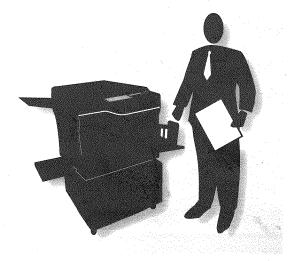
RISO

GR1700 GR1750 RISOGRAPH GR1750



If the Flat Paper Receiving Tray is installed . . .

Please remove pages 19-20 and replace them with the corresponding pages located at the back of this User's Guide.

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FCC Warning

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

DOC Warning

This digital apparatus does not exceed the Class A limit for radio noise emissions from digital apparatus as set out in the Radio Interference Regulation of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la Classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

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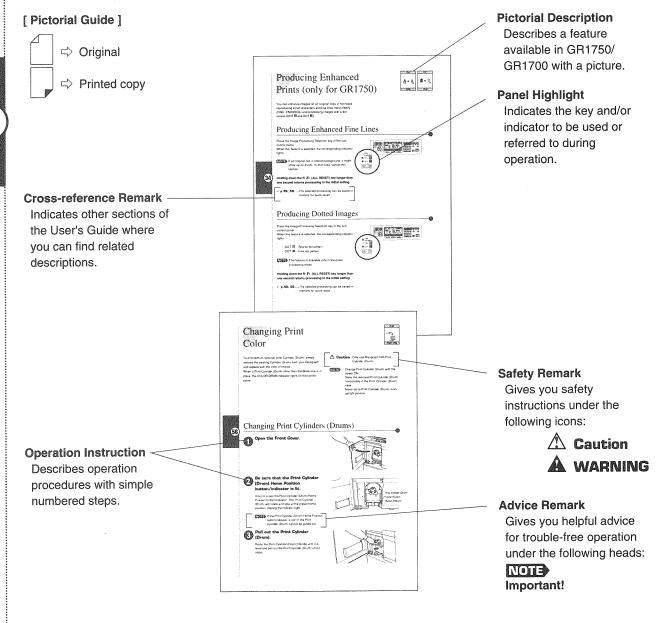
Register Sheet for Memory Feature

Welcome to the Risograph GR1750/GR1700

With its easy-to-read digital display and key entry for most procedures, this equipment has been specially designed for simple operation.

About This User's Guide

This Guide provides all required information necessary to use your Risograph GR1750/GR1700. It is designed to help you take advantage of the features built into the Risograph GR1750/GR1700, and provides information on maintenance and troubleshooting.



Introduction to your Risograph

This section provides the basic information about your Risograph, including initial installation, an overview of features, and names of parts.

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Cautions Concerning Installation

Follow the directions below for proper location and environment when installing your Risograph. They are intended to increase safety and prolong the life of your equipment.

Location and Environment

Your dealer will help determine a proper location for your unit at the time of delivery.

- Caution · Install the unit near the electrical outlet to avoid using an extension cord between the unit and the electrical outlet. If an extension cord is unavoidable, do not use one longer than 15 ft. (5 m).
 - Do not allow anything to rest on or roll over the power cord, and do not place the unit where the power cord is subject to traffic or abuse. This can result in a shock or fire hazard.
 - Maintain adequate distance from the rear wall to allow easy connection/disconnection of the power cord.

Important! [To Avoid Mechanical Problems]

- · Avoid dusty locations, such as near blackboards.
- · Select a location where the unit will be level (maximum of \pm 3/8 inch (±10 mm) differential allowed).
- · Avoid locations where direct sunlight will fall on the unit. If this is unavoidable, protect the unit with a curtain or shade on windows.
- Install within the recommended temperature range: 59°F to 86°F (15°C to 30°C) with moderate humidity (40% to 70%, no condensation).
- Avoid situations of sudden temperature change.
- Avoid locations where heat or air is directed onto the unit from an air conditioner or a heater.







Power Connections

A WARNING [To Avoid Personal Injury]

- Securely insert the power cord plug into the electrical outlet to ensure proper electrical connection.
- Do not overload the electrical outlet or extension cord, as it can result in fire or electrical shock (check the "Specifications" section for the allowable range).
- Make sure that the power cord plug is not crushed under other pieces of machinery or stepped on by normal traffic.







Overview of Features

Your Risograph is a high-quality digital printer that is as easy to use as a copier.

· Easy to Use and Fully Automatic

The control panel shows you the features available and the current status of your Risograph with indicator lights and easy-to-read digital displays, and includes a convenient "Machine Monitor" for troubleshooting.

Your Risograph processes your original by first making a master and then printing.

Print Speed Control

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

Confidential Feature

An original can be printed and the master can be automatically discarded to prevent further, unauthorized printing.

Color Printing Options

Optional ink colors are available, by simply changing the Print Cylinder (Drum).

Reduction Capabilities

Pre-set standard reductions are available (e.g., legal→letter or A3→A4).

Programmable Print Groupings

Simple control panel entries can automate different types of groupings to save time finishing your print jobs.

Programmable Print Jobs

Frequently used or complex print job settings can be stored in memory for instant recall.

· Two-Up Printing

Originals can be printed side by side on a single sheet.

· Automatic Idle

This feature ensures an excellent first copy when printing starts again after a period of idle time.

The following additional features are also available in GR1750.

Printing Density Control

Any of five printing densities can be selected for optimum performance.

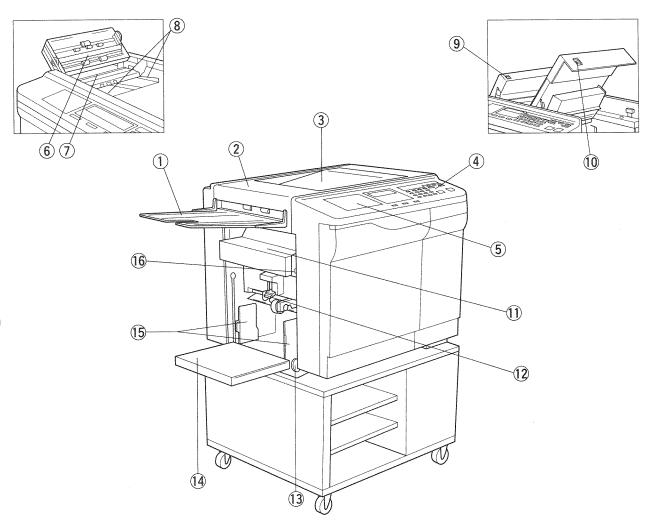
Image and Text Processing Options

In addition to the standard processes for sharp line definition and accurate shading patterns, special fine-line enhancement and dot-screen processes are available.

Enlargement and Zoom

Pre-set standard enlargement is available (e.g., letter→legal or A4→B4). Besides, prints can be reduced or enlarged from 50% to 200% in 1 % increments, according to your needs.

Knowing the Parts and Components



Upper Area

- 1 Original Tray (** p.24)
 Receives scanned originals.
- 2 ADF (Automatic Document Feeder) Unit Feeds originals into the scanner.
- 3 Original Feed Table (** p.24) Holds originals for the ADF.
- 4 Main Control Panel (12 p.10, 12)
- 5 Sub Control Panel (127 p.11, 13)
- 6 White Sheet (50 p.78)
- ⑦ Scanner Glass (☞ p.77)
- (8) Original Guides (ray p.24) Holds and guides originals for feeding.
- ADF Unit Release Lever (** p.77)
 Releases an original for removal when it is jammed in the ADF Unit
- Original Feed Table Release Lever
 Unlocks and opens the Original Feed Table.

Paper Feed Area

- (1) Master Disposal Box (197 p.64)
 Holds discarded masters.
- (2) Paper Feed Pressure Adjustment Lever (12) p.18)

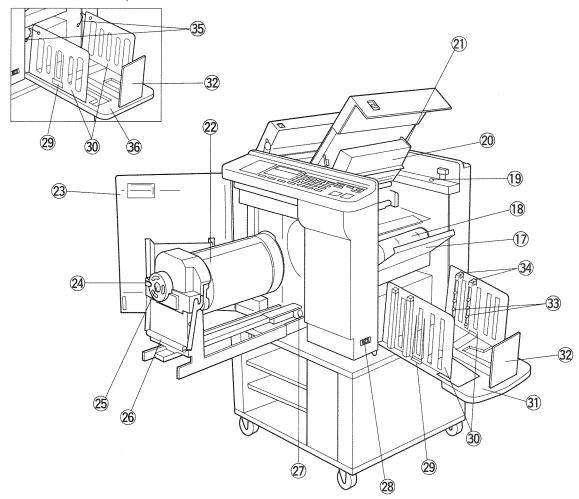
Adjusts the paper feed pressure according to the paper being used.

13 Left/Right Print Position Adjustment Dial (N° p.35)

Moves the print position to the left or right.

- Paper Feed Tray (p.18)
- 15 Feed Tray Paper Guides (FO p.18)
 Holds and guides paper.
- Feed Tray Down Button (** p.18)
 Lowers the Paper Feed Tray for replacing or adding printing paper.

 Refer below for the unit which is to be equipped with the curved Paper Receiving Tray in the main illustration as optional.



Master-Making Area

- Master Roll Cover (158° p.62)
 Protects the Master Roll.
- 18 Master Roll (≈ p.62)
- (19) Master Loading Button (re p.62)
 Loads as well as cuts the master.
- 20 Master Loading Unit (** p.62)
 Makes a master from the scanned original.
- (a) Master Loading Unit Release Lever (rs. p.62)
 Opens the Master Loading Unit.

Front Area

- 22 Print Cylinder (Drum) (** p.56) Holds the master.
- 23 Front Cover
- 24 Ink Cartridge Locking Lever (** p.60)
 Secures the Ink Cartridge in position.
- 25 Ink Cartridge (** p.60)
- 26 Print Cylinder (Drum) Handle (** p.56)
 Used to slide the Print Cylinder (Drum) forward.

② Print Cylinder (Drum) Home Position Button/Indicator (№ p.56)

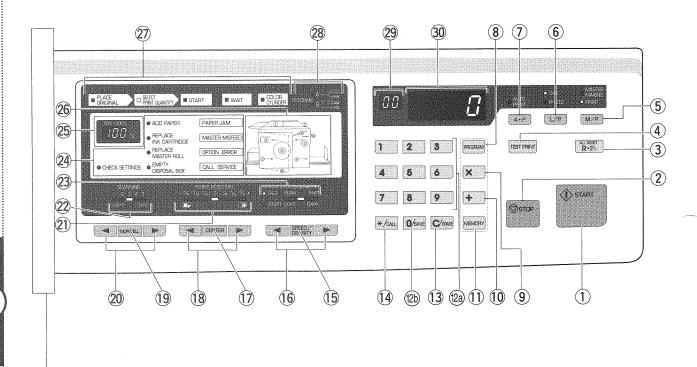
Positions and unlocks the Print Cylinder (Drum) for removal.

28 Main Power Switch (🖙 p.24)

Paper Receiving Area

- 29 Receiving Tray Paper Guide Adjustment Knob (157 p.19)
- 30 Receiving Tray Paper Guides (** p.19)
 Aligns printed paper neatly.
- 31 Curved Paper Receiving Tray (p.19)
- 32 Paper Stop (p.19)
 Stops printed paper ejected into the Paper Receiving Tray.
- 33 Paper Arranger (** p.19)
 Helps arrange printed paper ejected into the Paper Receiving Tray.
- Paper Arranger Adjustment Knob (** p.19)
- 35 Paper Guiding Arms (p.19)
 Guides printed paper into the paper Receiving Tray.
- 36 Flat Paper Receiving Tray (™ p.19)

The Control Panel - GR1750



Main Control Panel

① START Key

Starts printing or master-making process. The indicator is "GREEN" when the key is active. This key is also used to resume operation after troubleshooting.

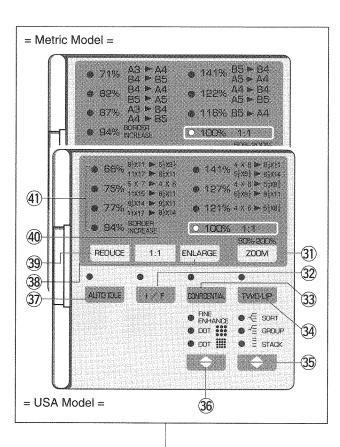
- (2) STOP Kev
 - Interrupts printing, and cancels confidential feature.
- 3 R:% (ALL RESET) Key (re p.38) Returns all settings to initial status. This key is also used to clear error displays after troubleshooting.
- TEST PRINT Key (** p.27)
 Prints a sample from the current master to allow you to check print quality, printing position and so on.
- (5) MASTER-MAKING/PRINT (M/P) Key Switches between Master-Making and Printing operations. Normally, selection is made automatically according to the current process.
- (6) LINE/PHOTO Key (** p.26) Switches the current processing mode among Line, Photo and Duo. The indicators light according to the selected mode.
- AUTO PRINT Key (* p.28)
 Automates the process of master-making through printing. The indicator lights when the feature is active.

- PROGRAM Key (** pp.43-47)
 Provides access to programmed grouping of prints.

- ① MEMORY Key (** pp.48-51)
 Provides access to the Memory features.
- Print Quantity Keys (0 to 9 Keys)
 Use these keys to enter the number of copies to be printed, or to enter other numeric values.
- ② 0/SAVE Key (p.49)
 Use to store settings in memory.
- (3) C/ERASE Key (** p.51)

 Cancels the number entered and resets the Print

 Quantity Display to zero. Also erases contents of
 memory.
- */CALL Key (** p.50)
 Use for memory recall.
- (15) PRINT SPEED/DENSITY Selection Key
 (152 p.36, 37)
 Switches between print speed and print density
 modes. The indicators light when the mode is active.
- PRINT SPEED/DENSITY Adjustment Keys (⟨ ▷) (□ p.36, 37)
 Adjusts print speed or density (on a 1 to 5 scale).



