Warning:

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

Note: Some illustrations may be slightly different from your machine.

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

Do not make copies of anything which is prohibited from copying by law. The following items are normally prohibited from copying by national law. Other items may be prohibited by local law.

 Stocks
 Driver's licenses Bonds Bank drafts Money • Stamps

 Checks Passports

The copy samples in this Operating Instructions differ somewhat from actual copies due to printing effects.

This copier has a function that prevents making counterfeit bills. So, if you use an original image that is similar to a bill, you may not get proper copies.

SAFETY PRECAUTIONS

About Indications

This manual and product indicate various cautions to allow you to use the product safely in the correct way and to prevent injuries to you or other people and damages to the property. These indications and their meanings are shown below.



Marning Indicates that a personal death or serious injury might occur if you handle your copier incorrectly ignoring this warning.



! Caution Indicates that a personal injury or only a property damage might occur if you handle your copier incorrectly ignoring this caution.

Examples of Indications



 \triangle indicates an item for which you should take care.

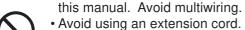


Such an operation is drawn specifically within \bigcirc . (The mark on the left indicates "No disassembling.")



• indicates an operation which is forced or specified to be performed. Such an operation is drawn specifically within . (The mark on the left instructs you to "remove the plug from the wall outlet.") To use your copier safely, the following warnings should always be followed:

♠ WARNINGS



- Do not set anything on the power cord.
- Do not plug or unplug the power cord with your hands wet. Otherwise, an electric shock might occur.

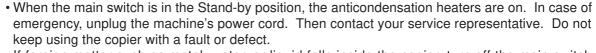
· Connect the copier to a power source meeting the specifications given on the inside front cover of



Make sure that the wall outlet is near the copier and easily accessible.



- Do not remove any covers or screws other than those specified in this manual.
- Do not modify or replace any parts other than those specified in this manual.





• If foreign matter such as metal, water, or liquid falls inside the copier, turn off the main switch (including the backup switch for some copier types) and unplug the power cord from the wall outlet. Then contact your service representative. If you keep using a faulty copier, a fire or electric shock might occur.



• Do not place a vase, flowerpot, glass, receptacle containing water, or metal object on the copier. If the contents fall inside the copier a fire or electric shock might occur.



• Do not incinerate toner or toner containers. Toner dust might ignite when exposed to open flames.

To use your copier safely, the following precautions should always be followed:

⚠ CAUTIONS



- Keep the copier away from humidity and dust. Otherwise, a fire or electric shock might occur.
- The copier must be level within 5 mm, 0.2" both front to rear and left to right.



• After you move the copier, fix it with the caster fixture. Otherwise, the copier might move or fall causing personal injury.



- When you move the copier, unplug the power cord from the wall outlet. Otherwise, the cord might be damaged causing a fire or electric shock.
- When the copier will not be used for a long period, disconnect the power cord.



• When you pull out the plug from the socket, grip the plug to avoid damaging the cord and causing fire or electric shock.



• To avoid possible build-up ozone, make sure to locate this copier in a large well ventilated room that has an air turnover of more than 30 m³/hr/person.



• Do not reuse stapled paper. Do not use aluminum foil, carbon-containing paper or other conductive paper. Otherwise, a fire might occur.



• Since some parts of the copier are supplied with high electrical voltage, touch only the parts specified in this manual otherwise a burn might occur.

