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Welcome to the RISOgraph RA4200

About This User Guide

This Guide provides all of the information necessary to use your new RISOgraph RA4200. It is designed to help you take advantage of the features built into the RISOgraph RA4200. It also provides information about how to maintain your RISOgraph and solve problems.

Control panel buttons and displays are clearly indicated, like this:

Indicators that are lit, to show you when a feature or mode is active, are presented with the associated button or icon, like this:

Procedures for using the RISOgraph are presented with simple numbered steps, like this:

1. Set the original into place.

Special information is presented like this:

Note. Change Drum Units with the power ON.

Important!
Do not mix printing paper of different sizes.

Safety information is presented like this:

⚠️ Caution

⚠️ WARNING

When you can find more details in another section of the User Guide, cross-references are provided, like this:

→ Pages 38-39 — See “Troubleshooting” for further information.
Installing Your RISOgraph

Location and Environment

⚠️ Caution
- Install the machine near the electrical outlet to avoid using an extension cord between the machine and the electrical outlet.
- Maintain adequate distance from the rear wall to allow easy connection and disconnection of the electrical cord.
- Do not allow anything to rest on or roll over the electrical cord, and do not place the machine where the electrical cord is subject to traffic or abuse. This may result in a shock or fire hazard.

Note  To avoid mechanical problems:
- Avoid dusty locations.
- Select a location where the machine will be level.
- Avoid locations where direct sunlight will fall on the machine. If it is unavoidable, protect the machine with a curtain or shade on windows.
- Install within the recommended temperature range: 50° F to 86° F (10° C to 30° C ) with moderate humidity.
- Avoid locations where heat or air is directed onto the machine from an air conditioner or a heater.

Power Connections

⚠️ WARNING – To Avoid Personal Injury
- Securely insert the power cord plug into the electrical outlet.
- Do not overload the electrical outlet or extension cord, as this can result in fire or electrical shock.
About Your RISOgraph

The RISOgraph RA4200 is a high-quality scanner/printer that is as easy to use as a copier.

Features

Print Speed Control
Any of five print speeds can be selected for optimum performance.

Confidential Feature
A confidential original can be printed and the master can be automatically discarded to prevent further, unauthorized printing.

Automatic Idle
This optional feature prevents ink from drying on the Drum Unit when the RISOgraph is not in use for a period of time. This prevents faint or blurred images on the first few sheets when printing starts again.

Photo Enhancement
By simply pressing the LINE/PHOTO button, you can set the RISOgraph to process for sharp line definition or to process for graphics and accurately reproduce shades.

Color Printing Options
Any of six optional ink colors can be used by changing the Drum Unit.

Easy to Use
The control panel is designed to show you the options available and the current status of the machine: Indicator lights, an easy-to-read digital display, and a convenient “Machine Monitor” display for troubleshooting.

Two-Up Printing
Originals can be printed side by side on a single sheet.

Fully Automatic Processing
The RISOgraph RA4200 processes your original by making a master and then printing. These processes are fully automatic, unless you choose to manually set the processing mode. The Master-Making/Printing indicator always shows the current process:

Master-Making

1. Set the original into place.
2. Scan the original.
3. Create the master.

Printing

4. Enter the number of copies you want.
5. Start printing.
Knowing the Parts and Components

Upper Block

1. Original Tray
   Holds scanned originals.

2. ADF (Automatic Document Feeder) Unit
   Feeds originals into the scanner.

3. Original Guides
   Holds and guides originals for feeding.

4. Original Feed Table

5. Original Feed Table Release Lever
   Unlocks and opens the Original Feed Table.

6. ADF Unit Release Lever
   Releases an original for removal when it is jammed in the ADF Unit.

7. Control Panel

Paper Feed Block

8. Paper Feed Tray

9. Feed Tray Paper Guides
   Holds and guides paper.

10. Paper Feed Pressure Adjustment Lever
    Adjusts the paper feed pressure according to the paper being used.

11. Left/Right Print Position Adjustment Dial
    Moves the print position to the left or right.

12. Feed Tray Down Button
    Lowers the Paper Feed Tray for replacing or adding printing paper.

13. Master Disposal Box
    Holds discarded masters.
Master-Making Block

10 Master Loading Unit Release Lever
Opens the Master Loading Unit.

11 Master Loading Unit
Makes a master from the scanned original.

12 Master Loading Button
Loads and/or cuts the master.

13 Master Roll Cover
Protects the Master Roll.

14 Master Roll

Paper Receiving Block

15 Paper Receiving Tray

16 Receiving Tray Paper Guides
Aligns printed paper neatly.

17 Paper Guiding Arms
Guides printed paper into the Paper Receiving Tray.

18 Paper Stop
Stops printed paper ejected into the Paper Receiving Tray.

Front Block

19 Front Cover

20 Drum Unit
Holds the master on its surface.

21 Ink Bottle

22 Ink Bottle Locking Lever
Secures the ink bottle in position.

23 Drum Handle
Used to pull the Drum Unit out of the machine.

24 Drum Home Position Button
Positions and unlocks the Drum Unit for removal.

26 Power Switch
Using the Control Panel

Main Panel

1 START Button
   Starts printing or making a master. This button is also used to resume operation after troubleshooting.

2 STOP Button
   Interrupts printing.

3 Print Quantity Keys
   Use these keys to enter the number of copies to be printed.

4 Clear (C) Key
   Cancels the number entered and resets the Print Quantity Display to zero.

5 ALL RESET Button
   Returns all settings to initial status. This button is also used to clear error messages after troubleshooting.

6 TEST PRINT Button (Page 19)
   Prints a sample from the current master. This button can be used to check print quality, printing position, and density.

7 CONFIDENTIAL Button (Page 22)
   Protects confidential documents from unauthorized duplication.

8 AUTO PRINT Button (Page 23)
   Automates the process of master-making through printing.

9 TWO-UP Button (Page 41)
   Reproduces two prints side by side on one sheet of paper. The indicator lights when the feature is active.
09 LINE/PHOTO Button (Page 18)
Changes the current mode between Line and Photo processing.

10 Master-Making/Print (M/P) Button
Switches between Master-Making and Printing operations. Normally, selection is automatically made according to the current process.

Sub Panel

12 SCANNING Contrast Adjustment Buttons (Page 18)
Selects any of five contrast adjustments for the darkness of the original to be scanned.

13 PRINT POSITION Adjustment Buttons (Page 20)
Adjusts vertical print position.

14 PRINT SPEED Adjustment Buttons (Page 21)
Selects any of five print speeds.

15 1:1 Button (Page 19)
Returns the reduction ratio to 1:1 (100%).

16 REDUCE Button (Page 19)
Selects any of four reduction ratios.

17 INTERFACE (I/F) Button
Allows data transmission between the RA4200 and external equipment, such as personal computers, word processors, and so on.