- PRINT POSITION CENTER Key (** p.35)

 Moves vertical print position back to center.
- (¹8) PRINT POSITION Adjustment Keys (⟨□⟩) (□² p.35)
 Adjusts vertical print position.
- (9 SCANNING CONTRAST NORMAL Key (128 p.33)

Returns the scanning contrast to the standard setting.

② SCANNING CONTRAST Adjustment Keys (⟨⟨ ▷⟩)(□ p.33)

Selects contrast adjustments (on a 1 to 5 scale) for the darkness of the original to be scanned.

Display

- 2) PRINT POSITION Indicator (** p.35)
 Shows the current vertical print position.
- ② ORIGINAL SCANNING CONTRAST Indicator (** p.33)

 Shows the current original scanning contrast.
- (15 PRINT SPEED/DENSITY Indicator (15 p.36, 37)
 Shows the selected print speed or density.
- ② Check & Error Display (☞ p.14) Shows errors or machine status.
- 25 Reproduction Size Display (pp.30-32)
 Shows the current reproduction size.

- 26 Machine Monitor Display (** p.65)

 Shows locations which should be checked in relation with the error or machine status indicated in the Check & Error Display.
- Operation Status Display (** p.14)
 Instructs the next operation.
- Program Display (** pp.43-47)
 Shows the selected program setting (A or B).
- 29 Entry Number Display (pp.43-51)
 Shows the group address in the Programmed printing feature or the register number in the Memory feature.
- 30 Print Quantity Display Counts the number of printed copies or shows other numeric settings and advice codes.

Sub Control Panel

- PRESET SIZE/ZOOM Selection Key (** pp.30-32)
 Switches between the preset reduction/ enlargement
 - Switches between the preset reduction/ enlargement and zoom.
 - INTERFACE (I/F) Key (128° p.58)
 Allows data transmission between your Risograph and external equipment, such as personal computers, with the optional computer interface.

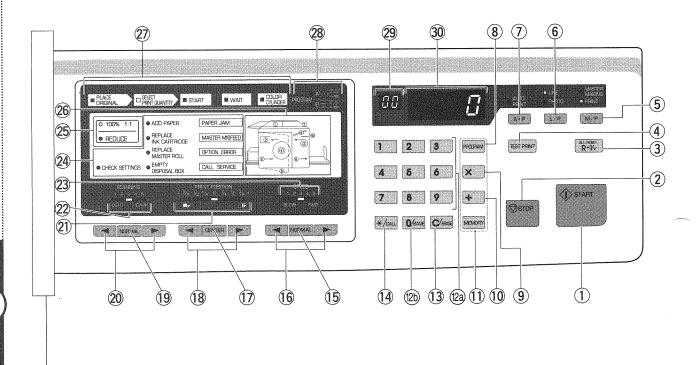
The indicator lights when an interface line is opened.

- GONFIDENTIAL Key (** p.52)
 Protects confidential documents from unauthorized duplication. The indicator lights when the feature is active.
- TWO-UP Key (197 pp.40-42)

 Reproduces two prints side by side on one sheet of paper. The indicator lights when the feature is active.
- SORTER Key (rar p.80)
 Use this key when you use the optional sorter. The indicators light when the sorter is active.
- 36 Image Processing Selection Key (** p.34)
 Selects either the Fine Enhance or Dot Photo
 processing features. The Fine Enhance feature prints
 small characters or fine lines clearly. The Dot Photo
 feature processes a photo original with two kinds of
 dot screen. The indicators light when the feature is
 active
- When switched ON, the print cylinder (Drum) is automatically rotated on a pre-set basis to ensure excellent first print quality. The indicator lights when AUTO IDLE is switched ON.
- 38 ENLARGE Key (** pp.30-32)
 Selects one of three preset enlargement sizes or increases the zoom percentage.
- 39 REDUCE Key (** pp.30-32)
 Selects any of four pre-set reduction sizes or decreases the zoom percentage.
- 40 1:1 Key (*** pp.30-32)

 Returns the reproduction size to 1:1 (100%).
- Preset Reduction/Enlargement Size Indicator (pp.30-32)
 Shows the current preset reduction or enlargement size.

The Control Panel - GR1700



Main Control Panel

1) START Key

Starts printing or master-making process. The indicator is "GREEN" when the key is active. This key is also used to resume operation after troubleshooting.

- ② STOP Kev
 - Interrupts printing, and cancels confidential feature.
- Returns all settings to initial status. This key is also used to clear error displays after troubleshooting.
- 4 TEST PRINT Key (15 p.27)

Prints a sample from the current master to allow you to check print quality, printing position and so on.

- (5) MASTER-MAKING/PRINT (M/P) Key Switches between Master-Making and Printing operations. Normally, selection is made automatically according to the current process.
- 6 LINE/PHOTO Key (127 p.26)

Switches the current mode between Line and Photo processing. The indicators light when the feature is active.

7 AUTO PRINT Key (100 p.28)

Automates the process of master-making through printing. The indicator lights when the feature is active.

- 8 PROGRAM Key (18 pp.43-47)
 - Provides access to programmed grouping of prints.
- 9 × Key (197 pp.43-47)

Use when making program settings.

① + Key (157 pp.43-47)

Use when making program settings.

① MEMORY Key (™ pp.48-51)

Provides access to the Memory features.

(2a) Print Quantity Keys (0 to 9 Keys)
Use these keys to enter the number of copies to be

Use these keys to enter the number of copies to be printed, or to enter other numeric values.

(2b) 0/SAVE Key (∞ p.49)

Use to store settings in memory.

13 C/ERASE Key (= p.51)

Cancels the number entered and resets the Print Quantity Display to zero. Also erases contents of memory

14 */CALL Key (@ p.50)

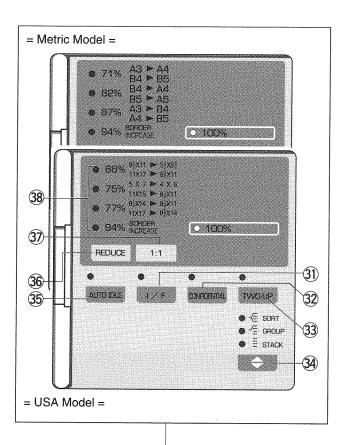
Use for memory recall.

15 PRINT SPEED CENTER Key (☞ p.36)

Returns the print speed to the standard setting.

PRINT SPEED Adjustment Keys (⟨⟨⟩⟩) (□ p.36)

Adjusts print speed (on a 1 to 5 scale).



- (FIF p.35)

 PRINT POSITION CENTER Key (FIF p.35)

 Moves vertical print position back to center.
- (® PRINT POSITION Adjustment Keys (⟨⟨⟩) ((ss p.35)

Adjusts vertical print position.

(19 SCANNING CONTRAST NORMAL Key (12 p.33)

Returns the scanning contrast to the standard setting.

② SCANNING CONTRAST Adjustment Keys (⟨⟨⟩)(1/27 p.33)

Selects contrast adjustments (on a 1 to 5 scale) for the darkness of the original to be scanned.

Display

- ② PRINT POSITION Indicator (** p.35)
 Shows the current vertical print position.
- ② ORIGINAL SCANNING CONTRAST Indicator (** p.33)

 Shows the current original scanning contrast.
- ② PRINT SPEED Indicator (** p.36)
 Shows the selected print speed.
- 24 Check & Error Display (p.14)
 Shows errors or machine status.
- 25 Reproduction Mode Indicator (** p.31)
 Shows whether an original is reduced or not.

- Machine Monitor Display (** p.65)

 Shows locations which should be checked in relation with the error or machine status indicated in the Check & Error Display.
- ② Operation Status Display (** p.14)
 Instructs the next operation.
- Program Display (** pp.43-47)
 Shows the selected program setting (A or B).
- Entry Number Display (** pp.43-51)
 Shows the group address in the Programmed printing feature or the register number in the Memory feature.
- 30 Print Quantity Display Counts the number of printed copies or shows other numeric settings and advice codes.

Sub Control Panel

31 INTERFACE (I/F) Key (** p.58)

Allows data transmission between your Risograph and external equipment, such as personal computers, with the optional computer interface.

The indicator lights when an interface line is opened.

② CONFIDENTIAL Key (** p.52)

Protects confidential documents from una

Protects confidential documents from unauthorized duplication. The indicator lights when the feature is active.

③ TWO-UP Key (☞ pp.40-42)

Reproduces two prints side by side on one sheet of paper. The indicator lights when the feature is active.

34 SORTER Key (™ p.80)

Use this key when you use the optional sorter. The indicators light when the sorter is active.

35 AUTO IDLE Key (☞ p.53)

When switched ON, the print cylinder (Drum) is automatically rotated on a pre-set basis to ensure excellent first print quality. The indicator lights when AUTO IDLE is switched ON.

36 REDUCE Key (™ p.31)

Selects any of four pre-set reduction sizes.

③ 1:1 Key (☞ p.31)

Returns the reproduction size to 1:1 (100%).

Preset Reduction Size Indicator (18 p.30, 31)

Shows the current preset reduction size.

The Operation Guide Displays

Operation Status Display =

1 PLACE ORIGINAL Indicator

Lights when an original is required to be placed in position.

2 SELECT PRINT QUANTITY Indicator

Lights when the number of copies is required to be specified.

③ START Indicator

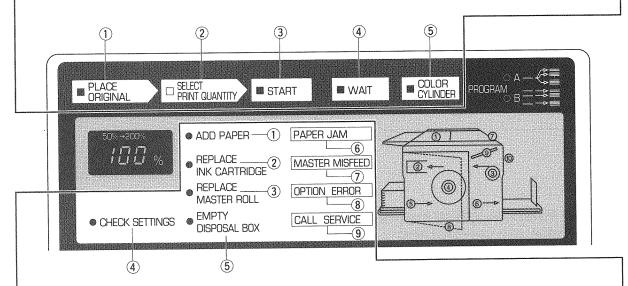
Lights when the START key is required to be pressed.

WAIT Indicator

Lights when requesting you to wait while the Risograph is operating.

5 COLOR CYLINDER (DRUM) Indicator

Lights when an optional color Cylinder (Drum) is installed.



Check & Error Display=

ADD PAPER Indicator

Flashes when paper is not loaded on the Paper Feed Trav.

② REPLACE INK CARTRIDGE Indicator

Flashes when the Ink Cartridge is empty.

REPLACE MASTER ROLL Indicator

Flashes when the Master Roll is depleted.

4 CHECK SETTINGS Indicator

Flashes when consumables or components of the unit are not placed in position.

5 EMPTY DISPOSAL BOX Indicator

Flashes when the Master Disposal Box is full of used masters.

6 PAPER JAM Indicator

Flashes when printing paper or originals get jammed or misfeed.

7 MASTER MISFEED Indicator

Flashes when an error occurs during master-making or master disposal operation.

8 OPTION ERROR Indicator

Flashes when an error occurs in the optional sorter or sheet feeder.

(9) CALL SERVICE Indicator

Flashes when technical supports of your authorized service representative are required.

15

Getting Ready to Use your Risograph /

This section describes how to set your Risograph for initial use, with basic information on printing paper and originals.

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0	Originals and Processing	
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0	Preparing to Print	18
	- Setting Up the Paper Feed Tray	
	- Adding or Replacing Paper	
	- Setting Up the Paper Receiving Tray	
	- Closing the Paper Receiving Tray	

Paper

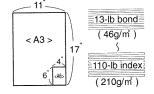
Recommendations

Size and Weight Restrictions

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

The maximum printing area is as follows:

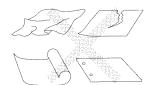
- ·Legal Cylinder (Drum) 7.9" x 13.5" (200 x 345 mm)
- ·B4 Cylinder (Drum) 9.8" x 13.9" (250 x 353 mm)
- ·A4 Cylinder (Drum) 7.8" x 11.2" (198 x 286 mm)



Important!

Do not use the following types of paper, as they can cause jams or misfeeds:

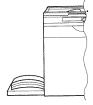
- Extremely thin paper (less than 13-lb bond, or 46 g/m²)
- Extremely thick or heavy paper (greater than 110-lb index, or 210 g/m²)
- Wrinkled, curled, folded, or torn paper
- · Chemically treated or coated paper (such as thermal or carbon paper)



Guides for Trouble-Free Use

To prevent paper jams and misfeeds, follow the directions below:

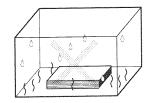
- When using standard paper, set the Paper Feed Pressure Adjustment Lever to "NORMAL" and open all four Paper Arrangers. If the Paper Guiding Arms are attached to the Receiving Tray Paper Guides instead of the Paper Arrangers, set them to "Standard." ** pp.18-20
- When using thick paper (such as card stock), set the Paper Feed Pressure
 Adjustment Lever to "CARD," and open the two inner Paper Arrangers. If the Paper
 Guiding Arms are attached to the Receiving Tray Paper Guides instead of the Paper
 Arrangers, set them to "Thick Paper/Ledger Paper." pp.18-20
- When using slippery paper, set the Paper Feed Pressure Adjustment Lever to "CARD." P.18
- Slide the Feed Tray Paper Guides, Receiving Tray Paper Guides, and Paper Stop to fit the paper size. **pp.18-20**
- Use flat printing paper that is free of folds. If curled paper is unavoidable, place the printing paper so that the curl faces down.
- Paper may stick to the Cylinder (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.



