

Read This First

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For information not in the printed manual, refer to the HTML/PDF files on the website.





Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information in this manual before using the machine.

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Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

How to Read This Manual

Symbols

This manual uses the following symbols:



Indicates points to pay attention to when using the machine.



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

[]

Indicates the names of keys on the machine's display or control panels.

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.

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

Notes

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

Two kinds of size notation are employed in this manual.

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

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.

About Operating Instructions

Operating Instructions explains how to operate and troubleshoot the machine after it is set up. It also lists the detailed specifications of the machine. You can download Operating Instructions from the RICOH home page.

http://www.ricoh.com/downloads/



For details about how to install and use an optional Interactive Whiteboard Remote License, see
 Operating Instructions.

Checking the Contents of the Machine

This machine consists of the Interactive Whiteboard main unit (hereafter "main unit") and Interactive Whiteboard Pen (hereafter "pen"). The following accessories are also included with the main unit and pen.

Main Unit

Accessories	Usage	Reference
D-SUB 15 pin cable × 1	Used to connect an image output device, such as a computer, tablet, or document camera to display an image, and to write information on the image that is displayed.	See Operating Instructions.
Power cord × 1	Used to connect to a power outlet.	See page 40 "Connecting the Power Cord".
Pen tray × 1	Used to hold the pen. Attached to the main unit.	See page 39 "Mounting the Pen Tray".
Screws for the pen tray × 2	Used to mount the pen tray on the main unit.	See page 39 "Mounting the Pen Tray".

- Read This First (This Manual)
- Other documents

Pen

Accessories	Usage	Reference
AAA size battery × 1	Place the battery in the pen.	See Operating Instructions.

1. Safety Information

This chapter describes the safety precautions.

Safety During Operation

In this manual, the following important symbols are used:



MARNING

Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.



ACAUTION

Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

Safety Precautions to Be Followed

This section explains safety precautions that should always be followed when using this machine.

Environments Where the Machine Can Be Used

This section explains safety precautions about environments where the machine can be used.

MARNING

- 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.
- 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.

CAUTION

- Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.
- Do not place any objects on the machine. Doing so may cause the machine to topple over, possibly resulting in injury.
- Do not place the machine on an unstable or tilted surface. If it topples over, an injury might 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 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.
- Install the machine securely. If the machine falls over, it might become damaged and an injury might occur.
- 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.

CAUTION

- Do not obstruct the machine's air inlet or outlet. Doing so risks fire caused by overheated internal components or resulting in damage to the product.
- Do not set the machine or accessories in a location exposed to excessive shaking. Doing so may
 cause an injury or accident. If an internal component is damaged by shaking, it may cause a fire
 or product failure.

Handling Power Cords and Power Cord Plugs

This section explains safety precautions about handling power cords and power cord plugs.

Notes for users in North America

MARNING

• Connect the supplied 120 V cable to the 120 V power supply.

Notes for users in EU and other areas

MARNING

• Connect the supplied 220 – 240 V cable to the 220 – 240 V power supply.

∴ WARNING

- Do not use any frequencies other than those that match the specifications shown. Doing so could result in fire or electric shock.
- Avoid using an extension cord or power strip when possible. Doing so could result in fire or electric shock.
- If for some reason you must use an extension cord or power strip, make sure the total power
 consumption of the connected devices does not exceed the power rating of the extension cord or
 power strip. If the total power consumption exceeds the specified power rating, the connected
 devices might become damaged or cause a fire.
- Do not use power cords that are damaged, broken, or modified. Also, do not use power cords
 that have been trapped under heavy objects, pulled hard, or bent severely. Doing so could
 result in fire or electric shock.
- Touching the prongs of the power cable's plug with anything metallic constitutes a fire and electric shock hazard.

MARNING

- 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
- If the power cord is damaged and its inner wires are exposed or broken, contact your service representative for a replacement. Use of damaged power cords could result in fire or electric shock.
- Be sure to disconnect the plug from the wall outlet at least once a year and check for the following:
 - There are burn marks on the plug.
 - The prongs on the plug are deformed.
- If any of the above conditions exist, do not use the plug and consult your dealer or service representative. Use of the plug could result in fire or electric shock.
- Be sure to disconnect the power cord from the wall outlet at least once a year and check for the following:
 - The power cord's inner wires are exposed, broken, etc.
 - The power cord's coating has a crack or dent.
 - When bending the power cord, the power turns off and on.
 - Part of the power cord becomes hot.
 - The power cord is damaged.
- If any of the above conditions exist, do not use the power cord and consult your dealer or service representative. Use of the power cord could result in fire or electric shock.