18 AUTO IDLE Button (Page 24)
When switched ON, extremely light or blurred printing is prevented after the machine is not used for long periods. The indicator lights when AUTO IDLE is switched on.

19 SORTER Button (Page 39)
Use this button when you use the optional sorter. The indicator lights when the sorter is active.

Panel Displays

20 Operation Status Display
Shows the next operation.

21 Check & Error Display
Shows errors or machine status.

22 Original Scanning Contrast Display
Shows the current original scanning contrast.

23 Print Position Display
Shows the current print position.

24 Print Speed Display
Shows the current print speed.

25 Reduction Ratio Display
Shows the current reduction ratio.

26 Print Quantity Display
Shows the specified number of copies to be printed or advisory messages.

27 Replace Ink Bottle Display
Flashes when ink bottle is empty.

28 Replace Master Roll Display
Flashes when the Master Roll is depleted.

29 Empty Disposal Box Display
Flashes when the Master Disposal Box is full.

30 Machine Monitor Display
Shows locations associated with errors, advisory messages on the Print Quantity Display, or machine settings.
About Printing Paper

Selecting Printing Paper

Printing paper sizes of 4 x 6 inch (postcard size, or A6) to 11 x 17 inch (ledger size, or A3) can be used. A wide range of paper thicknesses and types can be used for printing. Use printing paper with weights in the range of 13-lb bond (46 g/m²) to 110-lb index (210 g/m²).

The maximum printing area is 7.8 x 13.7 inch for a legal Drum Unit and 245 x 350 mm for a B4 Drum Unit.

Important!
Do not use the following paper, which may cause a jam or misfeed:

- Extremely thin paper (less than 13-lb bond, or 46 g/m²)
- Extremely thick paper (greater than 110-lb index, or 210 g/m²)
- Chemically treated paper (such as thermal paper, carbon paper)
- Wrinkled, curled, folded, or torn paper
- Chemically coated paper (one or both sides)
- Paper with folded, curled, or rough leading edges
- Heavy drawing paper

To prevent paper jams and misfeeds:

- When using standard paper, set the Paper Feed Pressure Adjustment Lever to "NORMAL" and the Paper Guiding Arms to "Standard". ⇒ Pages 12-13
- When using thick paper, such as drawing paper, set the Paper Feed Pressure Adjustment Lever to "CARD" and the Paper Guiding Arms to "Thick Paper/Ledger Paper". ⇒ Pages 12-13
- When using ledger-size (A3) paper, set the Paper Guiding Arms to "Thick Paper/Ledger Paper". ⇒ Page 13
- When using slippery paper, set the Paper Feed Pressure Adjustment Lever to "CARD". ⇒ Page 13
- Slide the Feed Tray Paper Guides, Receiving Tray Paper Guides, and Paper Stop to fit the paper size. ⇒ Pages 12-13
- Use flat printing paper that is free of folds. If curled paper is unavoidable, place the printing paper so that the curl faces down.
- Printing paper tends to stick to the drum surface if the top margin is too narrow on the original, or if the upper portion of the original uses a large amount of ink. To solve this problem, lower the print position to provide a wider top margin, or reverse the top and bottom of the original. Then restart printing from the beginning. ⇒ Page 20

Storing Paper

Store printing paper in a level, dry area. Storing the paper in a humid area could cause paper jams and/or poor print quality.

After unpacking printing paper, keep remaining paper wrapped and store it in a moisture-proof box. It is highly recommended to put silica gel in the paper storage box.
About Your Originals

You can use originals from 4 x 6 inch (postcard size, or A6) to 11 x 17 inch (ledger size, or A3). The weight of originals should be between 15-lb bond (50 g/m²) and 32-lb bond (120 g/m²).

You can use the LINE/PHOTO button to produce printed copies according to the contents of the original. If the original contains only text or lines, select LINE to produce crisp characters. If the original contains photos, select PHOTO to reproduce different shades.

Be sure to provide a margin of 3/8 inch (10 mm) or more at the top of an original.

Use the carrier sheet when printing the following originals:

- Patched or worn originals
- Wrinkled, curled, folded, or torn originals
- Transparent originals (such as tracing paper, OHP transparency)
- Originals that are chemically coated (one or both sides)
- Originals with correction fluid or glue. If correction fluid or glue is used on an original, thoroughly dry it before you set the original in position.
- Originals with folded, curled, or rough leading edges
- Extremely thin originals (less than 15-lb bond, or 50 g/m²)
- Originals with a chemically treated surface (such as thermal paper or carbon paper)

Important

Do not use the following originals:

- Originals with staples or clips
- Extremely thick originals (greater than 32-lb bond, or 120 g/m²)
Quick Overview

Printing operations are divided into three stages: Setting up and loading the Paper Feed Tray and Paper Receiving Tray, making masters, and printing.

Setting Up

1. Open the Original Tray.
   - Page 16

2. Open the Paper Feed Tray, load paper, and adjust the Feed Tray Paper Guides.
   - Page 12

3. Open the Paper Receiving Tray and raise the Receiving Tray Paper Guides and Paper Stop.
   - Page 13

4. Turn the power ON and check the Operation Status Display.
   - Page 16 — An optional colored-ink Drum Unit can be installed.

Making Masters

When you make the master, you can change settings to optimize print quality.

5. Place originals face-down on the Original Feed Table.
   - Page 16
   - Page 18 — Scanning contrast can be adjusted.
   - Page 18 — The type of processing, either line or photo, can be specified.
   - Page 19 — Reduction ratio can be specified.
   - Page 23 — The Auto Print feature can be switched ON.
   - Page 41 — The Two-Up feature can be activated.

6. Press the START button.
   A sample print is automatically produced.
7 Check print quality.

- Page 20 — Print position can be adjusted vertically and horizontally.
- Page 21 — Print speed can be adjusted.
- Page 19 — More sample prints can be printed.

Printing

8 Enter the number of copies to be printed.

- Page 17

9 Press the START button.

The specified number of copies are printed.

- Page 17
- Page 22 — After printing, the master remains on the Drum Unit unless the Confidential feature is switched ON.
**Setting Up the Paper Feed Tray**

1. Open the Paper Feed Tray.

2. Load printing paper and slide the Feed Tray Paper Guides to fit the paper width.

   **Important!**
   Do not mix printing paper of different sizes.

3. Set the paper feed pressure.
   Position the Paper Feed Pressure Adjustment Lever at either Normal or Card, according to the paper to be used:

   - **NORMAL**
     - when using standard paper
   - **CARD**
     - when using thick paper, such as drawing paper, or slippery paper

**Replacing or Adding Paper**

If printing paper is depleted during printing, or you want to use paper of a different size, lower the Paper Feed Tray so that you can load the paper easily.

To lower the Paper Feed Tray, hold down the Feed Tray Down button.