TABLE OF CONTENTS

SAFETY PRECAUTIONS	
About Indications	1
Examples of Indications	
	2
⚠ CAUTIONS	3
TABLE OF CONTENTS	4
WHERE IS IT & WHAT IS IT	7
TOUCH PANEL DISPLAY	
FUNCTION INTRODUCTION BY SAMPLE COPIES	
Coloring An Image And Changing Colors of An Image	
Copying Onto A Postcard	
COPIER EXTERIOR	
OPTIONS	
OPERATION PANEL	
TOUCH PANEL DISPLAY	
Sample Display and Common Keys	
COLOR FUNCTIONS	
FULL COLOR COPY/BLACK COPY	
SINGLE COLOR	
Color Conversion	
COLOR CREATION	
When editing an area Color Erase	
When editing an area	
AREA EDITING	
Highlight Color	
Paint Area	
Delete Area/Save Area	
COLOR BALANCE	
Color Balance Adjustment	
Color Balance Memory (Change)	
Color Balance Recall	
IMAGE ADJUSTMENT	
Background Density Control	
Pastel	
Sharp/Soft	
Auto Color Calibrator	
USER COLOR CREATION	34
BASIC	35
Non-recommended Originals For The Optional Document Feeder	
ORIGINALS	
Recommended Originals	
Original Sizes Difficult to Detect	
Original Sizes and Detection Range	
PAPER	
Recommended Paper Sizes and Types	
Non-recommended Paper	
Paper StoragePaper Loading	
·	
TONER	
Handling Toner Toner Storage	
How To Add Toner	
Used Toner	
~~~ · · · · · · · · · · · · · · · · · ·	

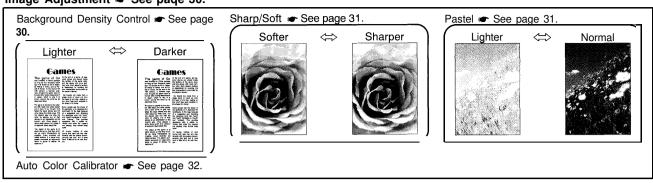
	CHANGING PAPER SIZE	41
	Changing Paper Size For Optional Paper Tray Unit	41
	USEFUL FUNCTIONS	43
	Stand-by	43
	Interrupt Copy	
	Auto Start	_
	User Code	
	Program	
C	OPYING	45
	BASIC OPERATION	46
	SETTING ORIGINALS	
	Setting originals on the exposure glass (platen glass)	
	Setting originals on the exposure glass (plater glass)	
	FUNCTION COMBINATION CHART	
	BASIC FUNCTIONS	
	Color Selection	
	Image Density Adjustment	
	Original Image Type Selection	52
	Auto Reduce/Enlarge	
	Copy Paper Selection	
	COPYING FROM THE BYPASS FEED TABLE	
	When Copying Onto OHP Sheets or Thick Paper	
	Two-Sided Copies	
	INTERRUPT COPYING	
	Preset Reduce/Enlarge  ZOOM AND PRESET REDUCE/ENLARGE	
	ZOOM AND PRESET REDUCE/ENLARGE	
	DIRECTIONAL MAGNIFICATION	
	MARGIN ADJUSTMENT	
	CENTERING	
	FULL IMAGE	
	MAKING ONE-SIDED COPIES FROM VARIOUS ORIGINALS	
	COMBINATION COPYING	
	TWO-SIDED COPYING	
	SORT/STACK AND STAPLE	
	Sort/Stack	
	Staple	73
	Auto Staple	
	Manual Staple	
	PROGRAM  Program Memory/Recall	
	Program Recall	
	WHEN COPYING A LARGE ORIGINAL	
	Removing the platen cover	
	Attaching the platen cover	
Λ١	REA EDITING	
AI		
	WHAT IS AREA EDITING	
	Function Combination Chart	
	BASIC OPERATION OF AREA EDITING	
	DESIGNATING AREAS	
	Operating the Area Designation Screen  How to Designate An Area	
<u> </u>	•	
ال	HANGING THE COPIER'S SETTINGS	
	CHANGING THE COPIER'S SETTINGS	
	Resetting The Copier's Settings	
	FUNCTION OVERVIEW	
	User Tool Menu	92

WHAT TO DO IF SOMETHING GOES WRONG	99
IF YOU CANNOT MAKE COPIES AS YOU WANT	100
LE IS LIT: LOADING PAPER	
ı≛ı IS LIT OR BLINKING: ADDING TONER	
Adding Black Toner	
Adding Color Toner	
% IS LIT: CLEARING MISFEEDS	107
When A and/or B Is Lit	
When C Is Lit	109
When D Is Lit	111
When P Is Lit	
When R Is Lit	
When Y Is Lit	
When Z Is Lit	
REMOVING JAMMED STAPLES	
IF YOU CANNOT START COPYING	
MAINTAINING YOUR COPIER	123
WHERE TO PUT YOUR COPIER	123
DO'S AND DON'TS	123
IF YOUR COPIER DOES NOT OPERATE AS YOU WANT	
DO'S AND DON'TS	
Storing Color Copies	
WHERE TO PUT YOUR COPIER	
When Moving The Copier To The Same Level	
Copier Environment After Moving	
Space Required for Installing The Copier	
Power Connection	
Cleaning The Exposure Glass (Platen Glass)	
Cleaning The Platen Cover	
Cleaning The ADF Belt	
MAINTAINING YOUR COPIER	
PROJECTOR UNIT (OPTION) OPERATION	
GUIDE TO COMPONENTS	
BEFORE OPERATING THE PROJECTOR	132
Available Films And Setting	
About Copying	
Notes For Operation	
OPERATION FLOW	
SETTING THE PROJECTOR IN POSITION	
SHADING	
Setting Copier's Functions	
Adjusting The Color Tone And Brightness	
Changing The Copy Settings	
Exiting The Projector Mode  IF THE PROJECTOR UNIT DOES NOT OPERATE AS YOU WANT	
DAILY MAINTENANCE	
SPECIFICATIONS	
COPIER  DOCUMENT FEEDER	
PAPER TRAY UNIT	
SORTER STAPLER	
PPC TABLE	
PPC FILM PROJECTOR	
INDEX	153

# WHERE IS IT & WHEREIS IT & WHER

# **TOUCH PANEL DISPLAY**

# Image Adjustment - See page 30.

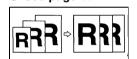


Original Image Type, Selection

**☞ See page** 52.

Copy Paper Selection See page 53.

Auto Reduce/Enlarge See page 53.



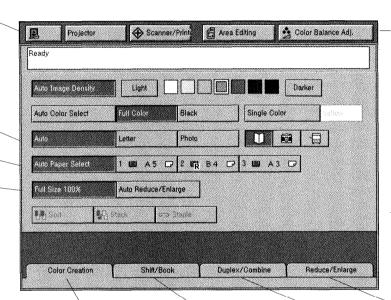
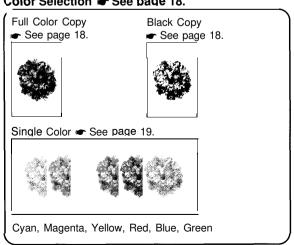
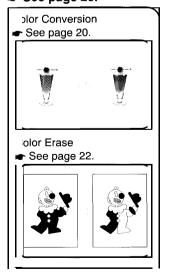


Image Density Adjustment - See page 51.

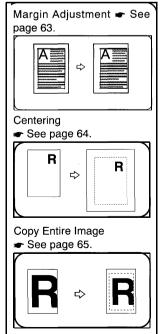
# Color Selection - See page 18.



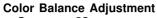
# Color Creation **→** See page 20.

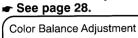


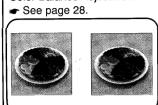
# Shift/Book **→** See page 63.



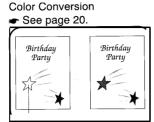
☐ Copy samples are expressed in the print processing mode to clarify the difference between the functions.

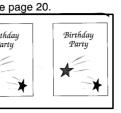


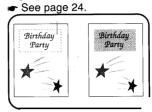


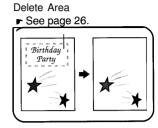


# Area Editing - See pages 24 and 77.



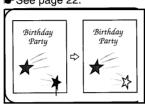






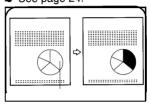
Color Erase

See page 22.

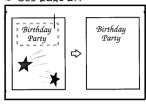




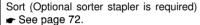
Highlight Color

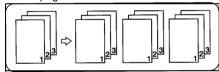


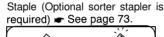
Save Area See page 27.

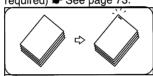


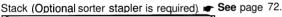






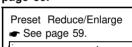








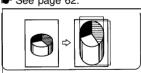
# Reduce/Enlarge - See page 59.







Directional Magnification See page 62.

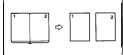


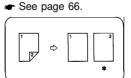
# Single Copies/Duplex/Combine - See page 66.

# **Single Copies**

Book → 1 Sided



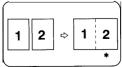


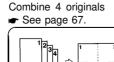


2 Sided → 1 Sided

#### Combine Combine

See page 67.

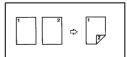




*Optional document feeder is required.

#### **Duplex** 1 Sided → 2 Sided

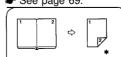
See page 69.

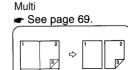






#### Single See page 69.



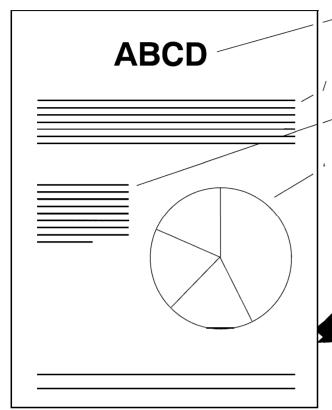


*Optional document feeder is required.

# FUNCTION INTRODUCTION BY SAMPLE COPIES

# Coloring An Image And Changing Colors of An Image

☐ Designate areas with a broken line or a frame and specify functions. 🖝 See page 24, "AREA EDITING."



Turn the letters green. • See page **20**, "Color Conversion" and page 19, "Color Selection (Single Color)."

Color the background of the image. See page 24, "Highlight Color."

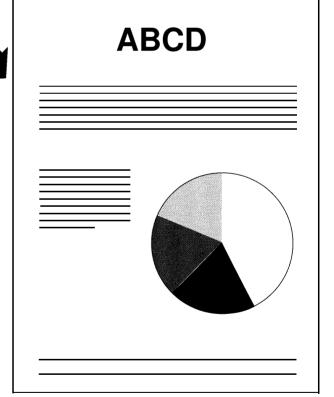
Erase the character strings. See page 27, "Delete Area."

Fill the areas with colors. See page 26, "Paint Area."

Erase the red letters. - See page 22, "Color Erase."

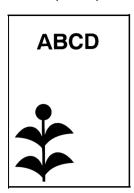
# **Operational Procedure**

- Touch the [Area Editing] key and set your original,
- Touch the [Scan] key and select the way to designate an area ([Rectangle], [Polygon 1], [Polygon 2], [Closed Loop]). → See page 83, "How To Designate An Area."
- Use the **Cursor** and **Point** keys to designate the area.
- Select modes for inside the area and touch the [Exit] key.
- Touch the [Outside (Area)] key. Specify an edit function and touch the [Exit] key.
- Touch the [Exit] key .
- When you specify Highlight Color, select color modes.
- You can also fill (paint) a frame with a created color or make copies in a color (single color copying in area editing).
   ★ See page 98, "USER TOOLS, [12] Create A User Color."



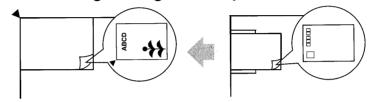
# Copying Onto A Postcard

☐ The copier copies onto postcards using the bypass feed tray. Be sure to set a postcard in the correct direction.

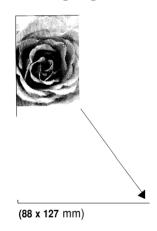


# **Operational Procedure**

- Touch the [Full Color] key.
- Set your original.
- Open the bypass feed table and touch the paper size on the touch panel display.
- Set a postcard in the bypass feed table. Touch the [H (orizontal] key and touch the [Thick Paper] key. See page 54, "COPYING FROM THE BYPASS FEED TABLE."
- Direction of setting an original and postcard



# Enlarging The Photographic Paper Size (Printed Photograph) To A4



# **Operational Procedure**

- Touch the [Full Color] key.
- Touch ospecify the photograph type.
  - See page 52, "Original Image Type Selection."
- Touch the [Reduce/Enlarge] key and specify the once the set of the [+] and [-] keys or the [Number Keys] key. See page 61, "ZOOM." Touch the [Reduce/Enlarge] key and specify the exact magnification using

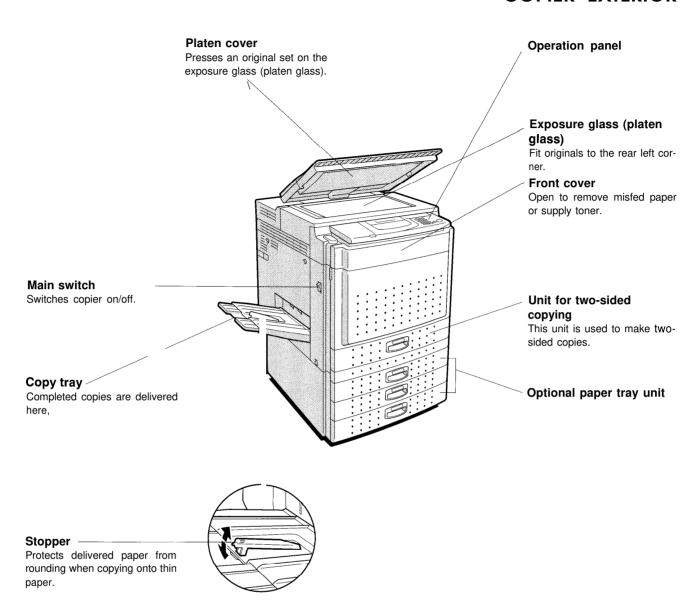


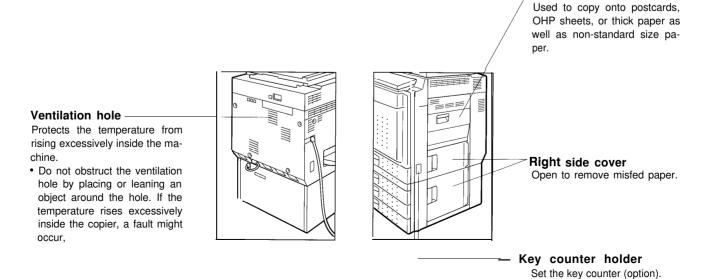


A4 size (232 %)

# **COPIER EXTERIOR**

Bypass feed table





# **OPTIONS**

**Document feeder** 

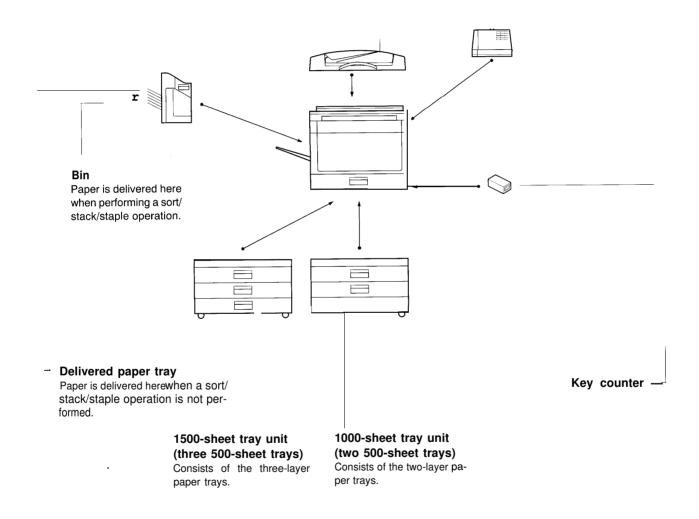
Insert a stack of originals here.

Projector unit

# - Sorter stapler (10-bin)

➤ See page 72.

Automatically sorts copies or binds them with the stapler.



☐ For the paper tray unit, either the 1000-sheet tray unit or the 500-sheet tray unit can be attached.

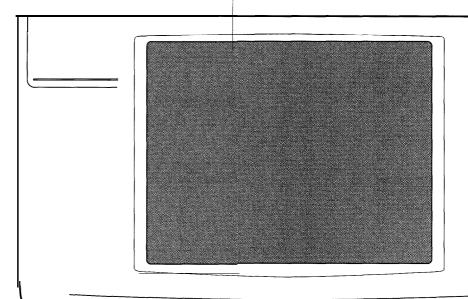
# **OPERATION PANEL**

# Touch Panel Display —

Shows operation status and messages. See page 8, "TOUCH PANEL DISPLAY."

# **Copy Counter**

Indicates the specified number of copies before a copy run, and the number of copies made or rest of copies to be made during a copy run,



# Number Keys, . Key

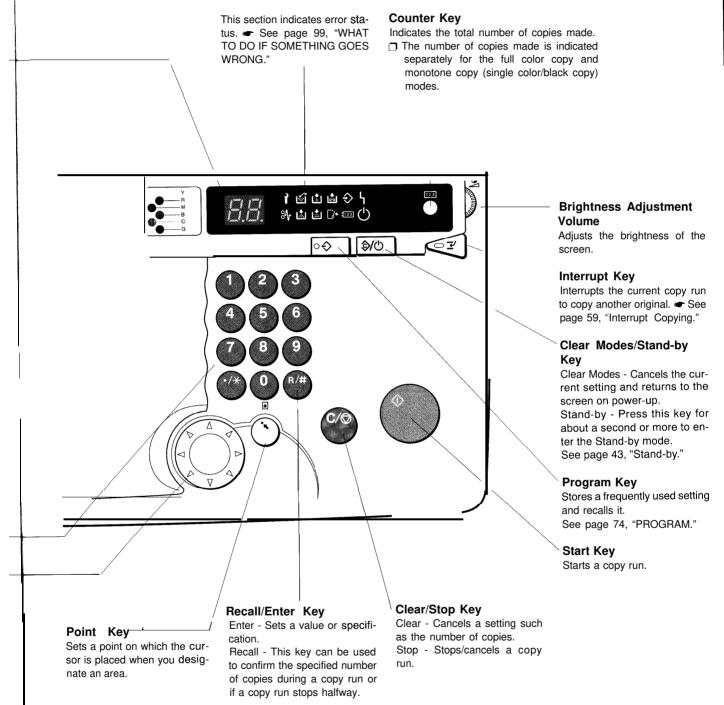
Use to enter a value for the number of copies, magnification, etc.

# **Cursor Key**

**Moves** the cursor (->) to designate an area on an image.

•When you press the **Cursor** key after touching the **[Scroll Screen]** key, the image scrolls on the screen,

- · The colors of the copier illustrated below might slightly differ from the actual colors of your copier.
- · The colors on sample copies illustrated below might slightly differ from those on actual copies.



# TOUCH PANEL DISPLAY

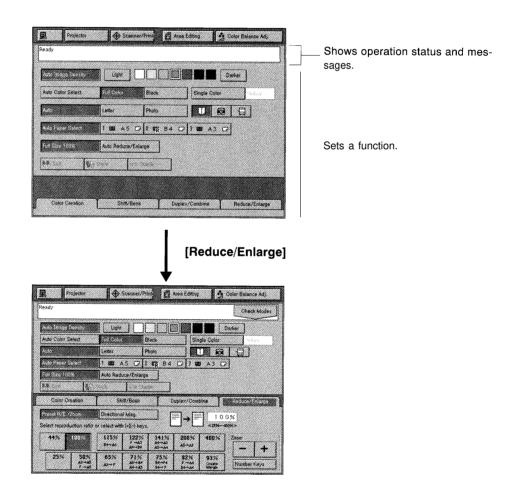
- The function items are displayed as touch keys.
   You can touch these keys lightly to selector specify the corresponding items,
- When you select or specify a function, it is highlighted like Auto Image Density . An unavailable key is grayed like Auto Reduce/Enlarge |.
- · Different keys or information might appear on the display depending on the option configuration.

#### **Important**

• Do not apply a strong shock or force of 30 N (3 kgf) or more to the touch panel display. Otherwise, the display might be damaged.

N = Newton, kgf = Kilogram-force (1 kgf = 9.8 N)

# Sample Display and Common Keys



#### **♦** Common keys

# COLOR FUNCTION

# **COLOR FUNCTIONS**

# FULL COLOR COPY/BLACK COPY

The Full Color Copy function overlays the four colors (yellow, magenta, cyan, and black) to make copies in colors close to those of originals.

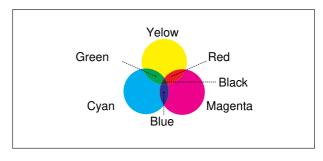
The Black Copy function makes copies in black regardless of colors of originals.

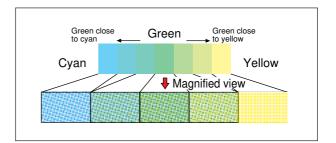


#### Three fundamental colors

- ☐ Yellow, magenta, and cyan (three fundamental colors) can be combined to express the seven colors shown in the figure below. If yellow, magenta, and cyan are overlaid, black is created. However, this copier uses the black toner to express black because the black made from the three fundamental colors slightly differs from actual black in the strict sense.
- This copier adjusts the amount of the yellow, magenta, and cyan toner to express green close to yellow (yellowish green) or cyan (bluish green).

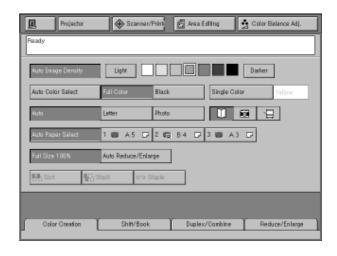
Difference between greens when combining yellow and cyan





# Touch the [Full Color] or [Black] key.

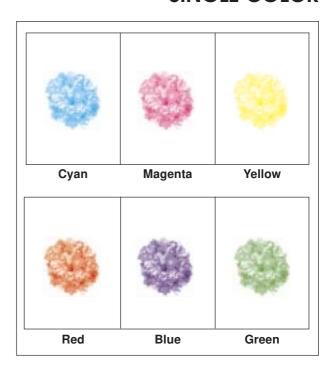
- ☐ When you do not set any other function, press the **Start** key to start a copy operation.
- ☐ You can adjust the overall color tone of a copy or the edges of an image. See "COLOR BALANCE ADJUSTMENT" for the overall color tone of a copy, and "Sharp/Soft" for the edges of an image.



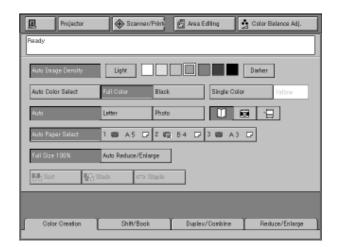
# SINGLE COLOR

This function makes copies in a specified color. For single color copying, you can choose yellow, red, magenta, blue, cyan, or green.

- □ Although still monochrone, some colors you select may be created with 2 toners. This is because yellow, magenta and cyan are created with a single toner, while red, blue and green use two toners.
- ☐ If you create a color using the user tool, you can select it as a registered color in area editing. ► See page 98, "USER TOOLS, Create A User Color."



Touch the [Single Color] key



- 2 Select a color to be copied and touch the [Exit] key.
- When you do not set any other function, press the Start key to start a copy operation.



# **COLOR CREATION**

# **Color Conversion**

This function converts a selected color of an original into a different color on the copy.

- When you specify the Color Conversion function, the color mode is set to "Full Color Copy."
- You can convert up to four colors. However, you can convert only two colors in editing an area.
- The color range to be converted can be adjusted within 5 levels. For example, when you specify yellow with the color width set to "Wide," other colors close to yellow, such as orange and yellowish green, are also converted. When you set the color width to "Narrow," only yellow is converted. You can adjust the color width with the user tools.
- You can specify the following nine colors: yellow, magenta, cyan, green, blue, red, white, black, and a user color



- Touch the [Color Creation] key.
- Touch the [Color Conversion] key.
- Touch a color before conversion.
- When changing the selected color, touch the [Clear] key and select another color.
- Touch a color after conversion.

# When converting two or more colors consecutively

- Repeat steps 
   and 
   above for all the colors you want to convert.
- Set your original and press the **Start** key.





# When editing an area

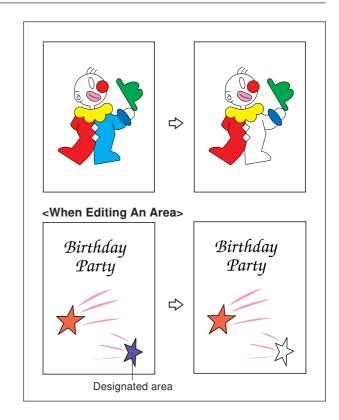
- Touch the [Area Editing] key and designate an area.
- □ "DESIGNATING AREAS" See page 82.
- Touch the [Color Creation 1] or [Color Creation 2] key and touch the [Color Conversion] key.
  - When converting colors, you can specify only two types of conversion ([Color Creation 1] and [Color Creation 2]) for all the designated areas.
- Touch a color you wish to convert (source) and one to convert to (final).
  - When changing the selected color, touch the **[Clear]** key and select another color.
  - To convert another color consecutively, repeat step
     3.
- Touch the [Exit] key.
- Touch the **[Exit]** key after specifying the way to edit images outside the area.
- ☐ Step 5 and later in "BASIC OPERATION OF AREA EDITING" See page 80.



# **Color Erase**

This function erases a selected color from an original image.

- You can convert up to four colors. However, you can convert only two colors in editing an area.
- You can adjust the width of a color to be erased within 5 levels. For example, when you specify yellow with the color width set to "Wide," other colors close to yellow, such as orange and yellowish green, are also erased. When you set the color width to "Narrow," only yellow is erased. You can adjust the color width with the user tool.
  - See page 94, "USER TOOLS, Color Sensitivity Adjustment."
- You can specify the following seven colors: yellow, magenta, cyan, green, blue, red, and black.



- Touch the [Color Creation] key.
- 2 Touch the [Color Erase] key.
- Touch a color to be erased.
- ☐ When changing the selected color, touch the [Clear] key and select another color.

When erasing two or more colors consecutively

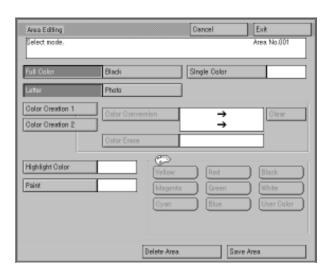
① Repeat step 3 above for all the colors you want to erase.





# When editing an area

- Touch the [Area Editing] key and designate an area.
- □ "DESIGNATING AREAS" See page 82.
- Touch the [Color Creation 1] or [Color Creation 2] key and touch the [Color Erase] key.
  - When converting colors, you can specify only two types of conversion ([Color Creation 1] and [Color Creation 2]) for all the designated areas.
- Touch a color to be erased.
  - When changing the selected color, touch the [Clear] key and select another color.
  - To erase another color consecutively, repeat step **8**.
- Touch the [Exit] key.
- Touch the **[Exit]** key after specifying the way to edit images outside the area.
- ☐ Step ⑤ and later in "BASIC OPERATION OF AREA EDITING" See page 80.



# **AREA EDITING**

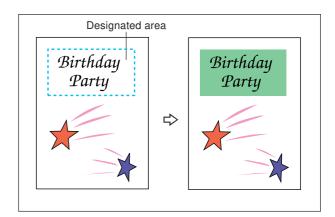
This function designates areas on an original and edits images inside or outside the areas.

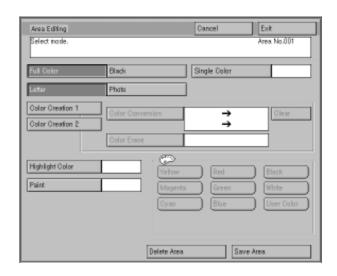
- ☐ You can specify only one of the "Color Creation 1," "Color Creation 2," "Highlight Color," and "Paint Area" functions in an area.
- ☐ You can also convert a selected color of an original or erase a selected color from an original. For the subsequent procedures, see "COLOR CREATION." See page 20.

# **Highlight Color**

This function colors the background of a selected area.

- When you make copies in the Highlight Color mode, the colors of the image might be changed because the entire image is colored.
- If you specify a dark highlight color, the entire image might become blackish.
- When you use the Highlight Color function, copies are made in the Letter mode in all color modes except the Full Color Copy mode.
- ☐ If you specify "Black" and "Photo" for the Single Color mode when you edit an area in the Full Color mode, the area is copied in gray using the four colors of toner.
- You can specify the following seven colors: yellow, magenta, cyan, green, blue, red, and black.
- ☐ You can adjust the background color density within 10 levels. See page 95, "USER TOOLS, Adjust Highlight."
- Touch the [Area Editing] key and designate an area.
- ☐ See page 82, "DESIGNATING AREAS."
- 2 Touch the [Highlight Color] key and select a background color.
- When changing the selected color, touch the [Highlight Color] key again to cancel it and select another color.
- Select the [Light] or [Dark] key to adjust the background color density.
- Touch the [Exit] key.
- Touch the [Exit] key after specifying the way to edit images outside the area.
- ☐ See page 80, Step **5** and later in "BASIC OPERATION OF AREA EDITING."





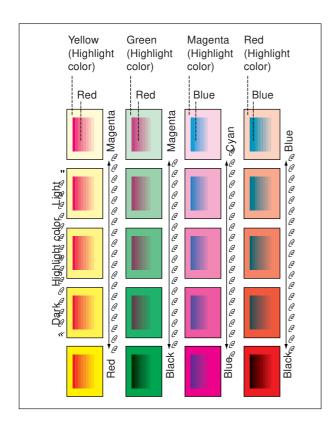


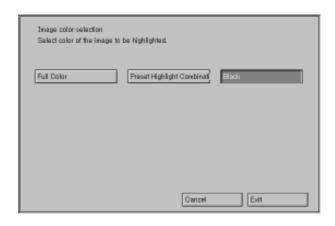


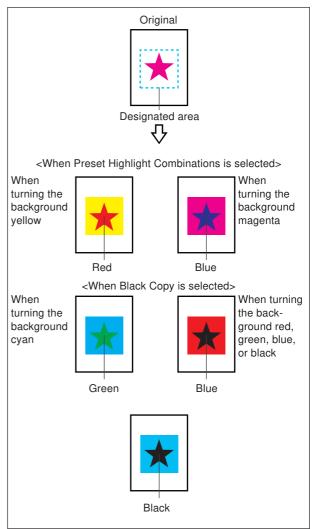
Select color modes for the areas for which you have specified the Highlight Color mode and touch the **[Exit]** key.

The color modes are set for all the areas for which you have specified the Highlight Color mode.

- The image colors differ in the areas depending on the selected color modes.
- When "Full color" is selected
   The images are copied with the original colors overlaid on the specified highlight colors.
- When "Black" is selected
   The images are copied in black regardless of the colors specified for Color Background.
- When "Preset Highlight Combinations" is selected The image colors differ depending on the colors specified for Highlight Color.
- When you specify a highlight color, the image color overlaid on the highlight color differs depending the highlight color type and density.
- If you specify a dark highlight color when the highlight color is green or red, the image color overlaid on the highlight color might appear in black.
- <Combinational color densities and samples>
- The color contrasts are slightly exaggerated for the purpose of illustration.







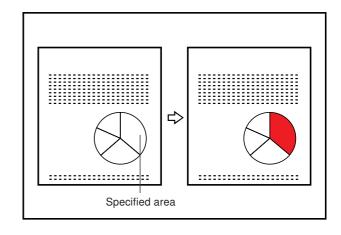
• The image color differs from the above if you specify a lighter color for Highlight Color.

# **Paint Area**

This function fills a designated area with a selected color.

- You can specify the following nine colors: yellow, magenta, cyan, green, blue, red, white, black, and user color.
- ☐ If you create a color using the user tool, you can select it as a registered color. See page 98, "USER TOOLS, Create A User Color."
- You can adjust the paint color density within 10 levels.
  See page 95, "USER TOOLS, Paint Mode Brightness."
- Touch the [Area Editing] key and designate an area.
- □ See page 82, "DESIGNATING AREAS."
- 2 Touch the [Paint] key and select a paint color.
- When changing the selected color, touch the [Paint] key again to cancel it and select another color.
- Select the [Light] or [Dark] key to adjust the paint color density.
- When a user color is selected, you cannot adjust the paint color density.

- Touch the [Exit] key.
- Touch the **[Exit]** key after specifying the way to edit images outside the area.
- ☐ See page 80, Step **5** and later in "BASIC OPERATION OF AREA EDITING."



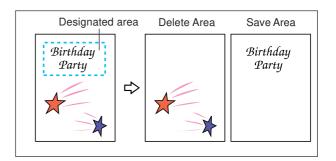




# **Delete Area/Save Area**

This function deletes images inside or outside designated areas.

- Touch the [Area Editing] key and designate an area.
- ☐ See page 82, "DESIGNATING AREAS."
- 7 Touch the [Delete Area] or [Save Area] key.
- Touch the [Exit] key.
- Touch the **[Exit]** key after specifying the way to edit images outside the area.
- ☐ See page 80, Step 5 and later in "BASIC OPERATION OF AREA EDITING."



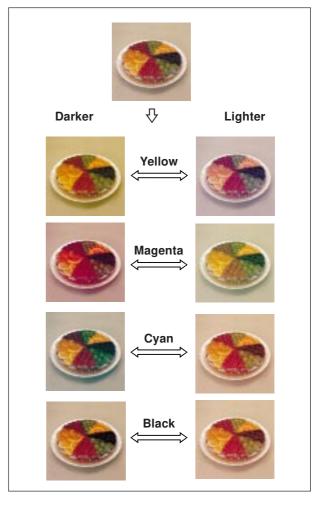




# **COLOR BALANCE**

# **Color Balance Adjustment**

Use this function to adjust the overall color tone of a copy if the copy is entirely reddish or bluish.



- Touch the [Color Balance Adj.] key.
- Adjust the color using the [Light] and [Dark] keys.
- If you specify a wrong value, touch the [Reset] key. The color balance setting returns to that specified when the Color Balance Adjustment screen was opened.
- You can store the adjusted color balance setting . See page 29, "Color Balance Memory."
- Set your original and press the **Start** key.
- ☐ When the copier is reset automatically or you press the Clear Modes/Stand-by key or turn off the power, the adjusted color balance is reset to the default value.

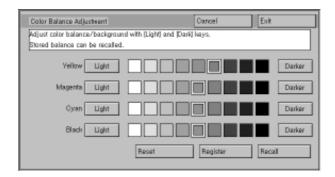


Color Balance Adjustment	Cancel	Exit
Adjust color balance/background with [Light] and Stored balance can be recalled.	Dark] lwys.	
Yellow Light		Darker
Magenta Light		Darker
Oyan Light		Darker
Black Light		Darker
Reset	Register	Recall

# Color Balance Memory (Change)

This function can be used to store a color balance adjustment setting into memory.

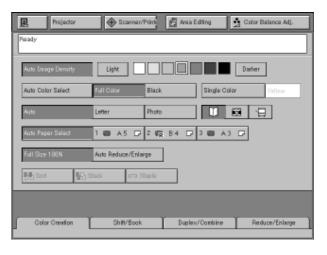
- You can store only one color balance setting.
- When you want to change a stored setting, store another setting. This replaces the current setting with the new setting.
- You can also store a color balance adjustment setting in the program. See page 74, "PROGRAM."
- Touch the [Color Balance Adj.] key and adjust the color balance to a setting you want to store.
- See page 28, steps 1 and 2 in "Color Balance Adjustment."
- 7 Touch the [Register] key.
- The color balance setting is stored.
- Touch the [Exit] key.



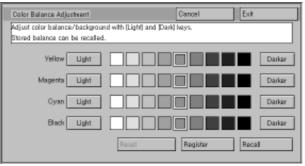
# **Color Balance Recall**

This function can be used to recall the stored color balance setting.

Touch the [Color Balance Adj.] key.



- Touch the [Recall] key.
- ☐ The stored color balance is recalled.
- **3** Set your original and press the **Start** key.
- If you recall a color balance when a copy run is completed, the copier is reset automatically, or you press the Clear Modes/Stand-by key, the color balance is cancelled.



# **IMAGE ADJUSTMENT**

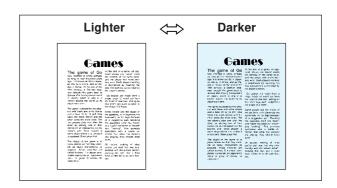
This function can be used to adjust the image quality.

☐ You can adjust the "Background Density Control," "Sharp/Soft," and "Pastel" functions separately. However, one function setting might affect other function levels depending on the adjustment level and color tone.

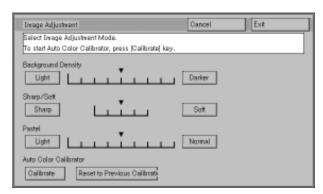
# **Background Density Control**

Adjusts the background density of an image.

- When copying a newspaper or an original with a dark background, adjust the background density to a lighter setting.
- □ To darken parts marked with a highlighting pen, adjust the background density to a darker setting. However, originals written with a highlighting pen might be copied in different colors or not be copied for some colors because fluorescent colors are difficult to duplicate.
- ☐ When you set "Background Density Control" mode, "Auto Image Density" mode is cleared.
- ☐ See page 51, "Image Density Adjustment."
- Touch the 🖳 key.
- Adjust the background density using the [Light] and [Dark] keys.
- 3 Set your original and press the **Start** key.
- When the copier is reset automatically or you press the Clear Modes/Stand-by key or turn off the power, the image adjustment settings are reset to the default values.

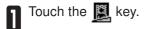






# **Pastel**

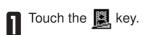
Copies an image in lighter (pastel) tones.



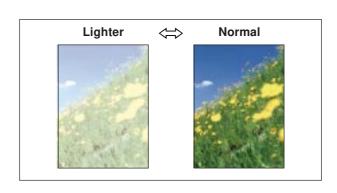
- Adjust the color tone using the [Light] and [Normal] keys.
- Set your original and press the Start key.
- When the copier is reset automatically or you press the Clear Modes/Stand-by key or turn off the power, the image adjustment settings are reset to the default values.

# Sharp/Soft

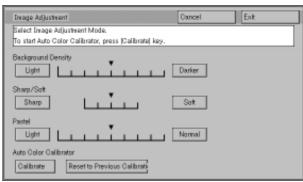
Adjusts the edges of an image.

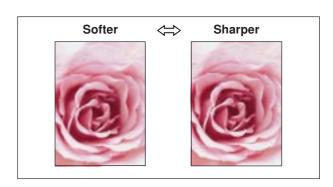


- 2 Choose the level using the [Sharp] and [Soft] keys.
- Set your original and press the Start key.
- When the copier is reset automatically or you press the Clear Modes/Stand-by key or turn off the power, the image adjustment settings are reset to the default values.

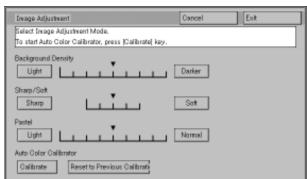










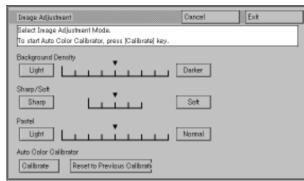


# **Auto Color Calibrator**

Use this function if a certain color tone is strong or the density of an image is not duplicated properly.

- ☐ The Auto color calibrator function adjusts the balance of the four basic colors (yellow, magenta, cyan, and black) so that their density can be duplicated properly.
- Touch the 🖳 key.
  - Auto Inaga Density

    Light Darker
- Touch the [Calibrate] key.



👸 Area Editing

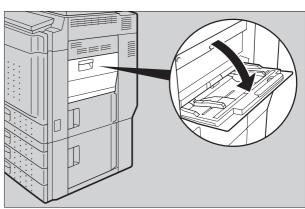
👲 Color Balance Adj.

When using the paper tray, touch the [Paper Tray] key.



# When setting paper in the bypass feed table

- Touch the paper size you want to use.
- ② Open the bypass feed table.
- Set any of A4 $\square$ , B4 $\square$ , A3 $\square$ , 8  $\frac{1}{2}$ " x 11" $\square$ , and 11" x 17" $\square$  paper and touch the [**Print**] key.
- ☐ The test pattern is output.



- When you use the bypass feed table, set the paper selected in step •.
