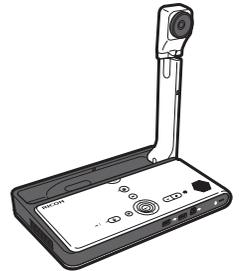




Unified Communication System P3000

Device Reference



-
- 1 Preparing to Use the Machine
 - 2 Operating the Machine
 - 3 Packing Up the Machine
 - 4 Troubleshooting
 - 5 Appendix

TABLE OF CONTENTS

- Manuals for This Machine.....3
- Introduction.....4
 - Disclaimer.....4
 - Notes.....4
- How to Read This Manual.....5
 - Symbols.....5
- Model-Specific Information.....6
- Precautions for Use.....7
 - Handling This Product.....7
 - Cleaning.....7
 - Wireless Networking.....8
 - Copyright Notice.....8

1. Preparing to Use the Machine

- Preparing to Start Using the Services.....9
- Checking the Package Contents.....11
- Guide to Components.....13
 - Front and Top view.....13
 - Rear and Bottom view.....14
 - Control Panel.....15
- Place to Install.....17
 - Installation Requirements.....17
 - Operating Environment for This Machine.....21
- Connecting the Power Cord Set.....24
- Connecting a Video Output Device.....27
- Connecting an Ethernet Cable.....28
- Connecting an External Microphone Speaker.....29

2. Operating the Machine

- Raising the Camera Unit.....31
- Turning On the Power.....33
- Turning on the Machine for the First Time.....34
- Adjusting the Camera.....36
- Using the Camera To Share Information.....38
- Adjusting the Volume.....39

Adjusting the Speaker Volume.....	39
Muting the Microphone.....	39
Turning Off the Power.....	41
Putting the Camera Back Into Place.....	42
3. Packing Up the Machine	
Removing the Power Cord Set and Video Output Device and Packing Up the Machine.....	43
4. Troubleshooting	
When You Have Problems Operating the Machine.....	47
5. Appendix	
Specifications.....	53
Precautions for Use.....	55
Trademarks.....	56
INDEX	57

Manuals for This Machine

Read this manual carefully before you use this machine.

Refer to the manuals that are relevant to what you want to do with the machine.

Read This First

Explains important items to know when using this product. It also describes how to set up this product when using it for the first time.

Quick Guide

Explains how to start a meeting.

Device Reference (This Manual)

Explains how to set up and operate the machine.

This manual also describes the specifications of the machine and provides information about how to troubleshoot problems that occur.

Features Reference

Explains how to start a meeting and describes the features of the machine.

This manual also provides information about how to troubleshoot feature and network problems that occur.

Introduction

Disclaimer

Contents of this manual are subject to change without prior notice.

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Notes

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

Two kinds of size notation are employed in this manual.

Some illustrations in this manual might be slightly different from the machine.

How to Read This Manual

Symbols

This manual uses the following symbols:

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of damage to machine or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's features, and instructions on resolving user errors.

[]

Indicates the names of keys on the display or control panel.

 **Region A** (mainly Europe and Asia)

 **Region B** (mainly North America)

Differences in the functions of Region A and Region B models are indicated by two symbols. Read the information indicated by the symbol that corresponds to the region of the model you are using. For details about which symbol corresponds to the model you are using, see p.6 "Model-Specific Information".

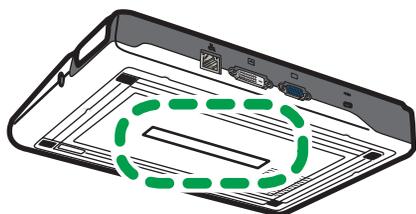
Note

- Some of the key names that appear in the on-screen instructions or messages might differ from those shown on the machine, depending on the region in which you live. The screen displays a key name, followed by the corresponding key mark. If the name of the key is different, use the corresponding mark to identify the key.

Model-Specific Information

This section explains how you can identify the region your machine belongs to.

There is a label on the bottom of the machine, located in the position shown below. The label contains details that identify the region your machine belongs to. Read the label.



CMJ001

The following information is region-specific. Read the information under the symbol that corresponds to the region of your machine.

 **Region A** (mainly Europe and Asia)

If the label contains the following, your machine is a region A model:

- 220V-240V

 **Region B** (mainly North America)

If the label contains the following, your machine is a region B model:

- 110V

Note

- Dimensions in this manual are given in two units of measure: metric and inch. If your machine is a Region A model, refer to the metric units. If your machine is a Region B model, refer to the inch units.

Precautions for Use

Handling This Product

Observe the following points when moving the machine:

- Turn off the machine and remove the power plug from the AC outlet.
- Remove all the connector cables connected to the machine.
- Return the camera to the closed position.
- Do not attempt to raise or move this machine by the camera unit.
- When carrying the machine by hand
 - Use the bag that comes with the machine.
 - When traveling by plane, take this machine onboard as carry-on luggage.
- When Transporting the Machine

This machine contains a large number of glass and precision parts. Observe the following points to prevent the machine from being damaged by excessive shock:

- Wrap the machine in cushioning material to prevent it from being directly exposed to shock.
- Place the machine in the supplied bag and pack it in the original box or a sturdy cardboard box.
- Inform the carrier that the machine is a piece of precision equipment.
- For more information about transporting the machine, consult your carrier.

Avoid contact with rubber and plastic materials for an extended period of time. Doing so may lead to discoloration or cause the exterior coating to peel off.

Do not use this machine for an extended period of time. Doing so may lead to failure or shorten the product life.

Cleaning

- Never use benzene or thinner to clean the machine. Doing so may lead to deformation, discoloring, or cause the exterior coating to peel off.
- Do not use a chemically treated cloth.
- Remove the dust that accumulates in the air outlet and inlet periodically. If the air outlet or inlet becomes clogged, the flow of air inside the machine decreases. Poor air flow can result in failure.

Wireless Networking

This product features a certified construction. Disassembling or modifying this product without permission may be punishable by law.

Copyright Notice

Using this machine to perform any of the following acts, without permission from the copyright holder, for purposes other than personal use may constitute an infringement on the copyright and/or neighboring rights of the commercial video software or cable broadcasting program. These acts include broadcasting or transmitting commercial video software or cable broadcasting programs, modifying videos, such as by freezing, or resizing videos to be displayed in an aspect ratio different from the original. To avoid the risk of possible infringement, we advise you to obtain permission from the copyright holder and take all other measures necessary before performing any of the above-mentioned acts.

1. Preparing to Use the Machine

Preparing to Start Using the Services

To start using the Unified Communication System services with this machine, you must set up this machine to use the services according to the conditions in which the machine was purchased and the environment in which the machine is used. This involves specifying the name of the machine and your password, configuring the network settings, and registering contact.

Preparing the machine

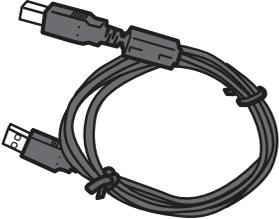
	Step	Reference
1	Checking the Package contents.	p.11 "Checking the Package Contents"
2	Installing the machine.	p.17 "Place to Install"
3	Connecting the power cord set.	p.24 "Connecting the Power Cord Set"
4	Connecting a video output cable.	p.27 "Connecting a Video Output Device"
5	Connecting an Ethernet cable. (If using a wired network)	p.28 "Connecting an Ethernet Cable"
6	Turning on the power.	p.33 "Turning On the Power"
7	Selecting the language and time zone.	p.34 "Turning on the Machine for the First Time"
8	Specifying Wired/Wireless Network Configuration.	"Changing Network Configuration", Features Reference "When the Machine Cannot Connect to the Network", Features Reference
9	Checking the Contact ID from the Contact List screen.	"About Screen", Features Reference

Preparing Unified Communication System Settings

	Step	Reference
1	Starting your Web browser.	"Logging in to Unified Communication System Settings", Features Reference
2	Changing the default password and machine name.	"Specifying the Name of the Machine and Your Password", Features Reference
3	Registering a contact to Address Book.	"Managing Address Book", Features Reference.

