PCS's network camera settings. In this example, the main PCS automatically tries to adjust the bit rates of cameras 2 and 3 to that of sub-terminal 1, but the mode for camera 3 is changed to "Voice Only" because user authority access is allowed and capability exchange cannot be performed again.	Settings on Main Terminal (PCS)	
		Communication Setup: LAN Bandwidth: 4 Mbps	
		General Setup/Network Camera: Bit Rate: Auto Frame Rate: Auto Mode: Auto Image Size: Auto	
		Determined Com. Mode on Sub-terminal	
		Terminal 1	LAN Bandwidth: 512 kbps Video Frame: 15 fps (No change for any item)
		Camera 2	Bit Rate: Changes from 1024 kbps to 512 kbps Frame Rate: 15 fps (No change) Mode: H.264 (No change) Image Size: QVGA (No change)
		Camera 3	Changes to "Voice Only" mode

Example	Description	Setting Example/ Determined Communication Mode	
2-b-1	 Main Terminal Added Sub-terminal 1 2048 kbps/15 fps Camera 2 2048 kbps/15 fps When a communication terminal is connected as a sub-terminal and if the sum of the bit rates of the sub-terminals (2048 kbps for communication terminal + 2048 kbps for camera) **exceeds the main PCS's LAN bandwidth (4 Mbps)*3,** the bit rate is automatically changed to the optimum value regardless of the main PCS's network camera settings.	Settings on Main Terminal (PCS)	
		Communication Setup: LAN Bandwidth: 4 Mbps **General Setup/Network Camera:** Bit Rate: Auto Frame Rate: Auto Mode: Auto Image Size: Auto	
		Determined Com. Mode on Sub-terminal	
		Terminal 1	The bit rate is changed to the optimum value when connection is made.
		Camera 2	
2-b-2	 Main Terminal Added Sub-terminal 1 2048 kbps/15 fps Camera 2 2048 kbps/15 fps When a communication terminal is connected as a sub-terminal and if the sum of the bit rates of the sub-terminals (2048 kbps for communication terminal + 2048 kbps for camera) **exceeds the main PCS's LAN bandwidth (4 Mbps)*3,** the mode for camera 2 is changed to "Voice Only" because user authority access is allowed and capability exchange cannot be performed again.	Settings on Main Terminal (PCS)	
		Communication Setup: LAN Bandwidth: 4Mbps **General Setup/Network Camera:** (Disabled even if configured)	
		Determined Com. Mode on Sub-terminal	
		Terminal 1	LAN Bandwidth: 2048 kbps Video Frame: 15 fps (No change for any item)
		Camera 2	Changes to "Voice Only" mode

∗3: If the network camera bit rate is configured as 2048 kbps for camera 2, the sum of the bit rates of the sub-terminals (communication terminal and camera) exceeds 4 Mbps of the PCS's LAN Bandwidth because the network camera bit rate does not include audio (G.711 = 64 kbps).

Example	Description	Setting Example/ Determined Communication Mode
2-b-3	 Main Terminal Added Sub-terminal 1 2048 kbps/15 fps Camera 2 2048 kbps/ 15 fps Camera 3 1024 kbps/ 15fps ∗ In this example, the main terminal connects to camera 2 with the administrator authority and camera 3 with the user authority. When the sum of the bit rates of the sub-terminals (2048 kbps for communication terminal + (2048 kbps + 1024 kbps) for cameras) **exceeds the main PCS's LAN bandwidth (4 Mbps)** due to the connection of the sub-terminal, the bit rate is changed to the optimum value for camera 2 regardless of the main PCS's network camera settings, but the mode for camera 3 is changed to "Voice Only" because user authority access is allowed and capability exchange cannot be performed again.	**Settings on Main Terminal (PCS)** **Communication Setup:** LAN Bandwidth: 4 Mbps **General Setup/Network Camera:** Bit Rate: Auto Frame Rate: Auto Mode: Auto Image Size: Auto Determined Com. Mode on Sub-terminal Terminal 1 / Camera 2: Bit rate is changed to the optimum value when connection is made. Camera 3: Changes to "Voice Only" mode
3-b	 Main Terminal Added Camera 4 30 fps Camera 2 30 fps Camera 3 30 fps Sub-terminal 1 30 fps ∗ In this example, the main terminal connects to cameras 2 and 4 with the administrator authority and camera 3 with the user authority. When the frame rate exceeds the main PCS's frame rate limit (30 fps × 4) due to the connection of camera 4, the capability exchange of the frame rate is required regardless of whether the administrator or user authority is used. In this example, the main PCS automatically tries to adjust the frame rate of all the sub-terminals to 15fps, but the mode for camera 3 is changed to "Voice Only" because user authority access is allowed and capability exchange cannot be performed.	**Settings on Main Terminal (PCS)** **Communication Setup:** LAN Bandwidth: 4Mbps **General Setup/Network Camera:** Bit Rate: Auto Frame Rate: Auto Mode: Auto Image Size: Auto Determined Com. Mode on Sub-terminal Terminal 1: Changes from 30 fps to 15 fps Camera 2: Changes from 30 fps to 15 fps Camera 3: Changes to "Voice Only" mode Camera 4: Changes from 30 fps to 15 fps

1-11-10. Web Control Function

This section describes the functions related to network camera connection of Web control functions supported by PCS-G50/G70.

Identifying a User

When you want to dial from the network camera list, check or modify the registered entries, and register new entries:

Log in by entering the user name and password for administrator*1 or network camera user*2.
Clicking [Network Camera] opens the Network Camera screen. On this page, you can dial from the network camera list, check or modify the registered entries, and register new entries in the network camera list:

When you want to check or modify the registered entries, and register new entries on the Network Camera page of General Setup Menu:

Log in by entering the user name and password for administrator.
Clicking [Setup] -[General] opens the General Setup screen. On this screen, you can check or modify the registered entries, and register new entries on the Network Camera page of General Setup Menu

You can make settings through the Web page, as well as through the Network Camera page under the General Setup of PCS-G50/G70. Operation based on the settings is also the same. (For details, see "1-11-5. Setting Network Camera Setting" section.)

∗1: User name for administrator is "sonypcs" and its password is the administrator setup password registered in Password page (1/3) of the Administrator Setup menu.
∗2: User name for network camera user is "networkcamera" and its password is the network camera password registered in Password page (1/3) of the Administrator Setup menu.

How to Use "Network Camera"

Dial button   Edit button   Password entry box
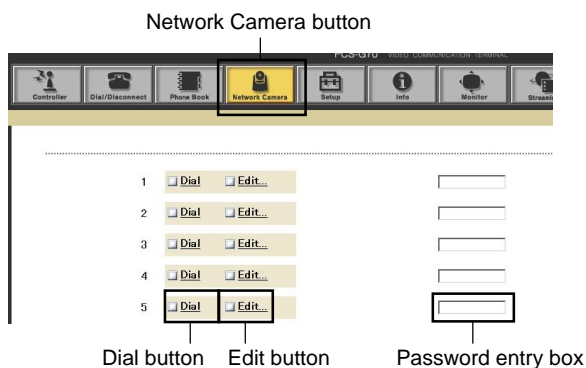
Network Camera Button
You can find this button only when you log in the Web page with administrator authority or network camera user authority. And this button is activated only when "Network Camera Connection" in the Network Camera page under the General Setup is set to On.
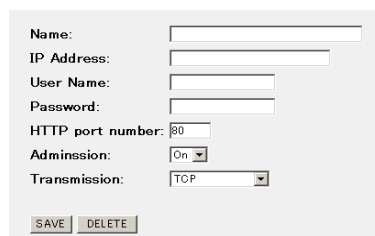
Dial Buttons (1 to 20)
Clicking this button enables you to dial the network camera which is registered in the corresponding network camera list.
Notes
· When "Admission" is set to On, and "Password" is left blank in the camera network list, enter the password in the password entry box and then click the Dial button.
· To disconnect, click the Dial/Disconnect button on the top part of the page.

Edit Buttons (1 to 20)
Clicking this button opens the edit screen shown below. You can register a new entry for the corresponding network camera list. You can also change and modify the registered entries.

Password Entry Box
You can check whether a password is saved or not. The password is represented with asterisks (∗) if saved.

Section 2
Maintenance

2-1. Confirmation Procedure of Local Terminal Operation Using Self-Loop

A self-loop is the loopback in the codec of the communication terminal.

Operation procedure

1. The launcher menu below is displayed when the power switch on the communication terminal is turned on.

Line type   Number text box   Dial
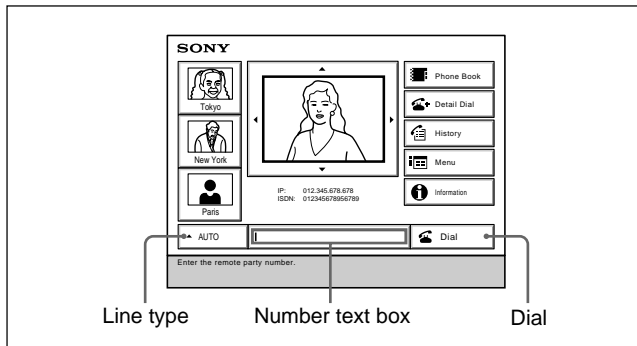
2. Select "Line I/F" using the ▲, ▼, ◄, ► buttons on the remote commander, and press the PUSH ENTER button. Then, select "IP" or "ISDN" using the ▲ and ▼ buttons, and press the PUSH ENTER button.

3. Select the number entry field using the ▲, ▼, ◄, ► buttons on the remote commander, and press the PUSH ENTER button. Then, enter ✳ (asterisk) twice from the remote commander.

4. Select "Dial" using the ▲, ▼, ◄, ► buttons on the remote commander and press the PUSH ENTER button, or press the CONNECT/DISCONNECT button on the remote commander.

   A self-loopback is started and "Dialing" appears on the monitor screen. "Meeting starts!" appears when the loopback is completed. Confirm that video picture and voice are looped back at this time.

2-2. LAN Communication Test Using Ping

A LAN communication test can be performed using ping (ICMP).

Operation procedure

1. The launcher menu below is displayed when the power switch on the communication terminal is turned on.

Line type   Number text box   Dial
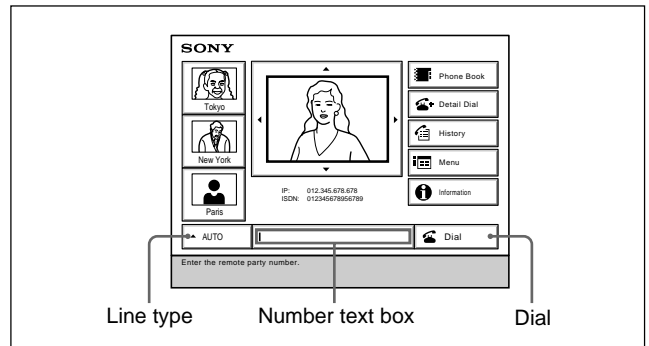
2. Select "Line I/F" using the ▲, ▼, ◄, ► buttons on the remote commander, and press the PUSH ENTER button. Then, select "IP" using the ▲ and ▼ buttons, and press the Enter button.

3. Select the number entry field using the ▲, ▼, ◄, ► buttons on the remote commander, and press the PUSH ENTER button. Then, enter "PING. remote IP address" from the remote commander.
   For example, enter PING.192.168.0.1 when performing a connection test to a terminal whose IP address is 192.168.0.1.
   Alphabets and numeric characters are switched using the "ALPHA/NUM" button on the remote commander.

4. Select "Dial" using the ▲, ▼, ◄, ► buttons on the remote commander and press the PUSH ENTER button, or press the CONNECT/DISCONNECT button on the remote commander.

5. The screen during LAN dialing is displayed. A message "1 reply from 192.168.0.1" is displayed in yellow below the "Dialing (LAN)" dialog box when the communication using ping succeeds.
   The number at the beginning is counted up sequentially. When it reaches 4, a message window "Line cannot be connected completely. No reason: Redial" appears at the bottom of the screen.
   When the communication using ping cannot be performed, no yellow characters is displayed and the message window above appears.

2-3. Failure Analysis

Inspect the items below when this system does not operate normally.

1. The communication terminal does not start even if its power switch is turned on.
・ Check that the power cable is connected properly.
・ Check that the POWER indicator (green) on the front panel of the communication terminal lights.

2. The main unit does not start even if you press the I/O button of a remote controller.
・ Check that the POWER indicator (orange) on the front panel of the communication terminal lights.
・ Check that the initial screen is displayed when the power switch of the communication terminal is
   turned on again.
     Check the power switch of the communication terminal and the power cable when the POWER
     indicator does not light.
・ Check that the transmission block of a remote commander emits light in the local image on the monitor
   when you press buttons on the remote commander put toward the camera unit.
     Check the consumed battery or failure of the remote commander when no light is emitted.

3. The initial screen is not displayed. (The screen is black.)
・ Check the monitor power and input selection.
・ Check that the video cable is connected properly.
・ Connect with the monitor having a composite (video) input terminal when only an RGB monitor is
   connected.
     Set the dual monitor properly in a "General Setup menu" when the initial screen is displayed on the
     monitor having a composite (video) input terminal.