Storing Environment

Store printing paper in a level, dry area. Storing the paper in an excessively humid area could cause paper jams as well as poor print quality.

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





1

Originals and Processing

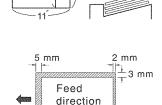
Size and Weight Restrictions

You can use originals from 4" x 6" (postcard size, or A6) size to 11" x 17" (ledger size, or A3). The weight of originals should be between 15-lb bond (50 g/m^2) and 28-lb bond (110 g/m^2).

The margins indicated on the figure to the right are required for the original. Reduce the original if necessary to fit it inside these margins.

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 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.
- 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)



< A3 >

15-lb bond (50 g/m²)

Important!

Do not use the following originals:

- · Originals with staples or clips
- Extremely thick originals (greater than 28-lb bond, or 110 g/m²)

Guides for Selecting Processing

You can use various image processing modes to produce printed copies according to the contents of the original.

- L/P Key (LINE / PHOTO) 🖙 p.26
 - LINE For ordinary documents with lines and text.
 - PHOTO To reproduce different shades of photo or half-tone images.

When using GR1750-

· DUO

To reproduce photo or half-tone images clearly without deteriorating line sharpness.

For GR1750, the following image processing modes are also available.

- Image Processing Selection Key (FINE ENHANCE / DOT \ / DOT | / DOT |) □ p.34
 - · FINE ENHANCE To print small characters and fine lines clearly.
 - · DOT **!!!** / DOT **!!!** To process a photo original using a dot screen.

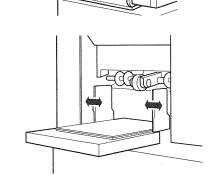
Setting Up the Paper Feed Tray

Open the Paper Feed Tray.

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

Important!

Do not mix printing paper of different sizes.



Set the paper feed pressure.

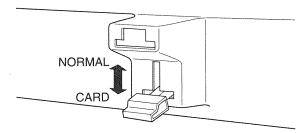
Position the Paper Feed Pressure Adjustment Lever at either "NORMAL" or "CARD," according to the paper to be used:

· NORMAL

Standard paper

· CARD

Thick paper such as card stock



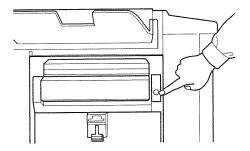
Adding or Replacing Paper

If you want to add paper or use paper of different size, lower the Paper Feed Tray so that you can load the paper

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.

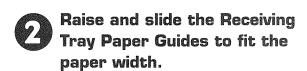


(18)

Setting Up the Paper Receiving Tray

1)

Open the Paper Receiving Tray.



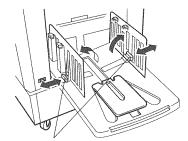
Holding the Receiving Tray Paper Guide Adjustment Knob, slide the guides.

For thick paper, set the guides a little wider than the actual paper width.

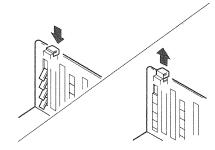


Select the best combination of Paper Arranger settings, referring to the following instruction.





Receiving Tray Paper Guide Adjustment Knob



NOTE = How to set Paper Arrangers =

· Ordinary paper



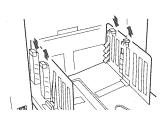
Open all four Paper Arrangers.

 Ordinary paper with images lopsided on page



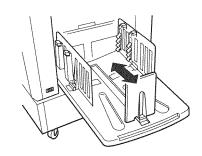
Open two Paper Arrangers on the more heavily printed side.

· Thick paper



Open two Paper Arrangers closest to the machine.

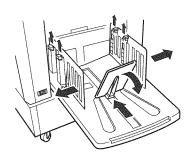
Raise and slide the Paper Stop to fit paper length.



Closing the Paper Receiving Tray

Slide the Paper Stop inwards and turn it down and outwards.

NOTE Do not let the Paper Stop protrude from the Paper Receiving Tray.



- Close all four Paper Arrangers and spread the Receiving Tray Paper Guides to the ledger (A3) position.
- Turn down the Receiving Tray Paper Guides.







Basic Features

This section describes the basic operation procedures and the features which are easy to use even for inexperienced operators in order to enhance the utility of your Risograph.

•	Cautions Concerning Handling and Operation	22
•	Basic Processes	23
0	Basic Operation	24
8	Photo/Half-Tone Processing F-1	26
0	Producing Proof Copies F-2	27
•	Automatic Printing F-3	28







Cautions Concerning Handling and Operation

To ensure proper product quality and the prolonged life of your Risograph, follow the directions below concerning handling and operation.

A WARNING [To Avoid Personal Injury]

- · Be alert and use common sense.
- · Do not open the cover or move the unit during operation.
- Do not handle the parts inside the unit, except what is specified in this *User's Guide*. The parts are made with high precision and can be damaged easily.
- Never stick your hands or fingers in the openings in and around the Paper Feed
 Tray as well as the Paper Receiving Tray during operation.
- Keep loose clothing or long hair away from moving parts to avoid becoming entangled.
- · Do not try to alter the unit or remove parts.
- · Disconnect the power cord if you think there is an electrical problem.
- · Before cleaning any parts of the unit, turn the power off.

↑ Caution [To Avoid Mechanical Problems]

- · Open/close the covers gently.
- · Do not turn off or unplug the unit during operation.
- Do not place items on top of the unit or in any opening of the unit during operation. It could cause damage.
- · Do not place heavy objects on any part of the unit.
- · Do not subject the unit to jolts.
- · Contact your local service center before moving the unit.

Important! - Materials Not to Be Printed

Remember not to infringe copyrights or violate laws when using the equipment, even during personal use. Consult your local authorities for further details. In general, use discretion and common sense.

Basic Processes

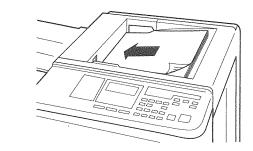
The basic processes of your Risograph can be divided into two stages: making a master of an original (mastermaking), and then printing copies from the master. Your Risograph has been designed so that these two processes flow smoothly from one to the other, with the current action shown clearly in the display.

Master-Making

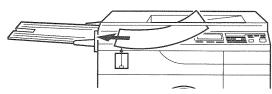
When you create a master, an original is scanned. The master is imaged and then automatically placed on the Print Cylinder (Drum).



Set an original in place.

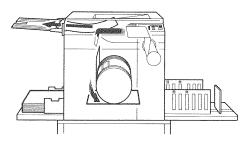


Scan the original.



Create a master.

The master is placed on the Print Cylinder (Drum) and a proof copy is produced.

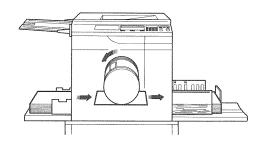


Printing

When you print, the Print Cylinder (Drum) rotates to print the specified number of copies.



Enter the number of copies you want.





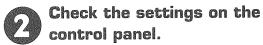


Basic Operation

Turn the power switch ON.

The power switch is located on the lower right side of the machine.





When the power is connected, the control panel indicators show the initial settings.

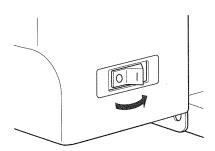
Make any necessary changes, such as reproduction ratio and processing mode.

Holding down the R·% (ALL RESET) key longer than one second returns the control panel to the initial settings.

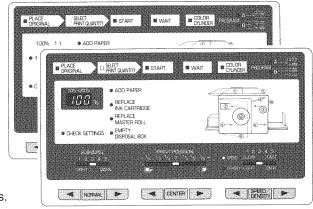
p.38Return to initial settings.

p.54You can customize the initial settings.

p.49, 50 ...Frequently used combinations of settings can be saved in memory for quick recall.



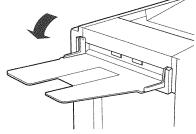
= GR1700 =



= GR1750 =

Open the Original Tray.

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



Place an original on the Original Feed Table.

Adjust the Original Guides to the width of the original. Then insert the original face down into the ADF Unit until it stops. The original is automatically fed and set into place.

A maximum of 50 originals can be set into place at

When an original is in place, processing automatically changes to Master-Making from Printing. The MASTER-MAKING indicator on the control panel lights.



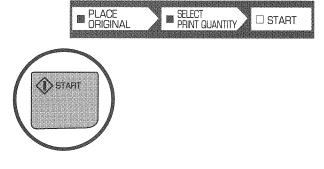




Press the START key.

After an original is scanned, a master is created. A sample is automatically printed to allow you to check the print quality, position, and density.

mage, press the PRINT POSITION
Adjustment keys, and/or turn the
Left/Right Print Position Adjustment
Dial.



When using GR1750

p.37To change the density of the printed copies, change the print density setting.

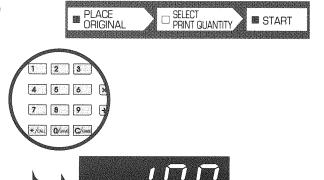
If settings are changed, press the TEST PRINT key to check the results with sample prints.





Specify the number of copies to be printed using the Print Quantity keys; the number is displayed in the Print Quantity Display.

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



SELECT PRINT QUANTITY

☐ START



Press the START key.

The specified number of copies is printed.

If printing stops and the ADD PAPER indicator flashes on the control panel, paper has run out in the Paper Feed Tray. Load paper into the tray.

p.18



PLACE ORIGINAL

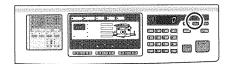
Photo/Half-Tone Processing



If an original contains photographs or half-tone images, or a multi-colored original is used, select PHOTO processing (or DUO processing for GR1750) by holding down the LINE / PHOTO key.

The corresponding indicator lights.

Since the image is processed graphically, degrees of shading are accurately reproduced.



When using GR1750-

PHOTO-

Reproduces different shades of photograph or half-tone images most clearly.

Lines and texts become less sharp if they are included in an original.

DUO-

Reproduces photograph or half-tone images clearly without deteriorating the sharpness of lines and texts.

This processing mode is recommended for multi-colored originals or photo originals with sharp lines and texts included.

p.33The scanning contrast setting should be checked and adjusted according to image density, if necessary.

Holding down the R⋅W (ALL RESET) key longer than one second returns processing to the initial setting.

p.49, 50 The selected processing can be saved in memory for quick recall.





- NOTE If DUO is selected for light density originals, lines might be broken. In this case, select LINE.
 - If LINE is selected to print an original that contains a darkly shaded photograph, on the other hand, copies might be smudged. In this case, select PHOTO or DUO.

p.54You can customize initial settings.

When using GR1700-

PHOTO -

Reproduces different shades of photograph or half-tone images most clearly.

Lines and texts become less sharp if they are included in an original.

p.33The scanning contrast setting should be checked and adjusted according to image density, if necessary.

Holding down the R⋅% (ALL RESET) key longer than one second returns processing to the initial setting.



NOTE If LINE is selected to print an original that contains a darkly shaded photograph, copies might be smudged.

p.49, 50 The selected processing can be saved in memory for quick recall.

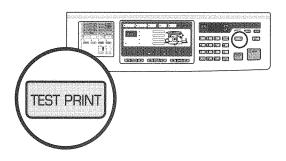
Producing Proof Copies



If changes have been made to the print position and other settings, check the print quality by producing proof copies.

By holding down the TEST PRINT key, you can print continuously.

NOTE Test printing does not affect the quantity in the Print Quantity Display.



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Automatic Printing



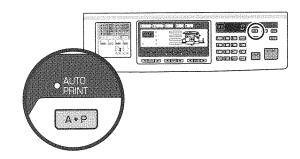
If you do not need to check print samples before making prints, press the AUTO PRINT key before pressing the START key to activate the Auto Print feature. This feature enables nonstop operation from master-making through printing.

If you need to check or adjust the print position, cancel the Auto Print feature by pressing the AUTO PRINT key again.

(1)

Press the AUTO PRINT key.

The Auto Print Indicator lights.



28

Set an original into place.

Insert an original face-down into the ADF Unit until it stops. A maximum of 50 originals can be in place at one time.



Enter the number of copies to be printed.

MOTE If you enter a number incorrectly, press the C key to reset the Print Quantity Display to "0," then enter the correct number.

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





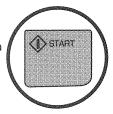


The specified number of copies are produced with an extra proof copy.

p.49, 50 The Auto Print feature can be saved in memory for quick recall.

Holding down the R·% (ALL RESET) key longer than one second returns the Auto Print feature to the initial setting.

p.54You can customize initial settings.

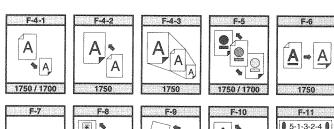


29

Adjustment Features

This section describes the features that enhance your Risograph's capabilities.