Checking the Package Contents

The product package contains the following items:

Package Contents	
Unified Communication System P3000 (this machine)	 <p style="text-align: right;">CMJ023</p>
AC adapter	 <p style="text-align: right;">CJB037</p>
Power cord	 <p style="text-align: right;">CJB036</p>
USB cable	 <p style="text-align: right;">CJB035</p>

Package Contents

Bag



CJB034

Quick Guide

Read This First

Other documents

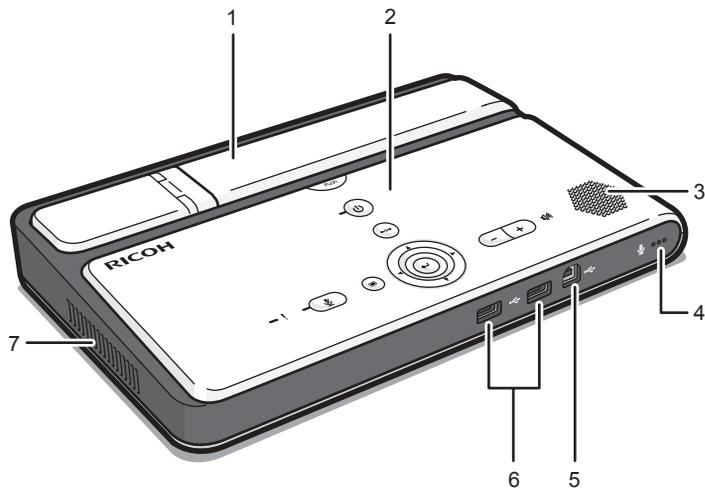
↓ Note

- Use the USB cable to share your computer screen. For details, see "Sharing the Computer Screen", Features Reference.
- Be sure to use the power cord set and USB cable that come with this machine.
- This machine is factory-shipped with a protective sheet covering the camera lens. Remove the protective sheet from the lens before using the camera.
- When this machine is not being used, store it together with the other accessories (including the power cord set and USB cable) in the supplied bag. Do not store any other items in the supplied bag.
- When placing this machine in the supplied bag, be sure to remove all cables and the power cord set.

Guide to Components

Front and Top view

1



CMU003

1. Camera unit

Captures live video that is transmitted to other parties.

The camera unit consists of a camera and an arm.

2. Control Panel

Provides a set of keys used to operate the machine.

For details about the control panel, see p.15 "Control Panel".

3. Speaker

Outputs audio from other parties.

4. Microphone

Inputs audio from the machine.

5. USB port (type B)

Used to connect the machine to your computer and share the computer screen.

6. USB ports (type A)

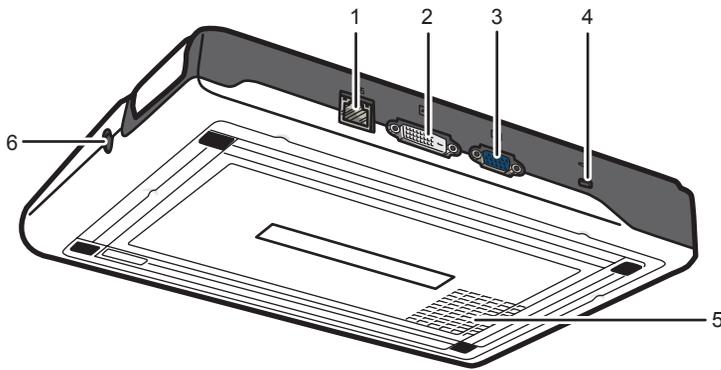
Used to attach an external microphone speaker to the machine.

7. Air outlet

Releases heat from inside of the machine.

Rear and Bottom view

1



CMJ004

1. Ethernet port

Port to which the 1000BASE-T, 100BASE-TX, or 10BASE-T cable connects. This port is used when connecting the machine to a wired network.

2. DVI-D connector

Connector used to connect this machine to a video output device, such as a projector or monitor, via a DVI-D connector.

Note

- DVI-I connection is not supported.

3. Analog RGB connector

Connector used to connect this machine to a video output device, such as a projector or monitor, via a RGB (VGA) connector.

4. Anti-theft lock hole

Hole for connecting the anti-theft chain.

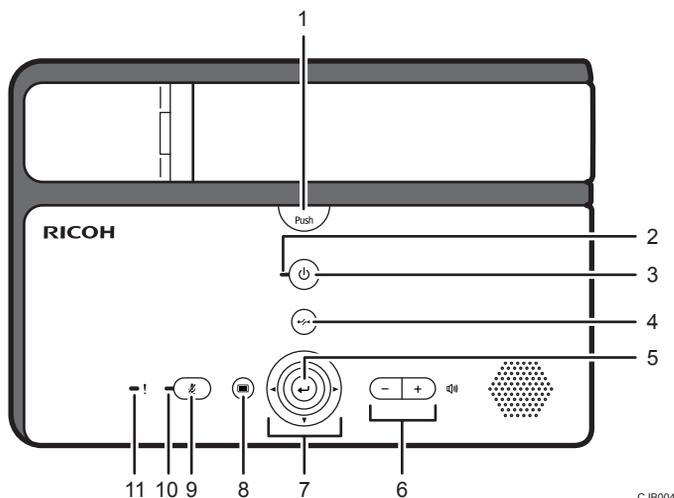
5. Air inlet

Brings in air from the outside to cool the machine and prevent it from overheating.

6. Power connector

Connector for connecting the power cord.

Control Panel



CJB004

1. [Push] key

Used to raise the camera unit.

2. Power indicator

Lights when the machine turns on.

This indicator blinks while the machine is starting up or shutting down.

3. [Power] key

Used to turn the machine on and off.

4. [Disconnect] key

Used to leave a meeting.

5. [Enter] key

Used to activate the menu, setting, or set value selected with the cursor keys.

This key is also used to connect and leave a meeting.

6. Speaker volume keys ([−] [+]) key

Used to adjust the speaker volume.

7. Cursor keys ([▲] [▼] [◀] [▶]) key

Used to select a menu, dialog, or setting.

These keys are also used to switch between screen layouts during a meeting.

8. [Menu] key

Used to display the Menu screen.

9. [Mute] key

Used to temporarily disable audio input on the machine.

10. Mute indicator

Flashes if the [Mute] key is used to disable the microphone.

11. Alarm indicator

Lights when an error occurs on the machine.

Follow the instructions in the on-screen messages to resolve the error.

Place to Install

Installation Requirements

WARNING

- Do not place vases, plant pots, cups, toiletries, medicines, small metal objects, or containers holding water or any other liquids, on or close to this machine. Fire or electric shock could result from spillage or if such objects or substances fall inside this machine.

WARNING

- Do not use flammable sprays or solvents in the vicinity of this machine. Doing so could result in fire or electric shock.

WARNING

- Keep the product and attachments out of the reach of children. If the product is near children, it might fall over and cause an injury.

CAUTION

- Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.

CAUTION

- Do not place heavy objects on the machine. Doing so can cause the machine to topple over, possibly resulting in injury.

CAUTION

- Do not place the machine in an unsafe environment such as on an unstable or tilted surface. If it falls over, an injury might occur.

CAUTION

- Do not place the product or use it in an environment where it might get wet such as from snow, rain, or being near water. Doing so could result in fire or electric shock.

CAUTION

- Do not put your face or hand near the air outlet. Doing so could result in burns or an accident due to hot air coming from the air outlet.