4. A local image is not displayed in the screen area of the initial screen.
・ Press the "INPUT SELECTION" button of the remote commander and confirm that the video input
   selection on the local side is "Main".
・ Check that the camera cable is connected properly.
・ Check that the POWER indicator (green) of a camera unit lights.
・ Check that the camera unit is connected to the MAIN CAMERA (PCS-G70/G70P) or VIDEO IN (PCS-
   G50/G50P) connector on the communication terminal.

5. A line is not connected. (ISDN)
・ Check that the communication terminal and ISDN unit are properly connected. (Pay attention to the
   vertical orientation of the connector.)
・ Check that the STATUS indicator (green) of an ISDN unit blinks.
・ Check that the STATUS 1 to 6 indicators (orange) of an ISDN unit light proportionally to the number
   of connected lines.
     Check the ISDN line and DSU (Digital Service Unit) when the indicators do not light.
・ Check whether loopback operation (Section 2-1) can be performed.
・ Check that the setting contents of a dial list and system setup are proper.
・ For bonding connection, check that the ISDN number of the local terminal on the incoming side is
   properly set (on pages 2 and 3 of "ISDN Setup menu").

6. A line is not connected. (LAN)

・ Check that the LAN cable is connected properly.
・ Check that the left indicator (green) of the communication terminal's LAN connector blinks.
・ Check that the LAN indicator (⎑) is highlighted in the system status display area (in the lower-right position of the screen) of the initial screen.
・ Check that an IP address is properly displayed below the LAN indicator.
・ Check that the setting contents of a dial list and system setup are proper.
・ Check that ping can be used for a default gateway or connection destination in the LAN communication test (Section 2-2) based on ping.

7. The voice from the remote side cannot be heard after line connection.

・ Check that the volume of the communication terminal is proper.
・ Check that the volume of a monitor is proper.
・ Check that the audio cable of the communication terminal and monitor is connected properly.
・ Check that the remote side is not set to MIC OFF.
・ Check that the audio input on the remote side is proper. (Check that a voice is normally input using an audio input level indicator on page 1/2 of an audio setup menu.)

8. A voice does not reach the remote side after line connection.

・ Check that the volume of the communication terminal on the remote side is proper.
・ Check that the volume of the monitor on the remote side is proper.
・ Check that the audio cable of the communication terminal and monitor on the remote side is connected properly.
・ Check that the local side is not set to MIC OFF.
・ Check that the audio input on the local side is proper. (Check that a voice is normally input using an audio input level indicator on page 1/2 of an audio setup menu.)

9. The image from the remote side is not displayed after line connection.

・ Check that the video input on the remote side is selected properly.
・ Check that the display can be switched using the "FAR/NEAR" button on the remote commander.
・ Check that a local image is displayed in self-loopback (Section 2-1) without any problem.
・ Check that a remote image is displayed during connection with other remote sides.

10. An image does not reach the remote side after line connection.

・ Check that the video input on the local side is selected properly.
・ Check that the display can be switched using the "FAR/NEAR" button on the remote commander on the remote side.
・ Check that a local image is displayed in self-loopback (Section 2-1) on the remote side without any problem.
・ Check that a remote image on the remote side is displayed during connection with other remote sides.

2-4. How to Take Log

Communication terminal has a function that outputs the internal processing history, between the connection and disconnection of a line, to the commercial personal computer (referred to as PC hereafter) connected to the outside and a function that saves the latest history of 1M byte in a Memory Stick (refer to the saving of system log on page 2-17).

Operation for extracting log using commercial PC (1)
Connect an AUX CONTROL terminal on the rear panel of the communication terminal and PC.
Turn on the power of the communication terminal and PC.
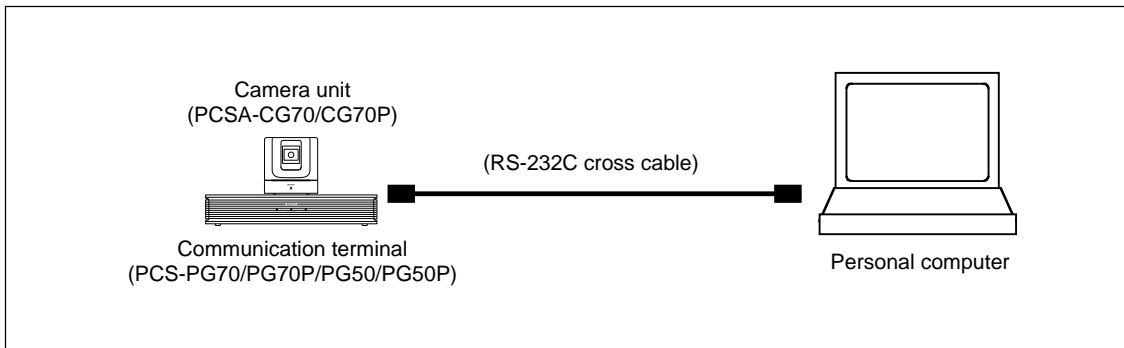
Activate accessory software "Hyper Terminal" of OS Windows 95/98/2000/XP on PC and set the properties of a communication port as follows.

Transmission rate: 38,400 bps
Data length: 8 bits
Stop bits: 2 bits
Parity bit: None

The procedure for "Hyper Terminal" activation, communication format setting, and log extraction is described on the next page and later.

・ Windows is the registered trademark of Microsoft Corporation in the United States and other countries.
・ For Windows 2000/XP, the procedure is "Start menu" → "Program" → "Accessories" → "Communications" → "Hyper Terminal".
　Note: In a hyper terminal, only 500 lines can be logged. For long-time logging, use other terminal software.

(1) Click "HyperTerminal" from "Start menu".
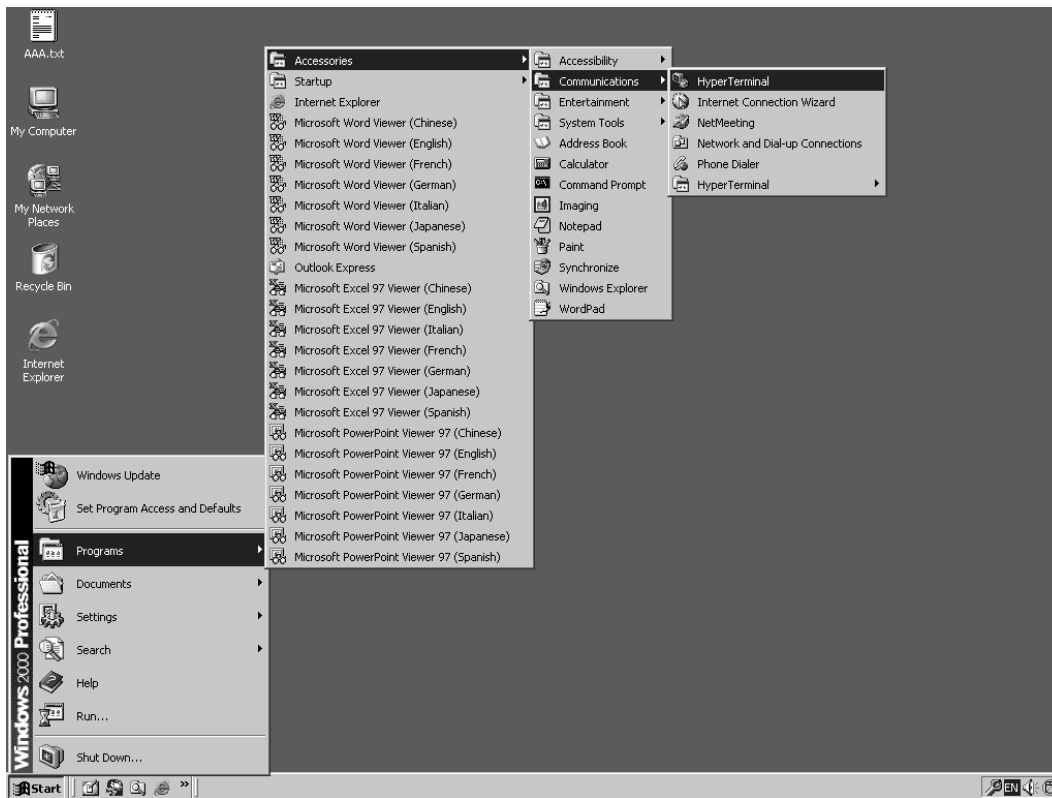
(2) Enter "VT100" in a text box "Name", select any icon, and click the "OK" button.

(3) Select "COM1" in a drop-down box "Connect using" and click the "OK" button.
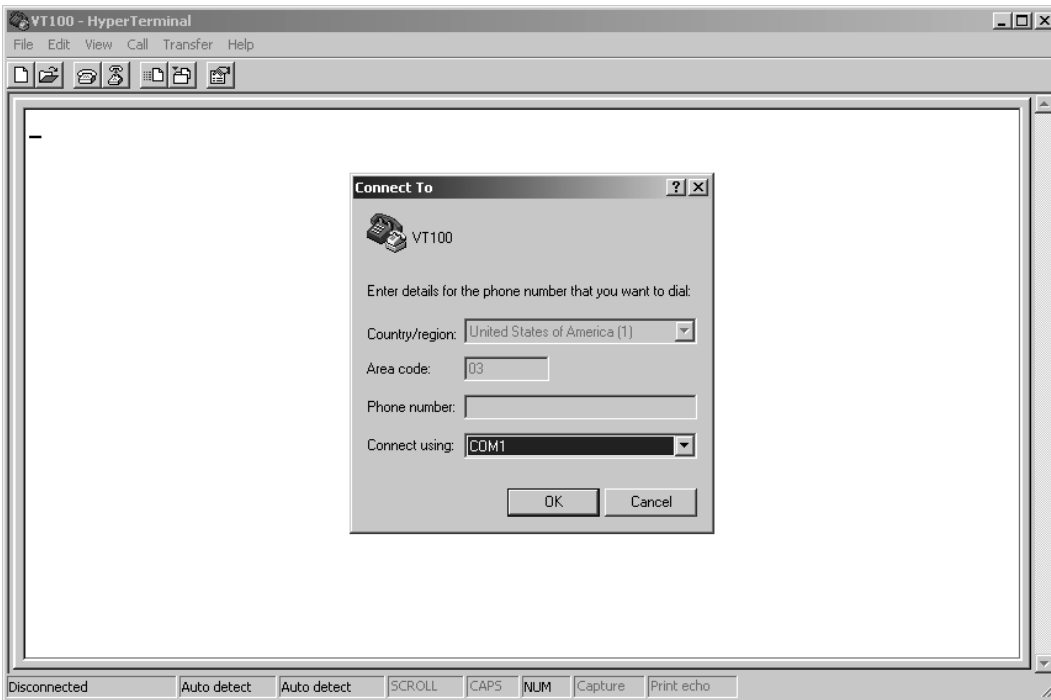
(4) Set the properties of the port as follows and click the "OK" button.

