Operating Instructions

Copy Reference

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.

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.

Important

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Notes

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

Certain options might not be available in some countries. For details, please contact your local dealer.

Laser Safety:

This machine is considered a class 1 laser device, safe for office/EDP use. The machine contains a 5-milliwatt, 760-800 nanometer wavelength, GaAIAs laser diode. Direct (or indirect reflected) eye contact with the laser beam might cause serious eye damage. Safety precautions and interlock mechanisms have been designed to prevent any possible laser beam exposure to the operator.

The following label is attached on the back side of the machine.

CLASS 1 LASER PRODUCT
LASER KLASSE 1 PRODUKT

Caution:

Use of controls or adjustments or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

Notes:

Two kinds of size notation are employed in this manual. With this machine refer to the metric version.

For good copy quality, the supplier recommends that you use genuine toner from the supplier.

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

Power Source

220 - 240V, 50/60Hz, 4 A or more

Please be sure to connect the power cord to a power source as above. For details about power source, see p.57 "Power Connection".

Manuals for This Machine

The following manuals describe the operational procedures of this machine. For particular functions, see the relevant parts of the manual.

🖉 Note
❒ Manuals provided are specific to machine type.
❒ Adobe Acrobat Reader is necessary to view the manuals as a PDF file.

❖ General Settings Guide
Provides an overview of the machine and describes System Settings (paper trays, Key Operator Tools, etc.), and troubleshooting.

❖ Network Guide
Describes procedures for configuring the machine and computers in a network environment.

❖ Copy Reference (this manual)
Describes operations, functions, and troubleshooting for the machine's copier function.

❖ Printer/Scanner Reference
Describes system settings, functions, troubleshooting and operations for the machine's printer and scanner function.

❖ Other Manuals
- Manuals for This Machine
- Safety Information
- Quick Reference Copy Guide
- Quick Reference Printer / Scanner Guide

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5. Remarks

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Notice

Important

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

How to Read This Manual

Symbols

The following set of symbols is used in this manual.

⚠ *WARNING:*

This symbol indicates a potentially hazardous situation that might result in death or serious injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

⚠ *CAUTION:*

This symbol indicates a potentially hazardous situation that might result in minor or moderate injury or property damage that does not involve personal injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

* The statements above are notes for your safety.

⚜Important

If this instruction is not followed, paper might be misfed, originals might be damaged, or data might be lost. Be sure to read this.

🗐 Preparation

This symbol indicates information or preparations required prior to operating.

🖉 Note

This symbol indicates precautions for operation, or actions to take after abnormal operation.

🖢 Limitation

This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

🔎Reference

This symbol indicates a reference.

[   ]

Keys that appear on the machine's display panel.

【   】

Keys built into the machine's control panel.

Functions Requiring Optional Configurations

The following functions are available when the ARDF is installed:

❖ **Duplex:**

- 2 Sided → 2 Sided

❖ **One-Sided Combine:**

- 2 Sided 1 Page → Combine 1 Side
- 2 Sided 2 Pages → Combine 1 Side

❖ **Two-Sided Combine:**

- 2 Sided 4 Pages → Combine 2 Side
- 2 Sided 8 Pages → Combine 2 Side

❖ **Series Copies:**

- 2 Sided → 1 Sided

Safety Information

When using this machine, the following safety precautions should always be followed.

Safety During Operation

In this manual, the following important symbols are used:

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

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

⚠ *WARNING:*

- **Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.**
- **To avoid hazardous electric shock or laser radiation exposure, do not remove any covers or screws other than those specified in this manual.**
- **Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following occurs:**
  - **You spill something into the machine.**
  - **You suspect that your machine needs service or repair.**
  - **The external housing of your machine has been damaged.**
- **Do not incinerate spilled toner or used toner. Toner dust might ignite when exposed to an open flame.**
- **Disposal can take place at our authorized dealer.**
- **Dispose of the used toner bottle in accordance with the local regulations.**
- **Connect the machine only to the power source described on the inside front cover of this manual. Connect the power cord directly into a wall outlet and do not use an extension cord.**
- **Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it. Do not pull it hard nor bend it more than necessary. These actions could cause an electric shock or fire.**
- **Keep the machine away from flammable liquids, gases, and aerosols. A fire or an electric shock might occur.**
- **Do not incinerate used toner or toner containers. Toner dust might ignite when exposed to an open flame.**
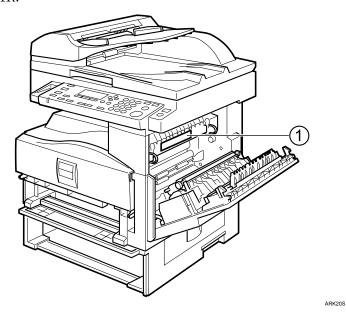
⚠ *CAUTION:*

- *Protect the machine from dampness or wet weather, such as rain and snow.*
- *Unplug the power cord from the wall outlet before you move the machine. While moving the machine, you should take care that the power cord will not be damaged under the machine.*
- *When you disconnect the power plug from the wall outlet, always pull the plug (not the cable).*
- *Do not allow paper clips, staples, or other small metallic objects to fall inside the machine.*
- *Keep toner (used or unused) and toner bottle out of the reach of children.*
- *For environmental reasons, do not dispose of the machine or expended supply waste at household waste collection points. Disposal can take place at an authorized dealer.*
- *The inside of the machine could be very hot. Do not touch the parts with a label indicating the "hot surface". Otherwise, an injury might occur.*
- *Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.*
- *Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.*
- *When the optional paper tray unit is installed, do not push the upper part of the main unit horizontally. An injury might occur if the paper tray unit becomes detached from the main unit.*
- *If you use the machine in a confined space, make sure there is a continuous air turnover.*
- *Keep toner (used or unused) and toner containers out of reach of children.*
- *If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.*
- *If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.*
- *If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.*
- *Avoid getting toner on your clothes or skin when removing a paper jam or replacing toner. If your skin comes into contact with toner, wash the affected area thoroughly with soap and water.*
- *If toner gets on your clothing, wash with cold water. Hot water will set the toner into the fabric and may make removing the stain impossible.*

Positions of ⚠WARNING and ⚠CAUTION Labels

This machine has labels for ⚠WARNING and ⚠CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.

The inside of this machine gets very hot. Do not touch the inside. Doing so could result in a burn.

ARK20S

①

CAUTION   PRECAUCIÓN
ACHTUNG   ATTENZIÓNE
ATTENTION 注意 주의

User Information on Electrical & Electronic Equipment

Users in the EU, Switzerland and Norway

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

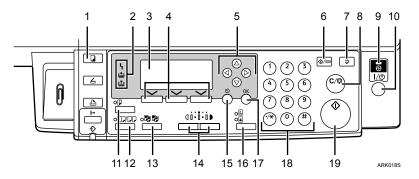Our products or product packaging are marked with the symbol below.

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.

Control Panel

ARK018S

1. 〖Copy〗key

Press to activate the copier function.

2. Indicators

Display errors and machine status.

- ⌐ : Error indicator
  See "Control Panel", *General Settings Guide*.
- ⌐ : Add Toner indicator
  See p.44 "⌐ Adding Toner".
- ⌐ : Load Paper indicator
  See p.41 "⌐ Loading Paper".

3. Display

Displays operation status and messages.

4. Selection keys

Correspond to items on the display. Press to select the corresponding item.

5. Scroll keys

Press to select an item.

【▲】: scroll upward

【▼】: scroll downward

【▶】: scroll right

【◀】: scroll left

Reference

See p.10 "Reading the Display and Using Keys".

6. 〖User Tools/Counter〗key

Press to change default or operation parameters according to requirement.

7. 〖Clear Modes〗key

Press to clear the current settings.

8. 〖Clear/Stop〗key

Clear: clears an entered numeric value.

Stop: stops copying.

9. Main power indicator

Lights when the main power switch is turned on.

Reference

p.11 "Turning On the Power"

10. Operation switch (On indicator)

Press to turn the power on. The On indicator lights. To turn the power off, press again.

Note

❒ This key is inactive during scanning or while setting defaults.

Reference

p.11 "Turning On the Power"

11. 〖Duplex〗key

Makes two-sided copies.

Reference

See p.30 "Duplex".

12. 〖Combine/Series〗key

Press to make combine or series copies.

Reference

p.32 "One-Sided Combine"

p.33 "Two-Sided Combine"

p.35 "Series Copies"

13. 〖Sort〗key

Automatically sorts copies.

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14. 【Lighter】 and 【Darker】

Press to change the image density setting. Select the image density in five increments, Lighter to Darker.

15. 【Escape】 key

Press to cancel an operation or return to the previous display.

16. 【Original Type】 key

Press to select the original type registered with **[Original Type 1 (Text)]** or **[Original Type 2 (Photo)]**. When the original type is selected, the corresponding indicator lights.

17. 【OK】 key

Press to set a selected item or entered numeric value.

18. Number keys

Press to enter numeric values.

19. 【Start】 key

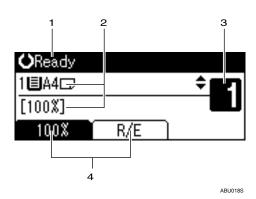Press to start scanning or sending.

Display

This section explains how to read the display and use the Selection key for the initial copy display.

✎ Note

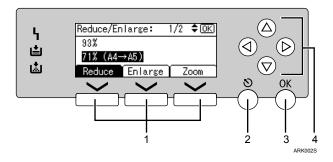❐ The copy display is set as the default screen when the machine is turned on.

❖ Initial copy display

ABU018S

1. **Operational status or messages**

2. **Messages and the selected tray appear here. Currently selected items appear in brackets.**

3. **Number of copies set.**

4. **Reduce/Enlarge ratio function for non-fixed ratios.**

Reading the Display and Using Keys

This section explains how to read the display and use the selection key for the initial copy display.