0	Reducing and Enlarging Originals	3(
	 Using Preset Reduction F-4-1 Using Preset Enlargement (only for GR1750) F-4-2 Using Zoom (only for GR1750) F-4-3 	·····3
9	Changing Image Contrast on Prints F-5	3
•	Producing Enhanced Prints (only for GR1750) - Producing Enhanced Fine Lines F-6 - Producing Dotted Images F-7	32
•	Repositioning the Print F-8 - Adjusting Vertical Print Position - Adjusting Horizontal Print Position	35
9	Changing Print Speed F-9	36
0	Changing Print Density (only for GR1750) F-10	37
6	Return to Initial Settings F-11	38













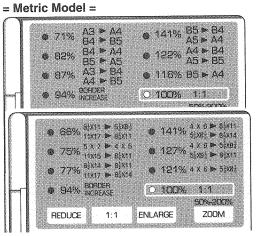
Reducing and Enlarging Originals

When using GR1750

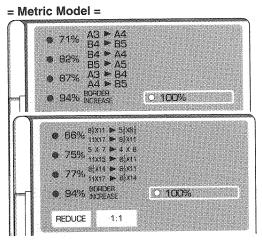
When using GR1700

Originals can be reduced or enlarged, using either preset reduction and enlargement or zoom that you specify.

Originals can be reduced into any of four pre-set percentages.







= USA Model =

Press the PRESET SIZE/ZOOM Selection key to select the method that you want to use: Preset Reduction/ Enlargement or Zoom. To switch back, press the key again.

(When the Zoom is available, all of the Preset Reduction/Enlargement Size indicators are off.)

p.49, 50Reproduction percentage can be adjusted and saved in memory for quick recall.

p.49, 50Reproduction percentage can be adjusted and saved in memory for quick recall.

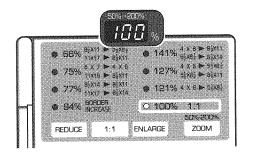
Using Preset Reduction

F-4-1 A A 1750/1700

When using GR1750

Confirm that any of the Preset Reduction/Enlargement Size indicators lights up.

If not, press either the PRESET SIZE/ZOOM Selection key or the 1:1 key to activate the Preset Reduction/Enlargement Size indicators.



Press the REDUCE Key to select a desired percentage.

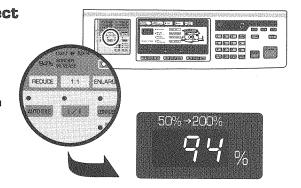
Each time the REDUCE key is pressed, the indicator lights and the percentage appearing in the Reproduction Size Display changes in the following order:

- < USA model >
 - $94\% \rightarrow 77\% \rightarrow 75\% \rightarrow 66\% \rightarrow 94\%$
- < Metric model >

$$94\% \rightarrow 87\% \rightarrow 82\% \rightarrow 71\% \rightarrow 94\%$$

When you press the 1:1 key, the percentage returns to the original size (100%).

Holding down the R·% (ALL RESET) key longer than one second returns print size to the initial setting (1:1).



When using GR1700 -



The Reduction Mode Indicator lights up.

Each time the REDUCE key is pressed, the Preset Reduction Size indicators light in the following order:

< USA model >

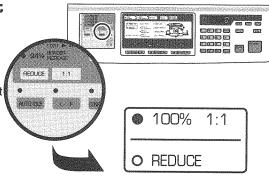
$$94\% \rightarrow 77\% \rightarrow 75\% \rightarrow 66\% \rightarrow 94\%$$

< Metric model >

$$94\% \rightarrow 87\% \rightarrow 82\% \rightarrow 71\% \rightarrow 94\%$$

When you press the 1:1 key, the percentage returns to the original size (100%).

Holding down the R·% (ALL RESET) key longer than one second returns print size to the initial setting (1:1).

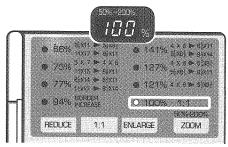


Using Preset Enlargement



Confirm that any of the Preset Reduction/Enlargement Size indicators lights up.

If not, press either the PRESET SIZE/ZOOM Selection key or the 1:1 key to activate the Preset Reduction/Enlargement Size indicators.



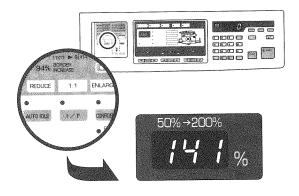
31

Each time the ENLARGE key is pressed, the indicator lights and the percentage appearing in the Reproduction Size Display changes in the following order:

- < USA model > $121\% \rightarrow 127\% \rightarrow 141\% \rightarrow 121\%$
- < Metric model > $116\% \rightarrow 122\% \rightarrow 141\% \rightarrow 116\%$

When you press the 1:1 key, the percentage returns to the original size (100%).

Holding down the R·\$ \checkmark (ALL RESET) key longer than one second returns print size to the initial setting (1:1).

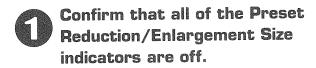


(32)

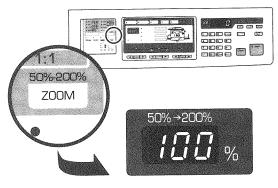
Using Zoom

You can specify any reduction or enlargement between 50% and 200%.

When you press the 1:1 key, the 100% indicator lights up and the percentage returns to the original size (100%).



If a Preset Reduction/Enlargement Size indicator is lit, press the PRESET SIZE/ZOOM Selection key. The current reproduction percentage is shown in the Reproduction Size Display.

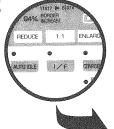


Press the REDUCE or ENLARGE key to specify the desired percentage in the Reproduction Size Display.

Each time you press the REDUCE or ENLARGE key, the percentage in the Reproduction Size Display decreases or increases by 1%.

Holding down the key longer than one second changes the percentage continuously.

Holding down the $R \cdot \mathcal{W}$ (ALL RESET) key longer than one second returns the print size to the initial setting (1:1).





Changing Image Contrast on Prints



To achieve different tones on printed copies from those of an original, adjust the scanning contrast according to the darkness of the original.

Each press of the ◀ or ▶ key lightens or darkens, respectively, the contrast by one degree (on a 1 to 5 scale).



Lightens the contrast for newspaper or colored originals.



Returns the contrast to the standard setting.



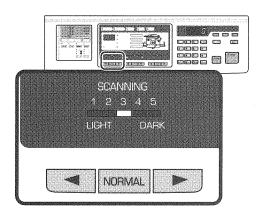
Darkens the contrast for poor copies or pencil-written originals.



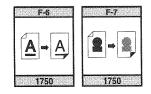
Moits After adjusting the scanning contrast, make another master to make the adjustment effective for further printed copies.

Holding down the R⋅% (ALL RESET) key longer than one second returns the Scanning Contrast mode to the initial setting (NORMAL).

p.49, 50 Scanning contrast can be adjusted and saved in memory for quick recall.



Producing Enhanced Prints



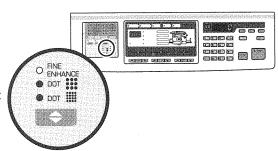
You can enhance images on an original copy in two ways: reproducing small characters and fine lines more clearly (FINE ENHANCE) and processing images with a dot screen (DOT::: and DOT !!!).

Producing Enhanced Fine Lines

Press the Image Processing Selection key in the sub control panel.

When this feature is selected, the corresponding indicator lights.

- If an original has a colored background, it might show up on prints. In that case, cancel this feature.
 - This feature is not available in the duo processing mode.



Holding down the $R \cdot \mathcal{W}$ (ALL RESET) key longer than one second returns processing to the initial setting.

p.49, 50 The selected processing can be saved in memory for quick recall.

Producing Dotted Images

Press the Image Processing Selection key in the sub control panel.

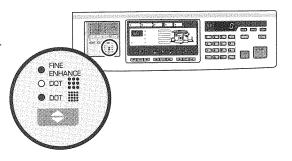
When this feature is selected, the corresponding indicator lights.

- · DOT ::: Sparse dot pattern
- DOT Ⅲ Fine dot pattern

This feature is available only in the photo processing mode.

Holding down the $R \cdot \mathcal{W}$ (ALL RESET) key longer than one second returns processing to the initial setting.

p.49, 50The selected processing can be saved in memory for quick recall.



35

Repositioning the Print



The print position can be adjusted vertically (up and down) and horizontally (to the right and left).

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

Adjusting Vertical Print Position

You can move the print position vertically by pressing either of the PRINT POSITION Adjustment keys. The allowable range is $\pm \sqrt[3]{4}$ (± 20 mm).

When the key is pressed, the adjusted vertical print position is roughly given by the PRINT POSITION indicator

4

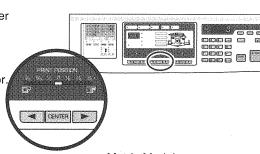
Moves print position down.

>

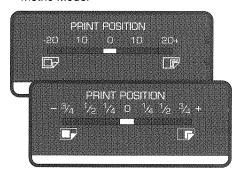
Moves print position up.

CENTER

Returns print position to the center.



= Metric Model =

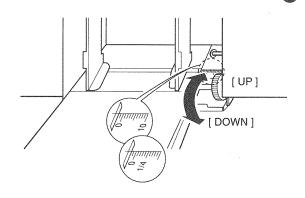


= USA Model =

Adjusting Horizontal Print Position

You can move the print position horizontally by turning the Left/Right Print Position Adjustment Dial on the Paper Feed Tray. The allowable range is \pm $^{3}/_{4}$ " (\pm 20 mm).

[UP] : Moves print position to the left. [DOWN] : Moves print position to the right.



Changing Print Speed

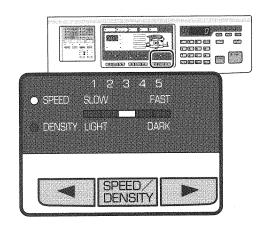


Print speed can be set at any of five levels, ranging between 60 and 130 sheets per minutes.

When using GR1750

Press the PRINT
SPEED/DENSITY Selection key
and select the SPEED mode.

When the SPEED indicator is lit, you can change print speed.



Press the PRINT SPEED

Adjustment keys () to change print speed.

•

Decreases print speed.

JD>-

Increases print speed.

The normal print speed (setting 3) is 100 sheets per minute.

p.49, 50Print speed setting can be saved in memory for quick recall.

• SPEED SLOW FAST

DENSITY LIGHT DARK

SPEED

DENSITY

DENSITY

Holding down the $R \cdot \mathcal{W}$ (ALL RESET) key longer than one second returns print speed to the initial setting.

p.54You can customize initial settings.

When using GR1700 -

Press the PRINT SPEED

Adjustment keys (< / >) to change print speed.

-46

Decreases print speed.



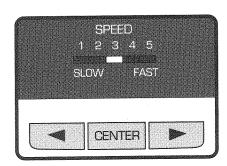
Increases print speed.

CENTER

Returns print speed to the normal setting.

Note The normal print speed (setting 3) is 100 sheets per minute.

p.49, 50Print speed setting can be saved in memory for quick recall.



Holding down the $R\cdot \mathcal{W}$ (ALL RESET) key longer than one second returns print speed to the initial setting.

p.54You can customize initial settings.

35

<u>37</u>

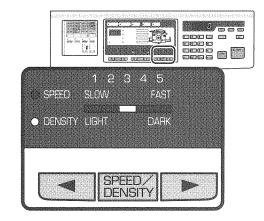
Changing Print Density



Print density can be set at any of five levels.

Press the PRINT
SPEED/DENSITY Selection key
and select the DENSITY mode.

When the DENSITY indicator is lit, you can change print density.



Press the PRINT DENSITY
Adjustment keys () to change print density.

Makes print density lighter.

Makes print density darker.

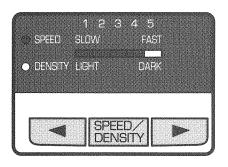
p.49, 50Print density setting can be seved in memory for quick recall.

When the print density setting is changed, press the TEST PRINT key to check the results with proof copies.

NOTE If the print density levels do not provide the desired result, adjust scanning contrast and create another master.

☞ p.33

Holding down the $R \cdot \mathcal{H}$ (ALL RESET) key longer than one second returns print density to the initial setting.



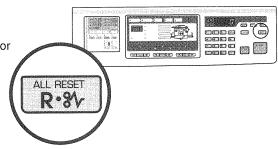
Return to Initial Settings

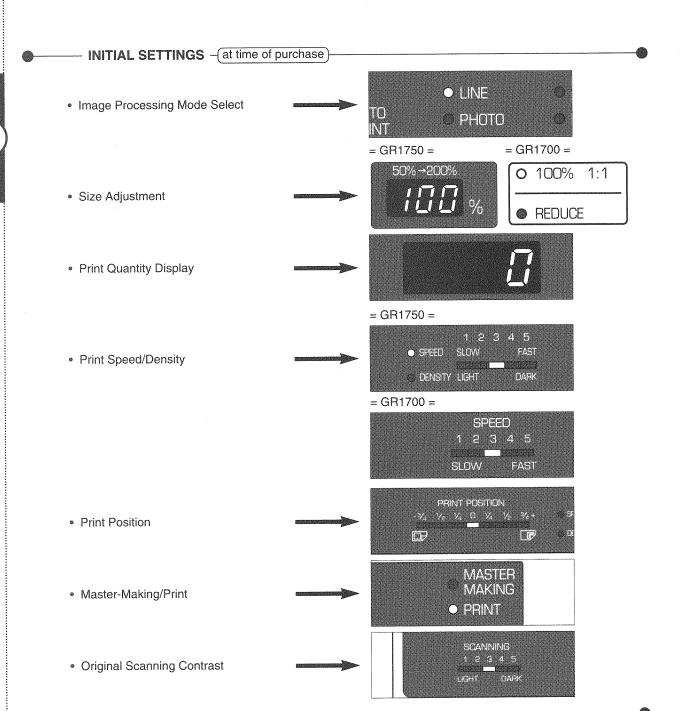


To return all the settings to initial status, including print position and reproduction percentage, turn the power off and on again, or hold down the R·% (ALL RESET) key for more than one second.