**Important!**
Do not mix different paper sizes in the Paper Feed Tray.

**Closing the Paper Feed Tray**

Remove the printing paper, widen the Feed Tray Paper Guides completely, and then close the Paper Feed Tray.
Setting Up the Paper Receiving Tray

Printed paper stacks on the Paper Receiving Tray according to size, thickness, and quantity. The Paper Receiving Tray can be positioned at high and low levels:

- At the high level, the tray is angled.
- At the low level, it can be level or angled.

Choose the best Paper Receiving Tray position for the paper you are using.

1. Open the Paper Receiving Tray.

2. Raise and slide the Receiving Tray Paper Guides to fit paper width.

3. Adjust the Paper Guiding Arms.
Adjust the Paper Guiding Arms so that discharged paper stacks easily.

- For standard paper, lower the Paper Guiding Arms and set them in the slit of the Receiving Tray Paper Guides.
- For card stock and ledger-size (A3) paper, raise the Paper Guiding Arms.

4. Raise and slide the Paper Stop to fit paper length.

Closing the Paper Receiving Tray
Slide the Paper Stop to the ledger (A3) position and turn it down. Spread the Receiving Tray Paper Guides to the ledger (A3) position, turn them down, and close the Paper Receiving Tray.
Color Printing

To print with another color ink, purchase optional color Drum Units and replace the entire drum. When a Drum Unit other than black is in place, the Colored Drum indicator lights on the control panel.

⚠️ Caution
Only use RISOGRAPH RA Drum.

Notes Change Drum Units with the power ON.
Store the removed Drum Unit horizontally in the Drum Unit case.
Never store Drum Units in an upright position.

Changing Color Drum Units

1 Open the Front Cover.

2 Be sure that the Drum Home Position indicator is lit.
If it is not lit, press the Drum Home Position indicator. The drum will rotate and stop at the preset home position, and the Drum Home Position indicator will light.

Note Unless the Drum Home Position indicator is lit, the Drum Unit cannot be pulled out.

3 Pull out the Drum Unit.
Raise the Drum Unit Handle until it is level and pull out the Drum Unit until it stops.

4 Remove the Drum Unit from the machine.
Lift the Drum Unit with both hands and remove it from the machine.
5 Load the color Drum Unit onto the holder.
Insert the Drum Unit into the holder horizontally, holding the handle and body with both hands.

6 Install the Drum Unit in the machine.
With the Drum Unit Handle in its raised position, push the Drum Unit into the machine until it stops. Then lower the handle and close the Front Cover.
Making Masters and Printing

**WARNING – To Avoid Personal Injury**
- Be alert and use common sense.
- Don’t open the covers or move the machine during operation.
- Keep loose clothing away from moving parts to avoid becoming entangled.
- Keep hands away from openings in the machine during operation.
- Before cleaning any parts of the machine, turn the power OFF.
- Disconnect the power cord if you think an electrical problem is present.

**Caution – To Avoid Mechanical Problems**
- Open/close the covers gently.
- Do not turn the power switch OFF or pull out the power cord plug during operation.
- DO NOT place items on top of the machine or in any opening of the machine during operation. This could damage the machine.

1. **Turn the power switch ON.**
The power switch is located on the lower right side of the machine:

   - I - ON
   - O - OFF

2. **Check the settings on the control panel.**
   When power is connected, the indicators on the control panel show the initial settings. Make any necessary changes such as reduction ratio, LINE/PHOTO, and so on.

   *Holding down the R + 8 (ALL RESET) button for more than 1 second returns the control panel to the initial settings.*

   - Page 24 — Return to initial settings.
   - Page 25 — You can customize the initial settings.

3. **Open the Original Tray.**
   Rotate the Original Tray, folded on the ADF Unit, by 180° outward.

4. **Place originals on the Original Feed Table.**
   Adjust the Original Guides to the width of the originals. Then insert the originals face down into the ADF Unit until they stop. The originals are automatically fed and set into place.

   A maximum of 50 originals can be set into place at one time.

**Note** When originals are in place, processing automatically changes to Master-Making from Printing. The MASTER-MAKING indicator on the control panel lights.
5 Press the START button.
After an original is scanned, a master is created. A sample is automatically printed so that you can check the print quality, position, and density.

Page 20 — To change the position of the printed image, press the PRINT POSITION adjustment buttons, and/or turn the Left/Right Print Position Adjustment Dial.

Page 18 — To change the density of the printed copies, adjust scanning contrast and create another master.

If settings are changed, press the TEST PRINT button to make a sample print.

6 Enter the number of copies to be printed.
Specify the number of copies to be printed using the Print Quantity keys. The specified number is displayed on the Print Quantity Display.

Note If you enter the incorrect number, press the C key to reset the Print Quantity Display to zero, then enter the correct number.

7 Press the START button.
The specified number of copies are printed.

Note If printing stops and the ADD PAPER indicator flashes on the control panel, paper in the Paper Feed Tray is depleted. Load paper into the Paper Feed Tray.
Text/Photo Processing

You can produce printed copies according to the contents of the original using the LINE/PHOTO feature.

Holding down the LINE/PHOTO button switches between LINE and PHOTO.

**Line**
- Select LINE if the original contains only text or lines. This includes word-processed originals, photocopies, and newspaper. Since images are processed in two scales, characters are sharply defined.

**Photo**
- Select PHOTO if your original contains a photo. Since it will be graphically processed, degrees of shading are accurately reproduced.

**Note** If LINE is selected to print an original that contains a photo with dark shades, copies could be smudged.

*Holding down the R * 8 (ALL RESET) button for more than 1 second returns processing to the initial setting (LINE).*

---

**Adjusting Scanning Contrast**

Scanning contrast can be set to any of five levels according to the darkness of the original.

- For light originals, such as inappropriately copied documents or those written with a pencil, make the scanning contrast darker.
- For dark originals, like newspapers or colored stock, make the scanning contrast lighter.

Use the SCANNING Contrast Adjustment buttons as follows:

- [ ] Makes the contrast darker.
- [ ] Makes the contrast lighter.
- [ ] Returns the contrast to normal.

*Holding down the R * 8 (ALL RESET) button for more than 1 second returns the contrast to the initial setting (NORMAL).*
Reducing the Print

Originals can be printed in four reduced sizes.

Press the REDUCE button on the control panel and select the desired reduction.

Each time the REDUCE button is pressed, the indicators light in this order: 94 – 77 – 75 – 66 – 94 (94 – 87 – 82 – 71 – 94 for metric models).

**USA Model**

94% Border Increase
77% 8 1/2 x 14 ➞ 8 1/2 x 11
11 x 17 ➞ 8 1/2 x 14
75% 11 x 15 ➞ 8 1/2 x 11
66% 8 1/2 x 11 ➞ 5 1/2 x 8 1/2
11 x 17 ➞ 8 1/2 x 11

**Metric Models**

94% Border Increase
87% A3 ➞ B4
A4 ➞ B5
82% B4 ➞ A4, B5, A5
71% A3 ➞ A4
B4 ➞ B5

To return to 1:1 (100%) ratio, press the 1:1 button.

*Holding down the R • ☐ (ALL RESET) button for more than 1 second returns print size to the initial setting (1:1).*

---

**Checking Print Quality**

If changes have been made to print position, etc., check print quality by producing test prints.

If you hold down the TEST PRINT button, you can print continuously.

Test printing does not affect the quantity on the Print Quantity Display.
Positioning the Print

Print position can be adjusted up and down and/or right and left:

- Vertical print position can be adjusted by pressing the PRINT POSITION Adjustment buttons on the control panel.
- Horizontal print position can be adjusted by using the Left/Right Print Position Adjustment dial on the Paper Feed Tray.

Note  If you adjust the print position, be sure to produce test prints to verify the new print position.

Printing paper can stick to the drum surface if the top margin is too narrow on the original or if the upper portion of the original uses a large amount of ink. To solve this problem, lower the print position to provide a wider top margin or reverse the top and bottom of the original and restart printing from the beginning.

Adjusting Vertical Print Position

You can move the print position up or down within a range of $\pm 3/4$ inch ($\pm 20$ mm) by pressing either of the PRINT POSITION Adjustment buttons.

- $\downarrow$ Moves print position down
- $\uparrow$ Moves print position up
- CENTER Returns print position to the center

Holding down the $\uparrow \downarrow$ (ALL RESET) button for more than 1 second returns the print position to the initial setting (CENTER).

Adjusting Horizontal Print Position

You can move the print position left or right by turning the Left/Right Print Position Adjustment dial on the Paper Feed Tray.

The distance that you can adjust horizontal print position is determined by the size of the printing paper:

- $4 \times 6$ inch (postcard, or A6) to $10.1 \times 14.3$ inch (B4) $\Rightarrow$ $\pm 3/4$ inch ($\pm 20$ mm)
- $11 \times 17$ inch (ledger, or A3) $\Rightarrow$ $\pm 3/16$ inch ($\pm 5$ mm)
Adjusting Print Speed

Printing can be set at any of five speeds, ranging between 60 and 130 sheets per minute. The normal print speed is 100 sheets per minute.

Decreases print speed.

Increases print speed.

Holding down the \( R \) \& \( 8 \) (ALL RESET) button for more than 1 second returns print speed to the initial setting.

Page 25 — You can customize initial settings.
Protecting Confidential Documents

After printing is complete, the master remains on the Drum Unit. The master on the Drum Unit can be printed at any time by pressing the START button.

To protect confidential documents from duplication, press the CONFIDENTIAL button to discard the original's master after printing.

1 Confirm that printing has ended.

2 Press the CONFIDENTIAL button.
The CONFIDENTIAL indicator lights.

Note To cancel the Confidential feature, press the CONFIDENTIAL button again.

3 Press the START button.
The existing master is discarded and replaced with a blank master.
The CONFIDENTIAL indicator goes out, and the Confidential feature is canceled.

Note The master is discarded into the Master Disposal Box.

Page 29 — For strictly confidential documents, discard the contents of the Master Disposal Box.
One-Step Printing

The Auto Print feature automates the processes from master-making through printing.

Press the AUTO PRINT button to activate this feature. To cancel, press the AUTO PRINT button again.

Note  If you need to check or adjust print position, cancel the Auto Print feature.

1 Press the AUTO PRINT button.
The Auto Print indicator lights.

2 Set an original into place.
Insert originals face-down into the ADF Unit until they stop. A maximum of 50 originals can be in place at a time.

3 Enter the number of copies to be printed.
Enter the number of copies to be printed using the Print Quantity keys.

Note  If you enter an incorrect number, press the C key to reset the Print Quantity Display to zero, then enter the correct number.

If 0 is displayed as the print quantity, the machine will not start.

4 Press the START button.
Master-making through printing will take place automatically, producing as many copies as specified.

Note  Since a sample is automatically produced after master-making, one extra copy is printed.

Holding down the R • B (ALL RESET) button for more than 1 second returns the Auto Print feature to the initial settings.

Page 25 — You can customize initial settings.
Automatic Maintenance

When the RISOGraph is not used for several hours, ink can dry on the Drum Unit. This can cause the first few sheets to be faint or blurred when printing starts again. The Automatic Idle feature assures consistent print quality.

Whenever the Automatic Idle indicator is lit, the Automatic Idle feature works. If you want this feature when the indicator is not lit, press the Automatic Idle button to activate it.

The Automatic Idle feature is automatically activated if the power is switched ON when the RISOGraph unit is not used for a certain period (12 or 6 hours).

Note For ordinary or test printing after a long rest, the Automatic Idle feature is ignored even if the indicator is lit.

The minimum period required for automatic activation of the Automatic Idle feature may be selected.

⇒ Page 25 — You can customize initial settings.

Return to Initial Settings

To return all the settings, including print position and reduction ratio, to initial status, turn the power OFF and ON again, or hold down the ALL RESET button for more than 1 second.

Note If the initial settings have been customized, the above procedure will bring back the customized settings.

INITIAL SETTINGS (at time of purchase)

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Mode Select</td>
<td>LINE, PHOTO</td>
</tr>
<tr>
<td>Size Adjustment</td>
<td>100%</td>
</tr>
<tr>
<td>Print Quantity Display</td>
<td>0</td>
</tr>
<tr>
<td>Print Speed</td>
<td>SLOW, FAST</td>
</tr>
<tr>
<td>Print Position</td>
<td>-20, 10, 0, 10, 20+</td>
</tr>
<tr>
<td>Master-Making/Print</td>
<td>MASTER, PRINT</td>
</tr>
<tr>
<td>Original Scanning Contrast</td>
<td>LIGHT, DARK</td>
</tr>
</tbody>
</table>
Customizing the Initial Settings

You can change some of the initial settings to which the machine status returns when the power is turned ON or the R • 8 V (ALL RESET) button is held down for more than 1 second.

The initial settings of the following items can be changed (the settings at the time of purchase are shown in boldface):

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Initial Setting Item</th>
<th>Enter 0</th>
<th>Enter 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Print Speed</td>
<td>100 sheets/min</td>
<td>60 sheets/min</td>
</tr>
<tr>
<td>02</td>
<td>Auto Print Feature</td>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>04</td>
<td>Displayed Print Quantity</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>06</td>
<td>Auto Reset Time</td>
<td>None</td>
<td>5 minutes</td>
</tr>
<tr>
<td>08</td>
<td>Auto Idle Period</td>
<td>12 hours</td>
<td>6 hours</td>
</tr>
<tr>
<td>12</td>
<td>Two-Up Paper Size Setting</td>
<td>A4-size</td>
<td>Letter-size</td>
</tr>
<tr>
<td></td>
<td>(A4-size)</td>
<td>(B4-size)</td>
<td></td>
</tr>
</tbody>
</table>

When you customize the initial settings, the settings remain valid until they are changed again.

1 Press 8 while holding down the * Print Quantity key.
Access the changeable initial settings.

2 Check the Print Quantity Display.
Item number 01 and setting-status numbers 0 or 1 appear on the Print Quantity Display.

3 Enter an item number.
Enter the item number that you want to customize, using the Print Quantity keys.
For example, to select item number 02, enter 0 and 2.

Note: If you want to change item number 01, just press the START button without entering an item number, then change the setting.

4 Press the START button.
Each time you press the START button, the setting-status number switches between 0 and 1. Select either number.

5 Press the ALL RESET button.
After customizing the settings, hold down the ALL RESET button for more than 1 second.
The custom settings appear as the initial settings when the power is turned ON or the ALL RESET button is held down for more than 1 second.


Maintaining Your RISOgraph

⚠️ WARNING – To Avoid Personal Injury During Handling
- DO NOT allow unauthorized persons to make adjustments or repairs.
- DO NOT remove any fixed covers.
- CALL your Dealer immediately if you suspect any dangerous situations or have questions or problems with the machine.
- The machine contains precision parts and driving mechanisms. Do not perform actions other than those described in this manual.
- Don't make any modifications to the machine or remove parts.
- When you want to move the machine, contact your RISO Dealer.

⚠️ Caution – To Avoid Mechanical Problems
- The best safety device is an alert person who demonstrates good sense.
- Neither RISO nor its dealer is responsible for maintenance service performed by non-RISO-authorized personnel.

Replacing the Lithium Battery

The lithium battery in your RISOgraph should last about 5 years.

When the battery is losing power, the CALL SERVICE Display will light and the code number ?? will appear.

⚠️ Caution
- The lithium battery must be replaced by a trained and authorized service technician.
Cleaning Your RISOgraph

If the Thermal Print Head (in the Master Loading Unit) or the scanner (in the ADF Unit) is smudged with dust, dirt, ink, or correction fluid, printed copies may be stained or blurred. Clean them periodically in the following way.

Cleaning the Thermal Print Head

Clean the Thermal Print Head after you have replaced two Master Rolls.

Lift up the Original Feed Table and open the Master Loading Unit. Then gently wipe the Thermal Print Head (inside the Unit) several times with a soft cloth or tissue.

Note  It is effective to dampen a soft cloth or tissue with a small amount of alcohol before wiping the Thermal Print Head.

Caution  Since the Thermal Print Head is very delicate, avoid shocks or scratching with a hard object.

Cleaning the Scanner

1 Open the ADF Unit.

Open the ADF Unit while holding the ADF Unit Release Lever.

2 Wipe the scanner glass.

Gently wipe the scanner glass several times with a soft cloth or tissue.

Note  It is effective to dampen a soft cloth or tissue with a small amount of alcohol before wiping the scanner glass.

Caution  Since the scanner glass is very delicate, avoid shocks or scratching with a hard object.

Cleaning the Press Roller

If the rubber Press Roller that presses the printing paper against the Drum Unit is stained, smudged strips may appear on the back side of prints.

Wipe the Press Roller gently with a soft cloth or tissue.

Cleaning the Machine Exterior

To remove dust, wipe the machine exterior periodically with a soft cloth.

To remove stains, use an appropriate cleanser.

Caution  The machine exterior is plastic. Never use alcohol or solvent for cleaning.
Replacing the Ink Bottle

1. Open the Front Cover and pull the empty ink bottle out of the machine.
   Release the green Ink Bottle Locking Lever and pull the empty ink bottle out of the Drum Unit.

2. Remove the cap from the new ink bottle.

3. Align the arrow on the new ink bottle with the arrow marked on the drum.
   While pushing the Ink Bottle Locking Lever aside, rotate the ink bottle until its arrow meets the arrow marked on the drum.

4. Insert the new ink bottle.
   Insert the ink bottle all the way into the drum.

5. Lock the ink bottle into place, and close the Front Cover.
   Return the Ink Bottle Locking Lever to its initial position to keep the ink bottle in place.
   Press on the lower righthand area of the Front Cover to close it securely.

Important!
- Never insert a bottle of a different color ink.
  Always be sure that the color of the new ink bottle is the same as that of the old one. To change print color, replace the entire Drum Unit.
- The master wrapped around the Drum Unit has ink on it. Keep your hands and clothing away from it.
  If your hands come into contact with ink, wash them immediately and thoroughly.
Emptying the Master Disposal Box

1. Pull out the Master Disposal Box.
   Hold together both the upper and lower handles of the Master Disposal Box and pull out the box.

   **Note** When carrying the Master Disposal Box, be sure to hold the handles so as not to drop the used masters.

2. Discard used Masters.
   While holding the handles, open the cover by pulling up the locking lever and discard used masters.
   Return the locking lever and close the cover.

3. Insert the Master Disposal Box into position.
   Holding the handles, insert the Master Disposal Box into position as far as it will go. Then release the handles.
Replacing the Master Roll

1. Raise the Original Feed Table.
   Hold the Original Feed Table Release Lever and raise the Original Feed Table until it stops.

2. Open the Master Loading Unit.
   Open the Master Loading Unit by pulling down the green Master Loading Unit Release Lever, which is located on the right side of the unit.

3. Open the Master Roll Cover.
   Pull down the Master Roll Cover.

4. Remove the depleted Master Roll.
   Pushing the depleted Master Roll to the right, pull it toward you and remove it from the supporter.

5. Remove both left and right flanges.
   Remove both left and right flanges from the depleted Master Roll.

6. Attach the flanges to a new Master Roll.
   Unpack a new Master Roll.

   **Note** If you use the RISOGRAPH RC Master, remove both the left and right flanges from the new Master Roll.

   **Important!**
   Do not use flanges removed from the new RISOGRAPH RC Master Roll.

   Attach the flanges removed from the depleted Master Roll to the new Master Roll, with the colored flange to the right end and the white flange to the left end.

   Then unwrap the new Master Roll.
7 Install the new Master Roll.
Pushing the colored flange onto the
righthand flange holder, slide the white
flange securely into the center groove of
the supporter.

8 Insert the leading edge of the master
under the green film.
Unroll the Master Roll by pulling on the
leading edge and insert the leading edge
under the green film.

9 Close the Master Roll Cover.
Close the Master Roll Cover gently.

10 Close the Master Loading Unit and the
Original Feed Table.
Close the Master Loading Unit gently
and return the Original Feed Table to the
original position.

Important!
If the leading edge of the master is
inserted too far beyond the green
film, the excess portion will be
automatically cut off. If the cut-off
strip remains inside, the CHECK
SETTINGS indicator flashes on the
control panel. Be sure to remove
the cut-off strip.
Advisory Messages

When the machine is not ready for use (when consumables are not installed, for example), an indicator lights or flashes on the display panel and a related code number appears on the Print Quantity Display.

The indicator shows machine status and the Machine Monitor Display indicates the problem location. The code number on the Print Quantity Display provides more detail about machine status.

If you need to contact technical support about a problem, inform the authorized service representative of the code number to help solve the problem quickly.
The CHECK SETTINGS indicator flashes when the Drum Unit, ink bottle, Master Roll, or Master Disposal Box are not properly installed, or a part of the machine (like the Front Cover) is not closed completely.

<table>
<thead>
<tr>
<th>Location</th>
<th>Code Number</th>
<th>Description and Action</th>
</tr>
</thead>
</table>
| 4 1      | E24         | Strip of cut master remains in the machine.  
  ➤ A cut-off piece of master is inside the Master Loading Unit. Open the Original Feed Table and Master Loading Unit, and remove the piece.  
  ➤ Page 30 |
| 4 2      | E27         | There is no master on the Drum Unit.  
  ➤ Press the R • 8 (ALL RESET) button to clear the displays. Then place an original on the Original Feed Table and start operation from master-making.  
  ➤ Page 16 |
| 4 2      | E52         | Drum Unit is not properly installed.  
  ➤ Slide the Drum Unit all the way into place and then let down the lever. Be sure the Drum Unit is securely locked in place.  
  ➤ Page 14 |
| 7 2      | E53         | Ink bottle is not properly installed.  
  ➤ Insert the ink bottle completely and then hook the locking lever onto it to securely lock it in place.  
  ➤ Page 28 |
| 5 1 4    | E54         | Master is not properly loaded.  
  ➤ Install the Master Roll in the Master Holder, if necessary. Be sure the leading edge of the master is inserted between the green plastic film tabs on the machine.  
  ➤ Page 30 |
| 9        | E55         | Front Cover is not properly closed.  
  ➤ Close the Front Cover tightly.  
  ➤ Page 28 |
| 8        | E56         | Original Feed Table is not properly closed.  
  ➤ Close the Original Feed Table tightly.  
  ➤ Page 31 |
| 8        | E57         | Master Disposal Box is not properly installed.  
  ➤ Holding the handles of the Master Disposal Box, insert the box completely.  
  ➤ Page 29 |
| 8        | E58         | Master Loading Unit is open.  
  ➤ Open the Original Feed Table and close the Master Loading Unit securely. Then return the Original Feed Table to its original position.  
  ➤ Page 30 |
| 1        | E59         | ADF Unit is not properly closed.  
  ➤ Close the ADF Unit tightly.  
  ➤ Page 27 |
| 8        | E60         | There is an obstacle stuck on the Paper Feed Tray.  
  ➤ Remove it.  
  ➤ Page 12 |
| 4 2      | E61         | Drum Unit is wrong type or size.  
  ➤ Install a recommended Drum Unit.  
  ➤ Page 15 |
ADD PAPER
The ADD PAPER indicator flashes when paper is not loaded in the Paper Feed Tray.

<table>
<thead>
<tr>
<th>Location</th>
<th>Code Number</th>
<th>Description and Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td></td>
<td>Paper is not loaded in the Paper Feed Tray.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Install paper in the Paper Feed Tray.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 12</td>
</tr>
</tbody>
</table>

REPLACE MASTER ROLL
The REPLACE MASTER ROLL indicator flashes when the Master Roll is depleted.

<table>
<thead>
<tr>
<th>Location</th>
<th>Code Number</th>
<th>Description and Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>11</td>
<td>Master Roll is depleted.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Install a new Master Roll.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 30</td>
</tr>
</tbody>
</table>

REPLACE INK BOTTLE
The REPLACE INK BOTTLE indicator flashes when the ink bottle is empty.

<table>
<thead>
<tr>
<th>Location</th>
<th>Code Number</th>
<th>Description and Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>2</td>
<td>Ink Bottle is empty.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Replace the empty ink bottle.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 28</td>
</tr>
</tbody>
</table>

EMPTY DISPOSAL BOX
The EMPTY DISPOSAL BOX indicator flashes when the Master Disposal Box is full of used masters.

<table>
<thead>
<tr>
<th>Location</th>
<th>Code Number</th>
<th>Description and Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td>Master Disposal Box is full.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pull out the Master Disposal Box and discard used masters.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page 29</td>
</tr>
</tbody>
</table>
**PAPER JAM**

The PAPER JAM indicator flashes when printing paper or originals get jammed inside the machine or ADF Unit.

<table>
<thead>
<tr>
<th>Location</th>
<th>Code Number</th>
<th>Description and Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>④ ③ ②</td>
<td>3 3</td>
<td>Paper is jammed in the paper feed area.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Open the Front Cover, pull out the Drum Unit, and remove the jammed paper from the paper feed area.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Page 14</td>
</tr>
<tr>
<td>④ ③ ②</td>
<td>3 2</td>
<td>Paper jammed in the paper ejection area.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Open the Front Cover, pull out the Drum Unit, and remove the jammed paper from the paper ejection area.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Page 14</td>
</tr>
<tr>
<td>⑨</td>
<td>3 3</td>
<td>Printing paper was not fed, or was improperly fed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Check paper and Paper Feed Tray and press the R • BY (ALL RESET) button.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Page 12</td>
</tr>
<tr>
<td>④ ③ ④</td>
<td>3 4</td>
<td>Printed paper is stuck to the drum.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Open the Front Cover, pull out the Drum Unit, and remove the printing paper.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Page 14</td>
</tr>
<tr>
<td>①</td>
<td>3 5</td>
<td>An original was not fed, or was improperly fed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Remove the original and reload it.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Page 16</td>
</tr>
<tr>
<td>①</td>
<td>3 7</td>
<td>An original is jammed at the entrance to the ADF Unit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Open the ADF Unit by holding the ADF Unit Release Lever. Remove the jammed original and reload it.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Page 27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>Code Number</th>
<th>Description and Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td>3 8</td>
<td>An original is jammed inside the ADF Unit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Open the ADF Unit by holding the ADF Unit Release Lever. Remove the jammed original and reload it.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ Page 27</td>
</tr>
</tbody>
</table>

**Note**

To prevent paper/original jams:

- Print on paper free of folds. If using curled paper is unavoidable, place the printing paper so that the curl faces down. If you must use heavily curled paper as an original, use the carrier sheet.
- When using slippery paper for printing, set the Paper Feed Pressure Adjustment Lever to "CARD".
- Page 12
- Printing paper tends to stick to the drum surface if the top margin is too narrow on the original, or if the upper portion of the original uses a large amount of ink. To solve this problem, lower the print position to provide a wider top margin or reverse the top and bottom of the original and then restart printing.
- Page 20
**MASTER MISFEED**

The MASTER MISFEED indicator flashes when an error occurs during master-making or master disposal.

<table>
<thead>
<tr>
<th>Location</th>
<th>Code Number</th>
<th>Description and Action</th>
</tr>
</thead>
</table>
| 5 1 8 | E 2 1 | Master is not loaded on the drum, or is improperly loaded on the drum.  
- Press the Master Loading Unit and wind up the Master Roll. Reload the master. After closing the Master Loading Unit, press the START button to restart the master-making operation.  
- Page 31 |
| 5 1 14 | E 2 2 | Master was not fed properly.  
- Press the Master Loading Unit, wind up the Master Roll, and reload the master.  
- Page 31 |
| 4 2 | E 2 3 | Master was not cut correctly.  
- Press the Front Cover and pull out the Drum Unit to see if the master is properly loaded on the drum. If not, restart the operation from master-making.  
- Page 14 |
| 3 4 2 | E 2 5 | A used master remains on the drum.  
- Press the Front Cover, pull out the Drum Unit, and remove the remaining master from the drum. After returning the Drum Unit to its original position, press the START button.  
- Page 14 |

<table>
<thead>
<tr>
<th>Location</th>
<th>Code Number</th>
<th>Description and Action</th>
</tr>
</thead>
</table>
| 3 | E 2 6 | A used master is stuck at the entrance of the Master Disposal Box.  
- Pull out the Master Disposal Box while holding the handles, and look inside. If the master remains, remove it.  
- Page 29 |
**SORTER ERROR**

The SORTER ERROR indicator flashes if an optional sorter malfunctions. The trouble location is not indicated on the Machine Monitor Display. Check the code number below for detailed error information.

*Note*  For details about using the optional sorter, please refer to the documentation provided with the sorter.

<table>
<thead>
<tr>
<th>Location</th>
<th>Code Number</th>
<th>Description and Action</th>
</tr>
</thead>
</table>
|          | E01         | A paper jam has occurred.  
            |              | **▷** Open the sorter door, if necessary, and remove the jammed paper. Then close the door. |
|          | E02         | Sorter door or cover is open.  
            |              | **▷** Close the door or cover. |
|          | E03         | Paper remains in the sort bin.  
            |              | **▷** Open the sorter door and remove the paper. Then close the door. |
|          | E04         | No more paper can be accommodated.  
            |              | **▷** Open the sorter door, if necessary, and remove the sorted paper. Then close the door. |
|          | E05         | The specified size does not match the printing paper size.  
            |              | **▷** Remove printing paper of different size, or specify the correct size on the sorter. |
|          | E06         | Wrong paper size is specified.  
            |              | **▷** Specify the correct paper size on the sorter. |
|          | E08         | Job Separator Tape is depleted.  
            |              | **▷** Install a new Job Separator Tape. |

**CALL SERVICE**

If the CALL SERVICE indicator flashes, contact your authorized service representative and report the code number on the Print Quantity Display to authorized service personnel.
Troubleshooting

If you have any of these problems, check the following items before calling your authorized service representative.

The machine does not start even when you press the power switch.
- Check to see that the power cord is firmly connected to an electrical outlet.
- Check to see that the power cord is connected to the machine.
- Check to see that the commercial power circuit breaker is normal.

The red and yellow advisory messages appear even when the Front Cover is closed.
- There is a metal plate in the lower righthand section of the Front Cover. Unless this plate is in direct contact with the magnet on the lower righthand part of the machine, advisory messages remain on the control panel.
  ➞ Press on the lower righthand area of the Front Cover to close it tightly.

There is no image on prints.
- Check to see if the original is correctly placed.
  ➞ Be sure that the original is placed face-down.
  ➞ Page 16
- Check to see if the master is correctly placed.
  ➞ Be sure that the master is placed with the leading edge unrolled from above.
  ➞ Page 30

The background of an original is picked up on prints.
- If newspaper or colored paper is used as an original, the background could be picked up on prints.
  ➞ Press the SCANNING Contrast Adjustment button to make scanning contrast lighter. Then reset the original and press the START button.
  ➞ Page 18

Printed images are excessively faint or blurred.
- If the machine is not used for a long period of time, ink on the drum surface dries. Dry ink on the Drum Unit can cause faint or blurred printing.
  ➞ Press the TEST PRINT button several times until a clear printed image is obtained.
  ➞ Page 19
  ➞ Turn ON the AUTOMATIC IDLE feature before operation to prevent light images that can occur after periods of non-use.
  ➞ Page 24
- Light originals result in light images.
  ➞ Press the SCANNING Contrast Adjustment button to make scanning contrast darker. Then reset the original and press the START button.
  ➞ Page 18
- If the temperature is low (below 59° F, or 15° C) or the ink bottles are stored in a cold place, ink may not flow smoothly.
  ➞ Warm the room or ink bottle before operating the machine.

Printing paper slips when it is fed.
- Misfeeding of printing paper could cause a paper jam.
  ➞ Set the Paper Feed Pressure Adjustment Lever to "CARD".
  ➞ Page 12

Vertical blank lines are found on printed copies.
- The Thermal Print Head (the device that makes the master) is smudged with paper powder from the master.
  ➞ Open the Master Loading Unit and clean the Thermal Print Head using a soft cloth or tissue.
  ➞ Page 27
- The scanner (the device that scans originals) glass is smudged with dust or correction fluid.
  ➞ Open the ADF Unit and clean the glass using a soft cloth or tissue.
  ➞ Page 27
Printing paper sticks to the drum surface.
- Use recommended printing paper.
- Lower the vertical print position with the PRINT POSITION Adjustment button ↓.
  ➤ Page 20
- Replace the original in the reverse direction and restart printing from the beginning (master-making).

The back of finished prints is smudged with ink.
- The rubber Press Roller, which keeps printing paper pressed against the drum during printing, is stained with ink.
  ➤ Remove the Drum Unit and clean the roller gently with a soft cloth or tissue.
  ➤ Page 27

The Drum Unit does not go in all the way.
- The Drum Unit does not go in all the way if the handle is let down.
  ➤ Slide in the drum with the handle up, and lower the handle after the drum is fully inserted.
  ➤ Page 16

Optional Accessories

A variety of optional accessories are available to enhance the capabilities of the RISOgraph RA4200.

Color Drum Units (RISOGRAPH RA Drum)
The six colors available are black, blue, red, green, brown, and yellow. Each Drum Unit has its own case for storage.
➤ Page 14 — By exchanging Drum Units, you can achieve multicolor prints.

RISOGRAPH Sorter TM2400
This compact sorter is capable of handling up to ledger (A3) paper. The sorter is equipped with an electric stapler so that you can efficiently create booklets from finished prints.

