



Unified Communication System P3500M

Operating Instructions

TABLE OF CONTENTS

1. Read This First

How to Read This Manual.....	3
Symbols.....	3
Disclaimer.....	3
Notes.....	3
Manuals for This Machine.....	5
Precautions for Usage.....	6
About the card inside the machine.....	6
Wireless Networking.....	6
Copyright Notice.....	6
Checking the Package Contents.....	7

2. Using This Machine

Guide to Components.....	11
Front and Top view.....	11
Rear and Bottom view.....	12
Control Panel.....	13
Operating Environment.....	15
Installation Requirements.....	15
Operating Environment for the Machine.....	18
Preparing to Use the Machine.....	22
Connecting the Power Cord Set.....	22
Connecting a Video Output Device.....	24
Connecting an Analog Audio Input Device.....	25
Connecting an Analog Audio Output Device.....	25
Connecting a Digital Audio Input/Output Device.....	26
Connecting a Video Input Device.....	27
Connecting an Ethernet Cable.....	28
Operating the Machine.....	29
Turning On the Power.....	29
Turning Off the Power.....	29
Adjusting the Speaker Volume.....	30
Muting the Microphone.....	30
Operating the Remote Control.....	32

Effective Range of the Remote Control.....	32
Loading Batteries into the Remote Control.....	33
Operating the Camera.....	35
Raising the Camera Unit.....	35
Adjusting the Camera.....	36
Zooming.....	37
Turning Off the Camera.....	38
Putting the Camera Back Into Place.....	39
Maintenance.....	40
Packing Up the Machine.....	40
Cleaning.....	41
Handling This Product.....	41
Specifications.....	43

3. Troubleshooting

When You Have Problems Operating the Machine.....	45
The problems related to the Machine.....	45
The problems related to the Picture.....	46
The problems related to the Sound.....	47

4. Appendix

Updating the System.....	51
Precautions for Use.....	52
Trademarks.....	53

1. Read This First

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.

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.

Disclaimer

To the maximum extent permitted by applicable laws, in no event will the manufacturer be liable for any damages whatsoever arising out of failures of this machine, losses of the registered data, or the use or non-use of this product and operation manuals provided with it.

Make sure that you always copy or have backups of the data registered in this machine. Documents or data might be erased due to your operational errors or malfunctions of the machine.

Notes

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

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.

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

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.

Important

- Media differ according to manual.
- A Web browser must be installed in order to view the html manuals.

Read This First

Before using the machine, be sure to read this manual entitled Safety Information. It also describes each regulation.

Setup Guide

Explains how to start a meeting.

It also describes the various functions of the machine.

Operating Instructions

Explains how to prepare the machine for use, how to operate the machine.

In addition, this manual explains how to troubleshoot problems, and describes the different specifications of the machine.

Connecting to the RICOH UCS Advanced Service

Explains how to use the Virtual Meeting Room (VMR) functionality of the RICOH Unified Communication System Advanced (RICOH UCS Advanced) service.

Precautions for Usage

1

About the card inside the machine

- Do not remove or insert the card. If you remove or insert the card, the machine will not be able to start.
- When the power indicator on this machine is lit or blinking, do not remove the card. Doing so may result in damage or a malfunction.
- Do not insert the card into the other devices. Doing so may result in damage or a malfunction.

Wireless Networking

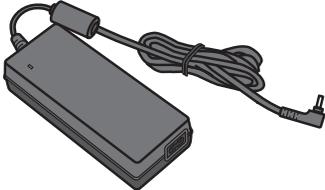
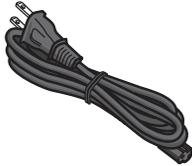
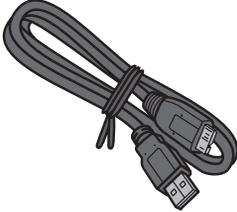
- This product features a certified construction. Disassembling or modifying this product without permission may be punishable by law.
- Before using a wireless LAN, make sure there is nobody with a pacemaker nearby. This product may cause pacemakers to malfunction due to electromagnetic interference.
- Before using a wireless LAN, make sure there is no medical equipment nearby. This product may cause medical equipment to malfunction due to electromagnetic interference.
- Before using a wireless LAN, make sure there are no limitations or restrictions in the place you will be using it. There may be restricted use in places such as medical facilities due to electromagnetic interference.
- Do not use a wireless LAN if there is electromagnetic interference from other equipment. Doing so may cause an accident due to the other equipment malfunctioning from the electromagnetic interference.

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.

Checking the Package Contents

The product package contains the following items:

Package Contents	
Unified Communication System P3500M (this machine)	 DEF019
AC adapter	 DEF020
Power cord	 DEF021
USB cable (For connecting to the computer / Macintosh)	 DEF018

Package Contents

Remote Control



DEF037

Bag



DEF023

Power plug

AAA battery LR03

Read This First

Setup Guide

Connecting to the RICOH UCS Advanced Service

Other documents

End User License Agreement

Warranty card (for users in USA only)

Note

- Use the USB cable to share your computer screen.
- Be sure to use the power cord set and USB cable that come with this machine.
- 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.

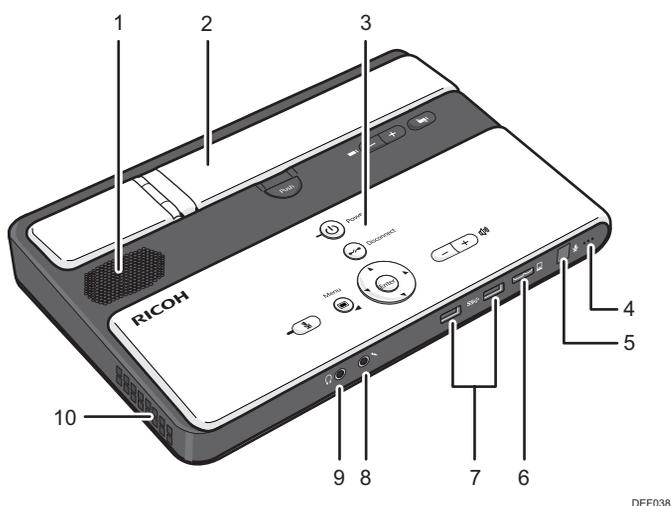
2. Using This Machine

This section describes the operating environment requirements for this machine. It also explains how to prepare and operate the machine. In addition, this section explains the precautions that must be noted when you store this machine, and provides a description of the machine's specifications.