CAUTION

- Be sure to push the plug of the power cord fully into the wall outlet. Partially inserted plugs create an unstable connection that can result in unsafe buildup of heat.
- 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.

⚠ CAUTION

- Be sure to disconnect the plug from the wall outlet and clean the prongs and the area around the prongs at least once a year. Allowing dust to build up on the plug constitutes a fire hazard.
- When performing maintenance on the machine, always disconnect the power cord from the wall outlet.

Handling the Main Unit

This section explains safety precautions about handling the main unit.

⚠ WARNING

- Be sure to locate the machine as close as possible to a wall outlet. This will allow easy disconnection of the power cord in the event of an emergency.
- If the machine emits smoke or odours, or if it behaves unusually, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.
- If metal objects, or water or other fluids fall inside this machine, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.
- Do not touch this machine if a lightning strike occurs in the immediate vicinity. Doing so could result in electric shock.
- The following explains the warning messages on the plastic bag used in this product's packaging.
 - Keep the polythene materials (bags, etc.) supplied with this machine away from babies and small children at all times. Suffocation can result if polythene materials are brought into contact with the mouth or nose.

⚠ CAUTION

- Do not place an object on this product or climb on it. Doing so may result in injury.
- Do not press the screen forcefully or subject it to shock. Doing so may result in damage, a malfunction, or injury.

1

ACAUTION

- Do not press the screen with a sharp object. Doing so may result in damage, a malfunction, or injury.
- Do not scratch or hit the main unit with a hard object. Doing so may result in damage, a malfunction, or injury.

Handling the Machine's Interior

This section explains safety precautions about handling the machine's interior.

∴ WARNING

- Do not remove any covers or screws that are not mentioned in this manual. Contact your service representative if any of the product's internal components require maintenance, adjustment, or repair.
- Do not disassemble or modify the product. Doing so may cause injury or malfunction.

CAUTION

• If the machine's interior is not cleaned regularly, dust will accumulate. Fire and breakdown can result from heavy accumulation of dust inside this machine. Contact your sales or service representative for details about and charges for cleaning the machine's interior.

Handling the Machine's Supplies

This section explains safety precautions about handling the machine's supplies.



 Keep battery out of reach of children. If a child accidentally swallows a battery, consult a doctor immediately.

About the Batteries

This section explains things that you should follow in regard to the batteries.

WARNING

- For safe operation, follow the warnings below regarding the batteries used in the pen. 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.
 - Correctly insert batteries according to the polarity (+ / -).
 - Do not charge non-rechargeable batteries.
 - 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 from the pen that are past their suggested use period or that are depleted.
 - 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.

CAUTION

- Danger of explosion if battery is incorrectly replaced.
- Replace only with the same or equivalent type (AAA alkaline batteries) recommended by the manufacturer. Dispose of used battery according to the manufacturer's instructions.

Moving

This section explains safety precautions about moving the main unit.



Unplug the power cord from the wall outlet before you move the machine. While moving the
machine, take care that the power cord is not damaged under the machine. Failing to take these
precautions could result in fire or electric shock.

ACAUTION

 Contact your service representative if you need to lift the machine (such as when relocating it to another floor). Do not attempt to lift the machine without the assistance of your service representative. The machine will be damaged if it topples or is dropped, resulting in malfunction and risk of injury to users.

Handling the Stand

This section explains safety precautions about handling the stand.

∴ WARNING

- Make sure that two or more people move the stand. Otherwise, it is likely that the stand falls down or the main unit falls off so that an injury may result.
- When assembling the stand, mounting the main unit on a wall, or installing the main unit, make sure to contact your local dealer. Do not attempt to perform the installation by yourself.
- Do not hang, lean against, or step on the stand. The maximum load weight of the shelf board is 10 kg (22.1 lb.). Do not place heavy objects, sit, or step on the shelf board. The stand might become deformed, resulting in an accident.
- Install the stand so that the power cord and cables do not get tangled or caught. If the cables get caught, they may become damaged, resulting in fire or electric shock.
- Do not disassemble, repair, or modify the stand. The stand might become deformed or damaged, or the stand might fall down.
- Only mount the display that is supported by this stand. If you attempt to use another display with
 this stand, the display might fall off the stand, become damaged, or tip over.
 For information about the supported models, see the RICOH web site (http://www.ricoh.com/).
- Do not adjust the display height by yourself. Doing so might cause the display to fall off the stand, tip over, and become damaged, resulting in injury.

ACAUTION

Raise the fall prevention metal fittings and unlock the caster stoppers when moving the stand. If
you fail to unlock the stoppers, the stand might tip over and result in an accident that damages
the stand or main unit.

ACAUTION

- When moving the stand, do not place your fingers on the inside of the main unit frame. Doing so may damage the internal sensor.
- Move the stand slowly when traveling across an uneven surface with bumps or depressions to avoid exposing the main unit to sudden jolts. Shaking or sudden jolts can damage the components of the main unit or the precision devices inside the main unit, and may cause the main unit failure.
- After moving the stand, lock the caster stoppers and lower the fall prevention metal fittings. If you
 fail to lock the stoppers, the stand might unexpectedly move or fall down, resulting in an accident
 that causes damage to the stand or main unit.
- Do not shake or forcefully touch the stand. If the stand is used improperly, the stand might become damaged, causing an accident that results in injury.

2. Information for This Machine

This chapter describes laws and regulations related to this machine.

Laws and Regulations

Warning on Class A Product

Warning:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

CE Marking Traceability Information (For EU Countries Only)

Manufacturer:

Ricoh Co., Ltd.

3-6 Nakamagome 1-chome, Ohta-ku, Tokyo. 143-8555, Japan

Importer:

Ricoh Europe PLC

20 Triton Street, London. NW1 3BF, United Kingdom

Overseas Affiliates and Noise Emission Information

In accordance with TUV "GS Symbol" requirements, details of the EU office or representative company are given below.

Overseas Affiliates

Ricoh Europe PLC

20 Triton Street, London. NW1 3BF, United Kingdom

Noise Emission

Maschinenlärminformations-Verordnung 3. GPSGV:

Der höchste Schalldruckpegel beträgt 70 dB(A) oder weniger gemäss EN ISO 7779

User Information on Electrical and Electronic Equipment

Users in the countries where this symbol shown in this section has been specified in national law on collection and treatment of E-waste

Our Products contain high quality components and are designed to facilitate recycling.

Our products or product packaging are marked with the symbol below.



The symbol indicates that the product must not be treated as municipal waste. It must be disposed of separately via the appropriate return and collection systems available. By following these instructions you ensure that this product is treated correctly and help to reduce potential impacts on the environment and human health, which could otherwise result from inappropriate handling. Recycling of products helps to conserve natural resources and protect the environment.

For more detailed information on collection and recycling systems for this product, please contact the shop where you purchased it, your local dealer or sales/service representatives.

All Other Users

If you wish to discard this product, please contact your local authorities, the shop where you bought this product, your local dealer or sales/service representatives.

For users in India

This product complies with the "India E-waste Rule 2011" and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 weight % and 0.01 weight % for cadmium, except for the exemptions set in Schedule 2 of the Rule.

For Turkey only

Üretici:

Ricoh Company, Ltd.

Ricoh Building, 8-13-1 Ginza, Chuo-ku, Tokyo 104-8222 Japan

+81-36278-2111(English only/Sadece İngilizce)

EEE Yönetmeliğine Uygundur.

Bu sistem sarf malzemeleri ve yedek parçaları da dahil olmak üzere EEE Yönetmeliğine Uygundur.

Note for the Battery and/or Accumulator Symbol



In accordance with the Battery Directive 2006/66/EC Article 20 Information for end-users Annex II, the above symbol is printed on batteries and accumulators.

This symbol means that in the European Union, used batteries and accumulators should be disposed of separately from your household waste.

In the EU, there are separate collection systems for not only used electrical and electronic products but also batteries and accumulators.

Please dispose of them correctly at your local community waste collection/recycling centre.

Notes to USA Users of FCC Requirements

Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Caution:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Using the shield cable

Properly shielded and grounded cables and connectors must be used for connections to a host computer (and/or peripheral) in order to meet FCC emission limits.

Installing the ferrite core

Ferrite core must be used for RF interference suppression.

Notes to Users in the State of California (Notes to Users in USA)

Perchlorate Material - special handling may apply. See: www.dtsc.ca.gov/hazardouswaste/perchlorate

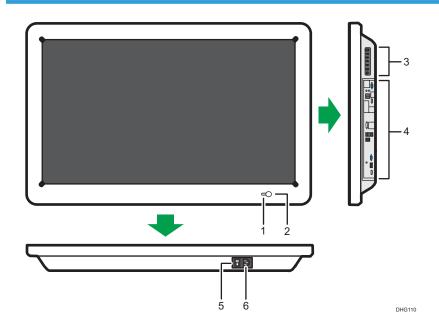
3

3. Setting Up the Machine

This chapter explains how to install, start, and stop this machine.