Bits per second:	38400
Data bits:	8
Parity:	None
Stop bits:	2
Flow control:	Xon/Xoff
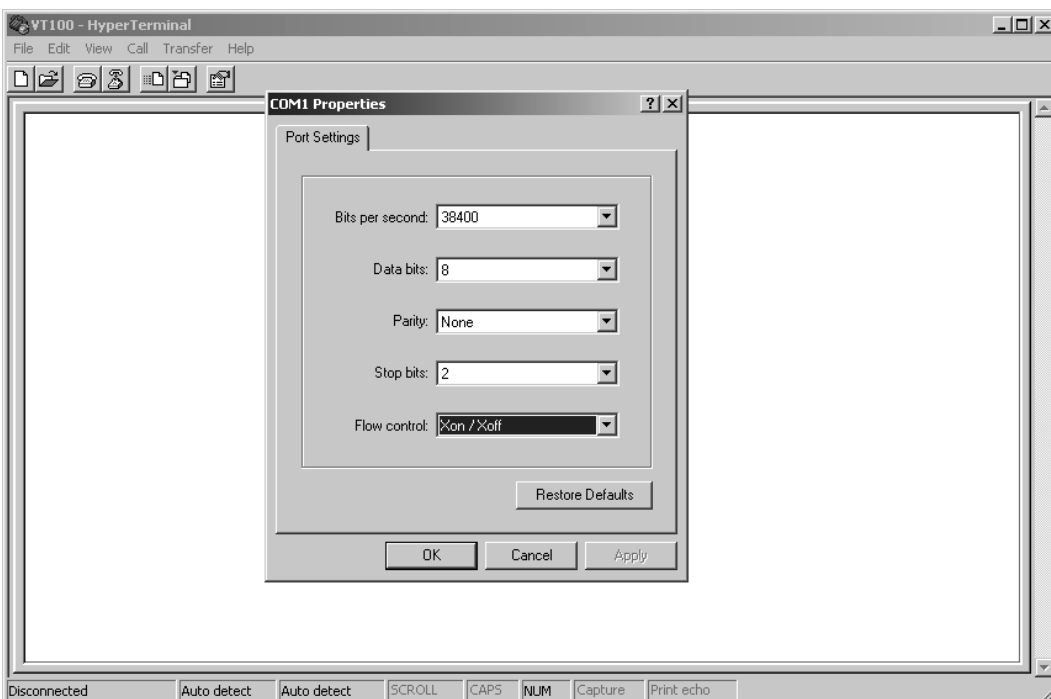
(5) Click "Capture Text" from the Transfer menu.
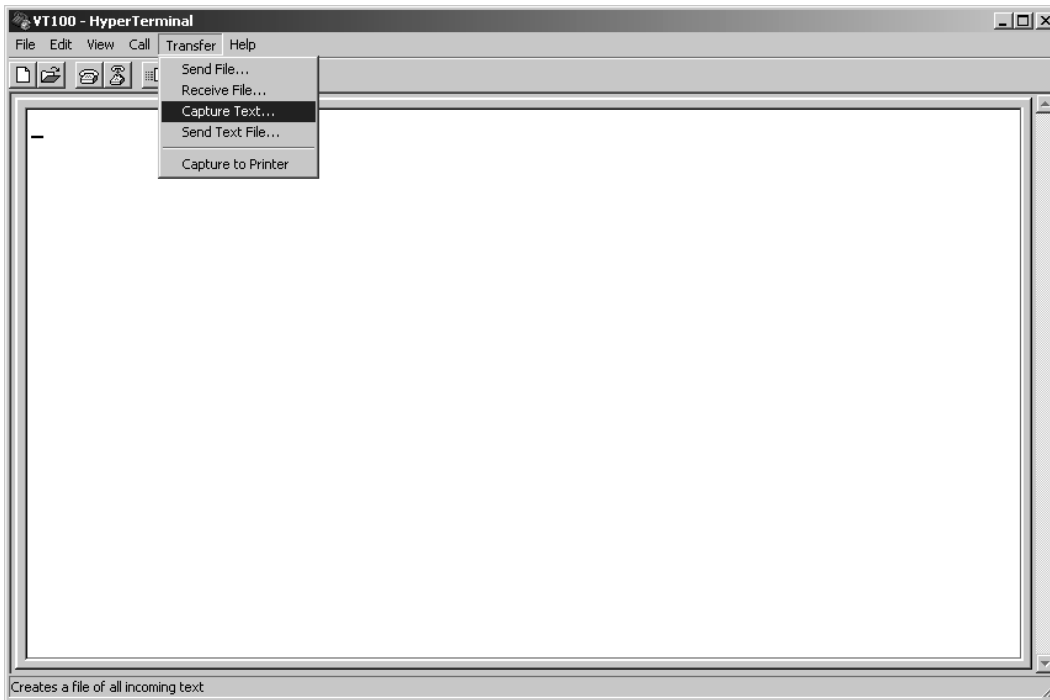
(6) Set the saving place and name of a log file and click "Start".
     Example of file name: PCSG70LOG.txt
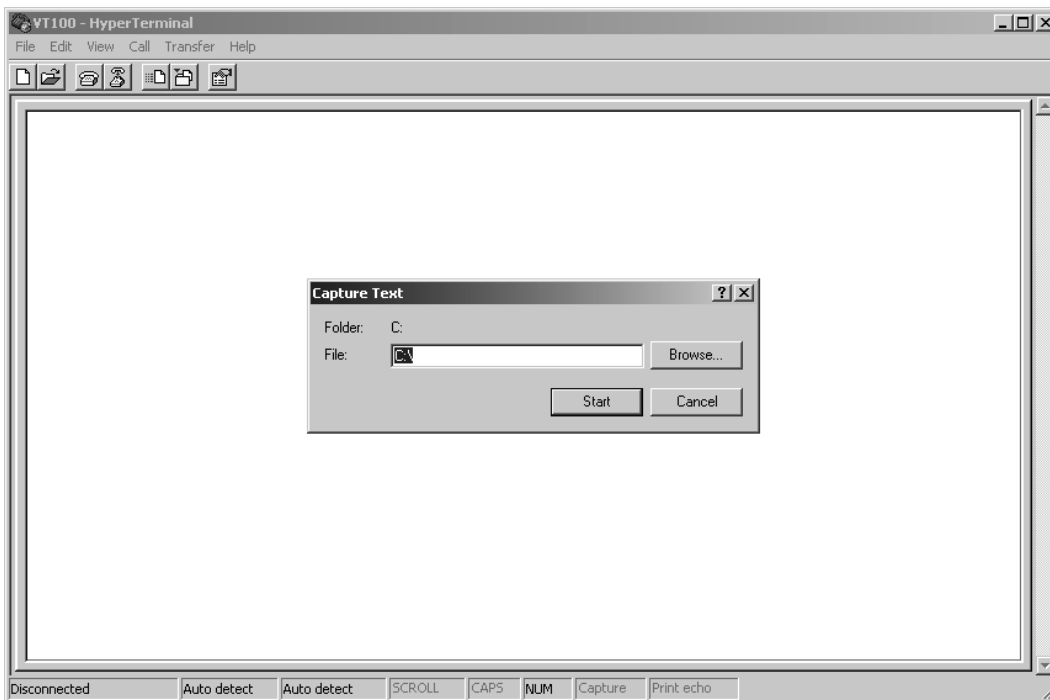
(7) After logging, click "Stop" from "Capture Text" in the Transfer menu.
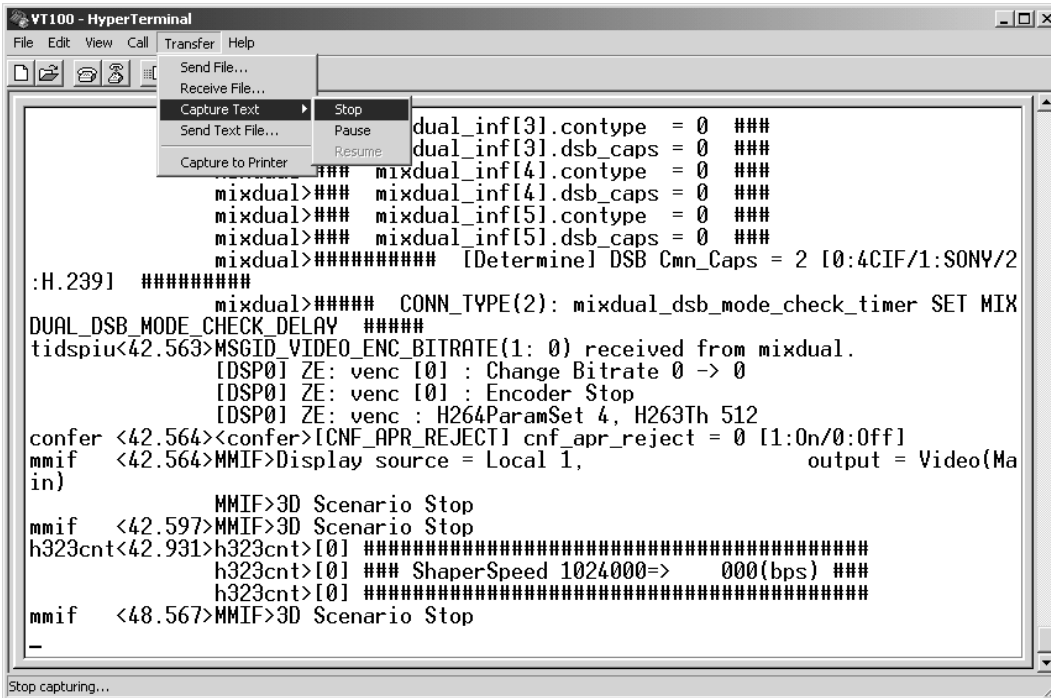
(8) Double-click the extracted log file to view a log.

Operation for extracting log using commercial PC (2)

When the communication terminal is connected to LAN, a log can be extracted from the communication terminal using telnet with PC connected to LAN.

Even when the communication terminal is not connected to LAN, a log can be extracted from the communication terminal using telnet by connecting the 100BASE-TX/10BASE-T connector on the rear panel of the communication terminal and the LAN connector of PC directly using a LAN cross cable.

First, connect the communication terminal and PC to LAN, or connect them directly using a cross cable and set LAN (TCP/IP) properties of PC. After that, issue "ping" command PC to the communication terminal and confirm that a reply is returned from the communication terminal.

(1) Click "Command Prompt" from "Start menu".
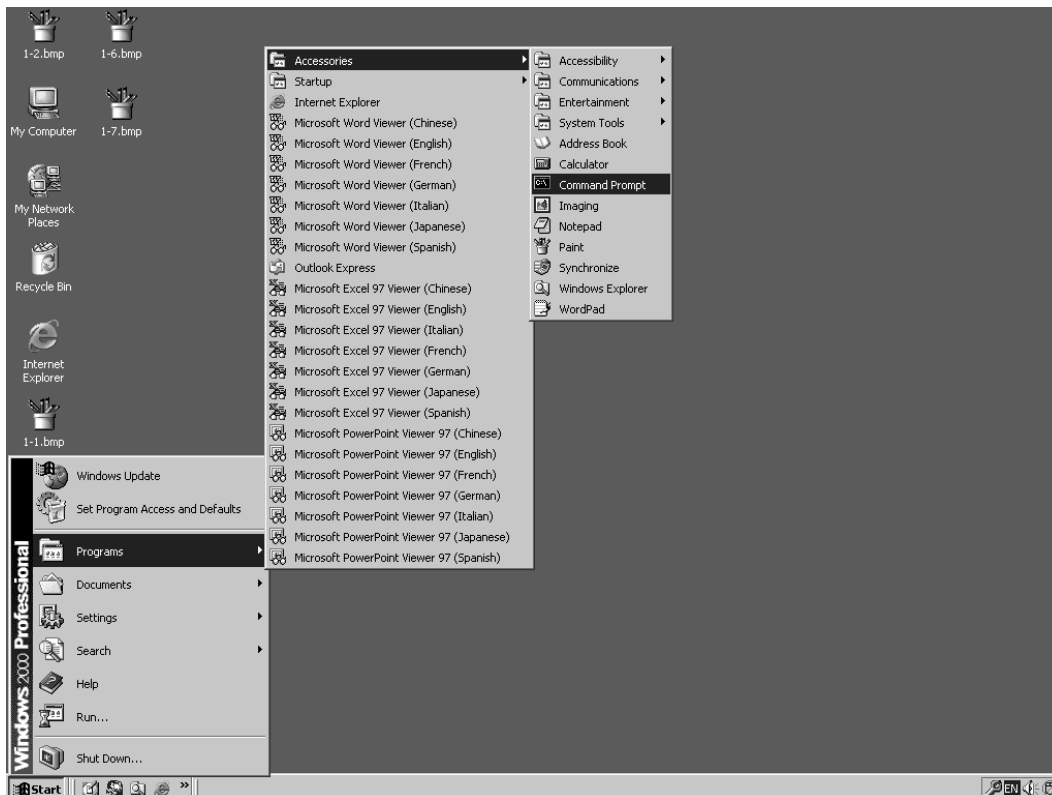
(2) Type "ping" and the IP address of the communication terminal after spacing out. Press the Enter key
    and confirm that a reply is returned. After confirmation, close the command prompt window.

```
Command Prompt                                                    _ □ ×
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>ping 191.100.100.66

Pinging 191.100.100.66 with 32 bytes of data:

Reply from 191.100.100.66: bytes=32 time<10ms TTL=255
Reply from 191.100.100.66: bytes=32 time<10ms TTL=255
Reply from 191.100.100.66: bytes=32 time<10ms TTL=255
Reply from 191.100.100.66: bytes=32 time<10ms TTL=255

Ping statistics for 191.100.100.66:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum =  0ms, Average =  0ms

C:\>_
```

(3) Click "HyperTerminal" from "Start menu".