Guide to Components

2

Front and Top view



DEF038

1. Speaker

Outputs audio from other parties.

2. Camera unit

Captures live video that is transmitted to other parties.

The camera unit consists of a camera and an arm.

3. Control Panel

Provides a set of keys used to operate the machine.

For details about the control panel, see page 13 "Control Panel".

4. Microphone

Inputs audio from the machine.

5. Remote control light receiver

Receives infrared rays from the remote control.

6. USB port (Micro-B type)

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

7. USB ports (type A)

Used to attach an external microphone speaker to the machine.

8. Audio input

Used to connect the machine to the analog audio input device, such as a microphone or headset.

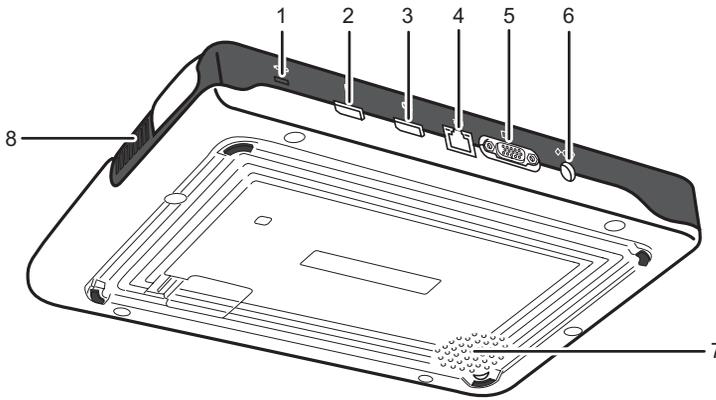
9. Audio output

Used to connect the machine to the analog audio output device, such as a speaker or headset.

10. Air outlet

Releases heat from inside of the machine.

Rear and Bottom view



DEF039

1. Anti-theft lock hole

Hole for connecting the anti-theft chain.

2. HDMI terminal (for video input)

Used to connect a video input device, such as an external camera, to the machine through the HDMI terminal.

3. HDMI terminal (for video output)

Used to connect a video output device, such as a projector or monitor, to the machine through the HDMI terminal.

4. 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.

5. Analog RGB (VGA) connector

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

6. Power connector

Connector for connecting the power cord.

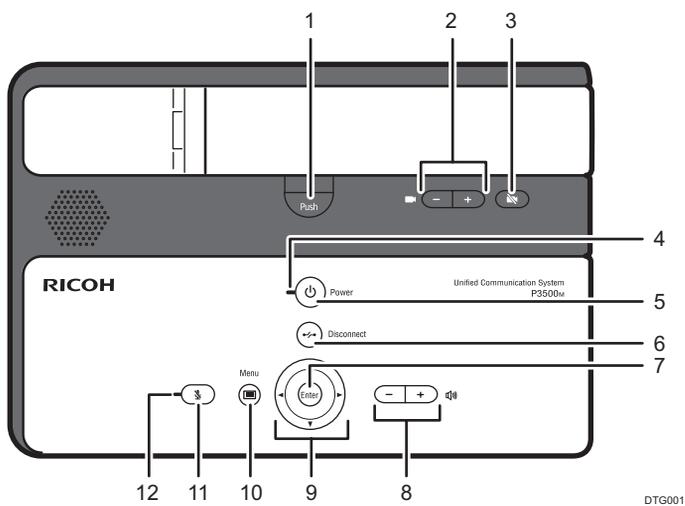
7. Air inlet

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

8. Air inlet

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

Control Panel



DTG001

1. [Push] key

Used to raise the camera unit.

2. Zoom keys ([Zoom+] [Zoom-] key)

Used to adjust the zoom of the machine's camera.

3. Camera OFF key

Used to turn off the display of the machine's camera.

4. Power indicator

Lights when the machine turns on.

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

5. [Power] key / 

Used to turn the machine on and off.

6. [Disconnect] key / 

Used to leave a meeting.

7. [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.

8. Speaker volume keys ([−] [+] key)

Used to adjust the speaker volume.

9. Cursor keys ([▲] [▼] [◀] [▶] key)

Used to select a menu, dialog, or setting.

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

10. [Menu] key /  key

Used to display the Settings screen.

11. [Mute] key

Used to temporarily disable audio input on the machine.

12. Mute indicator

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

Operating Environment

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.
- Do not use flammable sprays or solvents in the vicinity of this machine. Also, avoid placing these items in the vicinity of this machine. Doing so could result in fire or electric shock.
- 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.
- Do not place heavy objects on the machine. Doing so can cause the machine to topple over, possibly resulting in injury.
- 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.
- 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.
- Do not place the cord of the AC adapter and connection cable in a way that might cause someone to trip and fall. The product might fall over and cause an injury.
- 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.
- 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.

- 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.

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)
Humidity	<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)

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 is easily reflected, avoid speaking loudly to minimize 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.

- Do not connect or disconnect an audio input or output device while making or receiving a call, or while holding a meeting.
- When using a digital audio input/output device, keep it away from the air outlet of the machine. Placing a digital audio input/output device too close to the air outlet can cause the audio quality to deteriorate.
- If you plan to use an audio input/output device, see the manual for details about how to use the device.