ARK002S

1. Selection keys

Correspond to items at the bottom line on the display.

Example: initial copy display

- When the instruction "press **[Reduce]**" appears in this manual, press the left selection key.

- When the instruction "press **[Enlarge]**" appears in this manual, press the centre selection key.

- When the instruction "press **[Zoom]**" appears in this manual, press the right selection key.

2. 【Escape】key

Press to cancel an operation or return to the previous display.

3. 【OK】key

Press to set a selected item or entered numeric value.

4. Scroll keys

Press to move the cursor to each direction one by one.

When 【▲】, 【▼】, 【▶】, or 【◀】 key appears in this manual, press the scroll key of the same direction.

Turning On the Power

This machine has two power switches.

❖ **Operation switch (right side of the control panel)**
Press to activate the machine. When the machine has finished warming up, you can operate the machine.

❖ **Main power switch (left side of the machine)**
Turning off this switch makes the main power indicator on the right side of the control panel go off. When this is done, machine power is completely off.
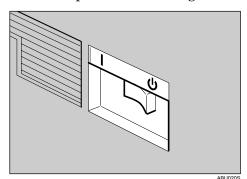
📝 Note

❒ This machine automatically enters Energy Saver mode or turns itself off if you do not use it for a while. See *General Settings Guide*.

Turning On the Main Power

1 **Make sure the power cord is firmly plugged into the wall outlet.**

2 **Turn on the main power switch.**
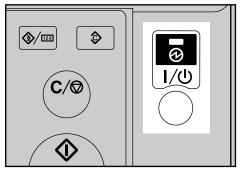
The main power indicator goes on.

ABU020S

⚠️Important

❒ Do not turn off the main power switch immediately after turning it on. Doing so may result in damage to the memory, leading to malfunctions.

Turning On the Power

1 **Press the operation switch.**

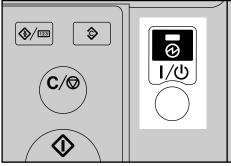The **On** indicator goes on.

ARK005S

📝 Note

❒ If the power does not come on when the operation switch is pressed, check the main power switch is on. If it is off, turn it on.

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Turning Off the Power

A **Make sure the exposure glass cover, ARDF is in the right position.**

B **Press the operation switch.**

The **On** indicator goes off.

ARK005S

Note
❒ Even if you press the operation switch, the indicator does not go out, but blinks in the following cases:

- During communication with external equipment.

Turning Off the Main Power

Important
❒ Do not turn off the main power switch when the **On** indicator is lit or blinking. Doing so may result in damage to the memory.

❒ Make sure 100% is shown as available memory on the initial scanner display before turning off the main power switch.

❒ Be sure to turn off the main power switch before pulling out the power plug. Not doing this may result in damage to the memory.

A **Be sure the On indicator is not lit.**

B **Turn off the main power switch.**

The main power indicator goes out.

Saving Energy

☼ Auto Off / Low Power

The machine automatically turns itself off when the job is finished, after a certain period of time has elapsed. This function is called "Auto Off".

Note
❒ You can change the Auto Off time, Auto Off Timer. See *General Settings Guide*.

❒ The Auto Off Timer function will not operate in the following cases:

- When a warning message appears

- When the service call message appears

- When paper is jammed

- When the cover is open

- When the " Add toner " message appears

- When toner is being replenished

- When the User Tools screen is displayed

- When fixed warm-up is in progress

- When the printer, or other functions are active

- When operations are suspended during printing

- When the Data In indicator is on or blinking

Originals

Sizes and Weights of Recommended Originals

❖ **Metric version**

Original location	Original size	Original weight
Exposure glass	Up to A4	--
ARDF	One-sided originals: A4⊡ – A5⊡⊡	52–105 g/m^2
	Two-sided originals: A4⊡ – A5⊡	52–105 g/m^2

❖ **Inch version**

Original location	Original size	Original weight
Exposure glass	Up to $8^1/_2" \times 14"$	--
ARDF	One-sided originals: $8^1/_2" \times 14"$⊡ – $5^1/_2" \times 8^1/_2"$⊡⊡	14–28 lb.
	Two-sided originals: $8^1/_2" \times 14"$⊡ – $5^1/_2" \times 8^1/_2"$⊡	14–28 lb.

✐ Note

❒ You can place about 50 originals (of 80 g/m^2 [20 lb] paper) in the ARDF.

Non-compatible originals for the ARDF

Placing the following types of originals in the ARDF can cause paper misfeeds or result in damage to the originals. Place these originals on the exposure glass instead.

- Originals other than those specified on p.13 "Sizes and Weights of Recommended Originals"
- Stapled or clipped originals
- Perforated or torn originals
- Curled, folded, or creased originals
- Pasted originals
- Originals with any kind of coating, such as art paper, aluminum foil, carbon paper, or conductive paper
- Originals with perforated lines
- Originals with indexes, tags, or other projecting parts
- Sticky originals such as translucent paper
- Thin, highly flexible originals
- Thick originals such as postcards
- Bound originals such as books
- Transparent originals such as OHP transparencies or translucent paper
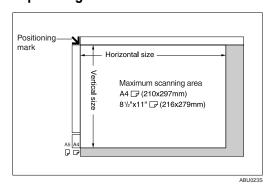
  Note
  ❒ The original might become dirty if it is written with a pencil or a similar tool.
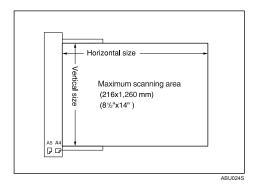
Sizes Selectable as Regular Size Originals

You can select the following original sizes on the display:

A4▭, B5 JIS(Japan Industrial Standard)▭, A5▯▭, $8^1/_2$"×14"▭, $8^1/_2$"×13"▭, $8^1/_2$"×11"▭, $5^1/_2$"×$8^1/_2$"▯▭, 8"×13"▭, $8^1/_4$"×13"▭, $8^1/_4$"×14"▭

❖ **Exposure glass**

Positioning mark
Horizontal size
Vertical size
Maximum scanning area
A4 ▭ (210x297mm)
$8^1/_2$"x11" ▭ (216x279mm)
A5 A4
▯ ▭

ABU023S

❖ **ARDF**

Horizontal size
Vertical size
Maximum scanning area
(216x1,260 mm)
($8^1/_2$"x14")
A5 A4
▯ ▭

ABU024S

Note

❒ When you copy custom size originals, make sure you specify the size of the originals. If not, the image may not be copied properly. See p.18 "Placing custom size originals".

Missing Image Area

Even if you place originals in the ARDF, or on the exposure glass correctly, 4 mm (0.2") margins on all four sides might not be copied.

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Placing Originals

Note

❒ Take care to place originals only after any correction fluid and ink has completely dried. Not taking this precaution could cause marks on the exposure glass that will be copied onto paper.

Reference

For original sizes you can set, see p.13 "Originals" .
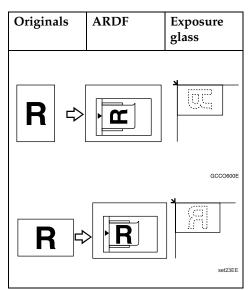
Original Orientation

You can set the original orientation in the following ways.

This function is useful for copying torn or large originals.

Note

❒ Originals should normally be aligned to the rear left corner. However, some copy functions may produce different results depending on the orientation of the originals. For details, see the explanations of each function.

Originals	ARDF	Exposure glass
R ⇨	R	(image) GCCO600E
R ⇨	R	(image) set23EE

Placing Originals on the Exposure Glass
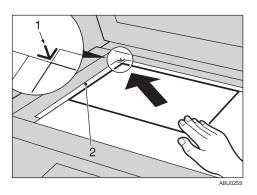
A **Lift the exposure glass cover, ARDF.**

Important

❒ Do not lift the exposure glass cover, ARDF forcefully. If you do, the ARDF cover might open or be damaged.

B **Place the original face down on the exposure glass. It should be aligned with the rear left corner.**

ABU025S

1. **Positioning mark**

2. **Left scale**
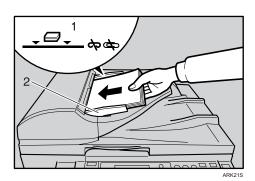
Note

❒ Start with the first page to be copied.

C **Lower the exposure glass cover, ARDF.**

Placing Originals in the ARDF

✐ Note

❒ Do not stack originals over the limit mark on the side fence of the ARDF.

❒ The last page should be on the bottom.

❒ Do not place anything on the ARDF cover, doing so could cause a malfunction.

A **Set the document guide to the original size.**

B **Align the edges of the originals and place them in the ARDF with the side to be copied facing up.**
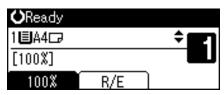

ARK21S

1. **Limit mark**

2. **Document guide**

✐ Note

❒ Originals that are 160 mm or less along the feed direction, such as A5, $5^1/_2"\times8^1/_2"$ long edge feed, may jam inside the ARDF when you make duplex copies.

❒ Straighten curls in the originals before placing them in the ARDF.

❒ To prevent multiple sheets feeding in at once, fan the originals before placing them in the ARDF.

❒ Set the original squarely.
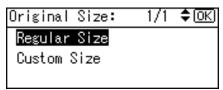
Placing Regular Size Originals

✐ Note

❒ If you do not specify the original size, the machine will make copies on the paper size in the tray selected. When copy paper size and original size differ, you need to specify the original size as follows:

A **Place originals face down on the exposure glass, or face up into the ARDF.**

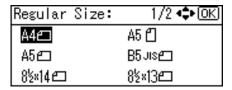**B** **Select the paper tray or bypass tray using 【▲】 or 【▼】, and then press the 【#】 key.**

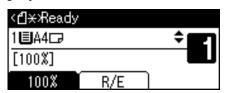**C** **Select [Regular Size] using 【▲】 or 【▼】, and then press the 【OK】 key.**

✐ Note

❒ If you selected the bypass tray, first select **[Original Size]** using 【▲】 or 【▼】, and then press the 【OK】 key.