Job Separator
This accessory efficiently sorts groups of prints with strips of paper as they are printed. The Job Separator is attached beside the Paper Receiving Tray.
### Specifications

<table>
<thead>
<tr>
<th><strong>Processing</strong></th>
<th>High-speed automatic digital scanning/fully automatic, thermal screening duplicating system</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time to First Copy</strong></td>
<td>Approx. 17 seconds (letter, or A4 original)</td>
</tr>
<tr>
<td><strong>Print Speed</strong></td>
<td>5 selectable print speeds (60 to 130 sheets per minute)</td>
</tr>
<tr>
<td><strong>Scanning Resolution</strong></td>
<td>300 DPI</td>
</tr>
<tr>
<td><strong>Original Input Type</strong></td>
<td>Sheets</td>
</tr>
<tr>
<td><strong>Original Size</strong></td>
<td>4 x 6 inch (A6, or 100 x 148 mm) to 11 x 17 inch (ledger, A3, or 297 x 431 mm)</td>
</tr>
<tr>
<td><strong>Output Paper Size</strong></td>
<td>4 x 6 inch (postcard, or A6) to 11 x 17 inch (ledger, or A3)</td>
</tr>
<tr>
<td><strong>Paper Weight</strong></td>
<td>13-lb bond (46 g/m²) to 110-lb index (210 g/m²)</td>
</tr>
<tr>
<td><strong>Image Area</strong></td>
<td>245 x 360 mm in B4 drum</td>
</tr>
<tr>
<td><strong>Paper Capacity</strong></td>
<td>1000 sheets in feed and receiving tray (18-lb bond or 64 g/m²)</td>
</tr>
<tr>
<td><strong>ADF Capacity</strong></td>
<td>50 originals</td>
</tr>
<tr>
<td><strong>Reduction Parameters</strong></td>
<td>4 selectable reductions: 94%, 77%, 75%, and 66% (94%, 87%, 82%, and 71% for metric models)</td>
</tr>
<tr>
<td><strong>Features</strong></td>
<td>Speed control, confidential mode, Two-Up printing, interface capabilities, photo enhancement, Automatic Idle, ADF, and scanning contrast adjustment</td>
</tr>
<tr>
<td><strong>Print Colors</strong></td>
<td>Six colors available as optional accessories (black, blue, red, green, brown, yellow)</td>
</tr>
<tr>
<td><strong>Optional Accessories</strong></td>
<td>Color Drum Units, Sorter TM2400, Job Separator</td>
</tr>
<tr>
<td><strong>Power Source</strong></td>
<td>USA Model: 120 VAC, 60 Hz &lt;3.5A&gt;</td>
</tr>
<tr>
<td><strong>&lt;Requirements&gt;</strong></td>
<td>Metric Models: 110 VAC, 60 Hz &lt;3.8A&gt; (110-v model), 220 to 240 VAC, 50/60 Hz &lt;3.0A&gt; (220-v model)</td>
</tr>
<tr>
<td><strong>WARNING</strong></td>
<td>Always check the rating plate on the machine before connecting the power</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>Approx. 192 lbs (87 kg)</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>53.5 x 24.8 x 23.2 inch in use (1360 x 631 x 599 mm)</td>
</tr>
<tr>
<td><strong>(W x D x H)</strong></td>
<td>25.6 x 24.8 x 23.9 inch in storage (650 x 631 x 606 mm)</td>
</tr>
</tbody>
</table>
Printing Two Originals Side by Side

Two of the same, or two different originals can be printed side by side on a sheet using the TWO-UP button.

When printing two originals on a sheet, each original can have different settings for reproduction ratio (Reduce), scanning contrast, and processing (Line/Photo).

High-volume printing time can be cut in half using the Two-Up feature. For example, you can double your productivity by using printing paper that is twice as large as the originals. When you use the Two-Up feature, you can then cut or fold the Two-Up prints in half to finish the job.

To print two different originals side by side, using the same combination of settings, place the two originals at one time:

- To print the same original twice on a sheet, or when different settings are used for two originals, place originals individually:

  ➤ Page 23 — The Auto Print feature can be used with Two-Up printing.

Important!

The Two-Up feature is available only when printing on A4-size or Letter-size (B4-size) paper.

Before selecting the Two-Up feature, always confirm the Two-Up paper size setting is equal to the size of paper to be used, by accessing the item number 12 in the Initial setting customizing operation.

If they are not equal, the Two-Up feature will not function correctly.

<table>
<thead>
<tr>
<th>Entry No.</th>
<th>Available paper size for Two-Up feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>A4-size (A4-size)</td>
</tr>
<tr>
<td>1</td>
<td>Letter-size (B4-size)</td>
</tr>
</tbody>
</table>

➤ Page 25 — You may customize initial settings.

< Additional Feature >
### Printing Two Different Originals Two-Up

<table>
<thead>
<tr>
<th>Step</th>
<th>Instruction</th>
</tr>
</thead>
</table>
| 1    | **Press the TWO-UP button to activate the Two-Up feature.**  
The Two-Up indicator lights when the feature is active.  
**Note** To cancel the Two-Up feature, press the TWO-UP button again. |
| 2    | **Place two originals face-down on the Original Feed Table.** |
| 3    | **Press the START button.**  
The originals are scanned and the Two-Up master is made.  
A sample Two-Up print is made. |
| 4    | **Enter the number of copies to be printed.**  
Specify the number of copies to be printed using the Print Quantity keys.  
The specified number is displayed on the Print Quantity Display.  
**Note** If you enter the incorrect number, press the C key to reset the Print Quantity Display to zero, then enter the correct number. |
| 5    | **Press the START button.**  
The specified number of Two-Up prints are printed.  
The Two-Up indicator goes out, and the Two-Up feature is canceled.  
**Note** If more than two originals are placed at one time, the Two-Up feature remains activated after printing is completed. **Holding down the R • BY (ALL RESET) button for more than 1 second returns the control panel to the initial settings.** |
Printing the Same Original Twice or Changing Settings for One Original

To print the same original twice on a sheet, or when different settings are used for the two originals, place originals individually.

Each original can have different settings for reproduction size (Reduce), scanning contrast, and processing (Line/Photo).

For Two-Up printing of one original or two originals with different settings, the RISOgraph scans the first original and then provides a 15-second period for the second original to be placed.

Note If you press the STOP button or do not place the second original during the 15-second beep, the sample print is produced with one side blank.

1 Press the TWO-UP button to activate the Two-Up feature.

The Two-Up indicator lights when the feature is active.

Note To cancel the Two-Up feature, press the TWO-UP button again.

2 Place an original face-down on the Original Feed Table.

3 Press the START button.

After the first original is scanned and ejected into the Original Tray, a 15-second beep sounds.

4 During the 15-second beep, enter the settings for the second original, if necessary, and place the second original.

After the second original is scanned, a sample Two-Up print is automatically printed.

5 Enter the number of copies to be printed.

Specify the number of copies to be printed using the Print Quantity keys. The specified number is displayed on the Print Quantity Display.

Note If you enter the incorrect number, press the C key to reset the Print Quantity Display to zero, then enter the correct number.

6 Press the START button.

The specified number of Two-Up copies are printed.

The Two-Up indicator goes out, and the Two-Up feature is canceled.

Holding down the R * (ALL RESET) button for more than 1 second returns the control panel to the initial settings.

< Additional Feature >