If you have customized the initial settings, they will be the ones recovered when you perform the procedure above.

r p.54

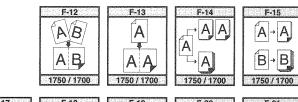




Special Features

This section describes special features that may be used for special needs.

Printing Originals Side by Side	4(
- Printing Two Different Originals Two-Up F-12	4(
- Printing the Same Original Two-Up F-13	
Automatic Sorting into Groups	
- Setting Up Program A F-14	
Storing Settings in Memory F-16	
- Saving Settings	49
- Recalling Saved Settings	
- Deleting Saved Settings	5
Protecting Confidential Documents F-17	52
Automatic Idle F-18	5
Customizing the Initial Settings F-19	54
Changing Print Color F-20	56
- Changing Print Cylinders (Drums)	
Interfacing with a Computer F-21	= <
· interracing with a computer [5-21]	















Printing Originals Side by Side





Two of the same (or two different) originals can be printed side by side and, if required, each original can have different settings: reproduction size, scanning contrast, and

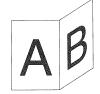
p.49, 50 Frequently used combinations of settings can be saved in memory for quick recall.

Productivity can be doubled by cutting or folding the Two-Up prints in half to finish your job.

p.28The Auto Print feature can be used with Two-Up printing.

p.49, 50 The Two-Up feature can be saved in memory for quick recall.





Irregular size printing paper cannot be used with the Two-Up feature.

Holding down the R· 8 (ALL RESET) key longer than one second returns the control panel to the initial settings.

Printing Two Different Originals Two-Up



Using the Same Settings -

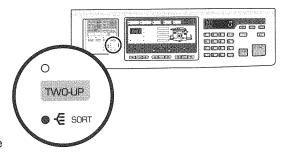
When using GR1700, refer to the special note on page 42 before activating the Two-Up feature.



Press the TWO-UP key to activate the Two-Up feature.

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

To cancel the Two-Up feature, press the key again.



Place two originals face-down on the Original Feed Table.



Press the START key.

The originals are scanned and the Two-Up master is made.

A sample Two-Up print is made.



Changing Settings for One Original

To use different settings when making Two-Up prints of two different originals, place originals individually.

The Risograph scans the first original, and then provides a 15-second period (a beep sounds) within which to place the second original.

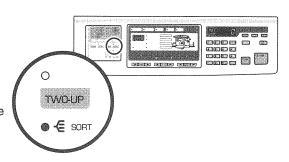
If you press the STOP key or do not place the second original during the 15-second period, the sample print will be produced with one side blank.

When using GR1700, refer to the special note on page 42 before activating the Two-Up feature.

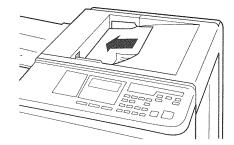


The Two-Up indicator lights when the feature is active.

NOTE To cancel the Two-Up feature, press the key again.

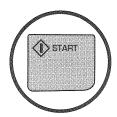


Place an original face-down on the Original Feed Table.



Press the START key.

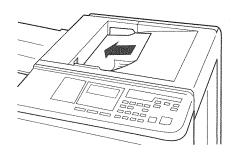
After the first original is scanned and ejected into the Original Tray, a 15-second beep sounds.



During the 15-second beep, enter the settings for the second original and place the second original on the Original Feed Table.

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







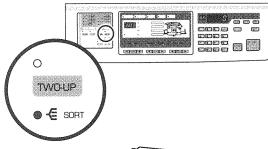
When using GR1700, refer to the special note below before activating the Two-Up feature.

Press the TWO-UP key 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 key again.

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





Press the START key.

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



During the 15-second beep, change the settings, if necessary, and place the original on the Original Feed Table again.

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

NOTE If you press the STOP key or do not place the original during the 15-second period, the sample print will be produced with one side blank.



START



Special Note when using the Two-Up feature in GR1700

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

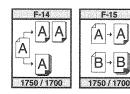
Before activating the Two-Up feature, always confirm the selected initial Two-Up formation is suitable for the size of paper to be used, by accessing the item number 12 in the Initial setting customizing operation. If it isn't, the Two-Up feature will not function correctly.

Choices	Two-Up Formation	Available Paper Size
[1]	Half Legal x 2 (B5 x 2)	Legal (B4-size) ———— The default selection
[2]	Statement x 2 (A5 x 2)	Letter (A4-size)

p.54You may customize initial settings.

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Automatic Sorting into Groups



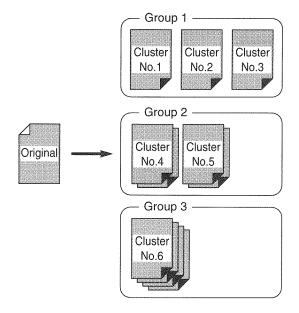
The Programmed Printing feature can be used to print and sort printed sheets into various groups automatically. One of two programmed printing methods, Program A or B, can be selected using the PROGRAM key.

- **p.49, 50**Frequently used combinations of settings can be saved in memory for quick recall.
- **p.49, 50....**The Programmed printing setting can be saved in memory for quick recall.

NOTE The Job Separator (optional) is useful for Programmed printing.

Program A

One original is printed in different quantities.



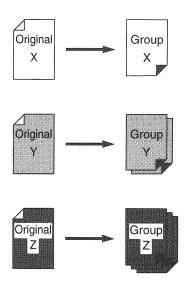
If more than one original is placed in the ADF Unit with the Auto Print feature activated, the program set up for Program A runs completely for each original, until all the originals are printed and sorted into groups as specified in the program.

NOTE The number of groups which can be set up in the Program A differs depending on the number of clusters in each group.

The total of clusters in all groups is limited to "50."

Program B -

Different originals are printed in different quantities.



NOTE Up to 50 groups can be set up, with a maximum of 9999 copies in each group.

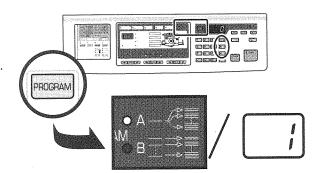
Setting Up Program A



Press the PROGRAM key.

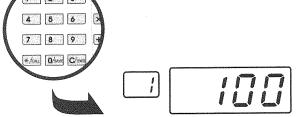
The Program A indicator lights and \boldsymbol{l} is shown in the Entry Number Display to identify the first group.

Note: To cancel Program A, press the PROGRAM key again.



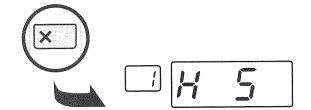
Input the number of copies to be printed for each cluster of the first group using the Print Quantity keys.

If you enter a number incorrectly, press the "C" key to reset the Print Quantity Display to zero, then enter the correct number.



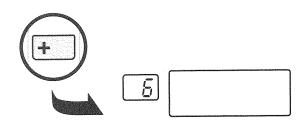
Press the "X" key and input the number of clusters of the first group.

If you press the "+" key instead of the "X" key at this stage, the quantity is automatically set at "1."



Press the "+" key to set the print quantity for the second group.

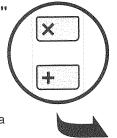
The youngest cluster No. to which the number of copies has not been assigned yet is indicated in the Entry Number Display and the Print Quantity Display is reset for the programming operation for the second group.

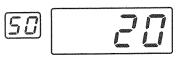


Use the Print Quantity keys, "X" key and "+" key and input print quantities and cluster numbers.

Up to 50 clusters can be used for this program.

NOTE If the PROGRAM key is pressed before a print quantity is specified for the last group, all the Program A settings will be canceled.





a)== = = =

Press the "*" key to check or correct the number of copies to be printed for any cluster already set up.

Each time you press the " \times " key, the print quantity for the previous cluster is displayed.

If you incorrectly enter the number of copies for the displayed cluster, press the "C" key to reset the Print Quantity
Display, then enter the correct number.

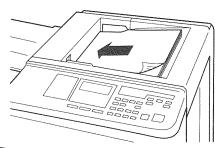
Enter other settings for Program A.

Specify printing position, reproduction size, and so on. (The Two-Up feature can also be specified.)

If you want to print more than one original using the same Program A settings, press the AUTO PRINT key to activate the Auto Print feature.

p.49, 50Before pressing the START key, save the program in memory for quick recall if you use these programmed settings frequently.

Place the original(s) face-down on the Original Feed Table.



Press the START key.

A sample print is produced. If the Auto Print feature is not activated, press the START key again.

Copies are produced and sorted according to the program, starting with the last group specified. When printing is completed, the current Program A settings are automatically cleared.

To interrupt the programmed printing, press the STOP key.

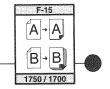


*/CAL

If the Auto Print feature is activated, the current Program A settings are recovered at the end of printing.

Holding down the R·\$ \checkmark (ALL RESET) key longer than one second returns the control panel to the initial settings and clears the program.

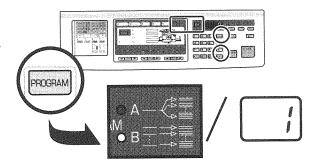
Setting Up Program B



Press the PROGRAM key twice.

The Program B indicator lights and *l* appears in the Entry Number Display to identify the first original.

NOTE To cancel Program B, press the PROGRAM key again.



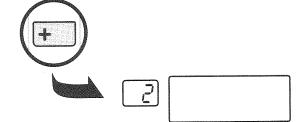
Input the number of copies to be printed for the first original using the Print Quantity keys.

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



Press the "+" key to set the print quantity for the second original.

The Entry Number Display changes to **2** and the Print Quantity Display is reset for the second original.

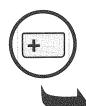


Input the print quantity for the remaining originals using the Print Quantity keys and the "+" key.

Up to 50 originals can be specified.

NOTE If the PROGRAM key is pressed before a print quantity is specified for the last original, all the Program B settings will be canceled.





50



46

Press the "*" key to check or correct the number of copies to be printed for any original already set up.

Each time you press the " *\times " key, the print quantity for the previous original is displayed.

If you incorrectly enter the number of copies for the displayed original entry number, press the C key to reset the Print Quantity Display, then enter the correct number.

Enter other settings for Program B.

Specify printing position, reproduction size, and so on. (The Two-Up feature can also be specified.)

p.49, 50....Before pressing the START key, save the program in memory for quick recall if you use these programmed settings frequently.

Place the originals face-down on the Original Feed Table.



(Î) START

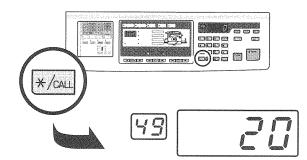
Press the START key.

Prints are produced according to the specified program, starting with the last original specified.

When printing is completed for all originals, the current Program B settings are automatically cleared.

To interrupt this programmed printing, press the STOP key.

Holding down the R-% (ALL RESET) key longer than one second returns the control panel to the initial settings and clears the program.



Storing Settings in Memory

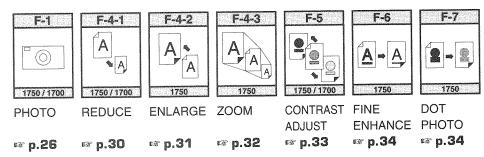


The Memory feature is a flexible tool for automating frequently used or complicated combinations of settings. You can store up to 20 combinations of frequently used or complex print-job settings and apply them to new print jobs whenever necessary.

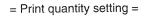
SETTINGS and FEATURES ASSIGNABLE for MEMORY

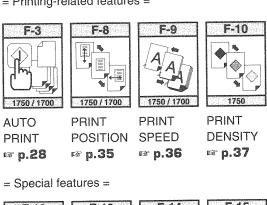
Any combination of the following settings and features can be saved in memory for quick recall.

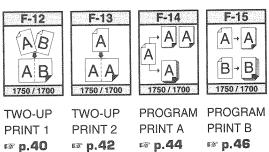
= Processing-related features =



= Printing-related features =



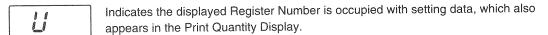




Display Guide for the Memory Feature

r p.40

Indicates the current Register Number, which appears in the Entry Number Display. Indicates the displayed Register Number is vacant (not occupied with setting data), which appears in the Print Quantity Display.



Once settings are saved in memory, the combination remains registered until the "C" key is used to remove it from memory.

It is recommended that you maintain a list of the Register Numbers currently in use and their associated settings.



Set up desired settings.

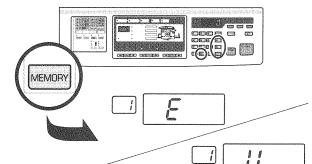




Press the MEMORY key to activate the Memory feature.

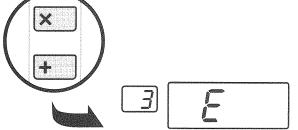
The Entry Number Display shows I, and either E or U is shown in the Print Quantity Display.

If \boldsymbol{E} appears in the Print Quantity Display, skip step 3 and go to step 4.



Select a vacant Register
Number for the combination of settings entered.

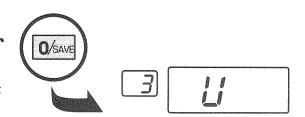
Press the "+" or "X" key to find a vacant Register Number.



Press the SAVE key to save the settings to the selected Register Number.

A long beep sounds and ${\pmb U}$ is displayed in the Print Quantity Display for 1 second to indicate that the settings have been registered.

Then the Memory feature is deactivated.