⚠ CAUTION

- Do not use the product on soft material such as paper or cloth that might get sucked into the air inlet. Doing so may cause heat buildup inside the product, resulting in malfunction, burns, or fire.

⚠ CAUTION

- Do not place the power cord and connection cable in a way that might cause someone to trip and fall. The product might fall over and cause an injury.

⚠ CAUTION

- Do not place the product in a location where air flow is poor. Doing so may cause fire due to internal components becoming overheated.

⚠ CAUTION

- Do not place or store the product in a location where direct sunlight or heat generation might occur. The heat may deform or wear out the exterior parts or negatively affect internal parts. Doing so could result in fire.

⚠ CAUTION

- Do not place low heat resistant objects near the air outlet. Hot air may come from the air outlet, resulting in damage to the object or an accident.

⚠ CAUTION

- Do not expose the product to salt air or corrosive gas. Also, do not place the product in a laboratory or other location where a chemical reaction might occur. Doing so may cause the product to malfunction.

⚠ CAUTION

- Do not obstruct the machine's air inlet or outlet. Doing so risks fire caused by overheated internal components.

- Do not use or store this machine in a place that is exposed to soot, cigarette smoke, or any other type of smoke. Doing so may soil the machine, resulting in shorter product life and lower video quality.
- Abrupt changes in temperature may cause drops of water to form inside the machine, resulting in a phenomenon called dew condensation. Continuing to use the machine in this condition may lead to product failure or malfunction. If dew condensation forms, wait until the drops of water evaporate before using the machine.

- Do not use this machine when it is improperly positioned or oriented. Doing so may lead to failure or shorten the product life.
- Route and position the power cord and other cables so that other users do not trip over them. Tripping over the cables may cause the machine to fall, resulting in personal injury.

Preventing the deterioration of sound quality

- Keep objects that may cause the sound quality to deteriorate away from the microphone or speaker.
- Blocking both the microphone and speaker may cause the sound quality to deteriorate.
- Do not place devices that generate noise, such as projectors or computers, near the machine.
- When using the machine in a room where sound echoes, try keeping your voice as low as possible during meetings to avoid distracting echoes.
- Make sure there is sufficient space between this machine and the wall.
- Keep this machine away enough from the other party's device, for example, when the other party's voice can be heard directly instead of through a speaker.
- Do not move the machine during a meeting.
- If you plan to use an external microphone and speaker, see the manual for details about how to use the device.
- When using an external microphone speaker, keep it away from the air outlet of the machine. Placing an external microphone speaker too close to the air outlet can cause the audio quality to deteriorate.

About network environment

- A poor network environment can cause delays in video streaming during meetings.
- When using a wireless network, communication quality may deteriorate or communication may be lost, depending on the environment in which the machine is used. If these problems occur, use a wired network instead. To switch to a wired network, you must first turn the machine off and then turn it back on.
- When using a wireless network, radio or electromagnetic interference or weak reception may cause the following problems to occur during meetings:
 - Delays in video streaming.
 - Video is stopped.
 - Audio of other party cuts out.
 - Synchronization between video and audio is lost.
 - Audio quality deteriorates.
 - Meetings are automatically ended or left.
 - Delays in video streaming occur when sharing computer screen.
 - Your video and the other party's video disappear and only audio is heard.

- Screen image does not display properly when the screen layout is changed.
- The Contact List or contact status do not appear, or it takes longer than expected for each to be displayed.
- The attempt to update the firmware fails, or it takes an excessively long time for the update to finish.
- The machine does not start.
- You cannot connect to other party.

If you experience one of the problems above, take one of the following actions. The action to be taken depends on the wireless network environment you are using:

- If IEEE802.11b and IEEE802.11g are in the same wireless network environment, the IEEE802.11b connection may be used first. The recommended line speed for the machine is 1 Mbps. To use the machine at a stable line speed, we recommend using it in a wireless network environment in which only IEEE802.11g is available.
- Avoid environments that have multiple wireless LAN standards.
- Turn off any wireless networking or radio devices that are not being used.
- If there are multiple devices in the environment that support IEEE802.11n, use IEEE802.11n with a single channel.
- Use the machine in an environment with stable reception, making sure to confirm the distance from the access point and check for any obstructions.
- If the environment has multiple wireless LAN standards, change the access point channel. There should be a difference of at least five between the channel settings for each LAN standard. For example, set one standard to channel 1 and the other to channel 6.
- Keep the machine as far away as possible from highly conductive objects such as metal.
- This wireless product uses the 2.4 GHz band. Make sure there is no industrial, scientific, or medical equipment that uses the same frequency band currently in operation, such as a microwave. Interference can cause communication to become unstable. Before using the machine, make sure that there is no equipment around that may potentially cause interference.
- If you experience radio interference or other wireless networking problems, please call the support desk.

Use this machine in an environment that meets the following conditions:

Specification	Description
Temperature	<ul style="list-style-type: none"> Operating 10 - 32 °C (50 - 89.6 °F) Non-operating 0 - 43 °C (50 - 109.4 °F)
Temperature	<ul style="list-style-type: none"> Operating 15 - 80 % (Non-condensing) Non-operating 10 - 90 % (Non-condensing)
Maximum Altitude	3,000 m (10,000 feet)

Operating Environment for This Machine

The following operating environments are required to use this machine:

Power Source

Specification	Operating environment
Power Source	<ul style="list-style-type: none">  Region A (mainly Europe and Asia) 220 V - 240 V, 50/60 Hz  Region B (mainly North America) 110 V, 50/60 Hz

Network

Specification	Operating environment
Interface	<p>Network with one of the following interfaces that can connect to the Internet</p> <ul style="list-style-type: none"> Wired Network 10BASE-T, 100BASE-TX, 1000BASE-T Wireless Network IEEE802.11g, IEEE802.11b, IEEE802.11n
Line speed	Minimum: 500 Kbps, Recommended: 1 Mbps or higher

Specification	Operating environment
Port	<p>The following port numbers are available for communication:</p> <ul style="list-style-type: none"> When no proxy is used TCP: 443, 5222, 17990, 17992 UDP: 50000 - 65535*¹ When a proxy is used TCP: 443
Frequency Range (Wireless Network)	<ul style="list-style-type: none">  Region A (mainly Europe and Asia) 2412 MHz - 2472 MHz (Ch1 - Ch13)  Region B (mainly North America) 2412 MHz - 2462 MHz (Ch1 - Ch11)
Authentication (Wireless Network)	<ul style="list-style-type: none"> Authentication method Open system authentication, shared key authentication, WPA-PSK, WPA2-PSK Encryption method WEP (128bit/64bit), TKIP, AES

*1 A port in the range of 50000 to 65535 is selected as the port used for communication, according to the environment and conditions.

Note

- This machine only supports the Basic authentication method when a proxy is used.
- When using a proxy to connect to a meeting, it may take longer for the meeting.
- For details about network settings, see "Changing Network Configuration", Features Reference.

Video Output Device

Specification	Operating environment
Supported device	Monitor or projector
Resolution	1024 × 768 pixels (XGA), 1280 × 800 pixels (WXGA)
Interfaces	Analog RGB, DVI-D

Note

- If the device being used supports resolutions of both 1024 × 768 pixels (XGA) and 1280 × 800 pixels (WXGA), the screen is displayed at a resolution of 1280 × 800 pixels (WXGA).

- Some projectors or monitors may not be able to display images from this machine correctly.
- Video output devices that do not meet these operating environment conditions may not be able to be display images from this machine correctly.

Connecting the Power Cord Set

WARNING

- Do not use any power sources other than those that match the specifications shown. Doing so could result in fire or electric shock.