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D **Select the paper size using the scroll keys, and then press the 【OK】 key.**

```
Regular Size:    1/2 ◀◆▶ OK
 A4▯        A5 ▯
 A5▯        B5 JIS▯
 8½×14▯     8½×13▯
```

The "Programmed" message appears.

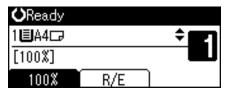When the regular size originals settings are registered, ◁▯✱Ready appears at the top of the copy display.

```
◁▯✱Ready
1▤A4▭              ◆ 1
[100%]
  100%      R/E
```

Note

❒ To cancel the registered original size, press the 【Clear Modes】 key.

E **Press the 【Start】 key.**

Placing custom size originals

Note
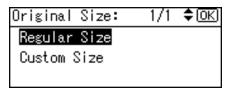
❒ Paper that has a vertical length of 139–216 mm (5.5"–8.5") and a horizontal length of 139–356 mm (5.5"–14.0") can be placed with this function.

❒ For the ARDF, paper sizes that can be set with this function are:

- one-sided originals: vertical 139-216 mm (5.5"-8.5"), horizontal 139-216 mm (5.5"-8.5").

- two-sided originals: vertical 139-216 mm (5.5"-8.5"), horizontal 160-1260 mm (5.5"-49.6").
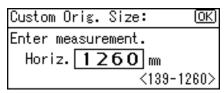
A **Place originals face down on the exposure glass, or face up into the ARDF.**

B **Select the paper tray or bypass tray using 【▲】 or 【▼】, and then press the 【#】 key.**

```
⏻Ready
1▤A4▭              ◆ 1
[100%]
  100%      R/E
```

C **Select [Custom Size] using 【▲】 or 【▼】 key, and then press the 【OK】 key.**

```
Original Size:    1/1  ◆ OK
 Regular Size
 Custom Size
```
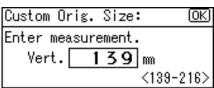
Note

❒ If you selected the bypass tray, first select **[Original Size]** using 【▲】 or 【▼】, and then press the 【OK】 key.

D **Enter the horizontal size of the original using the number keys, and then press the 【OK】 key.**

```
Custom Orig. Size:      OK
Enter measurement.
  Horiz. 1260 mm
                  <139-1260>
```
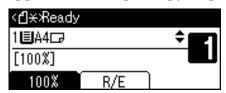
Note

❒ If you make a mistake, press the 【Clear/Stop】 key, and then enter the value again.

E **Enter the vertical size of the original using the number keys, and then press the 【OK】 key.**

```
Custom Orig. Size:    [OK]
Enter measurement.
   Vert. [  139] mm
              <139-216>
```

The "Programmed" message appears with your set original size.

When the custom size originals settings are registered, ⟨◻※Ready appears on the top of copy display.

```
⟨◻※Ready
1▤A4◻           ♦ 1
[100%]
 100%    R/E
```

📎 Note

❒ To cancel the size you have set, press the 【Clear Modes】 key.

19

Basic Procedure
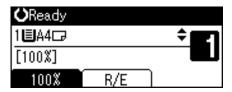
A **If the machine has user codes set, enter a user code (up to eight digits) using the number keys, and then press the 【OK】 or 【#】 key.**

The machine is ready to copy.

✐ Reference

For user codes, see " Key Operator Tools ", *General Settings Guide.*

B **Make sure "◯ Ready" appears on the display.**

❖ Initial copy display

```
◯Ready
1▤A4▱              ↕  1
[100%]
  100%      R/E
```

If any other function is displayed, press the 【Copy】 key.

C **Make sure no previous settings remain.**

✐ Note
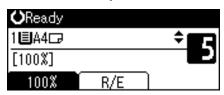
❒ When there are previous settings remaining, press the 【Clear Modes】 key and enter again.

D **Place your originals.**

✐ Reference

p.16 "Placing Originals"

E **Make the necessary settings.**

✐ Reference

See the explanations for each function.

F **Enter the number of copies using the number keys.**

```
◯Ready
1▤A4▱              ↕  5
[100%]
  100%      R/E
```

✐ Note

❒ The maximum copy quantity that can be set is 99.

G **Press the 【Start】 key.**

Copying starts.

✐ Note

❒ Copies are delivered face down.

- -

☼ How to operate

❖ **To switch between pages or select functions:**
Press the scroll key.

❖ **To stop the machine during a multi-copy run:**
Press the 【Clear/Stop】 key.

❖ **To return the machine to the initial condition after copying:**
Press the 【Clear Modes】 key.

❖ **To clear an entered value.**
Press the 【Clear/Stop】 key.

- -

Copying from the Bypass Tray

Use the bypass tray to copy onto OHP transparencies, thick paper, envelopes and copy paper that cannot be loaded in the paper trays.

⚠️Important

❒ Paper longer than 357 mm may become wrinkled, may not feed in, and may jam.
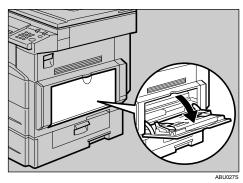
📝 Note

❒ If you do not use standard size copy paper, or if you use special paper, you should enter its vertical and horizontal dimensions. See p.18 "Placing custom size originals". The sizes you can enter are as follows:
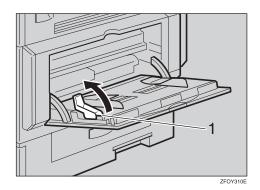
Metric version	• Vertical: 90–216 mm • Horizontal: 139–600 mm
Inch version	• Vertical: 3.55"–8.50"" • Horizontal: 5.48"–23.62"

❒ When copying onto OHP transparencies or paper heavier than 157 g/m² (about 42 lb.), you need to specify the paper type. See p.24 "When copying onto special paper".

❒ The maximum number of sheets you can load at the same time depends on paper type. The maximum number of sheets should not exceed the upper limit.

🅐 **Open the bypass tray.**

ABU027S
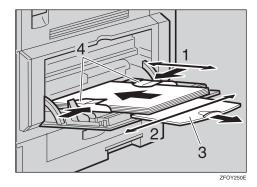
🅑 **Push up the paper guide release lever.**

ZFOY310E
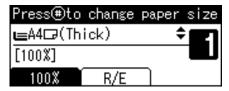
1. **Paper guide release lever**

C **Insert the paper with the side you want to copy facing down, and then adjust the paper guide with the paper size.**

ZFOY250E

1. **Horizontal size**

2. **Vertical size**

3. **Extender**

4. **Paper guides**

🖉 **Note**

❒ If the guides are not flush against the copy paper, images might be skewed or paper misfeeds might occur.

❒ Do not stack paper over the limit mark, otherwise images might be skewed or paper misfeeds might occur.

❒ Fan paper to get air between the sheets and avoid a multi-sheet feed.

D **Pull down the paper guide release lever (step B).**
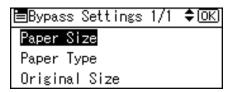
The bypass tray is selected on the display.
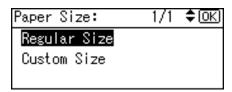
🖉 **Note**

❒ If ☰ is not selected on the display, select ☰ using 【▲】 or 【▼】, and then press the 【#】 key.

E **Select the paper size and type.**

When copying onto regular size paper

A **Select [Paper Size] using 【▲】 or 【▼】, and then press the 【OK】 key.**

B **Select [Regular Size] using 【▲】 or 【▼】, and then press the 【OK】 key.**

C **Select the paper size using the scroll keys, and then press the 【OK】 key.**
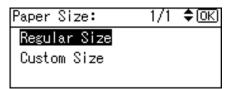

The " Programmed " message appears.
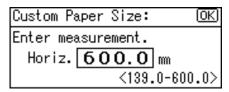
23
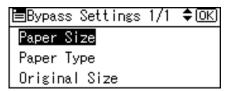
When copying onto custom size paper

⚠️Important

❒ You should specify the size of copy paper to avoid paper misfeeds.

A **Select [Paper Size] using 【▲】 or 【▼】, and then press the 【OK】 key.**

```
≣Bypass Settings 1/1  ◆OK
Paper Size
Paper Type
Original Size
```

B **Select [Custom Size] using 【▲】 or 【▼】, and then press the 【OK】 key.**

```
Paper Size:      1/1  ◆OK
Regular Size
Custom Size
```

C **Enter the horizontal size of the original using the number keys, and then press the 【OK】 key.**

```
Custom Paper Size:      OK
Enter measurement.
   Horiz. 600.0 mm
            <139.0-600.0>
```

📝 Note

❒ If you make a mistake, press the 【Clear/Stop】 key, and then enter the value again.

D **Enter the vertical size of the original using the number keys, and then press the 【OK】 key.**

```
Custom Paper Size:      OK
Enter measurement.
   Vert. 216.0 mm
            <90.0-216.0>
```

The " Programmed " message appears.

When copying onto special paper

A **Select [Paper Type] using 【▲】 or 【▼】, and then press the 【OK】 key.**

```
≣Bypass Settings 1/1  ◆OK
Paper Size
Paper Type
Original Size
```
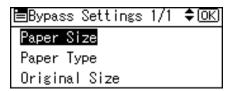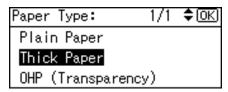
B **Select the paper type, and then press the 【OK】 key.**

```
Paper Type:      1/1  ◆OK
Plain Paper
Thick Paper
OHP (Transparency)
```
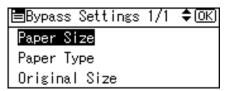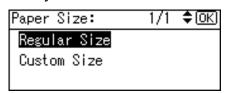
The " Programmed " message appears.
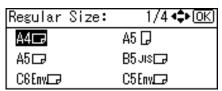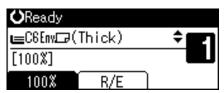
When copying onto envelopes

Note

❒ When copying onto small-sized envelopes, align the flaps to the paper guide on the left.

A **Select [Paper Size] using 【▲】 or 【▼】, and then press the 【OK】 key.**

```
目Bypass Settings 1/1 ≑OK
 Paper Size
 Paper Type
 Original Size
```

B **Select [Regular Size] using 【▲】 or 【▼】, and then press the 【OK】 key.**

```
Paper Size:      1/1 ≑OK
 Regular Size
 Custom Size
```

C **Select the envelope size from [C6 env⊐] [C5 env⊐] [DL env⊐], and then press the 【OK】 key.**
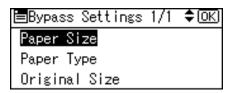
```
Regular Size:    1/4 ◀≑▶OK
 A4⊐          A5 ⊐
 A5⊐          B5 JIS⊐
 C6Env⊐       C5Env⊐
```

The " Programmed " message appears.

D **Press the 【#】 key.**

```
ⵙReady
 ⊫C6Env⊐(Thick)    ≑ 1
 [100%]
  100%    R/E
```

E **Select [Paper Type] using 【▲】 or 【▼】, and then press the 【OK】 key.**

```
目Bypass Settings 1/1 ≑OK
 Paper Size
 Paper Type
 Original Size
```
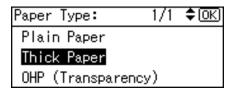
F **Select [Thick Paper] using 【▲】 or 【▼】, and then press the 【OK】 key.**

```
Paper Type:      1/1 ≑OK
 Plain Paper
 Thick Paper
 OHP (Transparency)
```

The " Programmed " message appears.

G **Place your originals, and then press the 【Start】 key.**

Note

❒ When copying onto OHP transparencies, remove copied sheets one by one.
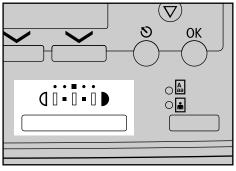
25

Copier Functions

Adjusting Image Density

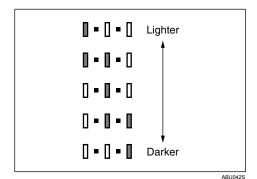You can adjust copy image density to match your originals.

If you require darker or lighter copies, adjust image density accordingly.

A **Press the 【Lighter】or 【Darker】key to adjust the density.**

ARK006S

The image density changes in five increments as follows:

ABU042S

Selecting Original Type Setting

Select one of the following two types to match your originals:

❖ **Text**
   Select this when your originals contain only text (no pictures).
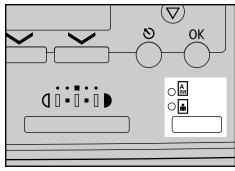
❖ **Photo**
   This can reproduce delicate tones of photographs and pictures.

🔎 **Reference**
   p.51 "Original Type Setting"

A **Press the 【Original Type】key and select the original type.**

ARK007S

✐ **Note**
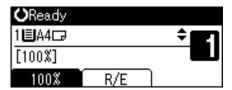❒ Press the 【Original Type】key to go through the following types:

Upper indicator lit	Text
Lower indicator lit	Photo

26

Selecting Copy Paper

Choose the tray containing the paper you want to copy onto: a paper tray or the bypass tray.
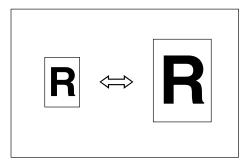
A **Select the paper tray or bypass tray using 【▲】 or 【▼】.**

The selected tray and the paper size appear.

```
ⓞReady
1▤A4▭              ⬍ 1
[100%]
   100%     R/E
```

𝒫 Reference

p.22 "Copying from the Bypass Tray"
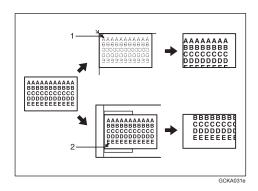
Preset Reduce/Enlarge

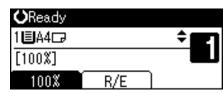You can select a preset ratio for copying.

❖ **Base Point**

The base point of Reduce/Enlarge differs depending on how the original is scanned. When the original is placed on the exposure glass, the upper left corner is the base point. When placed in the ARDF, the bottom left corner is the base point.
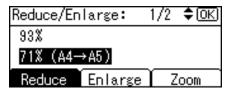

1. **Base point when placing on the exposure glass.**

2. **Base point when placing in the ARDF.**

𝒫 Reference

Related default settings

p.52 "Reproduction Ratio"

p.53 "Preset R/E Priority"

A **Press [R/E].**

```
ⓞReady
1▤A4▭              ⬍ 1
[100%]
   100%     R/E
```

B **Press [Reduce] or [Enlarge].**

```
Reduce/Enlarge:   1/2  ⬍ OK
  93%
  71% (A4→A5)
Reduce  Enlarge   Zoom
```
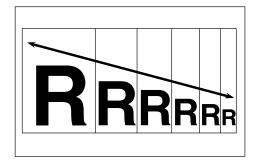
C **Select a ratio using 【▲】 or 【▼】, and then press the 【OK】 key.**
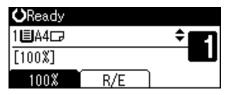
The " Programmed " message appears.

D **Place your originals, and then press the 【Start】 key.**
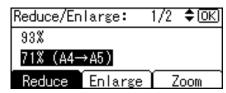
27

Zoom

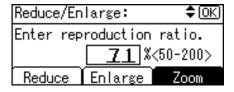You can change the reproduction ratio in increments of 1%.

✐ Note

❒ You can also select a preset ratio close to the desired ratio using **[Reduce]** or **[Enlarge]**, and then adjust the ratio using 【▲】 or 【▼】.

A Press [R/E].

B Press [Zoom].

C Enter the ratio.

To select the ratio using 【▲】 and 【▼】

A Adjust the ratio using 【▲】 or 【▼】.

✐ Note

❒ If you have incorrectly entered the ratio, readjust using 【▲】 or 【▼】.

❒ To change the ratio in increments of 10%, press and hold down 【▲】 or 【▼】.

B Press the 【OK】 key.

The " Programmed " message appears.

To enter the ratio using the number keys

A Enter the desired ratio using the number keys.

B Press the 【OK】 key.

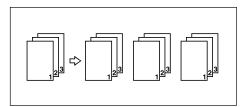The " Programmed " message appears.

D Place your originals, and then press the 【Start】 key.
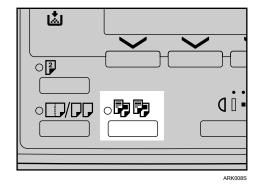
Sort

You can scan originals into memory and automatically sort copies.

❖ **Sort**
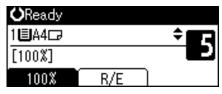
Copies are assembled as sequentially ordered sets.

A Press the 【Sort】 key.

ARK008S

✎ **Note**

❒ When canceling the Sort function, press the 【Sort】 key, and make sure the 【Sort】 key indicator is off.

B Enter the number of copy sets using the number keys.


```
⏻Ready
1▤A4▱              ⬍  5
[100%]
   100%      R/E
```

C Place your originals.

✎ **Note**

❒ When placing originals on the exposure glass, start from the first page to be copied. When placing originals in the ARDF, set the first page on top.
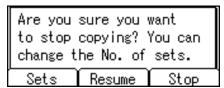
D Press the 【Start】 key.

✎ **Note**

❒ When placing originals on the exposure glass, press the 【#】 key after all originals are scanned.

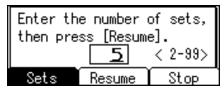# Changing the number of sets

You can change the number of copy sets during copying.

✎ **Note**

❒ This function can only be used when the Sort function is selected.

A While " **Copying...** " is displayed, press the 【Clear/Stop】 key.

B Press [Sets].

```
Are you sure you want
to stop copying? You can
change the No. of sets.
  Sets  │ Resume │  Stop
```

C Enter the number of copy sets with the number keys, and then press [Resume].

```
Enter the number of sets,
then press [Resume].
         5     ⟨ 2-99⟩
  Sets  │ Resume │  Stop
```
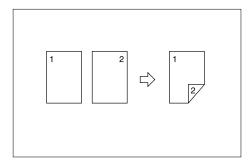
Copying starts again.

✎ **Note**

❒ The number of sets you can enter differs depending on when the 【Clear/Stop】 key is pressed.

Duplex

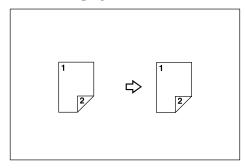There are two types of duplex:

❖ **1 Sided → 2 Sided**
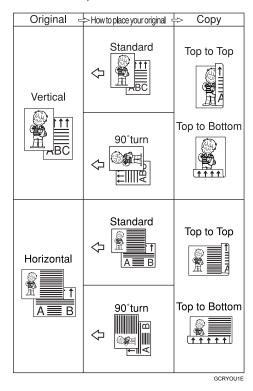Copies 2 one-sided pages onto 1 two-sided page.

❖ **2 Sided → 2 Sided**
Copies 1 two-sided page onto 1 two-sided page.

Original orientation and completed copies

The resulting copy image will differ according to the orientation in which you place the originals (vertical ⬓ or horizontal ⬒).
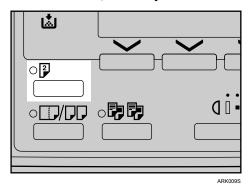

GCRYOU1E

[1] The table shows the orientation of images on the front and back of copies, not the orientation of delivery.
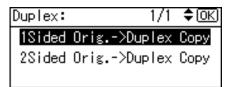
✎ Note

❒ You cannot use the bypass tray with this function.

❒ The maximum paper weight that can be used with duplex copying is 64–90 g/m^2, 20–24 lb.
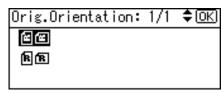
❒ You can change the margin. See p.53 "Duplex Margin".

A Press the 【Duplex】 key.

ARK009S

B Select the setting of original and copy type using 【▲】 or 【▼】, and then press the 【OK】 key.
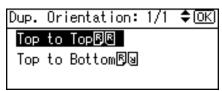
```
Duplex:              1/1  ♦OK
 1Sided Orig.->Duplex Copy
 2Sided Orig.->Duplex Copy
```

C Select the orientation using 【▲】 or 【▼】, and then press the 【OK】 key.

```
Orig.Orientation: 1/1  ♦OK
 回回
 倒倒
```

📝 Note

❒ You can select the orientation of originals and copying paper when **[Always Specify]** is specified for **[Orientation]** under **[Copier Features]** (User Tools). See p.52 "Orientation". If it was not specified for, proceed to step E.

D When selecting two-sided copying, select the orientation **[Top to Top]** or **[Top to Bottom]** using 【▲】 or 【▼】, and then press the 【OK】 key.

```
Dup. Orientation: 1/1  ♦OK
 Top to Top回回
 Top to Bottom回回
```

📝 Note

❒ To change the copy orientation, select the original icon whose orientation is that required. See p.30 "Original orientation and completed copies".

The " Programmed " message appears.

E Place your originals.

When placing originals on the exposure glass

❶ Place the original, and then press the 【Start】 key.

📝 Note

❒ Start from the first page to be copied.

❷ Place the next original, and then press the 【Start】 key.
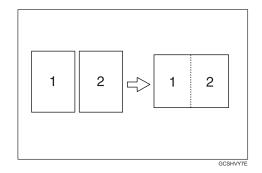
When placing a stack of originals in the ARDF

❶ Place your originals, and then press the 【Start】 key.

📝 Note
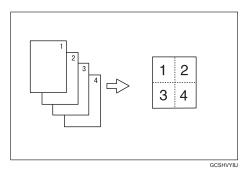
❒ Place the first page on top.

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One-Sided Combine

You can combine several pages onto one side of a sheet.
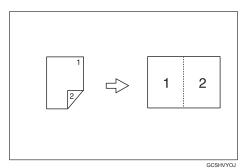
❖ **1 Sided 2 Pages → Combine 1 Side**
Copies 2 one-sided originals onto one side of a sheet.

GCSHVY7E
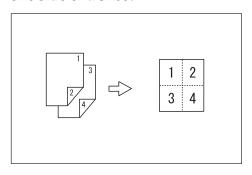
❖ **1 Sided 4 Pages → Combine 1 Side**
Copies 4 one-sided originals onto one side of a sheet.

GCSHVY8J

❖ **2 Sided 1 Page → Combine 1 Side**
Copies 1 two-sided original onto one side of a sheet.

GCSHVYOJ
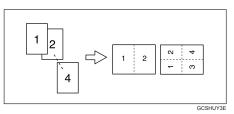
❖ **2 Sided 2 Pages → Combine 1 Side**
Copies 2 two-sided originals onto one side of a sheet.
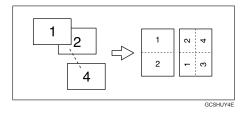
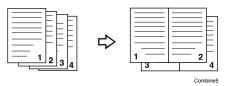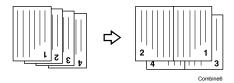❖ **Orientation of the original and image position of combine**
Open to left ⬧ originals

GCSHUY3E

Open to top ⬧ originals

GCSHUY4E

❖ **Placing originals (in the ARDF)**

- Originals read from left to right

Combine5
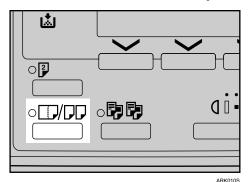
- Originals read from top to bottom
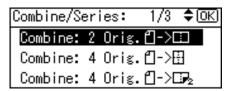
Combine6

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Note

❒ You cannot use the bypass tray with this function.

A **Press the 【Combine/Series】 key.**

ARK010S

B **Select the combine mode using 【▲】 or 【▼】, and then press the 【OK】 key.**

Reference

p.30 "Original orientation and completed copies"
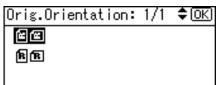
C **Select the orientation using 【▲】 or 【▼】, and then press the 【OK】 key.**

Note

❒ You can select the orientation of originals and copying paper when **[Always Specify]** is specified for **[Orientation]** under **[Copier Features]** (User Tools). See p.52 "Orientation". If it was not specified for, proceed to step D.

❒ To change the copy orientation, select the icon which orientation of originals is used.

The " Programmed " message appears.
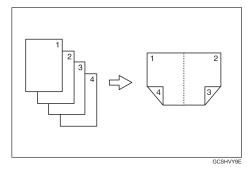
D **Place your originals, and then press the 【Start】 key.**
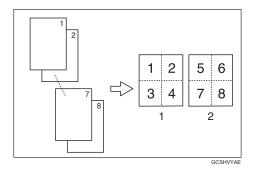
Two-Sided Combine

You can combine various pages of originals into one sheet with two sides.

❖ **1 Sided 4 Pages → Combine 2 Side**
Copies 4 one-sided originals onto one sheet with two pages per side.

GCSHVY9E
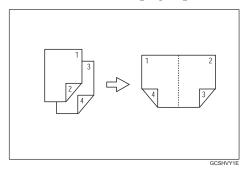
❖ **1 Sided 8 Pages → Combine 2 Side**
Copies 8 one-sided originals onto one sheet with four pages per side.

GCSHVYAE

1. **Front**

2. **Back**

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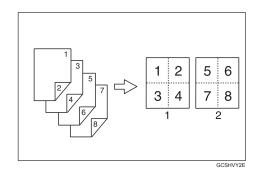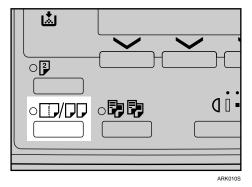
❖ **2 Sided 4 Pages → Combine 2 Side**
Copies 2 two-sided originals onto one sheet with two pages per side.

GCSHVY1E
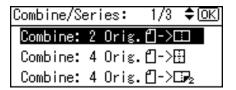
❖ **2 Sided 8 Pages → Combine 2 Side**
Copies 4 two-sided originals onto one sheet with four pages per side.

GCSHVY2E

1. **Front**

2. **Back**

A **Press the 【Combine/Series】 key.**

ARK010S

B **Select the combine mode using 【▲】 or 【▼】, and then press the 【OK】 key.**

```
Combine/Series:   1/3  ♦OK
Combine: 2 Orig. ⬛->⬛
Combine: 4 Orig. ⬛->⬛
Combine: 4 Orig. ⬛->⬛₂
```

C **Select the orientation using 【▲】 or 【▼】, and then press the 【OK】 key.**

```
Orig.Orientation: 1/1  ♦OK
⬛⬛
⬛⬛
```

🖉 Note

❒ You can select the orientation of originals and two-sided copying paper when **[Always Specify]** is specified for **[Orientation]** under **[Copier Features]** (User Tools). See p.52 "Orientation". If it was not specified for, proceed to **E**.

D **When selecting two-sided copying, select the orientation [Top to Top] or [Top to Bottom] using 【▲】 or 【▼】, and then press the 【OK】 key.**

```
Dup. Orientation: 1/1  ♦OK
Top to Top⬛⬛
Top to Bottom⬛⬛
```

🖉 Note

❒ To change the copy orientation, select the original icon whose orientation is that required . See p.30 "Original orientation and completed copies".

The " Programmed " message appears.

E **Select the paper size using 【▲】 or 【▼】.**

```
ⓄReady
1▤A4▭          ⬍ ⬛1
[Auto Ratio]
  100%    R/E    Auto
```
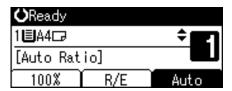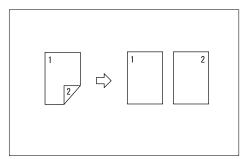
F **Place your originals, and then press the 【Start】 key.**

Series Copies
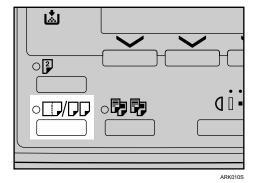
You can separately copy the front and back of a two-sided original or two facing pages of a bound original onto two sheets.

❖ **2 Sided→1 Sided**
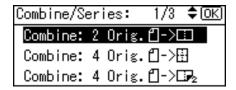
Copies each side of a two-sided original onto two separate pages.

A **Press the 【Combine/Series】 key**

ARK010S
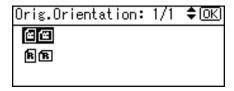
B **Select [Series:2Sided Orig.] using 【▲】 or 【▼】, and then press the 【OK】 key.**

```
Combine/Series:  1/3  ⬍OK
Combine: 2 Orig.❏->▥
Combine: 4 Orig.❏->▦
Combine: 4 Orig.❏->▱₂
```

C **Select the orientation using 【▲】 or 【▼】, and then press the 【OK】 key.**

```
Orig.Orientation: 1/1  ⬍OK
 回回
 ℝℝ
```

📝 Note

❒ You can select the orientation of originals when **[Always Specify]** is specified for **[Orientation]** under **[Copier Features]** (User Tools). See p.52 "Orientation".

❒ If it was not specified for, proceed to **D**.

The " Programmed " message appears.

D **Place your original, and then press the 【Start】 key.**

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If Your Machine Does Not Operate As You Want

When a Message Is Displayed

The following chart contains explanations for common messages. If other messages appear, follow the instructions as they are displayed.

🖉 Note

❒ For messages not listed here, see *General Settings Guide*.

Message	Causes	Solutions
Cannot dup. copy this size	A paper size not available with the Duplex function has been selected.	The following paper sizes are available for the Duplex function: A4▷, B5 JIS▷. Select one of these sizes.
Max. number of sets is**	The number of copies exceeds maximum copy quantity.	You can change the maximum copy quantity. See p.52 "Max. Number of Sets".
Cannot sort this size	A paper size not available with the Sort function has been specified.	Use copy paper of length under 357 mm.
Size error in Combine mode	A paper size not available with the Combine function has been specified.	Use copy paper of length under 357 mm.

If You Cannot Make Clear Copies

Problem	Causes	Solutions
Copies appear dirty.	Image density is too dark.	Adjust the image density. See p.26 "Adjusting Image Density".
The reverse side of an original image is copied.	Image density is too dark.	Adjust the image density. See p.26 "Adjusting Image Density".
A shadow appears on copies if you use pasted originals.	Image density is too dark.	Adjust the image density. See p.26 "Adjusting Image Density". Change the orientation of the original. Put mending tape over the pasted areas.
The same copy area is dirty whenever making copies.	The exposure glass or ARDF is dirty.	Clean them. See p.59 "Maintaining Your Machine".
Copies are too light.	Image density is too light.	Adjust the image density. See p.26 "Adjusting Image Density".
	The paper size is not appropriate.	Use the recommended paper. **Note** ❒ A light copy may result when you use damp or rough grain paper.
	Toner bottle is almost empty.	Add toner. See p.44 "📷 Adding Toner".
Parts of the paper are not copied.	The original is not placed correctly.	Place originals correctly. See p.16 "Placing Originals".
	An improper paper size is selected.	Select the proper paper size.
Copies are blank.	The original is not placed correctly.	When using the exposure glass, place originals face down. When using the ARDF, place them face up. See p.16 "Placing Originals".
A moiré pattern is produced on copies. **R** ⇨ **R**	Your original has a dot pattern image or many lines.	Place the original on the exposure glass at a slight angle.

If You Cannot Make Copies As You Want

This section explains causes and remedies when copy results are not as expected.

❖ **Basic**

Problem	Causes	Solutions
You cannot combine several functions.	Selected functions cannot be used together.	Check the combination of functions and make the settings again. 🔎**Reference** 　p.61 "Combination Chart"

❖ **Combine**

Problem	Causes	Solutions
When using Combine, parts of the image are not copied.	You specified a reproduction ratio that does not match the sizes of your originals and copy paper.	When you specify a reproduction ratio using the Manual Paper Select function, make sure the ratio matches your originals and the copy paper. 📝**Note** ❒ Select the correct reproduction ratio before using the Combine function.
	Your originals are not identical in size and direction.	Use originals that are identical in size and direction.
Copies are not in correct order.	You placed the originals in the incorrect order.	When placing a stack of originals in the ARDF, the last page should be on the bottom.
		If you place an original on the exposure glass, start with the first page to be copied.

❖ **Duplex**

Problem	Causes	Solutions
Order of copies is not correct.	You set originals in the incorrect order.	When setting a stack of originals in the ARDF, the last page should be on the bottom.
		If you set an original on the exposure glass, start with the first page to be copied.
In Duplex Margin mode, parts of the original image are not copied.	The margin is too wide.	Set a narrower margin with User Tools. You can set the width between 0-50 mm (0"-2"). See p.53 "Duplex Margin".
	There is a lack of margin space on the opposite side of the binding position.	
When using Duplex, copy is made Top to Top even though Top to Bottom is selected.	You placed the originals in the wrong orientation.	Place the originals in the correct orientation. See p.16 "Original Orientation".

When Memory Is Full
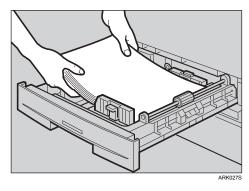
Messages	Causes	Solutions
`Memory is full. [Print] scanned orig., [Clear] to cancel/clear memory.` **[Clear] [Print]** 📎 **Note** ❒ Copying will stop and this message will be displayed when the memory is full.	The scanned original exceeds the number of pages that can be stored in memory.	Press **[Print]** to copy scanned originals and cancel the scanning data. Press **[Clear]** to cancel the scanning data and not copy.
`Reset * orig., then press [Resume] to scan and copy the remaining originals.` **[Stop] [Resume]**	The machine checks if the remaining originals should be copied, after the scanned original has been printed.	To continue copying, remove all copies, and then press **[Resume]**. To stop copying, press **[Stop]**.

Loading Paper

Loading Paper
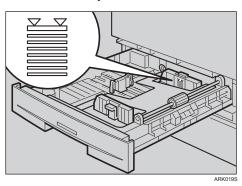
Note

❒ You can change the paper size, see *General Settings Guide*.

❒ This illustration shows Tray 1.

A **Pull the paper tray out slowly until it stops.**

B **Push the metal plate down, and then square the paper and load it in the tray.**

ARK027S

Important

❒ Check the top of the stack is not higher than the limit mark inside the tray.

ARK019S

❒ If paper is left in the paper tray, and then you add paper, a misfeed might occur.

Note

❒ Fan the paper before loading.

❒ Straighten curled or warped paper before loading.

❒ When using paper tray 2, load paper so that the paper touches the right side of the tray, or misfeeds might occur.

C **Push the paper tray in, until it stops.**
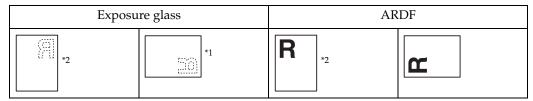
3

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Orientation-Fixed Paper or Two-Sided Paper

Orientation-fixed (top to bottom) or two-sided paper (for example, letterhead paper, prepunched paper, or copied paper) might not print correctly, depending on how the originals and paper are placed.

$\mathcal{P}$Reference

p.53 "Letterhead Setting"

$\mathscr{D}$ Note

❒ Select **[On]** in **[Letterhead Setting]** under **[Copier Features]** (User Tools), and then place the original and paper as shown below. When printing with the printer function, placing orientation is the same.

❖ Original Orientation

Exposure glass		ARDF	
[image] *2	[image] *1	**R** *2	**R**

*1 When copying in this orientation using the duplex function, and loaded paper orientation is $\bar{\Box}$, place originals as shown below:

[image]
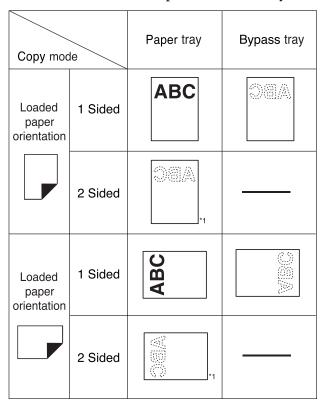
    Under **[Copier Features]**, if **[Orientation]** is set to **[Always Specify]**, load paper in [icon][icon] orientation.

*2 When copying in this orientation using the duplex function, select **[Always Specify]** in **[Orientation]** under **[Copier Features]** (User Tools). Place originals, and then select [icon][icon] as the original orientation.

❖ Loaded paper orientation

- For machine with copier function only

Copy mode		Paper tray	Bypass tray
Loaded paper orientation	1 Sided	**ABC**	ABC
	2 Sided	ABC *1	—
Loaded paper orientation	1 Sided	ABC	ABC
	2 Sided	ABC *1	—

*1 Shows when printing on the front page.

ABC : Shows the paper frontside facing up.

ABC : Shows the paper backside facing up.

ARK030S

⚙ Adding Toner

When ⚙ appears, it is time to add toner.

Handling Toner

⚠ *WARNING:*

- ***Do not incinerate used toner or toner containers. Toner dust might ignite when exposed to an open flame. Dispose of used toner containers in accordance with local regulations.***

⚠ *CAUTION:*

- *Keep toner (used or unused) and toner containers out of reach of children.*

⚠ *CAUTION:*

- *If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.*

⚠ *CAUTION:*

- *If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.*

⚠ *CAUTION:*

- *If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.*

⚠ *CAUTION:*

- *Avoid getting toner on your clothes or skin when removing a paper jam or replacing toner. If your skin comes into contact with toner, wash the affected area thoroughly with soap and water.*

- *If toner gets on your clothing, wash with cold water. Hot water will set the toner into the fabric and may make removing the stain impossible.*

Important

❒ Faults may occur if you use toner other than the recommended type.

❒ When adding toner, do not turn off the operation switch. If you do, settings will be lost.

❒ Always add toner when the machine instructs you.

❒ Do not repeatedly install and remove toner bottles. This will result in toner leakage.

❒ Do not shake the removed toner bottle. Remaining toner might scatter.

Note

❒ You can make about 50 copies even after the ⚙ symbol begins flashing, but replace toner early to prevent poor copy quality.

Toner Storage

When storing toner, the following precautions should always be followed:

- Store toner containers in a cool, dry place free from direct sunlight.
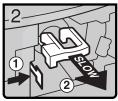- Store on a flat surface.

Used Toner

⚜ Note
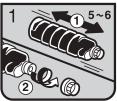
❐ Toner cannot be re-used.

Removing Toner

ZAAX040E

- 1: Open the front cover of the machine.
- 2: Lift the green lever.

ABU034S

- 3: Push the green lever, and then gently pull out the holder.

ZAAX060E

- 4: Press the toner bottle back to raise its top, and then gently pull it out.

Inserting Toner

ZAAX070E

- 1: Hold the new bottle horizontally and shake it from side to side five or six times.
2: Remove the black cap.

📎 Note

❒ Do not remove the black cap before shaking.

❒ Do not remove the inner cap.

ZAAX080E

- 3: Put the toner bottle on the holder, and then pull its top forward.

ZAAX090E

- 4: Push in the green lever until it clicks.

ZAAX100E

- 5: Press down the green lever.
- 6: Close the machine's front cover.

3

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3

4. User Tools (Copier Features)

Accessing User Tools (Copier Features)

This section is for key operators in charge of this machine. Key operators can change or make default settings.
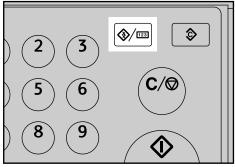
📝 Note

❒ Be sure to quit User Tools and return to the initial copy display when all settings are complete. This section describes system settings for the copier function.

❒ Selected settings are highlighted.

❒ Any changes made with User Tools remain in effect even if the main power switch or operation switch is turned off, or the 【Clear Modes】 key is pressed.

🔍 Reference

For details, see "User Tools (System Settings)", *General Settings Guide*.

Changing Default Settings

📝 Note

❒ If a key operator code is set, the key operator code input display appears before you can change the default settings. For details about access codes, see " Key Operator Tools ", *General Settings Guide*.
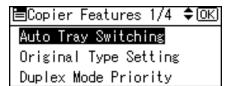
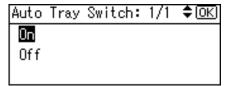**A** Press the 【User Tools/Counter】 key.

ARK004S

B Select [Copier Features] using 【▲】 or 【▼】, and then press the 【OK】 key.


```
≣User Tools      1/2  ⬍ OK
Counter
System Settings
Copier Features
```

C Select the menu using 【▲】 or 【▼】, and then press the 【OK】 key.


```
≣Copier Features 1/4 ⬍ OK
Auto Tray Switching
Original Type Setting
Duplex Mode Priority
```

D **Change settings by following instructions on the display, and then press the 【OK】 key.**

```
Auto Tray Switch: 1/1  ♦ OK
 On
 Off

```
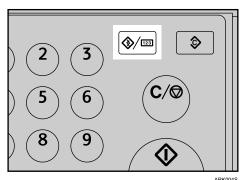
The " Programmed " message appears.

🖉 Note

❒ To cancel changes made to setting and return to the initial display, press the 【User Tools/Counter】 key.

Quitting User Tools

A **Press the 【User Tools/Counter】 key.**

ARK004S

The change is made, and the machine is ready to copy.

Settings You Can Change with User Tools

Auto Tray Switching

If you load same size paper in two or more trays, the machine automatically shifts to the other tray using image rotation when the first tray runs out of paper (if **[On]** is selected.) This function is called " Auto Tray Switching ". This setting specifies whether to use Auto Tray Switching or not.

Note
❒ Default: *On*

❒ Off : When a paper tray runs out of paper, copying is interrupted and the " Load paper. " message appears.

Original Type Setting

You can adjust copy finish quality level according to original type. You can choose these functions after selecting **[Original Type 1 (Text)]** or **[Original Type 2 (Photo)]**.

- Text Mode 1
  normal text originals
- Text Mode 2
  newspapers, semi-transparent originals (reverse side print faintly visible)
- Photo Mode 1
  text/photo images containing mostly photo areas
- Photo Mode 2
  text/photo images containing mostly text areas
- Photo Mode 3
  actual photographic paper

- Special Mode 1
  Highly transparent originals (reverse side clearly visible), or light text on a coloured background. Also for originals with very grainy backgrounds (some newspapers) and light text.
- Special Mode 2
  originals with coloured text and lines
- Special Mode 3
  photo images created by dithering (visible dots), such as newspaper photos - normal resolution
- Special Mode 4
  photo images created by dithering (visible dots), such as newspaper photos - coarse resolution
- Special Mode 5
  normal text originals (reproducing the background)

Note
❒ Default:
  - *Original Type 1 (Text): Text Mode 1*
  - *Original Type 2 (Photo): Photo Mode 1*
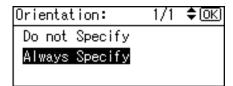
Duplex Mode Priority

You can select the type of Duplex function effective when the machine is turned on, reset, or modes are cleared.

Note
❒ Default: *1 Sided→1 Sided*

Orientation

You can select the original orientation when using the Combine, or two-sided originals to one-sided Duplex function.

```
Orientation:      1/1  ≑ OK
 Do not Specify
Always Specify
```

✐ Note

❒ Default: *Do not Specify*

❒ When you select **[Always Specify]**, you must select the orientation of originals.

Max. Number of Sets

The maximum copy quantity can be set between 1 and 99 using number keys.

✐ Note

❒ Default: *99sheets*

Original Count Display

You can set to display the count of originals and copying pages on the display when **[On]** is selected.

✐ Note

❒ Default: *Off*

Reproduction Ratio

You can select which reduce, enlarge, or input ratio is shown on the display with priority when **[Reduce]** or **[Enlarge]** is selected.

✐ Note

❒ Default:

- Metric version:
  - Ratio 1: *50%*
  - Ratio 2: *71%*
  - Ratio 3: *93%*
  - Ratio 4: *141%*
  - Ratio 5: *200%*
- Inch version:
  - Ratio 1: *65%*
  - Ratio 2: *78%*
  - Ratio 3: *93%*
  - Ratio 4: *129%*
  - Ratio 5: *155%*

You can set a ratio other than the above.

A **Press the 【User Tools/Counter】 key.**

B **Select [Copier Features] using 【▲】 or 【▼】, and then press the 【OK】 key.**

C **Select [Reproduction Ratio] using 【▲】 or 【▼】, and then press the 【OK】 key.**

D **Select the ratio you want to change using 【▲】 or 【▼】, and then press the 【OK】 key.**

E **Select [User R/E Ratio] using 【▲】 or 【▼】, and then press the 【OK】key.**

F **Enter a ratio using the number keys (from 50-200%), and then press the 【OK】 key. The "Programmed" message appears.**

Preset R/E Priority

You can set the ratio with priority when **[R/E]** is selected.

Note
❒ Default:
- Metric version: *71%*
- Inch version: *65%*

Duplex Margin

You can specify left margin on the back side of copies, and top margin on the front side. Select **[Top Margin]** or **[Left Margin]**, and then set the required value.

- Top Margin: 0 - 50 mm, 0″ – 2″
- Left Margin: 0 - 50 mm, 0″ – 2″

Note
❒ Default:
- Metric version: *5 mm*
- Inch version: *0.2 inch*

Letterhead Setting

If you select **[On]** for this function, the machine rotates the image correctly.

Note
❒ Default: *Off*
❒ Orientation-fixed (top to bottom) or two-sided paper might not print correctly, depending on how the originals and paper are placed.

Reference
When using letterhead paper, check its orientation is correct. See p.42 "Orientation-Fixed Paper or Two-Sided Paper".

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5. Remarks

Do's and Don'ts

⚠ *WARNING:*

- **Keep the machine away from flammable liquids, gases, and aerosols. A fire or an electric shock might occur.**

⚠ *CAUTION:*

- *Unplug the power cord from the wall outlet before you move the machine. While moving the machine, you should take care that the power cord will not be damaged under the machine.*

⚡Important

❒ Do not turn the power off while the On indicator is lit or blinking. Doing so may damage the memory.

❒ Before unplugging the power cord or turning off the main power switch, make sure remaining memory space is at 100%, as shown on the display. See p.12 "Turning Off the Power" and "Turning Off the Main Power".

- When you use this machine for a long time in a confined space without good ventilation, you may detect an odd smell. To keep the workplace comfortable, we recommend that you keep it well ventilated.

- Do not touch areas on or around the fusing unit. These areas get hot.

- After making copies continuously, the exposure glass may become warm—this is not a malfunction.

- The area around the ventilation hole might feel warm. This is caused by exhaust air and is not a malfunction.

- When the machine is not in use and in stand-by mode, you may hear a small noise inside. This is caused by the image stabilization process and is not a malfunction.

- Do not turn off the operation switch while copying or printing. Make sure all copying or printing has finished first.

- The machine might not produce good copy images if condensation forms inside as a result of rapid temperature change.

- Do not open the covers of the machine while copying or printing. If you do, misfeeds might occur.

- Do not move the machine during copying or printing.

- If you operate the machine improperly or a machine failure occurs, settings might be lost. Be sure to make a note of your machine settings.

- The manufacturer shall not be liable for any loss or damage resulting from mechanical failure, loss of settings, or use of the machine.

Where to Put Your Machine

Machine Environment

Choose your machine's location carefully. Environmental conditions greatly affect its performance.

Optimum environmental conditions

⚠ **CAUTION:**

- *Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.*
- *Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.*

⚠ **CAUTION:**

- *Make sure the room where you are using the machine is well ventilated and spacious. Good ventilation is especially important when the machine is used heavily.*

- TemperaturC: 10-32 °C (50-89.6 °F) (humidity to be 54% at 32 °C, 89.6 °F)
- Humidity: 15-80% (temperature to be 27 °C, 80.6 °F at 80%)
- A strong and level base.
- The machine must be level within 5 mm, 0.2 inches: both front to rear, and left to right.
- To avoid possible buildup of ozone, be sure to locate this machine in a large well ventilated room that has an air turnover of more than 30 m^3/hr/person.

Environments to avoid

- Locations exposed to direct sunlight or other sources of strong light (more than 1,500 lux).
- Locations directly exposed to cool air from an air conditioner or heated air from a heater. (Sudden temperature changes can cause condensation to form inside the machine.)
- Locations close to machines generating ammonia, such as a diazo copy machine.
- Places where the machine will be subject to frequent strong vibration.
- Dusty areas.
- Areas with corrosive gases.

Moving

⚠ **CAUTION:**

- *Unplug the power cord from the wall outlet before you move the machine. While moving the machine, you should take care that the power cord will not be damaged under the machine.*

⚠ **CAUTION:**

- *When the optional paper tray unit is installed, do not push the upper part of the main unit horizontally. An injury might occur if the paper tray unit becomes detached from the main unit.*

✴Important

❒ Be careful when moving the machine. Take the following precautions:

- Turn off the main power. See p.12 "Turning Off the Main Power".

- Unplug the power cord from the wall outlet. When you pull out the plug from the socket, grip the plug to avoid damaging the cord, thereby reducing the risk of fire or electric shock.

- Close all covers and trays, including the front cover and bypass tray.

❒ Do not take off the holding stand.

❒ Protect the machine from strong shocks. Impact can damage the memory.

Power Connection

⚠ WARNING:

- **Connect the machine only to the power source described on the inside front cover of this manual. Connect the power cord directly into a wall outlet and do not use an extension cord.**

- **Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it. Do not pull it hard nor bend it more than necessary. These actions could cause an electric shock or fire.**

⚠ CAUTION:
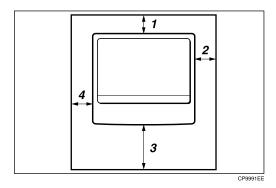
- *Unplug the power cord from the wall outlet before you move the machine. While moving the machine, you should take care that the power cord will not be damaged under the machine.*

⚠ CAUTION:

- *When you disconnect the power plug from the wall outlet, always pull the plug (not the cable).*

- When the main power switch is in the stand-by position, the optional anti-condensation heaters are on. In an emergency, unplug the machine's power cord.

- When you unplug the power cord, the anti-condensation heaters turn off.

- Make sure the plug is inserted firmly in the wall outlet.

- Voltage must not fluctuate by more than 10%.

- The wall outlet shall be installed near the machine and shall be easily accessible.

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Access to the Machine

Place the machine near the power source, providing the clearance areas shown.

CP9991EE

1. **Rear: 1 cm (0.4") or more**

2. **Right: 1 cm (0.4") or more**

3. **Front: 75 cm (29.6") or more**

4. **Left: 1 cm (0.4") or more**

✎ **Note**

❒ For the required space when options are installed, contact your service representative.

Maintaining Your Machine

If the exposure glass, exposure glass cover, ARDF belt is dirty, copy clarity may be reduced. Clean these parts if they are dirty.

❖ **Cleaning the machine**
Wipe the machine with a soft, damp cloth. Then wipe it with a dry cloth to remove the water.

⚠️**Important**
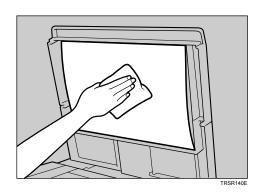
❒ Do not use chemical cleaner or organic solvents such as thinner or benzene. If such substances get inside the machine or melt plastic parts, a failure might occur.

❒ Do not clean parts other than those explicitly specified in this manual. Other parts should only be cleaned by your service representative.

Cleaning the Exposure Glass

GDSH050J
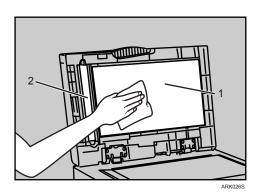
Clean 1 and 2.

Cleaning the Exposure Glass Cover

TRSR140E

Cleaning the ARDF

ARK026S

Clean 1 and 2.

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Combination Chart

The combination chart below shows which functions can be used together. When you read the chart, see the following table:

○	These functions can be used together.
●	These functions cannot be used together. The second function selected will be the function you are working in.

The following shows the combinations of functions.

Function selected after (columns, left to right):
1. Regular Size Originals
2. Custom Size Originals
3. Bypass Tray
4. Manual Image Density
5. Text Originals
6. Photo Originals
7. Preset Reduce/Enlarge
8. Zoom
9. 1 Sided → Combine 1 Sided
10. 1 Sided → Combine 2 Sided
11. 2 Sided → Combine 1 Sided
12. 2 Sided → Combine 2 Sided
13. 2 Sided → Series 1 Sided
14. 1 Sided → Duplex 2 Sided
15. 2 Sided → Duplex 2 Sided
16. Sort

Function selected first (rows):

Function selected first	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Regular Size Originals		●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Custom Size Originals	●		○	○	○	○	○	○	○	○	*1	*1	*1	○	*1	○
Bypass Tray	○	○		○	○	○	○	○	*2	*4	*2	*4	○	*4	*4	*2
Manual Image Density	○	○	○		○	○	○	○	○	○	○	○	○	○	○	○
Text Originals	○	○	○	○		●	○	○	○	○	○	○	○	○	○	○
Photo Originals	○	○	○	○	●		○	○	○	○	○	○	○	○	○	○
Preset Reduce/Enlarge	○	○	○	○	○	○		●	*3	*3	*3	*3	○	○	○	○
Zoom	○	○	○	○	○	○	●		*3	*3	*3	*3	○	○	○	○
1 Sided → Combine 1 Sided	○	○	*2	○	○	○	○	○		●	●	●	●	●	●	○
1 Sided → Combine 2 Sided	○	○	*4	○	○	○	○	○	●		●	●	●	●	●	○
2 Sided → Combine 1 Sided	○	*1	*2	○	○	○	○	○	●	●		●	●	●	●	○
2 Sided → Combine 2 Sided	○	*1	*4	○	○	○	○	○	●	●	●		●	●	●	○
2 Sided → Series 1 Sided	○	*1	○	○	○	○	○	○	●	●	●	●		●	●	○
1 Sided → Duplex 2 Sided	○	○	*4	○	○	○	○	○	●	●	●	●	●		●	○
2 Sided → Duplex 2 Sided	○	*1	*4	○	○	○	○	○	●	●	●	●	●	●		○
Sort	○	○	*2	○	○	○	○	○	○	○	○	○	○	○	○	

*1 You cannot use functions for two-sided originals if the originals are longer than 357 mm (▱) .

*2 This function cannot be used for copy paper longer than 356 mm (▱) .

*3 The function selected after switches the ratio to auto ratio.

*4 If you select these functions together, an error message appears. To copy, you must cancel one of the functions.

ARK031S

Supplementary Information

❖ **Bypass Tray Copy**

- The following paper sizes can be selected as standard sizes:
  A4▯, A5▯▯, B5 JIS▯, $8^1/_2$"×14"▯, $8^1/_2$"×13"▯, $8^1/_2$"×11"▯,
  $8^1/_4$"×14"▯, $8^1/_4$"×13"▯, 8"×13"▯,$7^1/_4$"×$10^1/_2$"▯, $5^1/_2$"×$8^1/_2$" ▯▯,
  $4^1/_8$"×$9^1/_2$"▯, $3^7/_8$"×$7^1/_2$"▯, 16K, C6 Env▯,C5 Env▯, DL Env▯

- When the beeper is turned off, it will not sound if you insert paper into the bypass tray. See *General Settings Guide*.

❖ **Preset Enlarge/Reduce**

- You can select one of 5 preset ratios (2 enlargement ratios, 3 reduction ratios).

- You can select a ratio regardless of the size of an original or copy paper. With some ratios, parts of the image might not be copied or margins will appear on copies.

- Copies can be reduced or enlarged as follows:

  ❖ **Metric version**

Ratio (%)	Original → Copy paper size
200 (enlarge area by 4)	A6→A4
141 (enlarge area by 2)	A5→A4
122	--
115	--
93	A little reduced. (Create Margin)
87	--
82	F→A4
71 (reduce area by $^1/_2$)	A4→A5
65	--
50 (reduce area by $^1/_4$)	A4→A6

❖ **Inch version**

Ratio (%)	Original → Copy paper size
200 (enlarge area by 4)	--
155 (enlarge area by 2)	$5^1/_2" \times 8^1/_2" \rightarrow 8^1/_2" \times 14"$
129	$5^1/_2" \times 8^1/_2" \rightarrow 8^1/_2" \times 11"$
121	--
93	--
85	$F \rightarrow 8^1/_2" \times 11"$
78	$8^1/_2" \times 14" \rightarrow 8^1/_2" \times 11"$
73	--
65	$8^1/_2" \times 11" \rightarrow 5^1/_2" \times 8^1/_2"$
50 (reduce area by $^1/_4$)	--

❖ **Zoom**
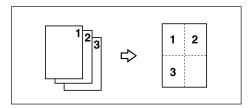
- The reproduction ratios you can specify are 50–200%.
- You can select a ratio regardless of the size of an original or copy paper. With some ratios, parts of the image might not be copied or margins will appear on copies.

❖ **Duplex**

- You cannot use the following copy paper with this function:
  - Paper smaller than B5 JIS▷ or $8^1/_2"\times11"$▷.
  - Paper thicker than 90 g/m^2, 24 lb.
  - Paper thinner than 64 g/m^2, 17 lb.
  - Translucent paper
  - OHP transparencies
  - Label paper (adhesive labels)
  - Postcards
- When an odd number of originals is placed in the ARDF, the back of the last page of copied paper is blank.
- During copying, the image is shifted to allow for the binding margin.
- The following paper sizes can be duplexed: A4▷, B5 JIS▷, $8^1/_2"\times14"$▷, $8_1/_4"\times14"$▷, $8^1/_2"\times11"$▷, $8^1/_2"\times13"$▷, $8_1/_4"\times13"$▷, 16K

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❖ **Combine**

- When using this function, the machine selects the reproduction ratio automatically. This reproduction ratio depends on copy paper sizes and the number of originals.
- If the calculated ratio is under the minimum ratio, it is automatically adjusted to within available range. However, with some ratios, parts of the image might not be copied.
- You cannot use custom size paper of 357 mm in length, or larger.
- If the orientation of originals is different from that of the copy paper, the machine will automatically rotate the image by 90° to make copies properly.
- If the number of originals placed is less than the number specified for combining, the last page segment is left blank as shown.

❖ **Duplex Margin**

- If you set a binding margin that is too wide, part of the image may not be copied.
- When making copies using the Combine function, the binding margin is added to the copies when combining is finished.

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CE

Declaration of Conformity

"The Product complies with the requirements of the EMC Directive 89/336/EEC and its amending directives and the Low Voltage Directive 73/23/EEC and its amending directives."

In accordance with IEC 60417, this machine uses the following symbols for the main power switch:

❙ means POWER ON.

⏻ means STAND BY.

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Operating Instructions   Copy Reference