(4) Enter "LAN" in the text box "Name:", select any icon, and click the "OK" button.
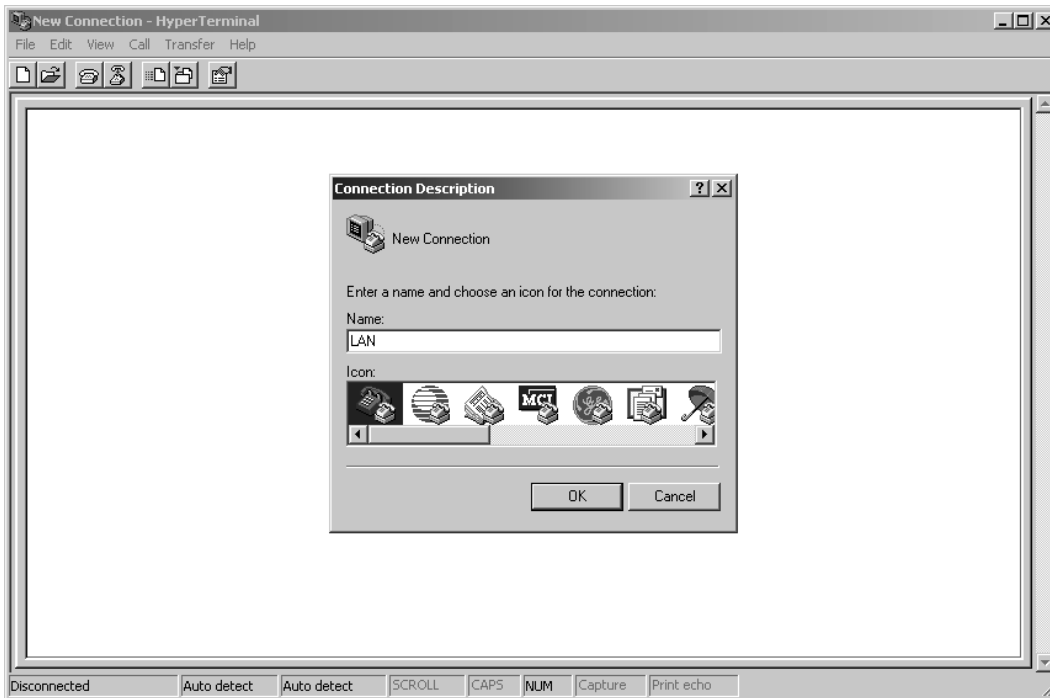
(5) Select "TCP/IP (Winsock)" in the drop-down box "Connect using", enter the IP address of the communication terminal in the text box "Host address:", and click the "OK" button.
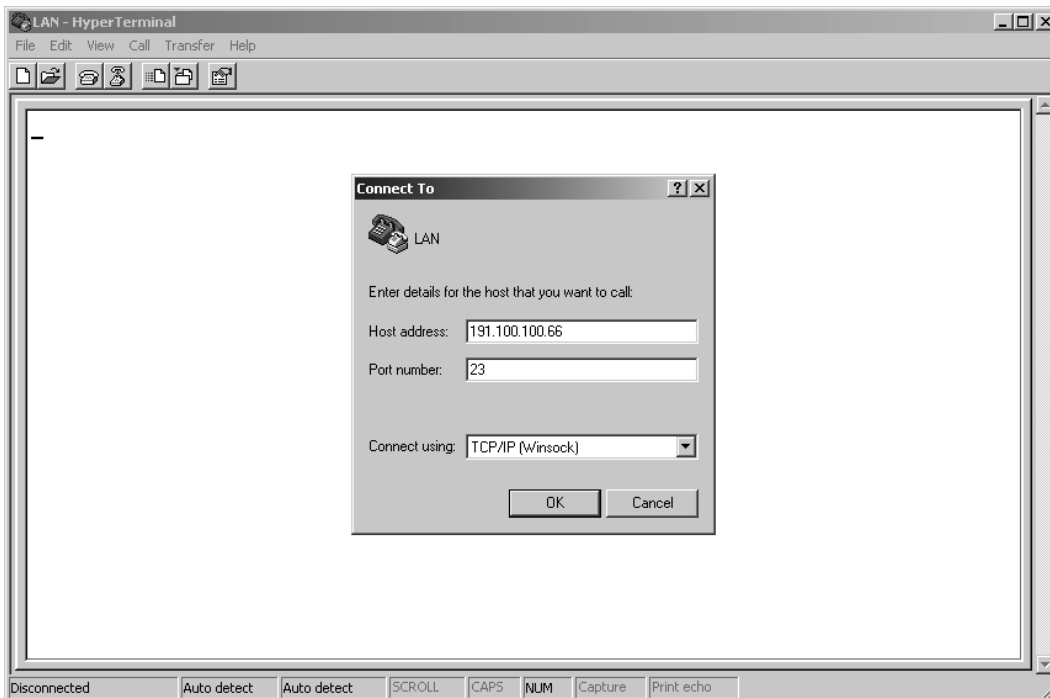
(6) Click "Capture Text" from the Transfer menu.
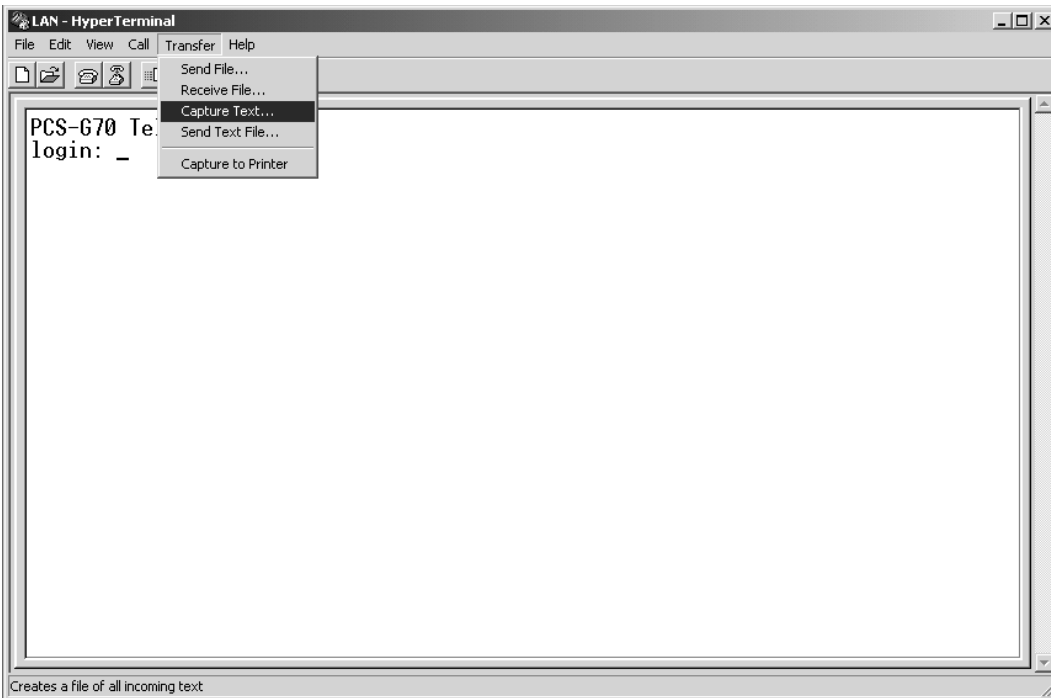
(7) Set the saving place and name of a log file and click the "Start" button.
Example of file name: PCSG70LOG.txt
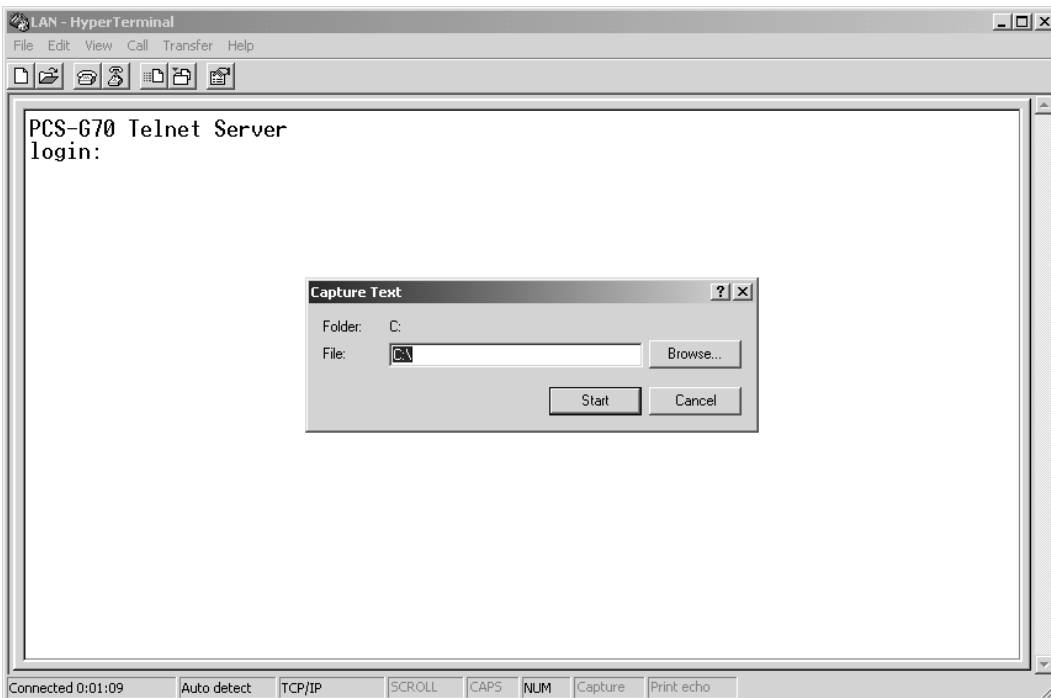
(8) The message below is already displayed on the hyper terminal screen.

   PCS-G70 Telnet Server (PCS-G50/G50P: PCS-G50 Telnet Server)

   login:

Enter "sonypcs" and press the Enter key. "Password:" is then displayed.

Press the Enter key again. A log begins to be extracted.
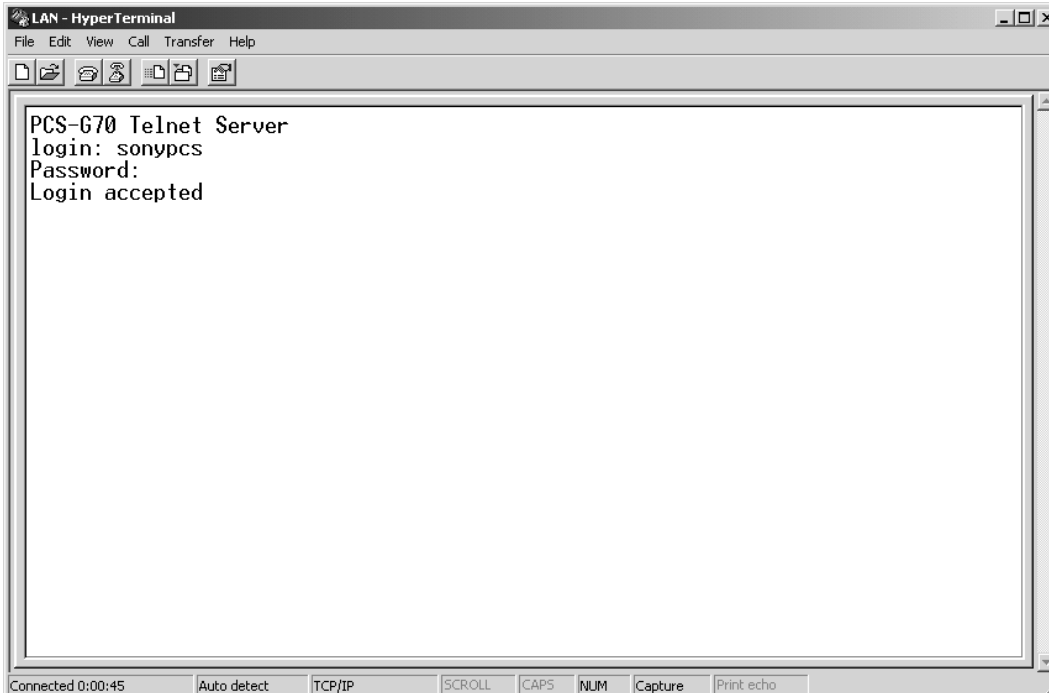
(9) After log extraction is completed, click "Stop" from "Capture Text" in the Transfer menu.
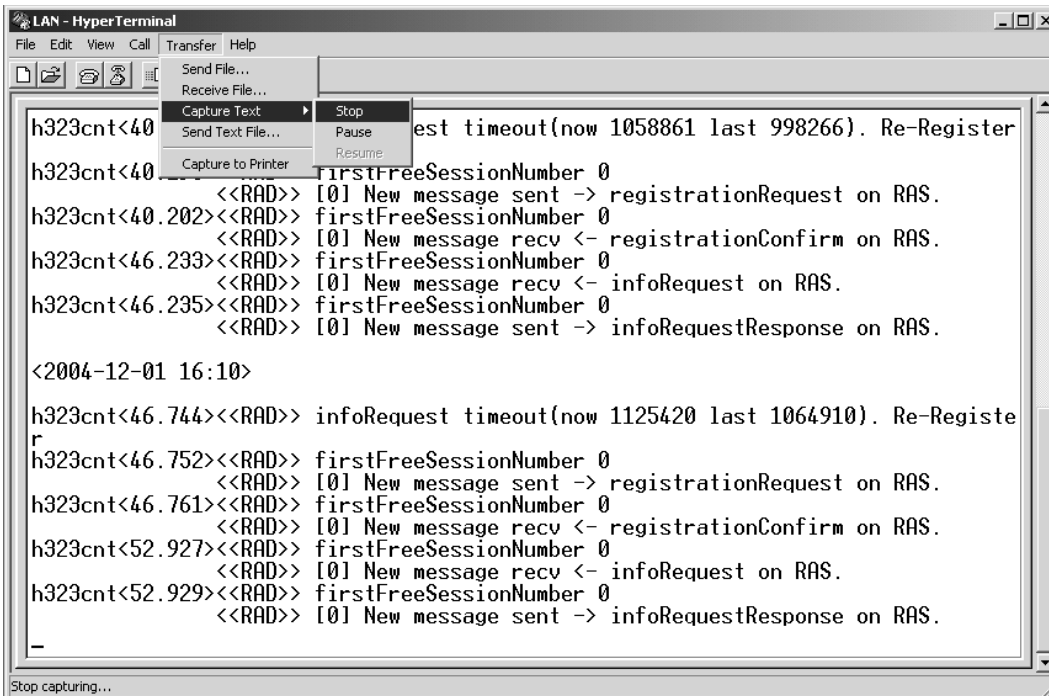
(10)Double-click the extracted log file to view a log.

2-5. Updating of Software

The software of this system may be updated for improvement in a function.
Two methods are available for updating. (Memory Stick and ftp)
When the updated is performed using the Memory Stick, the application software is updated only when it is newer than the existing file by checking the file date. But with the ftp, care should be taken because the file is compulsory overwritten.

 Note

Besides the communication terminal, software of the ISDN unit and data solution box (not supplied) is also included in the system software.

2-5-1. Updating Using Memory Stick

Turn off the power switch of the communication terminal.

Insert a Memory Stick storing system software into Memory Stick slot of the communication terminal.

 Notes
・ For details of storing system software in the Memory Stick, consult the Sony service staff.
・ Use a 128-Mbyte Memory Stick.