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 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.

Solutions

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 IEEE802.11n, IEEE802.11g, and IEEE802.11b are available in a wireless network environment, IEEE802.11b is sometimes preferred for network connection. 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 IEEE802.11n/g is available. We also recommend using a IEEE802.11a wireless network.

- 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.

Operating Environment for the Machine

Power Source

Specification	Operating environment
Power Source	<ul style="list-style-type: none"> • For mainly Europe 220 V - 240 V, 50 Hz • For mainly Asia 110 V, 220 V - 240 V, 50/60 Hz • For mainly North America 120 V, 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 IEEE802.11n/a/g/b
Communication frequency	2.4 GHz band, 5 GHz band
Frequency Range (Wireless Network)	<ul style="list-style-type: none"> 2.4 GHz band <ul style="list-style-type: none"> For mainly Europe and Asia 2412 MHz - 2472 MHz (Ch1 ~ Ch13) For mainly North America 2412 MHz - 2462 MHz (Ch1 ~ Ch11) 5 GHz band 5.18GHz~5.24GHz (36, 40, 44, 48ch) 5.26GHz~5.32GHz (52, 56, 60, 64ch) 5.5GHz~5.7GHz (100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140ch)
Authentication (Wireless Network)	<ul style="list-style-type: none"> Authentication method Open system authentication, shared key authentication, WPA-PSK, WPA2-PSK, WPA-EAP* 1, WPA2-EAP* 1 Encryption method WEP (128bit/64bit), TKIP, AES

* 1 PEAP is the only supported authentication method.

Audio Input Device

Analog Audio Input Device

Specification	Operating environment
Supported device	Microphone, headset, and other devices

Specification	Operating environment
Interfaces	Audio input

Analog Audio Output Device

Specification	Operating environment
Supported device	Speaker or headset, and other devices
Interfaces	Audio output

Digital Audio Input/Output Device

Specification	Operating environment
Supported device	USB microphone speaker
Interfaces	USB3.0 (type A)

Note

- You can use the left and right USB ports (A type) on this machine.
- You cannot connect and use an analog audio input/output device and digital audio input/output device at the same time. If the digital audio input/output device is connected, you can only use digital audio input/output device.

Video Output Device

Video Output Device (Analog RGB/VGA)

Specification	Operating environment
Supported device	Monitor or projector
Resolution ^{*1}	1024 × 768 pixels (XGA) 1280 × 800 pixels (WXGA)
Interfaces	Analog RGB (VGA)

*1 If the device you are using supports all the indicated resolutions, a resolution of 1280 × 800 pixels (WXGA) is used to display images and video.

Video Output Device (HDMI terminal)

Specification	Operating environment
Supported device	High-definition monitor, projector and other devices
Resolution	1024 × 768 pixels (XGA) *1 1280 × 800 pixels (WXGA) *1 1280 × 720 pixels (HD 720p)
Interfaces	HDMI terminal (type A) *2

*1 This resolution is used only if you connected this machine to a projector manufactured by Ricoh.

*2 A video output device only outputs video.

↓ Note

- 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 display images from this machine correctly.
- This machine cannot accept two video output devices connected at the same time via the analog RGB (VGA) and HDMI terminal. You can only use one connector at a time. Select the appropriate connector for the video output device you want to use.

Video Input Device

Specification	Operating environment
Supported device	camera
Interfaces	USB 3.0 (type A) HDMI terminal (type A)

↓ Note

- Only video is input from a video input device. If the camera has a microphone, the microphone is disabled.

Preparing to Use the Machine

Connecting the Power Cord Set

2

WARNING

- Do not use any power sources other than those that match the specifications shown. Doing so could result in fire or electric shock.
- 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.
- 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.
- It is dangerous to handle the power cord plug with wet hands. Doing so could result in electric shock.
- 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.
- 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

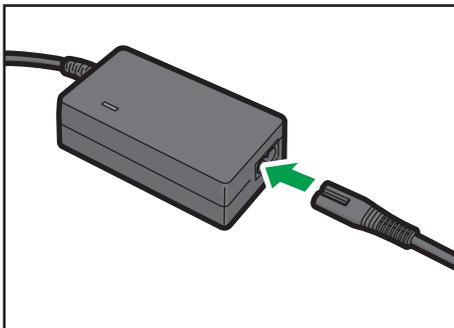
- If this machine is not going to be used for several days or longer at a time, disconnect its power cord from the wall outlet.
- When disconnecting the power cord from the wall outlet, always pull the plug, not the cord. Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.
- 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.
- When performing maintenance on the machine, always disconnect the power cord from the wall outlet.

⚠ 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.
- 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.
- 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.
- 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.

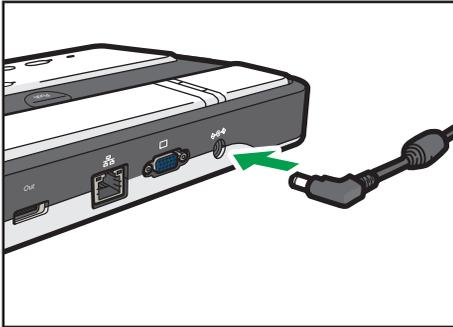
★ Important

- 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. Connect the power cord to the AC adapter.

DEF024

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



DEF025

3. Connect the power plug to the AC outlet.

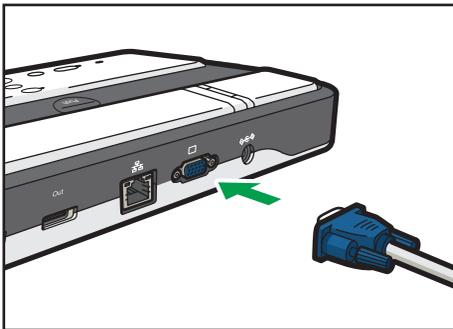
Connecting a Video Output Device

★ 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 (VGA) and HDMI terminal. You can only use one connector at a time. Select the appropriate connector for the video output device you want to use.