WARNING

- Do not damage, break, or modify the power cord or AC adapter. Also, do not place heavy objects on the power cord, or pull the cord or bend it severely. Doing so could result in fire or electric shock.

WARNING

- The supplied power cord is for use with this machine only. Do not use it with other appliances. Doing so could result in fire or electric shock.

WARNING

- It is dangerous to handle the power cord plug with wet hands. Doing so could result in electric shock.

WARNING

- Do not use the AC adapter or connection cable if it is deformed, cracked, or damaged. Doing so could result in fire or electric shock. If the AC adapter or connection cable is deformed, cracked, or damaged, contact your service representative to request a replacement cable.

WARNING

- When using an extension cord or power strip, only connect equipment whose total power consumption is within the power rating for the extension cord or power strip. If the power rating is exceeded, it may cause heat buildup and result in fire.

CAUTION

- Push the power plug all the way into the power outlet. Do not use a power outlet with a loose connection. Doing so may result in heat buildup. Plug the power cord and AC adapter in the correct direction into the base. If they are not plugged in correctly, it could result in smoke, fire, or electric shock.

⚠ CAUTION

- If this machine is not going to be used for several days or longer at a time, disconnect its power cord from the wall outlet.

⚠ CAUTION

- When disconnecting the power cord from the wall outlet, always pull the plug, not the cord. Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.

⚠ CAUTION

- Be sure to disconnect the plug from the wall outlet and clean the prongs and the area around the prongs at least once a year. Allowing dust to build up on the plug constitutes a fire hazard.

⚠ CAUTION

- When performing maintenance on the machine, always disconnect the power cord from the wall outlet.

⚠ CAUTION

- Do not disassemble or modify the AC adapter. Doing so may result in burns or electric shock. Contact your service representative if the AC adapter needs repaired.

⚠ CAUTION

- Do not wrap the power cord or connection cable around the AC adapter. If the power cord or connection cable is damaged or the inner wire is exposed, it may result in fire, electric shock, or burns.

⚠ CAUTION

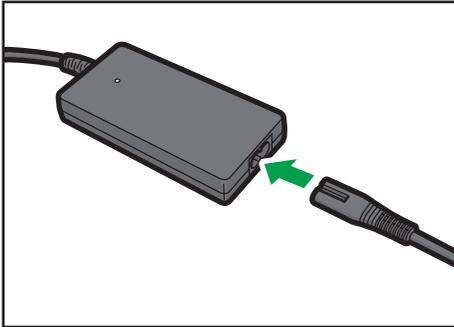
- It is recommended that you do not touch the AC adapter when using the product. Possible heat buildup in the AC adapter may cause burns.

★ Important

- Only use the supplied AC adapter indoors.
- Do not remove the power cord when the power indicator on this machine is lit or blinking.

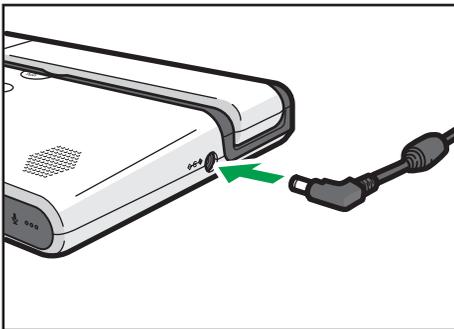
1

1. Connect the power cord to the AC adapter.



CJB012

2. Connect the power connector to the power connector inlet on this machine.



CJB005

3. Connect the power plug to the AC outlet.

Connecting a Video Output Device

Use the appropriate interface to connect the video output device.

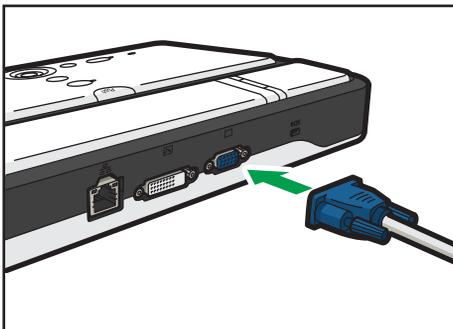
For details about requirements for video output device, see p.21 "Operating Environment for This Machine".

★ Important

- Make sure the machine is off before connecting to a video output device.
- This machine cannot accept two video output devices connected at the same time via the analog RGB and DVI-D connectors. You can only use one connector at a time. Select the appropriate connector for the video output device you want to use.

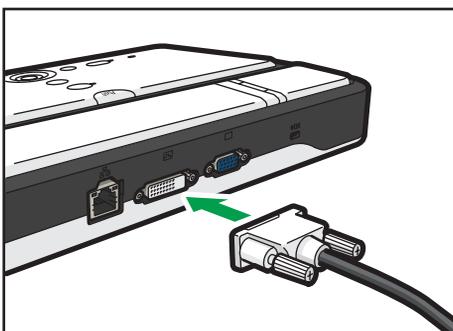
1. Connect the analog RGB or DVI-D connector to the machine.

- Analog RGB connector



CJB009

- DVI-D connector



CJB010

2. Connect the analog RGB or DVI-D connector to the video output device.

↓ Note

- For details about how to connect the cable to the video output device, see the manuals provided with the video output device.

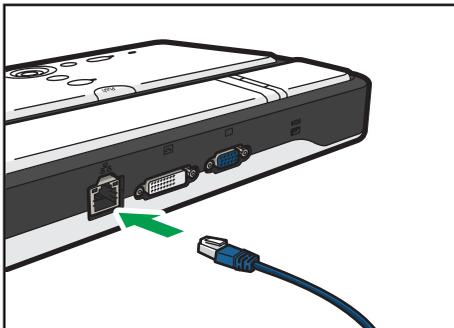
Connecting an Ethernet Cable

To use a wired network, connect the machine to a network connection device such as a hub or modem.

★ Important

- Make sure the machine is off before connecting an Ethernet cable.
- Make sure the Ethernet cable is connected to a hub. Do not connect to a network switch.
- Use the following Ethernet cables.
 - When using 100BASE-TX/10BASE-T:
Unshielded Twisted Pair Cable (UTP) or Shielded Twisted Pair Cable (STP) and Category type 5 or more
 - When using 1000BASE-T:
Unshielded Twisted Pair Cable (UTP) or Shielded Twisted Pair Cable (STP) and Category type 5e or more

1. Connect the Ethernet cable to the Ethernet port on this machine.



CJB100

2. Connect the other end of the Ethernet cable to the network connection device.

↓ Note

- An Ethernet cable connection is not required for a wireless network.

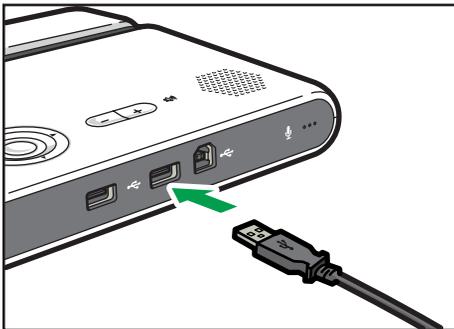
Connecting a External Microphone Speaker

Use the USB interface to connect the external microphone speaker.

★ Important

- You cannot connect and use two different external microphone speakers at the same time.
- Do not attempt to connect or disconnect the external microphone speaker while connecting or receiving a call, or while in the middle of a meeting. Doing so will cause problems with the audio.

1. Connect the A connector end of the USB cable to the USB port (type A) on this machine.



CJB040

↓ Note

- You can use the left and right USB ports (A type) on this machine.
- You cannot adjust the volume or mute a connected microphone speaker from the machine. You must adjust the volume settings on the actual device. For details about how to use the external microphone speaker, see the manuals provided with the microphone speaker.