Turn on the power switch.
・ The POWER indicator (green) lights.
・ The loader execution screen is displayed.

 Note
Make sure that the power stays on during this time. Software may not get updated.

 Note
The update operation takes approx. 5 minutes.

The launcher menu is displayed on the TV monitor.

Push in the Memory Stick once and then take out it.

Select "Setup" and confirm "Host version" in an information menu.

Return to the launcher menu and turn off the power switch on the rear panel of this unit.

Turn on the power switch again and reconfirm "Host version".

2-5-2. Upgrading using FTP software

Required equipment/software
- PCS-G50/G50P and PCS-G70/G70P to be upgraded
- Personal computer
  (Use Windows 2000 or Windows XP as PC.)
- FTP software

Notes
- Be sure to connect to an IP network in which a stable band can be obtained at all times.
- Be sure to use static IP addresses for a personal computer and PCS series.
- PPPoE authentication is required for upgrading. Software cannot be upgraded in the environment where ONU and PCS are connected directly.

Upgrading procedure
(1) Set up PCS-G50/G50P/G70/G70P (connect a camera and codec) and connect it to a network cable and monitor.
(2) Turn on the power of PCS-G50/G50P/G70/G70P.
(3) Confirm the IP address displayed in a launcher menu. (Write down it.)
(4) Keep the power ON.

   Note

   It takes about eight minutes to upgrade software. Never turn off the power of PCS during upgrading.
(5) Start a personal computer and confirm the connection of PCS using a Ping command.
(6) Create a "New folder" on the desktop.
(7) Download an upgrading program to the created folder.
(8) Double-click an icon and install the downloaded file.
(9) The window for confirming the folder to which files are extracted is displayed. Click the "OK" button. New files are displayed in the file, and a program is started automatically.
   If a program is not started automatically, double-click the icon of "PCS-G50VerUp" for PCS-G50/G50P or the icon of "PCS-G70VerUp" for PCS-G70/G70P.
(10) The window shown below is displayed. Enter the IP address of PCS, to be upgraded, in the IP address field. Enter "sonypcs" in the user field and password for administrator in the password field. Then, click the "START" button.
   (Upgrading is started automatically.)

(11) The window for completion of upgrading is displayed. Click the "CLOSE" button.

(12) PCS-G50/G50P/G70/G70P is restarted, and the GUI screen (launcher menu) during start-up is displayed. Upgrading is completed.

   Note

   When peripheral equipment is connected to PCS, it begins to be automatically upgraded (for about one minute) after the upgrading of PCS is completed. Never remove the peripheral equipment or turn off the power of PCS until a launcher menu is returned on the PCS side.

Confirmation of version information
(1) Press the MENU button of a remote controller or select "Menu" in a launcher menu and press the PUSH ENTER button. (The Setup menu is displayed.)
(2) Press the MENU button of a remote controller continuously. (The Setup menu (for administrator) is displayed.)
(3) Select "Information" in the setup menu for the administrator and press the PUSH ENTER button.
(4) Confirm that the host version is the latest one.
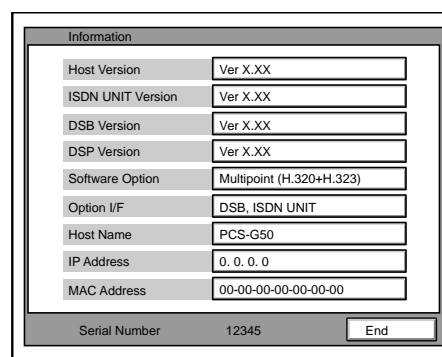
2-6.　Service Mode

In the service menu of communication terminal, data can be saved in the a commercial Memory Stick or read from a Memory Stick (overwritten in the current data).

1. Continuously press the MENU button on the remote commander and display the Setup menu including "Dial" and "Answer".
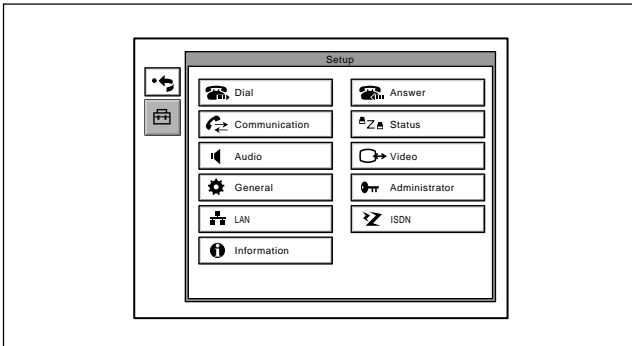
2. Select "Dial" using the ➡ button on the remote commander. Enter "7" and "2" sequentially using the numeric key on the remote commander without pressing the PUSH ENTER button and display the Service menu.
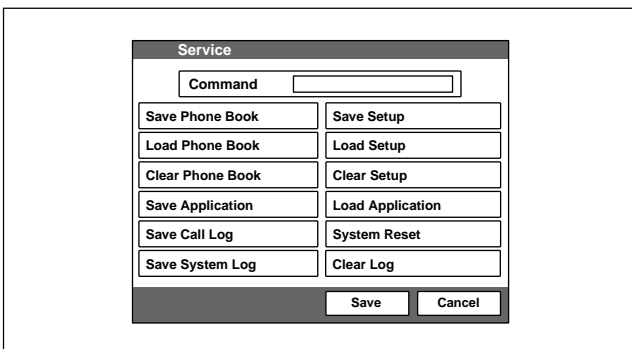
Note
To cancel the Service mode, select "Cancel" using ⬆, ⬇, ⬅ and ➡ buttons on the remote commander and press the PUSH ENTER button, or press the RETURN button on the remote commander. The current display returns to the Setup menu.

For saving of a phone book, loading of a phone book, saving of application, saving of a communication log, saving of a system log, saving of setting, and loading of setting

1. Display the Service menu.
2. Insert the Memory Stick, in which data can be written or in which the required contents have been already recorded, into the Memory Stick slot.
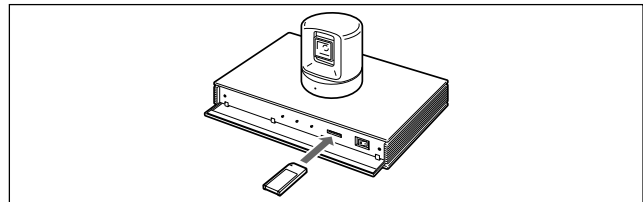
3. Select the function, which you want to execute, using ⬆, ⬇, ⬅ and ➡ buttons on the remote commander and press the PUSH ENTER button.
4. A confirmation message on whether to execute the function is displayed. To execute, select "OK" and press the PUSH ENTER button. To cancel execution, select "Cancel" and press the PUSH ENTER button.
5. After execution or cancellation, the current display returns to the Service menu.
6. Push in the Memory Stick once and take out it.

For erasing a phone book, a log, and setup (Can be done even in the Setup menu for the administrator menu.)

1. Display the Service menu.
2. Select the function, which you want to execute, using ⬆, ⬇, ⬅ and ➡ buttons on the remote commander and press the PUSH ENTER button
3. A confirmation message on whether to execute the function is displayed. To execute, select "OK" and press the PUSH ENTER button. To cancel execution, select "Cancel" and press the PUSH ENTER button.
4. After execution or cancellation, the current display returns to the Service menu.

For system reset

1. Display the Service menu.
2. Select "System Reset" using ⬆, ⬇, ⬅ and ➡ buttons on the remote commander and press the PUSH ENTER button
3. A confirmation message on whether to execute is displayed. To execute, select "OK" and press the PUSH ENTER button. To cancel execution, select "Cancel" and press the PUSH ENTER button.
4. After execution, the launcher menu is displayed. After cancellation, the current display returns to the Service menu.

For loading of application

1. Display the Service menu.
2. Insert the Memory Stick, in which the application software of the version to be loaded is recorded, into the Memory Stick slot.
3. Select "Load Application" using ▲, ▼, ◄ and ► buttons on the remote commander and press the PUSH ENTER button.
4. A confirmation message on whether to execute is displayed.
5. To execute, select "OK" and press the PUSH ENTER button. The screen display during loader execution then appears. After completion, the launcher menu is displayed. To cancel execution, select "Cancel" and press the PUSH ENTER button. The current display returns to the Service menu.
6. Push in the Memory Stick once and take out it.

Note

Do not turn off the power or take out a Memory Stick until the launcher menu is displayed.

For command input

1. Display the Service menu.
2. Select "Command" using ▲, ▼, ◄ and ► buttons on the remote commander and press the PUSH ENTER button.
   A key guidance is then displayed.
3. Enter the commands in a command list from the remote commander.
   ### Notes
   • To set two or more commands, put a one-character blank between the commands and then enter them.
   • The validated command can be confirmed in a command column at all times.
   • Use only the commands in the command table. If any other command (a free character string) is entered, the internal operation mode may become an improper state.

4. Select "Save" using ▲, ▼, ◄ and ► buttons on the remote commander and press the PUSH ENTER button.
   A Setup menu is then displayed.

To stop setting

Select "Cancel" using ▲, ▼, ◄ and ► buttons on the remote commander and press the PUSH ENTER button, or press the RETURN button on the remote commander.

Service menu function list

Command:

The commands listed in the table below are those for changing the internal operation mode of the communication terminal when the system is used in a special environment.

Command	Description
SMS	Validates an SMS function.
KV66	For KV-29FX66E monitors. Sets the input selection to 3 after power on when a KV-29FX66E monitor is being used. An IR output is changed so that the command during power-off sequence is sent properly. The monitor mode setting is invalidated when this command is specified, but the mode setting becomes valid by deleting this command.
WBxxxXyyy	Adjusts the angle of view of the whiteboard used.
YCLP**	(** indicates any of the values of 80, 90, A0, B0, C0, D0, or E0.) Clipped to the value for which the luminance value of a menu screen was specified. The section that has luminance exceeding the specified value is clipped to the specified value.
YLVL**	(** indicates a decimal value of 0 < ** < 80.) Shifted downward proportionally to the value for which the luminance value of a menu screen was specified. The whole screen becomes dark as the value increases. The black tone cannot be reproduced because all values are shifted.
D2B	Sets ISDN (2B) to the default value using the dial menu.
BMR0	AVAYA Bonding Mode Revision 0
PROJ	Sends the remote control code for the projector.
POFF	Does not display the packet loss indicator.
E1PRI	Changes forcibly to E1 (Default is T1 in NTSC models)
T1PRI	Changes forcibly to T1 (Default is E1 in PAL models)
PDx	Performs parallel dialing in units of xB (0-29) (default: in units of 5B). When 0 is entered, sets the default value 5B. When 30 or more is entered, sets the default value 29B. (Examples: PD1, PD29)
GKDISP	An alias name is displayed in a launcher menu instead of an IP address.
NOCIPN	CallingPartyNumber (originator number information) is not added to a SET_UP message during ISDN call origination.
NOSC	SendingComplete is not added to a SET_UP message during ISDN call origination.
SNDCMP	SendingComplete is added to a SET_UP message during ISDN call origination.
PKS****	Changes the video packet size. (**** = to 99)
TCB	A frame is displayed on the screen when a moving body is detected in the presenter mode of a tracking camera (PCSA-CTG70/CTG70P).

Save Phone Book:

All contents of a phone book are recorded and saved in a Memory Stick. After execution, a file is created in the area below in the Memory Stick.

\MSSONY\PRO\TVCONF\LIST\PCS_DLST.CSV

This file can be browsed using Microsoft Excel, but do not change the file name.

Load Phone Book:

The contents of a phone book (the file above in the folder described above) recorded in a Memory Stick are written in the phone book of the communication terminal.

The contents cannot be returned to the former setting after they are rewritten.

Clear Phone Book:

All contents of a phone book of the communication terminal are erased.

The contents cannot be returned to the former setting after they are erased.

Save Application:

The software of the system is saved in a Memory Stick. However, an MCU/SIP option is not saved in the Memory Stick. MCU software or SIP software is required separately.

Save Call Log:

The communication log recorded in the communication terminal is recorded and saved in a Memory Stick. A maximum of 500 latest logs are recorded in the communication terminal. After execution, a file is created in the area below in the Memory Stick.

\MSSONY\PRO\TVCONF\LOG\PCS_LOG.CSV

This file can be browsed using Microsoft Excel.

Save System Log:

A debug log is recorded and saved in a Memory Stick. A maximum of 1M bytes log is recorded and saved. After execution, a file is created in the area below in the Memory Stick.

\MSSONY\PRO\TVCONF\DEBUG\PCS_DEB.TXT

This file can be browsed using Microsoft Notepad, WordPad, or Word.

Save Setup:

All settings in the Setup menu are recorded and saved in a Memory Stick. After execution, a file is created in the area below in the Memory Stick.

\MSSONY\PRO\TVCONF\SETUP\PCS_STUP.CSV

This file can be browsed using Microsoft Excel.

Load Setup:

The setup information (\MSSONY\PRO\TVCONF\SETUP\PCS_STUP.CSV) recorded in a Memory Stick is overwritten in the Setup menu of the communication terminal. After execution, the screen disappears once, and the launcher menu is displayed in the same way as after the power is turned on.

The setup information cannot be returned to the former setting after it is rewritten.