Component Names and Functions

Main Unit



1. Power indicator

This indicator remains lit while the machine is running.

2. Power button ()

Starts and stops the machine.

Even after the power button is pressed to stop the machine, electricity will continue to flow to the machine until the main power switch is turned off.

For details about how to start and stop the machine, see page 32 "Starting and Stopping the Machine".

3. Control Panel

4. Ports on the Machine

5. Main power switch

Turns the main power on and off.

The meanings of the symbols for the main power switch on this machine are as follows:

: MAIN POWER ON

O: MAIN POWER OFF

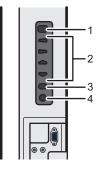
For details about how to start and stop the machine, see page 32 "Starting and Stopping the Machine".

6. Power cord connector

Connects the power cord.

For details about how to connect the power cord, see page 40 "Connecting the Power Cord".

Control Panel



DHG111

1. [PIP] button

Displays images from a device connected via VGA Input 2 in a sub-window, or hides these images.

2. Scroll buttons

Scroll through the options when selecting and modifying the monitor settings. These buttons are also used in the following cases:

- Press the left or right button to adjust the brightness of the monitor.
- Press the up or down button to adjust the volume.
- Press and hold the up and down buttons to mute the sound.

3. [Menu] button

Displays the menu screen for adjusting the monitor settings.

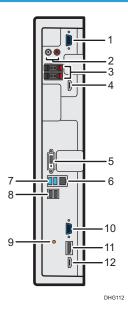
4. [Input/Enter] button

- Displays images from a device connected via HDMI Input 2 or VGA Input 2 in full screen, or hides these images. Each time this button is pressed, the screen changes in the following order:
 - Whiteboard → VGA Input 2 → HDMI Input 2 → Whiteboard
- The sub-window closes when this button is pressed while VGA Input 2 is displayed. Press the [PIP] button to show the sub-window again.
- This button is also used to apply the settings of the menu that was adjusted.

.3

3

Ports on the Machine



1. VGA Input 2

Connects a video conferencing device to the machine. You can display images from the connected device while using the machine. For details about how to display images from a video conferencing device, see Operating Instructions.

2. Audio Output 2 (Line Out/Stereo)

This terminal is used to connect built-in speakers to output the audio signal of the HDMI input or DisplayPort input.

3. Audio Output 1 (Speaker/Stereo: 10 W x 10 W)

These terminals are used to connect external speakers to output the audio signal of the HDMI input or DisplayPort input.

4. HDMI Input 2 [AV Input]

Connects an audio-visual device to the machine. You can display copyright-protected content, such as data on DVDs and Blu-ray discs.

5. DVI Output (DVI-D)

This terminal is used to connect a projector that supports full-HD to project screens. For details about how to connect a projector, see Operating Instructions.

6. Ethernet interface (10/100/1000 Mbps LAN port)

This interface is used to connect the machine to a network. For details about how to connect to a network, see Operating Instructions.

7. USB ports (USB 3.0 Type A)

These ports are used to connect a USB memory device to the machine to perform a firmware update, save a page, or use other functions. When using a USB cable to connect a USB device, use a cable less than 3 meter long.

8. USB ports (USB 2.0 Type A)

These ports are used to connect a USB memory device to the machine to perform a firmware update, save a page, or use other functions.

9. SSD access LED

10. VGA Input 1

This terminal is used to connect an image output device, such as a computer, tablet, or document camera to display an image, and to write information on the image that is displayed. For details about how to connect a computer, see Operating Instructions.

11. DisplayPort Input

This terminal is used to connect an image output device, such as a computer, tablet, or document camera to display an image, and to write information on the image that is displayed. For details about how to connect a computer, see Operating Instructions.

12. HDMI Input 1

This terminal is used to connect an image output device, such as a computer, tablet, or document camera to display an image, and to write information on the image that is displayed. You cannot display copyright-protected content, such as data on DVDs and Blu-ray discs. For details about connecting an image output device, see Operating Instructions.

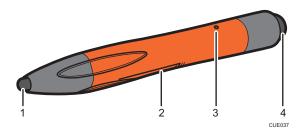
Pen

MARNING

- For safe operation, follow the warnings below regarding the batteries used in the pen. 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.
 - Correctly insert batteries according to the polarity (+ / -).
 - Do not charge non-rechargeable batteries.
 - 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 from the pen that are past their suggested use period or that are depleted.
 - 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.