2. Operating the Machine

Raising the Camera Unit

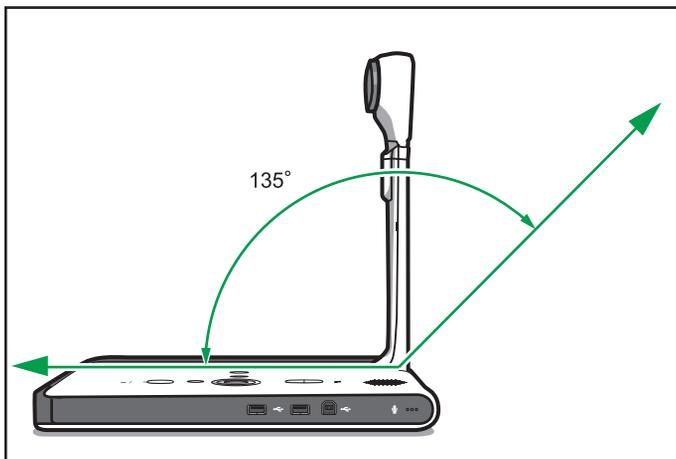
★ Important

- Do not attempt to raise or move this machine by the camera unit.
- Do not attempt to move the arm beyond its range of movement.

Range of movement

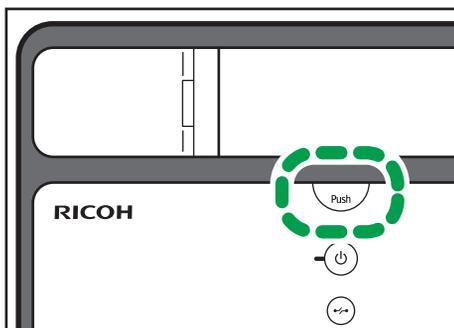
The camera arm can move within the following range:

0°-135° (when the camera unit is folded all the way down.)



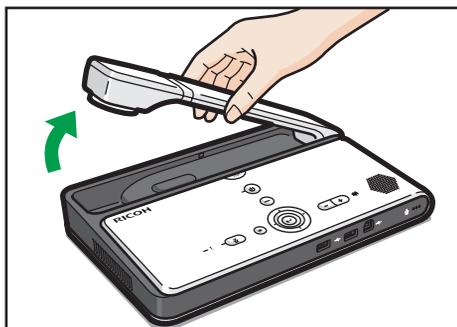
CJB043

1. Press the [Push] key.



CMJ012

2. Pull up on the arm of the camera to raise the camera unit.



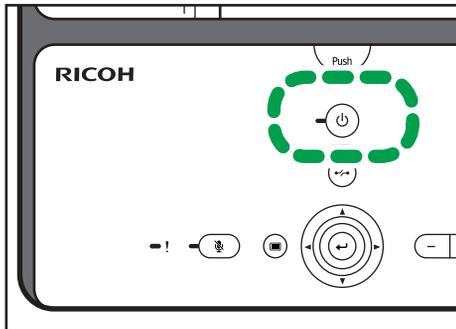
CMJ006

Note

- This machine is factory-shipped with a protective sheet covering the camera lens. Remove the protective sheet from the lens before using the camera.

Turning On the Power

1. Press the [Power] key/⏻.



CMJ011

↓ Note

- Depending on the network environment you are using, it may take the machine one minute or more to connect to the network.
- If the message "Connecting to the network..." remains displayed throughout the startup process, there is a problem preventing the machine from connecting to the network. For details about how to display the Configuration Menu screen in this state, see "About Screen", Features Reference. For details about what to do if the machine cannot connect to the network, see "When the Machine Cannot Connect to the Network", Features Reference.

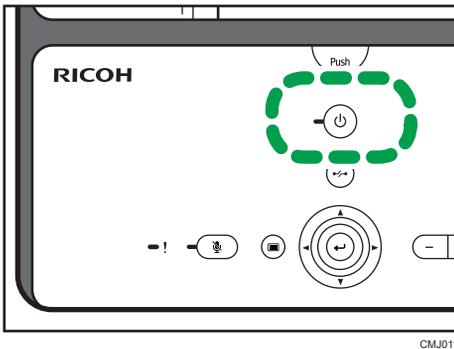
Turning on the Machine for the First Time

When you turn on the machine for the first time, a screen used to specify the language, date, and time will appear. Select the language, date, and time for the environment in which you plan to use the machine.

Note

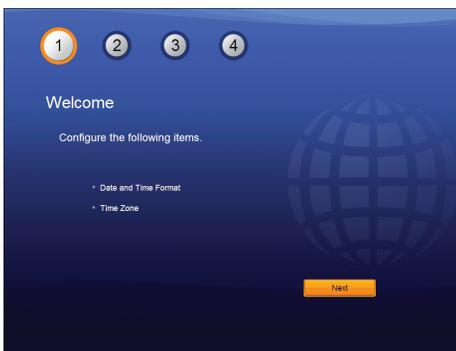
- You can also specify the language, date, and time from Configuration Menu. For details about how to specify these items from Configuration Menu, see "Changing the Language and Time Zone", Features Reference.

1. Press the [Power] key/⏻.



After the startup screen appears, the language selection dialog box appears.

- Press the cursor keys ([▼] [▲] [◀] [▶] keys) to select the language, and then press the [Enter] key/↵.
- Press the [Enter] key/↵.



- Press the [Enter] key/↵ to display the list.
- Press the [▼] or [▲] key to select the language, and then press the [Enter] key/↵.
Select the language to determine the data and time format.
- Press the [▼] or [▲] key to select the format, and then press the [Enter] key/↵.

7. Press the [▼] key to select [Next], and then press the [Enter] key/↵.
8. Press the [Enter] key/↵ to display the list.
9. Press the cursor keys ([▼] [▲] [◀] [▶] keys) to select the region, and then press the [Enter] key/↵.
10. Press the [▼] or [▲] key to select the time zone, and then press the [Enter] key/↵.
11. Press the [Enter] key/↵.
12. Confirm that the settings are correct, and then press the [Enter] key/↵.

Adjusting the Camera

★ Important

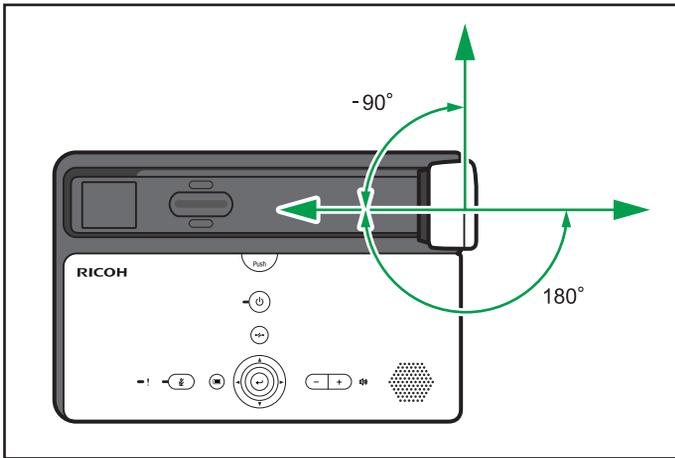
- Do not attempt to raise or move this machine by the camera unit.
- Do not attempt to move the camera beyond its range of movement.

2

Ranges of movement

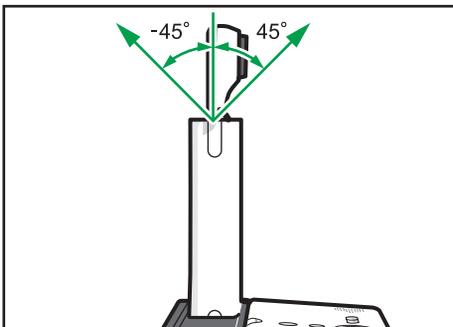
The camera can move within the following ranges:

- Horizontal direction
-90°-180° (when the camera unit is facing 0 degrees after it is raised)



CMJ025

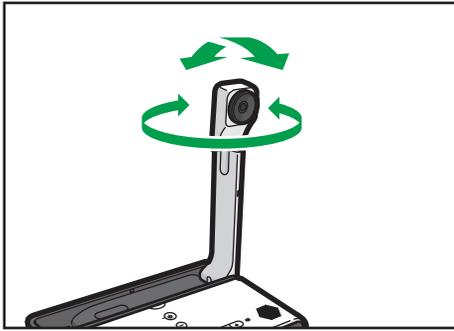
- Vertical direction
-45°-45° (when the vertical position of the camera unit is 0 degrees)



CMJ024

1. Adjust the orientation by carefully moving and rotating the camera vertically and horizontally while checking the screen display.

Set the camera so that the desired object is displayed on the screen.



CMJ013

Note

- Fingerprints or dust on the lens cover can cause image quality to deteriorate. If the lens cover is dirty, lightly wipe it with a soft cloth.

Using the Camera To Share Information

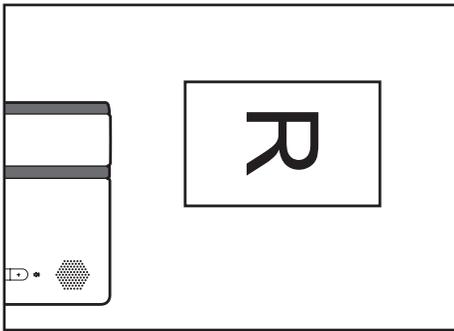
When using the camera to take a picture of a form or document directly, the camera automatically focuses on the object and displays the image visually.

This feature is useful at meetings when sharing printed forms or other documents for which no electronic data exists, such as hand-written memos.

2

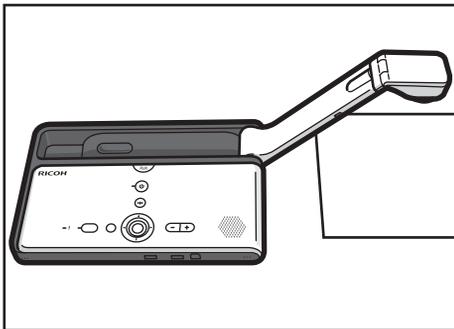
1. Set the object you want to share to the right of the machine.

Orientation of the object:



CMJ002

2. Set the camera unit as shown in the figure below.



CMJ007

To display a different part of the object, move the object.

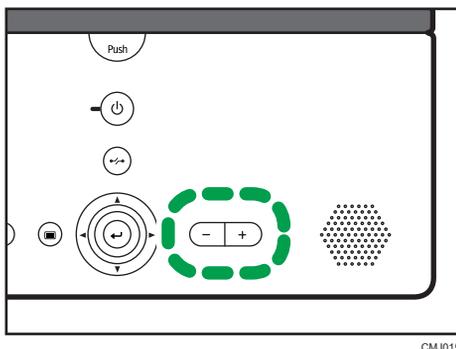
Adjusting the Volume

You can adjust the audio volume and temporarily mute the microphone.

Adjusting the Speaker Volume

2

1. Use the [-] and [+] keys to adjust the volume.



CMJ015

To lower the volume, press the [-] key.

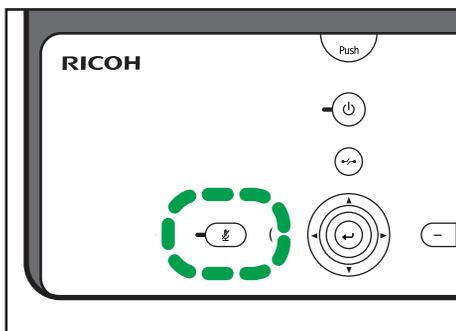
To raise the volume, press the [+] key.

Note

- If an external microphone speaker are connected, you cannot adjust the volume from the machine. For details about how to adjust the volume of your external microphone speaker, see the respective manual for device.

Muting the Microphone

1. Press the [Mute] key.



CMJ016

The Mute indicator starts blinking to indicate the microphone has been muted.

2. To cancel mute, press the [Mute] key again.

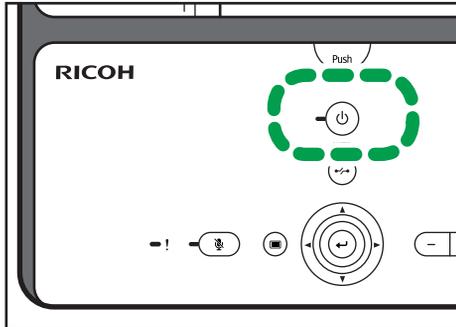
The Mute indicator turns off to indicate that mute has been cancelled.

↓ Note

- If an external microphone speaker are connected, you cannot mute them from the machine. For details about how to mute your external microphone speaker, see the respective manual for device.

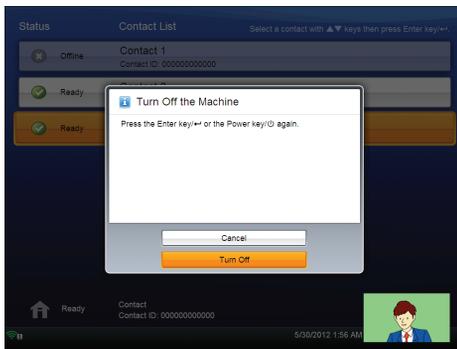
Turning Off the Power

1. Press the [Power] key/⏻.



CMJ011

2. Press the [▼] or [▲] key to select [Turn Off], and then press the [Enter] key/↵.



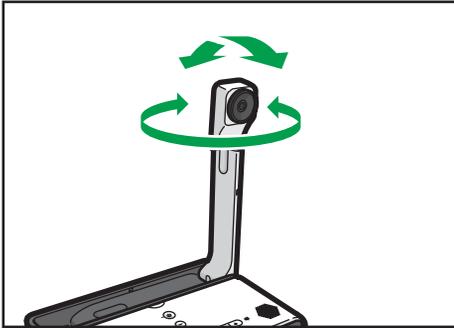
Note

- You can also turn off the machine by pressing the [Power] key/⏻ twice in Step 1.

Putting the Camera Back Into Place

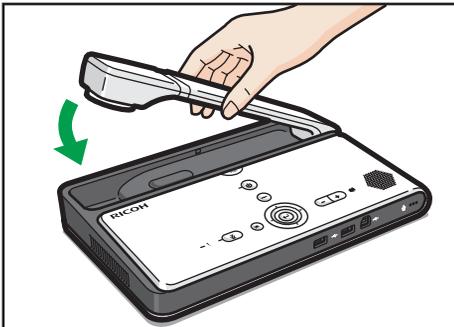
★ Important

- Do not attempt to raise or move this machine by the camera unit.
 - Do not attempt to move the camera beyond its range of movement.
1. Carefully rotate the camera and put it back into place.



CMJ013

2. Push the arm down until it clicks.



CMJ018

3. Packing Up the Machine

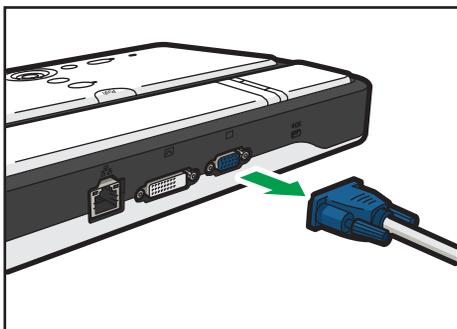
Removing the Power Cord Set and Video Output Device and Packing Up the Machine

★ Important

- Before packing up the machine, make sure the machine is off by checking whether the Power indicator is lit.