Clear Setup:

All setting in the Setup menu of the communication terminal are erased. After execution, the screen disappears once, and the Initial Setup Wizard is displayed in the same way as when the power is turned on first.

Load Application:

The software of the system recorded in a Memory Stick is loaded.

System Reset:

Software reset is applied to the communication terminal. After execution, the screen disappears once, and the launcher menu is displayed in the same way as after the power is turned on.

Clear Logs:

The communication log and the system log recorded in the communication terminal are erased. When the communication log is erased, the content of the Log menu is also erased. These information cannot be restored once they are erased.

Section 3
Technical Data

3-1. Communication Terminal Port Number Used

3-1-1. Without H.323MCU Option (Default)

The communication terminal uses the port number below during point-to-point (P-P) connection when the port number used in the LAN Setup menu is set as "Default".

Signal	Port number
RAS (Communication terminal)	Any number from 2253 to 2255 (when GK is used)
RAS (GK: Gatekeeper)	1718 or 1719 (when GK is used)
Q.931 (Dialing)	Any number from 2253 to 2255
Q.931 (Answering)	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/Dual video RTP	49158
Data conference/Dual video RTCP	49159

3-1-2. Without H.323MCU Option (Custom: When TCP port number is set to 3000 and UDP port number is set to 3100)

The port number that the communication terminal uses is determined by the value input to TCP and UDP port numbers when the port number used in a LAN Setup menu is set as "Custom". For example, communication terminal uses port numbers below during P-P connection when a TCP port number is set to 3000 and when a UDP port number is set to 3100.

Signal	Port number
RAS (Communication terminal)	Any number from 3000 to 3002 (when GK is used)
RAS (GK: Gatekeeper)	1718 or 1719 (when GK is used)
Q.931 (Dialing)	Any number from 3000 to 3002
Q.931 (Answering)	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/Dual video RTP	3106
Data conference/Dual video RTCP	3107

3-1-3. With H.323MCU Option (Default)

The communication terminal that operates as internal MCU uses the port number below when the port number used in the LAN Setup menu is set as "Default". The port number that a sub-terminal uses is the same as during P-P connection.

Signal	Port number (at first point)	Port number (at Nth point)
RAS (Communication terminal)	Any number from 2253 to 2263 (When GK is used)	Any number from 2253 to 2263 (When GK is used)
RAS (GK: Gatekeeper)	1718 or 1719 (When GK is used)	1718 or 1719 (when GK is used)
Q931 (Dialing)	Any number from 2253 to 2263	Any number from 2253 to 2263
Q931 (Answering)	1720	1720
H.245	Any number from 2253 to 2263	Any number from 2253 to 2263
Audio RTP	49152	$49152 + 20 \times (N - 1)$
Audio RTCP	49153	$49153 + 20 \times (N - 1)$
Video RTP	49154	$49154 + 20 \times (N - 1)$
Video RTCP	49155	$49155 + 20 \times (N - 1)$
FECC RTP	49156	$49156 + 20 \times (N - 1)$
FECC RTCP	49157	$49157 + 20 \times (N - 1)$
Data conference/Dual video RTP	49158	$49158 + 20 \times (N - 1)$
Data conference/Dual video RTCP	49159	$49159 + 20 \times (N - 1)$

3-1-4. With H.323MCU Option (Custom: When TCP port number is set to 3000 and when UDP port number is set to 3100)

The port number that the communication terminal uses is determined by the value input to TCP and UDP port numbers when the port number used in the LAN Setup menu is set as "Custom". For example, communication terminal that operates as internal MCU uses the port number below when a TCP port number is set to 3000 and when a UDP port number is set to 3100. The port number that a sub-terminal uses is the same as in P-P connection.

Signal	Port number (at first point)	Port number (at Nth point)
RAS (Communication terminal)	Any number from 3000 to 3010 (When GK is used)	Any number from 3000 to 3010 (When GK is used)
RAS (GK: Gatekeeper)	1718 or 1719 (when GK is used)	1718 or 1719 (when GK is used)
Q931 (Dialing)	Any number from 3000 to 3010	Any number from 3000 to 3010
Q931 (Answering)	1720	1720
H.245	Any number from 3000 to 3010	Any number from 3000 to 3010
Audio RTP	3100	$3100 + 20 \times (N - 1)$
Audio RTCP	3101	$3101 + 20 \times (N - 1)$
Video RTP	3102	$3102 + 20 \times (N - 1)$
Video RTCP	3103	$3103 + 20 \times (N - 1)$
FECC RTP	3104	$3104 + 20 \times (N - 1)$
FECC RTCP	3105	$3105 + 20 \times (N - 1)$
Data conference/Dual video RTP	3106	$3106 + 20 \times (N - 1)$
Data conference/Dual video RTCP	3107	$3107 + 20 \times (N - 1)$

3-2. Setting of Communication Terminal and HUB

The LAN Mode setting of the communication terminal is "Auto Negotiation" as default setting. When LAN Mode setting has been set to "Auto Negotiation", 10M/100M can be selected automatically, however, Half/Full cannot be selected automatically. Therefore, if the HUB is set to Full mode, a connection failure or packet loss occurs. The following table shows an example of connection between the PCS-PG70/PG70P/PG50/PG50P and Catalyst 2950. When the HUB is set to 100FULL or 10FULL, change the setting of HUB or adjust the PCS-PG70/PG70P/PG50/PG50P setting to HUB. Refer to Operating Instructions.

Table of connection between PCS-PG70/PG70P/PG50/PG50P and Catalyst 2950

PCS-PG70/PG70P/PG50/PG50P setting → ↓ 2950 setting	Auto Negotiation	100Mbps Full Duplex	100Mbps Half Duplex	10Mbps Full Duplex	10Mbps Half Duplex
AUTO	OK	Packet loss	OK	Packet loss	OK
100FULL	Packet loss	OK	Packet loss	Connection failure	Connection failure
100HALF	OK	Packet loss	OK	Connection failure	Connection failure
10FULL	Packet loss	Connection failure	Connection failure	OK	Packet loss
10HALF	OK	Connection failure	Connection failure	Packet loss	OK

3-3. Audio and Video Input/Output Characteristics of Communication Terminal

3-3-1. Audio Input/Output Characteristics of PCS-PG70/PG70P/PG50/PG50P

Name	Connector	Impedance	Input/output level	Remarks
MIC1/MIC2 (Input)	Mini-jack	4.7 kΩ (Plug in power)	The reference value of an input level is −55 dBs.	
AUDIO IN AUX (Input) AUDIO IN LINE (Input)	Phone jack	47 kΩ or higher, Unbalanced	The reference value of an input level is −9 dBs.	
AUDIO OUT (Output)	Phone jack	1 kΩ or less, Unbalanced	Reference value −12 dBs	
AUDIO OUT (MIXED) (Output)	Phone jack	1 kΩ or less, Unbalanced	Reference value −12 dBs	

3-3-2. Video Input/Output Characteristics of PCS-PG70/PG70P/PG50/PG50P

Name	Connector	Specifications	Remarks	
MAIN AUX IN (Input)	Mini DIN 7-pin	S video input signal Y signal: 0.7 V p-p/75 Ω C signal: 0.3 V p-p/75 Ω	PCS-G70/G50: PCS-G70P/G50P:	NTSC PAL
SUB AUX IN (Input)	Mini DIN 7-pin	S video input signal Y signal: 0.7 V p-p/75 Ω C signal: 0.3 V p-p/75 Ω	PCS-G70/G50: PCS-G70P/G50P:	NTSC PAL
VIDEO OUT AUX (Output)	Phono jack	Composite output signal 1 V p-p/75 Ω	PCS-G70/G50: PCS-G70P/G50P:	NTSC PAL
VIDEO OUT MONITOR 1 (Output)	Mini DIN 4-pin	S video output signal Y signal: 0.7 V p-p/75 Ω C signal: 0.3 V p-p/75 Ω	PCS-G70/G50: PCS-G70P/G50P:	NTSC PAL
VIDEO OUT MONITOR 2 (Output)	Mini DIN 4-pin	S video output signal Y signal: 0.7 V p-p/75 Ω C signal: 0.3 V p-p/75 Ω	PCS-G70/G50: PCS-G70P/G50P:	NTSC PAL
RGB OUT (Output)	D-Sub 15-pin	RGB video output (H/V/R/G/B: 0.7 V p-p/75 Ω)		
MCU VIDEO OUT (1 to 5)	Mini DIN 4-pin	S video output signal Y signal: 0.7 V p-p/75 Ω C signal: 0.3 V p-p/75 Ω	PCS-G70/G50: PCS-G70P/G50P:	NTSC PAL

3-4. Audio Selection List of PCS-G70/G70P/G50/G50P

Audio Setup Menu				Audio Signal	Operation State			Audio Output			Remarks
CTE	Input Select	Mic Select	Echo Canceller	Input Terminal	Internal Echo Canceller	Mic Mute	RCVR Volume Adjustment	AUDIO OUT, DSB AUX OUT, DSB LINE OUT	AUDIO OUT (MIXED) (Rec mute off)	AUDIO OUT (MIXED) (Rec mute on)	
OFF	MIC	MIC	ON	MIC	Enabled	Enabled	Enabled	Remote	Remote + MIC	Remote + MIC	*1
			OFF	MIC	Disabled	Enabled	Enabled	Remote	Remote + MIC	Remote + MIC	
		DSB MIC	ON	DSB MIC	Enabled	Enabled	Enabled	Remote	Remote + DSB MIC	Remote + DSB MIC	*1
			OFF	DSB MIC	Disabled	Enabled	Enabled	Remote	Remote + DSB MIC	Remote + DSB MIC	
		LINE	ON	LINE	Enabled	Enabled	Enabled	Remote	Remote + LINE	Remote + LINE	
			OFF	LINE	Disabled	Enabled	Enabled	Remote	Remote + LINE	Remote + LINE	*2
		EC-MIC	–	EC-MIC	–	Enabled	Enabled	Remote	Remote + EC-MIC	Remote + EC-MIC	
	AUX	MIC	ON	AUX	Disabled	Disabled	Enabled	Remote + AUX	Remote + AUX	Remote	
			OFF	AUX	Disabled	Disabled	Enabled	Remote + AUX	Remote + AUX	Remote	
		DSB MIC	ON	AUX	Disabled	Disabled	Enabled	Remote + AUX	Remote + AUX	Remote	
			OFF	AUX	Disabled	Disabled	Enabled	Remote + AUX	Remote + AUX	Remote	
		LINE	ON	AUX	Disabled	Disabled	Enabled	Remote + AUX	Remote + AUX	Remote	
			OFF	AUX	Disabled	Disabled	Enabled	Remote + AUX	Remote + AUX	Remote	
		EC-MIC	–	AUX	Disabled	Disabled	Enabled	Remote + AUX	Remote + AUX	Remote	
	MIC + AUX	MIC	ON	MIC + AUX	MIC Enabled	MIC Enabled	Enabled	Remote + AUX	Remote + MIC + AUX	Remote + MIC	
			OFF	MIC + AUX	Disabled	MIC Enabled	Enabled	Remote + AUX	Remote + MIC + AUX	Remote + MIC	
		DSB MIC	ON	DSB MIC + AUX	DSB MIC Enabled	DSB MIC Enabled	Enabled	Remote + AUX	Remote + DSB MIC + AUX	Remote + DSB MIC	
			OFF	DSB MIC + AUX	Disabled	DSB MIC Enabled	Enabled	Remote + AUX	Remote + DSB MIC + AUX	Remote + DSB MIC	
		LINE	ON	LINE + AUX	LINE Disabled	LINE Disabled	Enabled	Remote + AUX	Remote + LINE + AUX	Remote + LINE	
			OFF	LINE + AUX	Disabled	LINE Disabled	Enabled	Remote + AUX	Remote + LINE + AUX	Remote + LINE	
		EC-MIC	–	EC-MIC + AUX	–	Enabled	Enabled	Remote + AUX	Remote + EC-MIC + AUX	Remote + EC-MIC	
LINE	–	–	–	LINE	Disabled	Enabled	Enabled	Remote	Remote + LINE	Remote + LINE	*3
DSB AUX IN	–	–	–	DSB AUX	Disabled	Enabled	Enabled	Remote	Remote + DSB AUX	Remote + DSB AUX	*4

*1: Recommended when a specified microphone (PCS-A1/A300, PCSA-A3, etc.) is used.
*2: Recommended when an external echo canceller is used.
*3: Recommended when CTE (Connected to the main unit) or an external echo canceller is used.
*4: Recommended when CTE (Connected to DSB AUX) is used.

Audio input/output
- MIC: MIC1/MIC2 input of Communication terminal
- DSB MIC: MIC1 to MIC5 input of Data solution box
- LINE: AUDIO LINE input of Communication terminal
- AUX: AUDIO AUX input of Communication terminal
- DSB AUX: AUX IN input of Data solution box
- Remote: Remote audio

3-5. Displayed Window during Multipoint Connection of PCS-G70/G70P/G50/G50P

3-5-1. Displayed Picture at Each Point in Voice Activate Mode

In Voice Activate mode, a speaker's picture is displayed in other terminals, however the speaker's terminal is the same picture as the one before speaking.

Example at six points is shown below. (Note: Sub-terminals A to E are in connection order.)

Operation order	Operation	Main terminal	Sub-terminal A	Sub-terminal B	Sub-terminal C	Sub-terminal D	Sub-terminal E
1	Just after connection	Picture from Sub-terminal A	Picture from Main terminal	Picture from Main terminal	Picture from Main terminal	Picture from Main terminal	Picture from Main terminal
2	Spoken by A	Picture from Sub-terminal A	Picture from Main terminal	Picture from Sub-terminal A	Picture from Sub-terminal A	Picture from Sub-terminal A	Picture from Sub-terminal A
3	Spoken by B	Picture from Sub-terminal B	Picture from Sub-terminal B	Picture from Sub-terminal A	Picture from Sub-terminal B	Picture from Sub-terminal B	Picture from Sub-terminal B
4	Spoken by C	Picture from Sub-terminal C	Picture from Sub-terminal C	Picture from Sub-terminal C	Picture from Sub-terminal B	Picture from Sub-terminal C	Picture from Sub-terminal C

3-5-2. Displayed Picture at Each Point in Broadcast Mode with Full Screen Mode

The picture from the terminal at which the "Self Broadcast" was selected is displayed in other terminals. In the terminal at which the "Self Broadcast" was selected displays a picture that is set by Sender Screen setting in the Communication Setup menu of the terminal. When this setting is "Full Screen", the picture is displayed from the main terminal. For "Automatic" or "Six-screen Mosaic", refer to Section 4-5-3.

The following describes the operation with Full Screen mode.
- In the main terminal, when "A Broadcast" to "E Broadcast" or "Self Broadcast" is selected:
  A selected terminal displays the picture from the main terminal.
  Other terminals display the picture from the selected terminal.
- In the main terminal or broadcasting terminal, when "Stop Broadcast" is selected:
  When Broadcast Mode setting is "Split", each terminal displays the split window.
  When Broadcast Mode setting is "Voice Activate", the main terminal remains the picture from the broadcasting terminal and each sub-terminal displays the picture from the main terminal.

Example at six points is shown below with the main terminal selecting Voice Activate mode.
(Note: Sub-terminals A to E are in connection order.)

Operation order	Operation	Main terminal	Sub-terminal A	Sub-terminal B	Sub-terminal C	Sub-terminal D	Sub-terminal E
1	Just after connection	Picture from Sub-terminal A	Picture from Main terminal	Picture from Main terminal	Picture from Main terminal	Picture from Main terminal	Picture from Main terminal
2	Broadcast A	Picture from Sub-terminal A	Picture from Main terminal	Picture from Sub-terminal A	Picture from Sub-terminal A	Picture from Sub-terminal A	Picture from Sub-terminal A
3	Stop Broadcast	Picture from Sub-terminal A	Picture from Main terminal	Picture from Main terminal	Picture from Main terminal	Picture from Main terminal	Picture from Main terminal
4	Broadcast B	Picture from Sub-terminal B	Picture from Sub-terminal B	Picture from Main terminal	Picture from Sub-terminal B	Picture from Sub-terminal B	Picture from Sub-terminal B
5	Stop Broadcast	Picture from Sub-terminal B	Picture from Main terminal	Picture from Main terminal	Picture from Main terminal	Picture from Main terminal	Picture from Main terminal
6	Broadcast C	Picture from Sub-terminal C	Picture from Sub-terminal C	Picture from Sub-terminal C	Picture from Main terminal	Picture from Sub-terminal C	Picture from Sub-terminal C

3-5-3. Displayed Picture at Each Point in Broadcast Mode with Split Window Mode

1. Immediately after connection

The picture in all connected terminals are split and simultaneously displayed in all terminals.

a. When "Automatic" is set for Split setting in the Communication Setup menu:
    When one to three sub-terminals are connected, each terminal displays the four-split window. The picture position of each terminal is fixed in connection order.
    Example at four points is shown below. (Note: Sub-terminals A to C are in connection order.)

Displayed window in main and sub-terminals

Picture from sub-terminal A   Picture from sub-terminal B

Picture from main terminal   Picture from sub-terminal C
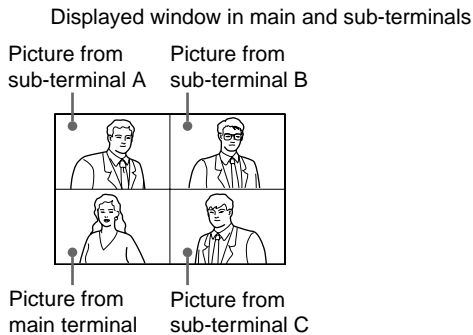
When four or five sub-terminals are connected, each terminal displays the six-split window. The picture position of each terminal is fixed in connection order immediately after connection.
Example at six points is shown below. (Note: Sub-terminals A to E are in connection order.)

Displayed window in main and sub-terminals immediately after connection

Picture from sub-terminal A   Picture from sub-terminal B   Picture from sub-terminal C

Picture from sub-terminal D

Picture from main terminal

Picture from sub-terminal E
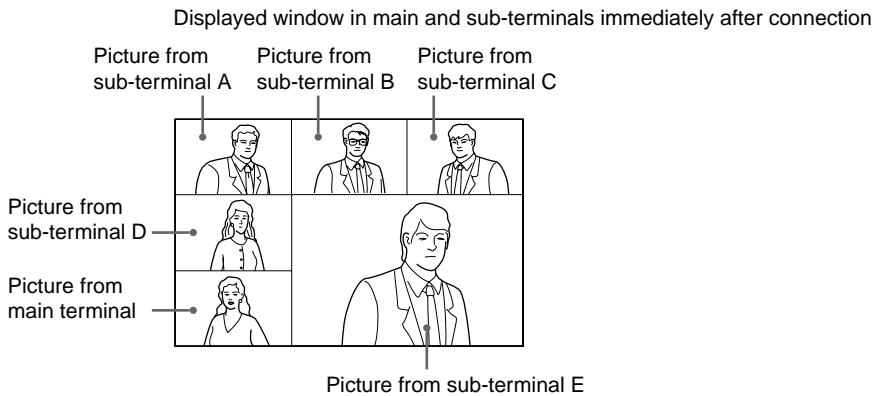
b. When "Six-screen Mosaic" is set for Split setting in the Communication Setup menu:
    Each terminal displays the six-split window irrespective of connected sub-terminals number. The picture position of each terminal is fixed in connection order immediately after connection.
    Example at four points is shown below. (Note: Sub-terminals A to E are in connection order.)

Displayed window in main and sub-terminals immediately after connection

Picture from sub-terminal A   Picture from sub-terminal B   Picture from sub-terminal C

Picture from sub-terminal D

Picture from main terminal

Picture from sub-terminal E
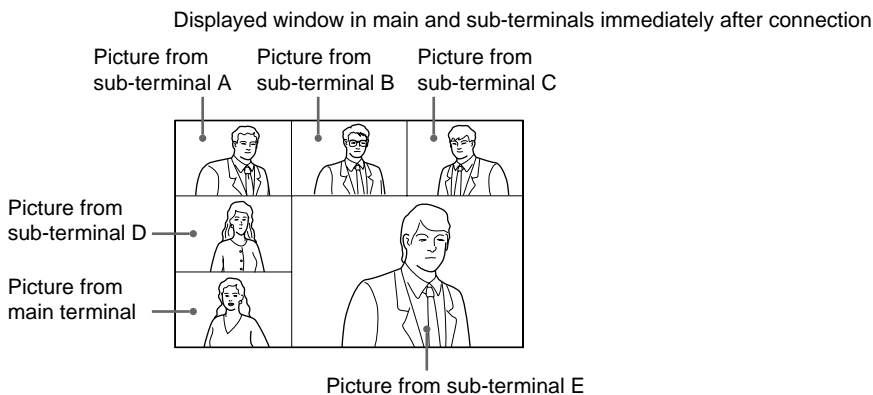
2. Immediately after speaking

a. Four-split window
   The picture position is always fixed in connection order.
b. Six-split window
   When a person speaks, the speaker's picture position moves to the lower-right position.
   When the previous picture displayed in the lower-right position is one from the main terminal, the picture from the main terminal moves to the position in which the speaker terminal was present before speaking.
   When the previous picture displayed in the lower-right position is one from a sub-terminal, it returns to the position immediately after connection. Instead, the picture from the main terminal moves to the speaker terminal position.

The transition example of a picture when the speaker changes to the sub-terminal B from the main terminal is shown below.

Spoken by main terminal

Picture from sub-terminal A | Picture from sub-terminal B | Picture from sub-terminal C

Picture from sub-terminal D

Picture from sub-terminal E

Picture from main terminal

→

Spoken by sub-terminal B

Picture from sub-terminal A | Picture from main terminal | Picture from sub-terminal C

Picture from sub-terminal D

Picture from sub-terminal E

Picture from sub-terminal B
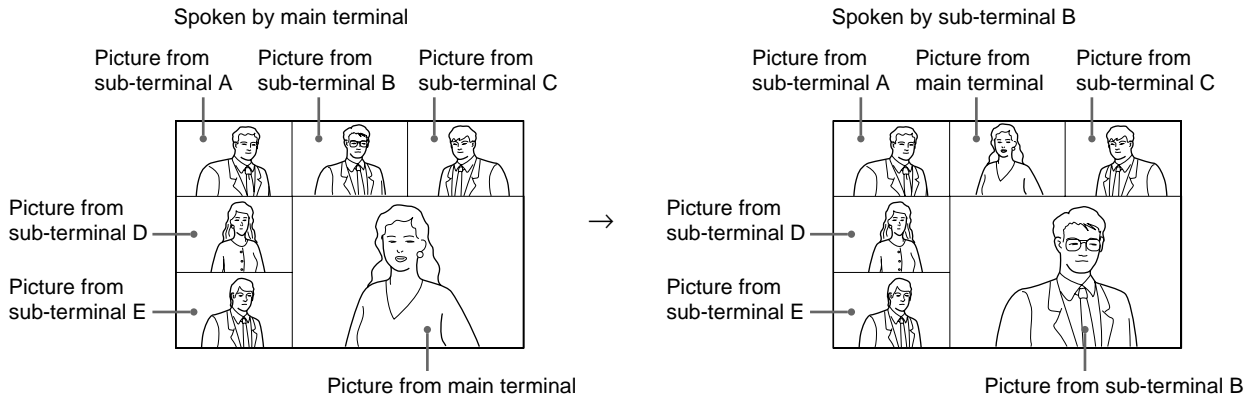
The transition example of a picture when the speaker changes to the sub-terminal D from the sub-terminal B is shown below.

Spoken by sub-terminal B

Picture from sub-terminal A | Picture from main terminal | Picture from sub-terminal C

Picture from sub-terminal D

Picture from sub-terminal E

Picture from sub-terminal B

→

Spoken by sub-terminal D

Picture from sub-terminal A | Picture from sub-terminal B | Picture from sub-terminal C

Picture from main terminal

Picture from sub-terminal E

Picture from sub-terminal D

3. Selecting one terminal by main terminal (in six-split window mode only)

The position of a sub-terminal selected by the main terminal can be moved to the lower-right position and fixed in the six-split window mode.
When "Split (A Fixed)" to "Split (E Fixed)" or "Split (Near End Fixed)" is selected in the main terminal, the picture from the selected terminal moves to the lower-right position and the picture from the main terminal moves to the position in which the selected terminal was present before selecting.

The example when "Split (E Fixed)" is selected after "Split (C Fixed)" has been selected by the main terminal is shown below.

Selected "Split (C Fixed)"

Picture from sub-terminal A
Picture from sub-terminal B
Picture from main terminal
Picture from sub-terminal D
Picture from sub-terminal E
Picture from sub-terminal C

→

Selected "Split (E Fixed)"

Picture from sub-terminal A
Picture from sub-terminal B
Picture from sub-terminal C
Picture from sub-terminal D
Picture from main terminal
Picture from sub-terminal E
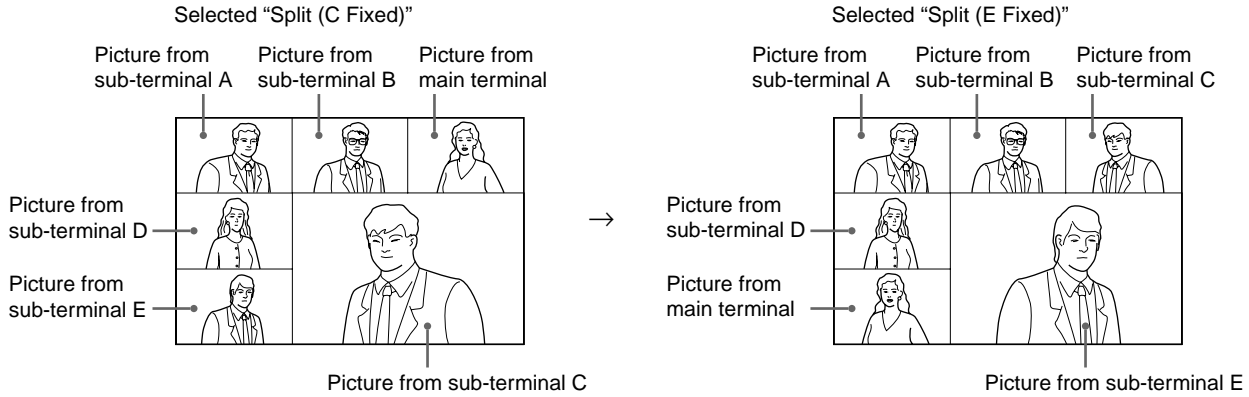
Note

During a videoconference in the split window mode, if a terminal transiently operates and ends the transmission with a full screen mode (examples: s/ps or DSB), the picture position from each terminal will return to the initial position of the connection order.

3-6. Display Transition List of PCS-G70/G70P/G50/G50P

Description on "Input 1" in Table

This indicates that a video source is selected in the Video Input Select menu of PCS-G70/G70P by "Input 1". In PCS-G50/G50P, the Video Input Select menu is not displayed as "Input 1", but "VIDEO IN".

Video setup 1

Number of monitors: 1

Main monitor: Video1

In this case, connect a video monitor to the VIDEO OUT MONITOR 1 connector of the communication terminal (CT).

The display transition is as shown below.

Note

Still picture and motion picture are abbreviated to "s/p" and "m/p" respectively in the following tables.

Transition state	VIDEO1 image
Non-communication	Launcher menu
M/p communication	"Input 1" image on the remote site (Sub-screen: "Input 1" image)
Dual video transmission (PCS-G70/G70P only)	"Input 1" image on the remote site
Dual video reception	(Left and right of split) Left: "Input 1" image on the remote site, Right: "Input 1" image (Top and bottom of split) Top: "Input 1" image on the remote site, Bottom: "Input 1" image
One shot/continuous s/p transmission	s/p (4CIF resolution)
DSB transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)
One shot/continuous s/p reception	s/p (4CIF resolution)
DSB reception	Remote PC image (4CIF resolution)
Whiteboard transmission/reception	Whiteboard image (4CIF resolution)

Video setup 2

Number of monitors: 1

Main monitor: RGB

In this case, connect an RGB monitor to the RGB connector of CT.

The display transition is as shown below.

Transition state	RGB image
Non-communication	Launcher menu
M/p communication	"Input 1" image on the remote site (Sub-screen: "Input 1" image)
Dual video transmission (PCS-G70/G70P only)	"Input 1" image on the remote site
Dual video reception	(Left and right of split) Left: "Input 1" image on the remote site, Right: "Input 1" image (Top and bottom of split) Top: "Input 1" image on the remote site, Bottom: "Input 1" image
One shot/continuous s/p transmission	s/p (4CIF resolution)
DSB transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)
One shot/continuous s/p reception	s/p (4CIF resolution)
DSB reception	Remote PC image (XGA resolution)
Whiteboard transmission/reception	Whiteboard image (XGA resolution)

Video setup 3

Number of monitors: 1

Main monitor: DSB RGB

In this case, connect an RGB monitor to the DSB RGB connector of the data solution box connected to CT.

The display transition is as shown below.

Transition state	DSB RGB image
Non-communication	Launcher menu
M/p communication	"Input 1" image on the remote site (Sub-screen: "Input 1" image)
Dual video transmission (PCS-G70/G70P only)	"Input 1" image on the remote site
Dual video reception	(Left and right of split) Left: "Input 1" image on the remote site, Right: "Input 1" image (Top and bottom of split) Top: "Input 1" image on the remote site, Bottom: "Input 1" image
One shot/continuous s/p transmission	s/p (4CIF resolution)
DSB transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)
One shot/continuous s/p reception	s/p (4CIF resolution)
DSB reception	Remote PC image (XGA resolution)
Whiteboard transmission/reception	Whiteboard image (XGA resolution)

Video setup 4

Number of monitors: 2

Main monitor: Video1   Sub monitor1:   Video2

In this case, connect video monitors to the VIDEO OUT MONITOR 1 and connectors of CT.

The display transition is as shown below.

Transition state	VIDEO1 image	VIDEO2 image
Non-communication	Launcher menu	"Input 1" image
M/p communication	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video transmission (PCS-G70/G70P only)	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 2" image on the remote site
One shot/continuous s/p transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)
DSB transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
One shot s/p reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)
Continuous s/p reception	s/p (4CIF resolution)	s/p (4CIF resolution)
DSB reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	Remote PC image (4CIF resolution)
Whiteboard transmission/reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	Whiteboard image (4CIF resolution)

Video setup 5

Number of monitors: 2

Main monitor: Video1   Sub monitor1:   RGB

In this case, connect a video monitor to the VIDEO OUT MONITOR 1 connector, and an RGB monitor to the RGB OUT connector of CT.

The display transition is as shown below.

Transition state	VIDEO1 image	RGB image
Non-communication	Launcher menu	"Input 1" image
M/p communication	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video transmission (PCS-G70/G70P only)	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 2" image on the remote site
One shot/continuous s/p transmission	"Input 1" image on the remote site	s/p (4CIF resolution)
DSB transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
One shot s/p reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)
Continuous s/p reception	s/p (4CIF resolution)	s/p (4CIF resolution)
DSB reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	Remote PC image (XGA resolution)
Whiteboard transmission/reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	Whiteboard image (XGA resolution)

Video setup 6

Number of monitors: 2

Main monitor: Video1   Sub monitor1:   DSB RGB

In this case, connect a video monitor to the VIDEO OUT MONITOR 1 connector, and an RGB monitor to the DSB RGB connector of the data solution box connected to CT.

The display transition is as shown below.

Transition state	VIDEO1 image	DSB RGB image
Non-communication	Launcher menu	Local PC image (XGA resolution)
M/p communication	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video transmission (PCS-G70/G70P only)	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 2" image on the remote site
One shot/continuous s/p transmission	"Input 1" image on the remote site	s/p (4CIF resolution)
DSB transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	Local PC image (XGA resolution)
One shot s/p reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)
Continuous s/p reception	s/p (4CIF resolution)	s/p (4CIF resolution)
DSB reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	Remote PC image (XGA resolution)
Whiteboard transmission/reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	Whiteboard image (XGA resolution)

Video setup 7

Number of monitors: 2
Main monitor: RGB   Sub monitor1:   Video1
In this case, connect an RGB monitor to the RGB OUT connector, and a video monitor to the VIDEO
OUT MONITOR 1 connector of CT.
The display transition is as shown below.

Transition state	RGB image	VIDEO1 image
Non-communication	Launcher menu	"Input 1" image
M/p communication	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video transmission (PCS-G70/G70P only)	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 2" image on the remote site
One shot/continuous s/p transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)
DSB transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
One shot s/p reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)
Continuous s/p reception	s/p (4CIF resolution)	s/p (4CIF resolution)
DSB reception	Remote PC image (XGA resolution)	"Input 1" image on the remote site
Whiteboard transmission/reception	Whiteboard image (XGA resolution)	"Input 1" image

Video setup 8

Number of monitors: 2
Main monitor: DSB RGB   Sub monitor1:   Video1
In this case, connect an RGB monitor to the DSB RGB connector of the data solution box connected to
CT, and a video monitor to the VIDEO OUT MONITOR 1 connector of CT.
The display transition is as shown below.

Transition state	DSB RGB image	VIDEO1 image
Non-communication	Launcher menu	"Input 1" image
M/p communication	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video transmission (PCS-G70/G70P only)	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 2" image on the remote site
One shot/continuous s/p transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)
DSB transmission	s/p (XGA resolution)	"Input 1" image on the remote site
One shot s/p reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)
Continuous s/p reception	s/p (4CIF resolution)	s/p (4CIF resolution)
DSB reception	Remote PC image (XGA resolution)	"Input 1" image on the remote site
Whiteboard transmission/reception	Whiteboard image (XGA resolution)	"Input 1" image

Video setup 9

Number of monitors: 2

Main monitor: RGB   Sub monitor1:   DSB RGB

In this case, connect RGB monitors to the RGB OUT connector of CT and DSB RGB connector of the data solution box connected to CT.

The display transition is as shown below.

Transition state	RGB image	DSB RGB image
Non-communication	Launcher menu	Local PC image (XGA resolution)
M/p communication	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video transmission (PCS-G70/G70P only)	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 2" image on the remote site
One shot/continuous s/p transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)
DSB transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	Local PC image (XGA resolution)
One shot s/p reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)
Continuous s/p reception	s/p (4CIF resolution)	s/p (4CIF resolution)
DSB reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	Remote PC image (XGA resolution)
Whiteboard transmission/reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	Whiteboard image (XGA resolution)

Video setup 10

Number of monitors: 2

Main monitor: DSB RGB   Sub monitor1:   RGB

In this case, connect RGB monitors to the DSB RGB connector of the data solution box connected to CT and RGB OUT connector of CT.

The display transition is as shown below.

Transition state	DSB RGB image	RGB image
Non-communication	Launcher menu	"Input 1" image
M/p communication	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video transmission (PCS-G70/G70P only)	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image
Dual video reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 2" image on the remote site
One shot/continuous s/p transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)
DSB transmission	s/p (XGA resolution)	"Input 1" image on the remote site
One shot s/p reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)
Continuous s/p reception	s/p (4CIF resolution)	s/p (4CIF resolution)
DSB reception	Remote PC image (XGA resolution)	"Input 1" image on the remote site
Whiteboard transmission/reception	Whiteboard image (XGA resolution)	"Input 1" image

Video setup 11

Number of monitors: 3

Main monitor: Video1   Sub monitor1: Video2   Sub monitor2: RGB

In this case, connect video monitors to the VIDEO OUT MONITOR 1 and 2 connectors, and an RGB
monitor to the RGB OUT connector of CT.

The display transition is as shown below.

Transition state	VIDEO1 image	VIDEO2 image	RGB image
Non-communication	Launcher menu	"Input 1" image	"Input 1" image
M/p communication	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	"Input 1" image
Dual video transmission (PCS-G70/G70P only)	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	"Input 1" image
Dual video reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 2" image on the remote site	"Input 2" image on the remote site
One shot/continuous s/p transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)	"Input 1" image
DSB transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	"Input 1" image
One shot s/p reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)	"Input 1" image
Continuous s/p reception	s/p (4CIF resolution)	s/p (4CIF resolution)	"Input 1" image
DSB reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	Remote PC image (XGA resolution)
Whiteboard transmission/reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	Whiteboard image (XGA resolution)

Video setup 12

Number of monitors: 3

Main monitor: Video1   Sub monitor1: Video2   Sub monitor2: DSB RGB

In this case, connect video monitors to the VIDEO OUT MONITOR 1 and 2 connectors of CT, and an
RGB monitor to the DSB RGB connector of the data solution box connected to CT.

The display transition is as shown below.

Transition state	VIDEO1 image	VIDEO2 image	DSB RGB image
Non-communication	Launcher menu	"Input 1" image	s/p (XGA resolution)
M/p communication	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	"Input 1" image
Dual video transmission (PCS-G70/G70P only)	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	"Input 1" image
Dual video reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 2" image on the remote site	"Input 2" image on the remote site
One shot/continuous s/p transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)	"Input 1" image
DSB transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	s/p (XGA resolution)
One shot s/p reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)	"Input 1" image
Continuous s/p reception	s/p (4CIF resolution)	s/p (4CIF resolution)	s/p (4CIF resolution)
DSB reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	Remote PC image (XGA resolution)
Whiteboard transmission/reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	Whiteboard image (XGA resolution)

Video setup 13

Number of monitors: 3

Main monitor: Video1   Sub monitor1: RGB   Sub monitor2: DSB RGB

In this case, connect a video monitor to the VIDEO OUT MONITOR 1 connector, and RGB monitors to
the RGB OUT connector of CT and DSB RGB connector of the data solution box connected to CT.

The display transition is as shown below.

Transition state	VIDEO1 image	RGB image	DSB RGB image
Non-communication	Launcher menu	"Input 1" image	Local PC image (XGA resolution)
M/p communication	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	"Input 1" image
Dual video transmission (PCS-G70/G70P only)	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	"Input 1" image
Dual video reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 2" image on the remote site	"Input 2" image on the remote site
One shot/continuous s/p transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)	"Input 1" image
DSB transmission	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	Local PC image (XGA resolution)
One shot s/p reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	s/p (4CIF resolution)	"Input 1" image
Continuous s/p reception	s/p (4CIF resolution)	s/p (4CIF resolution)	"Input 1" image
DSB reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	Remote PC image (XGA resolution)
Whiteboard transmission/reception	"Input 1" image on the remote site (Sub-screen: "Input 1" image)	"Input 1" image	Whiteboard image (XGA resolution)

3-7. Supported Video/Audio Codec

	H.323 P-P	H.320 P-P	H.323 MCU	H.320 MCU	MIX MCU	Cascade (Only LAN)	Cascade (MIX)
Video							
Interlaced SIF	○	○	–	–	–	–	–
Interlaced SIF (H.264)	○	○	–	–	–	–	–
H.264	○	○	○	○	○	○	○
MPEG4	○	–	–	–	–	–	–
H.263	○	○	○	○	○	○	○
H.263 4CIF	○	–	△*Note	△*Note	–	–	–
H.261	○	○	○	○	○	○	○
Audio							
MPEG4 AAC	○	○	○	○	○	○	○
G.722.1	○	–	–	–	–	–	–
G.722	○	○	○	○	○	○	○
G.729	○	–	–	–	–	–	–
G.728	○	○	○	○	○	○	○
G.723.1	○	–	–	–	–	–	–
G.711	○	○	○	○	○	○	○

∗Note: A 4CIF image can be received in a sub-terminal if a master terminal is Ver.2.4 or later.
For more information, refer to "Multi-point conference for which 4CIF mode is used" in Section 1-10.

Sony Corporation