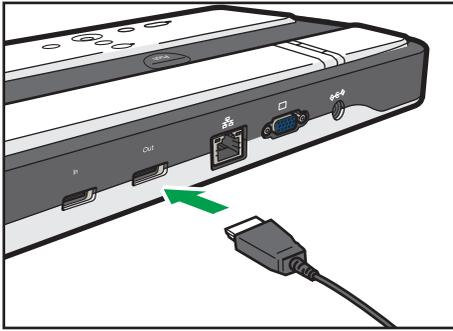
1. Connect the analog RGB (VGA) or HDMI terminal connector to the machine.

- Analog RGB (VGA)



DEF030

- HDMI terminal (for video output)



DEF042

2. Connect the analog RGB (VGA) or HDMI terminal connector to the video output device.

Note

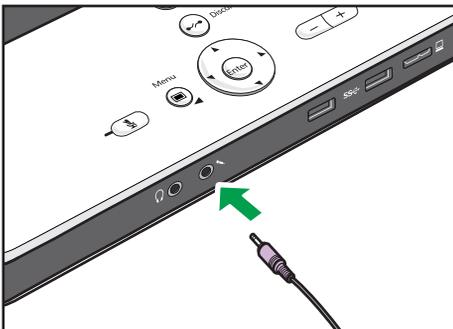
- For details about how to connect the cable to the video output device, see the manuals provided with the video output device.

Connecting an Analog Audio Input Device

Important

- This machine cannot accept two audio output devices connected at the same time. If the digital audio input/output device is connected, you can only use digital audio input/output device.

1. Connect audio input connector to the machine.



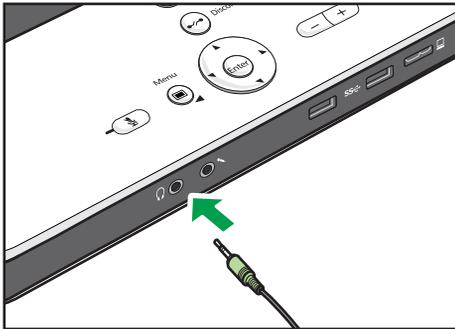
DEF027

Connecting an Analog Audio Output Device

Important

- This machine cannot accept two audio output devices connected at the same time. If the digital audio input/output device is connected, you can only use digital audio input/output device.

1. Connect audio output connector to the machine.

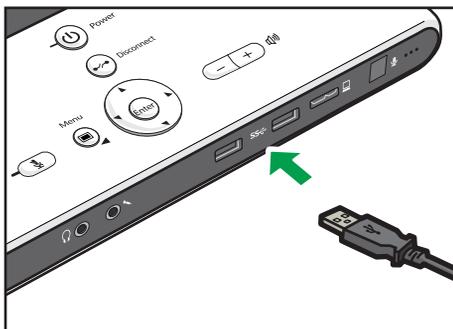


Connecting a Digital Audio Input/Output Device

★ Important

- This machine cannot accept two audio output devices connected at the same time. If the digital audio input/output device is connected, you can only use digital audio input/output device.
- You cannot connect and use two different digital audio input/output devices at the same time.
- Do not attempt to connect or disconnect the digital audio input/output device 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.



↓ Note

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

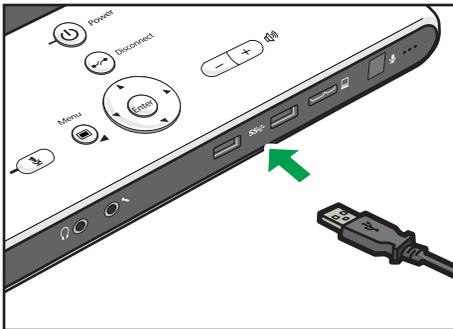
Connecting a Video Input Device

★ Important

- You cannot connect and use two different video input devices at the same time.
- Do not connect or disconnect a video input device after connecting or receiving a call, or before starting a meeting.

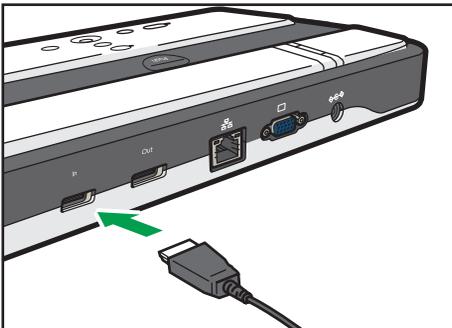
1. Connect the USB or HDMI terminal connector to the machine.

- USB



DEF029

- HDMI terminal (for video input)



DEF031

The screen switches to the video from the video input device.

↓ Note

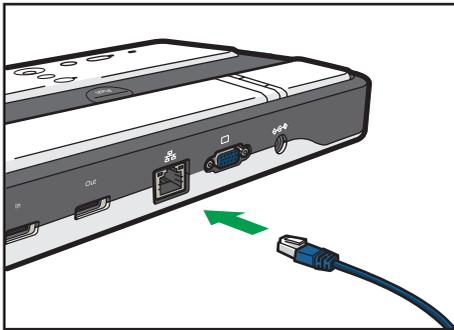
- When you disconnect the video input device, the screen switches to the video from the camera of this machine. When disconnecting, and then reconnecting the video input device, or when connecting a different video input device, remove the cable, make sure that the screen switches to the video from the camera of this machine, and then connect the video input device.
- A single digital audio input/output device can be used together with a video input device.

Connecting an Ethernet Cable

★ 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.