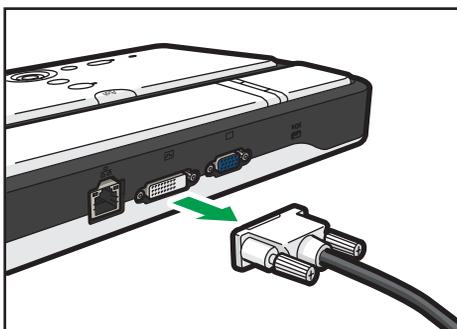
1. Remove the analog RGB or DVI-D connector from the machine.

- Analog RGB connector



CJB028

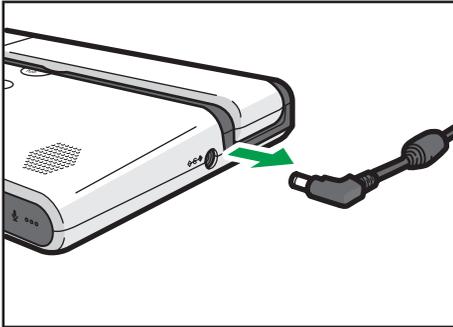
- DVI-D connector



CJB029

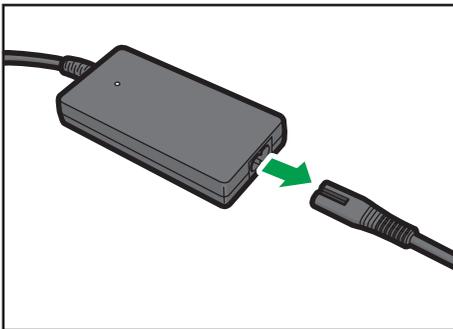
2. Remove the analog RGB or DVI-D connector from the video output device.

3. Remove the power connector from the power connector inlet on the machine.



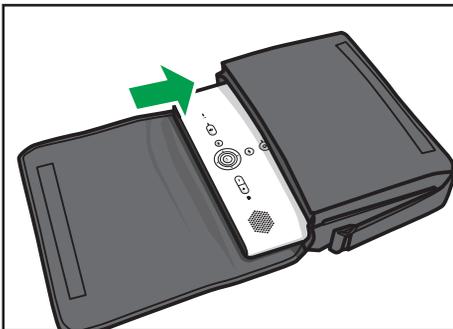
CJB044

4. Remove the AC adapter and power cord.



CJB030

5. Pack the machine and power cord set in the supplied bag.



CJB045

Note

- For details about how to use your video output device, see the manual that comes with the device.
- If the USB cable for the PC Screen Share is connected, remove the USB cable. Pack the USB cable in the supplied bag.
- If this machine is not used for an extended period of time, store it together with the other accessories (including the power cord set, and USB cable) in the provided bag. Do not store any other items in the bag.

- Be sure to disconnect all cables and the power cord set before placing this machine in the bag.

4. Troubleshooting

This chapter describes common problems of the machine.

For details about network problems and messages, see "Troubleshooting", Features Reference.

When You Have Problems Operating the Machine

★ Important

- If the problem continues to persist even you after follow instructions given to resolve the problem, contact the support desk.

Problems	Causes	Solutions
The machine does not turn on.	The power cord set is not connected correctly.	<ul style="list-style-type: none">• Check that the power cord is connected to the AC adapter correctly.• Check that the power connector is connected to the machine.• Check that the power plug is connected to the AC outlet correctly. For details about how to connect the power cord, see p.24 "Connecting the Power Cord Set".
The startup screen is displayed.	The machine is starting.	Wait for a while. If the machine does not get ready in two minutes, contact the support desk.
No video is displayed.	The video output cable is not connected correctly.	Check that the video output device is connected to this machine correctly.
No video is displayed.	The video output device being used does not turn on.	Check that the video output device has been turned on.
No video is displayed.	The video output device being used is not configured correctly.	Check that the video output device being used is configured correctly.

Problems	Causes	Solutions
<p>Cannot be connected to the contact whose status is "Ready".</p>	<p>An error occurred on the other party's machine. If the error message is displayed, the machine cannot be receive the call.</p>	<p>Ask the party to solve the problem.</p>
<p>Cannot connect to the contact whose status is "Ready" or "Meeting".</p>	<p>The status of the contact is changed suddenly, if the machine of the other party is disconnected from the network, or the machine is turned off. In this case, the status might be displayed continuously "Ready" or "Meeting" even the actual status has changed.</p> <p>It takes up to two minutes to update the status of the contact.</p>	<p>Wait for two minutes, and then check the status of the contact and try to connect again.</p>
<p>Cannot connect to the contact whose status is "Ready" or "Meeting" after disconnecting from the contact.</p>	<p>The status of the contact is changed suddenly, if the machine of the other party is disconnected from the network, or the machine is turned off. In this case, the status might be displayed continuously "Ready" or "Meeting" even the actual status has changed.</p> <p>It takes up to two minutes to update the status of the contact.</p>	<p>Wait for two minutes, and then check the status of the contact and try to connect again.</p>
<p>The screen layout cannot be changed during a meeting.</p>	<p>A dialog box indicating that you are leaving the meeting or turning off the machine appears.</p>	<p>Check the dialog box that appears. Use the cursor keys to select the appropriate key, and then press the [Enter] key/↵ to close the dialog box.</p>

Problems	Causes	Solutions
Video or Audio of other party cuts out.	The wireless network problem is occurred, such as radio/electromagnetic interference or weak reception.	Contact your network administrator.
Deterioration of sound quality	Howling might be occurred if placing objects near the microphone or speaker.	Keep objects away from the microphone or speaker.
Deterioration of sound quality	Howling might be occurred if blocking both the microphone and speaker.	Do not block both the microphone and speaker.
Deterioration of sound quality	Howling might be occurred if placing objects or hands in front of the microphone.	Keep objects or hands away from the microphone.
Deterioration of sound quality	Howling might be occurred if the machine is located near the devices that generate noise.	Do not place devices that generate noise, such as projectors or computers, near the machine.
Deterioration of sound quality	Howling might be occurred if the machine is located just next to the wall.	Make sure there is sufficient space between this machine and the wall.
Deterioration of sound quality	Howling might be occurred if using the machine in a room where sound echoes.	Try keeping your voice as low as possible during meetings to avoid distracting echoes.
Deterioration of sound quality	Howling might be occurred if using the machine close to the other party's device for example, when the other party's voice can be heard directly instead of through a speaker.	Keep this machine away enough from the other party's device.

Problems	Causes	Solutions
Deterioration of sound quality	Howling might be occurred if the audio volume is set too loud.	<p>Adjust the audio volume on the machine. For details about how to adjust the volume, see p.36 "Adjusting the Camera".</p> <p>If you are using an external microphone speaker, adjust the volume of the external microphone speaker. For details about how to adjust the volume, see the respective manual for the device.</p>
Deterioration of sound quality	Howling might be occurred if your voice is too loud.	<ul style="list-style-type: none"> • Keep away from the microphone. • Lower your voice.
Deterioration of sound quality	Howling might be occurred if the machine is moved during a meeting.	Before moving the machine, mute the microphone of your machine. After you finish moving the machine, cancel mute.
Deterioration of sound quality	Howling might be occurred if the external microphone speaker is placed too close to the air outlet of the machine.	When using an external microphone speaker, keep it away from the air outlet of the machine.
The sound is distorted.	If the audio from the other party is too loud or the speaker volume of the machine is raised excessively, the audio might become distorted.	<ul style="list-style-type: none"> • Lower the speaker volume of the machine. For details about how to lower the volume, see p.36 "Adjusting the Camera". • If you are using an external microphone speaker, lower the volume of the speaker. For details about how to lower the volume, see the respective manual for the device. • Ask the other party to back away from the microphone when they speak.