⚠ WARNING

- 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. Pen nib

The part used to touch the screen to write, draw, and select operations. If the pen nib becomes damaged, replace it with a replacement pen nib.

2. Battery cover

3. Power indicator

Indicates the remaining amount of battery.

- The power indicator starts flashing when the pen nib or bottom is touched.
- When the pen is not used for a certain amount of time, the power indicator turns off.
- The power indicator flashes at a slower rate when the battery is low.
- When the battery runs out, the power indicator will not turn on, even if the pen nib or bottom is touched. Replace the battery.

4. Pen bottom

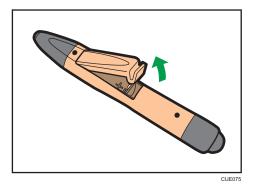
The part used to touch the screen to clear the previous operation. If the pen bottom becomes damaged, replace it with a replacement pen bottom.



• For details about how to replace the pen nib and bottom, see Operating Instructions.

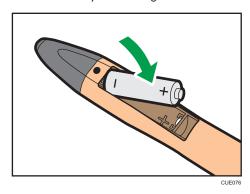
Inserting a Battery into the Pen

1. Remove the battery cover.

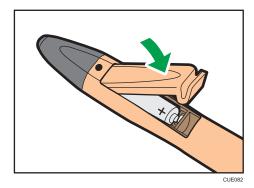


2. Insert the battery.

Insert the battery with its negative terminal facing the side of the pen nib.



3. Replace the battery cover.

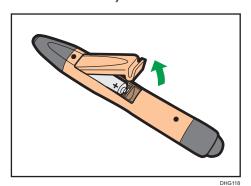


3

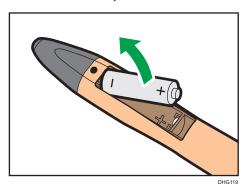
3

Removing a Battery from the Pen

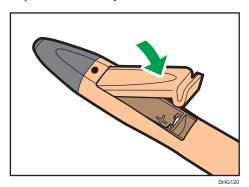
1. Remove the battery cover.



2. Remove the battery.



3. Replace the battery cover.



Moving the Machine

When moving a machine mounted on the stand, follow the procedure below.

MARNING

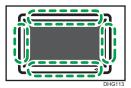
• Make sure that two or more people move the stand. Otherwise, it is likely that the stand falls down or the main unit falls off so that an injury may result.

ACAUTION

- Unplug the power cord from the wall outlet before you move the machine. While moving the
 machine, take care that the power cord is not damaged under the machine. Failing to take these
 precautions could result in fire or electric shock.
- Contact your service representative if you need to lift the machine (such as when relocating it to another floor). Do not attempt to lift the machine without the assistance of your service representative. The machine will be damaged if it topples or is dropped, resulting in malfunction and risk of injury to users.
- Raise the fall prevention metal fittings and unlock the caster stoppers when moving the stand. If
 you fail to unlock the stoppers, the stand might tip over and result in an accident that damages
 the stand or main unit.
- When moving the stand, do not place your fingers on the inside of the main unit frame. Doing so may damage the internal sensor.
- Move the stand slowly when traveling across an uneven surface with bumps or depressions to avoid exposing the main unit to sudden jolts. Shaking or sudden jolts can damage the components of the main unit or the precision devices inside the main unit, and may cause the main unit failure.
- After moving the stand, lock the caster stoppers and lower the fall prevention metal fittings. If you
 fail to lock the stoppers, the stand might unexpectedly move or fall down, resulting in an accident
 that causes damage to the stand or main unit.

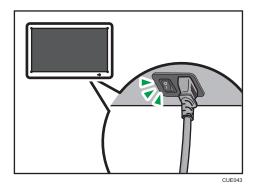
Important

When carrying the main unit, hold it by the areas specified in the following illustration. Do not touch
the sensors in the four corners of the main unit.



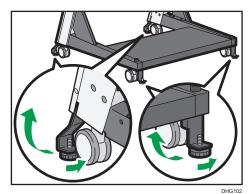
3

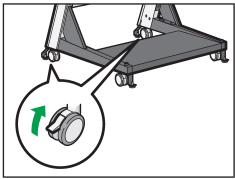
- When moving a machine mounted on a wall, contact your local dealer and ask for assistance.
- When using multiple machines in the same location, make sure that each machine is set at least 15 m (49.2 feet) apart. If machines are placed within a distance of 15 meters, pen operations may interfere with other machines, causing unintended consequences.
- 1. Make sure the main power switch is turned off.