- ☐ You can use 64 to 105 g/m², 17.1 to 27.9 lb paper in the paper tray.
- ☐ The counter value is not increased even when the test pattern is output.
- **5** Set the test pattern on the exposure glass (platen glass), and press the **[Scan]** key.
- ☐ The copy image is calibrated.
- The test pattern is not read if you set it in the optional document feeder.

#### **Important**

- Set the test pattern on the exposure glass (platen glass) with two or three blank sheets of the same size overlaid on it.
- Set your original and press the **Start** key.

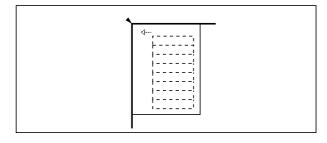
# Resetting the image adjustment values

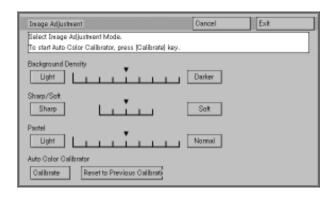
• Touch the [Reset to Previous Calibration] key.

- "Resetting" means to return the image adjustment values to those specified before performing Auto Color Calibration.
- 2 Touch the [Yes] key.

The image adjustment values are reset to the original values.

 If you do not want to reset the image adjustment values, touch the [No] key.



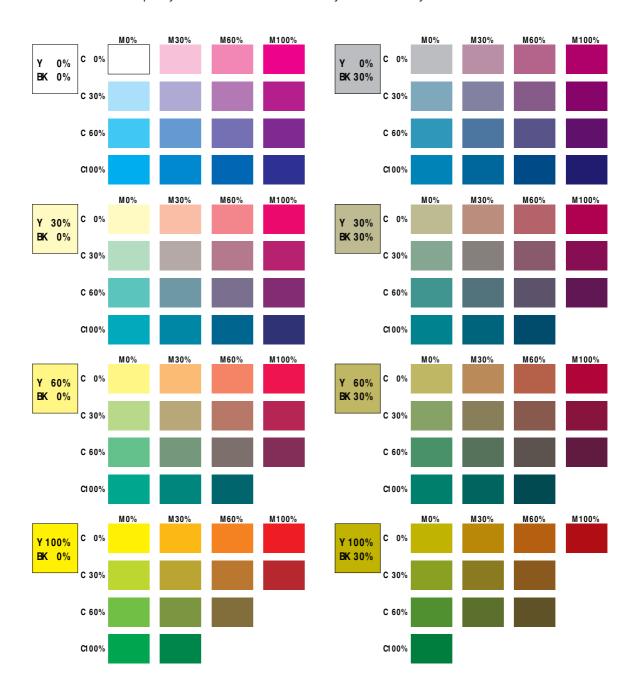




# **USER COLOR CREATION**

You can create only one color and store it.

- ☐ Refer to the following color samples when creating your color.
  - See page 98, "USER TOOLS, [12] Create A User Color."
- ☐ The sample colors shown below might slightly differ from colors on actual copies because the samples are expressed in the print processing mode.
- When you create a user color, adjust the amount of yellow, magenta, cyan, and black so that their total percentage will be 255 % or less.
- ☐ User colors might appear differently between the Paint Area and Single Color modes.
- When you edit an area in the Single Color mode, a user color might not appear as in editing the area in another color mode.
- ☐ You sometimes cannot specify black for the Photo mode as you want when you edit an area.



# **BASIC**

## **ORIGINALS**

Originals written with a highlighting pen might be copied in different colors or cannot be copied for some colors because fluorescent colors are difficult to duplicate.

## **Recommended Originals**

#### **Metric version**

	Original Size	Maximum Number of Originals	Original Weight
When you set an original on the exposure glass (platen glass)	A3 (297 x 420 mm) or smaller	_	_
When you set originals in	One-sided to one-sided copy: A3 - B6 -	50	52~128g/m²
the optional document feeder	Two-sided to one-sided copy: A3 - A5 -	50	52~105g/m²
	Thin Paper mode: A3 - B6	50	40~52g/m²

#### Inch version

	Original Size	Maximum Number of Originals	Original Weight
When you set an original on the exposure glass (platen glass)	11" x 17" or smaller	_	_
When you set originals in the optional document	One-sided to one-sided copy: 11" x 17" - 51/2" x 81/2" -	50	13.8~34.0lb
feeder	Two-sided to one-sided copy: 11" x 17" - 51/2" x 81/2" -	50	13.8~27.9lb
	Thin Paper mode: 11" x 17"□ - 51/2" x 81/2"□□	50	10.7~13.8lb

## Non-recommended Originals For The Optional Document Feeder

damaged. Set them on the exposure glass (platen glass).
Originals other than the following sizes:
Motric varsion: A2□ P4□ A4□□ P5□□ A5□□ P6□□ 11" v 15"□ 91/-" v 12"□ 9" v 12"□ 91/-" v 11"□□

☐ If you set the following originals in the optional document feeder, a paper jam might occur or the originals might be

- Paper with any kind of coating, such as thermosensitive paper, art paper, aluminum foil, carbon paper, and conductive paper
- · Indexed or tagged originals
- Non-smooth paper such as tracing paper (transparencies)
- Thin originals that have low stiffness
- · Stapled or clipped originals
- Perforated or torn originals
- · Thick originals such as books
- Bent, folded, or creased originals
- Thin originals

- · Pasted originals
- ☐ When setting a thin original (40 52 g/m², 10.7 13.8 lb) in the optional document feeder, you can adjust the optional document feeder so that the original will not be damaged. See page 95, "USER TOOLS, ARDF: Thin paper mode."

## **Original Sizes Difficult to Detect**

- ☐ In Auto Paper Select mode, the correct size of paper might not be selected because the sizes of the following originals are difficult to detect. Select paper manually for these originals.
  - Indexed or tagged originals
- · Originals containing solid image
- OHP or other transparencies
- Originals with solid image on their edges
- · Entirely blackish originals having a lot of text or patterns
- When you set an original on the exposure glass (platen glass), originals other than the following sizes:

  Metric version: A2D R4D A4DD R5DD A5DD 816" x 12"D

Metric version: A3 $\square$ , B4 $\square$ , A4 $\square$ , B5 $\square$ , A5 $\square$ , 81/2" x 13" $\square$ 

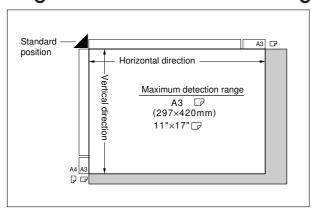
Inch version: 11" x 17", 10" x 14", 81/2" x 14", 81/2" x 13", 8" x 13", 8" x 13", 81/2" x 11", 51/2 x 81/2"

• The following sizes cannot be detected on the exposure glass (platen glass). Set originals of the following sizes in the optional document feeder.

Metric version: B6□□, 11" x 15"□, 8" x 13"□, 81/2" x 11"□□

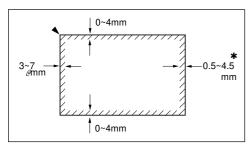
Inch version: 11" x 15"□, 8" x 10"□

## **Original Sizes and Detection Range**



Exposure Glass (platen glass) Surface

☐ As shown in the figure below, part of paper edges are not copied. To copy the original entirely, specify the "Copy Entire Image" mode to reduce the copy automatically.



- See page 65, "COPY ENTIRE IMAGE."
- * This width is 4 to 8 mm when you touch the [Duplex Side 2] key or specify "Thick paper".

**PAPER** 

## **Recommended Paper Sizes and Types**

- Postcards can be set in the bypass feed table. However, reply cards must not be folded.
- ☐ The paper sizes, quantity, and types that can be set in each tray are shown below.

#### **Metric version**

	Paper Size	Maximum Number of Sheets	Paper Weight and Types
Optional paper tray unit  * Note 1	A3□, B4□, A4□□, B5□□, A5□, 11" x 17"□, 8½" x 11"□□, 5½" x 8½"□, 8" x 13"□, 8½" x 13"□, 8½" x 13"□, 85% x 10"□, 267 x 389mm, 195 x 267mm		52 ~ 105 g/m²
Bypass feed table	Vertical: 100 ~ 297mm	40	52 ~ 90 g/m ²
* Note 2	Horizontal: 140 ~ 432mm Standard size A3, B4, A4, A, B5, A5, B6, 11" < 17", 81/2" x 14", 81/2" x 11"	50	90 ~ 157 g/m² • OHP transparencies • Postcards

^{*} Note 1: When setting paper in the optional paper tray unit, you must specify the paper size manually. See page 94, "USER TOOLS, Select Paper Type & Orientation."

#### Inch version

	Paper Size	Maximum Number of Sheets	Paper Weight and Types
Optional paper tray unit * Note 3	A3□, B4□, A4□□, A5□, 11" x 17"□, 8½" x 14"□, 8½" x 11"□□, 5½" x 8½" □, 8" x 13"□, 8½" x 13"□, 11" x 15"□, 10" x 14"□, 8" x 10½"□, 8" x 10"□	500	13.9 ~ 27.9 lb
Bypass feed table	Vertical: 4.0" ~ 11.6"	40	13.9 ~ 23.9 lb
* Note 4	Horizontal: 5.5" ~ 17.0" Standard size 11" x 17", 81/2" x 11", 51/2" x 81/2" , 8" x 13",	20	24.0 ~ 41.7 lb • OHP transpar encies • Postcards

^{*} Note 3: When setting paper in the optional paper tray unit, you must specify the paper size manually. • See page 94, "USER TOOLS, Select Paper Type & Orientation."

☐ If you have two or more trays with the same size paper, the copier can be programmed to use the other trays when paper runs out. See page 93, "USER TOOLS, Auto Tray Shift." This saves interrupting a copy run to replenish paper. Note that if you choose the Recycled Paper setting (USER TOOLS, Recycled Paper Indicator, see page 94), you must specify the same setting for the other trays.

#### Setting paper in the portrait direction (Single-sided)

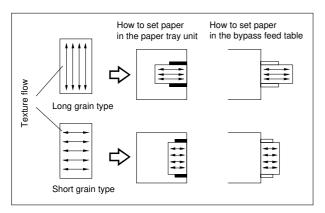
□ When setting paper thinner than 64 g/m², 17.1 lb in the 1500-sheet or 1000-sheet tray unit or bypass feed table, set it as shown in the figure below. Thin paper is divided into the long grain and short grain types depending on the texture flow direction. If you set thin paper in the reverse direction, a paper jam might occur. Since A3, B4, 11" x 17", and 8 1/2" x 14" sizes of thin paper are set in the lengthwise direction in this copier, they must be of the long grain type.

^{*} Note 2: When setting non-standard paper sizes (100 ~ 297 mm long, 140 ~ 432 mm wide), you must specify the size manually. See page 93, "USER TOOLS, Set Bypass Paper Size."

When copying onto most kinds of adhesive labels, use the default paper type setting. For some kinds of label, however, Thick Paper mode should be selected.

^{*} Note 4: When setting non-standard paper sizes (4.0" ~ 11.6" long, 5.5" ~ 17.0" wide), you must specify the size manually. See page 93, "USER TOOLS, Set Bypass Paper Size."

Although adhesive label belongs to the "Thick Paper" type, do not specify the "Thick Paper" mode when you use it.



Set paper in the bypass feed table in the reverse direction to that above when you make two-sided copies; set in the sidewise direction paper of which texture flow direction is vertical and in the lengthwise direction paper of which texture flow direction is horizontal.

☐ Set paper in the bypass feed table in the reverse direction to that above when you make two-sided copies; set long grain paper in the sidewise direction and set short grain paper in the lengthwise direction.

## Non-recommended Paper



 Do not reuse stapled paper. Do not use aluminum foil, carbon paper, or other conductive paper. Otherwise, a fire might occur.

Do not set the following paper. Otherwise, a paper jam might occur.

- · Bent, folded, or creased paper
- Torn paper
- · Slippery paper

- · Perforated paper
- Non-smooth paper
- · Thin paper that has little rigidity
- Thin, easy-to-bend paper such as tracing paper (transparencies).
- Paper that has been already copied on by another type of copier.
- Copies might be blurred if you copy onto coarse paper.
- □ Do not use paper with any kind of coating, such as thermosensitive paper, art paper, aluminum foil, carbon paper, and conductive paper. Otherwise, a malfunction might occur.

#### **Important**

☐ Do not set in the paper tray paper that has been copied on one side. Otherwise, a paper jam might occur. However, you can use the [Duplex Side 2] key to copy onto the underside of paper that has been copied on by this copier. ► See page 54, "COPYING FROM THE BYPASS FEED TABLE."

## **Paper Storage**

- ☐ When storing paper, the following precautions should always be followed:
  - · Keep paper away from direct sunlight.
  - Store in a dry location (humidity: 70 % or less).
  - · Store on a flat surface.
- ☐ After you unpack the container of paper, store the paper in a polyvinyl bag to avoid humidity.

#### Important

☐ If you use damp, bent paper, a stapler needle or paper jam might occur. In this case, set the paper upside down.

## **Paper Loading**

- ☐ See page 102, " IS LIT: LOADING PAPER."
- ☐ See page 41, "CHANGING PAPER SIZE."

**TONER** 

"Toner" is powder ink used for copying.

## **Handling Toner**



• Do not incinerate the used toner containers. Toner dust might ignite when exposed to open flame. Dispose of the used toner containers according to local regulations.

## **Toner Storage**

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

- ☐ Store toner cartridges vertically in a cool, dark place.
- ☐ Do not store toner where it will be exposed to heat.
- ☐ Do not eat or swallow toner, and keep it out of reach of children.

### **How To Add Toner**

☐ ► See page 102, "LIT OR BLINKING: ADDING TONER."

### **Used Toner**

- ☐ You cannot reuse once-used toner.
- Dispose of the used toner cartridge according to local regulations.

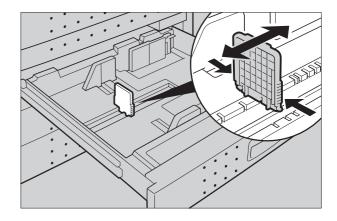
## **CHANGING PAPER SIZE**

## **Changing Paper Size For Optional Paper Tray Unit**

For the paper sizes and types that can be set, resee page 38 "PAPER."

#### **Important**

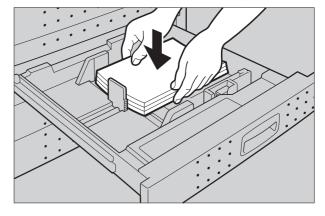
- ☐ When setting paper in the optional paper tray unit, you must specify the paper size manually. Otherwise, not only an incorrect paper size detection but also a paper jam might occur.
- Check that the target paper tray is not feeding paper, and pull the tray out until it stops.
- □ Remove any remaining paper.
- 2 Set the left guide to the paper size you want to use.



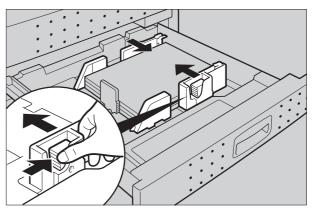
3 Square the paper and set it in the tray.

#### **Important**

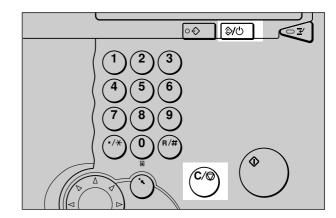
- $\hfill\Box$  Do not stack paper over the limit mark.
- $\ \square$  Shuffle the paper before setting it in the tray.



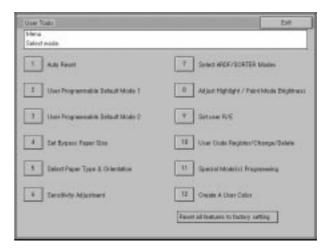
While pressing the release levers on the front and rear guides, slide the front and rear guides to the paper size you want to use.



Specify the paper size with the "user tools." Press the Clear Modes/Stand-by key and then press the Clear/Stop key for three seconds or more.



Touch "[5] Tray Selection."



- 7 Touch the number of the paper tray you want to use and select the paper size to be set in the specified tray.
- Touch the [Exit] key.
- ☐ The initial settings have been changed. The copier returns to the ready condition.
- Push the tray in until it stops, and confirm that the **Start** key turns green.
- ☐ The paper size and direction you have set are lit.



## **USEFUL FUNCTIONS**

## Stand-by

The copier turns off the display and enters the Stand-by mode when you do not use it with the power on for a certain period of time or press the **Clear Modes/Stand-by** key for about three seconds or more. This saves the power consumption of the copier. The Stand-by mode can be cleared by pressing the **Clear Modes/Stand-by** key again.

- ☐ If you press the Clear Modes/Stand-by key while you are setting a value or function, all the settings you are specifying are cancelled.
- ☐ See page 92, "USER TOOLS, Auto Reset."
- ☐ See page 92, "USER TOOLS, Choose Auto Reset Mode."

## Interrupt Copy

When you press the **Interrupt** key, you can interrupt the current copy run to copy another original. After interrupt copying is completed, press the **Interrupt** key again to recall the previous copy settings. For the operational procedure, resee page 58, "INTERRUPT COPYING."

☐ Since the settings before the interrupt remains, you can resume the previous copy run only by pressing the **Start** key after interrupt copying is completed.

#### **Auto Start**

The copier will start the copy operation automatically when the copier enters the ready condition.

- ① Specify a copy setting while the message "Please wait" is displayed (� is lit in red) after turning on the power.
- 2 Press the Start key.
- 3 Set your originals.
- ☐ The Auto Start mode can be cleared by pressing the Clear Modes/Stand-by or Clear/Stop key.
- When you set the Auto Start mode, the Start key blinks.
- ☐ When you specify the Auto Start mode, you cannot select the projector (option) and area editing functions.

#### **User Code**

You can specify user codes to allow only specific people to use the copier or to manage the number of copies each section makes. For setting a user code, see "CHANGING THE COPIER'S SETTINGS." See page 96, "USER TOOLS, 10. User Code Register/Change/Delete."

- ☐ As soon as the copier powers up or after copy settings are automatically cleared, the copier enters a secure state and you must enter your user code to operate the copier.
- ☐ To forcibly enable the copier to accept the user code, press the Clear/Stop key while pressing the Clear Modes/Stand-by key.

## **Program**

When there are frequently used copy operations, you can store settings in a program for quick access. For details on storing, changing, and recalling copy settings, see page 74, "PROGRAM."

☐ Unless you store another setting, the stored settings are not cleared even when you turn off the power or press the **Clear Modes/Stand-by** key.

# **COPYING**

## **BASIC OPERATION**

This chapter describes the basic operation for copying originals.

Before performing the copy operation, press the Clear Modes/Stand-by key to clear the previous settings.

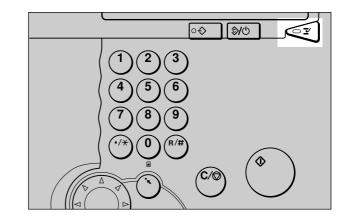
#### If the user code is set

• Enter the user code (6 digits or less) using the Number keys, and press the Recall/Enter key.

The copier enters the ready condition.



- When you use a color mode for which a user code is specified (the corresponding key cannot be selected), you cannot make a copy unless you enter the user code. When you make a copy in a color mode for which a user code is not specified, select the color mode.
- Even if the optional key counter is used, you can select a color mode to make a copy when a user code is not specified for the color mode.
- Set your originals.
- ☐ See page 47, "SETTING ORIGINALS."
- 2 Specify the basic functions (color selection, image density adjustment, original image type selection, copy paper selection, and auto reduce/enlarge).
- ☐ If you do not specify your settings, copy operations are performed in the copier's settings shown below: Full Color Copy, Auto Image Density, Auto (Photo/Letter) mode, Auto Paper Select, and Full Size
- Enter the number of copies using the **Number** keys, and press the **Start** key.
- ☐ The copier starts the copy run.
- If you enter a wrong value, press the Clear/Stop key before pressing the Start key and re-enter a correct value.
- $\ \square$  To stop the copy run, press the **Clear/Stop** key .
- ☐ To reset the copier to the initial condition, press the Clear Modes/Stand-by key.
- You can change the copier's settings for the basic functions. See page 92, "User Tool Menu."
- The copier resets itself if you do not use it for a certain period of time after the last copy run. This function is called "Auto Reset."



- Changing the time after which the copier resets itself See page 92, "USER TOOL, Auto Reset."
- Specifying whether the copier enters the Stand-by mode at the same time as the Auto Reset function is executed
   See page 92, "USER TOOLS, "Choose Auto Reset Mode."
- The Auto Reset function might not be executed in the following cases:

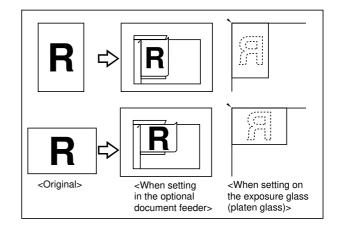
There are originals still left.

When a copy remains in the sorter stapler bin.

## **SETTING ORIGINALS**

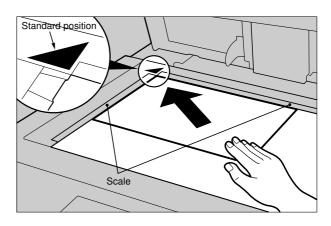
Set your originals on the exposure glass (platen glass) or optional document feeder. Set them properly based on the original type and copy operation.

- ☐ For cautions about originals, see "ORIGINALS." ► See page 36.
  - Align the top of an original to the scale on the rear side. However, some functions might output different copy results depending on the original direction. See relevant function descriptions for details.
  - If originals contain ink or ink eraser, wait until the originals are completely dry before setting them. If you do not, smudges may appear on the exposure glass (platen glass) and be reproduced on copies.



# Setting originals on the exposure glass (platen glass)

- Lift the platen cover or the optional document feeder. Set the original face down on the exposure glass (platen glass). The original should be aligned to the rear left corner.
- 2 Lower the platen cover or the optional document feeder.



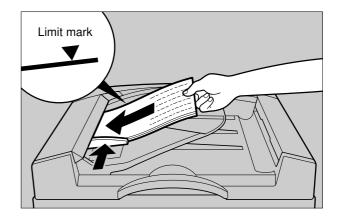
## Setting originals in the optional document feeder.

For original sizes and feeder capacity, see "ORIGINALS." • See page 36.

- □ Do not stack originals above the limit mark.
- When copying thin originals, set them sheet by sheet in the document feeder so that they will not be damaged by a multi-sheet feed (several sheets are fed simultaneously).
- ☐ When setting thin originals (40 52 g/m², 10.7 13.8 lb), you must change the copier's settings. ■ See page 95, "USER TOOLS, ARDF: Thin paper mode."

## When setting two or more originals in the optional document feeder.

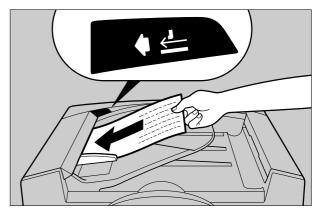
Adjust the guide to the original size. Tap the originals and set them face up into the optional document feeder.



## When setting one original at a time in the optional document feeder.

• Set an original in the optional document feeder and then set the next one while the Auto Feed indicator is lit.

After the second one, the originals are fed automatically without pressing the **Start** key.



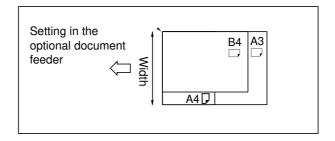
#### When setting different sizes of originals in the optional document feeder.

- ☐ Before you start, you must change the copier's settings. ► See page 95, "USER TOOLS, ARDF Free Size Setting."
- $\Box$  The original thickness that can be set is 52 to 80 g/m², 13.8 to 21.2 lb.
- ☐ It takes more time to perform this operation because the original size is detected for each sheet.
- ☐ Small originals might be copied in a slanting direction because the guide cannot be adjusted to their sizes.

Set the original so that the left and rear edges match the scale.

#### **Important**

- □When setting different width originals, set the wider original under the narrower one. If you set them in a wrong order, their sizes are not detected properly.
- Adjust the guide to the larger original size. Set the originals face up in the optional document feeder.



## **FUNCTION COMBINATION CHART**

- : Combinable
- x: Not combinable
  - (A function specified earlier has the priority.)
- : Not combinable

(A function to be specified later has the priority.)

The available function combinations are shown below.

<											F	uno	otio	n s	spe	ecit	iec	d ea	arli	er						-										
		Function name	Auto Color Select	Full Color Copy	Black Copy	Single Color	Auto Image D	Manual Imag	Background	Pastel							/Se	Combine			Varidad		1000	Conv Entire Image	Centering	Margin Adjustmen	Color Conv	Color Frase	Auto Paper Soloat	Auto Heduce/Enlarge	Interrupt copying	Area Editing	Sort	Stack	Staple	Charle
	Function	name	select	ору			Auto Image Density Adjustment	Manual Image Density Selection	Background Density Control			Calibrator	Color Balance Adjustment	Preset Reduce/Enlarge/Zoom	Directional Magnification	Book → 1 Sided	2 Sided → 1 Sided	Combine	Combine 4 originals	ادما	2 Sided → 2 Sided	Single	Multi	mage	Suncir	ersion	5	Gelect	Sologi	xe/Enlarge	pying	9			Auto	Manual
	Auto Colo	r Select	K		•	•	0	0	0	0	$\overline{\bigcirc}$	•	0	0	0	0	0	0	0		o		0	510	1		1		)(	10	0	* 4	* 2	* 2	* 2 *	*2
	Full Color		•	V	•	•	0	0	0	0	0	•		Ö	Ó	Ó	Ó	Ó	Ó	ð	ŏ	ă	δlà	1	516			56	1	<u> </u>	K	* 4	-	* 2	* 2 *	7
	Black Cop		•		$\sum$		0	O	0	0	0	•	$\overline{\bigcirc}$	O	0	Ö	Ö	Ó	Ö	d	Ó	δl	álà	1	5			Ĭ	1		ď	* 4	5		Ħ,	7
	Single Co		•	•		1	0	0	0	0	0	•	O	O	0	Ó	Ó	Ö	Ó	á	ð	Ō	álà	510	<b>T</b>			Ť	10		ď	* 1	ă	ă	ă,	<del>SF</del>
	Auto Image	e Density Adjustment	0	0	0	0		0	•		Ö	•	Ö	d	Ó	Ó	Ó	Ó	Ó	ð	ð	Ŏ.	ăÈ	1	ŚΙζ	10		16	tè	<u> </u>	Ħ	ä	허	ă	쑮	#
	Manual Ima	age Density Selection	0	0	0	0	0	1	0	o	Ö	•	đ	ð	Ō	Ŏ	ŏl	ŏ	ŏ	ð	ă	ŏĺ	ălă	1	1		1	1	1		Ħ	爿	쉬	H	커	∜
Function to be specified later	Backgrou	nd Density Control	0	0	0	0	0	0		Ō	Ō	Ō	Ō	Õ	Ŏ	Ŏ	Ŏ	Ŏ	ă	ă	ă	5	ă	1	12	10	1	16		16	$\leq$	$\preceq$	$\preceq$	$\preceq$	$\exists$	#
ctic	Pastel		0	0	Ō	Ō	Ō	Ō	$\overline{}$	Ĭ	Ŏ	ŏ	Ŏ	Ŏ	ă	ă	ă	ă	ă	ă		Ž,	ă)	1	1	1	1	1	1	16	$\preceq$	$\preceq$	$\preceq$	$\preceq$	$\exists$	#
Ď	Sharp/Sof	t	0	to	Ō	Ō	Ō	Õ	Ŏ	a	Ĭ	ŏ	ă	ă	ă	ŏ	ă	ă	ă	ă	3	Ă,	5/2	1	#	#	1	+	#	16	$\asymp$	$\preceq$	$\preceq$	$\preceq$	廾	#
9		r Calibrator	-	Ĕ		Ĭ	)	$\subseteq$	$\subseteq$	$\preceq$			$\preceq$	$\preceq$	$\preceq$	$\preceq$	$\preceq$	$\preceq$	$\preceq$		4	$\preceq$	$\perp$	尘	土		1	#	$\pm$	+	$\vdash$	4	4	4	4	4
e s		ance Adjustment	0	0	$\overline{a}$	0	$\bigcirc$	0			al		$\forall$	d	$\overline{\Box}$	$\overline{\Box}$	$\overline{a}$	$\overline{\Box}$	$\overline{a}$	d			1	1	1	+	1	+	1					$\overline{}$	$\exists$	7
pe	Preset Red	duce/Enlarge/Zoom	Õ	Ŏ	Ŏ	0	Ŏ	Ŏ	ă	ă	ă	Š	$\exists$	J	ă	ă	$\stackrel{\sim}{\sim}$	ă	ă	$\exists i$	XI,	$\preceq$	#	#	1	+	1	+	+		$\bowtie$	$\exists$	겕	$\exists$	#	#
₩		l Magnification	ŏ	5	$\overline{}$	ŏ	Ŏ	$\stackrel{\sim}{\sim}$	$\tilde{a}$	ă	커		ă	4	$\overline{}$	$\preceq$	X	$\exists$	$\preceq$	$\frac{3}{3}$	<del>기</del>	$\preceq$	#	#	#	+	1	#	1		$\bowtie$	묏	묏	兴	#	#
ď		Book → 1 Sided	Ŏ	Ŏ	Š	ŏ	ă	ŏ	ă	ă	커		$\preceq$	7	$\forall$	$\forall$	$\preceq$		$\preceq$			$\preceq$	#	1	1	+		+	1		띩	$\leq$	싀	$\preceq$	쏫	#
ate	Combine	2 Sided → 1 Sided	Ŏ	Ŏ	$\tilde{\cap}$	Ŏ	ă	ă	ă	ă	Ħ,	3	$\frac{1}{2}$	ă		$\Rightarrow$	7							#	+	+	1		4		$\exists$		$\preceq$	$\preceq$	쏫	4.Č
4	/Series	Combine	5	K	$\stackrel{\sim}{\sim}$	$\leq$	ă	$\preceq$	H	XI,	쉬		$\preceq$	Ħ,	$\preceq$		$\Rightarrow$							4	#	#		4		$\subseteq$	의		쐿	21	7	4 <u>/</u> ×
		Combine 4 originals	K	H	$\stackrel{\sim}{\sim}$	$\stackrel{\sim}{\sim}$	쉬	$\preceq$	$\exists$	$\Xi$	쉬		겘	XI,	쑀			A'						4			1				9		<u>ي</u> ار	<u> </u>	4	Ŋ×
		1 Sided → 2 Sided	$\frac{2}{3}$	H	$\preceq$	$\cong$	쉬	爿	$\exists$	쑀	쒸.		쑀	싀	$\exists$				$\forall$			4				10	1		10		9		9	21	<u> </u>	٧×
		2 Sided → 2 Sided	$\geq$	X	쉬	$\preceq$	싀	爿	爿	쑀	ᆀ		싀	4	싀					$\frac{1}{2}$				1		10	1	)()	<u>C</u>	$\bigcirc$	9		9(	$\supset$ (	$\supseteq$	$\geq$
	Duplex	Single	$\frac{2}{3}$	$\bowtie$	$\exists$	$\preceq$	爿	쉬	싀	$\frac{1}{2}$	싀		싀	싀	$\subseteq$						$\frac{1}{2}$					10	1	90	$\mathbb{C}$	0	익		<u> </u>	$\supset$ (	$\supset C$	$\geq$
	}	Multi	$\stackrel{\smile}{\sim}$	$\bowtie$	싀	$\preceq$	싀	싀	싀	Ӳ			7	겍	$\frac{1}{2}$							Y				10	C		0		엑		$\bigcirc$	$\supseteq$ (	<u> </u>	$\times$
	Copy Entir		$\preceq$	띩	싀	싀	싀	싀	ᆀ	븻	겍.		싀(	4	싀		<u> </u>						Ħ,			9	C		0		의		<u>)</u> (	<u>)(</u>	$\supset C$	$\times$
	Centering	e illaye	쉬	믯	믯	씱	ᆀ	ᆀ	븨	4	븻.	4	4	싀	븨(	ᅫ	겍	4	4	7	4	71	47	TC	)[C	10	C	90	10	0	9	2(	$\bigcirc$	$\supset ($	<u> </u>	)(C
	Vargin Ad	iustmont	븼	뷔	쒸	씱	ᆀ.	싀	ᆀ	ᅫ	ᅫ		4	4	싀.	싀	긔:	<u>~ </u>	Ϋ́	<u> </u>	北	<u> </u>	₹ĮČ	1	$^{\downarrow}$	10	C		* 5	$\bigcirc$	9	$\supseteq$	$\supset$	$\mathbb{Q}($	ЭC	) C
			끸	뷔	싀	밁	븻.	ᆀ	싀	4	4	_(	식(	4	겍(	겍	겍(	싀	4	4	7	4	<u>)[</u>	<u> C</u>	1	Ø	C	0	0	0	9		$\supseteq$	)(C	$\supseteq C$	)(Č
	Color Con			믜		7	겍	겍	9	4	2		21	7	<u>)(</u>	9	)(	9	2(	)(	)(	)(	$\bigcirc$	C			$\Box$	0	0	0	$\bigcirc$		2(	<u>)</u> k	ЭĊ	
	Color Eras		픠	믜			ᆀ	겍	싀	ᆀ(	4		7(	7	)(	釟	7	1	4	7	210	)(	$\bigcirc$			0		0	0		0		2[	<u>)[</u>	<u>)</u> [	
	Auto Pape		싀	싀	ᆀ	븨	싀	븨	<u> </u>	4	4		7	7	7		7			4						0	C	$\Delta$	•		0	$\bigcirc$	$\supset C$	)(	<u>)</u> [	
		ed copying	의	싀	긔	의	겍	겍	Y	7	4		4	7	7	)(	7	4	Y)	<u> </u>	$\langle   \rangle$	炓	$\langle   \bigcirc \rangle$	* 5		0	C			$\bigcirc$		<b>)</b>  *	1*	1*	1*	10
		ce/Enlarge	의	$\subseteq$	긔	의	<u> </u>	9	<u> </u>	<u> </u>	4		4		D)	<u> </u>	<u>)</u>	<u>Y</u>	<u> </u>	$\bigcirc$	$\langle   \rangle$	$\langle \rangle$	$\langle   \bigcirc \rangle$	C	0	0	C		0	N			)(	570	ЭC	
	nterrupt co		9	9	4	엑	<u>)(</u>	7	9(	<u> </u>			) (	$\supseteq$	$\supseteq$	2(	$\supseteq$	$ \rangle$	$\langle   \rangle$	$\langle   \rangle$	< >	<>	$\langle \bigcirc$	C	0	0	$\Box$	0	0			$\langle \rangle$	<>	$\langle \rangle$	\langΪ≻	\lang⋉
	\rea Editin	ıg	×	* 4	4	* 4	$\bigcirc$	)(C	2	$\bigcirc$	212	<u> </u>	)(	$\supseteq$		$\times$	<u> </u>	$\times$	×ĺ̈́	< >	<>	⟨▷	$\bigcirc$	C	0	•		0	0		X	1	) (	5k	5 C	)X
	3ort		* 2	* 2	2	9		)(		)(	$\supseteq$		20	$\bigcirc$	$\bigcirc$		)[	$\supset C$	)(	)		20			0	* 2	* 2	20	* 1	0		7		*	30	
	Stack		* 2	* 2	9		20	2		2 (			)K	7		70	)[		)[C	)(		1		C	0	* 2	* 2	0	* 1	0					$\tilde{\mathbb{X}}$	र्त
	Staple	Auto	* 2	* 2				)(		)(			7	7	7	ÖK	7		7		0	10			O	* 2	* 5	Ó	* 1	Ó	Ō			$\star$	$\pm$	
	'rojector				)(					0			70	510	ST	<u> </u>	7	                                                                                                                                                                                                                                                                                                                                                     	<>	₹Ī	<b>(</b>  >	₹   	dó	Ó	ń	0	Ó	Ŏ		Ŏ.	Žľ	7	7	512	ᄼ	Æ

- ☐ When you execute the Auto Color Calibrator function, all specified functions are cleared.
- 1 These functions cannot be combined when OHP sheets, thick paper, or non-standard size (out of standard) paper is used.
- □ *2 These functions cannot be combined if the state "Full Color Sorting prohibition" is specified with the user tool.
- *3 The "Staple (Auto)" function is specified as the function to be specified later and the Sort function is also executed automatically.
- *4 If a designated area is a full color image, the Full Color Copy mode is used. If not, the color mode outside the area is used.
- ∃ *5 These functions cannot be combined when you use non-standard size paper.

## **BASIC FUNCTIONS**

This section describes the basic functions and their settings.

- The basic functions are as follows.
  - "Color Selection"
    - Auto Color Select, Black Copy, Full Color Copy, Single Color
  - "Image Density Adjustment"
    - Auto Image Density, Manual Image Density Selection, Combined Auto & Manual Image Density Selection
  - "Original Image Type Selection"
    - Auto (Photo/Letter) mode, Letter mode, Photo mode
  - "Copy Paper Selection"
    - Auto Paper Select, Manual Paper Select, Bypass Feed Select
  - "Full Size," "Auto Reduce/Enlarge"
- ☐ You can change the copier's settings for these functions. Use the pertinent user tools (see "CHANGING THE COPIER'S SETTINGS).
  - "Auto Color Selection" See page 95.
  - "Choose Copy Mode Default" See page 92.
  - "Auto Paper Selection" See page 92.

### **Color Selection**

This function selects colors to be copied based on the original type and purpose of copies.

☐ The color mode is divided into the following four types:

Auto Color Select

Automatically detects colors of an original and makes a copy in the Full Color Copy or Black Copy mode.

Full Color

Makes copies in full color.

Black

Makes copies in black regardless of colors of originals.

Single Color

Makes copies in a specified color.

- ☐ If you create a color using the user tool, you can select it as a registered color. ► See page 98, "USER TOOLS, Create A User Color."
- Most functions increase the counter values for specified color modes.
  - See page 18, "FULL COLOR COPY/BLACK COPY."
  - See page 19, "SINGLE COLOR."



Select the color mode.



### When selecting the Single Color mode

Select a color you want to use, and touch the [Exit] key.



## **Image Density Adjustment**

- ☐ The image density adjustment function is divided into the following four types:
  - "Auto Image Density"
    Automatically make copies in appropriate background density.

"Background Density Control"

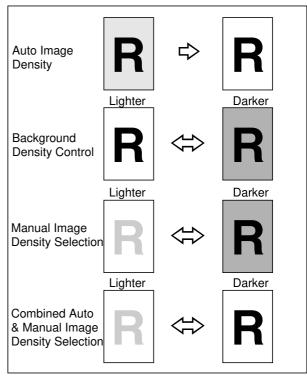
Adjusts the background density to a lighter or darker setting. You can specify 9 steps of density. When you set Background Density Control mode, "Auto Image Density" mode is cleared. • See page 30, "Background Density Control."

"Manual Image Density Selection"
Makes whole copies lighter or darker.
You can specify 7 levels of density.

If you use Manual Image Density Select to increase image density, the background may come out standard. Therefore, use this function to mask out dark backgrounds at the same time as increasing image density (for example with newspaper originals).

### When adjusting the density

- Adjust the density using the [Lighter] and [Darker] keys.
- The density indicator moves.
- If you do not set any other function, press the Start key to copy.





## **Original Image Type Selection**

☐ This function is divided into the following three types:

Auto

For copying images containing a mixture of photos, pictures and text.

Letter

This mode should be used for copying originals consisting of characters.

Photo

This mode should be used for copying photo or picture originals.

- ☐ When you touch the [Auto] or [Photo] key in Full color mode, the Photo mode is divided into the following three types:
  - [I] (Printed photograph) Use this mode when originals are photographs printed in magazines.
  - (Photographic paper) Use this mode when originals are photographs.
  - (Color copy original) Use this mode when copying color copies.

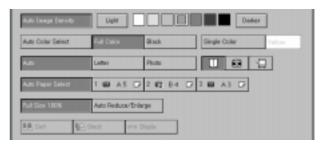
You cannot select the photo type when you select the Black Copy or Single Color mode in the color mode selection or the Black Copy mode in the user tool Auto Color Selection.

☐ You can change the copier's settings for these functions. 
☐ See page 92, "USER TOOLS, Select Desired Photo Mode (Auto)/(Photo)."

Select the original type.

When copying photographic paper or color copy originals

● Touch 🗐 or 🗐.



## **Copy Paper Selection**

- ☐ The copy paper selection function is divided into the following three types:
  - "Auto Paper Select"

Automatically selects a suitable size of copy paper based on the original size and the reproduction ratio.

"Manual Paper Select"

Manually selects one of the paper trays containing a suitable size of copy paper. ► See page 54. "COPYING FROM THE BYPASS FEED TABLE."

- ☐ Some sizes of originals are not selected correctly. See "Original Sizes Difficult To Detect." ► See page 37.
- When you set recycled paper in a paper tray, the paper type can be displayed on the touch panel display.
  - See page 94, "USER TOOLS, Recycled Paper Indicator."

#### When selecting copy paper manually:

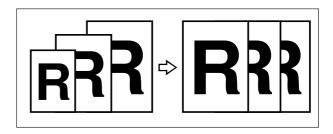
Select copy paper set in the optional paper tray unit or the bypass feed table.



## **Auto Reduce/Enlarge**

Automatically reduces/enlarges copies based on a specified paper size.

- ☐ The magnification is selected in the range of 25 to 400 %.
- ☐ The magnification might not be selected correctly for some sizes of originals. See "Original Sizes Difficult To Detect." ► See page 37.
- □ You can set different sizes of originals at the same time in the optional document feeder. See "When setting different sizes of originals in the optional document feeder." See page 48.
- Touch the [Auto Reduce/Enlarge] key.
- 2 Select copy paper from the optional paper tray unit.



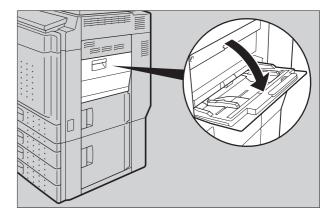


## COPYING FROM THE BYPASS FEED TABLE

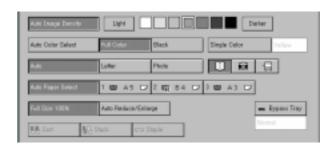
Make copies by setting paper in the bypass feed table. The bypass feed table allows you to copy onto postcards or other thick paper, OHP transparencies, and adhesive labels as well as some sizes of paper that cannot be set in the paper tray.

#### **Important**

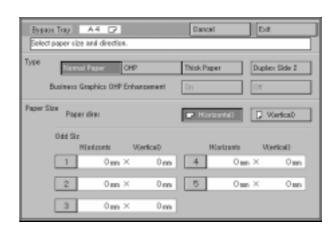
- □ If paper is bent, correct it before setting the paper in the bypass feed table. If the bend is not corrected, a paper jam might occur.
- ☐ For the paper sizes, directions, and quantity that can be set in the bypass feed table, see "PAPER." ► See page 38.
- ☐ When copying onto OHP sheets or thick paper, see "When Copying Onto OHP Sheets Or Thick Paper." ► See page 55.
- □ Except for 38 page standard sizes, paper size that can be set is 100 297 mm, 4.0" ~ 11.6" long and 140 432 mm, 5.5" ~ 17.0" wide. You must specify the paper size with the user tools and select "Odd size" in step ② for paper sizes in this range because they are not detected in the bypass feed table. ► See page 93, "USER TOOLS, Set Bypass Paper Size."
- ☐ If you want to copy onto A6☐ paper, contact your service representative.
- Open the bypass feed table.
- ☐ The "Bypass Feed" indicator is lit.



7 Touch the paper size on the touch panel display.



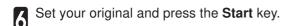
- Touch the [V (ertical)] or [H (orizontal)] key. Touch the number specified with the user tool.
- ☐ When you close the bypass feed table, the paper size setting is cancelled.

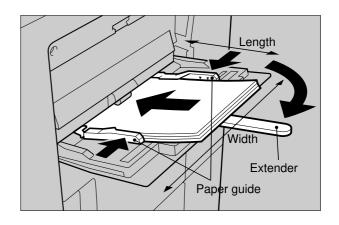


- Touch the [Exit] key.
- Slide the paper guides to the paper width. Insert the paper until the beeper sounds.

#### **Important**

- If the paper guides are not adjusted to the paper size properly, originals might be copied in a slanting direction or a paper jam might occur.
- ☐ When setting paper larger than A4☐, 8 ½"x11"☐, pull out the extender.
- When setting two or more sheets at a time in the table, shuffle the sheets to avoid a paper jam.





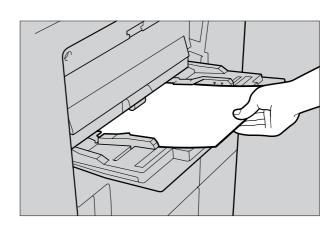
## When Copying Onto OHP Sheets or Thick Paper

- ☐ When using paper thicker than 105 g/m², 27.9 lb, select [Thick Paper] key.
- Open the bypass feed table and specify the paper direction and size.
- See page 54, steps 1 to 3 in "COPYING FROM THE BYPASS FEED TABLE."
- 7 Touch the [OHP] or [Thick Paper] key.
- □ When copying onto OHP sheets in Black Copy mode, you don't need to touch either the [OHP] or the [Thick Paper] key. Follow steps § and ⑤ then set your original and press the Start key.

### When selecting OHP sheets

- When you want to process photo or crosshatched parts roughly for OHP projection, touch the [On] key. When you want to process an original normally, touch the [Off] key.
- When you select Letter for the original image type before or after selecting the paper type, the original image is not processed roughly even if you touch the [On] key.
- Touch the [Exit] key.
- Slide the paper guides to the paper width. Insert the paper until the beeper sounds.
- ☐ Postcards must not be folded, and be set in the portrait direction.





#### **Important**

- ☐ If the paper guides are not adjusted to the paper size properly, originals might be copied in a slanting direction or a paper jam might occur.
- When setting two or more sheets at a time in the table, shuffle the sheets to avoid a paper jam.
- 5 Confirm that the OHP sheet or thick paper is set in the table, and set your originals. Then press the **Start** key.

#### **Important**

When copying onto OHP sheets, remove the delivered copies sheet by sheet.

## **Two-Sided Copies**

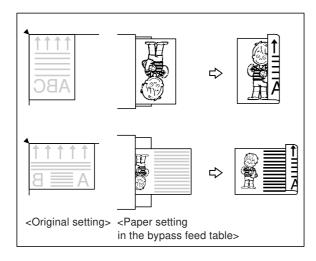
Use the bypass feed table to copy onto the underside of paper that has been already copied on.

#### **Important**

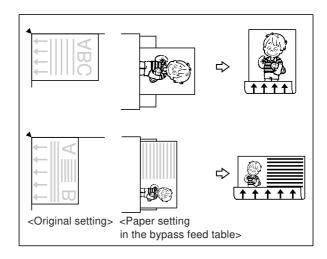
- ☐ If paper is bent, correct it before setting the paper in the bypass feed table. If the bend is not corrected, a paper jam might occur.
- ☐ Do not reuse paper that has been already copied on by other type of copier. However, you can use the **[Duplex Side 2]** key to copy onto the underside of paper that has been copied on by this copier.
- $\square$  When copying onto the underside of once-used paper, the "image loss width" is  $4 \sim 8$  mm on the trailing edge.
- When you make a two-sided copy, copy an original having less image areas, such as an letter original, on the upside of paper.

### ♦ Original and paper setting and copies

#### Opened horizontally



#### Opened vertically



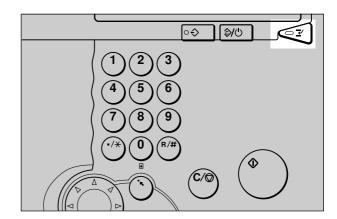
- Open the bypass feed table. Set the paper in the table with the copied side face down (the blank side face up).
- ☐ "COPYING FROM THE BYPASS FEED TABLE" ► See page 54.
- 2 Confirm the paper type (standard/thick paper) and size.
- ☐ When you use an OHP sheet, you cannot use the "Duplex Side 2" function.
- Touch the [Duplex Side 2] key and touch the [Exit] key.
- Set your original and press the **Start** key.



## **INTERRUPT COPYING**

This function allows you to interrupt the current copy job to copy another original.

- In interrupt copying, the following functions cannot be specified: Combine 4 originals, Duplex, Sort, Stack, Staple, Area Editing, Projector, Program
- Press the **Interrupt** key.
- The indicator on the Interrupt key is lit.
- If the user code is set, enter the user code (6 digits or less) using the Number keys, and press the Recall/Enter key.
- Remove the originals being copied and make any other copies you need.
- Remove the originals you have just copied and the delivered copies.
- Press the Interrupt key again.
- The indicator on the **Interrupt** key is off and the copier returns to the previous copy setting.
- ☐ Since the settings before the interrupt remains, you can resume the previous copy run only by pressing the **Start** key after interrupt copying is completed.

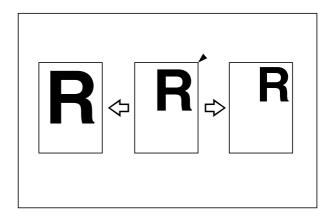


## **ZOOM AND PRESET REDUCE/ENLARGE**

## **Preset Reduce/Enlarge**

This function reduces/enlarges copies with a preset magnification.

☐ There are 12 fixed ratios (5 enlargement ratios and 7 reduction ratios) and 2 arbitrary magnifications.



### Relationship between the fixed ratios and the original and paper sizes

#### metric version

Enlargement Ratio (%)	Original Size → Paper Size
400	
200	A5→A3 A6→A4
141	A4→A3 A5→A4 A6→A5
122	A4→B4 A5→B5 A6→B6
115	B4→A3 B5→A4 B6→A5

Reduction Ratio (%)	Original Size → Paper Size				
93	When setting a margin on				
	the edges of an original				
82	B4→A4 B5→A5 B6→A6				
75					
71	A3→A4 A4→A5 A5→A6				
	B4→B5 B5→B6				
65	A3→B5 A4→B6				
50	A3→A5 A4→A6 B4→B6				
25					

#### inch version

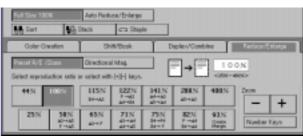
Enlargement Ratio (%)	Original Size	<b>→</b>	Paper Size
400			
200			
155	5 ¹ / ₂ "x8 ¹ / ₂ "	$\rightarrow$	8 ¹ / ₂ "x14"
129	8 ¹ / ₂ "x11"	$\rightarrow$	11"x17"
	5 ¹ / ₂ "x8 ¹ / ₂ "	$\rightarrow$	8 ¹ / ₂ "x11"
121	8 ¹ / ₂ "x14"	$\rightarrow$	11"x17"

Reduction Ratio (%)	Original Size	9 →	Paper Size
93			
85			
77	8 ¹ / ₂ "x14"	$\rightarrow$	8 ¹ / ₂ "x11"
74	11"x15"	$\rightarrow$	8 ¹ / ₂ "x11"
65	11"x17"	$\rightarrow$	8 ¹ / ₂ "x11"
	8 ¹ / ₂ "x11"	$\rightarrow$	$5^{1}/_{2}$ "x $8^{1}/_{2}$ "
50			
25			

- ☐ You can store and display up to two frequently used magnifications (in 1% steps) other than the fixed magnifications.
  - See page 96, "USER TOOLS, Set user R/E."
- ☐ You can select the magnification regardless of the original and paper sizes. However, part of an image might be lost or an unnecessary margin might be made in a copy for some magnifications.

- Touch the [Reduce/Enlarge] key.
- 2 Confirm that the [Preset R/E Zoom] key is highlighted.
- ☐ If the [Preset R/E Zoom] key is not highlighted, touch it.
- When you specify an arbitrary magnification, it is indicated in the section showing 100% in other cases.
- 3 Select a magnification.
- Set your original and press the **Start** key.



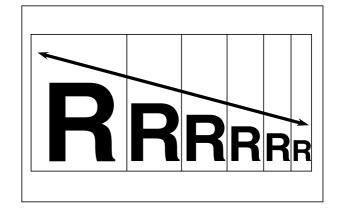


## **ZOOM**

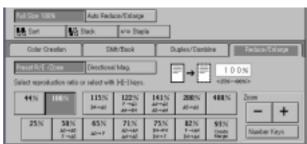
This function specifies the reduction/enlargement ratio in 1 % steps to make copies using finer magnifications.

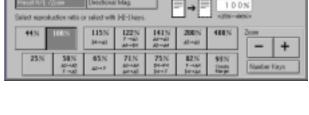
- ☐ Use the [+] and [—] keys or [Number Keys] key to specify a magnification.
- ☐ You can specify a magnification in the range of 25 to 400 %.
- You can also select a fixed magnification close to your desired one in the "Preset Reduce/Enlarge" mode and then adjust it using the [+] and [-] keys.

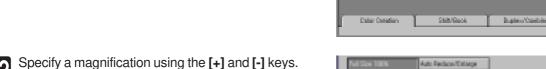
Touch the [Reduce/Enlarge] key.











- ☐ If you enter a wrong value, re-enter the correct value using the [+] and [-] keys.
- ☐ To use the **Number** keys, touch the **[Number Keys]** key.

#### When using the Number keys

- Touch the [Number Keys] key.
- 2 Enter a magnification using the Number keys.
- If you enter a wrong value, press the Clear/Stop key and re-enter the correct value.
- To use the [+] and [-] keys, touch them.
- ❸ Press the Recall/Enter key.
- Set your original and press the Start key.



This function makes copies by selecting independent ratios for vertical and horizontal directions. This allows you to change the shape of an image.

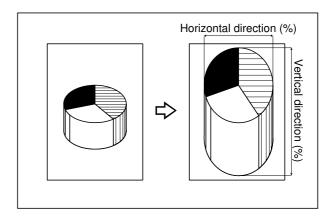
☐ You can specify a magnification in the range of 25 to 400 %.

- Touch the [Reduce/Enlarge] key.
- 2 Touch the [Directional Mag.] key.

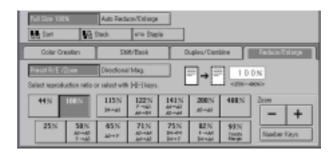
- Enter a magnification in the horizontal direction using the **Number** keys, and press the **Recall/Enter** key.
- ☐ If you enter a wrong value, press the Clear/Stop key or touch the [Clear] key and re-enter the correct value before pressing the Recall/Enter key.
- Enter a magnification in the vertical direction using the **Number** keys, and press the **Recall/Enter** key.
- Set your original and press the Start key.
- ☐ For setting an original, see "SETTING ORIGINALS."

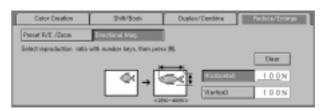
   See page 47.

## **DIRECTIONAL MAGNIFICATION**





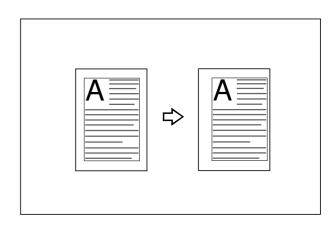


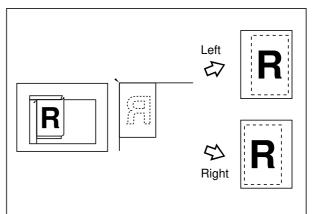


## MARGIN ADJUSTMENT

This function makes copies with a margin on their left or right side. This is useful when making a margin on copies for punching or stapling.

- ☐ You can specify a margin in the range of 1 to 20 mm, 0.1" to 0.8" (in 1 mm, 0.1" steps) on the left or right side.
- ☐ You can change the copier's settings for the margin directions and width. ► See page 97, "USER TOOLS, Margin adjustment."
- If you specify too wide a margin, part of an image will be lost on the copy.
- ☐ You can also change the margin width on side 2.
- The margin position differs depending on the original direction. Basically, set the margin as shown in the figure on the right.













Specify a margin.

When you specify a margin on one side of the paper

● Touch the [Margin Adj.] key.

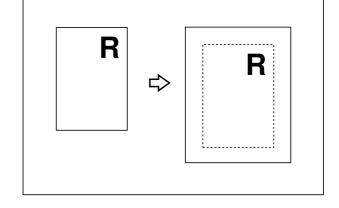
When you specify margins on both sides of the paper

- Touch the [Side 1] or [Side 2] key.
- Specify the left or right margin width using the  $[\rightarrow]$  and  $[\leftarrow]$  keys.
- ☐ If you specify a wrong value, re-enter the correct value using the  $[\rightarrow]$  and  $[\leftarrow]$  keys or the [Clear] key.
- Set your original and press the Start key.

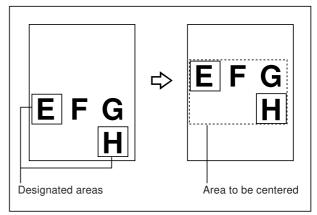
## CENTERING

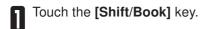
This function makes copies by shifting the entire image of an original to the center of copy paper.

You can use the Centering function even when copying from the bypass feed table. However, you cannot use the Centering function when using non-standard paper.



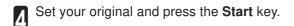
- When you designate two or more areas for area editing, the minimum rectangle containing all the areas is centered.
- □ When the Centering function is specified, the Book → 1 Sided, Combine, Combine 4 originals, Single, Multi, and Auto Paper Select functions cannot be used.







- Select the copy paper.
- When using the bypass feed table, specify the paper size. See page 54, "COPYING FROM THE BY-PASS FEED TABLE."



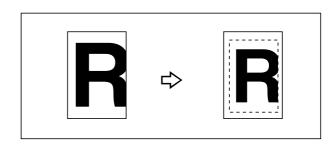
☐ If the message "Cannot detect original size, please select paper size" is displayed, lift and lower the platen cover or the optional document feeder before pressing the **Start** key. If the copier cannot detect the original size correctly, the copy image is not centered properly. See page 37, "Original Sizes Difficult To Detect."





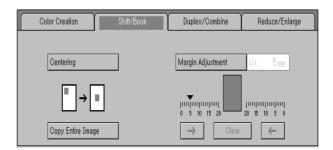
## **COPY ENTIRE IMAGE**

If an original has an image extending to its edges, this function automatically reduces a copy so that the edges will not be lost.



- Touch the [Shift/Book] key.
- 7 Touch the [Copy Entire Image] key.
- Set your original and press the Start key.
- ☐ The reduction ratio is displayed.





## MAKING ONE-SIDED COPIES FROM VARIOUS ORIGINALS

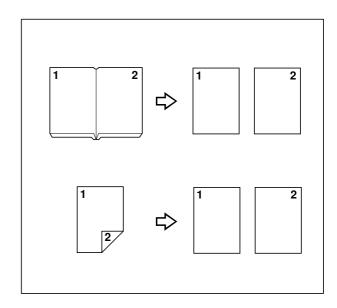
This function makes one-sided copies from twosided originals or two facing pages of bound (book) originals.

☐ This function is divided into the following two types:

#### Book → 1 Sided

Makes one-sided copies from two facing pages of bound (book) originals.

- 2 Sided →1 Sided (Document feeder is required)
  Makes one-sided copies from two-sided originals.
- □ When the Book → 1 Sided mode is selected, the Auto Paper Select, Auto Reduce/Enlarge, Centering, and Area Editing functions cannot be used.





- Keys and values displayed on the touch panel vary depending on the options used.
- Touch the Book  $\rightarrow$  1 Sided or 2 Sided  $\rightarrow$  1 Sided key.
- Keys and values displayed on the touch panel vary depending on the options used.
- $\square$  When selecting Book  $\rightarrow$  1 Sided, select the  $\square$  (sideways) paper of the appropriate size.
- 3 Set your original and press the Start key.





## **COMBINATION COPYING**

☐ This function can be used only when your copier is equipped with the optional document feeder.

This function combines two or more one-sided originals on one copy.

☐ The combination copying function is divided into the following two types:

#### Combine

Copies two one-sided originals onto two facing pages of paper.

#### Combine 4 originals

Copies four one-sided originals onto both sides of two facing pages of paper.

The number of originals that can be combined (combination quantity) on a copy is two and four.

#### Original setting and copies

- You cannot copy different sizes and directions of originals in one copy run.
- ☐ You cannot select the Combine 4 originals mode when using OHP sheets, thick paper, or non-standard size (odd size) paper.
- When the combination copying mode is selected, the Auto Reduce/Enlarge, Centering, and Area Editing functions cannot be used.
- ☐ The Auto Paper Select function cannot be used. Select copy paper twice as large as an original size or a magnification relevant to selected paper following the table below.

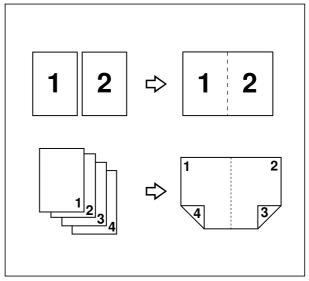
#### Paper sizes for combining one-sided originals

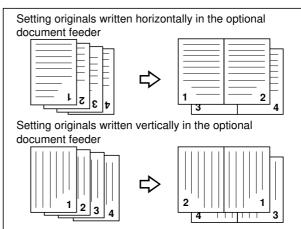
metric version:

Original	Copy paper	Ratio
<b>∆</b> ⊿□	A4□	71%
A4_	A3□ <b>,</b>	100%
<b>∧ ⊢</b> □	A4□ <b>,</b>	100%
A5_,	A3□ <b>,</b>	141%
DE□	A4□ <b>,</b>	82%
B5_,	A3□	115%

#### inch version:

Original	Copy paper	Ratio
8 ¹ / ₂ "x11"	8¹/₂"x11"□¬	65%
0 72 X 1 1 L	11"x17"□-	100%
E1/ "v01/ "	8¹/₂"x11"□-	100%
5 ¹ / ₂ "x8 ¹ / ₂ "	11"x17"□	129%





#### **COMBINATION COPYING**

- Touch the [Duplex/Combine] key.
- ☐ Keys and values displayed on the touch panel vary depending on the options used.
- Touch the [Combine] or [Combine 4 originals] key.
- Select the  $\square$  (lengthwise) paper of the appropriate size.
- $\mathbf{\Lambda}$  Set your originals and press the **Start** key.
- ☐ Set the originals in the optional document feeder with the first sheet placed on their top.





## TWO-SIDED COPYING

This function copies onto both sides of paper. This allows you to make two-sided copies from two one-sided originals or two facing pages of bound (book) originals.

The two-sided copying function is divided into the following four types:

#### 1 Sided → 2 Sided

Makes two-sided copies from two one-sided originals.

## 2 Sided → 2 Sided (optional document feeder is required)

Makes two-sided copies from two-sided originals.

#### Single (optional document feeder is required)

Makes two-sided copies from two facing pages of book originals.

#### Multi (optional document feeder is required)

Makes two-side copies from book originals as they are.

- You cannot use the two-sided copying function when using OHP sheets, thick paper, or non-standard size (odd size) paper.
- ☐ The Area Editing function can be used only in 1 Sided
   → 2 Sided mode.
- When the [Single] or [Multi] mode is selected, the Auto Paper Select, Auto Reduce/Enlarge, and Centering functions cannot be used.
- ☐ You can use 64 to 105 g/m², 17.1 to 27.9 lb paper in the two-sided copying mode.
- The number of copies that can be specified is as follows.

<For the Single Color and Black Copy modes>

B4, 8 1/2" x 14" or smaller ...... 50 copies

A3 and 11" x 17"......30 copies

<For the Full Color Copy mode>

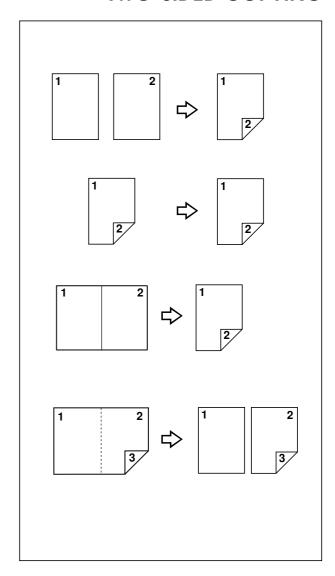
A3 - A5, 11" x 17" - 5 1/2" x 8 1/2" ........... 20 copies

 Copy images can be shifted for the binding margin on the reverse side of paper. You can adjust the margin width and position.
 See page 63, "MARGIN ADJUSTMENT."

You can also change the default margin settings. 
See page 97, "USER TOOLS, Margin adjustment."

#### When selecting [1 Sided → 2 Sided]

- When setting originals in the optional document feeder
  - Set the originals in the optional document feeder with the first sheet placed on their top.
- When setting originals on the exposure glass (platen glass)
  - Set the originals from the last sheet. This also applies to setting originals sheet by sheet in the optional document feeder.
- If you set an odd number of one-sided originals, one side of the paper copied last becomes blank.



## Original settings and copies in the 1 Sided $\rightarrow$ 2 Sided mode

☐ The way to set an original differs depending on the original direction ("opened horizontally" or "opened vertically") as shown in the illustration.

When the width is longer than the length

When opened vertically

When the width is longer than the width

When the width is longer than the width

When an A3, 11" x 17" or B4, 8 1/2" x 14" original is "opened horizontally" and fed in the portrait direction

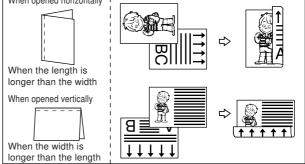
When opened horizontally and fed in the portrait direction

When opened

horizontally

When the length is longer than the width

- □ When an A3, 11" x 17" or B4, 8 1/2" x 14" original is "opened horizontally" and fed in the portrait direction and when it is "opened vertically" and fed in the landscape direction, set the original as shown in the illustration.
- Touch the [Duplex/Combine] key.
- Keys and values displayed on the touch panel vary depending on the options used.
- Select one of the two-sided copying modes.
- Keys and values displayed on the touch panel vary depending on the options used.
- 3 Set your originals and press the **Start** key.







• If a copied paper remains in the two-sided copying tray, the message is displayed. Press the **Start** key to deliver the paper to the copy tray.

#### Original setting in the 1 Sided → 2 Sided mode

- For the way to set originals, see "When setting originals in the optional document feeder" and "When setting originals on the exposure glass (platen glass)." See pages 47 and 48.
- When the first sheet of the originals have been read on the exposure glass (platen glass), remove it and repeat step 3 above. To quit the copy run, press the •/* key.

☐ These functions can be used only when your copier is equipped with the optional sorter stapler.

### Sort/Stack

When handling documents for a meeting, for example, this function sorts pages into ordered sets, or stacks them by page number.

- ☐ The Sort/Stack function cannot be used for some sizes of paper. ■ See page 151.
- ☐ The Sort/Stack functions cannot be used when using OHP sheets or thick paper.
- ☐ The paper curl may increase depending on the paper type, humidity, temperature and so on. If sorter misfeeds occur frequently due to paper curl, reset the paper the other way up.
- ☐ The maximum number of originals and copies that can be set is shown below.

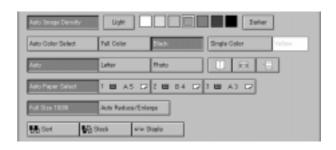
### <Sort>

Maximum number of originals	Maximum number of copies
25 (B4, 8 ¹ / ₂ " x 14"	10
or larger)	
30 (A4, 8 ¹ / ₂ " x 11"	
or smaller)	

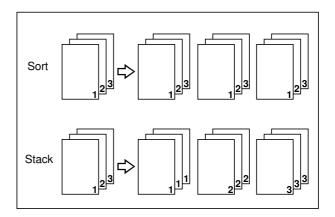
### <Stack>

Maximum number of originals	Maximum number of copies
10	20 (B4, 8 ¹ / ₂ " x 14"
	or larger)
	25 (A4, 8 ¹ / ₂ " x 11"
	or smaller)

Touch the [Sort] or [Stack] key.



- 2 Enter the number of copies using the **Number** keys.
- Set your originals and press the Start key.
- ☐ Copies can also be stapled. ► See page 73, "Manual Staple."



SORT/STACK AND STAPLE

### Staple

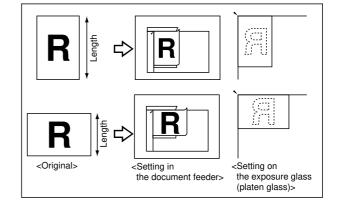
This function staples sorted copies.

- ☐ The Staple function cannot be used for some sizes of paper. 
  See page 151.
- Different sizes of paper cannot stapled.
- The Staple function cannot be used when using OHP sheets or thick paper.
- ☐ If you use paper which is 52 g/m², 13.9 lb thick or more or bent, a staple or paper jam might occur. In this case, set the paper upside down.
- ☐ The stapling position might differ depending on the original direction. Be sure to set an original as shown in the figure.
  - If you copy onto different length of paper, the copies cannot be stapled.
  - The maximum number of originals and copies that can be set is shown below.

Maximum number of originals*	Maximum number of copies
20	10

^{*} If you copy originals exceeding the limit quantity for stapling, the copies are delivered but cannot be stapled.

# Staple



### **Auto Staple**

☐ This function can be used only when your copier is equipped with the optional sorter stapler.

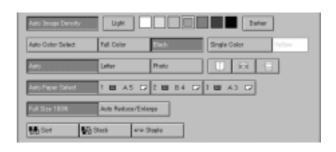
This function staples sorted copies automatically.

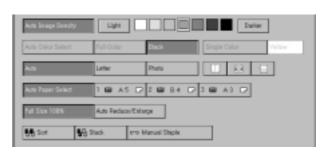
- Touch the [Staple] key.
- 2 Enter the number of copies using the **Number** keys.
- Set your originals in the document feeder and press the **Start** key.
- The copies are stapled automatically when they have been sorted.

### **Manual Staple**

This function staples sorted copies.

- Touch the [Manual Staple] key after copies are sorted.
- The copies are stapled.





### **PROGRAM**

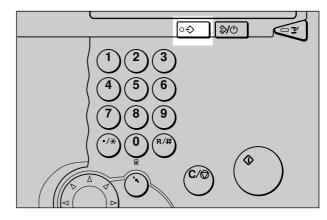
When there are frequently used copy jobs, you can store their settings in a program to execute them repeatedly.

- ☐ To use the Program function, store a job you want to use frequently. This operation is called "Program Memory." Stored settings can be recalled easily by the "Program Recall" function.
- ☐ The Program function can store up to three jobs.
- □ Copy paper size settings are stored as actual sizes, not paper trays. If the same size paper is stored in all trays, trays are selected in the order tray 1, tray 2 and tray 3.
- ☐ Unless you store another setting, stored settings are not cleared even when you turn off the power or press the **Clear Modes/Stand-by** key.
- ☐ Stored programs cannot be deleted. To change a stored program, modify the settings and store them in the program again. 

  See "Program Memory/Recall."
- ☐ Projector unit operations, Area Editing functions, and the number of copies cannot be stored by the Program function.

### **Program Memory/Recall**

- ¶ Specify copy settings that you want to store.
- Press the Program key.
- The Program screen is displayed.



- Touch the [Store] key.
- Select a program number ([1] [3]) to be stored.
- is indicated when the program memory operation is completed.
- A program has been already stored for a number for which is indicated.

### When a program has been already stored (Change)

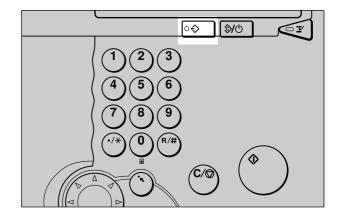
- Onfirm the stored setting and specify whether to overwrite the program.
- ☐ When you overwrite the program, touch the [Yes] key.
- When you cancel storing the program, touch the [No] key and select a number which has not been stored yet.
- □ To know settings stored in a program, see "Program Recall." See page 75.





### **Program Recall**

- Press the **Program** key.
- ☐ The Program screen is displayed.



- 2 Select a program number ([1] [3]) to be recalled.
- $\ \square$  The settings in the selected program are displayed.
- No program is stored for a number for which is not indicated.
- 3 Set your originals and press the **Start** key.



### WHEN COPYING A LARGE ORIGINAL

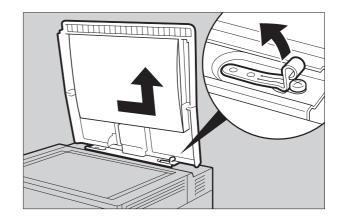
You can copy originals larger than A3, 11" x 17", such as large maps and drawings, by removing the platen cover.

### Removing the platen cover

Slide the platen cover to the right while pulling the pull on the platen cover. When the cover is unlocked, lift it to remove it from the copier.

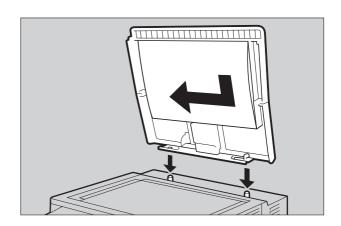
### **Important**

☐ Lift the platen cover with both hands. Place the removed cover on a flat surface such as a desk and protect it from any damages.



### Attaching the platen cover

Fit the holes of the platen cover to the pins on the copier and slide the cover to the left.



### **AREA EDITING**

### WHAT IS AREA EDITING

"Area editing" means to edit only a part of images on an original.

### **Function Combination Chart**

The area editing functions can be combined as shown in the chart below.

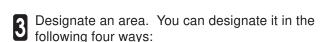
\	Function to be specified later												
		Function name	Full Color Copy	Black Copy	Single Color	Letter	Photo	Color Erase	Color Conversion	Paint	Highlight Color	Delete Area	Save Area
	Function name												
	Full Color Copy			lacksquare	lacksquare	$\circ$	$\bigcirc$	$\odot$	$\circ$	lacksquare	lacksquare		*1
	Black Copy		lacksquare		lacksquare	$\bigcirc$	$\bigcirc$	lacksquare	lacksquare	lacksquare	lacksquare	$\bigcirc$	$\circ$
Ţ	Single Color		lacksquare	lacksquare		$\circ$	$\bigcirc$	lacksquare	lacksquare	lacksquare	lacksquare	•	*1
'n	Letter		$\bigcirc$	$\bigcirc$	$\bigcirc$	/		$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
ō	ğ. Photo		$\circ$	0	0			0	0	0	$\bigcirc$	$\circ$	0
1 S	<u>ഗ</u> Color Erase		$\bigcirc$	lacksquare	•	$\circ$	$\bigcirc$	/	$\circ$	•	lacksquare		*1
ĕ	Color Conversion		$\circ$	•	•	$\circ$	$\circ$	$\circ$		•		•	*1
fie	Paint		•	•	•	$\bigcirc$	$\bigcirc$		•		•	•	$\bigcirc$
Function specified earlier	Highlight Color		•	•	•	0	0		•	•			0
ar.	Delete Area			$\bigcirc$	•	$\bigcirc$	$\bigcirc$	•	•	•			0
er	Save Area		*1	0	*1	0	Q	*1	*1	0	0	$\bigcirc$	

- : Combinable
- Not combinable (A function to be specified later has the priority.)

- *1 These functions cannot be combined for editing images outside the area.
- The "Color Conversion", "Paint", "Highlight Color", and "Delete Area" functions cannot be used for editing images outside the area.
- When a color mode is specified for an area with the "Highlight Color" function, you can select the color mode again when you quit area editing. See page 25, Step 3 in "Highlight Color."
- For the functions that can be used for the entire original, see "FUNCTION COMBINATION CHART". See page 49.

### **BASIC OPERATION OF AREA EDITING**

- Touch the [Area Editing] key.
  - When you have already entered a "user code limiting color modes", the confirmation message is displayed. Since some color modes and functions cannot be used for area editing, confirm the message and touch the [Clear] or [Cancel] key.
- 2 Set your original on the exposure glass (platen glass) and touch the [Scan] key.
- ☐ The scanned image is displayed on the touch panel display.
- Do not move the original after touching the [Scan] key so that the designated area can be copied in the correct position.

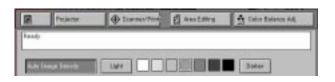


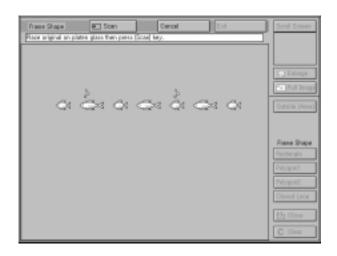
### Rectangle, Polygon 1, Polygon 2, Closed Loop

- See page 82, "DESIGNATING AREAS."
- Select an editing function for inside the area and touch the [Exit] key.
- ☐ "BASIC FUNCTIONS" See page 50.
- □ "When editing an area" in "Color Conversion" 
   See page 21.
- □ "When editing an area" in "Color Erase" 
   See page
  23
- □ "Highlight Color" See page 24, "Paint Area" See page 26.
- □ "Delete Area/Save Area" See page 27.
  - You can specify only one of the "Color Creation 1", "Color Creation 2", "Highlight Color", and "Paint Area" functions in an area.

### When designating two or more areas consecutively

- Touch any of the [Rectangle], [Polygon 1], [Polygon 2], and [Closed Loop] keys to designate an area.
- When designating the same shape of area as the previous one, you can designate it without touching the corresponding key.









5

Touch the [Outside (Area)] key.



Select an editing function for outside the area and touch the [Exit] key.

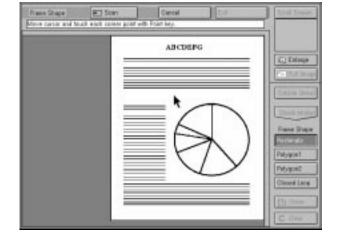


### When changing the editing function for inside the area

- Touch the [Check Modes] key and touch the area for which you want to change the editing function.
- The touched area blinks.



- Touch the [Change Modes] key.
- ☐ To remove the area, touch the [Cancel Area] key.
- ☐ When you touch the [Previous Mode] key, the touch panel display returns to the screen in step 1.
  - Specify another function for the area and touch the **[Exit]** key.
  - 4 Touch the [Previous Mode] key.



### 7

### Touch the [Exit] key.

- If you have not entered a "user code limiting color modes," the entry screen is displayed. Enter the user code. When you touch the [Cancel] key, area editing is cancelled.
- If you do not touch the [Outside (Area)] key, the editing screen for outside the area is displayed.
- □ When you specify the Highlight Color function, the color mode selection screen is displayed. See page 25, Step 6 in "Highlight Color."
- ☐ If you specify a light value for a color function such as Image Density Adjustment and Pastel when the Paint Area or Highlight Color function is selected, a color specified for Paint Area or Highlight Color might be lost.

### 8

### Press the Start key.

- You can use the Image Density Adjustment, Paper Select, and Auto Reduce/Enlarge functions for the entire image of an original. 
  ■ See page 50, "BASIC FUNCTIONS."
- ☐ For other functions, see "Function Combination Chart." See page 78, "Function Combination Chart."
- You cannot select the original image type or color mode for the entire original. The color modes are set as follows for an area and the entire original.

Color mode for an area	Color mode for the entire original
Full Color Copy	Full Color Copy
Black Copy	Color mode specified
Single Color	for the outside of the area



### **DESIGNATING AREAS**

### Operating the Area Designation Screen

☐ The main keys are described below.

**Point** key ...... Sets a point on which the cursor is placed. **Cursor** key .... Moves the cursor  $(\rightarrow)$ .

 When you press the Cursor key after touching the [Scroll Screen] key, the image scrolls on the screen

"OPERATION PANEL" - See page 14.

[Scan] key ...... Scans an original.

[Standard] key ..... Displays the entire image of an original on the touch panel dis-

play.

[Enlarge] key ...... Enlarges an image displayed with the [Standard] key. The magnification changes to 150 %, 200 %, and 300 % in that order each time you touch the

[Enlarge] key.

 The touch panel displays the scale to show the standard original dimensions. This scale is indicated in 10 mm, 1" steps using the upper right corner of an original as the criterion point.

[Close] key ............ Connects the start and end points when the area is designated ([Polygon 1], [Polygon

[Clear] ..... Deletes the last point you have

specified.

[Scroll Screen] .... When you press the Cursor key in the desired direction

key in the desired direction after touching the [Scroll Screen] key, the image scrolls in the direction on the screen.



### How to Designate An Area

- ☐ You can designate an area in the four ways:
- ☐ If you need the standard scale in the vertical/horizontal direction when designating areas, you can enlarge a copy image and display the grids on it. ☐ See page 93, "USER TOOLS, 3 User Programmable Default Mode 2, Editor Grid (Display)."
  - These grids are indicated at the same intervals as the standard scale.

### Rectangle Polygon 1 Polygon 2 Closed Loop

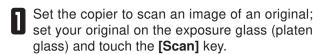
### Number of areas that can be designated

- □ You can designate up to 300 points; you can specify up to 150 points when designating an area with Rectangle and 300 with Closed Loop. When you use Polygon 1 or 2, the number of areas that can be specified decreases as the number of specified points increases in an area.
- □ You can designate up to 25 areas in the vertical direction when an image of an original is displayed on the touch panel display. For example, up to four areas are designated in the vertical direction in the illustration. You must not designate more than 25 areas in this pattern.

If a large, closed-loop area is included, the number of areas that can be designated might be less than 300.



- ☐ If you overlay a new area on an existing one, the area specified later becomes valid.
- ☐ If you designate a lot of areas, the processing speed is lowered slightly.
- When you designate a triangle area, use the [Polygon 2] key.

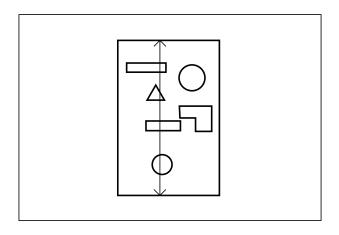


The scanned image is displayed on the touch panel display.

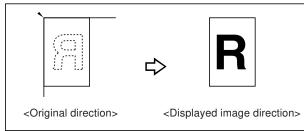
- The relationship between the original direction and the displayed image direction is as shown in the illustration.
- Do not move the original after touching the [Scan] key so that the designated area can be copied in the correct position.
- You cannot set the original in the optional document feeder.



[Rectangle]/[Polygon 1]/[Polygon 2]/[Closed Loop]

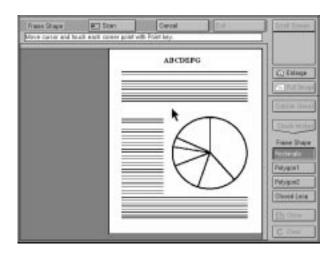




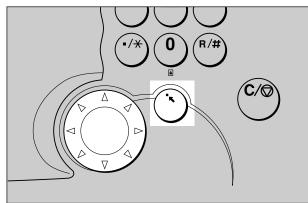


### When using the [Rectangle] key

Confirm that the [Rectangle] key is selected.



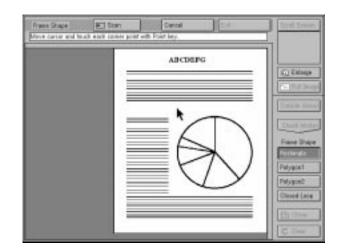
- Designate the first point. Move the cursor to the designated point using the **Cursor** key or your finger and press the **Point** key.
  - To change the designated point, touch the [Clear] key and designate another point.



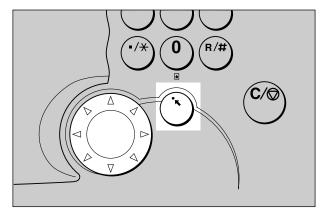
- Designate the second point diagonally.
- ☐ The designated points are connected as a rectangle.

### When using the [Polygon 1] or [Polygon 2] key

Touch the [Polygon 1] or [Polygon 2] key.



- Designate the first point. Move the cursor to the designated point using the Cursor key or your finger and press the Point key.
  - To change the designated point, touch the **[Clear]** key and designate another point.



- 3 Designate the subsequent points.
- ☐ Each time you designate a new point, a side is made.

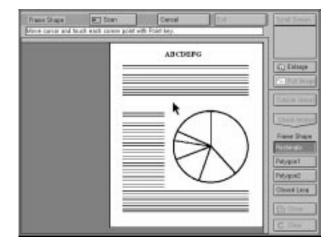
### **Important**

- When using the [Polygon 1] key, designate points horizontally or vertically.
- ☐ You can designate up to 20 points in an area.
- Move the cursor to the last point you have designated, and touch the [Close] key.
- The start and end points are connected and the area is set.

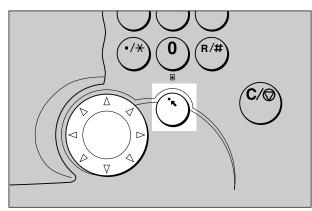
### When using a closed loop

### **Important**

- □ To edit an image effectively, the following conditions must be satisfied:
  - The edge lines of the image must not have any break or light-density part.
  - The edge lines must be of even width and 0.5 mm or more.
  - · The edge lines must be written in black.
  - The edge lines must be written at intervals of 2 mm or more.
- When specifying the Paint or Highlight Color function, part around the edge lines might not be colored as you want or the width of the edge lines might become uneven.
- If you select the Photo mode when you specify Highlight Color in a mode other than the Full Color Copy mode, the Photo mode is switched to the Letter mode.
- You sometimes cannot specify a closed loop area properly if the area to be designated for Closed Loop is colored or crosshatched.
- If you specify Closed Loop on the trailing edge of an original and specify the Centering and Enlarge functions at the same time, the image might not be placed on copy paper properly.
- Touch the [Closed Loop] key.



Designate a point in the loop. Move the cursor to the designated point using the **Cursor** key or your finger and press the **Point** key.

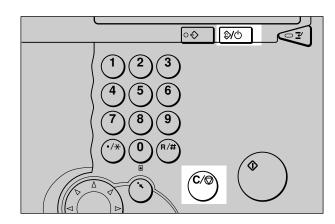


### CHANGING THE COPIER'S SETTINGS

### **CHANGING THE COPIER'S SETTINGS**

You can change the initial settings or specify operational conditions for functions according to the conditions you usually use.

- ☐ When you change the default settings, use a mode different from the usual copy mode. When you have changed the settings, be sure to return the machine to the previous copy mode.
- ☐ When you specify or change the default settings, they are not cancelled even when you turn off the power or press the Clear Modes/Stand-by key unless you change them again or clear them.
- Confirm that the copier is in the ready condition.
- Press the Clear Modes/Stand-by key and then press the Clear/Stop key for three seconds or more.
- The user tool menu is shown on the touch panel display.

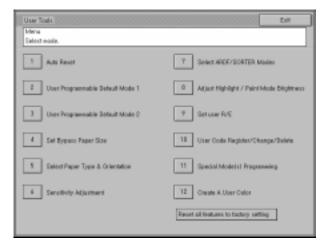


- Touch a number for a user tool item ([1] [12]) you want to adjust.
- ☐ For the functions that can be specified or changed and the methods of these operations, see "User Tool Menu." See page 92.
- Change the copier's settings or specify the operational conditions following the messages displayed on the touch panel display.
- "User Tool Menu" See page 92.

### Returning the machine to the copy mode

- When you have changed the default setting, touch the [Menu] key.
- The user tool menu appears again.
- Touch the [Exit] key on the menu.

  The copier returns to the ready condition.
- You can also press the Clear Modes/Stand-by key to exit from the user tool mode.



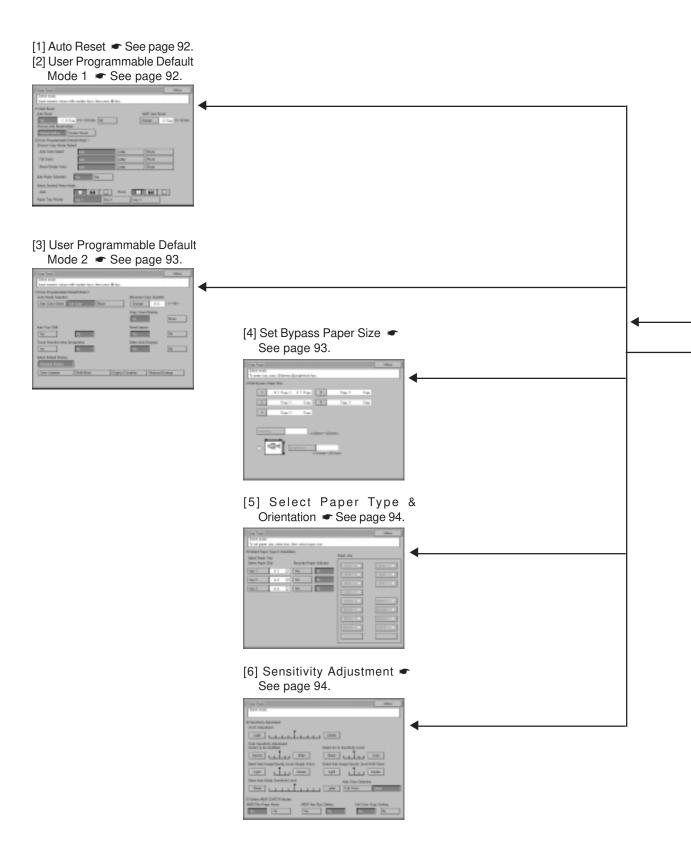
### **Resetting The Copier's Settings**

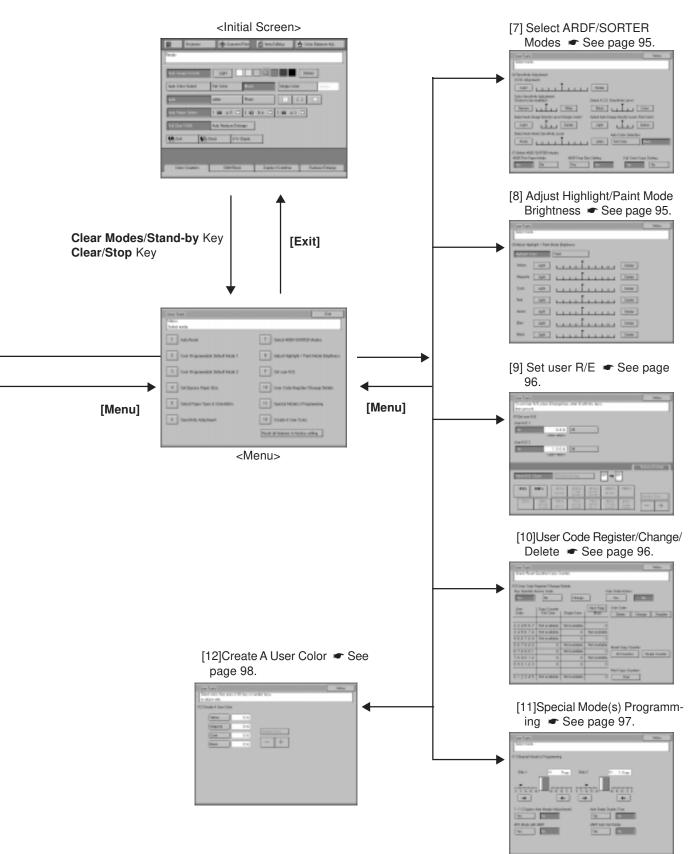
This procedure resets all the copier's settings except those in "[10] User Code Register/Change/Delete" to the factory-shipped values.

- ☐ For changing and canceling the settings in "[10] User Code Register/Change/Delete," see "User Tool Menu." ► See page 92.
- Follow steps 1 and 2 shown in the previous page.
- Touch the [Reset all features to factory setting] key and touch the [Yes] key.
- □ All the copier's settings except those in "[10] User Code Register/Change/Delete" are reset to the factory-shipped values.

### **FUNCTION OVERVIEW**

In screens [1] to [12], press the **Clear Modes/Stand-by** key to return to the initial screen, and touch the **[Menu]** key to return to the main menu.





### **User Tool Menu**

- ☐ See "CHANGING THE COPIER'S SETTINGS" for the way to display the desired user tool item. ► See page 88.
- ☐ Crosshatched parts ( ) indicate factory-shipped settings.

### 1 Auto Reset

Item	Description	Choices (range) and specification method
Auto Reset	Changes the time after which the copier resets itself.	<ul> <li>[Yes]/[No]</li> <li>Enter a value using the Number keys.</li> <li>From 10 to 900 seconds</li> <li>60 seconds</li> <li>Press the Recall/Enter key.</li> </ul>
Choose Auto Reset Mode	Specifies whether the copier enters Stand-by mode at the same time as the Auto Reset function is executed.	• [Default Setting]/ [Screen Saver]
SADF Auto Reset	When you set one original at a time in the optional document feeder, the next original is not fed automatically if you set it in the optional document feeder after a specified period of time. The SADF auto reset function changes this period of time.	<ul> <li>Touch the [Change] key.</li> <li>Enter a value using the Number keys.</li> <li>From 5 to 60 seconds.</li> <li>20 seconds</li> <li>Press the Recall/Enter key.</li> </ul>

### 2 User Programmable Default Mode 1

Item	Description	Choices (range) and specification method
Choose Copy Mode Default (Auto Color Select)	☐ Changes the original image type which is specified when you turn on the power or the current mode is cleared.	• Select the original image type:  [Auto]/[Photo]/[Letter]
Choose Copy Mode Default (Full Color)		[Letter] is the factory- shipped value for Black
Choose Copy Mode Default (Black Single Color)		Copy/Single Color.
Auto Paper Selection	Specifies whether to set the Auto Paper Select mode after powering on or when the current mode is cleared.	● [Yes]/[No]
Select Desired Photo Mode (Auto)	Changes the photo type which is specified when you turn on the power or the current mode is cleared.	● Select the photo type:
Select Desired Photo Mode (Photo)	"Original Image Type Selection" * See page 52.	
Paper Tray Priority	This function changes the paper tray which is selected after powering on or when the current mode is cleared. The function also changes the paper tray which is selected when the Auto Paper Select mode is not specified.	<ul> <li>Select the paper tray: [Tray 1]/[Tray 2]/[Tray 3]</li> <li>The third tray is not displayed for the 1000-sheet paper tray unit because this unit is a two-layer paper tray table.</li> </ul>

### 3 User Programmable Default Mode 2

Item	Description	Choices (range) and specification method
Color Mode Selection	Changes the color mode which is specified after powering on or when the current mode is cleared.	• Select the color mode:  [Auto Color Select]/  [Full Color]/[Black]
Auto Tray Shift	Specifies whether to select another tray when paper runs out.	• [Yes]/[No]
Touch Sensitive Area Designation	Specifies whether points are set automatically by touching the screen when designating an area.  If you specify this function, you need not touch the <b>Point</b> key to set a designated point.	① [Yes]/[No]
Maximum Copy Quantity	Changes the maximum number of copies that can be set.	<ul> <li>Touch the [Change] key.</li> <li>Enter a value using the Number keys.</li> <li>From 1 to 99.</li> <li>99 sheets</li> <li>Press the Recall/Enter key.</li> </ul>
Copy Count Display	Specifies whether the copy counter shows the number of copies made or the number of copies remaining to be made.	• [Up]/[Down]
Panel beeper	Specifies whether the beeper sounds or not when you press a key.	① [Yes]/[No]
Editor Grid (Display)	Specifies whether the grids are displayed on a magnified image when designating an area.  ☐ If you specify this function, the grids are displayed at 10 mm or 1 inch intervals.	① [Yes]/[No]
Select Default Display	Specifies the function which is displayed after powering on or when the current mode is cleared.  When you want to set a duplex copying function, touch the [Duplex] key even if combination copying and two-sided copying functions are not available.	● Select the function:  [Standard Display]/  [Color Creation]  /[Shift/Book]  /[Duplex]  /[Reduce/Enlarge]

### 4 Set Bypass Paper Size

Item	Description	Choices (range) and specification method
Set Bypass Paper Size	Specifies the paper size which is displayed when selecting the [Odd Size] key for copying from the bypass feed table.	<ul> <li>Touch one of the [1] to [5] keys.</li> <li>Enter the width using the Number keys.</li> <li>Width: 432 mm,17.0" (140 - 432, 5.6"~ 17.0")</li> <li>Touch the [Lengthwise] key.</li> <li>Enter a value using the Number keys.</li> <li>Length: 297 mm,11.7" (100 - 297, 4.0"~11.7")</li> <li>Press the Recall/Enter key.</li> </ul>

### 5 Select Paper Type & Orientation

Item	Description	Choices (range) and specification method
Select Paper Type & Orientation	Specifies the size of paper set in the optional paper tray.  Important  If the specified paper size differs from the size of paper set actually in the paper tray, a paper jam might occur because the paper size is not detected correctly.	<ul> <li>Touch one of the [Tray 1] to [Tray 3] keys. See "Paper Tray Priority."  See page 92.</li> <li>Select the paper paper size and direction.</li> <li>Metric version</li></ul>
Recycled Paper Indicator	Sets the touch panel display to indicate the paper types set in each paper tray.  If you specify this function, "R" is displayed.	<ul> <li>Touch one of the [Tray 1] to [Tray 3] keys.</li> <li>See "Paper Tray Priority."  See page 92.</li> <li>②[Yes]/[No]</li> </ul>

### 6 Sensitivity Adjustment

Item	Description	Choices (range) and specification method
U.C.R adjustment (Black toner adjustment)	You can adjust the amount of black toner within 9 levels when making copies in full color.  Specify "Darker" when you want to copy letter parts clearly in black, and "Lighter" if an entire image is blackish.	Touch the [Light] or [Dark] key.
Color Sensitivity Adjustment (Colors to be modified)	You can adjust the width of colors to be erased or converted within 5 levels.  For example, when you specify yellow with the color width set to "Wide," other colors close to yellow, such as orange and yellowish green, are also specified. When you set the color width to "Narrow," only yellow is specified.	● Touch the [Narrow] or [Wide] key.
Select A. C. S. Sensitivity Level (Auto color selection)	When in the Auto Color Select mode, you can specify 5 levels of standard with which the copier identifies whether an image of an original is "Color" or "Black."  The copier easily identifies black originals when you specify a level close to "Black", and color originals when you specify a level close to "Color."	● Touch the [Black] or [Color] key.
Select Auto Image Density Level (Single Color)	The "Auto Image Density" function sets the copier to make copies in appropriate background density. This background density can be adjusted within 4 levels.  The "Full Color" and "Black/Single Color" modes can be adjusted separately.	● Touch the [Light] or [Dark] key.
Select Auto Image Density Level (Full Color)	☐ Use this function to adjust the level of background color erase specified automatically. When you specify a darker value, dark background colors are not erased easily. When you specify a lighter value, dark colors are also erased easily.	

Item	Description	Choices (range) and specification method
Select Auto Mode Sensitivity Level	When in the "Auto" mode, you can specify 9 levels of standard with which the copier identifies whether an image of an original is "Letter" or "Photo."  The copier should be set to lean towards the "Letter" mode if letter part is blurred or unclear, and the "Photo" mode if the edges of a copy are blackish when copying a photograph of which density changes largely.	● Touch the [Letter] or [Photo] key.
Auto Color Selection	When in Auto Color Select mode, you can set the copier to use either the "Black" or "Color" mode preferentially.  □ Select the mode (Black or Color) used frequently in the "Auto Color Select" mode.	● [Full Color]/[Black]

### 7 Select ARDF/SORTER Modes

- ☐ This group is displayed only when you attach the optional unit (Document feeder or sorter stapler).
- ☐ If your copier is the sorter stapler but not equipped with the document feeder, only "Full Color Sorting" is displayed. If your copier is the document feeder but not equipped with the sorter stapler, only the document feeder-related functions are displayed.

Item	Description	Choices (range) and specification method
ARDF: Thin paper mode	Adjusts the document feeder so that thin originals (40 - 52 g/m², 10.7 - 13.8 lb) will not be damaged when they are set in the optional document feeder.	• [Yes]/[No]
ARDF: Free Size Setting	You can set the copier to feed originals of different sizes and directions from the optional document feeder at a time.	• [Yes]/[No]
Full Color Sorting	You can set the copier to disable the Sort/Stack and Staple functions (sorter stapler is required) when you make copies in the Full Color or Auto Color Select mode.  Setting in the optional document feeder  A4D  A4D	• [Yes]/[No]

### 8 Adjust Highlight/Paint Mode Brightness

Item	Description	Choices (range) and specification method
Adjust Highlight	Changes the background or paint color density which is specified when you turn on the power or the current mode is cleared.	● Highlight Color/ Paint  Paoch the [Light] or
Paint Mode Brightness		[Dark] key to adjust the density.

### 9 Set user R/E

Item	Description	Choices (range) and specification method
User R/E 1	You can store or change frequently used magnifications other than the fixed magnifications.	• [On]/[Off] • Enter a value using the
User R/E 2		Number keys. • From 25 to 400 % (in 1 % steps) • Press the Recall/Enter key.

### 10 User Code Register/Change/Delete

Item	Description	Choices (range) and specification method	
Key Operator Access Code	Sets the key operator access code (6 digits or less) to manipulate the accounting mode.  You can also register or change the key operator access code.  When you register the key operator access code, you cannot use all the functions in "[10] User Code Register/Change/Delete" unless you enter it.  If you cannot remember your access code, contact your service representative.	● [Yes]/[No] To change an existing code, touch the [Change] key. ② Enter a 6-digit access code using the Number keys. ③ Touch the [Enter] key.	
User Code Access	Specifies whether to manage the copier with user codes.	<ul> <li>Touch the [Yes] key.</li> <li>Select a color mode to be managed with user codes.</li> <li>[Full Color]/[Single Color]/[Black]</li> <li>Touch the [Exit] key.</li> </ul>	
Register user code	Registers your user code.  You can register up to 20 codes.  A user code must be a 1-digit to 6-digit number.	<ul> <li>[Register]</li> <li>Enter a user code using the Number keys.</li> <li>From 0 to 999999</li> <li>Press the Recall/Enter key.</li> <li>When registering a user code, specify a color mode in which the user code can be used.</li> <li>[Full Color]/</li> <li>[Single Color]/[Black]</li> </ul>	
Change user code.	Even if you change your user code, the user code counter is not cleared.	<ul> <li>Touch the [Change] key.</li> <li>Enter a user code to be changed.</li> <li>Press the Recall/Enter key.</li> <li>Enter a new user code.</li> <li>Press the Recall/Enter key.</li> </ul>	

Item	Description	Choices (range) and specification method	
Delete user code.	If you delete your user code, the user code counter is cleared automatically.	<ul> <li>Touch the [Delete] key.</li> <li>Touch the [User Code] or [Delete All] key.</li> <li>When you have entered a user code, press the Recall/Enter key.</li> <li>Touch the [Yes] key.</li> </ul>	
Reset Copy Counter	Resets a user code counter to "0".	<ul> <li>Touch the [Single Counter] key.</li> <li>Enter a user code for a counter to be cleared using the Number keys.</li> <li>Press the Recall/Enter key.</li> <li>Touch the [Yes] key.</li> </ul>	
	Resets all the user code counters to "0".	<ul><li>Touch the [All Counters] key.</li><li>Touch the [Yes] key.</li></ul>	
Copy Counter	Shows the number of copies made using each user code.	• You can use the [Next Page] key to show the number of copies made for another user code.	
Print Copy Counters	You can print data (number of copies made) for all user code counters. This data is printed on A4□, 8 1/2" x 11"paper.	Touch the [Print] key. Press the Start key to print the counter data.	

**11 Special Mode(s) Programming**☐ If your copier is not equipped with the optional document feeder, the ADF-related functions are not displayed.

Item	Description	Choices (range) and specification method
Margin Adjustment	Changes the margin direction and width which are set immediately after powering on or when Stand-by mode is cleared or the copier is reset automatically.	<ul> <li>Side 1 L 5mm, 0.2" Side 2 L 10mm, 0.4"</li> <li>Specify a value using the [→] and [←] keys.</li> <li>From 1 to 20 mm, 0.1" to 0.8".</li> </ul>
1 → 2 Duplex Auto Margin Adjust(ment)	Specifies whether to make a margin on the back side automatically in "1 Sided $\rightarrow$ 2 Sided" copying.	• [Yes]/[No]
Auto Empty Duplex Tray	Specifies whether to deliver the last copy with its reverse side blank if you set an odd number of originals in "1 Sided → 2 Sided or Combine" copying from the optional document feeder.  ☐ This function is invalid when you set your originals sheet by sheet on the exposure glass (platen glass) or in the optional document feeder.	① [Yes]/[No]
APS Mode with ARDF	Specifies whether to set "Auto Paper Select" mode automatically when originals are set in the optional document feeder.	
ARDF Auto Sort Mode	Specifies whether to sort copies automatically when the number of originals and copies is two or more.	① [Yes]/[No]

### 12 Create A User Color

Item	Description	Choices (range) and specification method
Create A User Color	You can create and register only a color.  If you register a user color, you can use it in the Single Color, Paint Area, and Auto Color Calibrator modes in area editing. For the relationship between color tones and entered values, see "USER COLOR CREATION."  See page 34.  □ You cannot delete a registered color. To change a registered color, register a different one.  Important  □ When making copies using a user color, the color tone varies slightly depending on the copier's condition.  □ The copier might optimize an entered value so that originals are duplicated effectively. Therefore, colors on copies made in the Letter mode might slightly differ from those in the Photo mode.  □ In the shift/book editing and area editing modes, user colors differ slightly from those in other modes.	<ul> <li>O [Yellow]/[Magenta]/         [Cyan]/[Black]</li> <li>O [+] [-]/[Number Keys].</li> <li>O When selecting the         [Number Keys] key,         enter a value using the         Number keys.</li> <li>O Press the Recall/Enter         key.</li> </ul>

## WHAT TO DO IF SOMETHING GOES WRONG

### IF YOU CANNOT MAKE COPIES AS YOU WANT

The following table shows the causes of problems and the corrective actions when you cannot make copies as you want.

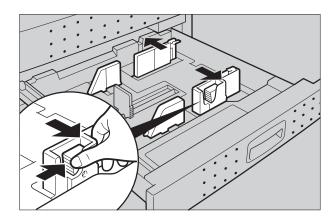
Problem	Cause	Action
☐ Copies appear dirty.	The image density is too dark.	Adjust the image density.  See page 51, "Image Density Adjustment."
		• Touch the [Image Adj.] key to adjust the background density. • See page 30, "Background Density Control."
☐ The reverse side of an original image is copied.	The image density is too dark.	Adjust the image density. See page 51, "Image Density Adjustment"
		• Touch the [Image Adj.] key to adjust the background density. • See page 30, "Background Density Control."
		Copy the original with the same size of black paper laid under it.
☐A shadow is copied when copying a pasted	The image density is too dark.	Adjust the image density. See page 51, "Image Density Adjustment."
original.		Set the original in a different direction.
		Put mending tape on the bound part.
☐ An image not on the original appears on the copy.	The exposure glass (platen glass), platen cover, or ADF belt is dirty.	Clean them. See page 128, "MAINTAINING YOUR COPIER."
☐ A copy image is blurred.	An improper kind of paper is set.	<ul> <li>Set the right kind of paper in the paper tray. See page 38.</li> <li>Copies might be blurred if you copy onto rough grain, coated, or damp paper.</li> </ul>
☐ Parts of an image are not copied.	The original is not set correctly.	Set the original correctly.  See page 47, "SETTING ORIGINALS."
	An improper paper size is selected.	<ul> <li>Select the proper paper size.</li> <li>See page 53, "Copy Paper Selection."</li> </ul>
☐ An original image is not copied.	The reverse side of the original is set.	• Set the original face down on the exposure glass (platen glass), and face up in the optional document feeder. • See page 47, "SETTING ORIGINALS."
□ A moire pattern is produced on copies.	Moire patterns are produced due to an overlap of grid points	You might be able to avoid moire patterns by slanting an original slightly when setting it.
	or lines arranged regularly in processing an image.	When the original image type is set to "Letter," change the setting to "Auto (Letter/Photo)" or "Photo."
		• Enter "Sharp/Soft" mode touching the [Image Adj.] key and set the value to a softer setting.  ■ See page 31, "Sharp/Soft."
☐ The color tone of copies is different from that of originals.	The color balance is thrown off.	• Touch the [Color Balance Adj.] key to adjust the color tones.  ► See page 28, "Color Balance Adjustment."
☐ The color tone of copies is completely different from that of originals.		Contact your service representative.

Problem	Cause	Action
□A copy image is un-	An improper original image type	Specify the original image type as follows.
clear.	is selected.	To copy the letter area of an original (e.g., a map) clearly: "Letter"
		To copy an original with mixed photo and letter areas: "Auto (Letter/Photo)"
		To copy a photo or picture original: "Photo"
		<ul> <li>Enter the "Sharp/Soft" mode touching the [Image Adj.] key and set the value to a sharper setting.</li> <li>See page 31, "Sharp/Soft."</li> </ul>
Letter and photo areas are not separated and the text or photographs are not copied clearly.	Letters consisting of grid points or light-density letters are copied.	Use the user tool "Select Auto Mode Sensitivity Level" to set the value closer to "Letter" for the standard with which the copier identifies whether an image of an original is "Letter" or "Photo."    ✓ See page 95, "USER TOOLS, Select Auto Mode Sensitivity Level."
	High-contrast photographs are copied.	Use the user tool "Select Auto Mode Sensitivity Level" to set the value closer to "Photo" for the standard
	Photographs consisting of thin lines arranged continuously at narrow intervals are copied.	with which the copier identifies whether an image of an original is "Letter" or "Photo." • See page 95, "USER TOOLS, Select Auto Mode Sensitivity Level."
Color areas of an original are copied in black when the Auto Color Select mode is selected.	The original contains an area of color that is too small or too thin.	• Use the user tool "Select A, C, S, Sensitivity Level" to set the value closer to "Color" for the standard with which the copier identifies whether an image of an original is "Color" or "Black."    ■ See page 94, "USER TOOLS, Select A, C, S, Sensitivity Level (Auto color selection)."
☐ A black and white original is copied in color when the Auto Color Select mode is selected.	An original of which background has a light color (e.g., a news- paper and color paper) is cop- ied.	• Use the user tool "Select A, C, S, Sensitivity Level" to set the value closer to "Black" for the standard with which the copier identifies whether an image of an original is "Color" or "Black."  See page 94, "USER TOOLS, Select A, C, S, Sensitivity Level (Auto color selection)."
☐ Solid colors at the lead-	Too much curl is produced on	• Try to turn over the stack of paper in the paper tray.
ing or trailing edge of two-sided copies are faint or a different color.	the paper after making the first side of copies.	Use lighter image density originals (especially at the trailing edge area) for the first side of copies.
		• If these are not successful, increasing the blank margin (up to 10 mm/0.4") at the leading and trailing edges will improve the copy image. Contact your service representative for this case.

### LE IS LIT: LOADING PAPER

This section describes the procedure for loading paper when the paper tray runs out of paper.

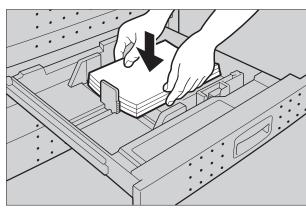
- ☐ For the paper types and sizes that can be set, see "PAPER." ► See page 38.
- ☐ You can change the paper size. ► See page 41, "CHANGING PAPER SIZE."
- Pull out the tray for which paper loading is indicated.
- While pressing the release levers on the front and rear guides, slide the front and rear guides outward.



3 Square the paper and set it in the tray.

### **Important**

- Do not stack paper over the limit mark.
- ☐ Shuffle the paper before setting it in the tray.
- While pressing the release levers on the front and rear guides, slide the front and rear guides to the paper size you want to use.
- Push the paper tray in until it stops.



### L IS LIT OR BLINKING: ADDING TONER

This section describes the procedure for adding toner when little or no toner remains.

### ⚠ Warning

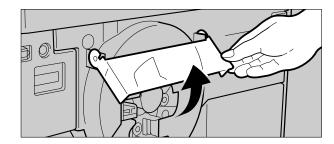
• Do not incinerate the used toner bottle. Toner dust might ignite when exposed to open flame. Dispose of the used toner bottle according to local regulations.

### **Important**

- ☐ If you use toner other than the specified, a fault might occur.
- ☐ When replacing the toner cartridge, do not turn off the power. If you turn off the power, specified functions and number of copies are cleared. Replace the toner cartridge with the power turned on and close the front cover. Then you can press the **Start** key to continue the suspended copy run.
- ☐ For the toner storage, see "TONER." See page 40.
- 🗖 Even if 🚨 blinks, you can make about 10 copies. However, you should replace the toner as soon as possible.
- □ 🖾 is lit if no toner remains. In this case, you cannot make any copy.
- ☐ Do not close the front cover with no toner cartridge set.

### **Adding Black Toner**

- Open the copier's front cover gently; pull it towards you while holding the left and right knobs with both hands.
- Open the clear cover.



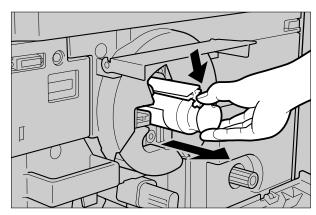
Tap the toner cartridge lightly two or three times.



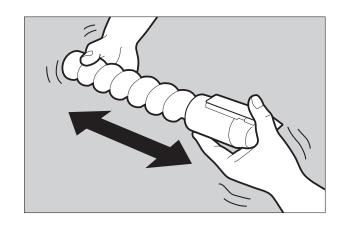
Pull out the toner cartridge while holding the hook.

### **Important**

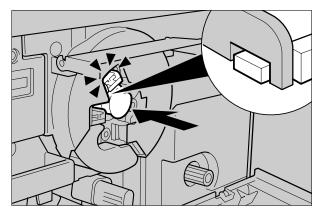
To protect the toner from spilling out, you must pull the toner cartridge straight out in the horizontal direction and must not rotate it.



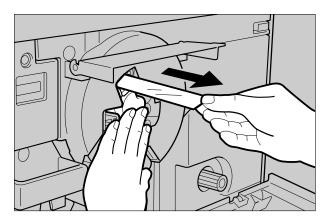
Shake the new cartridge left and right 10 to 15 times to make the toner spread evenly.



Insert the toner cartridge into the copier with the seal face up until it clicks.



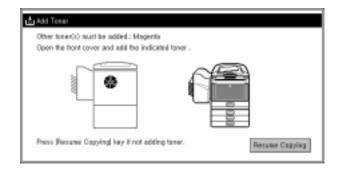
Remove the seal while pressing the toner cartridge.



- Close the clear cover and the copier's front cover by pressing the left and right knobs with both hands.
- □ 🕹 goes off.
- Do not open the front cover until the message "Please wait" disappears.

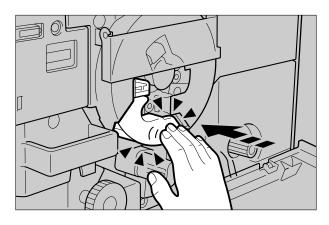
### If 📩 is blinking or lit again.

- Specify whether to replace another toner cartridge.
- When you quit replacing the cartridge and resume copying, touch the [Resume Copying] key.
- □ When you replace another toner cartridge continuously, see "Adding Color Toner." See page 105.



### **Adding Color Toner**

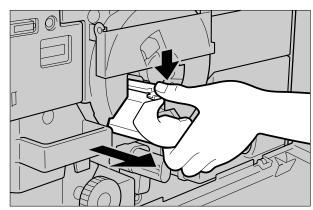
- $\hfill\Box$  When adding toner, be sure to confirm the toner color.
- Open the copier's front cover gently; pull it towards you while holding the left and right knobs with both hands.
- 7 Tap the toner cartridge lightly two or three times.



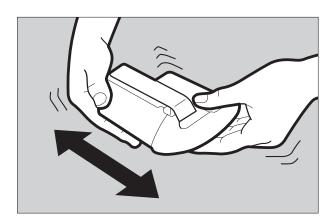
Pull out the toner cartridge while holding the hook.

### **Important**

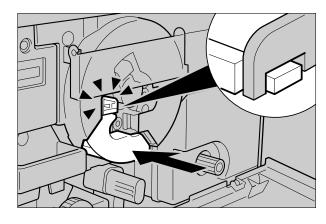
☐ To protect the toner from spilling out, you must pull the toner cartridge straight out in the horizontal direction and must not rotate it.



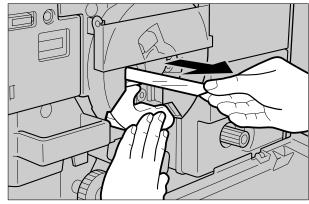
Shake a new cartridge left and right 10 to 15 times to make the toner spread evenly.



Insert the toner cartridge into the copier until it clicks.



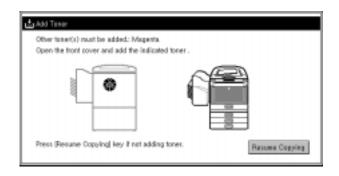
Remove the seal while pressing the toner cartridge.



- Press the left and right knobs with both hands to close the front cover.
- □ 🛓 goes off.
- ☐ Do not open the front cover until the message "Please wait" disappears.

### If 📩 is blinking or lit again.

- Specify whether to replace another toner cartridge.
- When you quit replacing the cartridge and resume copying, touch the [Resume Copying] key.
- When you want to make copies in full color, replace another toner cartridge.
- ☐ When you replace another color toner cartridge continuously, go back to step ①. When you replace the black toner cartridge, see "Adding Black Toner." ► See page 103.



### **¾ IS LIT: CLEARING MISFEEDS**

If an original or paper misfeed occurs, one or more misfeed locations are displayed on the operation panel. This section describes the procedure for clearing misfeeds.



 Since some parts of the copier are supplied with high electrical voltage, touch only parts specified in the instructions on the stickers inside the machine's cover.

### **Important**

When clearing misfeeds, do not turn off the power. If you turn off the power, specified functions and number of copies are cleared.

### **Important**

Do not tear misfed paper when removing it. If a piece of paper remains in the copier, a paper misfeed might recur or another failure might occur.

### **Important**

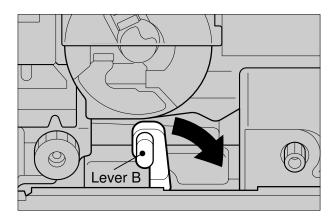
If a paper misfeed occurs repeatedly, contact your service representative.

- ☐ Two or more misfeed locations might be displayed at a time. In this case, check all the displayed locations.
- ☐ You can find a sticker explaining how to remove misfed paper inside the copier's front cover.

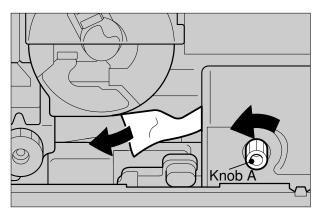
### When A and/or B Is Lit

Open the copier's front cover gently; pull it towards you while holding the left and right knobs with both hands.

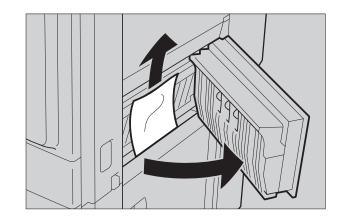
Pull lever B to the right.



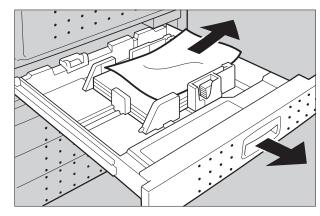
Remove misfed paper while rotating knob A counterclockwise.



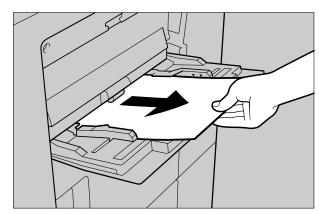
If you cannot find the misfed paper by rotating knob A, open the right side cover and remove misfed paper.



If you cannot find the misfed paper by opening the right side cover, pull the paper tray and remove misfed paper.



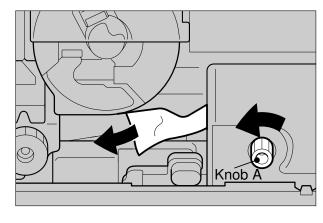
If a paper misfeed occurs in the bypass feed table when you copy from it, remove the misfeeds from the bypass feed table.



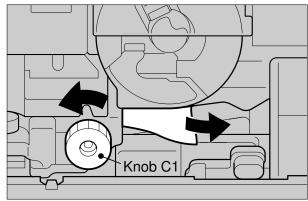
- Return lever B to the original position.
- Close the copier's front cover by pressing the left and right knobs with both hands.
- o If you opened the right side cover, close it.
- The Start key turns green.

#### When C Is Lit

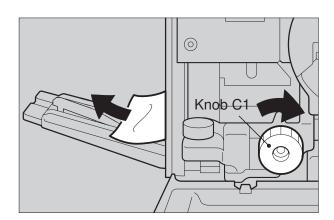
- Open the copier's front cover gently; pull it towards you while holding the left and right knobs with both hands.
- Pull lever B to the right.



Remove the misfed paper while rotating knob C1 counterclockwise.



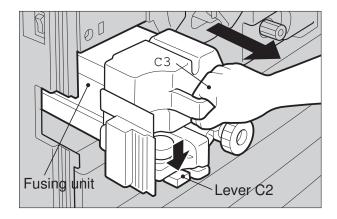
- If jamming paper is not fed, rotate knob C1 clockwise and remove misfeeds.
- ☐ When your copier is equipped with the sorter stapler (option), see "When R Is Lit." ► See page 112.



If misfed paper is not fed by rotating knob C1, hold grip C3 while pressing lever C2 to pull out the fusing unit.

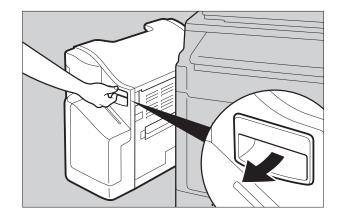
#### 🛕 Caution

 The fusing unit is very hot. Do not touch any part other than lever C2 and grip C3. Otherwise, a burn might occur.



#### When your copier is equipped with the sorter staler (option)

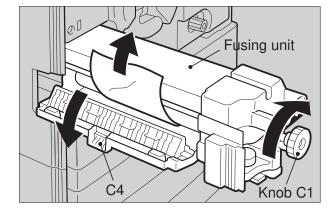
• Unlock the sorter stapler by pulling the grip inside. Then open the sorter stapler.



Pull C4 pull to the left and rotate knob C1 clockwise to remove misfed paper.



 The fusing unit is very hot. Do not touch any part other than knob C1 and C4. Otherwise, a burn might occur.

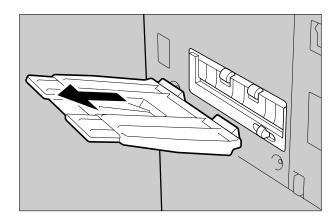


- Return the C4 to the original position. Then press the C3 grip to return the fusing unit to the original position.
- Press the fusing unit into the copier lightly until it stops.
- Return lever B to the original position.
- If you opened the sorter stapler, close it.
- Olose the copier's front cover by pressing the left and right knobs with both hands.
- ☐ The Start key turns green.

#### When D Is Lit

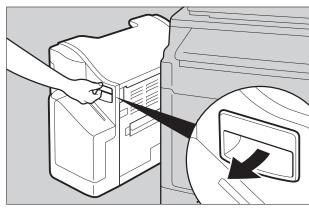
0

Remove the copy tray from the copier.

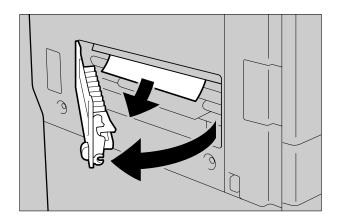


When the copier is equipped with the sorter stapler (option) :

• Unlock the sorter stapler by pulling the grip from inside. Open the sorter stapler.



- 2 Open the cover by pulling knob D, and remove misfed paper.
- ☐ For the position of knob C1, see the illustration of Step ☐ in "When C Is Lit."



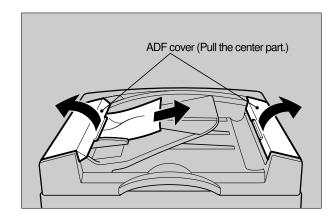
- Close the cover and return the copy tray to the original position.
- ☐ The **Start** key turns green.
- ☐ If you opened the sorter stapler, close it.

#### When P Is Lit

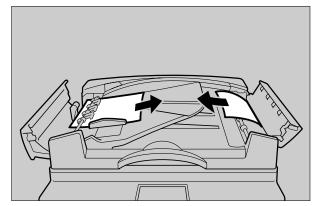
Remove the originals from the optional document feeder and open the ADF covers.

#### **Important**

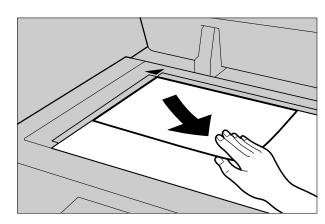
☐ When opening the ADF covers, pull their center parts. If you pull the edges, a failure might occur.



Remove misfed paper.

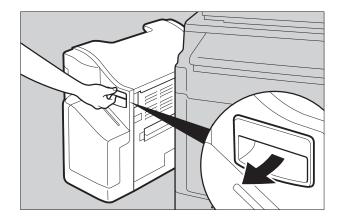


- **3** Lift the document feeder and remove the original from the exposure glass (platen glass).
- Close the ADF covers.
- ☐ The Start key turns green.

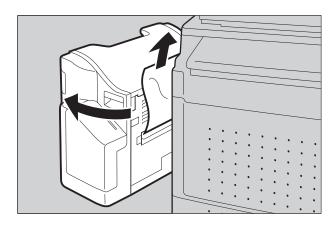


#### When R Is Lit

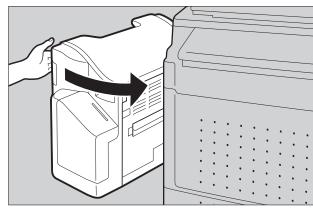
Unlock the sorter stapler (option) by pulling the grip inside.



Open the sorter stapler and remove misfed paper.

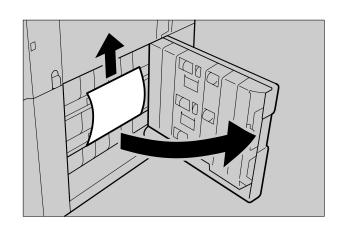


Close the sorter stapler by pressing it until it clicks.



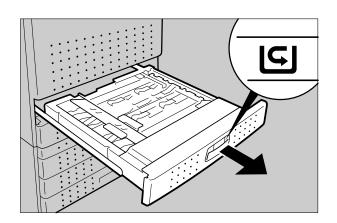
#### When Y Is Lit

- Open the right side cover of the optional paper tray unit and remove misfed paper.
- Close the right side cover.

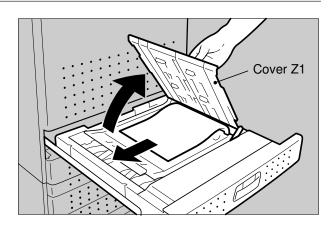


#### When Z Is Lit

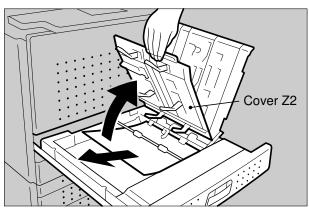
Pull out the two-sided copying tray until it stops.



2 Lift cover Z1 and remove misfed paper.

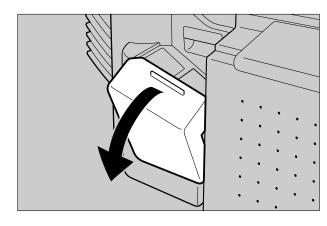


- If there is no misfeed in Z1, lift cover Z2 and remove misfed paper.
- Lower the covers Z1 and Z2 and push the two-sided copying tray in until it stops.
- ☐ The **Start** key turns green.

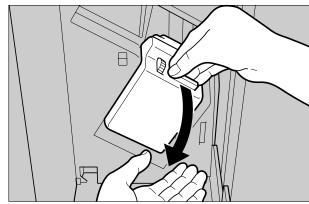


#### 

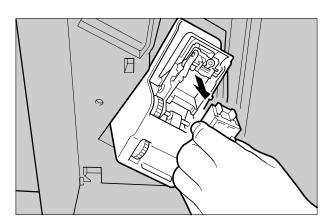
- ☐ Even when you specify the "Staple" function after replacing the staple cartridge, copies are not stapled but nipped without staples 5 to 7 times while the sorter stapler is adjusting the staple sheet position.
- ☐ If you use a staple cartridge other than the specified, copies might not be stapled or a staple jam might occur.
- Open the front cover of the sorter stapler.



Pull down the staple unit.



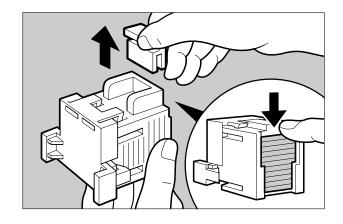
Remove the staple cartridge from the unit.



- Pull out the stopper from a new cartridge with the top of the cartridge face up.
- If you remove the stopper with the top of the cartridge face down, staple sheets might fall out off the cartridge.

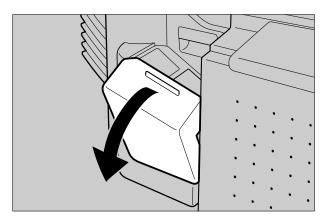
#### **Important**

- ☐ If any staple sheets extend from the mouth of the new staple cartridge, press them back into the cartridge. If you set the cartridge with staple sheets extending, a staple sheet jam might occur.
- Press the cartridge with its top face up until it clicks.
- ☐ The cartridge is set in the staple unit.
- Return the staple unit to the original position.
- 7 Close the front cover of the sorter stapler.
- ☐ **L** goes off and the **Start** key turns green.

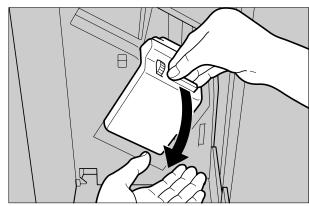


#### **REMOVING JAMMED STAPLES**

- ☐ Staples might be jammed repeatedly due to bent paper. In this case, set the paper upside down.
- ☐ Even when you resume a "Staple" operation after removing jammed staples, copies are not stapled but nipped without staples 5 to 7 times while the sorter stapler is adjusting the staple sheet position.
- Open the front cover of the sorter stapler.

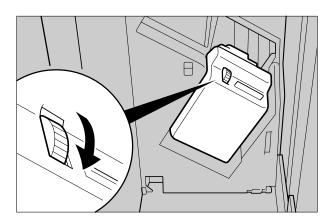


Pull down the staple unit.



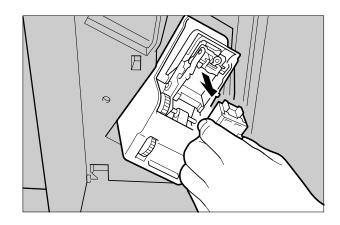
#### If you cannot pull down the staple unit

- Rotate the knob downward 8 to 9 times. This separates the staple unit and paper so that the staple unit can be pulled down.
- 2 Pull down the staple unit.

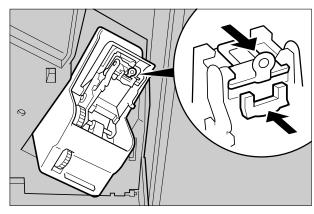


3

Remove the staple cartridge from the unit.



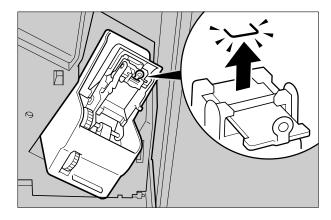
- Pull down the staple cover while pressing the hook.
- ☐ If you cannot pull the staple cover, rotate the knob on the staple unit 7 to 8 times as described in step **①**.



Remove jammed staples and staple sheets.

#### **Important**

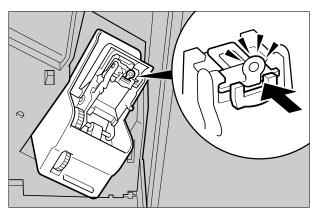
- Remove the jammed staples and staple sheets carefully without applying an excessive force.
- ☐ Staples might be removed together with staple sheets.

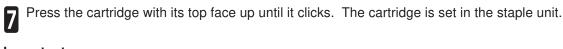


Close the staple cover by pressing it until it clicks.

#### **Important**

If you do not close the staple cover completely, copies might be nipped without staples or a paper jam might occur.





#### **Important**

- ☐ If any staple sheets extend from the mouth of the new staple cartridge, press them back into the cartridge. If you set the cartridge with staple sheets extending, a staple sheet jam might occur.
- Do not set the removed staples or staple sheets in the cartridge again. They cannot be used for stapling.
- ☐ If you cannot set the cartridge in the unit, go back to step 6 and close the staple cover completely. Then set the staple cartridge.
  - Return the staple unit to the original position.
- Olose the front cover of the sorter stapler.
- ☐ The Start key turns green.
- ☐ When you touch the **[Manual Staple]** key, a staple operation resumes but copies are nipped without staples while the sorter stapler is adjusting the staple sheet position.

#### IF YOU CANNOT START COPYING

This section describes the corrective action to be taken if you cannot start copying.

#### ♦ If an error message is displayed

The following table describes the typical error messages. If a message not described below is displayed, follow the instruction shown in the message.

Message	State/Cause	Action
□ Please wait	This message is displayed when setting the main switch to "On" or after adding toner.	<ul> <li>Wait for a while.</li> <li>When the message "Please wait" is displayed, you can preset copy settings.  See page 43, "Auto Start."</li> <li>When you set the main switch to "On," it takes about 6 minutes for the copier to enter the ready condition.</li> </ul>
	About 50 copies are made.	<ul> <li>This message is displayed for about 17 or 11 seconds to maintain the image quality when 50 copies are made. Wait for a while. If the message is displayed for 11 seconds, it also appears during a copy run and the copy run is restarted automatically.</li> <li>This message might be displayed for 11 seconds even when less than 50 copies are made.</li> </ul>
	About 150 copies are made.	<ul> <li>This message is displayed for about 120~180 seconds or 17 seconds to maintain the image quality when 150 copies are made. Wait for a while.</li> <li>This message is displayed for about 22 seconds only when the optional document feeder is used.</li> </ul>
	Originals with large letter or photo areas are copied.	<ul> <li>This message is displayed for about 47 seconds when you make about 50 copies of originals with large letter or photo areas. Even when the message is displayed during a copy run, the copy run is restarted automatically.</li> <li>This message might be displayed for some original types even when less than 50 copies are made.</li> </ul>
□ Cannot detect original size, please select paper size.	• An improper size of originals is set. • See page 37, "Original Sizes Difficult To Detect."	If an improper size of originals is set, select the paper size using the Paper Selection key instead of the "Auto Paper Select" function, and reduce/enlarge copies using a method other than the "Auto Reduce/Enlarge" function. When you press the Start key, however, the originals are copied onto the paper selected currently.
	No original is set.	Set your originals.
	• The "Centering" function is specified.	Lift and lower the platen cover or optional document feeder and press the <b>Start</b> key.
☐ Check paper size and direction.	The paper direction differs from the original direction.	Set the originals in the same direction as the copy paper.
		When you press the <b>Start</b> key, the originals are copied onto the paper selected currently.
	The selected paper size and di- rection do not fit the specified magnification.	Set the paper of which size and direction are the same as the originals.

Message	State/Cause	Action		
☐ Cannot duplex this size paper.	The selected size of paper can- not be used for two-sided copy- ing.	• Select the proper paper size. • See page 38.		
Copies are not properly stacked. Staple mode is off.	Different width of copies are sorted.	Only the same width of paper can be stapled.  Sorter stapler  Sorter stapler  NG  OK  OK		
☐ Stapling cancelled.	Only one original is set in the optional document feeder.	The Staple operation cannot be performed if only one original is set. Check the number of originals.		
☐ Cannot sort or stack— paper or smaller		• Select the proper size. • See page 38.		
□ Maximum number of sets is —.	The specified number of copies exceeds the maximum quantity.	<ul> <li>You can change the maximum number of copies that can be made at a time.  ■ See page 93, "USER TOOLS, Maximum Copy Quantity."</li> </ul>		
□ Sorter bins are full Remove copies	The quantity of loaded paper exceeds the maximum paper quantity that can be loaded in a paper tray.	• The maximum paper quantity that can be loaded in a paper tray is 25 sheets for B4, 8 ½ x 14 size or larger, and 30 sheets for A4, 8 ½ x 11 size or smaller.		
Used toner bottle almost full.	The used toner bottle is almost full.	Contact your service representative. Your service representative replaces the used toner bottle.		
☐ Used Toner Bottle is Full. Please call service.	The used toner bottle is full.			

#### ♦ Others

Problem	Cause	Action
☐ The Stand-by indicator	• The copier is in the Stand-by	Press the Clear Modes/Stand-by key to turn off the
is lit and the display is	mode.	Stand-by indicator.
turned off.		

## TILLED

# MAINTAINING YOUR COPIER

# WHERE TO PUT YOUR COPIER

DO'S AND DON'TS

#### IF YOUR COPIER DOES NOT OPERATE AS YOU WANT

Problem	Cause	Action	
☐ Misfeeds occur frequently.	An improper paper size is selected.	• Select the proper paper size. • See page 41, "CHANGING PAPER SIZE."	
☐ When two or more functions are specified, some functions are not executed.		<ul> <li>Confirm the function combination and specify an other one.</li> <li>"FUNCTION COMBINATION CHART" See page 49.</li> </ul>	

#### Staple

Problem	Cause	Action
☐ Staples do not come out at all.	There are jammed staples in the stapler.	<ul> <li>Remove the jammed staples from the stapler.         "REMOVING JAMMED STAPLES"  See page 117.</li> <li>After removing jammed staples, copies are not stapled but nipped without staples while the sorter stapler is adjusting the staple sheet position.</li> </ul>
	The specified number of copies exceeds the maximum quantity that can be stapled.	Up to 20 copies can be stapled at a time.
☐The stapling position is wrong.	The originals are set in a wrong direction.	• Align the top of the originals to the scale on the rear side. • See page 73, "Staple."

#### **Margin Adjustment**

Problem	Cause	Action
☐ Parts of an image are not copied.	• The specified margin width is too large.	• Specify a smaller margin width. You can specify it in the range of 1 to 20 mm, 0.1" to 0.8".
	The margin is too narrow on the opposite side of the original binding margin.	"Margin Adjustment" 🖝 See page 63.

#### **Combination Copying**

Problem	Cause	Action
☐ Parts of an image are not copied, or an unnecessary	• Originals larger than A4, 8 1/2" x 11" are set.	• Set A4, B5, A5, B6, 8 ¹ / ₂ " x 11", or 5 ¹ / ₂ " x 8 ¹ / ₂ " originals.
margin is made.	The selected paper size does not fit the original size.	<ul> <li>Confirm the paper size that fits the original size.</li> <li>See page 67, "COMBINATION COPYING."</li> <li>You can reduce/enlarge and combine copies after determining the magnification.</li> </ul>
	Originals of different sizes and directions are set.	Originals of different sizes and directions cannot be combined. Copy them to make the originals of the same size before you combine them.
☐ Copies are made in a wrong order.	Originals are set in a wrong order.	• Set the originals with the first sheet placed on their top. • See page 67, "COMBINATION COPYING."

#### **Two-sided Copying**

Problem	Cause	Action
☐ Copies are made in a wrong order.	Originals are set in a wrong order.	Set the originals in the optional document feeder with the first sheet placed on their top, or set them on the exposure glass (platen glass) from the last sheet.

#### DO'S AND DON'TS

☐ While copying, do not turn off the main switch. When you turn off the copier, confirm that all copy runs have finished
☐ When the main switch is in the Stand-by position, the anticondensation heaters are on. In case of emergency, unplug the machine's power cord.
<u> Caution</u>
When the copier will not be used for a long period, disconnect the power cord.
☐ While copying, do not turn off the main switch.
☐ While copying, do not open the doors or covers.
☐ While copying, do not lift the document feeder.
☐ While copying, do not unplug the power cord.
☐ Do not lay anything weighing more than 10 kg, 22 lb on the exposure glass (platen glass).
Do not place tools or other hard objects on the exposure glass (platen glass).
☐ Keep corrosive liquids, such as acid, off the machine.
Do not allow paper clips, staples, or other small metallic objects to fall inside the machine.
☐ Do not use paper that has been copied onto by this machine in other office equipment. A fault might occur.
☐ When copying from a colored original, the copier will scan the original 4 times for one copy. Be careful not to move the original during the scanning process. If the original is moved slightly, the colors (Cyan, Magenta, Yellow, and Black) might not combine properly.
Storing Color Copies
☐ Colors of copies made with this copier fade as those of ordinary color prints do. However, you should keep copies with a binder or keep them away from the direct sunlight when you store them for a long time.
☐ If you overlay a copy on a wet print, the toner might be fused.
☐ If you paste copies using a solvent adhesive, the toner might be fused.
☐ If you fold a copy, the toner of the folded part might come off.
☐ If you bind copies with a vinyl chloride mat in a hot location for a long time, the toner might be fused.
☐ If you keep copies in an excessively hot location due to a heater or other factor, the toner might be fused.

#### WHERE TO PUT YOUR COPIER

When you move the copier if your division changes the equipment layout or moves to another location, follow the precautions shown below.

#### When Moving The Copier To The Same Level



 When you move the copier, unplug the power cord from the wall outlet. Otherwise, the cord might be damaged to cause a fire or electric shock.



- When you move the copier, be sure to pull out the four knobs (left and right) completely. If you pull out them incompletely or hold a part other than the knobs, your finger might be pinched causing injury. When you have moved the copier, return the knobs to the original positions.
- When the copier is equipped with the optional paper tray unit, do not push the upper part of the copier forcibly. The main body might be separated from the optional paper tray unit causing injury.
- ☐ If the copier must be transported by vehicle, please contact your service representative.
- ☐ When you move the copier a short distance, follow the precautions shown below.

Turn off the power.

Pull the main plug to disconnect the power source.

When the projector unit is attached, do not pull it to move the copier.

Close the front cover, right side cover, and bypass feed table.

Move the copier gently keeping it level. If you shake or slant it, a failure might occur.

#### **Copier Environment After Moving**



- · Keep the copier away from humidity and dust. Otherwise, a fire or electric shock might occur.
- The copier must be level within 5 mm, 0.2" both front to rear and left to right.

#### A Caution

After you move the copier, fix it with the caster fixture. Otherwise, the copier might move or fall causing a personal
injury.

Do not move the copier to the following locations. If you move the copier to an improper location, copies cannot be made normally or a failure might occur.

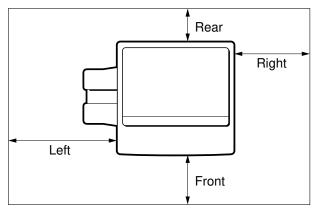
Excessively cold and dry or hot and humid location

The optimum environmental conditions are as follows.

- Temperature: 10 30°C (50 86°F)
- Humidity: 15 90 %
- ☐ Location subject to direct sunlight or strong light (more then 2,000 lux)
- Location near an air conditioner or humidifier
- Location subject to vibration
- Location with bad ventilation
- Location subject to dust
- Unstable floor or base
  - Place the copier in a flat location. The copier must be level within 5 mm, 0.2" both front to rear and left to right.
  - Place the copier on a stable floor. When you place it on a base, select a stable one such as a table dedicated to copiers (the table surface must be larger than the copier size).

#### Space Required for Installing The Copier

Leave enough space around the copier. This space is necessary for you to operate the copier or your service representative to work. When the copier is equipped with options, contact your service representative for the necessary space.



	Standard setting	
Front	70 cm, 27.6"	
Rear	10 cm, 4,0"	
Left	42 cm, 16.6"	
Right	40 cm, 15.8"	

#### **Power Connection**

#### **Marning**

- Connect the copier to a power source meeting the specifications given on the inside front cover of this manual. Avoid multiwiring. Otherwise, a fire or electric shock might occur.
- · Avoid using an extension cord. Otherwise, a fire might occur.
- Do not set anything on the power cord. Otherwise, a fire might occur.
- Make sure that the wall outlet is near the copier and easily accessible.
- · When you pull out the plug from the socket, grip the plug to avoid damaging the cord and causing fire or electric shock.
- When the copier will not be used for a long period, disconnect the power cord.
- ☐ When you disconnect the power plug from the wall outlet, the anticondensation heaters are turned off.
- ☐ Connect the power plug to the wall outlet firmly in a direct way.

#### MAINTAINING YOUR COPIER

If the exposure glass (platen glass), platen cover, or ADF belt is dirty, you cannot make copies as you want. Clean them if you find them dirty.

Cleaning the copier

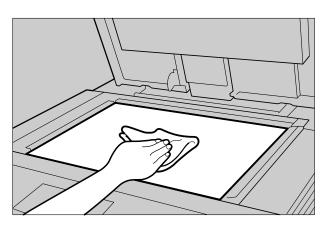
Wipe it with a soft, dry cloth. If you cannot remove contaminants with this cloth, wipe the copier with a well-wrung, damp cloth.

After wiping the copier with a damp cloth, wipe it with a dry cloth to remove the water.

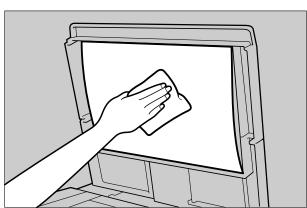
#### **Important**

- ☐ Do not use any chemical cleaner or organic solvent such as thinner and benzine. If they get into the copier or melt plastic parts, a failure might occur.
- ☐ For cleaning parts other than those specified in this manual, such as the inside of the copier, contact your service representative.

## Cleaning The Exposure Glass (Platen Glass)

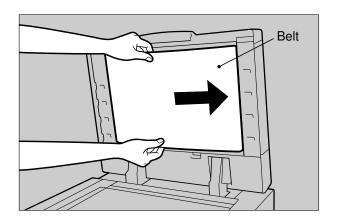


#### **Cleaning The Platen Cover**



#### Cleaning The ADF Belt

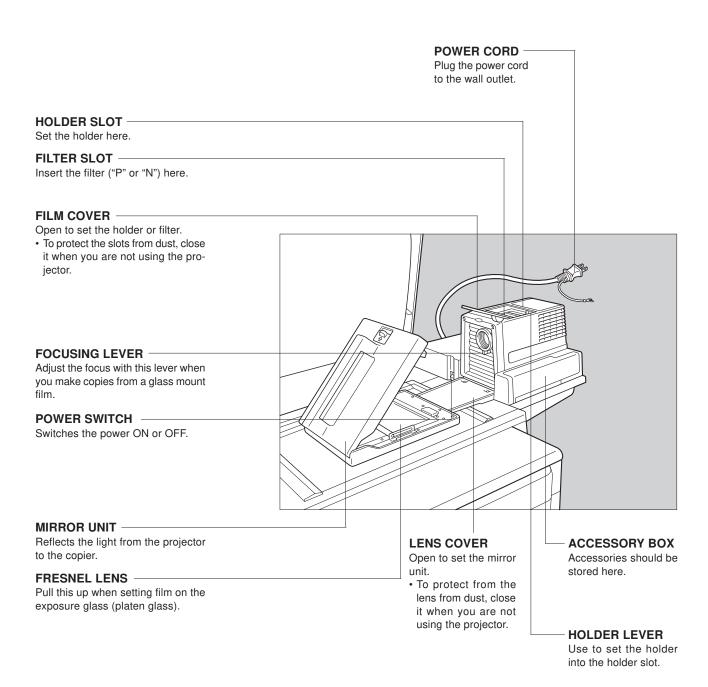
Slide the belt with both hands and wipe it with a damp cloth.



# PROJECTOR UNIT (OPTION) OPERATION

#### **GUIDE TO COMPONENTS**

Marning Be sure to read "SAFETY PRECAUTIONS" for connecting the power, and moving the



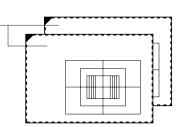
[☐] The projector base is required.

#### FILM HOLDERS -**LOCK LEVERS** Set 35 mm film in one of these holders. Use to fix the film after set- Film Strip Holder ting it in the holder. Set negative or positive strip film and base film here. You can set up to 6 films. Slide Film Holder Set mounted positive films in this holder. You can set up to 5 films. • Glass Mount Film Holder Set the positive glass mount films in this holder. You can set up to 5 films. SLIDE MOUNT Use to make a base film slide. **BASE FILM SLIDES BLOWER BRUSH** Use them when performing Use to clean the lens or glass. shading with Negative film. ☐ ISO-100 film is supplied from the following three manufacturers: · Fuji Photo Film Co., Ltd. **FILTERS** Konica Corporation P = Positive · Eastman Kodak Company N = Negative One of them should be set in the ☐Base film must be set in the film strip holder. filter slot.

#### FILM POSITION SHEET

Use a duplicate of this sheet to place the film to the correct position on the exposure glass. Make a copy from the original sheet, cut the surrounding margin on the dotted lines, and cut away the center part corresponding to the size of the film to be copied. Keep the original film position sheet.

• If two or more film position sheets are required for film sizes to be used, copy the original film position sheet onto B4, 8 ½" x 14" or A3, 11" x 17" paper. You should copy the original sheet on thick paper to make the copies easier to use.



#### BEFORE OPERATING THE PROJECTOR

#### Available Films And Setting

Setting location Film type/size	Slide film holder	Film strip holder	Glass mount film Holder	Exposure glass
35 mm mount film	0	×	×	×
35 mm glass mount film	×	×	0	×
35 mm strip film	×	0	×	0
Brownie type	×	×	×	0
6 x 6 cm	×	×	×	0
4" x 5" (101.6 x 127 mm)	×	×	×	0
Maximum size (140 x 210 mm, 5.5" x 8.2")	×	×	×	0

#### **Important**

- When using film, make sure to take it out from film protecting sheet.
- ☐ To protect film, follow the precautions shown below.
  - Do not use the same film for more than 30 minutes.
  - Do not use and store film in rooms where the temperature is more than 30°C/86°F.
  - For valuable images, we recommend copying from duplicates.
- ☐ About film:
  - Positive film
     When held to the light, an image of this film can be seen in the same way as an ordinary photograph.
  - Negative film

     An image of this film is a reverse image and seen differently from an ordinary photograph when held to the light.
  - Positive slide film This is 35 mm positive film set on a mount for a slide and called "slide film" or "mount film."
  - Glass mount film This film has the same shape as slide film, but the surface is coated with glass.

#### **About Copying**

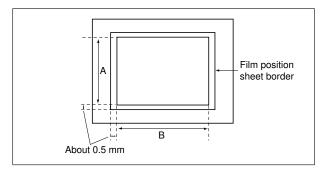
#### ♦ Mount and strip film (when using the film holder)

	When using the Slide Film Holder	When using the Film Strip Holder
Available film area for copying	21.5 mm, 0.85" ——33 mm, 1.30"—	23 mm, 0.91" —34 mm, 1.34"—
The copy size when Full Size is selected. * This size corresponds to A5.	121 mm, 4.76" — 193 mm, 7.6" —	129 mm, 5.07" ————————————————————————————————————

- ☐ To extend the available film area for copying, use the glass mount film holder and adjust the focus with the focusing lever.
- ☐ For adjusting the focus, refer to step 11 in "SHADING." See page 136.

#### **♦** Large format film (when using the film position sheet)

☐ The copy area available for large format film must be within about 0.5 mm from the film position sheet border as shown below.

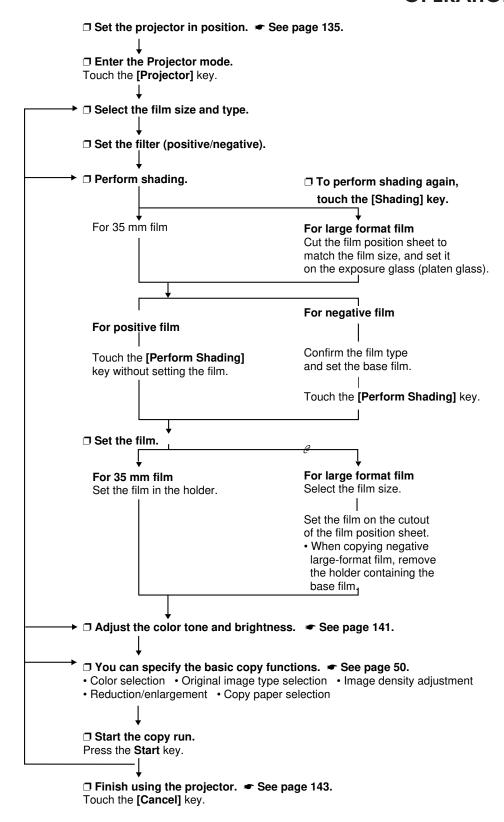


Film size	А	В
60 x 45 mm	About 59 mm	About 44.6 mm
60 x 60 mm	About 59 mm	About 59 mm
60 x 70 mm	About 59 mm	About 72 mm
60 x 80 mm	About 59 mm	About 79 mm
60 x 90 mm	About 59 mm	About 86 mm
4" x 5"	About 97 mm	About 122 mm
Maximum size	About 142 mm	About 210 mm

#### **Notes For Operation**

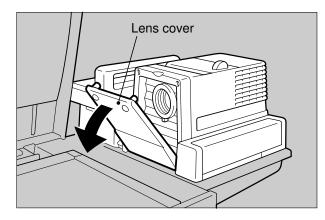
- Do not obstruct the light path from the projector. If the light path is obstructed, the image might not match the original.
- ☐ The shading adjustment is very sensitive, so after the shading operation the mirror unit must be kept perfectly still. Do not move it or allow vibrations to interfere with it. If this happens during copying, lines might appear on the copy. In that case, you must perform shading again.
- ☐ Keep base film, filters, lenses, holders, the mirror unit, and the exposure glass (platen glass) away from dust. Otherwise, you cannot make clear copies. If dust is attached to these parts, clean them. ■ See page 146.

#### **OPERATION FLOW**

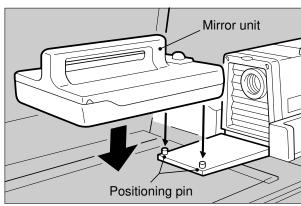


#### SETTING THE PROJECTOR IN POSITION

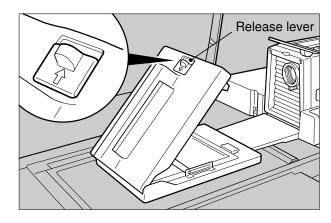
- ☐ Do not touch to the fresnel lens or the glass of the mirror unit. Fingerprints or dirty parts might appear on the copy. For cleaning the projector parts, see "DAILY MAINTENANCE." ➤ See page 146.
- Insert the plug of the projector into the wall outlet. Turn on the main switch of the projector.
- Open the lens cover of the projector.



Place the mirror unit so that the unit's position holes fit over the projector's positioning pins.



Slide the release lever of the mirror unit in the direction of the arrow and open the cover of the mirror unit.



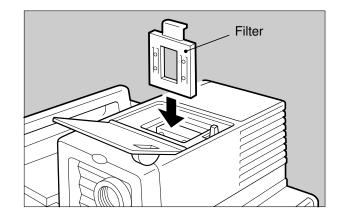
#### **SHADING**

- ☐ The operational procedure varies depending on the film size (35 mm/large format) and type (positive/negative).
- Touch the [Projector] key.
- Select the film size and type and touch the [Shading] key in the setting procedure.
- ☐ "Max. Size" specifies the size of 140 x 210 mm.

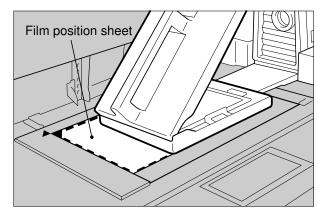




- Insert the positive or negative filter into the filter slot based on the film type.
- ☐ Set the filter so that the alphabet character (P/N) on the top faces forward (the metal part faces right).



- When selecting the exposure glass (platen glass) (large format film), cut the film position sheet to match the film size, and set it on the exposure glass (platen glass).
- ☐ Fit rmark of the film position sheet to the standard position on the exposure glass (platen glass).



- Perform shading.

#### When copying positive film:

• Touch the [Perform Shading] key without setting the film.

The lamp is lit and shading is started.

 To cancel shading, touch the [Cancel Shading] key.

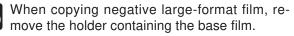
#### When copying negative film:

- Set the base film that fits the film in the strip holder.
- The projector unit provides three types of base film slides as accessories.
   See page 132.
- The base film must be set sideways in the holder.
   There is no difference between both sides of the base film.
- If you use film that does not have suitable base film, you can make the base film yourself.
   See page 145.
- When you set the film to be copied at the same time as setting the base film, you need not replace the holder later.
- While pressing the holder lever to the left, insert the holder slightly in the holder slot. Then press the holder until the mark is placed as shown in the illustration.



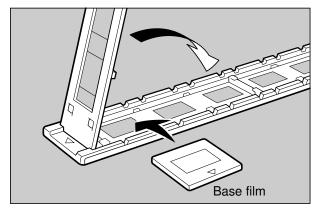
The lamp is lit and shading is started.

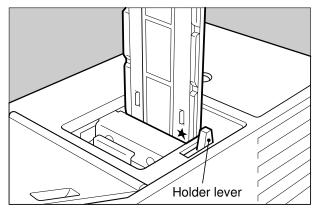
 To cancel shading, touch the [Cancel Shading] key.







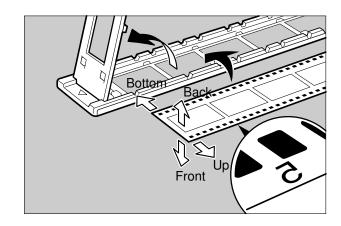






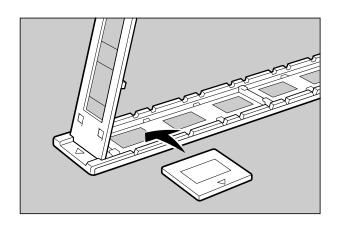
#### When copying 35 mm film:

- When copying strip film
- Set the film in the film strip holder.
- Place the strip film so that its front and back sides are set in the correct directions. Put the front side of the film face down (the side where the film number is shown in reverse must face upward) and set it in the film strip holder.
- Adjust the film position so that the film partition fits the holder partition.

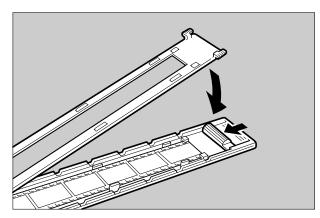


#### When copying slide film

- Set the film in the slide film holder or glass mount film holder.
- The film must be set sideways in the holder with the front side face down.



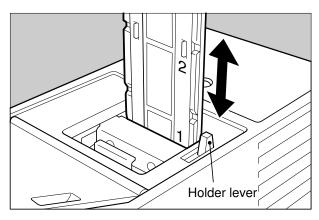
Olose the holder and lock it.



While pressing the holder lever to the left, insert the holder slightly in the holder slot. Then adjust the holder by sliding it up and down to position the correct frame for copying.

The copier enters the ready condition.

 Confirm the arrow mark of the holder to set the sides of the film in the correct directions.

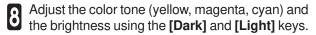


#### When copying large format film:

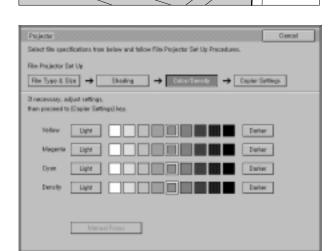
• Lift the Fresnel lens and place the film on the cutout of the film position sheet that has already been set.

The copier enters the ready condition.

• Set the film with the front side face down and lower the Fresnel lens by pressing it against the film.



☐ When you adjust the color tone, see "Adjusting The Color Tone And Brightness." ► See page 141.



Fresnel lens

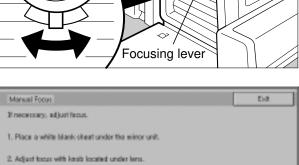
Film

#### When adjusting the focus manually (for 35 mm film):

- To adjust the focus manually, touch the [Manual Focus] key.
- The focus is adjusted automatically when you make copies without adjusting it manually.
- Set blank sheets on the exposure glass (platen glass) and under the mirror unit, and adjust the focus with the focusing lever.



❸ Touch the [Exit] key.



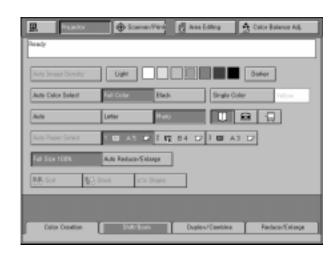
3. Then press (Exit) key.

- 9
  - You can use the **[Copier Settings]** key to specify the basic copy functions.
- ☐ See page 140, "Setting Copier's Functions."
- When you start copying without setting functions, go to step 0.
- 10 5
- Specify the number of copies and press the **Start** key.
- ☐ The copier starts the copy run.
- ☐ For setting the subsequent copy runs, see "Changing The Copy Settings." ► See page 141.

#### **Setting Copier's Functions**

You can also specify the copier's basic, editing, and area editing functions when you use the projector unit.

- ☐ You cannot use the Single Copies, Combine, 2 Sided → 2 Sided, Single, Multi, Auto Paper Select, Staple, and Interrupt copying functions.
- ☐ You can operate the copier's functions in the same way as in making copies without the projector. However, you must edit areas after setting the projector unit.
- Specify your desired function on the touch panel display.

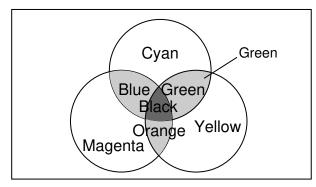


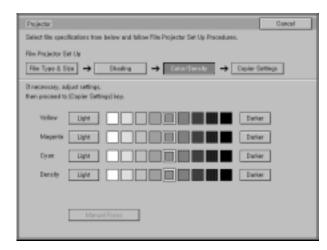
- Press the Start key.
- The projector starts the operation and the copier makes copies automatically.

#### **Adjusting The Color Tone And Brightness**

You can adjust the overall color tone of copies by adjusting the yellow, magenta, and cyan tones to a lighter or darker setting only when you are using the projector.

- When adjusting the color tone, it is useful to imagine the relationship among the three basic colors. For example, when the overall color tone of copies is greenish, you may want to adjust the cyan and yellow tones to a lighter setting or adjust the magenta tone, the complementary color, to a darker setting.
  - You should adjust the color tone for each film slide to make more correct copies because the projection condition varies each time.
- Adjust the color tone (yellow, magenta, cyan) and the brightness using the [Dark] and [Light] keys.





#### **Changing The Copy Settings**

This section describes the operations to be performed after copying is completed.

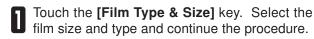
#### Using The Same Type Of Film

Touch the [Continue] key.



- **9** Specify the basic and editing functions.
- When you copy another frame of the film set in the holder, slide the holder up and down to adjust the order of frames. You can see the numbers indicated on the holder to confirm the order of frames.

#### Changing The Film Size and Type



☐ For the film selection and the subsequent operations, see the descriptions after step ② in "SHADING." ► See page 136.

# President Press (Confinue) lags, or to refty, press (Film Projector Set Up) lags. Film Projector Set Up Film Type & Size Shading Celes/Donsity Confinue

#### Adjusting The Color Tone And Brightness



2 Check the copies and adjust the color tone and brightness.

☐ For the procedure after this step, see "Adjusting The Color Tone And Brightness." See page 141.

### Performing The Shading Operation Again

Perform the shading operation again if you cannot make copies as you want or you move the mirror unit inadvertently.

Touch the [Shading] key.

☐ For the procedure after this step, see the descriptions after step **5** in "SHADING." **►** See page 136.





#### **Exiting The Projector Mode**

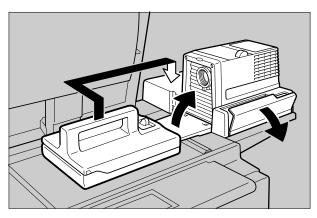
Finish using the projector and return to the copy mode.

- Touch the [Cancel] key.
- ☐ You can also press the **Clear Modes/Stand-by** key to finish using the projector.
- 2 Return the mirror unit, used holders, and other accessories to the original positions and close the lens cover.
- □ Do not touch the Fresnel lens or the glass of the mirror unit. If there are fingerprints or other dirty parts on the lens or glass, wipe them. See page 146, "DAILY MAINTENANCE."
- ☐ You can store a frequently used filter in the filter slot.
- Turn off the power switch.

#### **Important**

☐ Though the power switch is turned off, the cooling fan may be still working. Therefore, please wait a few moments before unplugging the power cord.





## IF THE PROJECTOR UNIT DOES NOT OPERATE AS YOU WANT

### ♦ If the copy image is improper

Problem	Cause	Action
☐ The copy image is out of fo-	The film is not set in the holder	Reset the film correctly in the holder.
cus.	properly.	Adjust the focus.
☐ The edge of the original image does not appear on the copy.	The film size that can be copied is predetermined.	<ul> <li>When setting film in the holder, be sure to position the desired frame properly.</li> <li>"About Copying"  See page 132.</li> </ul>
		You can copy a larger area by using the glass mount film holder and focusing manually.
☐ Lines appear on the copy.	The mirror unit is moved by copier operation.	<ul> <li>Perform the shading operation again.</li> <li>Black lines might appear on the edge of an image depending on the way film or a holder is set. This is because the holder frame or film edge is projected on the copies.</li> <li>When copying from negative film, thin black lines might appear on the lighter part of the copy. In such a case, the lines might not be eliminated even when you perform shading again.</li> </ul>
	Dust and foreign matter are attached to base film, a filter, a lens, a holder, the mirror unit, or the exposure glass (platen glass.)	Clean these parts.     "DAILY MAINTENANCE"
☐ A ring pattern appears on the copy.	The ring pattern is present on	Open and close the film cover.
	the film itself, and the copier is	Slide the film in the holder a bit.
	sensitive enough to pick it up.	Turn the film around in the holder. (Do not flip it over.)

#### ♦ If an error message is displayed

Message	Problem/Cause	Action
☐ Shading error. To resum shading	When copying 35 mm positive film, the shading operation is performed with the film set in the projector.	Remove the film holder and perform shading again with no film set in the projector.
		Adjust the focus.
Shading error. To resum shading	When copying large format film, the shading operation is per- formed with the Fresnel lens lifted up.	Lower the Fresnel lens and perform shading again.
	The light path from the projector is obstructed.	Do not place anything between the projector and the mirror unit so that the light path will not be obstructed.
	The mirror unit is not set properly.	• Set the mirror unit properly. • See page 135, "SETTING THE PROJECTOR IN POSITION."
	The filter (positive/negative) does not match the film type (positive/negative).	Set the suitable filter that matches the film type.     See page 136, "SHADING."

#### ♦ If something goes wrong

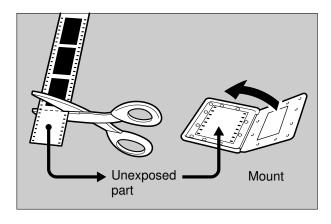
<u> Caution:</u> Do not open lamp cover and replace the lamp. Otherwise a fire might occur.

Problem	Cause	Action
☐ The copier does not enter the Projector mode even when you touch the	The optical fiber cable is disconnected.	<ul> <li>Turn off the copier and projector, and connect the optical fiber cable. Then turn them on again.</li> <li>"GUIDE TO COMPONENTS"  See page 130.</li> </ul>
[Projector] key.  ☐ The projection lamp does not light.	The projector is turned off or the power cord is disconnected.	Turn off the copier, connect the power cord of the projector to the wall outlet, and turn on the pro- jector. Then turn on the copier again.
☐ The projection lamp does not go off.	The lamp is burned out.	Contact your service representative.
☐ Copies are blank when copying negative film.	A failure occurs on the copier or projector.	
☐Black images are copied when copying positive film.		

## Making Base Film

This section describes the action you should take if you use film that does not have suitable base film.

- Using unexposed film:
  - If you do not plan on copying from this type of film often, use an unexposed frame of the same film strip, if available, when performing shading.
- Making new base film:
  - If you plan on copying from this type of film often, make a base slide using an unexposed, developed frame of the film.



#### **DAILY MAINTENANCE**

This section describes the way to clean the projector.

- ☐ Dust and foreign matters might be attached to the following parts. Check and clean them.
  - · Base film
  - Filter
  - Lens
  - Holder
  - Mirror unit
  - Exposure glass (platen glass) See page 128.

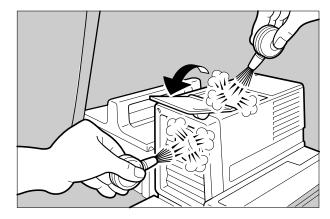
#### **Exterior**

Wipe with a dry soft cloth.

#### Lens and holder/filter slot

Blow off any dust using the blower brush.

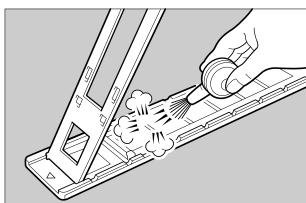
If there are fingerprints on the lens, wipe them with a soft cloth.



#### Film holder

Blow off any dust using the blower brush.

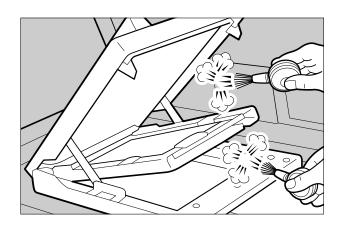
If there are fingerprints on the glass, wipe with a soft cloth.



#### Mirror unit

Blow off any dust using the blower brush.

 If there are fingerprints on the glass, wipe with a soft cloth.



# **SPECIFICATIONS**

### **COPIER**

Configuration: Desktop
Photosensitivity Type: OPC

Copy Process: Dry electrostatic transfer system

Development: Dry two-component development

**Fixing:** Heating roll system

**Exposure Glass:** Stationary original exposure type

Write: Sequential four-color write (yellow, magenta, cyan, and black)

Original read: Sequential read through CCD

Warm-up time: Less than 360 seconds (20°C, 68°F)

First Copy Time*: Normal mode OHP/Thick Paper mode

Full Color:32 seconds or less50 seconds or lessBlack:15 seconds or less35 seconds or less

Cyan, Magenta,

Yellow: 20 seconds or less 35 seconds or less

Yellow + magenta (red),

Magenta + cyan (blue):25 seconds or less40 seconds or lessYellow + cyan (green):30 seconds or less45 seconds or less

Copying Speed (Full Size):

Full Color (4 colors): Normal mode OHP/Thick Paper mode

3 copies/minute (A4 $\square$ , 8 ½" × 11" $\square$ ) 1.5 copies/minute (A4 $\square$ , 8 ½" × 11" $\square$ ) 1.5 copies/minute (A3 $\square$ , 11" × 17" $\square$ )1 copy/minute (A3 $\square$ , 11" × 17" $\square$ )

Yellow, magenta, cyan, black:

Normal mode OHP/Thick Paper mode

21 copies/minute (A4 $\square$ , 8 ½" × 11" $\square$ ) 2.5 copies/minute (A4 $\square$ , 8 ½" × 11" $\square$ ) 11 copies/minute (A3 $\square$ , 11" × 17" $\square$ ) 1.5 copies/minute (A3 $\square$ , 11" × 17" $\square$ )

Magenta + cyan (blue), Magenta + yellow (red):

Normal mode OHP/Thick Paper mode

4 copies/minute (A4 $\square$ , 8  $^{1}/_{2}$ " × 11" $\square$ ) 2 copies/minute (A4 $\square$ , 8  $^{1}/_{2}$ " × 11" $\square$ ) 3 copies/minute (A3 $\square$ , 11" × 17" $\square$ ) 1 copies/minute (A3 $\square$ , 11" × 17" $\square$ )

Yellow + cyan (green): Normal mode OHP/Thick Paper mode

3 copies/minute (A4 $\square$ , 8  $^{1}/_{2}$ " × 11" $\square$ ) 1.5 copies/minute (A4 $\square$ , 8  $^{1}/_{2}$ " × 11" $\square$ ) 2.5 copies/minute (A3 $\square$ , 11" × 17" $\square$ ) 1 copies/minute (A3 $\square$ , 11" × 17" $\square$ )

Original Type: Sheet/Book/Film/Objects

Original Size: Maximum: A3  $\square$  (297 × 420 mm), 11" × 17"

**Copy Paper Weight:** Bypass Feed Table: 52 - 157 g/m², 14 - 43 lb

Unit For Two-sided Copying: 64 - 104 g/m², 17 - 28 lb

**Non-reproduction Area:** Leading edge 5 +/- 2 mm

Trailing edge Front side: 2.5 +/- 1.5 mm

Reverse side: 6.0+/- 2mm

Left edge 2 + / - 2 mmRight edge 2 + / - 2 mm **Reproduction Ratio:** See page 59.

Resolutions: 400 dpi

**Paper Feed:** Unit for two-sided copying (B4, 8 ½" × 14" or smaller: 50 sheets, A3, 11" × 17":

30 sheets, Full Color Copy: 20 sheets) + Bypass feed table (40 sheets of

paper)

Copy Number Input: Number keys, 1 - 99

**Advanced Function:** Color Selection (Auto Color Select, Full Color Copy, Black Copy, Single Color)

Auto Copy Select

**Auto Image Density** 

Original Image Type Selection (Auto (Letter/Photo) mode, Letter mode, Photo

mode)

**Auto Start** 

Reduction/Enlargement (Auto Reduce/Enlarge, Preset Reduce/Enlarge, Zoom,

**Directional Magnification**)

Shift/Book (Margin Adjustment, Centering)

Single Copies/Combine/Duplex

(Book → 1 Sided, 2 Sided → 1 Sided, Combine, Combine 4 Originals, 1 Sided

→ 2 Sided, 2 Sided → 2 Sided, Single, Multi )

Color Creation (Color Conversion, Color Erase)

Area Editing (Color Conversion, Color Erase, Paint Area, Highlight Color, Delete

Area/Save Area)

Color Adjustment (Color Balance Adjustment)

Full Image

Image Adjustment (Background Density Control, Pastel, Sharp/Soft, Auto Color

Calibration)

Program

User Tools (including user codes)

Clear Modes, Stand-by, Auto Reset

Interrupt Copying

**Power Source:** See the inside front cover of this manual.

**Power Consumption:** 

Warm-up	1.25 kW
Stand-by	0.25 kW
Copying	1.15 kW
Maximum	1.5 kW

**Dimensions (W×D×H):**  $620 \times 750 \times 592 \text{ mm}, 24.5" \times 29.6" \times 23.4"$ 

[Height up to the exposure glass (platen glass)]

Full System Area (W×D):  $1038 \times 750 \text{ mm}, 40.9" \times 29.6"$ 

(when the bypass feed table is opened and the copy tray is attached)

 $1280 \times 750$  mm,  $50.4" \times 29.6"$ 

(when the extenders of the bypass feed table and copy tray are pulled out

for A3, 11"  $\times$  17", B4, 8  $^{1}/_{2}$ "  $\times$  14" or other large size paper.)

**Noise Emission:** Sound pressure level (The measurements are made according to ISO 7779

at the operator position.)

Copier only	Full system*
less than 61 dB (A)	less than 65 dB (A)

^{*} Full system: Copier with document feeder, 1500-sheet tray unit, and a sorter stapler.

Sound power level (The measurements are made according to ISO 7779.)

	Copier only	Full system*
Stand-by	less than 54 dB (A)	less than 58 dB (A)
Copying (This value is for the black copy mode.)	less than 67 dB (A)	less than 71 dB (A)

^{*} Full system: Copier with document feeder, 1500-sheet tray unit, and a sorter stapler.

Weight: Copier Only: 105 kg, 231 lb

## **DOCUMENT FEEDER**

Automatically feeds originals sheet by sheet.

Mode: ADF mode, SADF mode

Original Size: A3 ☐ - B6 ☐ ☐

11"  $\times$  17"  $\square$  - 8  $^{1}/_{2}$ "  $\times$  5  $^{1}/_{2}$ "  $\square$ 

**Original Thickness** 

**(788 × 1091 mm):** Normal mode:  $52 - 128 \text{ g/m}^2$ ,  $14 \sim 34 \text{ lb}$ 

2 Sided Original mode:  $52 - 105 \text{ g/m}^2$ ,  $14 \sim 28 \text{ lb}$ 

Thin Paper mode:  $40 - 52 \text{ g/m}^2$ ,  $11 \sim 14 \text{ lb}$ 

Number of originals to be set: 50 sheets

**Copying Speed:** 1 to 1 copy mode: 3 copies/minute

(Full Color Copy mode, A4 $\square$ , 8  $^{1}/_{2}$ " × 11" $\square$ )

20 copies/minute (Single Color mode, A4 $\square$ , 8  $^{1}/_{2}$ " × 11" $\square$ )

Power Consumption: Maximum: 45 W

(Power is supplied from the copier.)

**Dimensions (W×D×H):**  $610 \times 507 \times 130 \text{ mm}, 24.1" \times 20.0" \times 5.2"$ 

Weight: 10.5 kg, 23.2 lb

## PAPER TRAY UNIT

Adds two or three paper trays.

**Copy Paper Weight:** 52 - 105 g/m², 14 - 28 lb

Available Paper Size: See page 38.

**Power Consumption:** Maximum: 111 W (Power is supplied from the copier.)

Copy Tray Capacity: 500 sheets  $\times$  2 trays/500 sheets  $\times$  3 trays Dimensions (W×D×H): 620  $\times$  632  $\times$  390 mm, 24.5"  $\times$  24.9"  $\times$  15.4"

**Weight:** 36 kg, 79.3 lb/38 kg, 83.7 lb

## **SORTER STAPLER**

Sorts copies automatically and staples sorted copies.

**Number of Bins:** 10 bins + Delivered paper tray

**Delivered paper tray:** Paper Size for Tray: A3□, B4□, A4□□, B5□□, A5□□, postcard □ (100 ×

148 mm, 4.0" x 5.8"), B6□

 $11"\times17"\square,\ 8\ ^1/2"\times14"\square,\ 8\ ^1/2"\times11"\square\square,\ 8\ ^1/2"\times5\ ^1/2"\square\square$ 

Tray Capacity: 100 sheets (52 ~ 80 g/m², 13.9 ~ 21.2 lb)

50 sheets (81  $\sim$ 128 g/m², 21.6  $\sim$  34.0 lb) 30 sheets (129  $\sim$  157 g/m², 34.4  $\sim$  41.7 lb)

Paper Thickness: 52 ~ 157 g/m², 13.9 ~ 41.7 lb

**10 Bins:** Paper Size for Bins: A3, B4, A4, B5, and A5

 $11" \times 17" \square$ ,  $8^{1/2}" \times 14" \square$ ,  $8^{1/2}" \times 11" \square$ ,

and 5  $^{1}/_{2}$ " x 8  $^{1}/_{2}$ "

Bin Capacity:

Sort mode: 30 sheets/bin (A4, 8  $^{1}/_{2}$ "  $\times$  11" or smaller),

25 sheets/bin (B4, 8  $^{1}/_{2}$ "  $\times$  14" or larger)

Stack mode: 25 sheets/bin (A4, 8  $^{1}\!/_{2}"\times11"$  or smaller),

20 sheets/bin (B4, 8  $^{1}/_{2}$ " × 14" or larger)

Paper Thickness: 52 - 157 g/m², 13.9 - 41.7 lb

Staple: Stapler Capacity: 20 copies

Paper Size for Stapler: A3, B4, A4, A4, B5

 $11" \times 17" \square$ ,  $8^{1/2}" \times 14" \square$ ,  $8^{1/2}" \times 11" \square$ 

Paper Thickness: 52 - 80 g/m², 13.9 - 21.2 lb Stapling Position: One point, parallel binding

**Power Consumption:** Maximum: 33 W (Power is supplied from the copier.)

**Dimensions (W×D×H):**  $381 \times 548 \times 443 \text{ mm}, 15.0" \times 21.6" \times 17.5"$ 

Weight: 12.4 kg, 27.4 lb (sorter stapler only)

## **PPC TABLE**

This is a copier table which can store consumables.

**Dimensions (W×D×H):**  $620 \times 632 \times 390 \text{ mm}, 24.5" \times 24.9" \times 15.4"$ 

**Weight:** 20.8 kg, 45.9 lb

## PPC FILM PROJECTOR

This unit allows you to copy film directly.

**Configuration:** Stationary model on the right side of the copier **Projection:** Full image projection system (Projector mode)

Full image projection system (Projector mode)
Backlighting system (Backlight mode)

Available Film Size: See page 132.

Available Film Type: See page 132.

Focusing: Adjustable

**Power Consumption:** Maximum: Less than 185 W (The power supply is different from the copier's.)

**Dimensions (W×D×H):** Projector:  $300 \times 442 \times 212$  mm, 11.9" × 17.5" × 8.4"

Mirror unit:  $298 \times 232 \times 50$  mm,  $11.8" \times 9.2" \times 2.0"$ 

Weight: Projector: 10 kg, 22.1 lb

Mirror unit: 5 kg, 11.1 lb

PPC FILM PROJECTOR FIXTURE

**KEY COUNTER** 

## **INDEX**

1 → 2 Duplex Auto Margin Adjust(ment)	97	Change user code Changing paper size
Α		Choose Auto Reset I
A		Choose Copy Mode
Adding staples	103	Clear Modes/Stand-k Clear/Stop key Color Balance Adjust
ADE/Contant Charles on a different and		Color Balance Memo
ADF/Sorter Stapler specifications		Color Balance Recal
Adjust Highlight/Paint Mode Brightness		Color Conversion (or
Anticondensation heaters		Color Erase
APS Mode with ARDF		Color mode selection
ARDF Auto Sort Mode		Color Mode Selection
ARDF: Free Size Setting		Color Sensitivity Adju
ARDF: Thin paper mode		(Colors to be mod
Area editing	24	Combine
Auto Color Calibrator		Copier's settings
Auto Color Select	50	Copy Counter (count
Auto Color Selection	95	Copy Counter (displa
Auto Empty Duplex Tray	97	Copy Counter (reset
Auto Image Density	51	Copy Paper Selection
Auto Paper Select	53	Copy tray
Auto Paper Selection	92	Copying form the by
Auto Reduce/Enlarge	53	Counter key
Auto Reset	92	Cursor key
Auto Reset function	46	Ourson Ney
Auto Reset setting	46	
Auto Staple	73	
Auto Start	43	
Auto Tray Shift		Delete Area Delete user code
		Directional Magnifica
В		Document feeder
		Duplex
Background Density Control	30	Бирієх
Basic functions	50	
Black Copy	18	
Brightness Adjustment Volume	15	
Bypass feed table		Editor Grid (Display)
		Error messages
		Exposure glass (plat
С		1 2 Q /b.m.
Centering	64	
Centering key	14	

Change user code	. 96
Changing paper size	4
Choose Auto Reset Mode	92
Choose Copy Mode Default	92
Clear Modes/Stand-by key	15
Clear/Stop key	. 15
Color Balance Adjustment	28
Color Balance Memory (Change)	29
Color Balance Recall	29
Color Conversion (option)	20
Color Erase	. 22
Color mode selection	18
Color Mode Selection	93
Color Sensitivity Adjustment	
(Colors to be modified)	94
Combine9,	67
Copier's settings	
Copy Counter (count up/count down)	97
Copy Counter (display)	9
Copy Counter (reset)	9
Copy Paper Selection	53
Copy tray	. 12
Copying form the bypass feed table	54
Counter key	. 15
Cursor key	. 14
<b>D</b>	
D	
Delete Area	.27
Delete user code	
Directional Magnification (option)	
Document feeder	
Duplex9,	
,	
E	
Editor Grid (Display)	Q.
Error messages	
Exposure glass (platen glass)	
LAPUSUIE GIASS (PIALEII GIASS)	14

Original Image Type Selection	F	N	
Full Color Copy	F	N. observa	4.
Full Color Sorting		Number keys	14
Full Image			
Fusing unit. 109  Pusing unit. 109  Highlight color 24 Optional paper tray unit 11 Options 11 Options 25 Original holder -s Platen cover 11 Original holder -s Platen cover 11 Original lange type keys 55 Original lange Type Selection 55 Originals 36, 45  Image Adjustment 30 Image Density Adjustment 51 Interrupt Copying 58 Interrupt Key 15 Interrupt Key 15  Jammed staples 17  Jammed staples 17  K  Key counter Noder 18 Key counter Noder 19 Key Operator Access Code 96  L  L  Loading paper 102  Main switch 12 Main switch 13 Margin adjustment 19 Maximum Copy Quantity 19 Maximum Copy Quantity 19 Maximum Copy Quantity 19 Maximum Copy Quantity 19 Moire 100 Moire 100 Moire 100 Moire 100 Moire 100 Moire 100 Moire 11  Optional paper 11  Apoper tray unit 11  Puit Inange type keys 55  Criginal lange type laten cover 11  Paper tray minage type keys 55  Paint Area 2  Paint Area 2  Paint Area 2  Paint Area 2  Paint Area 3  Pa	_	0	
H	_	·	
H	rusing unit109	Operation Panel	14
Highlight color		Optional paper tray unit	13
Highlight color	Н	Options	13
Image Adjustment		Original holder -> Platen cover	12
Image Adjustment	Highlight color24	Original image type keys	52
Image Adjustment		Original Image Type Selection	52
Interrupt Copying		Originals	36, 47
Interrupt Copying	·		
Interrupt Copying	Image Adjustment	P	
Panel beeper		Point Area	26
Paper			
Paper misfeed   107	interrupt key15	·	
Paper tray			
Paper Tray Priority   92   Pastel   31   Platen cover   12   Point key   15   Power cord   127   Key counter   13   Rey counter holder   12   Key Counter holder   12   Key Operator Access Code   96   Preset Enlarge   55   Preset Reduce   55   Preset Reduce   55   Print Copy Counters (user codes)   97   L   Program (Annage   74   Program Memory   74   Program Memory   74   Program Recall   75   Projector   125   Manual Staple   73   Margin adjustment   63   Margin Adjustment   97   Maximum Copy Quantity   93   Message area   16   Misfeed   107   Mecall   16   Recall   15   Register user code   96   Register	J	•	
Name   Staples   117			
Platen cover	Jammed staples117		
K         Point key         15           Power cord         12           Power source -> Main switch         12           Key counter holder         12         Preset Enlarge         58           Key Operator Access Code         96         Preset Reduce         58           Preset Reduce/Enlarge         58           Print Copy Counters (user codes)         97           Program         74           Program Change         74           Program Memory         74           Program Memory         75           Projector         12           Main switch         12           Manual Staple         73           Margin adjustment         63           Maximum Copy Quantity         93           Message area         16         R/# key -> Recall/Enter key         15           Misfeed         107         Recall         15           Moire         100         Recycled Paper Indicator         94           Register user code         96			
Power cord   127   Key counter   13			
Key counter       13       Power source -> Main switch       12         Key counter holder       12       Preset Enlarge       55         Key Operator Access Code       96       Preset Reduce       56         Print Copy Counters (user codes)       97         Program       74         Program Change       74         Program Memory       74         Program Recall       75         Projector       12         Manual Staple       73         Margin adjustment       63         Margin Adjustment       97         Message area       16         Misfeed       107         Moire       100         Recall       15         Projector Lev       15         Projector unit       13, 125         Recall       15         Recall       15         Recall       15         Recall       15         Recycled Paper Indicator       94         Register user code       96	K	-	
Key counter holder       12       Preset Enlarge       55         Key Operator Access Code       96       Preset Reduce       55         Print Copy Counters (user codes)       97         Program       74         Program Change       74         Program Memory       74         Program Recall       75         Projector       12         Manual Staple       73         Margin adjustment       63         Margin Adjustment       97         Maximum Copy Quantity       93         Message area       16         Misfeed       107         Moire       100         Recall       15         Recycled Paper Indicator       94         Register user code       96	Vou counter 19		
New Operator Access Code	•		
Preset Reduce/Enlarge   56	•		
Print Copy Counters (user codes)	Key Operator Access Code96		
Program   774   Program   774   Program   774   Program   774   Program   774   Program   784   Program   784   Program   863   Projector   125   Projector   125   Projector   125   Projector   126   Projector   127   Projector   128   Projector   128   Projector   129   Projecto			
Program Change	L		
Description		_	
Program Memory   74	Loading paper102	•	
M       Program Recall       75         Projector       12         Manual Staple       73         Margin adjustment       63         Margin Adjustment       97         Maximum Copy Quantity       93         Message area       16       R/# key -> Recall/Enter key       15         Misfeed       107       Recall       15         Moire       100       Recycled Paper Indicator       92         Register user code       96			
Main switch       12         Manual Staple       73         Margin adjustment       63         Margin Adjustment       97         Maximum Copy Quantity       93         Message area       16       R/# key -> Recall/Enter key       15         Misfeed       107       Recall       15         Moire       100       Recycled Paper Indicator       92         Register user code       96		-	
Main switch       12         Manual Staple       73         Margin adjustment       63         Margin Adjustment       97         Maximum Copy Quantity       93         Message area       16       R/# key -> Recall/Enter key       15         Misfeed       107       Recall       15         Moire       100       Recycled Paper Indicator       92         Register user code       96	M	Projector	129
Manual Staple       73         Margin adjustment       63         Margin Adjustment       97         Maximum Copy Quantity       93         Message area       16       R/# key -> Recall/Enter key       15         Misfeed       107       Recall       15         Moire       100       Recycled Paper Indicator       94         Register user code       96	Mala a tal	Projector key	14
Margin adjustment       63         Margin Adjustment       97         Maximum Copy Quantity       93         Message area       16       R/# key -> Recall/Enter key       15         Misfeed       107       Recall       15         Moire       100       Recycled Paper Indicator       92         Register user code       96		Projector unit	13, 129
Margin Adjustment       97         Maximum Copy Quantity       93         Message area       16       R/# key -> Recall/Enter key       15         Misfeed       107       Recall       15         Moire       100       Recycled Paper Indicator       94         Register user code       96	•		
Maximum Copy Quantity       93         Message area       16       R/# key -> Recall/Enter key       15         Misfeed       107       Recall       15         Moire       100       Recycled Paper Indicator       94         Register user code       96			
Message area       16       R/# key -> Recall/Enter key       15         Misfeed       107       Recall       15         Moire       100       Recycled Paper Indicator       92         Register user code       96		R	
Misfeed       107       Recall       15         Moire       100       Recycled Paper Indicator       94         Register user code       96		B.(#1	
Moire	_		
Register user code			
•	IVIOITE100		
Right side cover12		-	
		Hight side cover	12

S	V
SADF Auto Reset92	Ventilation hole
SADF Auto Reset92	
Save Area27	
Select A, C, S Sensitivity Level	Z
(Auto color selection)	
Select Auto Image Density Level	Zoom
Select Auto Mode Sensitivity Level	Zoom (Number keys)
Select Default Display	
Select Paper Type & Orientation	Ducineter Unit (Onti
Sensitivity Adjustment	Projector Unit (Opti
Set Bypass Paper Size	Adjusting the focus manually
Set user R/E96	Mirror unit
Setting OHP sheets 55	Shading
Setting postcards54	Griading
Sharp/Soft31	
Single Color19	
Single Copies 9, 66	
Sort72	
Sorter key14	
Sorter stapler 13, 72	
Special Mode(s) Programming	
Stack72	
Stand-by43	
Staple73	
Staples??	
Start key15	
Stopper12	
Toner40	
Touch Panel Display 8, 16	
Touch Sensitive Area Designation	
Two-sided copies56	

U

U.C.R Adjustment (Black toner adjustment) ..... 94 Unit for two-sided copying ...... 12 User code ......43 User Code Access......96 User Code Register/Change/Delete ..................96 User Programmable Default Mode 1 ...... 92 User Tools ......92

V	
/entilation hole	. 12
Z	
ZoomZoom (Number keys)	
Projector Unit (Option)	
Adjusting the focus manually	130