If you try to save the settings to an occupied Register Number (which is accompanied by the **U** display), the **U** flashes and short beeps sound for 2 seconds when you press the SAVE key. Press the "+" or "X" key to find a vacant Register Number or erase the current settings from the occupied Register Number and save the new settings.

49

Recalling Saved Settings

F-16

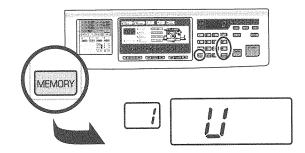
1 • 2 • 3 • • 6 • 7 • • • 1750 / 1700

Use the CALL key to recall settings that are saved in memory.

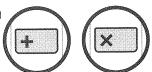


Press the MEMORY key to activate the Memory feature.

The Entry Number Display shows I.



Select the Register Number with the desired settings using the "+" or "X" key.



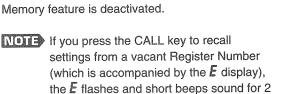
NOTE It is recommended that you maintain a list of the Register Numbers currently in use and their associated settings.



Press the CALL key.

seconds.

The settings will be recalled from memory, and the indicators and displays on the control panel will light accordingly. A long beep sounds and the Memory feature is deactivated.



Press the "+" or "X" key to find an occupied Register Number.

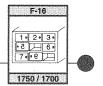






(50)

Deleting Saved Settings

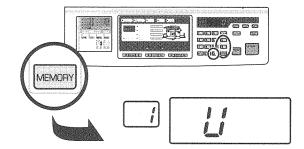


Use the "C" key to clear all settings from an occupied Register Number.

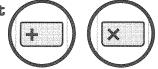


Press the MEMORY key to activate the Memory feature.

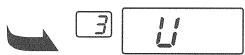
The Entry Number Display shows 1.



Use the "+" or "X" key to select the Register Number that you want to clear.



It is recommended that you maintain a list of the Register Numbers currently in use and their associated settings.



Press the "C" key.

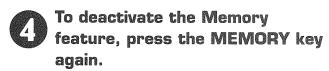
The settings are erased from the selected Register Number and the \mathbf{E} appears in the Print Quantity Display.



Register Number (which is accompanied by the **E** display), the **E** flashes and short beeps sound for 2 seconds.

Press the "+" or "X" key to find an occupied Register Number.

As the Memory feature remains active, you can make further memory settings or recall saved settings.





Protecting Confidential Documents

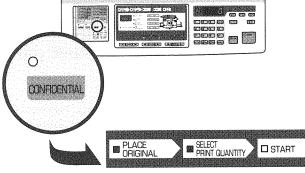


After printing is complete, the master remains on the Print Cylinder (Drum). Copies of this master can be printed at any time by pressing the START key. To protect confidential documents from unauthorized duplication, press the CONFIDENTIAL key to discard the master after printing.

- Confirm that printing has ended.
- Press the CONFIDENTIAL key.

The CONFIDENTIAL indicator lights.

To cancel the Confidential feature, press the STOP key or the CONFIDENTIAL key again.

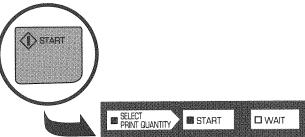


Press the START key.

The current master is discarded and replaced with a blank one. The CONFIDENTIAL indicator goes out, and the Confidential feature is canceled.

NOTE The master is discarded into the Master Disposal Box.

p.64For strictly confidential documents, discard the contents of the Master Disposal Box.



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Automatic Idle



The Automatic Idle feature assures consistent print quality even after a long break by rotating the Print Cylinder (Drum) to ensure even ink distribution, and saves you from wasting paper due to faint images in printing.

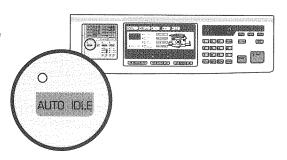
When ordinary or test printing takes place after a long break, the Automatic Idle feature is ignored even when the Automatic Idle indicator is lit.

Whenever the Automatic Idle indicator is lit, the Automatic Idle feature is on. If you want to use this feature when the indicator is not lit, press the AUTO IDLE key to activate it.

This feature is automatically activated if the power is switched on when the machine unit has not been used for a certain period (6 to 12 hours).

You can select the minimum period required for the automatic activation of the Automatic Idle feature.

p.54You can customize initial settings.



Customizing the Initial Settings



You can select some of the initial settings to which the machine status will be returned when the power is turned on, or the R·% (ALL RESET) key is held down for more than one second.

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

• INITIAL SETTINGS OPEN TO ARBITARY CHANGES

Item No.	Title	Description	Choices	Ref.Page
01	PRINT SPEED	Selects the initial print speed (copies per minutes).	1(=60), 2(=80), 3(=100), 4(=120), 5(=130[cpm])	p.36
02	AUTO PRINT FEATURE	Selects the initial status of the Auto print feature.	1(OFF), 2(ON)	p.28
— For 03	GR1750 only— JUMP WING SETTING (EJECTION GUIDE ARRANGING)	Activates/Deactivates the Jump wings (Ejection guides) at paper exit.	1(AUTO), 2(OFF)	
04	DISPLAYED PRINT QUANTITY	Selects the initial number appearing in Print quantity display.	1(0000), 2(0001)	
- For 05	GR1750 only— MASTER-MAKING AREA LIMIT	Selects the maximum image area for a master.	1(VARIABLE), 2(11×17/A3), 3(8.5×14/B4), 4(8.5×11/A4)	p.16
06	AUTO RESET TIME	Gives/Ignores the period for automatic initialization.	1(NONE), 2(5 Minutes)	p.38
07	MINIMUM PRINT QUANTITY	Selects the minimum print quantity which should be produced from one master.	1(1), 2(10), 3(20), 4(30) [copies]	
08	AUTO IDLE PERIOD	Selects the period required for automatic activation of the Autoidle feature.	1(12 Hours), 2(6Hours), 3(OFF <no limit="">)</no>	p.53
09	AUTO DOCUMENT FEED	Requires the START key or Not, to feed the following original placed in the ADF unit without the Auto print feature activated.	1(OFF) <start key="" required="">, 2(ON) <start key="" not="" required=""></start></start>	
— Fo i	GR1750 only— IMAGE PROCESSING	Selects the initial image processing mode.	LINE, DUO	p.26
— Fo i 12	GR1700 only— TWO-UP SELECTION (TWO-UP FORMATION)	Selects the formation available in the Two-up printing.	1(Half Legal x 2/B5X2), 2(Statement x 2/A5X2)	p.42
13	JOB SEPARATOR CONNECTION	Opens/Closes the data line for the optional Job Separator. Select "YES" when attaching the Job Sepalator.	1(NO <close date="" line="">), 2(YES <open data="" line="">)</open></close>	p.80

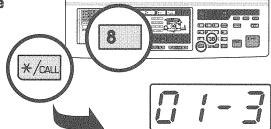
^{*} The framed item is the default setting.





Access the changeable initial settings.

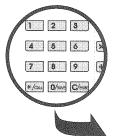
Item number **01** and a setting-status number **3** appear on the Print Quantity Display.

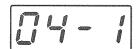


Enter the item number that you want to customize.

Use the Print Quantity keys.

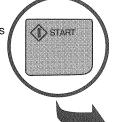
For item numbers under 10, press "0" first.

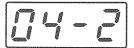




Press the START key.

Each time you press the START key, the setting is changed. Select a desired setting.



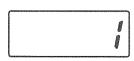


Press the R · % (ALL RESET) key.

After customizing the settings, hold down the ALL RESET key for more than one second.

The custom settings appear as the initial settings when the power is turned ON or the ALL RESET key is held down for more than one second.





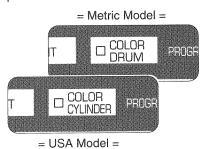


Changing Print Color



To print with an optional color Cylinder (Drum), simply remove the existing Cylinder (Drum) from your Risograph and replace with the color of choice.

When a Print Cylinder (Drum) other than the Black one is in place, the COLOR CYLINDER (DRUM) indicator lights on the control panel.



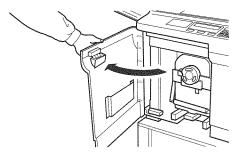
Caution Only use Risograph GR Print Cylinder (Drum).

- NOTE · Change Print Cylinder (Drum) with the power ON.
 - · Store the removed Print Cylinder (Drum) horizontally in the Print Cylinder (Drum)
 - Never store Print Cylinder (Drum) in an upright position.

Changing Print Cylinders (Drums)



Open the Front Cover.



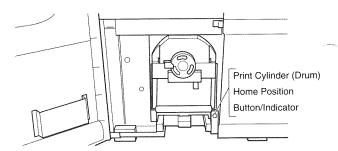
Be sure that the Print Cylinder (Drum) Home Position button/indicator is lit.

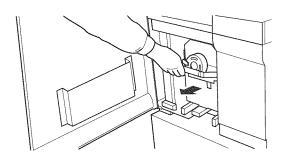
> If not lit, press the Print Cylinder (Drum) Home Position button/indicator. The Print Cylinder (Drum) will rotate and stop at the preset home position, making the indicator light.

If the Print Cylinder (Drum) Home Position button/indicator is not lit, the Print Cylinder (Drum) cannot be pulled out.



Raise the Print Cylinder (Drum) Handle until it is level and pull out the Print Cylinder (Drum) until it stops.





Remove the Print Cylinder(Drum) from the unit.

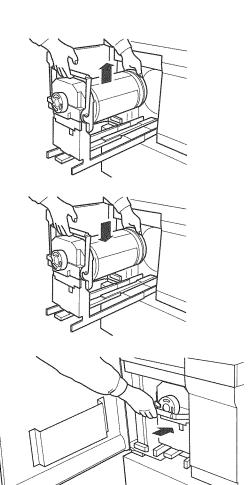
Lift the Print Cylinder (Drum) with both hands to remove it.

Load another color Print
Cylinder (Drum) onto the holder.

Insert another Print Cylinder (Drum) into the holder horizontally, holding the handle and body with both hands.

Slide the Print Cylinder (Drum) into the unit.

With the Print Cylinder (Drum) Handle in its raised position, slide the Print Cylinder (Drum) into the unit until it stops. Then lower the handle and close the Front Cover.



Interfacing with a Computer



Your Risograph can be interfaced with Computers (such as IBM and compatibles, and Macintosh) via the dedicated computer interface (optional).

When the Risograph is interfaced with a Computer, the I/F key opens the interface line to the Computer.

For more details on how to interface with computers, consult the manual for the Risograph Computer Interface system.

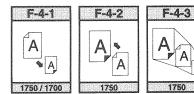


Open the sub-panel cover and press the I/F key.

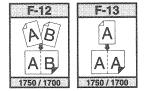
The corresponding indicator lights up when the interface line to a Computer is open.

NOTE The following features become inactive when the I/F key is selected:

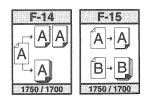
- SIZE ADJUSTMENT FEATURE -

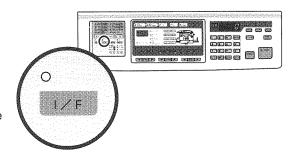


- TWO-UP PRINTING FEATURE -



-PROGRAMMED PRINTING FEATURE -





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Replenishing and Disposing Supplies

This section describes how to replenish supplies and dispose of them regularly.

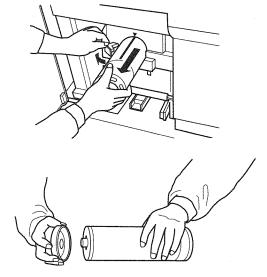
•	Replacing the Ink Cartridge	60
9	Replacing the Master Roll	62
•	Emptying the Master Disposal Box	64

Replacing the Ink Cartridge

Open the Front Cover, and pull the empty lnk Cartridge out of the Print Cylinder (Drum).

Release the Ink Cartridge Locking Lever (green in color) and pull the empty Ink Cartridge out of the Print Cylinder (Drum).

Remove the cap from a new lnk Cartridge.

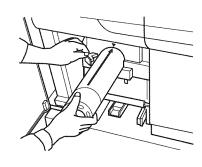


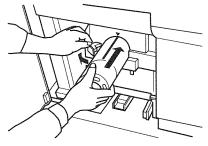
Align the arrow on the new lnk

Cartridge with the arrow marked
on the Print Cylinder (Drum).

While holding the Ink Cartridge Locking Lever aside, rotate the Ink Cartridge until its arrow meets the arrow marked on the Print Cylinder (Drum).

Insert the new Ink Cartridge all the way into the Print Cylinder (Drum).





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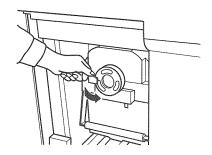
Lock the Ink Cartridge into place, and close the Front Cover.

Return the Ink Cartridge Locking Lever to its initial position to keep the Ink Cartridge in place. Also, press on the lower right-hand area of the Front Cover to close it securely.

Important!

 Never insert a cartridge of a different color ink.

Always be sure that the color of the new Ink Cartridge is the same as that of the old one being replaced. If you want to change the print color, you must replace the entire Print Cylinder (Drum).



• There is ink on the master wrapped around the Print Cylinder (Drum). Keep your hands and clothing away from it. If your hands come into contact with ink, wash thoroughly.

Replacing the Master Roll

Raise the Original Feed Table.

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

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.

Open the Master Roll Cover.

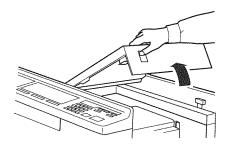
Pull the Master Roll Cover down.

Remove the depleted Master Roll.