Make sure the machine is completely turned off. If the main power remains on, turn it off. For details about how to turn the main power switch off, see page 33 "Stopping".

- 2. Detach all the connected cables.
- 3. Raise the fall prevention metal fittings.

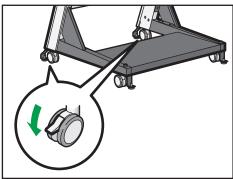




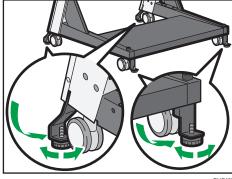
5. Move the machine.

Move it slowly to avoid subjecting the main unit to excessive shock.

6. After you move the machine to the desired location, lock the stopper for each caster.



7. Lower and adjust the fall prevention metal fittings.



Failure to lock the stoppers may result in damage to the machine, cause the machine to tip over, or lead to injury.

3

8. Connect the power cord.

For details about how to connect the power cord, see page 40 "Connecting the Power Cord".

Starting and Stopping the Machine

∴ WARNING

- Be sure to locate the machine as close as possible to a wall outlet. This will allow easy disconnection of the power cord in the event of an emergency.
- If the machine emits smoke or odours, or if it behaves unusually, you must turn off its power
 immediately. After turning off the power, be sure to disconnect the power cord plug from the
 wall outlet. Then contact your service representative and report the problem. Do not use the
 machine. Doing so could result in fire or electric shock.
- If metal objects, or water or other fluids fall inside this machine, you must turn off its power
 immediately. After turning off the power, be sure to disconnect the power cord plug from the
 wall outlet. Then contact your service representative and report the problem. Do not use the
 machine. Doing so could result in fire or electric shock.
- Do not touch this machine if a lightning strike occurs in the immediate vicinity. Doing so could result in electric shock.

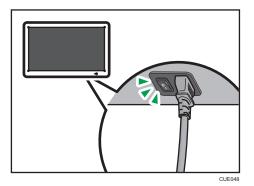
 When using the machine for an extended period of time, make sure to take breaks to prevent eye strain.

The machine is equipped with a main power switch and power button. We recommend normally leaving the main power switch on. If you intend to move the machine or do not expect to use it for an extended period of time, turn the main power switch off.

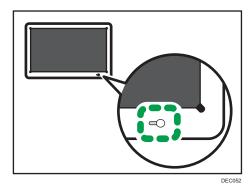
Starting

When the machine starts up, the position of the touch sensor is adjusted automatically. Do not touch
the screen before the screen changes to the whiteboard. If you do, the position of the touch sensor
may not be adjusted correctly.

1. Turn the main power switch on.



2. Press the power button.



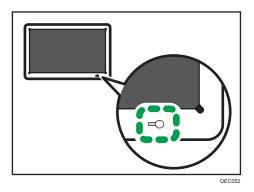
The screen appears.

Stopping



- Do not turn the main power switch off or remove the power cord before the machine is completely turned off. Doing so may ruin the flash memory drive or cause other damage.
- If the machine is turned off while sharing a screen with multiple devices connected via a network and performing operations on the shared screen, the data for these operations will be lost.
- 1. Press the power button.

Press and immediately release the power button.



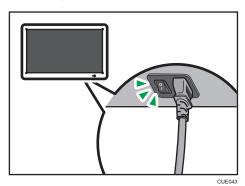
The shutdown confirmation message appears.

2. Touch [Turn Power Off Now].

The shutdown process starts.

While [Turn Power Off Now] is not touched, the shutdown process automatically starts after 5 seconds.

3. After the power indicator turns off, turn the main power switch off.



Installing the Machine (Installed by a Contractor)

⚠ WARNING

· When assembling the stand, mounting the main unit on a wall, or installing the main unit, make sure to contact your local dealer. Do not attempt to perform the installation by yourself.

The main unit can be mounted on the dedicated stand or mounted on a wall. For details about how to mount the main unit on the dedicated stand, see Installation Guide included with the dedicated stand. For details about how to mount the main unit on the wall, see the instructions included with the wallmounting bracket.

Installation Precautions

⚠ WARNING

- 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.
- 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.
- Install the machine so that the power cord and cables do not get tangled or caught. If the cables get caught, they may become damaged, resulting in fire or electric shock.
- The following explains the warning messages on the plastic bag used in this product's packaging.
 - · Keep the polythene materials (bags, etc.) supplied with this machine away from babies and small children at all times. Suffocation can result if polythene materials are brought into contact with the mouth or nose.