Problems	Causes	Solutions
The sound cuts in and out.	If you and the other party speak at the same time, the sound may cut in and out.	Wait until the other party is finished before speaking. If the other party speaks for an extended length of time and the audio continually cuts out, mute the microphone of your machine.
No sound can be heard from the other party.	The audio volume is set to the lowest level.	<ul style="list-style-type: none"> Adjust the audio volume on the machine. For details about how to adjust the volume, see p.39 "Adjusting the Volume". If you are using an external microphone speaker, adjust the volume of the external microphone speaker. For details about how to adjust the volume, see the respective manual for the device.
No sound can be heard from the other party.	The other party's microphone is muted.	Ask the party to cancel mute.
No audio is input.	The microphone is muted.	Cancel mute. For details about how to cancel mute, see p.39 "Adjusting the Volume".
The speaker volume cannot be adjusted.	An external microphone speaker is connected. If an external microphone speaker is connected, the speaker on the machine is disabled.	<ul style="list-style-type: none"> Adjust the volume of the external microphone speaker. For details about how to adjust the volume, see the respective manual for the device. Remove the external microphone speaker, and then adjust the volume of the speaker on the machine.
The microphone cannot be muted.	An external microphone speaker is connected. The external microphone speaker cannot be muted from the machine.	Mute the external microphone speaker. For details about how to mute the external microphone speaker, see the respective manual for the device.

Problems	Causes	Solutions
Firmware Update screen is displayed when turn on the machine.	If a required firmware update is detected. You cannot start a meeting or accept a registration request until the update is complete.	Check the update information, and then start the update immediately.

5. Appendix

Specifications

Item	Specification
Interface	<ul style="list-style-type: none">• Ethernet: 10BASE-T, 100BASE-TX, 1000BASE-T• IEEE802.11g, IEEE802.11b, IEEE802.11n• Encryption method: WEP128bit/64bit, WPA-PSK(TKIP/AES), WPA2-PSK(AES)• USB2.0 (type A) × 2• USB2.0 (type B)• DVI-D• Analog RGB (VGA)
Proxy authentication	Basic authentication
Port	The following port numbers are available for communication: <ul style="list-style-type: none">• When no proxy is used TCP: 443, 5222, 17990, 17992 UDP: 50000 - 65535*¹• When a proxy is used TCP: 443
Network bandwidth	Minimum 2Mbps
Video resolution	<ul style="list-style-type: none">• Maximum transmission resolution 640 × 360 pixels• Maximum reception resolution 1280 × 720 pixels
Frame rate	Up to 30 fps
Video mode	1024×768 pixels (XGA), 1280×800 pixels (WXGA)
Video coding	H.264 Annex G (SVC)
Voice coding	SPEEX wideband/ITU-T G.711/ITU-T G.722
Data transfer	RTP (RFC1889/RFC3550) and RTCP (RFC1890/RFC3551)

Item	Specification
Focus	Pan focus
Automatic camera adjustment	<ul style="list-style-type: none"> • Automatic gain control • Automatic white balance control
Microphone	<ul style="list-style-type: none"> • Automatic echo canceller • Automatic noise reduction • Automatic gain control • Muting
Noise	40 dB or less
Power Source	<ul style="list-style-type: none"> •  Region A (mainly Europe and Asia) 220 V-240 V, 50/60 Hz •  Region B (mainly North America) 110 V, 50/60 Hz
Power consumption	50 W or less
External dimensions (W × D × H)	<ul style="list-style-type: none"> • Main unit (Camera unit folded) 285.0 × 189.0 × 40.0 mm (11.2 × 7.4 × 1.6 inches) • AC adapter (excludes projection) 119.2 × 53.3 × 17.6 mm (4.7 × 2.1 × 0.7 inches)
Weight	<ul style="list-style-type: none"> • Main unit Approx. 1.6 kg (3.5 lb.) • AC adapter Approx. 250 g (0.6 lb.)

*1 A port in the range of 50000 to 65535 is selected as the port used for communication, according to the environment and conditions.

Precautions for Use

This section describes precautions for using the machine. It also provides additional information about the machine's specifications.

Where to use this machine

- The location in which the machine is used may affect the audio quality. Read the information provided on p.17 "Installation Requirements" and select an appropriate location.
- This machine may not work properly depending on the network environment you are using. For details, see p.17 "Installation Requirements".

Screen

- Do not remove the connected output cable to change the video output device after you turn on the machine. Doing so can distort the screen image.
- Depending on the monitor used, the screen image may not be centered properly. If the monitor is equipped with screen adjustment features, use these features to adjust the screen image.
- If the machine is used in a poor network environment or the connection speed is slow, video from a meeting or PC Screen Share may lag or even stop.

Meetings

- Because the automatic learning function of the echo canceller is active for approximately five to ten seconds after a meeting starts, you may hear a loud noise or howling for a short time. Although this noise greatly diminishes the audio quality and makes it difficult to hear the other contacts, there is nothing wrong with the machine. The audio quality will gradually improve as you continue the meeting and speak with the other parties.
- Depending on the status of the network band, video from you or the other contacts might not be displayed. As a result, you will only be able to hear the voices of the other contacts participating in the meeting.

PC Screen Share

- Sometimes PC Screen Share may not start automatically when you connect the machine to the computer via a USB cable. If this is the case, the auto-play function on the computer might be disabled. Check whether the function has been disabled. If it has been disabled, enable it. The procedure for enabling and disabling the auto-play function differs depending on the operating system version or edition you are using. For details, see the Windows Help.

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Windows® Internet Explorer® 8

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Microsoft® Windows® XP Professional Edition

Microsoft® Windows® XP Home Edition

Microsoft® Windows® XP Media Center Edition

Microsoft® Windows® XP Tablet PC Edition

- The product names of Windows Vista are as follows:

Microsoft® Windows Vista® Ultimate

Microsoft® Windows Vista® Business

Microsoft® Windows Vista® Home Premium

Microsoft® Windows Vista® Home Basic

Microsoft® Windows Vista® Enterprise

- The product names of Windows 7 are as follows:

Microsoft® Windows® 7 Home Premium

Microsoft® Windows® 7 Professional

Microsoft® Windows® 7 Ultimate

Microsoft® Windows® 7 Enterprise

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INDEX

A

Air inlet.....	14
Air outlet.....	13
Alert indicator.....	15
Analog RGB connector.....	14
Anti-theft lock hole.....	14

C

Camera unit.....	13, 31
Cleaning.....	7
Control panel.....	13, 15
Copyright notice.....	8
Cursor keys.....	15

D

Disconnect key.....	15
DVI-D connector.....	14

E

Enter key.....	15
Ethernet cable.....	28
Ethernet port.....	14
External microphone speaker.....	29

G

Guide to components.....	13
--------------------------	----

H

Handling this product.....	7
How to read this manual.....	5

I

Installation Requirements.....	17
Introduction.....	4

M

Manuals for this machine.....	3
Menu key.....	15
Microphone.....	13
Model-Specific Information.....	6
Mute indicator.....	15
Mute key.....	15

P

Power connector.....	14
----------------------	----

Power cord set.....	24
Power indicator.....	15
Power key.....	15
Precautions for use.....	7
Push key.....	15

S

Speaker.....	13
Speaker volume keys.....	15
Specifications.....	53
Symbols.....	5

T

Trademarks.....	56
-----------------	----

U

USB port (type A).....	13
USB port (type B).....	13

V

Video output device.....	27
--------------------------	----

W

Wireless networking.....	8
--------------------------	---

MEMO

MEMO

MEMO

