



Operating Instructions



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1. Read This First

How to Read This Manual

1

Symbols

This manual uses the following symbols:



Indicates points to pay attention to when using functions. This symbol indicates points that may result in the product or service becoming unusable or result in the loss of data if the instructions are not obeyed. Be sure to read these explanations.



Indicates supplementary explanations of the product's functions and instructions on resolving user errors.

[]

Indicates the names of keys or buttons on the product or display.

Notes

Some illustrations or explanations in this guide may differ from your product due to improvements or changes in the product.

This manual shall not be copied, duplicated, changed, quoted or reproduced in part or in full without permission.

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 product, losses of documents or 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 important documents or data. Documents or data might be erased due to your operational errors or malfunctions of the machine. Also, you are responsible for taking protective measures against computer viruses, worms, and other harmful software.

In no event will the manufacturer be responsible for any documents created by you using this product or any results from the data executed by you.

Remarks

1

The application of this product does not include sound recording and video recording features.

2. Setting Up the Device

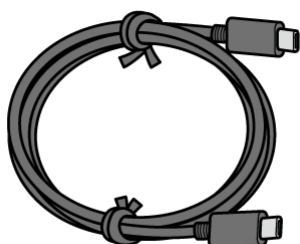
This chapter describes the operating requirements and necessary setups for this device and how to use it.

Checking the Package Contents

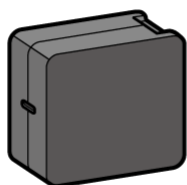
2

This product includes the items listed below. Check that they are all included.

- USB cable (Type-C to Type-C, USB 3.1, 2.0 m) × 2



- AC adapter (45W)



- Power plug



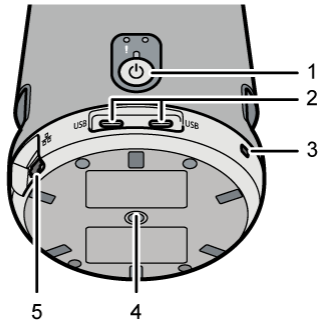
- Documents
 - Read This First
 - Quick Guide
 - Warranty card

Note

The shape of the power cord plug varies, depending on the country where this device is used.

Names and Functions of the Components

Front



2

1. Power button

Use this to restart the device or to put the device into standby.

2. USB Type-C port

There are two USB ports. You can connect a USB cable to either one of them to:

- Connect this device to a computer, or
- Supply power from a power outlet to the device via the AC adapter connected.

3. Security slot (Slot size: 3 x 7 mm)

Use this to connect a security wire lock for the theft prevention of this device.

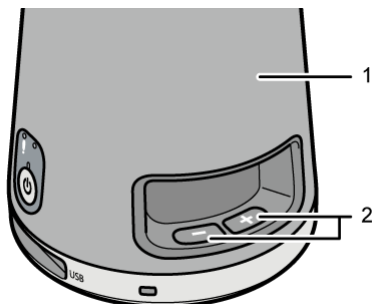
4. Threaded hole

Use this to attach the device to a camera tripod, etc.

5. Ethernet port

You can connect a 1000BASE-T, 100BASE-TX, or 10BASE-T cable to this port when using the device in a wired network to update its firmware.

Side



1. Speaker

This provides audio output from a computer connected to this device.

The speaker is embedded into the device's side area.

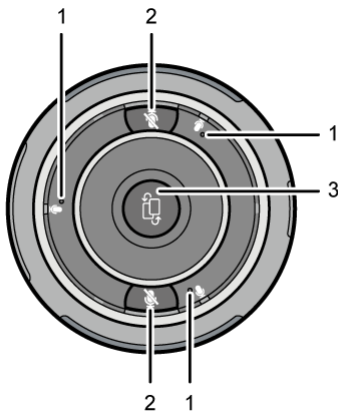
2. **[+] and [-] keys**

Use these to adjust the speaker volume on this device.

There are two pairs of these keys on two different positions on the device's side area.

2

Top



1. **Microphones**

These receive sound from your location.

There are three microphones on the device's top area.

2. **[Microphone Mute] keys**

Use this to mute audio from the microphones on the device.

There are two [Microphone Mute] keys on the device's top area.

3. **[Screen Layout Switching] key**

Use this to switch between different layout contents for video from the camera.

For more information about the layouts of video from the camera, see page 20 "Switching between Layout Contents for Video from the Camera".



1. **Camera**

Used to take a panoramic image of the surrounding area of this device.

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.
- Keep this machine and its attachments out of the reach of infants. If this machine and its attachments are near infants, they may cause burns or injury.
- If this machine and its attachments are within the reach of children, be sure that children do not touch or handle this machine and its attachments unless supervised by an adult. Doing so may cause injuries such as electric shock or burns.
- Do not mount to and use the machine on a ceiling via the tripod screw hole or by any other means. Otherwise, the machine could fall, resulting in injury or damage.
- When a tripod is attached, make sure that the tripod is stable. Otherwise, the machine could tip over or fall, resulting in injury or damage.
- Do not disassemble or modify this machine. Doing so can result in fire and electric shock.
- Do not allow excessive power, shock, or vibration to occur, for example, by dropping, stepping on, or throwing the machine. Otherwise, the machine could be damaged, resulting in fire or injury.

CAUTION

- Do not place heavy objects on the machine. Doing so can cause the machine to fall or topple over, possibly resulting in injury.
- Do not place the machine on an unstable or tilted surface. Doing so can cause the machine to fall or topple over, possibly resulting in injury.
- Do not place the machine 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 USB cable in a way that might cause someone to trip or fall. The machine might fall over and cause an injury.

- Do not place or store the machine 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 use this machine continuously for more than eight hours. Doing so could result in a malfunction.

- Keep any volatile chemical, such as benzine/thinner, or pesticide away from the machine. Otherwise, deformation, tarnishing, or cracking could occur.

- Keep the machine away from salt-bearing air and corrosive gases. Also, do not install the machine in places where chemical reactions are likely (laboratories, etc.), as doing so will cause the machine to malfunction.
- Do not use the device outdoors.
- 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.
- 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	• Operating 10 - 32°C (50 - 89.6°F) • Non-operating 0 - 43°C (50 - 109.4°F)
Humidity	• Operating 15 - 80% (Non-condensing) • Non-operating 10 - 90% (Non-condensing)

Specification	Description
Maximum Altitude	3,048 m (10,000 feet)

Preventing the deterioration of sound quality

2

- 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.
- When using the device, make sure to be within six meters in proximity.

When using the device in a room where there is little noise, it can recognize voices within six meters. When using the device in an environment where there is noise, make sure to get closer to the device.

Operating Requirements for a Connected Computer

The computer connected to the device needs to be running any of the following operating systems:

- Microsoft Windows 10 Home version 1803 or higher
- Microsoft Windows 10 Pro version 1803 or higher
- Microsoft Windows 10 Enterprise version 1803 or higher
- Microsoft Windows 11 Home
- Microsoft Windows 11 Pro
- Microsoft Windows 11 Enterprise
 - A 64-bit version is supported.
- macOS 12
- macOS 13
- macOS 14
 - Use with MacBook Air or MacBook Pro is supported.

For the latest supported versions, visit the following RICOH website:

<https://support.ricoh.com/services/device/qr/E0A8.html>

Necessary Setups

The device connected to a computer can be used as a Web camera and a microphone speaker.

Connecting to a Power Outlet

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.
- 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.
- Do not damage, break, or modify the 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.
- Do not use the AC adapter or USB cable if it is deformed, cracked, or damaged. Doing so could result in fire or electric shock.
- Avoid applying the following actions to USB cables. Doing so may result in fire or electric shock:
 - Damaging them
 - Bundling them
 - Modifying them
 - Putting heavy objects on them
 - Pulling them forcibly
 - Bending them forcibly
- The supplied AC adapter is for use with this machine only. They cannot be used for appliances other than this machine. Also, do not use AC adapters other than the one supplied with this machine. Doing so can result in fire or electric shock.
- Do not handle the power cord plug with wet hands. Doing so can result in electric shock.
- After disconnecting the AC adapter, make sure to also disconnect the power plug from the wall outlet.

- Do not allow conductive objects (such as metal, pencil lead, etc.) and dust to come in contact with the external connection terminal of the AC adapter.

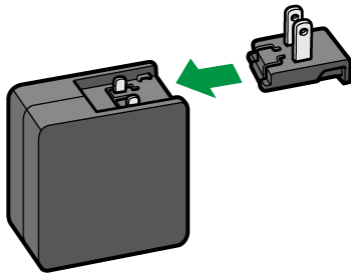
CAUTION

- 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.
- Do not wrap the USB cable around the AC adapter. If the USB cable is damaged or the inner wire is exposed, this may result in a 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.
- Be sure to push the power cord plug fully into the wall outlet. Also, do not push it into loose and unstable wall outlets likely to cause a contact failure. Doing so can result in heat generation.
- 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 disconnecting the USB cable from the wall outlet, be sure to pull the plug and not the cord. Do not pull the USB cable forcibly. Doing so can damage the USB cable, possibly resulting in a fire or electric shock.
- When performing maintenance on the machine, disconnect the power cord from the wall outlet for safety.
- If you do not use the machine for a long period of time such as consecutive holidays, be sure to disconnect the power cord plug from the wall outlet for reasons of safety.

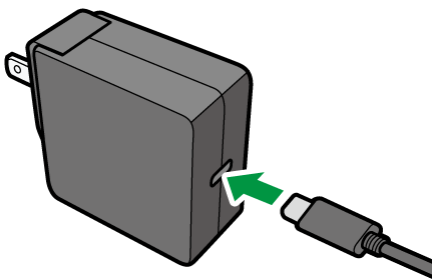
Important

- **Use the supplied AC adapter indoors.**
- **Do not remove from the device the USB cable connected to the AC adapter when the power indicator on this device is lit or flashing. However, when the power indicator is flashing slowly, you can safely remove the USB cable.**

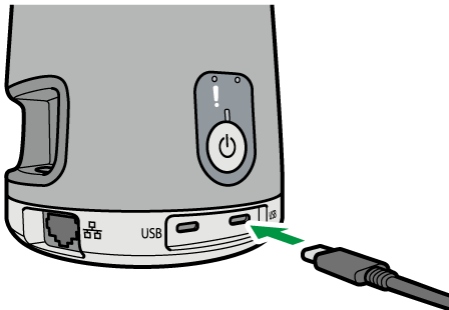
1. Snap the power cord plug into the AC adapter.



2. Connect the USB cable to the AC adapter.



3. Plug the AC adapter into a power outlet.
4. Plug the USB cable into the USB port on the device.



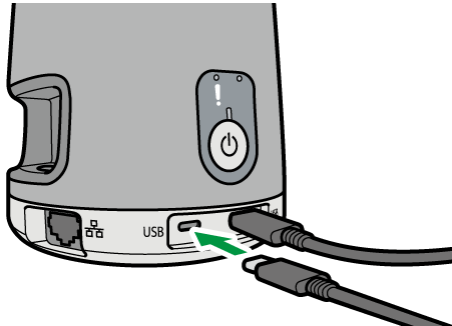
The device starts up automatically, and the power indicator turns on.

Note

- Use the included USB cable.
- This device has two USB ports. Either port can be used to connect the USB cable.
- When you connect this device to a power outlet via a USB cable, the device automatically turns on. Do not press the Power button.
- If you use a computer that is capable of supplying 15 W of power or higher via the USB cable, simply connect the device to the computer to start using it. You do not need to connect it to a power outlet. For more information, see page 16 "Connecting to a Computer without Power Supply from a Power Outlet".

Connecting to a Computer

1. Connect the USB cable to the USB port on the device.



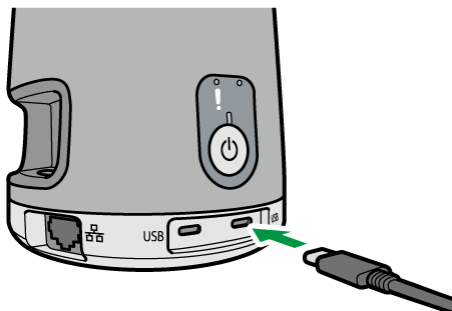
2. Check that the power indicator on the device turns on, and then connect the USB cable to an appropriate USB port on the computer.

Note

- When you perform the following, a message for restarting the device appears, and clicking [OK] restarts the device.
 - Disconnect the USB cable from the Windows computer on which RICOH Meeting 360 Apps is running, and then connect the USB cable to the Mac computer on which RICOH Meeting 360 Apps is running.
 - Disconnect the USB cable from the Mac computer on which RICOH Meeting 360 Apps is running, and then connect the USB cable to the Windows computer on which RICOH Meeting 360 Apps is running.

Connecting to a Computer without Power Supply from a Power Outlet

1. Plug the USB cable into the USB port on the device.



2. Plug the USB cable into an appropriate USB port on the computer.

The power indicator turns on.

Note

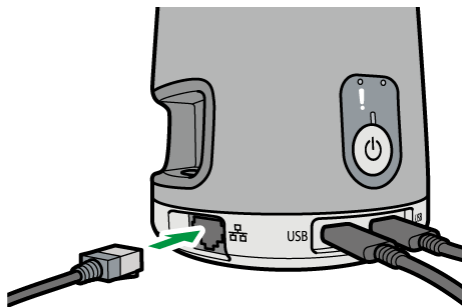
- This device has two USB ports. Either port can be used to connect the USB cable.
- If you connect the device to a laptop and if the laptop is not capable of supplying a minimum power of 15 W, you need to connect the device to a power outlet.

- If you are using the device without connecting it to a power outlet, the following restrictions apply:
 - The device cannot connect to a network for communication.
 - The firmware on the device cannot be updated.
 - The maximum speaker volume of the device is limited to approx. 90%.
 - The frame rate of the camera image decreases.
 - When you connect the device to a power outlet: 30 fps
 - When you do not connect the device to a power outlet: 10 fps

Connecting the Ethernet Cable for Firmware Update

To update the device's firmware, you need to connect the device to a network by connecting the Ethernet cable or by using a wireless LAN.

1. **Connect the Ethernet cable to the Ethernet port on the device.**



2. **Connect the Ethernet cable to a communication device such as a router or hub.**

↓ Note

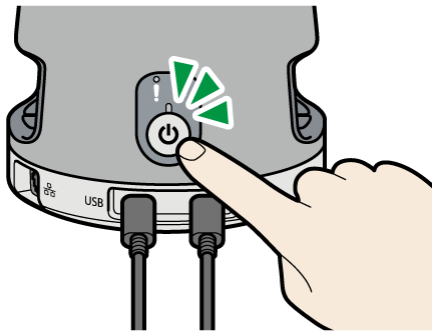
- For information about the network settings to be configured when the Ethernet cable is connected, see page 41 "Configuring the Network Settings".
- For information about settings for updating the device's firmware, see page 44 "Configuring the Firmware Update Settings".
- If you do not connect the device to a power outlet, the device cannot communicate via a network even if it is connected to a communication device via the Ethernet cable. To allow the device to communicate via a network, be sure to connect the device to a power outlet.

Using This Device

Starting Up the Device

2

1. Press the Power button when the device is in standby.



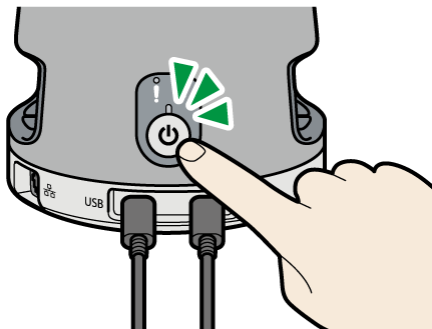
The device starts up, and the power indicator turns on.

↓ Note

- When you connect this device to a power outlet via a USB cable, the device turns on without need of pressing the Power button.
- This device may take 20 seconds or so after you connect it to a power outlet via a USB cable until it turns on.

Putting the Device into Standby

1. Press the Power button while the device is operating.



The device enters standby. The power indicator starts flashing slowly.

Adjusting the Speaker Volume

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



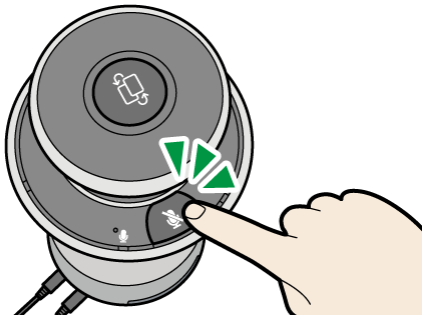
To turn up the volume, press the [+] key.

To turn down the volume, press the [-] key.

2

Muting the Microphones

1. Press the [Microphone Mute] key.



When the microphones are muted, the Microphone Mute indicators turn on.

2. To unmute the microphones, press the [Microphone Mute] key again.

When the microphones are unmuted, the Microphone Mute indicators turn off.

↓ Note

- When the microphones on this device are muted, the microphone on the Web meeting application is not muted. To mute the microphone on the Web meeting application, configure the application to mute the microphone.

Switching between Layout Contents for Video from the Camera

- Press the [Screen Layout Switching] key.



You can switch between layout contents for video from the camera as follows:

- When Pin Screen is off

You can switch to the following screen layouts:

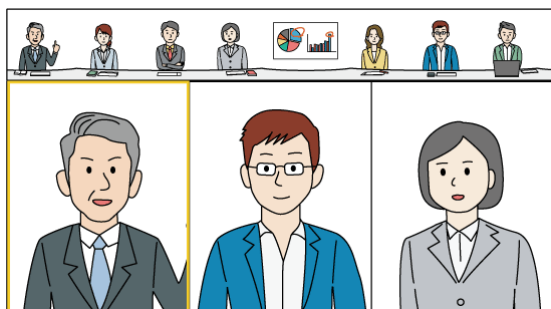
- Split Screen Top/Bottom



- 1 Speaker



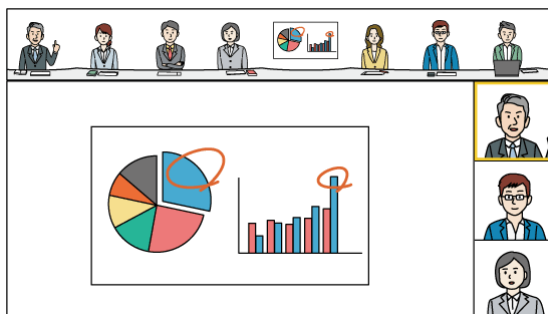
- 3 Speakers



- When Pin Screen is on

You can switch between the following two different screen displays:

- Speaker close-up display



- No speaker close-up display

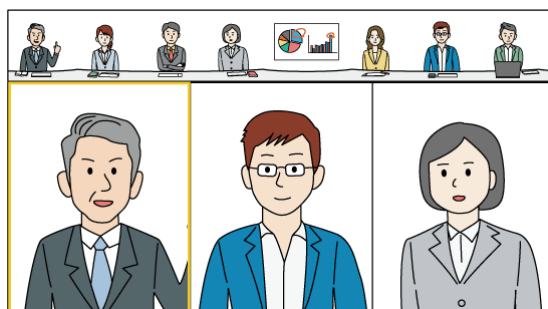


- Press and hold the [Screen Layout Switching] key.

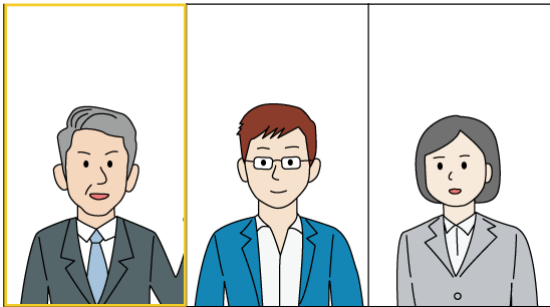


You can switch between screen layouts in the camera images with a panoramic image and without a panoramic image.

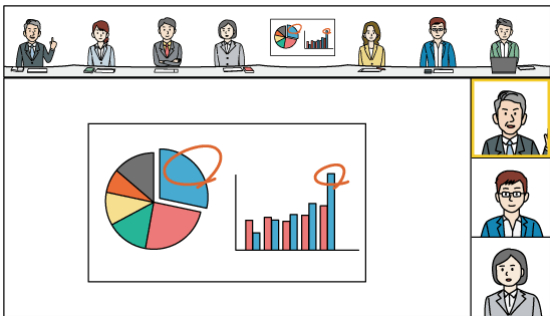
- When Pin Screen is off
 - With a panoramic image



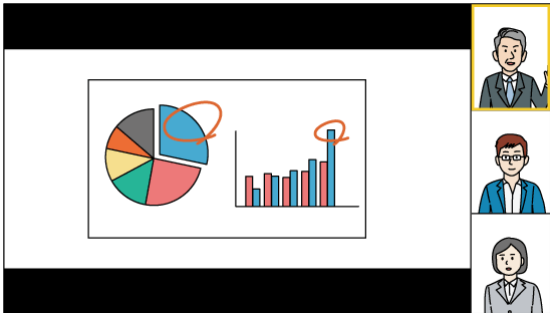
- Without a panoramic image



- When Pin Screen is on
 - With a panoramic image



- Without a panoramic image



Finishing Use of the Device

Follow the steps to finish using the device.

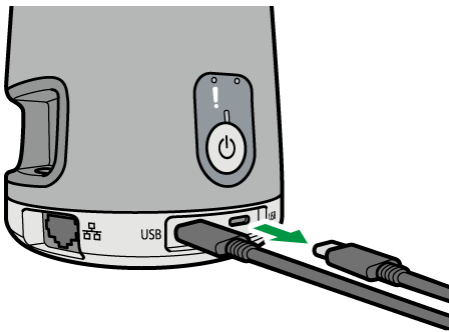
★ Important

- If the device is operating, press the **Power** button first and wait until the device is in standby.

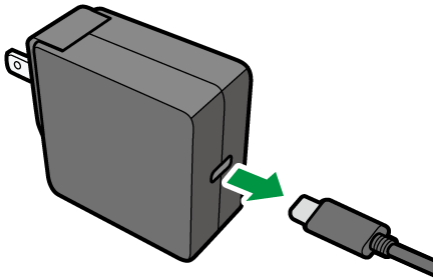
2

Removal from the Power Outlet

1. Remove the AC adapter from the power outlet.
2. From the USB port on the device, remove the USB cable connected to the AC adapter.

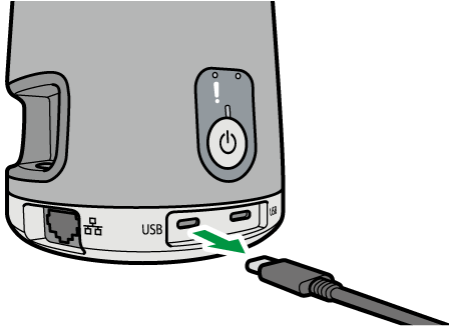


3. Remove the USB cable from the AC adapter.



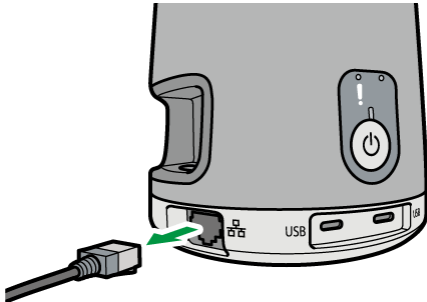
Removal from the Computer

1. Remove the USB cable from the computer.
2. Remove the USB cable from the device.



Removing the Ethernet Cable

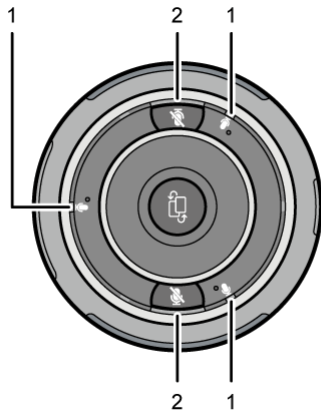
1. If the Ethernet cable is connected, first remove the Ethernet cable from the communication device.
2. Remove the Ethernet cable from the device.



LED Indicators

This section describes the different states indicated by the LEDs on the device.

LEDs on the top



2

1. Microphone ON indicators (blue): Three (three different positions)

Turns on, depending on the state

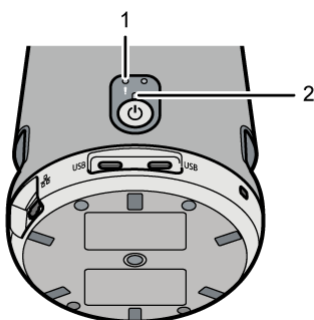
State	LED display
Microphone ON	On
Other state than above	Off

2. Microphone Mute indicators (red): Ten (five x two different positions)

LEDs turn on, depending on the state

State	LED display
Microphone muted	On
Other state than above	Off

LEDs on the front



1. Alert indicator (red)

Flashes, depending on the state

State	LED display
Firmware update is in progress	Flashing
Other state than above	Off

2. Power indicator (blue)

Turns on or Flashes, depending on the state

State	LED display
Operating	On
Starting up	Flashing
Entering standby	Flashing
Standby	Flashing slowly
Other state than above	Off

Camera LED



1. Camera state indicator (blue)

LEDs turn on, depending on the state

State	LED display
The computer connected to the device displays video from its camera via an application.	On
Other state than above	Off

3. Using RICOH Meeting 360 Apps

This chapter provides the basics on how to use RICOH Meeting 360 Apps.

About RICOH Meeting 360 Apps

RICOH Meeting 360 Apps allows you to change the layout of images for your location when having a Web meeting over the Internet or to configure a variety of settings for the device.

What you can do with this application:

- Displaying screen contents on the layout of panoramic images and extracted speaker images
- Configuring a screen to be pinned
- Changing the front position of a panoramic image
- Changing the network settings on the device, specifying whether to automatically update the device's firmware, etc.

↓ Note

- To hold a Web meeting, a separate Web meeting application, such as Teams, Zoom, Cisco Webex, or Google Meet, is required.
- Start this application and the Web meeting application on the computer connected to this device.

Operating Requirements for RICOH Meeting 360 Apps

The supported environments are as follows:

OSs

Microsoft Windows 10 Home version 1803 or higher

Microsoft Windows 10 Pro version 1803 or higher

Microsoft Windows 10 Enterprise version 1803 or higher

Microsoft Windows 11 Home

Microsoft Windows 11 Pro

Microsoft Windows 11 Enterprise

- A 64-bit version is supported.

macOS 12

macOS 13

macOS 14

- Use with MacBook Air and MacBook Pro and supported.

For the latest supported versions, visit the following RICOH website:

<https://support.ricoh.com/services/device/qr/E0A8.html>

CPU

For Windows: Intel Core i5-8350U or higher / 4 core

For Mac: Intel Core i5-8350U or higher / Apple M1 or higher

Memory

4 GB minimum

HDD

Available space: 1 GB or more

Installation

Follow the steps below to install this application:

★ Important

- **To install this application, log in to the computer with administrator privileges.**

For a Windows computer

1. **Access the RICOH Meeting 360 product page from the RICOH website.**
2. **Download the appropriate installation file from Software Download.**
3. **Double-click the downloaded installation file to start the installer.**

Installation file name: RICOH-Meeting360AppsforWindows-setup.exe

4. **Read through the license agreement. If you agree, click [I Agree].**
5. **Check that the installation has been successfully completed, and then click [Finish].**

To start this application immediately, select the "Run RICOH Meeting 360 Apps" check box.

For a Mac computer

1. **Access the RICOH Meeting 360 product page from the RICOH website.**
2. **Download the appropriate DMG file from Software Download.**
3. **Double-click the downloaded DMG file.**
DMG file name: RICOH-Meeting360AppsforMac.dmg
4. **From the Dock, click "Finder".**
5. **Click "Applications" to display the Applications folder.**
6. **Drag the "RICOH Meeting 360 Apps" icon of the DMG file to the Applications folder.**

Uninstallation

Follow the steps below to uninstall this application:

★ Important

- **To uninstall this application, log in to the computer with administrator privileges. It is recommended that you use the same account as that used for installation.**

For a Windows computer

1. From the Start menu, open [Settings] and click [Apps].
2. From the "Apps & features" list or the "Installed apps" list, select "RICOH Meeting 360 Apps", and then click [Uninstall].
3. Click [Uninstall] twice.
4. Check that the uninstallation has been successfully completed, and then click [Finish].

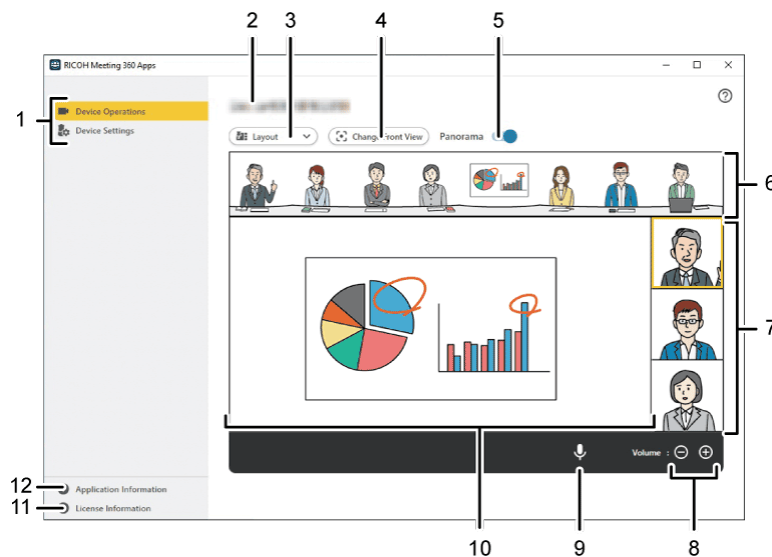
For a Mac computer

1. From the Dock, click "Finder".
2. Click "Applications" to display the Applications folder.
3. From the Applications folder, drag the "RICOH Meeting 360 Apps" icon to the Recycle Bin.

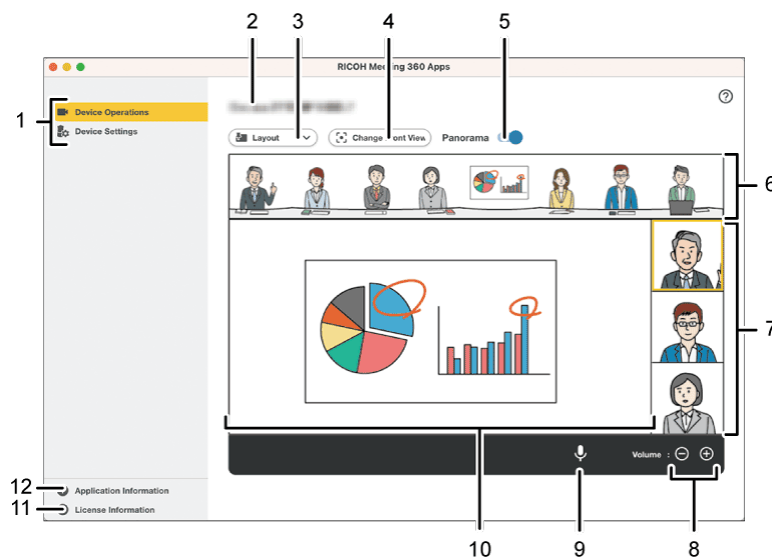
Screen Configuration

This section describes the screen components of the top screen of this application and how to use them.

Top screen: On a Windows computer



Top screen: On a Mac computer



1. Operations menu

Displays the following menus of this application

- [Device Operations]
Displays the top screen of this application
- [Device Settings]
Displays the settings screen for the device

For more information, see page 40 "Configuring the Device Settings".

2. **Device name**

Displays the name of this device; the device name can be changed from [Device Settings].

3. **[Layout]**

Use this to switch between different screen layouts. For information about the screen layout, see page 35 "Changing the Screen Layout".

- Split Screen Top/Bottom

Displays a panoramic image splitting the screen into two sections: top and bottom

- 1 Speaker

Displays the image of only one speaker

- 3 Speakers

Displays the images of up to three speakers

- Only Pinned Screen

Displays the image set to the Pin Screen without displaying any speakers

- Pinned Screen + Speakers

Displays a combination of the image set to the Pin Screen and the images of up to three speakers

- Customize Pinned Screen

Enables you to change the Pin Screen settings; For information about the Pin Screen settings, see page 37 "Configuring Pin Screen".

Note

- You can change the screen layout also by pressing the [Screen Layout Switching] key on this device. For more information, see page 20 "Switching between Layout Contents for Video from the Camera".

4. **[Change Front View]**

Use this to change the Front View settings. For information about the Front View settings, see page 38 "Configuring the Front View".

5. **[Panorama]**

Sets whether to display a panoramic image; a panoramic image is displayed when the switch is set to the right and a panoramic image is hidden when the switch is set to the left.

This setting cannot be changed when "Split Screen Top/Bottom" is selected in [Layout].

Note

- You can also show or hide a panoramic image by pressing and holding the [Screen Layout Switching] key on this device. For more information, see page 20 "Switching between Layout Contents for Video from the Camera".

6. Panoramic image

Displays a panoramic image from this device

7. Speaker image

Displays speaker images; use [Layout] to set the maximum number of speakers to be displayed.

8. Volume control buttons

Click [+] to turn up the speaker volume.

Click [-] to turn down the speaker volume.

9. Microphone icon

Click this to mute the microphone. The mute icon is displayed.

When the mute icon is clicked, the microphone is unmuted and the microphone icon is displayed.

Note

- When the microphone on this application is muted, the microphone on the Web meeting application is not muted. To mute the microphone on the Web meeting application, configure the application to mute the microphone.

10. Pin Screen image

Displays the image to be displayed for Pin Screen; the image is displayed when Pin Screen is enabled.

For information about the Pin Screen settings, see page 37 "Configuring Pin Screen".

11. [License Information]

Displays the license information for this device

12. [Application Information]

Displays the version of this application; in addition, the following functions are also available:

- [Execute] in "Initialize Device Settings": When clicked, the device settings are initialized.
- [Execute] in "Get Device Logs": When clicked, the device logs are retrieved.

Note

- Device logs may be requested when contacting our support center. Usually, this does not occur.

Basic Operations

Starting RICOH Meeting 360 Apps

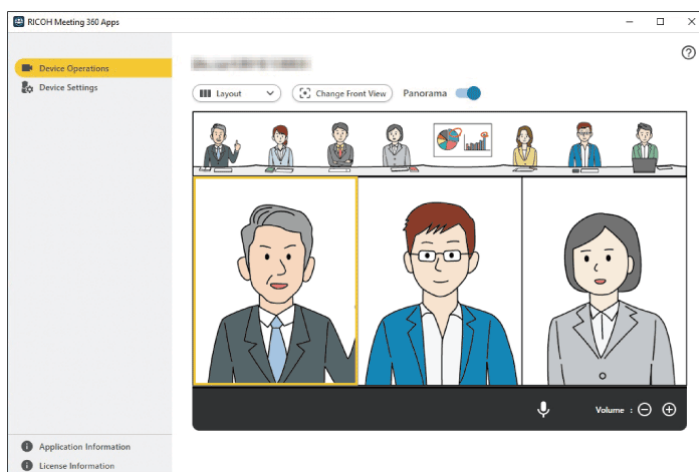
To hold a meeting with this application, start this application and a Web meeting application.

★ Important

- **Do not use "Run as administrator" to start this application on a Windows computer.**

1. Start this application.
2. When a screen is displayed to enter your authentication information for the proxy, enter your user name and password as necessary for proxy authentication, and then click [OK].
3. Open your Web meeting application and start a meeting.

A screen for your location as configured by the screen layout settings in this application is displayed. You can now start the meeting.



For information about the screen layout settings, see page 35 "Changing the Screen Layout".

↓ Note

- This screen provides a preview at a lower refresh rate to reduce the load on the computer.

The preview is not displayed as continuous images such as the images displayed when using this device via a Web meeting application.

- Depending on the configuration of the Web meeting application, the Web meeting application might not display all images from the device.
- If "Device not Recognized" appears when this application is started up, perform the following actions to fix the error:

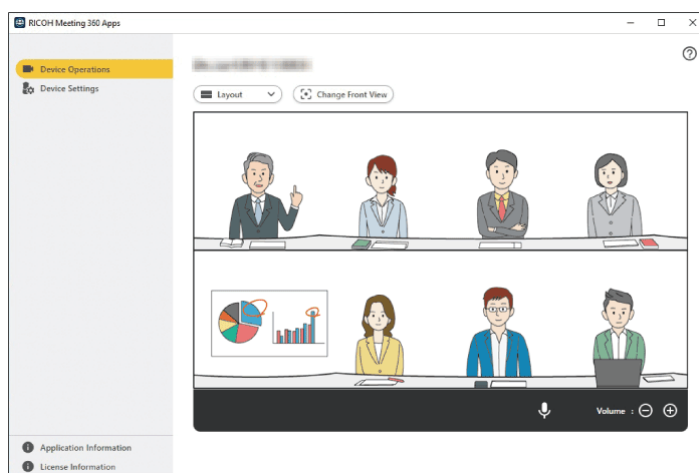
- Check that the device is connected to a computer.
- Check that the device is turned on.
- Remove the USB cable between the device and the computer, and then reconnect the cable.

Changing the Screen Layout

You can display and use the drop-down list by clicking [Layout] to change the screen layout. You can change the screen layout even during a meeting.

The following different screen layout options are available:

Split Screen Top/Bottom:

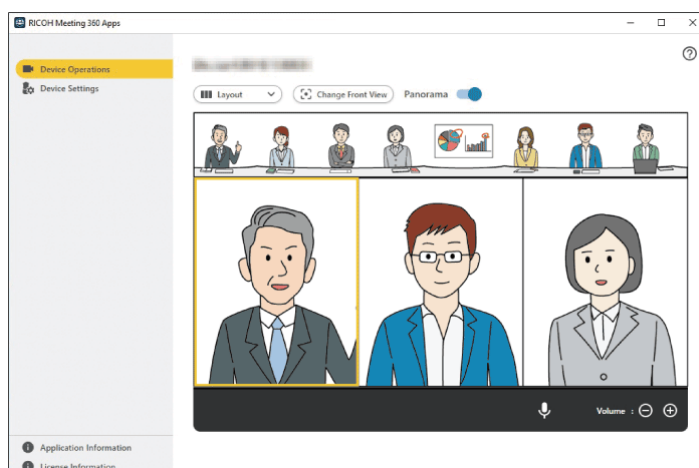


- Use this if you do not use screen pinning.

For information about how to turn screen pinning on, see page 37 "Configuring Pin Screen".

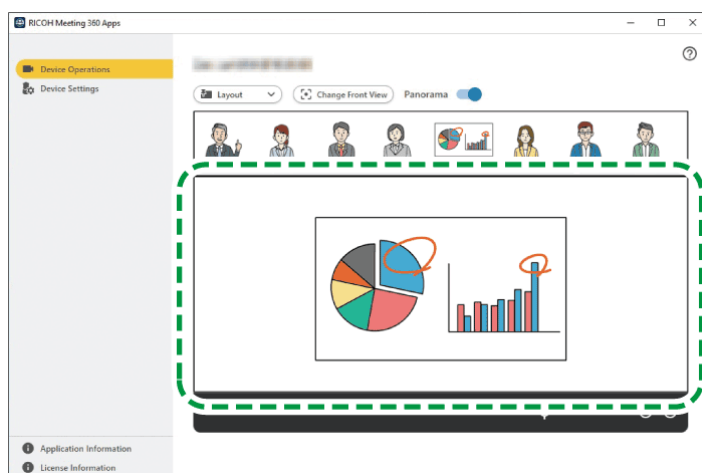
- Two panoramic images from the device are displayed at the top and bottom of the screen.

1 Speaker/3 Speakers:



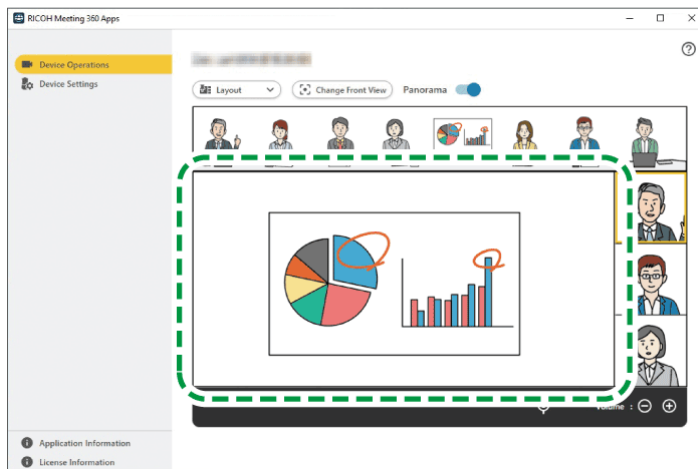
- Use this if you do not use screen pinning.
For information about how to turn screen pinning on, see page 37 "Configuring Pin Screen".
- If no speaker is recognized by this device, the front view is displayed.
For information about how to configure the front view, see page 38 "Configuring the Front View".
- If a speaker is recognized by this device, the speaker is extracted and displayed at the bottom of the screen.
- An active speaker is displayed inside a highlighted frame.
- If "1 Speaker" is selected in [Layout], only one speaker is displayed.
If "3 Speakers" is selected in [Layout], up to three speakers can be displayed.
- If "3 Speakers" is selected in [Layout] and a new speaker is recognized by the device when three speakers are already displayed, the image of the first speaker is turned off and the new speaker is extracted and displayed.
- [Panorama] can be used to set whether to display a panoramic image. A panoramic image is displayed when the switch is set to the right and a panoramic image is hidden when the switch is set to the left.

Only Pinned Screen:



- A pinned image is always displayed inside a frame.
For information about how to configure Pin Screen, see page 37 "Configuring Pin Screen".
- The extracted speaker is not shown.
- [Panorama] can be used to set whether to display a panoramic image. A panoramic image is displayed when the switch is set to the right and a panoramic image is hidden when the switch is set to the left.

Pinned Screen + Speakers:



- A pinned image is always displayed inside a frame.
For information about how to configure Pin Screen, see page 37 "Configuring Pin Screen".
- If a speaker is recognized by this device, the speaker is extracted and displayed at the bottom of the screen.
- An active speaker is displayed inside a highlighted frame.
- Up to three speakers are displayed.
- If a new speaker is recognized by this device when three speakers are already displayed, the first speaker recognized is turned off and then the new speaker is extracted and displayed.
- [Panorama] can be used to set whether to display a panoramic image. A panoramic image is displayed when the switch is set to the right and a panoramic image is hidden when the switch is set to the left.

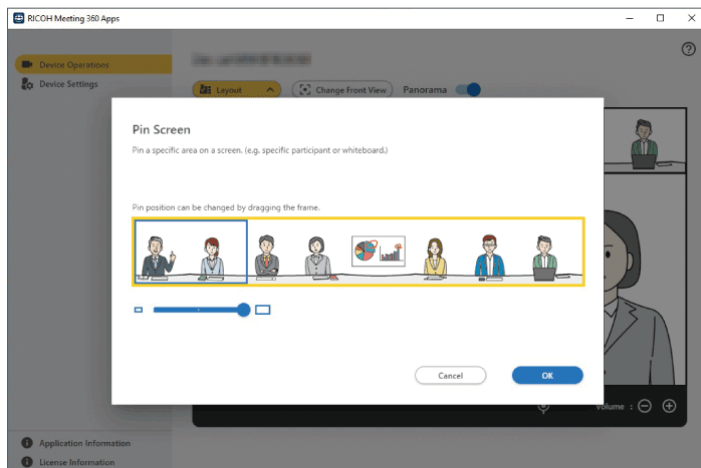
Note

- You can change the screen layout also by pressing the [Screen Layout Switching] key on this device. For more information, see page 20 "Switching between Layout Contents for Video from the Camera".

Configuring Pin Screen

You can configure the display content and size for Pin Screen.

1. Click [Layout].
2. Click "Only Pinned Screen" or "Pinned Screen + Speakers".
3. Click "Customize Pinned Screen".



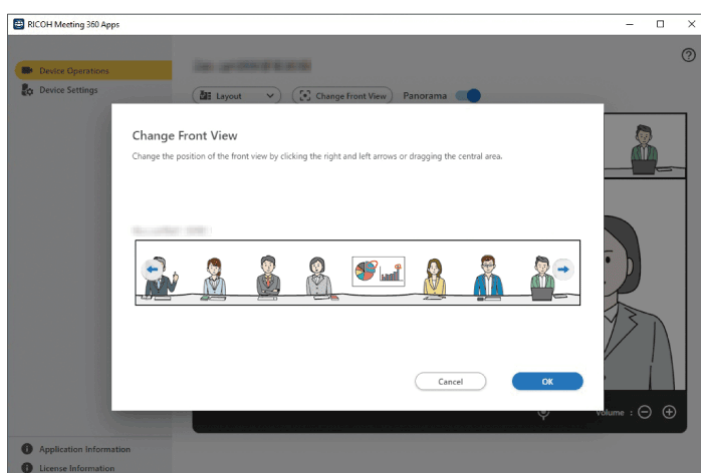
The Pin Screen dialog box is displayed.

4. Use the slider below the panoramic image to adjust the screen size for Pin Screen.
5. Drag the blue frame for the panoramic image to configure the position where to pin the screen.
6. Click [OK].

Configuring the Front View

You can configure the front position of the panoramic image.

1. Click [Change Front View].



The Change Front View dialog box is displayed.

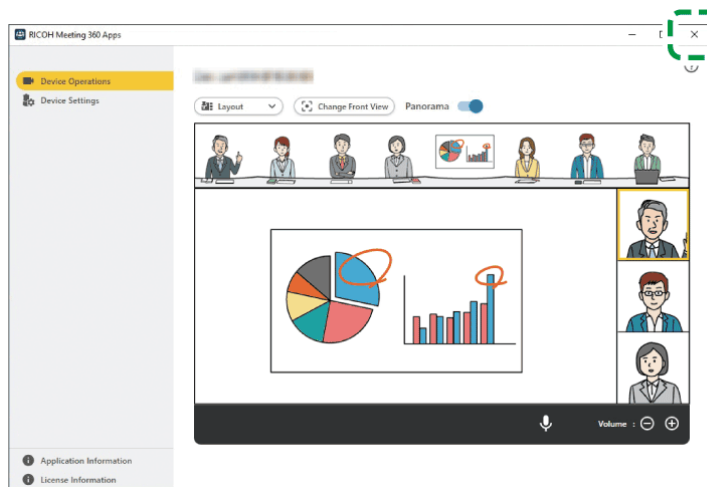
2. Adjust the display position of the panoramic image.
 - Use the left and right arrow buttons to configure the front position of the panoramic image.

- The position of the front view can also be configured by dragging the central area of the panoramic image.

3. Click [OK].

Ending RICOH Meeting 360 Apps

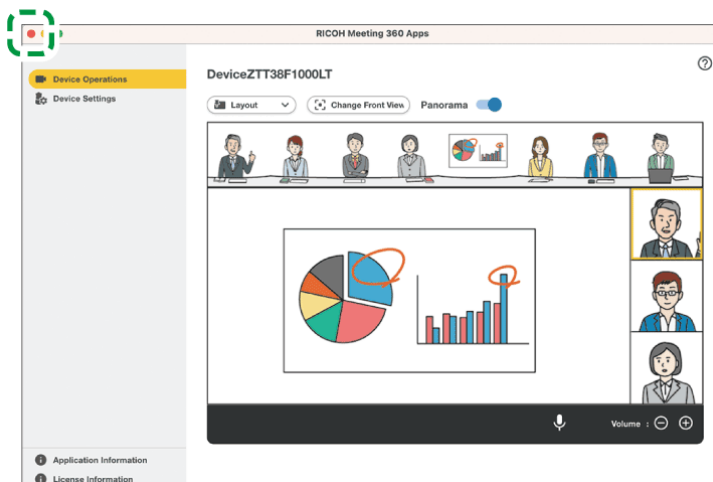
1. Close the Web meeting application.
2. Click [×] at the upper right of the screen of this application.



The application closes.

Note

- When using a Mac computer, click [×] at the upper left corner of the screen of this application for step 2.



Configuring the Device Settings

On the left-hand menu of this application, click [Device Settings] to display the Device Settings screen.

The Device Settings screen provides links to various settings screens at the left-hand menu.

The following sections describe the various device settings.

★ Important

- **When the Device Settings screen is opened for the first time, configure the administrator password. After that, the administrator password will be required whenever opening the Device Settings screen. For information about how to configure the administrator password, see page 44 "Configuring the Administrator Password".**

Configuring the General Settings

On the "General Settings" screen, the following settings are available:

Setting	Description	Initial value	Required/Optional
Device Name	Specify the name of the device. • Up to 255 characters can be entered. • The following single-byte characters cannot be used: " * / : < > ? ¥	DeviceXXXXXX XXXXX (XXXXXXXXXXXX X" represents the serial number of the device.)	Optional
SERIAL NO.	Indicates the serial number of the device	-	-
Operation Sounds	Enables/disables the operation sounds for this device	Enabled	-
Image Brightness	Set the brightness of the images.	Bright (Recommended)	-

↓ Note

- Changing the "Image Brightness" setting restarts the device.

Configuring the Network Settings

Before connecting this device to a network, be sure to configure the network settings.

★ Important

- **Network settings become unavailable if you do not connect the device to a power outlet.**

Wired Network Settings

Configure these settings to connect the device to a wired network via an Ethernet cable.

On the "Wired Network Settings" screen, the following settings are available:

Setting	Description	Initial value	Required/Optional
Obtain IP Address Automatically	Select whether to automatically configure the network. If this is disabled, enter the following information: • IP Address • Subnet Mask • Default Gateway	Enabled	- If "Obtain IP Address Automatically" is disabled, "IP Address", "Subnet Mask", and "Default Gateway" are required.
Obtain DNS Server Address Automatically	Select whether to automatically configure the DNS server. If this is disabled, enter the following information: • Preferred DNS Server • Alternate DNS Server If "Obtain IP Address Automatically" is disabled, this setting is also disabled.	Enabled	- If "Obtain DNS Server Address Automatically" is disabled, "Preferred DNS Server" and "Alternate DNS Server" are required.
MAC Address	Indicates the MAC address of the wired LAN adapter	-	-
Current IP Address	Indicates the IP address for the device	-	-

Wireless Network Settings

Configure these settings to connect the device to a network via a wireless LAN.

On the "Wireless Network Settings" screen, the following settings are available:

Setting	Description	Initial value	Required/Optional
Network Name	Enter the name of the wireless network to be used.	-	Required
Security Type	Select either of the following: • Open • WPA2-PSK	Open	-
Security Key	This is displayed if "WPA2-PSK" is selected for "Security Type". Enter the security key for the network specified for "Network Name".	-	Optional
Obtain IP Address Automatically	Select whether to automatically configure the network. If this is disabled, enter the following information: • IP Address • Subnet Mask • Default Gateway	Enabled	- If "Obtain IP Address Automatically" is disabled, "IP Address", "Subnet Mask", and "Default Gateway" are required.
Obtain DNS Server Address Automatically	Select whether to automatically configure the DNS server. If this is disabled, enter the following information: • Preferred DNS Server • Alternate DNS Server If "Obtain IP Address Automatically" is disabled, this setting is also disabled.	Enabled	- If "Obtain DNS Server Address Automatically" is disabled, "Preferred DNS Server" and "Alternate DNS Server" are required.
MAC Address	Indicates the MAC address of the wireless LAN adapter	-	-

Setting	Description	Initial value	Required/Optional
Current IP Address	Indicates the IP address for the device	-	-

Automatic Configuration/Proxy Server

If this device is connected to a network, configure these settings to use an automatic configuration script or proxy server.

On the "Automatic Configuration/Proxy Server" screen, the following settings are available:

Setting	Description	Initial value	Required/Optional
Use Automatic Configuration/Proxy Server	Select Enabled or Disabled. If this is enabled, enter the following information: - Setting Method "Automatic Configuration Script" or "Proxy Server" - Address If a proxy server is used, enter the IP address or host name of the server. If an automatic configuration script is used, enter its URL. - Port Number - User Name - Password Do not enter a user name or password if proxy server authentication is not used.	Disabled	- If "Use Automatic Configuration/Proxy Server" is enabled, "Address" is required. If "Proxy Server" is selected in "Setting Method", "Port Number" is required.

Network Diagnostics

Use the following steps on the "Network Diagnostics" screen to diagnose the device's network connection status:

1. Click [Execute].

It will take up to 15 seconds to complete the diagnosis.

2. Follow the instructions until diagnosis results are displayed.
3. Click [OK].

Configuring the Firmware Update Settings

On the "Device Firmware Update" screen, the following settings are available:

Setting	Description	Initial value	Required/Optional
Auto Update	Select Enabled or Disabled. If this is enabled, this device's firmware is automatically updated to the latest version when a specific length of time elapses after the device enters standby.	Enabled	-
Manual Update	Click [Execute] to update the firmware to the latest version.	-	-

★ Important

- To update the firmware, connect this device to the network first.
- Firmware update settings become unavailable if you do not connect the device to a power outlet.
- Do not put this device into standby or remove the USB cable connected to the AC adapter during firmware update. Be careful to ensure that the network connection is not interrupted during firmware update. The update might fail.

↓ Note

- The alert indicator flashes during firmware update. For information about the alert indicator, see page 25 "LED Indicators".

Configuring the Administrator Password

On the "Administrator Password" screen, you can configure the administrator password for this device.

★ Important

- When the Device Settings screen is opened for the first time, configure the administrator password. After that, the administrator password will be required whenever opening the Device Settings screen.

- **If the administrator password is forgotten, the device settings need to be initialized. From [Application Information] of this application, execute [Initialize Device Settings].**
1. **Click [Change].**
A dialog box for changing the administrator password is displayed.
 2. **Enter the current administrator password, the new administrator password, and the same new administrator password for confirmation.**
Enter the password using 8–128 single-byte characters. You can use single-byte alphanumeric characters, symbols, and spaces.
 3. **Click [Set].**

Initializing the Device Settings

From the "Initialization" screen, you can initialize the device settings.

1. **Click [Execute].**
A dialog box for confirming the initialization is displayed.
2. **Click [Initialize].**
The initialization starts, and the result is displayed.
3. **Click [OK].**

4. Troubleshooting

This chapter describes the problems that can occur when using this device and RICOH Meeting 360 Apps, as well as their possible causes and actions to take.

Problems Starting or Stopping the Device

Problem	Cause	Solution
The USB cable is connected to the device, but the device does not start up or the power indicator does not turn on or flash.	• The USB cable might be connected incorrectly. • The USB cable might be damaged. • The power supplied from the computer to the device is lower than 15 W. • The device might be damaged.	• If you are connecting the device to a power outlet via the AC adapter, check that the USB cable is correctly connected to the AC adapter. • Check that the USB cable is connected to the device correctly. • Check that the AC adapter is correctly connected to the power outlet. • Check that the USB cable is not broken. • Remove the USB cable from the device, wait at least two seconds, and then reconnect the USB cable to the device. • Remove the AC adapter from the power outlet, wait at least two seconds, and then reconnect the AC adapter to the power outlet. • Connect the device to a power outlet or to a computer that is capable of supplying 15 W of power or higher. If the problem persists, contact your service representative.

Problem	Cause	Solution
		 Note For instructions on how to connect to a power outlet, see page 13 "Connecting to a Power Outlet".
The Power button is pressed when the device is in standby, but neither the device itself nor the power indicator turns on.	- The USB cable might be connected incorrectly. - The Power button might not have been pressed correctly. - The USB cable might be damaged. - The device might be damaged.	- If you are connecting the device to a power outlet via the AC adapter, check that the USB cable is correctly connected to the AC adapter. - Check that the USB cable is connected to the device correctly. - Check that the AC adapter is correctly connected to the power outlet. - Press the Power button again. - Check that the USB cable is not broken. - Check if the Power button is broken. - Remove the USB cable from the device, wait at least two seconds, and then reconnect the USB cable to the device. - Remove the AC adapter from the power outlet, wait at least two seconds, and then reconnect the AC adapter to the power outlet. If the problem persists, contact your service representative.  Note - For instructions on how to connect to a power outlet, see page 13 "Connecting to a Power Outlet".

Problem	Cause	Solution
The Power button is pressed while the device is operating, but the device is not put into standby, and the power indicator does not turn on.	• The Power button might not have been pressed correctly. • The device might be damaged.	• Press the Power button again. • Try the steps below. 1. From the device, remove the USB cable connected to the AC adapter if you are connecting the device to a power outlet via the AC adapter. 2. Remove the USB cable connected to the computer from the device. 3. Wait two seconds or more, and then reconnect each of the USB cables to the device. 4. When the power indicator turns on, press the Power button again. If the problem persists, contact your service representative.

Problems Using the Device

Problem	Cause	Solution
The device gets too hot to touch.	The device might be damaged.	Remove the AC adapter from the power outlet, and then contact your service representative.
The microphone does not work and captures no sound.	• The microphone might be muted. • The microphone volume on the computer connected to this device might be set low. • The USB cable might not be connected correctly. • This device might not be set as the microphone used for the Web meeting application. • This device is not set as the microphone used on the computer. • The device might be damaged.	• Unmute the microphone. For information about how to unmute the microphone, see page 19 "Muting the Microphones" or page 31 "Screen Configuration". • Turn up the microphone volume on the computer. • Check that the USB cable is connected correctly. • Set this device as the microphone used by your Web meeting application. • Set this device as the microphone used on the computer. If the problem persists, contact your service representative.
The Microphone Mute button is pressed, but the microphone is not muted or unmuted.	• The operation of this device is unstable. • The device might be damaged.	Try the following steps to restart the device:

Problem	Cause	Solution
		1. Press the Power button. 2. From the device, remove the USB cable connected to the AC adapter if you are connecting the device to a power outlet via the AC adapter. 3. Remove the USB cable connected to the computer from the device. 4. Wait two seconds or more, and then reconnect each of the USB cables to the device. If the problem persists, contact your service representative.
No sound is heard from the speaker. Speaker sound is interrupted.	• The speaker volume on this device might be set low. • The USB cable might not be connected correctly. • The network to which the computer connected to this device is connecting might be unstable. • This device is not set as the speaker used on the computer. • The device might be damaged.	• Turn up the speaker volume on this device. For information about how to turn up the speaker volume, see page 19 "Adjusting the Speaker Volume" or page 31 "Screen Configuration". • Check that the USB cable is connected correctly. • Check the speaker settings on the Web meeting application. • Use the Web meeting application when the computer network is stable. • Set this device as the speaker used on the computer. If the problem persists, contact your service representative.

Problem	Cause	Solution
No image from the camera is displayed on the computer.	• The USB cable might not be connected correctly. • This device might not be set as the camera used for the Web meeting application. • The device might not be recognized as an external camera by the computer connected to it. • The operation of this device is unstable. • The device might be damaged. • The operation of the computer connected to this device is unstable.	• Check that the USB cable is connected correctly. • Set this device as the camera used by your Web meeting application. • Try the following steps to restart the device: 1. Press the Power button. 2. From the device, remove the USB cable connected to the AC adapter if you are connecting the device to a power outlet via the AC adapter. 3. Remove the USB cable connected to the computer from the device. 4. Wait two seconds or more, and then reconnect each of the USB cables to the device. • Restart the computer. If the problem persists, contact your service representative.
The image is blurred. The image quality is low.	• The lens cover might be dirty. • A Web meeting application that only supports a lower resolution might be used. • The lighting in the room might be too light or too dark.	• Wipe the lens cover lightly with a soft cloth to clean it. • Use a different Web meeting application. • Adjust the lighting in the room. • Change the placement of the device. • Use the device when the computer network is stable. • Try the following steps to restart the device:

Problem	Cause	Solution
	• The placement of the device might not be appropriate in view of the lighting in the room. • The network to which the computer connected to this device is connecting might be unstable. • The operation of this device is unstable. • The device might be damaged. • The operation of the computer connected to this device is unstable.	1. Press the Power button. 2. From the device, remove the USB cable connected to the AC adapter if you are connecting the device to a power outlet via the AC adapter. 3. Remove the USB cable connected to the computer from the device. 4. Wait two seconds or more, and then reconnect each of the USB cables to the device. • Restart the computer. If the problem persists, contact your service representative.
A speaker is not recognized. A person that is not speaking is recognized.	• Speakers may be 3.6 meters or more away from the device. • Near this device, there might be equipment causing noise. In such an environment, a speaker might not be recognized, or a person that is not speaking might be recognized. • A person that is not speaking might be recognized in response to sound from the speaker.	• Speak at a position closer to the device. • Keep the device away from any equipment causing noise. • Speak longer. • Change the orientation of the device or change the front position on RICOH Meeting 360 Apps. For information about how to change the front position, see page 38 "Configuring the Front View". • Speak while keeping your distance from other people. • Try the following steps to restart the device:

Problem	Cause	Solution
	• A speaker might not be recognized due to short-duration speech. • A speaker might not be recognized if they are at a position where the panoramic image is starting or ending. • If the speaker is close proximity to another person, the person next to the speaker might be recognized. • The operation of this device is unstable. • The device might be damaged.	1. Press the Power button. 2. From the device, remove the USB cable connected to the AC adapter if you are connecting the device to a power outlet via the AC adapter. 3. Remove the USB cable connected to the computer from the device. 4. Wait two seconds or more, and then reconnect each of the USB cables to the device. If the problem persists, contact your service representative.
My voice is heard from the speaker. Feedback occurs.	• Using the device where you can directly hear the voice of the other party might cause feedback. • Using the device right by the wall might cause echoes and feedback. • Near this device, there might be equipment causing noise. • Using the device in a room with high resonance might cause echoes and feedback.	• Use the device in a place where you cannot directly hear the voice of the other party. • Use the device away from the wall. • Keep the device away from any equipment causing noise. • Turn down the speaker volume of the device and adjust the direction of the device. For information about how to turn down the speaker volume, see page 19 "Adjusting the Speaker Volume" or page 31 "Screen Configuration".

Problem	Cause	Solution
	The speaker volume of the device is too high.	
Audio is interrupted or noisy. Audio from your end is interrupted, or noisy audio is heard on the other end.	- The microphone input volume is too low. - Equipment causing noise might be near this device. - Audio might be interrupted due to an inappropriate noise cancellation setting in the Web meeting application. - Speaking while the other party is speaking might cause the audio to be interrupted.	- Turn up the microphone input volume or move closer to the device when speaking. - Keep the device away from any equipment causing noise. - Check the settings for the noise cancellation function in the Web meeting application. - Speak after the other party finishes speaking; if the other party is speaking for an extended period of, mute the device microphone. For how to mute the device microphone, see page 19 "Muting the Microphones".

Problems Using RICOH Meeting 360 Apps

Problem	Cause	Solution
RICOH Meeting 360 Apps cannot be installed.	• The installation file might be damaged. • The operating system used might not be supported by RICOH Meeting 360 Apps. • The installation is prevented by a security policy of the operating system. • The computer connected to this device might not have enough free space. • The operation of the computer connected to this device is unstable.	• Obtain the installation file again, and then try to install the application again. • Use an operating system supported by RICOH Meeting 360 Apps. For information about the operating systems supported by RICOH Meeting 360 Apps, see page 9 "Operating Environment". • Restart the computer. • Use a different computer. If the problem persists, contact your service representative.
Device configuration cannot be performed with RICOH Meeting 360 Apps.	• The USB cable might not be connected correctly. • The operation of this device is unstable. • The device might be damaged. • The operation of the computer connected to this device is unstable.	• Check that the USB cable is connected correctly. • Try the following steps to restart the device:

Problem	Cause	Solution
		1. Press the Power button. 2. From the device, remove the USB cable connected to the AC adapter if you are connecting the device to a power outlet via the AC adapter. 3. Remove the USB cable connected to the computer from the device. 4. Wait two seconds or more, and then reconnect each of the USB cables to the device. • Restart the computer. If the problem persists, contact your service representative.
Desiring to configure a proxy	No proxy was configured to use RICOH Meeting 360 Apps. The proxy needs to be configured in order to connect to the Internet.	Use the following steps to configure a proxy. 1. On the Start menu, open [Settings] and click [Network & Internet]. 2. Click [Proxy]. 3. Fill in the fields as required. 4. Click [Home], and then click [×] at the upper right corner to close the Settings screen.
The administrator password for the device is unknown.	-	Use the following steps to initialize the device's settings: 1. Start RICOH Meeting 360 Apps. 2. Click [Application Information]. 3. Click [Execute] in "Initialize Device Settings".

Problem	Cause	Solution
The message "The network cannot be used because the device is in power saving mode. To use the network, connect the AC adapter to the device." is displayed on the RICOH Meeting 360 Apps screen, and you cannot configure a network or update the firmware.	You are using the device by connecting it to a computer instead of to a power outlet.	When setting a network or updating the firmware, connect the device to a power outlet.

5. Appendix

Specifications

Item	Specifications
Interfaces	• USB Type-C (USB3.1 gen1) × 2 • Ethernet 10BASE-T/100BASE-TX/1000BASE-T • IEEE802.11a/b/g/n/ac/ax • Frequency range 2.4 GHz band: 2.412–2.472 GHz (1–13ch) 5 GHz band: 5.18–5.24 GHz (36, 40, 44, 48 ch), 5.26–5.32 GHz (52, 56, 60, 64 ch), 5.5–5.7 GHz (100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140 ch) • Security types None: Disabled (open system) AES: AES (WPA2-PSK)
Video encoding types Audio encoding types	• Camera, microphone, and speaker functions Video: Motion JPEG Audio: PCM (48 kHz/16 bit/2 ch)
Image display	• Supported resolutions Output to a computer: 1920 × 1080, 1280 × 720 • Speaker recognition range: Max. 3.6 m
Camera	• Resolution: 1920 × 1080 • Angle of view - Horizontal: 360°, vertical: 45 ±2° • Focus: 80 cm (fixed) • Auto white balance • Auto exposure control • Flicker canceler (50 Hz/60 Hz, Auto/Manual) • LTM • Continuous uptime: Max. 8 hours
Zoom	• Type: Digital zoom • Magnification: × 1

Item	Specifications
Microphones	• Quantity: 3 • Frequency range: 80–8,000 Hz • Maximum sound pickup range in an open environment: 3.6 m • Maximum sound pickup range in a closed environment: 6 m • Microphone muting • Microphone gain level adjustment • Auto gain control • Noise reduction • Echo canceler
Speakers	• Output: 8 W × 3 • Frequency range: 220–8,000 Hz
Power	AC 220V 0.8A 50Hz
Power consumption	Maximum power: 45W (when the AC adapter used), 15W (when computer-supplied power is used) Standby power: 1 W or less
External dimensions	Height: 272.6 mm Max. diameter: 110 mm Min. diameter: 90 mm (top portion)
Weight	1.129 kg

Restrictions

The following restrictions apply to the use of this device:

- The device does not support connecting to a WPA2 enterprise network.
- The device's camera can have a video resolution of 1920 × 1080 pixels or 1280 × 720 pixels.

If this video resolution is not available on a computer or Web meeting application due to an environmental or other temporary condition, try to connect this device to a different computer.

- Do not connect this device to a computer that is used in a virtual desktop environment such as thin client or remote desktop.
- When the device is connected to a computer, the computer recognizes the device as a network device (a network adapter).

Depending on the computer's network settings or the network-related software that is installed, the network settings might change automatically.

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