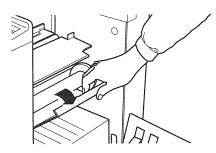
Pushing the depleted Master Roll to the right, pull it toward you and remove it from the supporter.

Remove both left and right flanges.

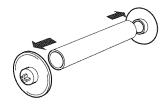
Remove both left and right flanges from the depleted Master Roll.











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Attach the existing flanges to a new Master Roll.

Unpack a new Master Roll.

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

Install the new Master Roll.

Pushing the colored flange onto the right-hand flange holder, slide the white flange securely into the center groove of the supporter.

Insert the leading edge of the Master Roll under the green films.

Unroll the Master Roll by pulling on the leading edge and insert the leading edge under the green films.

Close the Master Roll Cover.

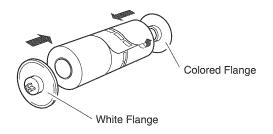
Close the Master Roll Cover gently.

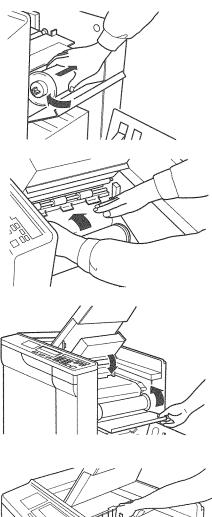
Close the Master Loading Unit and the Original Feed Table.

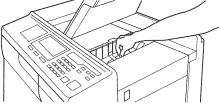
Close the Master Loading Unit gently and return the Original Feed Table to the original position.

Important!

If the leading edge of the Master Roll is inserted too far beyond the green films, the excess portion will be automatically cut off. If the strip that has been cut off remains inside, the CHECK SETTINGS indicator flashes on the control panel to advise you to remove it. Be sure to remove the cut-off strip.







Emptying the Master Disposal Box

Pull out the Master Disposal Box.

Squeeze both the upper and lower handles of the Master Disposal Box together and pull out.

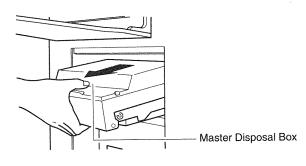
When carrying the Master Disposal Box, be sure to hold the handles so as not to drop used masters.

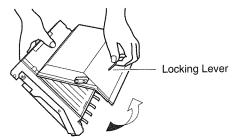
Discard used masters.

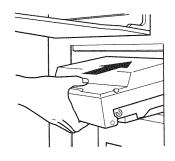
While holding the handles, open the cover by pulling the locking lever up, then discard used masters. Return the locking lever and close the cover.

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.



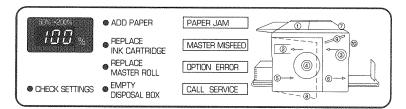




Advisory Displays

This section describes how to respond to advisory displays indicated on the control panel. If you need help in following an advice, consult the reference charts in the index below and refer to the corresponding page.

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CHECK SETTINGS		
Location	Page	
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3	p.66	
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7	p.66	
8	p.66	
9	p.66	
10	p.66	
No indication	p.69/p.70	

	· •	p.00/p.0/
	7	p.66
	8	p.66
	9	p.66
	10	p.66
No	indication	p.69/p.70

REPLACE M	ASTER ROLL
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p.68

EMPTY DISE	OSAL BOX
p.68	

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PAPER JAW		
Location	Page	
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(5)	p.70	
5 8	p.69	
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MASTER MISFEED	
Location	Page
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79	p.68

OPTION ERR	OR
p.67/p.70	

Code No. Refere	100
Code No.	Page
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C24	p.69
[C25]~[C27]	p.69
[C31]~[C32]	p.69
[C33]~[C34]	p.70
[C36]~[C39]	p.70
[C41]~[C44]	p.68
[C51]~[C59]	p.66
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C71	p.70
C72	p.67

CALL SERVICE	
Code No.	Page
E1~E20	p.67
E50	p.67
E68	p.67
E78	p.67

The code numbers in the brackets appear only when you press the "*" key.

Requesting Proper Setting

Displays			Description and Action	Reference
Indicator	Location	Code No.		
	[10	[C51]	An operator card is required to be inserted into the Key/card counter (optional). Action Insert it.	p.80
	4.8	[C52]	The Print Cylinder (Drum) is not properly installed. Action Slide it into place, holding the handle.	p.56
	4.8	[C53]	An Ink cartridge is not properly installed. Action Insert it completely and hook the locking lever on it.	p.60
	3	[C54]	Master is not properly loaded. Action Install a Master roll, if required, and insert the lead edge under the green plastic film tabs.	p.62
CHECK SETTINGS	. 8	[C55]	The Front cover is not properly closed. Action Close it tightly, pressing on the lower right-hand area.	
	⑦	[C56]	The Original feed table is not properly closed. Action Close it tightly, holding it down.	
	2	[C57]	The Master disposal box is not properly loaded. Action Insert it completely, holding the handles.	p.64
	9	[C58]	The Master loading unit is open. Action Open the Original feed table and close the Master loading unit securely.	
		[C59]	The ADF unit is not properly closed. Action Close it tightly.	

The code numbers in the brackets appear only when you press the " \star " key.

Requesting Proper Setting

Displays			Description and Action	Reference
Indicator	Location	Code No.		
CHECK SETTINGS	48	C61	This size Print Cylinder (Drum) is not acceptable for this machine. Action Install a correct size one. If you don't know what Print Cylinder (Drum) is of the correct size, contact your service representative.	p.56
	48	C62	This type of Print Cylinder (Drum) is not acceptable for this machine. Action Install a correct type. If you don't know what Print Cylinder (Drum) is the correct type, contact your service representative.	p.56
	48	C63	This type of lnk cartridge is not acceptable for this machine. Action Insert a correct type. If you don't know what lnk cartridge is the correct type, contact your service representative.	p.60
OPTION ERROR	no indication	C69	The cover of the sheet feeder SF3000 (optional) is not properly closed. Action Close it tightly and press the R·% (ALL RESET) key.	p.80
LNNON	no indication	C72	The cover of the sorter (optional) is not properly closed. Action Close it securely.	p.80

Requiring Technical Support

Displays		Des	scription and Action	Reference
Indicator	Location	Code No.		
CALL SERVICE	no indication	E1 Action S E6, E11 S E17, E19, E20, E50, E68, E78	Contact your authorized service representative and report him or her the trouble code (E##).	
	no indication	E7 Action S E10, E18	Turn the power off and then on again. If this code number still appears, contact you authorized service representative and report him or her the trouble code (E##).	

Displays			Description and Action	Reference
Indicator	Location	Code No.		
REPLACE INK CARTRIDGE	4	[C41]	An Ink cartridge is empty. Action Replace it with a new one.	p. 60
REPLACE MASTER ROLL	3	[C42]	A Master roll is depleted. Action Install a new one.	p.62
EMPTY DISPOSAL BOX	2	[C43]	The Master disposal box is full of used masters. Action Pull out the box and discard used masters.	p. 64
ADD PAPER	no indication	[C44]	Paper is depleted and/or not loaded in the Paper feed tray. Action Load paper in the Paper feed tray.	p.18

The code numbers in the brackets appear only when you press the "*" key.

Informing Troubles in Master-Making Area

Displays			Description and Action	Reference
Indicator	Location	Code No.		
	7.9	[C21]	Master has not been properly loaded on the Print Cylinder (Drum). Action Open the Master loading unit and wind the Master roll. Reload master. After closing the Master loading unit, press the START key to restart the master-making operation.	p.62
MASTER MISFEED	79	[C22]	Master has misfed. Action Open the Master loading unit and wind the Master roll. Reload master.	p.62
	4/8	[C23]	Master was not cut correctly. Action Open the Front cover and pull out the Print Cylinder (Drum) to check whether a master was properly loaded. If not, remove the master and restart the operation from master-making.	p.56

The code numbers in the brackets appear only when you press the " $\mbox{\ensuremath{\star}}$ " key.

Informing Troubles in Master-Making Area

Displays			Description and Action	Reference
Indicator	Location	Code No.		
CHECK SETTINGS	no indication	C24	A cut-off piece of master has been left inside the Master loading unit. Action Open the Original feed table and Master loading unit and remove the piece.	p.63
MASTER MISFEED	28	[C25]	A used master remains on the Print Cylinder (Drum). Action Open the Front cover, pull out the Print Cylinder (Drum) and remove the remaining master. After returning the Print Cylinder (Drum) to its position, press the START key to restart the master-making operation.	p.56
	2	[C26]	A used master is stuck at the entrance of the Master disposal box. Action Pull out the Master disposal box and look inside. If a master is present, remove it.	p.64

The code numbers in the brackets appear only when you press the "*" key.

Informing Troubles in Printing Area

Displays			Description and Action	Reference
Indicator	Location	Code No.		
CHECK SETTINGS	no indication	[C27]	There is no master on the Print Cylinder (Drum). Action Press the R·% (ALL RESET) key. Then place an original in the ADF unit and press the START key.	
	(5)8)	[C31]	Paper is jammed in the paper feed area. Action Open the Front cover, pull out the Print Cylinder (Drum) and remove the paper.	p.5 6
PAPER JAM	68	[C32]	Paper is jammed under the Print Cylinder (drum) or in the paper ejection area. Action Open the Front cover, pull out the Print Cylinder (Drum) and remove the paper.	p.56
		The code	numbers in the brackets appear only when you press the	e " 米 " key.

Informing Troubles in Printing Area

Displays			Description and Action	Reference
Indicator	Location	Code No.		
	(5)	[C33]	Paper was not fed or was improperly fed. Action Check paper and the Paper feed tray and press the R·% (ALL RESET) key.	p.18
PAPER JAM	48	[C34]	Paper has stuck to the Print Cylinder (drum). Action Open the Front cover, pull out the Print Cylinder (Drum) and remove the paper.	p.56
CHECK SETTINGS	no indication	C60	The safety switch above or under the Paper feed tray has been activated. Action Check the paper feed area for any obstructions and clear it if an obstacle is found.	p.18
OPTION ERROR	no indication	C71	Paper is jammed in the sorter (optional). Action Open the cover of the sorter and remove the paper.	

The code numbers in the brackets appear only when you press the " $\mbox{\ensuremath{\star}}$ " key.

TO PREVENT PAPER JAMS

- Use flat printing paper that is free of folds. If curled paper is unavoidable, place it so that the curl faces down.
 - r p.16

· When using smooth paper for printing, set the Paper feed pressure adjustment lever to "CARD."

Informing Troubles in ADF Unit

Displays			Description and Action	Reference
Indicator	Location	Code No.		
	1	[C36]	An original was not fed, or was improperly fed. Action Open the ADF unit by holding the ADF unit release lever. Then remove the original and reset it.	p.77
DADED 1444	1	[C37]	An original is jammed at the entrance of the ADF unit. Action Open the ADF unit by holding the ADF unit release lever. Then remove the original and reset it.	p.77
PAPER JAM ①	1	[C38]	An original is too long for the ADF unit. Action Open the ADF unit by holding the ADF unit release lever. Then remove the original.	p.77
	1	[C39]	An original is jammed at the exit of the ADF unit Action Open the ADF unit by holding the ADF unit release lever. Then remove the original and reset it.	p.77

The code numbers in the brackets appear only when you press the " $\mbox{\ensuremath{\star}}$ " key.

Troubleshooting Tips

This section describes how to take care of problems that may arise with your Risograph.

Check the following "Tips List" and the related items before calling your authorized service representative.

Tips List

0	The unit does not start even when the power switch is pressed.	72
•	The CHECK SETTINGS indicator flashes and ® lights up in the Machine Monitor Display even when the Front cover is closed.	72
9	There is no image on copies.	72
•	The unwanted background of an original is picked up on copies.	72
9	Copies are incomplete; some images are missing or unclear.	72
0	Printed images are excessively faint or blurred.	72
0	Vertical blank lines are found on printed copies.	73
•	The back of finished copies are smudged with ink.	73
0	Paper sticks to the surface of the Print Cylinder (Drum).	73
0	Paper slips when it is fed.	73

☐ The unit does not start even when the power switch is pressed.

Action · Check whether the power cord is firmly connected to an electrical outlet.

· Check whether the power cord is connected to the unit.

· Check whether the commercial power circuit breaker is on.

☐ The CHECK SETTINGS indicator flashes and ⑧ lights up in the Machine Monitor Display even when the Front cover is closed.

 There is a metal plate in the lower right-hand section of the Front cover. Unless this plate is in direct contact with the magnet on the lower right-hand part of the machine, the CHECK SETTINGS indicator keeps flashing in the Check & Error Display.

Action Press on the lower right-hand area of the Front cover to close it tightly.

☐ There is no image on copies.



· Check whether the original is correctly placed.

Action Be sure it is placed face down.

∞p.24

· Check whether the master is correctly placed.

Action Be sure that it is placed with the leading edge unrolled from below.

r p.63

☐ The unwanted background of an original is picked up on copies.



 If newspaper or colored paper is used as an original, the background might have been picked up on copies.

Action Press the SCANNING CONTRAST Adjustment key (⟨□) to make the scanning contrast lighter. Then replace the original and press the START key.

™p.33

When using GR1750:

Action If the Fine Enhance feature is activated, press the Image Processing Selection key to cancel the Fine Enhance feature.

∞p.34

$\hfill \Box$ Copies are incomplete; some images are missing or unclear.



 \cdot The Scanner glass may be stained with correction fluid or glue.

Action Open the ADF unit and clean the Scanner glass using a soft cloth or tissue.