⚠ CAUTION

- · Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might
- Do not place any objects on the machine. Doing so may cause the machine to topple over, possibly resulting in injury.

⚠ CAUTION

- Do not place the machine on an unstable or tilted surface. If it topples over, an injury might
- 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.

Stand installation precautions



- · Do not hang, lean against, or step on the stand. The stand might become deformed, resulting in an accident.
- Make sure that two or more people assemble and move this stand. Otherwise, it is likely that this stand falls down or the display falls off so that an injury may result while the stand is being assembled.
- To assemble and move this stand, turn off the power or disconnect cables. Otherwise, it is likely that assembling this stand poses unexpected electric shock or fire hazard. Also, the stand may fall down if it is caught in cables.
- The display height must be adjusted by the installer. Adjusting the display height by yourself might cause the display to fall off the stand, tip over, and become damaged, resulting in injury.

⚠ CAUTION

- Assemble this stand in a wide area, and place blankets or cushions on the floor so that it will not be damaged. Assembling the stand without using blankets and cushions may cause the floor to be damaged.
- Raise the fall prevention metal fittings and unlock the caster stoppers when moving the stand. If you fail to unlock the stoppers, the stand might tip over and result in an accident that damages the stand or main unit.
- After moving the stand, lock the caster stoppers and lower the fall prevention metal fittings. If you fail to lock the stoppers, the stand might unexpectedly move or fall down, resulting in an accident that causes damage to the stand or main unit.
- When you assemble the stand, do not set your feet near the casters or insert your hands in between parts. Your hands or feet might get caught, resulting in injury.



• Do not shake or forcefully touch the stand. If the stand is used improperly, the stand might become damaged, causing an accident that results in injury.

Wall mounting precautions

A VESA-compliant bracket is required to mount the main unit on a wall.



- At least two people are required to install, remove, or move the main unit.
- When mounting a VESA-compliant bracket, use the bracket that corresponds to 400×200 mm $(15.7 \times 7.9 \text{ inches})$.
- Use a bracket that creates 3 cm (1.2 inches) or more of clearance when the main unit is mounted on a wall or the ceiling.
- The weight of the main unit is about 50 kg (110.2 lb.). Use a mounting bracket that is sufficiently strong enough to support the weight of the main unit.
- When mounting the main unit on a wall or the ceiling, select a location that can withstand four times the combined weight of the main unit and mounting bracket, such as a concrete wall or pillar.
- When mounting a bracket, use M8 screws.
- Use only the VESA screw holes on the back.



 Contact your local dealer for details about the recommended wall-mounting bracket for the main unit.

Environmental Specifications

The following table lists the environmental specifications for the machine:

Environment	Specifications
Temperature	10 – 32°C (50 – 89.6°F)
Humidity	15 – 80% (Non-condensing)
Maximum altitude	2,000 m (6,600 feet)
Power	AC 100 – 240 V, 50/60 Hz

The machine is designed for indoor use.

- The machine is equipped with an infrared touch panel. Do not use the machine in a location exposed to strong light, such as direct sunlight. If you use the machine in a location exposed to strong light, the machine may not operate properly.
- We recommend that you take the necessary measures to prevent the machine from falling over after it is installed.



• If you install the machine in a location exposed to high temperatures, we recommend that you specify a low humidity (60% or lower) when operating the machine.

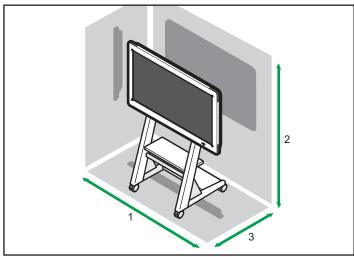
Installation Space Requirements

Secure a sufficient amount of clearance around the machine to allow for cable routing and better airflow.



When using multiple machines in the same location, make sure that each machine is set at least 15 m (49.2 feet) apart. If machines are set within 15 m of each other, unintended operations may be performed.

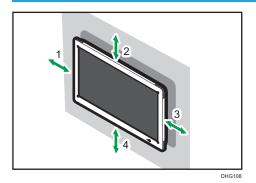
When installing the machine by mounting the main unit on a stand



DHG10

- 1. Width: 150 cm (59.1 inches) or more
- 2. Height: 200 cm (78.7 inches) or more
- 3. Depth: 100 cm (39.4 inches) or more

When installing the machine by mounting the main unit on a wall



1. Left: 10 cm (3.9 inches) or more

2. Top: 20 cm (7.9 inches) or more

3. Right: 15 cm (5.9 inches) or more

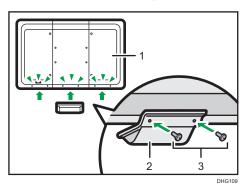
4. Under: 20 cm (7.9 inches) or more

Mounting the Pen Tray

Important

When mounting the pen tray, make sure to contact your local dealer. Do not attempt to perform the
mounting by yourself.

After mounting the main unit, mount the pen tray on the main unit. The pen tray may be positioned on the left side, the center, or the right side of the lower part of the main unit.



1. Main unit

2. Pen tray

3. Screws for the pen tray



- A Phillips screwdriver or coin is required to mount the pen tray. Select the proper tool according to location in which the main unit is installed.
- When removing the main unit from the stand or wall, make sure to remove the pen tray first.

Connecting the Power Cord

Notes for users in North America



• Connect the supplied 120 V cable to the 120 V power supply.

Notes for users in EU and other areas



• Connect the supplied 220 - 240 V cable to the 220 - 240 V power supply.

For users in Norway, this product is also designed for an IT power distribution system with phase-to-phase voltage of 230V.

MARNING

- Do not use any frequencies other than those that match the specifications shown. Doing so could result in fire or electric shock.
- Avoid using an extension cord or power strip when possible. Doing so could result in fire or electric shock.
- If for some reason you must use an extension cord or power strip, make sure the total power
 consumption of the connected devices does not exceed the power rating of the extension cord or
 power strip. If the total power consumption exceeds the specified power rating, the connected
 devices might become damaged or cause a fire.
- Do not use power cords that are damaged, broken, or modified. Also, do not use power cords
 that have been trapped under heavy objects, pulled hard, or bent severely. Doing so could
 result in fire or electric shock.
- Touching the prongs of the power cable's plug with anything metallic constitutes a fire and electric shock hazard.
- The supplied power cord is for use with this machine only. Do not use it with other appliances.
 Doing so could result in fire or electric shock.

WARNING

- It is dangerous to handle the power cord plug with wet hands. Doing so could result in electric shock.
- If the power cord is damaged and its inner wires are exposed or broken, contact your service representative for a replacement. Use of damaged power cords could result in fire or electric shock.
- Be sure to disconnect the plug from the wall outlet at least once a year and check for the following:
 - There are burn marks on the plug.
 - The prongs on the plug are deformed.
- If any of the above conditions exist, do not use the plug and consult your dealer or service representative. Use of the plug could result in fire or electric shock.
- Be sure to disconnect the power cord from the wall outlet at least once a year and check for the following:
 - The power cord's inner wires are exposed, broken, etc.
 - The power cord's coating has a crack or dent.
 - When bending the power cord, the power turns off and on.
 - Part of the power cord becomes hot.
 - The power cord is damaged.
- If any of the above conditions exist, do not use the power cord and consult your dealer or service representative. Use of the power cord could result in fire or electric shock.

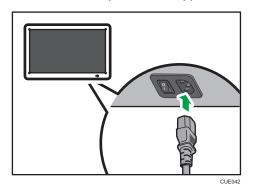
CAUTION

- Be sure to push the plug of the power cord fully into the wall outlet. Partially inserted plugs create an unstable connection that can result in unsafe buildup of heat.
- 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.

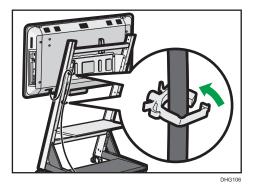


- When performing maintenance on the machine, always disconnect the power cord from the wall outlet.
- 1. Connect the power cord to the power cord connector.

Use the dedicated power cord supplied with this machine.



2. When installing the machine by mounting the main unit on a stand, keep the power cord connected to the clamp.



3. Connect the power plug to the wall outlet.

4. Troubleshooting

This chapter explains what to do when you cannot use the machine.

The Machine Does Not Start

If the machine does not start, perform the following procedure:

- Make sure the power cord is connected.
 See page 40 "Connecting the Power Cord".
- Make sure the main power switch is turned on. See page 32 "Starting".
- 3. If the problem persists, contact your service representative.



 For details about how to solve problems that may occur after you start the machine, or for details about how to handle error messages that are displayed, see Operating Instructions.

5. Appendix

Trademarks

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