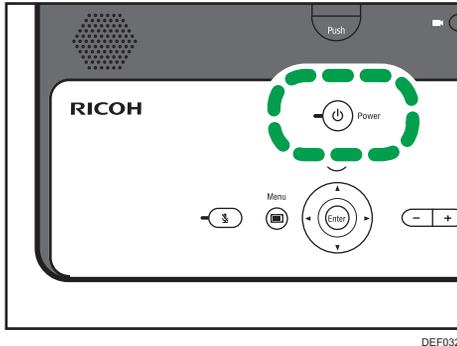
DEF026

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

Operating the Machine

Turning On the Power

1. Press the [Power] key/🔌.

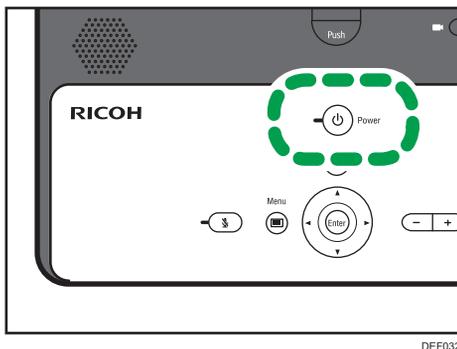


↓ Note

- Depending on the network environment you are using, it may take the machine one minute or more to connect to the network.

Turning Off the Power

1. Press the [Power] key/🔌.



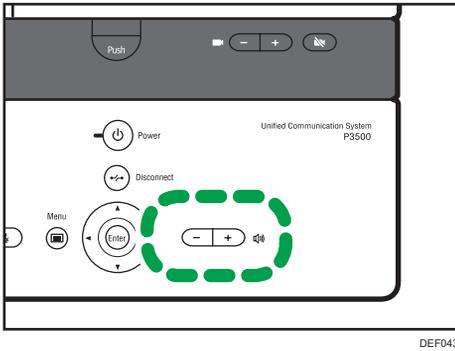
2. Select [OK].

↓ Note

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

Adjusting the Speaker Volume

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



DEF043

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

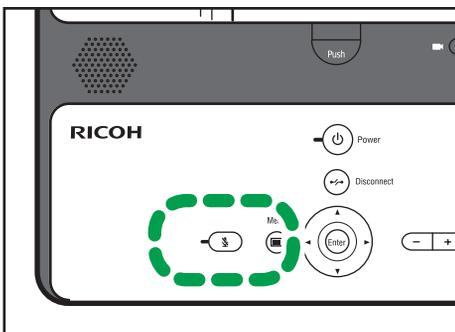
To raise the volume, press the [+] key.

Note

- If the digital audio input/output device is connected, you cannot adjust the volume from the machine. For details about how to adjust the volume of the digital audio input/output device, see the respective manual for device.

Muting the Microphone

1. Press the [Mute] key.



DEF044

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 the digital audio input/output device is connected, you cannot mute them from the machine. For details about how to mute your digital audio input/output device, see the respective manual for device.

Operating the Remote Control

You can use the remote control to perform the same operations that are performed on the control panel of the machine. The remote control allows you to turn the power on and off, perform operations on a screen, adjust the volume, and zoom the camera in and out.

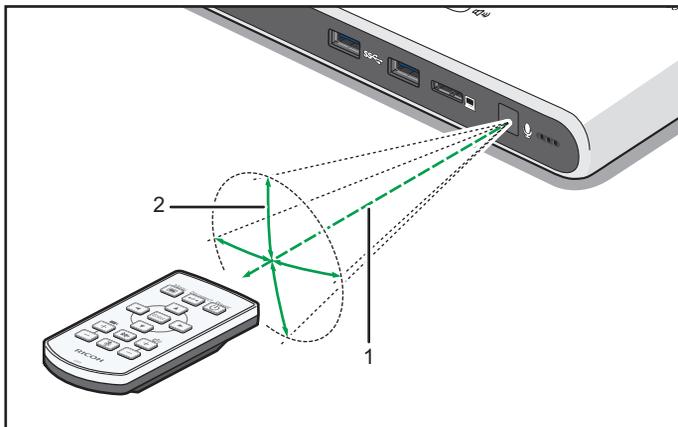
Note the following precautions when using the remote control:

- Do not drop or hit the remote control.
- Do not place the remote control in a place that is very hot or very humid.
- Do not allow the remote control to become wet. Also, do not place it on anything that is wet.
- Do not dismantle the remote control.

Effective Range of the Remote Control

Point the remote control at the remote control receiver on the machine to use it.

The remote control can be used within the following effective range.



DEF045

1. **Distance:** approximately 5 m
2. **Angle:** $\pm 15^\circ$ vertically, $\pm 30^\circ$ horizontally

Note

- If there is an object between the remote control receiver and the remote control, the remote control may not work.
- The reception of the remote control may not be effective in some areas and in some conditions. If this happens, re-point the remote control at the machine and do the operation again.
- The remote control may not work if there is sunlight, fluorescent light, or some other strong light shining on the remote control receiver on the machine.

Loading Batteries into the Remote Control

Use two AAA LR03 batteries for the remote control.

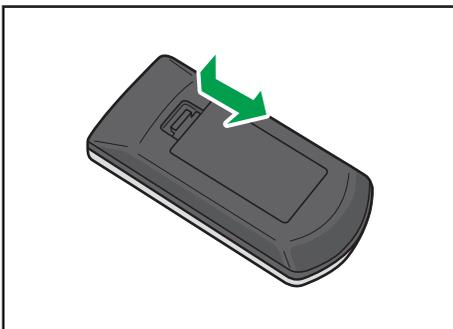
When using the remote control for the first time, use the supplied batteries.

⚠ WARNING

- For safe operation, follow the warnings below regarding the batteries used in the remote control. If you use the batteries incorrectly, it may result in fire or injury due to batteries leaking or exploding.
 - Do not use batteries other than the ones specified.
 - Do not mix and use batteries that are different types or that are new and old.
 - Correctly insert batteries according to the polarity (+/-).
 - Do not heat or throw the batteries into fire or water.
 - Do not connect the positive and negative terminals on a battery with a wire.
 - Remove the batteries when they will not be used for extended periods.
 - Keep the batteries out of the reach of children. Children may swallow or choke on the batteries. If this happens, contact a doctor immediately.

- What to do if a battery has leaked
 - If leakage from a battery adheres to your skin, rinse it with water immediately, and then contact a doctor.
 - Wipe off the leakage with tissue paper while being careful not to touch it.
 - Soak the tissue paper that you used in water, and then throw it away as burnable trash.

1. Remove the battery cover of the remote control.

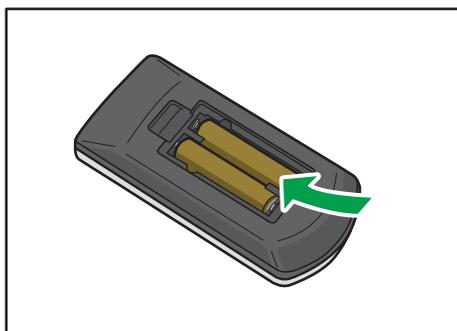


DEF034

2. Load batteries.

Check battery polarity (+ and -).

2



DEF035

3. Reattach the battery cover.



DEF036

Note

- If the remote control does not work at all or at a normal reaching distance, replace the batteries with new ones.

Operating the Camera

Raising the Camera Unit

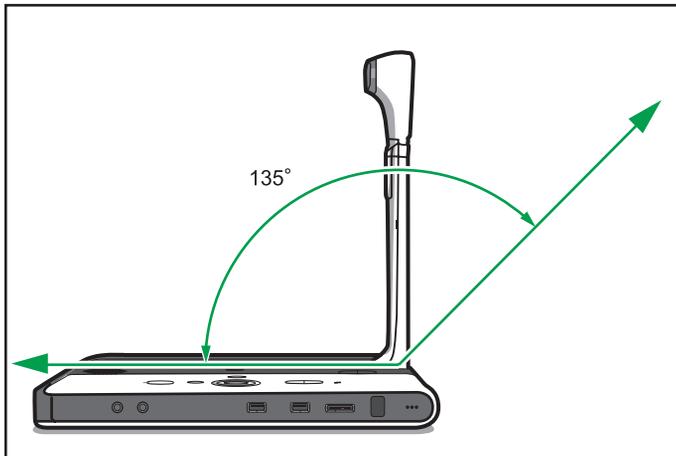
★ Important

- 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

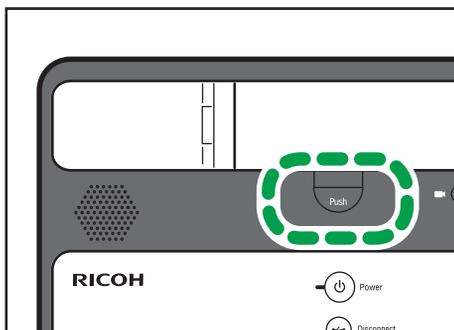
The camera arm can move within the following range:

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



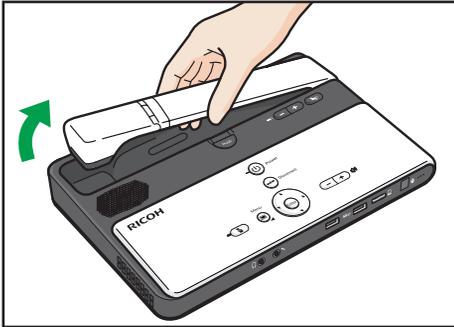
DEF047

1. Press the [Push] key.



DEF048

2. Lift the arm of the camera to raise the camera unit.



DEF049

Adjusting the Camera

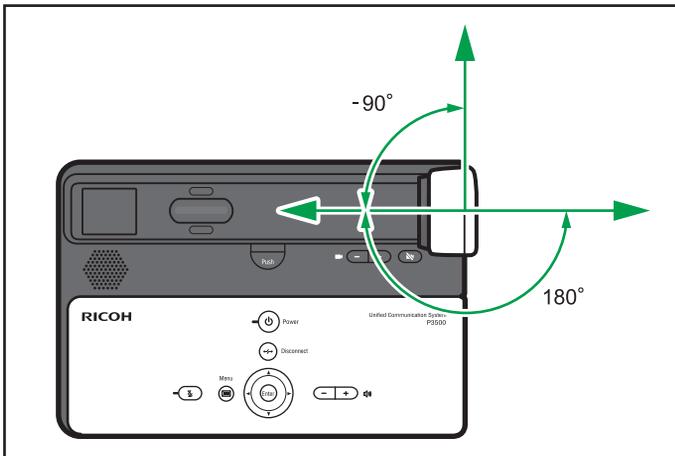
★ Important

- 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.

Ranges of movement

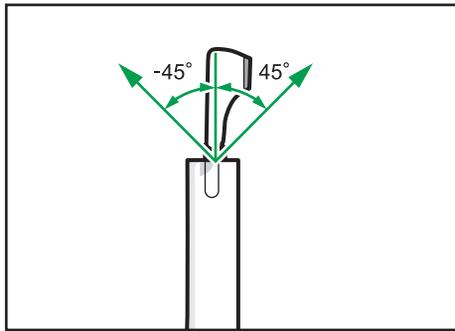
The camera can move within the following ranges:

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



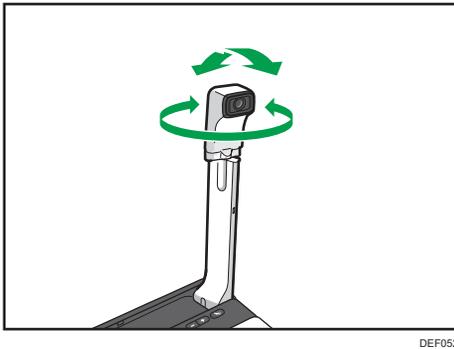
DEF050

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



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.



↓ Note

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

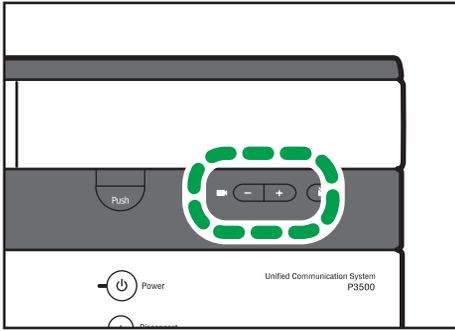
Zooming

You can adjust the zoom of the machine's camera to change the area displayed or magnification.

There are five different zoom levels. The zoom levels change in the following order: $\times 1$, $\times 1.5$, $\times 2$, $\times 3$, and $\times 4$.

1. Press the [Zoom⁺] or [Zoom⁻] key to change the zoom level.

The zoom switches to the next level each time the zoom key is pressed.



DEF053

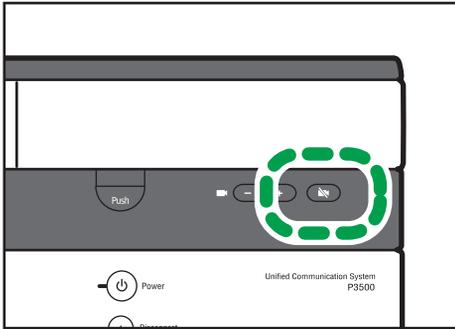
Note

- The zoom level selected last remains enabled until the machine power is turned off.
- When the machine power is turned on, the zoom level is reset to $\times 1$.
- If you use a video input device such as an external camera, you cannot use the zoom keys to change the zoom level.

Turning Off the Camera

You can temporarily turn off the display of the machine's camera.

1. Press the [Camera OFF] key.



DEF054

2. To turn the camera back on, press the [Camera OFF] key again.

Note

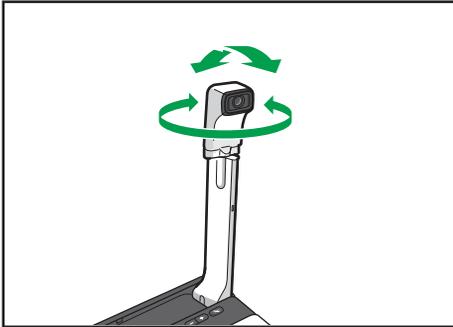
- If you use a video input device such as an external camera, you cannot use the [Camera OFF] key to turn off the camera display.

Putting the Camera Back Into Place

★ Important

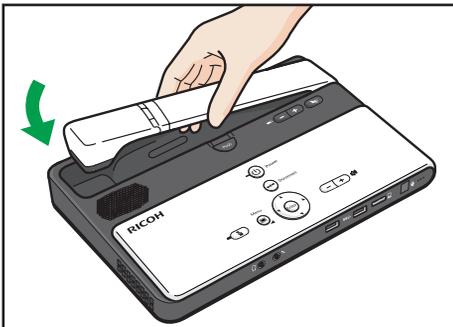
- Do not attempt to raise or move this machine by the camera unit.
- Do not attempt to move the camera beyond its range of movement.

1. Carefully rotate the camera and put it back into place.

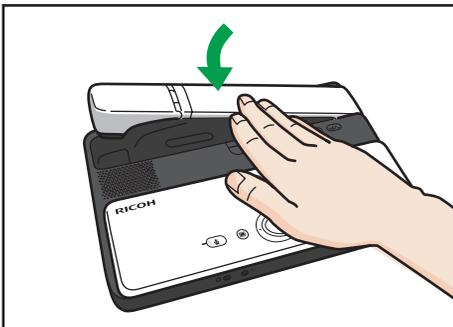


DEF052

2. Push the arm down until it clicks.



DEF056



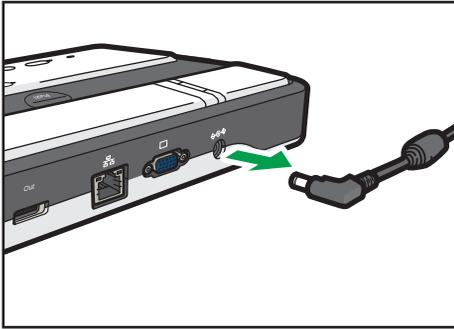
DEF067

Maintenance

Packing Up the Machine

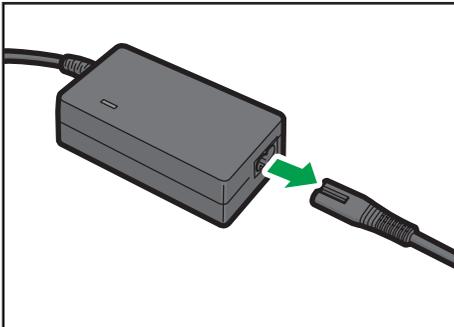
★ Important

- Before packing up the machine, make sure the machine is off by checking whether the Power indicator is lit.
1. Remove all the connector cables of the device from the machine.
 2. Remove the power connector from the power connector inlet on the machine.



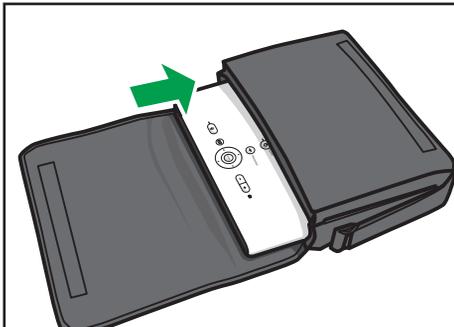
DEF057

3. Remove the AC adapter and power cord.



DEF058

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



DEF059

↓ Note

- 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.

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.

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.
- Put the machine and its parts in the bag that comes with this machine, and put the bag inside a sturdy cardboard box or the original package that contained this machine when you purchased it. When using the original package, replace the cushioning material with material of the appropriate size.
- Inform the carrier that the machine is a piece of precision equipment.
- For more information about transporting the machine, consult your carrier.

Specifications

Item	Specification
Interface	<ul style="list-style-type: none"> • Ethernet: 10BASE-T, 100BASE-TX, 1000BASE-T • IEEE802.11a/n/g/b <ul style="list-style-type: none"> • Authentication method Open system authentication, shared key authentication, WPA-PSK, WPA2-PSK, WPA-EAP^{*1}, WPA2-EAP^{*1} • Encryption method WEP: WEP128bit/64bit TKIP: WPA-PSK/WPA2-PSK/WPA-EAP/WPA2-EAP AES: WPA-PSK/WPA2-PSK/WPA-EAP/WPA2-EAP • USB3.0 (type A) × 2 • USB3.0 (type B) • Analog RGB (VGA) • HDMI terminal (for video output) • HDMI terminal (for video input) • Audio input • Audio output
Automatic camera adjustment	<ul style="list-style-type: none"> • Automatic white balance control • Automatic exposure compensation • Automatic gain control • Automatic flicker canceller (50 Hz/60 Hz)
Audio	<ul style="list-style-type: none"> • Adaptive echo canceller • Noise suppressor • Echo suppressor • Automatic gain control • Non-stationary noise reduction
Noise	45 dB or less
Remote control batteries	AAA battery LR03

Item	Specification
Power Source	<ul style="list-style-type: none"> • For mainly Europe and Asia 220 V-240 V, 50 Hz • For mainly Asia • 110V, 220V-240V, 50/60Hz • For mainly North America 120 V, 60 Hz
Power consumption	<ul style="list-style-type: none"> • Maximum 66 W or less • Auto shutdown 0.5 W or less
External dimensions (W × D × H)	285.0 × 189.0 × 40.0 mm (11.2 × 7.4 × 1.6 inches)
Weight	Approx. 1.6 kg (3.5 lb.)

*1 PEAP is the only supported authentication method.

3. Troubleshooting

This section describes actions to be taken when the machine cannot be operated.

When You Have Problems Operating the Machine

★ Important

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

The problems related to the Machine

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 page 22 "Connecting the Power Cord Set".
The screen does not change after 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.

Problems	Causes	Solutions
The remote control does not work.	The remote control receiver is not receiving the signal from the remote control.	<ul style="list-style-type: none"> Point the remote control at the remote control receiver. Check whether there are any obstacles between the remote control and the machine. Check whether the receiver of the machine is exposed to direct sunlight or a strong fluorescent light. If the receiver is exposed to an extremely strong light, move the machine to a different location or change its orientation.
The remote control does not work.	The remote control batteries are running low.	Replace the remote control batteries.
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.

The problems related to the Picture

Problems	Causes	Solutions
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
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.

The problems related to the Sound

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.

Problems	Causes	Solutions
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.
Deterioration of sound quality	Howling might be occurred if the audio volume is set too loud.	Adjust the audio volume on the machine. For details about how to adjust the volume, see page 30 "Adjusting the Speaker 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.
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.

Problems	Causes	Solutions
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 page 30 "Adjusting the Speaker Volume". • 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.
The sound cuts in and out.	If you and the other party speak at the same time, the sound may cut in and out.	<p>Wait until the other party is finished before speaking.</p> <p>If the other party speaks for an extended length of time and the audio continually cuts out, mute the microphone of your machine.</p>
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 page 30 "Adjusting the Speaker 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.

Problems	Causes	Solutions
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 page 30 "Muting the Microphone".
The microphone cannot be muted.	A digital audio input/output device is connected. The digital audio input/output device cannot be muted from the machine.	Mute the digital audio input/output device. For details about how to mute the digital audio input/output device, see the respective manual for the device.

4. Appendix

Updating the System

There are two different ways to update the system of this machine.

Online update

If [Update system from network on startup] is selected in System Settings, the system automatically checks whether any system update is available when the machine starts up.

For online update to work normally, the machine must be correctly connected to the network when it starts up.

If a system update is available, a message is displayed to notify the user of the update. Click [Update] to start the update.

Offline update

With this update method, a USB memory device is used to update the system.

Download an available update file on a computer and save the file to a USB flash drive.

Note

- If an error occurs during the system update, an error message is displayed and the update process is terminated before completion. If this is the case, the system reverts to the version prior to the update.

Use the following procedure to complete an update by the offline method:

1. **On a computer, access the Ricoh home page and download an available P3500M system update file.**
2. **Save the downloaded system update file to a USB flash drive.**

The system update file is a compressed file. Save it to the USB flash drive without decompressing it.
3. **Insert the USB flash drive into this machine.**
4. **Press the [Menu] key.**
5. **Select [System Settings].**
6. **Select [System update from USB memory].**
7. **Select the system update file, and then select [OK].**
8. **Select [Update].**
9. **Follow the instructions on the screen to install the system update file.**
10. **Select [Finish].**

The machine restarts.

Precautions for Use

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

Handling This Product

- 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.

Screen

4

- 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.

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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The proper names of the Windows operating systems are as follows:

- 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

- The product names of Windows 8 are as follows:

Microsoft® Windows® 8

Microsoft® Windows® 8 Pro

Microsoft® Windows® 8 Enterprise

- The product names of Windows 8.1 are as follows:

Microsoft® Windows® 8.1

Microsoft® Windows® 8.1 Pro

Microsoft® Windows® 8.1 Enterprise

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