☞p.77

A foreign object may be on or under the master on the Print Cylinder (Drum).

Action Pull out the Print Cylinder (Drum) and remove the object.

™p.56

$\hfill \square$ Printed images are excessively faint or blurred.



If the machine is not used for a long period of time, ink on the surface of the Print Cylinder (Drum) may dry. Dry ink on the Print Cylinder (Drum) may cause faint or blurred printing.

Action Press the TEST PRINT key several times until a clear printed image is obtained.

☞p.27

Action Activate the Automatic Idle feature before operation to prevent light images that may occur after periods of non-use.

r≆p.53

· Light originals result in light images.

ræp.33

• If the temperature is low (below 59°F or 15°C) or the lnk cartridges are stored in a cold place, ink may not flow smoothly.

Action Warm the room or Ink cartridge before operating the unit.

■ Vertical blank lines are found on printed copies.



The Thermal print head (the device that makes the master) may be smudged with paper powder from the master.

Action Open the Master loading unit and clean the Thermal print head using a soft cloth or tissue.

⇔p.77

The Scanner glass may be smudged with dust or correction fluid.

Action Open the ADF unit and clean the glass using a soft cloth or tissue. ☞p.77

☐ The back of finished copies are smudged with ink.



The rubber Pressure roller, which keeps printing paper pressed against the Print Cylinder (Drum) during printing, may be stained with ink.

Action Remove the Print Cylinder (Drum) and clean the roller gently with a soft cloth or tissue.

☞p.78

When using GR1750:

The Feed tray paper guides are set at maximum width.

Action Adjust the Feed tray paper guides to fit the width of the printing paper.

☐ Paper sticks to the surface of the Print Cylinder (Drum).



Action · Use recommended printing paper.

™p.16

- Lower the vertical print position with the PRINT POSITION Adjustment key <.
- Replace the original in the reverse direction and restart printing from the beginning (master-making).

□ Paper slips when it is fed.

Misfeeding of printing paper might have caused a paper jam. Action Set the Paper feed pressure adjustment lever to "CARD." ☞p.18

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Maintenance

This section describes the actions to be taken to maintain your machine in proper working order.

•	Cautions Concerning Maintenance	76
	- Replacing the Lithium Battery	
•	Cleaning : Preventing Defective Prints	
	- Cleaning the Thermal Print Head	
	- Cleaning the Scanner Glass	
	- Cleaning the White Sheet	
	- Cleaning the Pressure Roller	
	- Cleaning the Risograph Exterior	

Cautions Concerning Maintenance

WARNING [To Avoid Personal Injury During Handling]

- $\cdot\,$ 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
- · Precision parts and driving mechanisms are contained in the unit. Do not perform actions other than those described in this manual.
- · Don't make any modifications to the unit or remove parts.
- · When you want to move the unit, contact your dealer.

- · 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 machine should last about five years.

When the battery is losing power, the CALL SERVICE Indicator will flash and the advice code number E17 will appear in the Print Quantity Display.

Caution The lithium battery must be replaced by a trained and authorized service technician. ADD PAPER ■ REPLACE INK CARTRIDGE ● REPLACE MASTER ROLL EMPTY CALL SERVICE DISPOSAL BOX

77

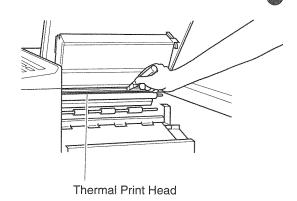
Cleaning: Preventing Defective Prints

Cleaning the Thermal Print Head

Clean the Thermal Print Head after every 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.

For more effective cleaning, 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 Glass

Open the ADF unit.

Open the ADF unit while holding the ADF unit release lever.

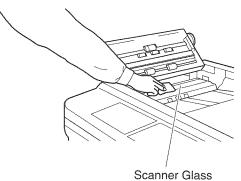


Wipe the Scanner Glass.

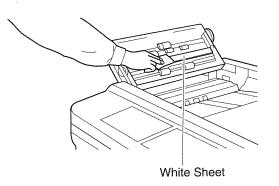
Gently wipe the Scanner Glass several times with a soft cloth or tissue.

NOTE For more effective cleaning, 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.



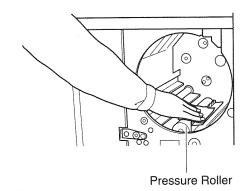
- Open the ADF unit.
- Gently wipe the White Sheet with a soft cloth or tissue.



Cleaning the Pressure Roller

If the rubber Pressure Roller [that presses printing paper against the Print Cylinder (Drum)] is stained, smudged strips may appear on the back sides of copies.

In such a case, wipe the Pressure Roller thoroughly with a soft cloth dampened with alcohol, or pass used paper with a blank master loaded on the Print Cylinder (Drum) using the Confidential feature.



Cleaning the Risograph Exterior

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

To remove stains, use an appropriate cleanser recommended by your authorized service representative.

⚠ Caution The machine exterior is plastic.

Never use alcohol or solvent for cleaning.



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Appendices

This section includes information on options and specifications.

•	Optional Accessories	.80
0	Specifications - GR1750	.81
®	Specifications - GR1700	82

Optional Accessories

A variety of optional accessories are available to enhance the capabilities of your Risograph GR1750/GR1700.

Color Cylinder (Color Drum Units)

A variety of colors are available, such as blue, red, green, and brown. Each Cylinder (Drum) has its own case for storage.

p.56......By exchanging the Cylinder (Drum), you can achieve multicolor prints.

RISOGRAPH Sorter TM2400

This compact sorter is capable of handling up to 11×17 (or A3-sized) paper. It is equipped with an electric stapler so that you can efficiently create booklets from finished prints.

Sheet Feeder SF3000

3000 sheets of printing paper can be loaded in this sheet freeder, sparing you from frequent paper replenishment in high-volume printing.

Key/Card Counter III

This counter shows the numbers of printed sheets and consumed masters within a preset period of time. This can help you control costs.

Job Separator II

This accessory efficiently sorts groups of prints with strips of paper as they are printed. The Job Separator is attached next to the Paper receiving tray.

- For the Units equipped with the Flat Paper Receiving Tray -

Precision Stacking Tray

This new style of the paper receiving tray realizes a neat stack of printed copies in any kind by setting four domino-style Paper arrangers built in the paper guides according to paper type and print pattern.

Specifications GR1750

Processing High-speed automatic digital scanning/fully automatic, thermal

screening duplicating system

Time to First Copy Ledger or A3 original: approx. 23 seconds

Letter or A4 original: approx. 17 seconds

Print Speed 5 selectable print speeds (60 to 130 sheets per minute)

Scanning Resolution 400 dpi **Original Input Type** Sheets

4" X 6" (postcard, A6 or 100 x 148 mm) to 11" x 17" **Original Size**

(ledger, A3, or 297 x 420 mm)

Output Paper Size 4" x 6" (postcard, or A6) to 11" x 17" (ledger, or A3) **Original Weight** 15-lb bond (50 g/m²) to 28-lb bond (110 g/m²) **Paper Weight** 13-lb bond (46 g/m²) to 110-lb index stock (210 g/m²) **Image Area**

Legal Cylinder (Drum) - 7.9" x 13.5" (200 x 345mm) B4 Cylinder (Drum) - 9.8" x 13.9" (250 x 353mm) A4 Cylinder (Drum) - 7.8" x 11.2" (198 x 286mm)

Paper Capacity 1000 sheets in feed and receiving tray (16-lb bond or 64 g/m²) **Enlargement Parameters** 3 selectable enlargements: 141%, 127% and 121% (141%,

122% and 116% for metric models)

Reduction Parameters 4 selectable reductions: 94%, 77%, 75% and 66% (94%, 87%,

82% and 71% for metric models)

Zooming Parameters 50% to 200%

Features Print Speed/Density control (auto/manual)

> Confidential mode Two-Up printing Programmed printing

· Memory storage of frequently used settings

· Fine Enhance Dot-screening Photo enhancement

Interface capabilities

Automatic idle

Scanning contrast adjustment

Automatic Jump wing (Ejection Guide) control

Print Colors A wide range of colors including : black, blue, red, green,

brown, yellow, etc.

Optional Accessories Color Cylinder (Drum), Sorter TM2400, Sheet Feeder SF3000,

Job Separator II, Key/Card Counter II and Computer Interface

- Additional for certain areas -Precision Stacking Tray

Power Source USA Model · 120 V AC, 60 Hz <5 A> <Requirements>

Metric Models: · 110 V AC, 60 Hz <5 A> (110 V model)

· 220-240 V AC, 50/60 Hz <3 A> (220 V

WARNING Always check the rating plate on the machine before connecting the power.

Weight Approx. 203 lbs. (92 kg)

Dimensions (W x D x H) In use: 53.7" x 24.4" x 23.0" (1364 x 619 x 583 mm)

In storage: 29.3" x 24.4" x 23.7" (745 x 619 x 602 mm)

The specifications are subject to change without prior notice. Please acknowledge that the illustrations and descriptions in this manual may differ from the actual machine, due to the change in specifications.

Specifications - GR1700

Processing

High-speed automatic digital scanning/fully automatic, thermal

screening duplicating system

Time to First Copy

Ledger or A3 original: approx. 23 seconds

Letter or A4 original: approx. 17 seconds

Print Speed

5 selectable print speeds (60 to 130 sheets per minute)

Scanning Resolution

300 dpi (300 dpi <Lateral> x 400 dpi <Vertical>)

Original Input Type

Sheets

Original Size

4" X 6" (postcard, A6 or 100 x 148 mm) to 11" x 17"

(ledger, A3, or 297 x 420 mm)

Output Paper Size Original Weight Paper Weight Image Area

4" x 6" (postcard, or A6) to 11" x 17" (ledger, or A3) 15-lb bond (50 g/m²) to 28-lb bond (110 g/m²)

13-lb bond (46 g/m²) to 110-lb index stock (210 g/m²) Legal Cylinder (Drum) - 7.9" x 13.5" (200 x 345mm) B4 Cylinder (Drum) - 9.8" x 13.9" (250 x 353mm) A4 Cylinder (Drum) - 7.8" x 11.2" (198 x 286mm)

Paper Capacity

1000 sheets in feed and receiving tray (16-lb bond or 64 g/m²)

4 selectable reductions: 94%, 77%, 75% and 66% (94%, 87%,

82% and 71% for metric models)

Reduction Parameters

Features

- · Print Speed control
- · Confidential mode
- · Two-Up printing
- · Programmed printing
- Memory storage of frequently used settings
- · Photo enhancement
- · Interface capabilities
- Automatic idle
- Scanning contrast adjustment

Print Colors

A wide range of colors including: black, blue, red, green,

brown, yellow, etc.

Optional Accessories

Color Cylinder (Drum), Sorter TM2400, Sheet Feeder SF3000, Job Separator II, Key/Card Counter II and Computer Interface

- Additional for certain areas -Precision Stacking Tray

Power Source <Requirements> USA Model

· 120 V AC, 60 Hz <5 A>

· 110 V AC, 60 Hz <5 A> (110 V model) Metric Models:

220-240 V AC, 50/60 Hz <3 A> (220 V

WARNING Always check the rating plate on the machine before connecting the power.

Weight

Approx. 203 lbs. (92 kg)

Dimensions (W x D x H)

In use: 53.7" x 24.4" x 23.0" (1364 x 619 x 583 mm) In storage: 29.3" x 24.4" x 23.7" (745 x 619 x 602 mm)

The specifications are subject to change without prior notice. Please acknowledge that the illustrations and descriptions in this manual may differ from the actual machine, due to the change in specifications.

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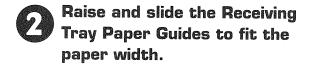
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Setting Up the Paper Receiving Tray

(1)

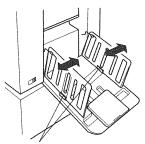
Open the Paper Receiving Tray.



Holding the Receiving Tray Paper Guide Adjustment Knob, slide the guides.

NOTE For thick paper, set the guides a little wider than the actual paper width.





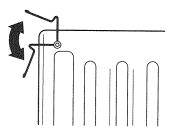
Receiving Tray Paper Guide Adjustment Knob

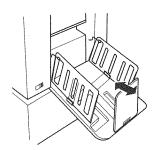


Adjust the Paper Guiding Arms so that discharged paper stacks easily.

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



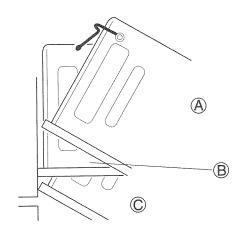




The Paper Receiving Tray can be positioned in the following three ways:

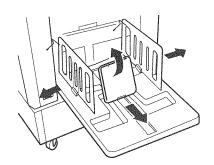
- $\widehat{\mbox{\ensuremath{(A)}}}$ The tray is angled at the high position.
- (B) The tray is level at the low position.
- © The tray is angled at the low position.

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



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 down the Receiving Tray Paper Guides.



Close the Paper Receiving Tray.

MOTE If the tray is positioned at the high level, move it down to the low level before closing it.



Register Sheet for Memory Feature

REGISTER NO. < DATE >	MEMORIZED STATUS	REGISTER NO. < DATE >	MEMORIZED STATUS
< / >		11	
2 < / >		12	
3		13	
< / >		14	
< / > 5		< / > 15	
< / > 6		< / >	
< / >		< / >	
< / >		17	
8		18	
9		19	
< / >		< / >	
10 < / >		20	



Please contact following for supplies and service: