

Operating Instructions



1 Before Using the Machine

2 Basics

- 3 Printing Functions
- 4 Troubleshooting
- 5 User Tools
- 6) Remarks
- 7) Entering Text
- 8) Specifications

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

Introduction

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

Important

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

Notes:

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

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

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

For good print quality, the supplier recommends that you use genuine master and ink from the supplier.

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

Power Source

220 - 240V, 50/60Hz, 1.8A or more

Please be sure to connect the power cord to a power source as above. For details about power source, see p.168 "Power Connection".

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Manuals for This Machine

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

🖉 Note

- □ Manuals provided are specific to machine type.
- □ Adobe Acrobat Reader/Adobe Reader is necessary to view the manuals as a PDF file.

Safety Information (paper)

Describes information about the safety precautions.

Easy Operation Guide (paper/PDF file - CD-ROM ^{*1}) Describes information about the control panel and basic operations.

Operating Instructions (this manual)

Describes operations, functions, User Tools (initial setting, mode setting, etc.) and troubleshooting.

Network Guide (PDF file - CD-ROM ^{*1})

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

Printer Reference (PDF file - CD-ROM ^{*1})

Describes system settings and operations for the machine's printer function.

✤ Preparations for Use as a Printer (paper/PDF file - CD-ROM ^{*1})

Describes procedures for connecting the Ethernet and USB cables to the machine.

Manuals for DeskTopBinder Lite

DeskTopBinder Lite is a utility included on the CD-ROM labeled "Document Management Utility".

- DeskTopBinder Lite Setup Guide (PDF file CD-ROM ^{*2}) Describes the installation of, and the operating environment for DeskTop-Binder Lite in detail. This guide can be displayed from the **[Setup]** dialog box when DeskTopBinder Lite is installed.
- DeskTopBinder Introduction Guide (PDF file CD-ROM ^{*2}) Describes operations of DeskTopBinder Lite and provides an overview of its functions. This guide is added to the **[Start]** menu when DeskTopBinder Lite is installed.

Other manuals

- PostScript3 (PDF file CD-ROM ^{*1})
- ^{*1} Provided on the CD-ROM labeled "Operating Instructions"
- ^{*2} Provided on the CD-ROM labeled "Document Management Utility"

What You Can do with this Machine

Below is a quick summary of this machine's features and where to look for more information.

Basic Procedure

See p.44 "Basic Procedure".

- Saving Energy See p.46 "Saving Energy".
- Printing onto Various Kinds of Paper See p.47 "Printing onto Various Kinds of Paper".
- Image Rotation See p.51 "Image Rotation".
- Selecting Original Type See p.52 "Selecting Original Type".

Master Making Density

See p.53 "Master Making Density".

 Adjusting the Position of Printed Images

See p.54 "Adjusting the Position of Printed Images".



*Paper feed direction

Changing the Printing Speed

See p.55 "Changing the Printing Speed".

Preset Reduce/Enlarge See p.57 "Preset Reduce/Enlarge".



Zoom

See p.58 "Zoom".



Auto Reduce/Enlarge

See p.59 "Auto Reduce/Enlarge".



Directional Magnification (%)

See p.61 "Directional Magnification (%)".



Directional Size Magnification (mm) See p.62 "Directional Size Magnification (mm)".



Combine

See p.63 "Combine".



Class Settings

See p.67 "Class Settings".



✤ Separate

See p.71 "Separate".



✤ Image Repeat

See p.73 "Image Repeat".



✤ Centring

See p.76 "Centring".



GCCNTR0E

Erase Border

See p.76 "Erase Border".



Margin Adjustment

See p.77 "Margin Adjustment".



✤ Overlay

See p.78 "Overlay".



Preset Stamp

See p.80 "Preset Stamp".



✤ Make-up

See p.82 "Make-Up Printing Features", p.85 "Command Sheets for Make-Up Printing", and p.92 "Make-Up Printing".

Quality Start

See p.95 "Quality Start".

- Economy Mode See p.96 "Economy Mode".
- Skip Feed See p.96 "Skip Feed".
- See p.97 "Security".
- Conserving the Master See p.98 "Conserving the Master".
- Double Feed See p.99 "Double Feed".
- Storing File See p.100 "Storing File".
- Programs See p.106 "Programs".
- Making Colour Prints See p.109 "Making Colour Prints".
- Changing the Drum Size See p.113 "Changing the Drum Size".
- Printing from the computer See Printer Reference.

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How to Read This Manual

Symbols

The following set of symbols is used in this manual.

A WARNING:

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

A CAUTION:

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

* The statements above are notes for your safety.

∰Important

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

Preparation

This symbol indicates information or preparations required prior to operating.

🖉 Note

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

Limitation

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

This symbol indicates a reference.

[

Keys that appear on the machine's display panel.

[]

Keys built into the machine's control panel.

Safety Information

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

Safety During Operation

In this manual, the following important symbols are used:

A WARNING:

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

▲ CAUTION:

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

A WARNING:

- Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it. Do not pull it hard nor bend it more than necessary. These actions could cause an electric shock or fire.
- Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.
- To avoid hazardous electric shock, do not remove any covers or screws other than those specified in this manual.
- Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following occurs:
 - You spill something into the machine.
 - You suspect that your machine needs service or repair.
 - The external housing of your machine has been damaged.
- Keep the machine away from flammable liquids, gases, and aerosols. A fire or an electric shock might occur.
- Connect the power cord directly into a wall outlet and never use an extension cord.
- Only connect the machine to the power source described in this manual.
- Disposal can take place at our authorized dealer or at appropriate collection sites.

A CAUTION:

- After you move the machine, use the caster fixture to fix it in place. Otherwise the machine might move or come down to cause an injury.
- If you use the machine in a confined space, make sure there is a continuous air turnover.
- Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.
- Protect the machine from dampness or wet weather, such as rain and snow.
- Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.
- Unplug the power cord from the wall outlet before you move the machine. While moving the machine, you should take care that the power cord will not be damaged under the machine.
- When you disconnect the power plug from the wall outlet, always pull the plug (not the cable).
- Do not allow paper clips, staples, or other small metallic objects to fall inside the machine.
- For environmental reasons, do not dispose of the machine or expended supply waste at household waste collection points. Disposal can take place at an authorized dealer.
- When disposing of a used ink container, reattach the cap to prevent ink from splattering.
- Be careful not to get ink on your clothes when replacing an ink container. Ink stains on clothes are hard to remove.
- Be careful not to cut yourself on any sharp edges when you reach inside the machine to remove misfed sheets of paper or masters.
- If ink comes into contact with your eyes, rinse immediately in running water. For other symptoms, consult a doctor.
- Keep the ink or ink container out of reach of children.
- If ink is ingested, induce vomiting by drinking a strong saline solution. Consult a doctor immediately.
- If your skin comes into contact with ink, wash the affected area thoroughly with soap and water.
- While printing, do not touch the belt at the end of the paper delivery tray or the job separator. Otherwise, an injury might occur.
- Our products are engineered to meet the high standards of quality and functionality, and we recommend that you only use the expendable supplies available at an authorized dealer.

Positions of AWARNING and ACAUTION Labels

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



AJK100S

Guide To Components



1. Front door

Open to access the inside of the machine.

2. Control panel

See p.17 "Control Panel".

3. Master making unit

Open this unit when installing the master.

4. Paper feed tray down key

Press to lower the paper feed tray.

5. Paper feed side plates

AJK111S

Prevent paper skewing.

6. Paper feed tray Load paper here.

7. Paper feed side plates knob Use to move the side plates.

8. Paper feed side plates knob lock lever

Locks the paper feed side plates.



1. Main switch

Use to turn the power on or off.

2. Paper alignment wings

Lift or lower the wings depending on the type of paper being used.

3. Paper delivery side plates

Use to align the prints on the paper delivery tray.

4. Paper delivery end plate

This plate aligns the leading edge of prints.

5. Paper delivery tray

Completed prints are delivered here.

6. Chocks

Use to adjust the buffer fins.

7. Master eject unit handle E1

Use to pull out the master eject unit.

8. Ink holder

Set the ink cartridge in this holder.

9. Drum unit lock lever B1

Lower to unlock and pull out the drum unit.

10. Drum unit

The master is wrapped around this unit.

11. Exposure glass

Position originals here face down for printing.

12. Exposure glass cover (optional) or Auto Document Feeder (optional)

Lower this cover over an original on the exposure glass. If you have the ADF, load a stack of originals here. They will be fed automatically, one by one.

(The illustration shows the ADF.)

13. Trailing edge guides

Swing out these guides when you use A4, $8^{1}/{_{2}}$ " × 11" \square \square paper.

14. Buffer fins

Use to stack prints neatly.

15. Paper delivery end plate knob Use to move the end plate.

16. Paper delivery side plate knobs Use to move the side plates.

Options

Option List

Options	Model Name
Auto Document Feeder (ADF)	DF Type 85
Exposure Glass Cover	Platen Cover Type 1018
Large Capacity System (LCS)	LS3000R
Drum unit	Metric version: Drum Type 90 <a3> / <a4></a4></a3>
	Inch version:Drum Type 90 <a4> (8¹/₂" × 11") / <11" × 17"></a4>
Twin colour press roller printing system	TC-IIR
PostScript board	PostScript3 Board Type 2
IEEE 1284 parallel board	IEEE 1284 Parallel Board Type 1
IEEE 802.11b interface board	IEEE 802.11b I/F Unit Type 1
Memory unit	Memory Unit TypeC (128 MB/256 MB)
HDD board	Extension HDD Type 1
Key Counter	-

Guide to Major Options

Auto Document Feeder (ADF)

Load a stack of originals here. They will be fed automatically, one by one.



1. Auto Document Feeder

✤ Large Capacity System (LCS): Large capacity input tray (LCIT)



- **1.** Indicators
- 2. Side guide adjustment knob
- 3. Down button
- 4. Up button
- **5.** Side guide screw
- **6.** Feeding pressure lever
- 7. Side guides

- 8. Input tray
- 9. Power switch
- **10.** Cover release lever
- 11. Cover
- **12.** Intermediate feeding section
- 13. LCIT release lever

✤ Large Capacity System (LCS): Large capacity output tray (LCOT)



- 1. Side guide adjustment knob
- 2. End plate screw
- 3. End plate
- 4. Output tray

- 5. Side guides
- 6. Up button
- 7. Down button

Control Panel



1. Screen contrast knob

Adjusts the brightness of the display panel.

2. [Image Position] key

Adjusts the position of printed images.

3. [User Tools] key

Press to change the default settings to meet your requirements.

4. Position Setting keys

Adjusts the position of printed images.

5. [Printer Settings] key

Press to change the default settings for online printing.

6. Indicators

[]. Open Cover/Unit indicator. See p.143 "]. When the Open Cover/Unit Indicator Lights".

Let you know the status of the machine.

∴ Add Ink indicator. See p.126 "∴Adding Ink".

is: Master End indicator. See p.128 ″is Replacing the Master Roll″.

'≟: Load Paper indicator. See p.124 "**'≟**Loading Paper".

औr: Misfeed indicator. See p.130 "औr Clearing Misfeeds".

7. [Check Modes] key

Press this key to check settings.

8. [Program] key

Press to register frequently used settings, or to recall registered settings.

9. [Clear Modes] key

Press to clear previously entered print job settings.

10. [Hold Data-in] key

Press to reject the online print temporarily.

11. [Master Making] mode select key

Press to select the master making mode.

12. [Auto Cycle] key

Press to make masters and prints in a single operation. See p.44 "Basic Procedure".

13. [Print] mode select key

Press to select the print mode.

14. Main power indicator

The main power indicator lights up when the main switch is turned on.

15. [Proof] key

Press to make a proof print.

🖉 Note

□ Same as 22.

16. Data In indicator (Green)

- On: Data waiting for Master Making and printing is in the machine.
- Blinking: Data is being received, or Master Making or printing is in progress.
- Off: Master Making and printing are completed.

17. Error indicator (Red)

- On: An error has occurred. Master Making and printing stops.
- Off: Normal status

18. Speed setting keys

Press to adjust the printing speed. See p.55 "Changing the Printing Speed".

19. [Initial position] key

Press to reset to the default image position.

20. Number keys

Press to enter the desired number of prints and data for selected modes.

21. [Clear/Stop] key

- Clear
 - Press to delete a number entered.
- Stop Press to stop a job in progress.

22. [Proof] key

Press to make a proof print.

🖉 Note

□ Same as 15.

23. [Start] key

Press to start making masters or printing.

24. Operation switch

Press this switch to operate the machine in Energy Saver mode.

To go back into the Energy Saver mode, press this switch.

Display Panel

The display panel shows machine status, error messages and function menus.

The function items displayed serve as selector keys. You can select or specify an item by lightly pressing them.

When you select or specify an item on the display panel, it is highlighted like [1058]. Keys appearing as OK cannot be used.

∰Important

□ A force or impact of more than 30 N (about 3 kgf) will damage the display panel.



- 1. Original functions.
- 2. Operational status and messages.

3. You can register up to three frequently used reduce/enlarge ratios other than the fixed reduce/enlarge ratios.

4. Numbers of prints set.

5. Displays available functions. Press a function name to display its menu. For example, press [Reduce / Enlarge] to bring up the Reduce/Enlarge menu. 6. Displays contents of the Shortcut keys. You can register frequently used functions in these keys.

7. A clip mark indicates the currently selected function.

Common Key Operations

The following keys are common to all screens.

✤ Key list

[ОК]	Acknowledges a selected function or entered values, and then returns to the previous display
[Cancel]	Deletes a selected function or entered values, and then returns to the previous display
[▲Prev.], [▼Next]	Moves to the previous page or the next page when all functions cannot be displayed on one page.
[OK] [Yes]	Closes displayed messages.
[Clear]	Clears entered values and does not change the settings.
[Exit]	Returns to the previous display.

Turning On the Power

Main switch (left side of the machine)

Press to activate the machine. When the machine has finished warming up, you can make master and prints.

Turning off this switch will completely turn off power to the machine.

🖉 Note

This machine automatically enters Energy Saver Mode or turns itself off if you do not use it for a certain period. See p.46 "Saving Energy" and p.46 "Auto Off Timer".

Turning On the Power

- **1** Make sure that the power cord is firmly plugged into the wall outlet.
- **2** Open the switch cover and turn on the main switch.



The main power indicator turns on.

∰Important

Do not turn off the main power immediately after it has been turned on. Otherwise it may result in damage to the hard disk or memory, leading to the malfunctioning of the machine.

Turning Off the Power

∰Important

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

1 Open the switch cover, and turn off the main switch.



The main power indicator goes off.

1. Before Using the Machine

Originals

Size and Weights of Recommended Originals

✤ Metric version

Where original is placed	Original size	Original weight
Exposure glass	A3 🗗, B4 🗗, A4 🗍 🗗, B5 JIS (Japanese Industrial Standard) 🖵 🗗	
ADF	A3 🗗, B4 JIS 🗗, A4 🗗 🗗, B5 JIS 🗗 🗗, A5 🗗 🗗	$52-128 \text{ g/m}^2$

Inch version

Where original is placed	Original size	Original weight
Exposure glass	$\begin{array}{c} 11" \times 17" \ \square, 8^{1}/_{2}" \times 14" \ \square, \\ 8^{1}/_{2}" \times 11" \ \square \ \square \end{array}$	
ADF	$\begin{array}{c} 11" \times 17" \ \square, 8^{1}/_{2}" \times 14" \ \square, 8^{1}/_{2}" \\ \times 11" \ \square, 5^{1}/_{2}" \times 8^{1}/_{2}" \ \square \end{array}$	14–28 lb.

🖉 Note

- □ The maximum number of originals that can be placed in the ADF is about 50 (80 g/m^2 , 20 lb).
- □ If you do not lift the exposure glass cover more than 30° when you place another original, the machine might not detect the next original size correctly.

Non compatible originals for the Auto Document Feeder(ADF)

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

- Originals other than those specified on p.23 "Size and Weights of Recommended Originals".
- Perforated or torn originals
- Curled, folded, or creased originals
- Pasted originals
- Originals with any kind of coating, such as thermal fax paper, art paper, aluminum foil, carbon paper, or conductive paper.
- Originals with indexes, tags, other projecting parts
- Stapled or clipped original
- Sticky originals such as translucent paper
- Thin originals that have low stiffness
- Thick originals such as postcards
- Bound originals such as books
- Transparent originals such as OHP transparencies or translucent paper
Sizes difficult to detect

It is difficult for the machine to automatically detect the sizes of the following types of originals, so select the paper size manually.

- Originals with indexes, tags, or other protrusions
- Transparent originals such as OHP transparencies or translucent paper
- Text or picture dense original
- Originals containing solid images
- Originals containing solid images around their edges

Sizes Detectable by Auto Paper Select

O: Detectable size × : Undetectable size

Metric version

Size	A3 🗗	B4 JIS 🗗	A4 🖓 🖓	B5 JIS 🖓 🗗	A5 🖓 🖓
Location of the original					
Exposure glass	О	О	О	О	х
ADF	О	О	О	О	О

Inch version

Size	11"×17" □	$8^{1}/_{2}$ " × 14" D	$8^{1}/_{2}$ " × 11"	$5^1/_2$ " × $8^1/_2$ "
Location of the original				
Exposure glass	О	О	О	×
ADF	О	О	О	О

Print Paper

Recommended Paper Size and Type

The following limitations apply:

	Paper S	Paper	
	Metric	Inch	Weight
Paper feed tray	A3 , B4 JIS , A4 , A4 , B5 JIS , A5 , A5 , B6 JIS , A6 Others (Vertical: 70 - 297 mm, Horizontal: 148 - 432 mm)	11" × 17" \Box , 8 ¹ / ₂ " × 14" \Box , 8 ¹ / ₂ " × 11" \Box \Box , 5 ¹ / ₂ " × 8 ¹ / ₂ " \Box \Box Others (Vertical: 2.76" - 11.7", Horizontal: 5.83" - 17")	47.1 - 209.3 g/m ² , 12.5 - 55.6 lb

Recommended for the LCIT

The size and quantity of paper that can be loaded on the LCIT are as follows.

Paper size		Paper weight	Tray capacity
Metric version	Inch version		
Maximum: 297 × 432 mm (325 × 447 mm ^{*1}) Minimum: 128 × 182 mm	Maximum: 11.6" × 17.0" (12.7" × 17.5" ^{*1}) Minimum: 5.1" × 7.1"	47.1 – 209.3 g/m ² (12.5 – 55.61 lb.)	3000 sheets (80 g/m ² , 20 lb.) Paper stack height: Less than 320 mm (12.5")

^{*1} When the image position is set to 0 mm (0")

🖉 Note

 \square Tray capacity is based on using high quality 80 g/m² (20 lb.) paper. The number of sheets shown is approximate.

Recommended for the LCOT

Pape	r size	Paper weight	Tray capacity
Metric version	Inch version		
Maximum: 297 × 432 mm (325 × 447 mm ^{*1})	Maximum: 11.6" × 17.0" (12.7" × 17.5" ^{*1})	47.1 – 209.3 g/m ² (12.5 – 55.61 lb.)	3000 sheets (80 g/m ² , 20 lb.)
Minimum: 70 × 148 mm (When the LCIT is installed: 128 × 182 mm)	Minimum: 2.8" × 5.9" (When the LCIT is in- stalled: 5.1" × 7.1")		Paper stack height: Less than 345 mm (13.5")

^{*1} When the image position is set to 0 mm (0")

🖉 Note

 \Box Tray capacity is based on using high quality 80 g/m² (20 lb.) paper. The number of sheets shown is approximate.

Non-recommended Paper

The following types of paper are not recommended for this machine:

- Roughly cut paper
- Paper of different thickness in the same stack
- Envelopes heavier than 85 g/m^2 , 22 lb.
- Folded, curled, creased, or damaged paper
- Damp paper
- Torn paper
- Slippery paper
- Rough paper
- Paper with any kind of coating (such as carbon)
- Short grain paper
- Thin paper that has low stiffness
- Paper that is prone to generate a lot of paper dust
- Grained paper loaded with the direction of the grain perpendicular to the feed direction
- Certain types of long thin envelopes. E.g. international mail envelopes



• The following types of envelopes

Envelopes with glue or gum	Envelopes with windows	Envelopes with round tags	Open envelopes
			Less than 150mm 6.0" Paper feed direction

🖉 Note

- Do not use inkjet paper. It does not absorb ink well, print will smudge if rubbed, and the back of paper may be dirtied.
- □ If you print on rough grained paper, the print image might be blurred.
- □ You can use A3 (297 × 420 mm) or 11" × 17" originals or printing paper. When you want to print the entire image of an A3, 11" × 17" original, select Reduce mode because the maximum print areas are as follows:
 - Metric version: 290 × 412 mm, 11.4" × 16.2"
 - Inch version: 290 × 422 mm, 11.4" × 16.6"
- □ When you use A3, $11" \times 17"$ and 209.3 g/m², 55.6 lb paper, slow the printing speed down to setting 1, 2, or 3.

∰Important

Correct curls in the paper before placing it in the machine. When you cannot correct the paper curl, stack the paper with the curl face down or face up as shown in the illustration. If the paper is curled, it might wrap around the drum or stains might appear.

	Right	Wrong
Thin Paper		
Thick Paper		

Storing Paper

Note

□ When storing paper, the following precautions should always be taken:

- Do not store paper where it will be exposed to direct sunlight.
- Avoid storing paper in humid (greater than 70%) areas.
- Store on a flat surface.
- □ Keep open reams of paper in the package and store as you would unopened paper.

Printing Size

Maximum print size

- Metric version: 290 × 412 mm, 11.4" × 16.2"(approx. A3 size)
- Inch version: 290 × 422 mm, 11.4" × 16.6"

At low temperatures, the maximum print size may be somewhat smaller.

Range that cannot be printed

The first 6 mm, 0.24", of the leading edge and the last 2 mm, 0.08", of the trailing edge cannot be printed. Make sure the leading edge margin is at least 6 mm, 0.24", and the trailing edge margin is at least 2 mm, 0.08".



a = 6 mm, 0.24"

2. Basics

Printing Preparations

Using the Paper Feed Tray and Delivery Tray

Loading Paper



2 Lift the paper feed side plates.



🖉 Note

When loading larger paper, slide out the extender.

B Make sure that the paper feed side plates knob lock lever is raised (lock is released), and then grasp the paper feed side plates knob and adjust the paper feed side plates to match the paper size.



∰Important

Always adjust the position with the lock lever for the paper feed side plates in the raised position (lock released).

4 Place the paper on the paper feed tray.



🖉 Note

Correct the paper curl before loading the paper. If you cannot do so, stack the paper with the curl face down. • Make sure that the paper feed side plates are touching both sides of the paper, and then push the lock lever for the side plates down to lock the side plates into position.



∰Important

Always make sure that you push the lock lever for the side plates down to lock the side plates into position.

🖉 Note

Make sure that the paper size and orientation in the display panel correspond with the actual paper size and orientation set on the paper feed tray.

Setting Up The Paper Delivery Tray

1 Raise the paper delivery tray slightly, and then gently lower it with your hand.



2 Lift the paper delivery side plates and adjust them to match the paper size.



3 Lift the paper delivery end plate and adjust it to match the paper size.



NoteThe inside of the plates should correspond to the paper size.

Adjusting the Paper Alignment Wings and Chocks

Use the paper alignment wings and chocks to stack printed paper neatly.

🖉 Note

- Prints may be delivered curled up if they contain large areas of solid image. If this happens, raise the paper alignment wings to about 45 degrees. When printing on B5 JISD D or A4D of 52.3 g/m², 13.9 lb or thinner, slide the chocks up together.
- Depending on the type of paper you are using, you may not be able to load to capacity (1000 sheets) when the wings are raised.
- When printing on 52.3 g/m², 13.9 lb or thinner at a fast speed, paper jams (C) may occur in the paper exit area. If this happens, do the following:
 - Decrease print speed.

Reference

p.55 "Changing the Printing Speed"

- Lower the paper alignment wings.
- Push the end plate toward the paper delivery tray edge.
- When the paper alignment wings are raised, prints may not be delivered neatly stacked, depending on paper type. If this happens, lower the wings.

Paper alignment wings
Adjust the paper alignment wings.



1	2	
---	---	--

- **1**. Raise the wings fully.
- 2. Raise the wings to about 45 degrees.

Chocks

Slide the chocks up or down to adjust the buffer fins to match the paper size and thickness.



Adjust the paper alignment wings and chocks according to paper size and thickness, as follows:

Paper Weight	Paper Size	Paper align- ment wings	Chocks
128 g/m ² , 34 lb or thicker	A3 ₽, 11" × 17"₽, B4 JIS ₽	Lower the wings.	Down
	A4 ☞ 💭 , B5 JIS ☞ 🖓	Lower the wings.	Down
52.3 g/m ² - 128 g/m ² ,13.9 lb to 34 lb	A3 ₽, 11" × 17"₽, B4 JIS ₽	Raise the wings fully.	Up
	A4 ₽ ₽, B5 JIS ₽ ₽	Raise the wings to about 45 degrees.	Up
52.3g/m ² , 13.9 lb or thinner	A3 ₽, 11" × 17"₽, B4 JIS ₽	Raise the wings to about 45 degrees.	Down
	A4 ☞ ₽, B5 JIS ☞ ₽	Raise the wings to about 45 degrees.	Down

$\mathbf{\hat{V}}$ Using the trailing edge guides

When printing on A4 $\Box \Box$, $8^1/_2$ " $\Box \Box$, B5 JIS $\Box \Box$ size paper, swing out the guides as shown below:



Using the LCIT and LCOT

Installing the LCIT

1 Open the paper feed tray of the machine.



2 Make sure that the paper feed side plates knob lock lever is raised (lock is released), and then grasp the paper feed side plates knob and move the side guides of the paper feed tray of the machine to the widest position.



3 Lower the paper feed side plates.



Hold the handle and unfold the intermediate feeding section of the LCIT.



🖉 Note

□ Do not release the handle.

5 Lift the end of the intermediate feeding section and put it down placing the wheeled support bar onto the paper feed tray.



Push the LCIT into the machine until it clicks.



7 Plug the LCIT optical cable into the slot located at the left side of the back of the machine.



Turning On the Power

∰Important

- □ Make sure to turn on the power switch of the LCS first, and then turn on the main switch of the machine.
- **1** Make sure that the power cord is firmly plugged into the wall outlet.
- **2** Turn the power switch on.

The green indicator blinks.



Loading Paper

1 Turn the side guide adjustment knob to adjust the side guides to the paper size.



2 Tighten the screw to lock the side guides.



E Load paper.



Note 🖉

□ The leading edge of the paper must touch the inside of the LCIT.

Loading Paper Smaller than B6 JIS (128 imes182 mm, 5.0" × 7.1")

Paper smaller than B6 JIS must be loaded directly onto the paper feed tray of the machine. The LCIT must be detached.

Detach the LCIT.

2 Load paper onto the paper feed tray.

Setting up the LCOT

Press the up button to lift the output tray.

The output tray goes up.





2 Turn the side guide adjustment knob to adjust the side guides to the paper size.



🖉 Note

□ Align the inside of the side guides with the appropriate mark on the output tray.

3 Loosen the screw for the end plate, adjust it to the paper size, and then tighten the screw to lock the end plate.



🖉 Note

□ Align the screw with the appropriate paper size mark.

Printing on Paper Smaller than B6 JIS

1 Move the side guides outward.



2 Loosen the screw for the end plate, move it as close to the machine as possible, and then tighten the screw to lock the end plate.



Printing on 81.4 g/m² (21.6 lb.) or Heavier Paper

1 Lower the paper alignment wings.



🖉 Note

- Depending on the type of paper that you are using, you might not be able to use the full capacity (3000 sheets) of the LCOT when the wings are lifted.
- □ Lift the paper alignment wings when B5 JIS □ □ or A4 □ prints are delivered curled up.

Printing on Sizes Smaller than A4 or $8^{1}\!/_{2}"\times 11"$ \square \square Paper

Swing out the guides as shown in the illustration.



Removing Prints

1 Move the side guides outward, and then lift the end plate arm.



🖉 Note

□ Lift the end plate arm completely before releasing it.

2 Remove prints.



3 Move the side guides and end plate arm back to their original positions.

🖉 Note

□ Lower the end plate arm completely before releasing it.

After Printing

This section shows you how to return the paper feed tray and paper delivery tray to their original positions.

Folding the Paper Feed Tray and Delivery Tray

Folding the Paper Feed Tray



The paper feed tray will lower.

🖉 Note

□ If the extender has been slided out, push it back.



2 After the paper feed tray has stopped moving, raise the paper feed side plates knob lock lever to release the side plates.



Adjust the side plates to A4□, and then lower them.



Gently close the paper feed tray.



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Folding the Paper Delivery Tray

1 Slightly lower one of the side plates.



2 Remove the prints from the tray.



3 Lower the paper alignment wings.



4 Slide the chocks down.



5 Move the paper delivery end plate until its handle is flush with the end of the tray.



6 Lower the paper delivery end plate.



2

2 Move the side plates to the widest position, and then lower them.



B Close the paper delivery tray.



Uninstalling the LCIT

- **1** Turn off the main switch of the machine, and then turn off the power switch of the LCIT.
- **2** Unplug the power cord of the LCIT from the wall outlet.
- **3** Unplug the LCIT optical cable.



While pulling the LCIT release lever, detach the LCIT.



🖉 Note

- Be sure to hold the handle of the intermediate feeding section when you detach the LCIT.
- **5** Fold the intermediate feeding section.



Placing Originals

Original Orientation

When using the ADF, place the originals face up.

When using the exposure glass, place the originals face down.



1. ADF

2. Exposure glass

3. Exposure glass (Combine, Stamp or Make-Up functions)

🖉 Note

When using the Combine, Stamp, or Make-Up functions, place the original face down with its leading edge towards you.

When printing A3 , B4 JIS or 11" × 17" size originals, select 23 as the Original Orientation. The machine will then rotate the print image by 90°. This is useful for printing large originals using the Combine, or Stamp functions.

For example, to print A3 or 11" × 17" originals with the Stamp function selected:



🖉 Note

It is recommended that you use the Original Orientation function with the Auto Paper Select or Preset Reduce/Enlarge function.

1 Select [RE] or [EE]



Placing Originals on the Exposure Glass

1 Lift the exposure glass cover.



🖉 Note

- □ Be sure to lift the exposure glass cover more than 30 degrees.
- **2** Place the original face down on the exposure glass. The original should be aligned with the left scale.



- **1.** Left scale
- 2. Positioning mark
- **U** Lower the exposure glass cover.

Placing Originals in the Auto Document Feeder

- Adjust the guide to the original size.
- **2** Insert the aligned originals face up into the ADF.



🖉 Note

To avoid originals misfeeding, fan the originals before placing them in the ADF.

Limitation

Approximately 50 originals (80 g/m², 20 lb) can be inserted at a time in the ADF. The first (top) original will be fed first.

🖉 Note

- To avoid jamming, fan the originals before placing them in the ADF.
- □ The guides must fit snugly against both sides of the stack.

Adjust print settings as necessary, and then press the [Start] key.

🖉 Note

If the next original has been placed in the ADF before the machine stops, that original is fed automatically.

Basic Procedure

When Auto Cycle mode is on, you can process masters and make prints in a single operation.

Note 🖉

- □ The Auto Cycle mode is set to "on" as default.
- □ For details about step-by-step master and print making, see p.49 "Making a Master and Prints".

Make sure "() Ready" appears on the display.

Initial print display



Note 🖉

□ If the machine has user codes set, enter your user code using the number keys, and then press [#].

✓ Reference

p.162 "User Code"

2 Make sure no previous settings remain.

🖉 Note

□ If previous settings remain, press the [Clear Modes] key before entering your settings.

🔗 Note

□ Check the **(Auto Cycle)** mode select key is lit.



3 Place the originals.

^PReference

p.42 "Placing Originals"

- **4** Make the necessary settings.
- **b** Enter the required number of prints using the number keys.

Note

□ Set a print quantity between 1 (minimum) and 9999 (maximum).

6 Press the **[Start]** key.



Master making and printing starts.

. And to operate

- To stop the machine during a multiprint run Press the [Clear/Stop] key.
- To return the machine to the initial condition after printing Press the [Clear Modes] key.
- When clearing entered values Press the [Clear/Stop] key or [Clear] on the display.
- To check the settings Press the [Check Modes] key.

.

Original Beeper

The beeper sounds and an error message is displayed if you leave originals on the exposure glass after printing.

Auto Reset

If not used for a certain period of time after printing, the machine will return to the initial condition. This function is called "Auto Reset".

🖉 Note

- You can change the time the machine waits before Auto Reset starts. See p.153 "System Auto Reset Timer".
- □ The machine will not enter Auto Reset in the following cases if:
 - a warning message appears
 - there is no ink
 - originals or paper are jammed
 - it is making master or printing
 - it is printing the second page of a combined print job
 - it is loading original images into memory
 - you are making changes with User Tools
 - there is no paper
 - there is no master
 - the paper delivery box is full
 - originals are left in the ADF
 - a cover is open
 - you select "Off" for "System Auto Reset Timer" with User Tools

Saving Energy

If not used for a certain period of time after printing, the machine will enter the Energy Saver or Auto Off mode to reduce energy consumption.

Energy Saver mode

The display goes off. Printing from a computer is possible in this mode. To operate the machine, press the Operation switch, or place originals on the exposure glass or in the ADF.

To go back into the Energy Saver mode, press the Operation switch.

Auto Off mode

The machine turns off automatically. To use it, turn the main switch on.

🖉 Note

- You can select which mode the machine enters after a specified period has passed following job completion. See p.154 "Energy Saver Option".
- You can change the time the machine waits before Energy Saver or Auto Off mode starts. See p.153 "Energy Saver Timer".

🖉 Note

- The machine will not automatically enter the Energy Saver or Auto Off mode in the following cases if:
 - a warning message appears
 - there is no ink
 - originals or paper are jammed
 - it is making master or printing
 - it is loading original images into memory
 - there is no paper
 - there is no master
 - originals are left in the ADF
 - a cover is open
 - you are making changes with User Tools
 - the user code entry screen is displayed
 - the Data In indicator is lit or blinking

Auto Off Timer

You can set the machine to turn itself off at a specified time everyday.

Make the timer setting in User Tools. See p.153 "Auto Off Timer".

🖉 Note

The machine will not automatically turn itself off if you are using it at the set time.

Printing onto Various Kinds of Paper

Before printing onto thick paper, thin paper, envelopes or special kinds of paper loaded in the paper feed tray, you must select the paper type.

Printing onto Thick Paper

If you wish to print onto thick (128 to 209.3 g/m², 34 to 55.6 lb or heavier) paper, perform the following steps.

Press [Feed Tray Paper Type].



2 Press [Thick Paper].

Press [Change Settings].

Press [OK].

Printing onto Standard Paper

If you wish to print onto standard (47.1 to 105 g/m^2 , 12.5 to 28 lb) paper, perform the following steps.

Press [Feed Tray Paper Type].

- 2 Make sure that [Normal] is selected.
- Press [OK].

Printing onto Envelopes

- Press [Feed Tray Paper Type].
- Select [Special Paper] .
- B Press [Change Settings]
- Press [OK].
- Delace the envelopes in the paper feed tray as shown in the illustration.



* Paper feed direction

🔗 Note

- □ When you use envelopes, the paper feed tray capacity is about 150 sheets (85 g/m², 22 lb) or enough to load a stack up to 105 mm, 4.1" high.
- **1** If your envelopes do not feed in well, lift the paper feed tray a little, and then lower it so that it slants up slightly.



Printing onto Special Paper

Preparation

To use this function, you have to register the special paper type in **[User 1]**, or **[User 2]** with User Tools. See p.155 "Paper Type: User1–2".

- Press [Feed Tray Paper Type].
- 2 Select [User 1] or [User 2].
- B Press [Change Settings]
- Press [OK].

Making a Master and Prints

Using the default settings, you can process masters and make prints in a single operation. This is called "Auto Cycle". You can also make masters and prints in separate operations. See the procedure below.

🖉 Note

- □ To create masters and make prints in a single operation, see p.44 "Basic Procedure".
- Make sure the [Master Making] mode select key is lit.

🖉 Note

□ If it is not lit, press the **[Master Making]** mode select key.



2 Place your originals.

p.42 "Placing Originals"

Press the [Start] key.



🔗 Note

□ Press the **[Proof]** key to check the image before making prints.



Reference

To change the image position, see p.54 "Adjusting the Position of Printed Images".

A Make sure the [Print] mode select key is lit.

E Enter the required number of prints using the number keys.



6 Press the **[Start]** key.



When the print job finishes, press the **[Clear Modes]** key. Previously entered job settings are cleared.

Selecting Cycle Setting

When printing from a computer, one of the four master making and printing cycles listed below can be selected. For details about Cycle Settings, see *Printer Reference*.

- Auto Cycle
- Original Page Cycle
- Master Cycle
- Master/Print Cycle

Image Rotation

When your original setting orientation is different from the paper orientation, the machine automatically rotates the original image by 90° to match the paper orientation.

🖉 Note

The following tables list the combinations that can be used in Image Rotation mode.

Original Paper	A3D	B4 JIS⊡	A4D	A4 🖓	B5 JIS⊡	B5 JIS ₽	A5⊅ ☆	A5 🗖 ☆
A4D				*		*		*
A4 🖵	*	*	*		*		*	
B5 JIS □				*		*		*
B5 JIS 🖵	*	*	*		*		*	
A5 D				*		*		*
B6 JIS □				*		*		*

✤ Metric version

 \star : The machine automatically rotates the original image by 90° to match the paper orientation.

 \Rightarrow : Place these originals in the optional ADF.

Inch version

Original	11" ×	8 ¹ / ₂ ''×	8 ¹ / ₂ "×	8 ¹ /2"×	5 ¹ / ₂ "×	$5^{1}/_{2}$ " × $8^{1}/_{2}$ "
Paper	لو_ا"17	14"□	11"□	11" 🖵	8 ¹ /₂"₽☆	▶ ☆
$8^1/_2$ " × 11"				*		*
$8^1/_2$ " × 11"	*	*	*		*	
5 ¹ / ₂ "×				*		*
8 ¹ / ₂ "						

 \star : The machine automatically rotates the original image by 90° to match the paper orientation.

 \Rightarrow : Place these originals in the optional ADF.

🖉 Note

- □ If you use Zoom mode, custom size originals or paper, the image will not be rotated.
- □ It takes longer than usual to make masters in Image Rotation mode.
- □ You can cancel Image Rotation mode with User Tools. See p.161 "Auto Rotation".

Selecting Original Type

The following can be selected as the original document type.

✤ Text

Specify this if the original document consists primarily of text.

Text/Photo

If the original document contains a combination of text and photographs, it is printed using the optimum image balance.

🖉 Note

□ Contrast can be selected.

Photo

Specify this for photographs, pictures, or coloured documents.

🔗 Note

Contrast and screen can be selected.

Pencil

Specify this for originals drawn/written in pencil.

🖉 Note

□ Set documents drawn/written in pencil on the exposure glass.

Pale

When printing pale colours, the master is created using pale colour print.

🖉 Note

- □ Masters are normally produced using [Text].
- □ If **[Photo]** is selected for original documents that contain both text and photographs, text may appear too light. If this is the case, select **[Text / Photo]**.
- □ Black ink printed using **[Pale]** can produce a grayish colour.
- Coloured ink printed using [Pale] can produce pale colours for background images.

Press [Original Type].

Text	() Ready		
	Set the original, then press the Start key	to make the ne	ew master
Original Type	1 E D A 4 Standard		
Master Making Density	Full Size Auto Reduce / Enlarge	A3→A4 B4→B5	A4→A3 A5→A4
Original Orientation	$\begin{array}{c} 1 \\ 2 \\ \hline \end{array} \rightarrow 1 \\ 2 \\ \hline \end{array} \begin{array}{c} 1 \\ 2 \\ \hline \end{array} \rightarrow \frac{12}{34} \end{array}$	Create Margin]
Select Stored File	Make Master Options Edit Image		Combine

2 Select the type of original.



Adjust the contrast in the **[Text / Photo]** and **[Photo]** modes.

🖉 Note

- Contrast adjustment is effective only if the [Text / Photo] or [Photo] mode is selected.
 - When **[High]** is selected, human faces are sharpened.
 - When **[Low]** is selected, scenery and other similar images are sharpened.

Adjust the screen in the **[Photo]** modes.

🔗 Note

- □ Screen adjustment is effective only if the **[Photo]** mode is selected.
- Screen can be selected in five levels, [Standard], [Lightest 1], [Lightest 2], [Lightest 3]and [Lightest 4].

Press [OK].

Master Making Density

You can adjust the print image density before making a master in the following cases.

- When printing from faint originals, set the image density darker.
- When printing from originals that have many fine lines, set the image density darker.
- When printing from originals that have many bold lines or blurred letters, set the image density lighter.

Press [Master Making Density].



2 Select the density, and then press [OK].

🖉 Note

- Density can be selected in four levels, [Light], [Normal], [Dark] and [Very Dark].
- □ To darken the density, select **[Dark]** or **[Very Dark]**, and to lighten the density, select **[Light]**.

2

Sample Print and Adjustment

Once the master making has been completed, it is possible to confirm the print finish before pressing the [Print] mode select key to start the printing process.

🖉 Note

□ After completing the master making, it is only possible to adjust the print position and speed

Press the [Proof] key.

🖉 Note

You can also use the [Proof] key arranged in the right part of the control panel.



AJK138S

A single printed page is ejected.

🖉 Note

Press the key continuously to eject printed pages in succession.

Adjusting the Position of Printed Images

Use the following procedure to adjust the position of print images as required.



* Paper feed direction

Press [Image position].



AJK137S

Adjust image position using the [♥], [▲], [▶], and [◀] keys.



🔗 Note

- When you shift the image forward, leave a 10 mm, 0.4" margin at the leading edge. If there is no margin, paper might wrap around the drum and cause a misfeed.
- □ One push of either scroll key shifts the image position by 0.25 mm, 0.01".
- □ The 【▼】 and 【▲】 keys shift the image up to 10 mm, 0.4" in each direction.
- □ The [▶] and [◀] keys shift the image up to 15 mm, 0.6" in each direction.
- □ When you reset to the default position, press the **[Initial position]** key.

B Press [Exit].

Press the [**Proof**] key to check the image position.

Changing the Printing Speed

Use the **[**] or **[**] key to adjust the printing speed. The relationship between printing speed and print quality depends on the type of paper you use.

Limitation

□ When printing on paper longer than 364 mm or 14.4", the maximum print speed is 120 sheets/minute.

Press the [▶] key to increase the speed, or the [◄] key to reduce the speed.



The printing speed changes in six increments as follows:



- 1. 60 sheets/minute
- 2. 75 sheets/minute
- 3. 90 sheets/minute
- 4. 105 sheets/minute
- 5. 120 sheets/minute
- 6. 135 sheets/minute

3. Printing Functions

Printing Functions

Preset Reduce/Enlarge

Use this function to reduce or enlarge originals by a preset ratio. A total of 9 ratios are available (3 enlargement ratios, 6 reduction ratios).



🖉 Note

- You can select a ratio regardless of the size of an original or printing paper. With some ratios, parts of the image might not be printed or margins will appear on prints.
- You can change the preset reproduction ratios with User Tools. See p.158 "Reproduction Ratio".
- Prints can be reduced or enlarged as follows:

Metric version

Ratio (%)	Original \rightarrow Print paper size
200	$A5 \rightarrow A3, B6 JIS \rightarrow B4 JIS$
141	$A4 \rightarrow A3, A5 \rightarrow A4$
122	$A4 \rightarrow B4$ JIS, $A5 \rightarrow B5$ JIS
115	B4 JIS \rightarrow A3, B5 JIS \rightarrow A4
93	—
87	$A3 \rightarrow B4$ JIS, $A4 \rightarrow B5$ JIS
82	B4 JIS \rightarrow A4, B5 JIS \rightarrow A5
71	$A3 \rightarrow A4, B4 JIS \rightarrow B5 JIS,$
61	$A3 \rightarrow B5 JIS, A4 \rightarrow B6 JIS$
50	$A3 \rightarrow A5, B4 JIS \rightarrow B6 JIS$

Inch version

Ratio (%)	$Original \rightarrow Print \ paper \ size$
200	$5^{1}/_{2}$ " × $8^{1}/_{2}$ " → 11 " × 17 "
155	$5^{1}/_{2}$ " × $8^{1}/_{2}$ " → $8^{1}/_{2}$ " × 14"
129	$8^{1}/_{2}"\times11"\rightarrow11"\times17"$
121	$8^{1}/_{2}"\times14"\rightarrow11"\times17"$
93	_
85	$F \rightarrow 8^{1}/_{2}" \times 11"$
77	$8^{1}/_{2}"\times14"\rightarrow8^{1}/_{2}"\times11"$
74	$11"\times15"\rightarrow8~^{1}/_{2}"\times11"$
65	$11"\times17"\rightarrow8"/_2"\times11"$
50	$11" \times 17" \rightarrow 5^{1}/_{2}" \times 8^{1}/_{2}"$

Place the originals. Press [Reduce / Enlarge].

NOV 2005 12:13 Print 0 Feed Tray Paper Type Separate ce / En large A3→A4 B4→B5 A4→A3 A5→A4 93% 100% Class Settings Skip Feed Create Margin 1 2 3 4 Security Edit Imag Combin Reduce / Enlarge Store File

🔗 Note

To select a preset ratio on the initial display, press the shortcut Reduce/Enlarge key, and then proceed to step 5.

E Press [Enlarge] or [Reduce].

Select a ratio, and then press [OK].

5 Press the **[Start]** key.

Zoom

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



🖉 Note

□ You can select a preset ratio close to the ratio using [Reduce] or [Enlarge], and then adjust it further, using [+] or [-].

- Place the originals.
- **2** Press [Reduce / Enlarge].

					I NUV	2005 12:1	3
s the Start key	to make the	new master.				Print 0	
			Feed Tray P	aper Type		Separate	
uce / En large	A3→A4 B4→B5	A4→A3 A5→A4	93%	100%	CI	ass Settings	
) → 12 3 4	Create Margin					Skip Feed	
					[Security	
Edit Image		Combine	Reduce	/Enlarge		Store File	

Enter the ratio.

To select the ratio using [+] and [-]

- Select a preset ratio close to the ratio using [Reduce] or [Enlarge].
- Adjust the ratio further, using [+] or [−].
 - 🖉 Note
 - Pressing [+] or [-] changes the ratio in increments of 1%. Pressing and holding down
 [+] or [-] changes it in increments of 10%.
 - □ If you have incorrectly entered the ratio, readjust it using [+] or [-].

To enter the ratio using the number keys

- Press [Mag. Ratio].
- 2 Enter the ratio using the number keys.
- 3 Press [#].
- **4** Press [OK].
- **4** Press the **[Start]** key.

Auto Reduce/Enlarge

The machine can choose an appropriate reproduction ratio based on the paper and original sizes you select.



🖉 Note

- \Box The range of ratios you can select are 50 200%.
- □ The table below shows the reproduction ratios that can be selected for various combinations of original and paper size.

Origi- nal	A3 □	B4 JIS⊡	A4D	A4 🖵	B5 JIS⊡	B5 JIS 🖵	A5□ *2	A5 🖓 *2
Paper								
A3D	100%	115%	141%		163%		200%	
B4 JIS₽	87%	100%	122%		141%		173%	
A4₽	71%	82%	100%	100% *1	115%	115% *1	141%	141% *1
A4 🔽	71% ^{*1}	82% *1	100% *1	100%	115% *1	115%	141% *1	141%
B5 JIS₽	61%	71%	87%	87% *1	100%	100% *1	122%	122% *1
B5 JIS 🖵	61% ^{*1}	71% *1	87% *1	87%	100% *1	100%	122% *1	122%
A5 □	50%	50%	71%	71% *1	82%	82% *1	100%	100% *1
B6 JIS □		50%	61%	61% *1	71%	71% *1	87%	87% *1

✤ Metric version

*1 The machine automatically rotates the original image by 90° to match the paper direction and selects an appropriate reproduction ratio. See p.51 "Image Rotation".

^{*2} Place these originals in the optional ADF.

Original Paper	11"× 17"₽	8 ¹ /₂"× 14"⊡	8 ¹ /₂"× 11"⊡	8 ¹ /₂"× 11"₽	8 ¹ / ₂ "× 5 ¹ / ₂ "□ *2	$8^{1/_{2}} \times 5^{1/_{2}}$ "
11"×17"₽	100%	121%	129%		200%	
$8^{1/2''} \times 14'' \square$	77%	100%			155%	
$8^{1/2''} \times 11'' \square$	65%	77%	100%	100% *1	129%	129% *1
$\begin{array}{c} 8^1/_2"\times\\ 11" \Box \end{array}$	65% *1	77% *1	100% *1	100%	129% *1	129%
$8^{1/2''} \times 5^{1/2''} \square$	50%	61%	65%	65% *1	100%	100% *1

Inch version

^{*1} The machine automatically rotates the original image by 90° to match the paper direction and selects an appropriate reproduction ratio. See p.51 "Image Rotation".

^{*2} Place these originals in the optional ADF.

Place the originals.

Press [Auto Reduce / Enlarge].



Press the [Start] key.
Directional Magnification (%)

Prints can be reduced or enlarged at different reproduction ratios, horizontally and vertically.



- a: Horizontal ratio
- b: Vertical ratio
- 🖉 Note
- □ You can also select a preset ratio close to the ratio using [Reduce] or [Enlarge], and then adjust it further, using [+] or [-].

Place the originals.

2 Press [Reduce / Enlarge].



Press [Specified Ratio].

Press [Direct. Mag.%].

To enter the ratio using the number keys

Press [Horizontal].

- 2 Enter the ratio using the number keys, and then press [#].
- **3** Press [Vertical].
- Enter the ratio using the number keys, and then press [#].
- 6 Press [OK].

To specify a ratio using [+] and [-]

- Press [With + -].
- Press [Horizontal].
- Adjust the ratio using [+] or [-].
 - 🖉 Note
 - Pressing [+] or [-] changes the ratio in increments of 1%. Pressing and holding down [+] or [-] changes it in increments of 10%.
 - □ If you have incorrectly entered the ratio, readjust it using [+] or [-].
- **4** Press [Vertical].
- S Adjust the ratio using [+] or [−].
- 6 Press [OK].
- D Press [OK].
- **6** Press the **[Start]** key.

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Directional Size Magnification (mm)

A suitable reproduction ratio is automatically selected when you enter the horizontal and vertical lengths of the original and print image you require.



- **1.** Horizontal original size
- 2. Vertical original size
- 3. Horizontal print size
- **4.** Vertical print size

Preparation

Specify the vertical and horizontal size of the original and that of the prints, as shown.

🖉 Note

You can enter sizes within the following ranges:

Metric	Vertical: 1–999 mm
version	(increments of 1 mm)
	Horizontal: 1–999 mm (increments of 1 mm)
Inch	0.1"–99.9"
version	(increments of 0.1")

- Place the originals.
- **2** Press [Reduce / Enlarge].

						2000 12:	0
s the Start key	to make the r	new master.				Print 0	
			Feed Tray	Paper Type		Separate	
uce / En large	A3→A4 B4→B5	A4→A3 A5→A4	93%	100%	С	lass Settings	
→ 12 3 4	Create	1				Skip Feed	
						Security	
Edit Image		Combine	Reduce	e / En large		Store File	

- Press [Specified Ratio].
- Press [Direct. Mag. mm].
- Enter the horizontal size of the original using the number keys, and then press [#].

6 Enter the horizontal size of the print using the number keys, and then press [#].

- **2** Enter the vertical size of the original using the number keys, and then press [#].
- Enter the vertical size of the print using the number keys, and then press [#].

- To change the length, press the key you want to change, and then enter the new value.
- Press [OK] twice.
- Press the [Start] key.

Combine

Use this function to combine originals onto one sheet of paper.

✤ 2 one-sided originals



✤ 4 one-sided originals



Preparation

You can combine 2 or 4 one-sided originals onto one side of a sheet. Refer to the following tables when you select the original and paper sizes:

Metric version

Original	A3D	B4 JIS⊅	A4 🖓 🖓	B5 JIS 🖓 🖙	A5 🖓 🖙 *3
Paper					
A3 ₽	*2	*2	*2	*2	*2
B4 JIS₽	*1	*2	*2	*2	*2
A4 🖓 🖙	*1	*1	*2	*2	*2
B5 JIS 🖓 🖙	-	*1	*1	*2	*2

*1: You can use these original and paper sizes to combine 4 one-sided originals.

*2: You can use these original and paper sizes to combine 2 or 4 one-sided originals.

*3: Only available when placing the original on the exposure glass.

Inch version

Original	11"×17"□	8 ¹ / ₂ " × 14"□	8 ¹ / ₂ " × 11" 🖓 🕞	5 ¹ / ₂ "×
Paper				8 ¹ / ₂ " ⁻ *3
11" × 17" D	*2	*2	*2	*2
$8^{1}/_{2}$ " × 14"	*1	*2	*2	*2
$8^{1}/_{2}$ " × 11" \square \square	*1	*1	*2	*2
$5^1/_2$ " × $8^1/_2$ " D	_	_	*1	*2

*1: You can use these original and paper sizes to combine 4 one-sided originals.

*2: You can use these original and paper sizes to combine 2 or 4 one-sided originals.

*3: Only available when placing the original on the exposure glass.

Limitation

- □ You cannot print with originals different in size and orientation.
- □ If the reproduction ratio is under 49%, it is automatically adjusted to 50%. Parts of the image might not be printed.

- You can print a separation line in between the combined images. See p.159 "Combine/Image Repeat Separation Line".
- □ You can set the machine to automatically cancel Combine mode once you have finished using it. See p.160 "Cancel Combine/Repeat Setting".
- □ If the orientation of originals is different from that of the paper, the machine will automatically rotate the image by 90° to make prints properly.
- □ If the number of originals placed is less than the number specified for combining, the last page segment is left blank as shown.



Place the originals.

Placing the original (\Box) on the exposure glass

Place the original face down with its leading edge towards you, as shown below.



Placing the originals (\Box) in the optional ADF

1 Place the originals face up with the first page on the top.

2 Adjust the document guides to the original size.



🖉 Note

□ To avoid originals misfeeding, fan the originals before placing them in the ADF.

2 Press [Combine].



B Press [2 Originals] or [4 Originals] .

Press [OK].



- 🖉 Note
- **D** The machine selects the reproduction ratio automatically.

Class Settings

You can use the Class Setting function to make different numbers of prints for different classes from the same original. All stored numbers of prints are made for each set. You can also make the same number of prints for the same class from a number of different originals.

This feature is useful for teachers who frequently make multiple print sets (notes, handouts, tests etc) for their classes.

The following class function modes are available:

Class mode

Make the same number of prints from the same original for multiple classes. You must enter the numbers of prints and classes.

You can set the multiple pattern of the number of prints and classes.

You can also register frequently used pattern settings in the machine's memory and recall these for future use.



Separate per Original mode

Make prints from different originals for multiple classes. You must to enter the numbers of prints for each original manually.

You can also register frequently used settings of the numbers of originals and prints in the machine's memory and recall these for future use.



Separate Prints

Make prints from the same original for multiple classes. You must enter the numbers of prints for each class manually.

You can also register frequently used settings of the numbers of prints in the machine's memory and recall these for future use.



✤ Year/Class

Make prints from the same originals for all registered classes, years.

This mode allows you to store the number of students in each class in the machine's memory beforehand.



🖉 Note

- When you select the Class Setting function, Separate mode is automatically enabled. The Separator pulls the top sheet of each set delivered to the paper delivery tray to mark the end of each print set. See p.71 "Separate".
- You can also cancel Separate mode with User Tools. See p.161 "Auto Separate (Class)".

Class mode

1 Place one original on the exposure glass or in the optional ADF.

Press [Class Settings].



B Press [Class].

4 Enter the number of prints and classes per pattern using the number keys, and then press the [#] key.

Registering a program

You can also register frequently used settings in machine memory.

- Press [Program / Recall].
- Press [Program].
- **3** Press the program number you want to store.
 - 🖉 Note
 - □ Program numbers displayed with ⇒ next to them already have settings.
- Enter the program name using the letter keys on the display panel.

You can enter up to 40 characters.

Reference

For details about entering characters, see p.175 "Entering Text".

6 Press [OK].

When the settings are successfully stored, the \Rightarrow indicator followed by the program number and program name will be displayed. After a while, the screen reverts back to the initial display.

Recalling a Program

You can recall the program if you have registered it already.

Press [Program / Recall].

2 Press [Recall].

The stored settings are displayed.

🖉 Note

□ Program numbers displayed with ⇒ next to them already have settings.

3 Press the number of the program you want to recall.

Press [OK] twice.

6 Press the **[Start]** key.



Separate per Original

Place first original on the exposure glass or in the optional ADF.

2 Press [Class Settings].



Press [Separate per Orig.].

Enter the number of prints per original using the number keys, and then press the [#] key.

🖉 Note

- □ Up to 30 originals can be set.
- If you use this setting frequently you can register and recall a program. For details, see p.68 "Registering a program" and p.69 "Recalling a Program".

Press [OK] twice.

6 Press the **[Start]** key.

Separate Prints

- **1** Place one original on the exposure glass or in the optional ADF.
- **2** Press [Class Settings].

					1 NOV	2005 12:1	3
s the Start key t	to make the	new master.				Print 0	
			Feed Tray F	Paper Type		Separate	
uce / En large	A3→A4 B4→B5	A4→A3 A5→A4	9 3%	100%	C	ass Settings	
) → 12 3 4	Create Margin	1				Skip Feed	
		<u>ل</u>				Security	
Edit Image		Combine	Reduce	/Enlarge		Store File	

- Press [Separate Prints].
- Enter print quantity per number of class using the number keys, and then press the [#] key.

- **Up** to 30 classes can be set.
- If you use this setting frequently you can register and recall a program. See procedure of "Registering a Program" and "Recalling a Program" on p.68 "Class mode"
- **5** Press [OK] twice.
- O Press the [Start] key.

Year/Class

Preparation

You must register the number of students in each class. See p.70 "Registering Classes" .

1 Place one original on the exposure glass or in the optional ADF.

Press [Class Settings].



Press [Year / Class].

Press the registered class for each year you want.

🔗 Note

- □ To select all classes of year, press [All] of the desired year.
- Make prints for all registered classes, press [All Years].

5 Press [OK] twice.

6 Press the **[Start]** key.

Registering Classes

Press [Class Settings].

			I NUY	2005 12:13
s the Start key to ma	ke the new master.			Print 0
	(Feed Tray Paper Type		Separate
uce / En large 83- 84-	+A4 A4→A3 +B5 A5→A4	93% 100%	С	lass Settings
) → 112 Cre 3 4 Ma	ate min			Skip Feed
	3			Security
Edit Image	Combine	Reduce / En large		Store File

- **2** Press [Year / Class].
- Press [Program / Change].
- **4** Press the class number.
- **5** Enter the number of students using the number keys, and then press the [#] key.

- □ Repeat steps **4** and **5** until you have finished registering the number of students in each class for each year.
- Up to 9 years and 12 classes for each year can be set
- Press [OK] twice.

Separate

The print on the top of each print set in the paper delivery tray is pulled by the separator. This function is useful when you make two or more print sets.



Limitation

□ In Separate mode, the following limitations apply.

Metric version

Minimum paper size	Maximum paper weight	Paper delivery tray capacity	LCOT capacity
Length: 210 mm Width: 128 mm	127.9 g/m ²	600 sheets (64 g/m ²)	3000 sheets (64 g/m ²)

Inch version

Minimum paper size	Maximum paper weight	Paper delivery tray capacity	LCOT capacity
Length: 8.3" Width: 5.1"	34 lb	600 sheets (17 lb)	3000 sheets (17 lb.)

🔗 Note

- When you use thin paper, it is not recommended to use Separate mode. The separator might tear the paper.
- □ If the separator touches the print image, prints might be marked. In this case, it is not recommended to use Separate mode.
- □ When you do not use Separate mode, you can select the machine condition after each print set is fed out to the paper delivery tray with User Tools. See p.155 "Auto Class".
- □ If there are less than 10 sheets of paper in the paper delivery tray, the machine may not be able to use Separate mode.

1 Place the originals.

2 Press the [Separate] key.

				1007 2003 12.13
Text	() Ready			Print
	Set the original, then press the Start key to ma	ke the new master.		0
Original Type	1 E D A 4 Standard		Feed Tray Paper Type	Separate
Normal Master Making Density	Full Size Auto Reduce / Enlarge 83 84	+A4 A4+A3 +B5 A5+A4	93% 100%	Class Settings
Original Orientation	12+12 12+12 Cre 84 Mi	rate rgin		Skip Feed
				security
Select Stored File	Make Master Options Edit Image	Combine	Reduce / Enlarge	Store File

B Press the [Start] key.

🖉 Note

□ After the last page of each print set is fed out to the paper delivery tray, the separator pulls the last sheet of each group in Separate mode. The next separation begins.



Image Repeat

Use this function to repeat the image on the same sheet of paper. You can select to print 2, 4, 8 or 16 repeated images.



Limitation

Part of the repeated image might not be printed depending on the paper sizes, reproduction ratio and paper orientation.

🖉 Note

□ You can print a separation line in between the repeated images. See p.159 "Combine/Image Repeat Separation Line".

Refer to the following tables when you select the original and paper sizes:

Placing originals in the optional ADF (metric version)

Original	A3D	B4 JIS□	A4 🖓 🕞	B5 JIS 🖓 🖙	A5 🖓 🕞
Paper					
A3D	*2	*2	*3	*3	*4
B4 JIS □	*1	*2	*2	*3	*3
A4 🖓 🖙	*1	*1	*2	*2	*3
B5 JIS 🗖 🗖		*1	*1	*2	*2

*1: You can use these original and paper sizes to repeat 2 images.

*2: You can use these original and paper sizes to repeat 2 or 4 images.

*3: You can use these original and paper sizes to repeat 2, 4 or 8 images.

*4: You can use these original and paper sizes to repeat 2, 4, 8 or 16 images.

Placing originals in the optional ADF (inch version)

Original	11"×17"₽	8 ¹ / ₂ "×14"□	8 ¹ / ₂ " × 11" 🖓 🕞	$8^{1/2}$ " $ imes 5^{1/2}$ " \square \square
Paper				
11" × 17" D	*2	*2	*3	*4
$8^{1}/_{2}$ " × 14"	*1	*2	*2	*3
$8^{1}/_{2}$ " × 11" \square \square	*1	*1	*2	*3
$5^1/_2$ " × $8^1/_2$ " D			*1	*2

*1: You can use these original and paper sizes to repeat 2 images.

*2: You can use these original and paper sizes to repeat 2 or 4 images.

*3: You can use these original and paper sizes to repeat 2, 4 or 8 images.

*4: You can use these original and paper sizes to repeat 2, 4, 8 or 16 images.

Placing originals on the exposure glass (metric version)

Original	A3D	B4 JIS□	A4 🖓 🖙	B5 JIS 🖓 🖙
Paper				
A3D	*2	*2	*3	*3
B4 JIS □	*1	*2	*2	*3
A4 🖓 🕞	*1	*1	*2	*2
B5 JIS D □		*1	*1	*2

*1: You can use these original and paper sizes to repeat 2 images.

*2: You can use these original and paper sizes to repeat 2 or 4 images.

*3: You can use these original and paper sizes to repeat 2, 4 or 8 images.

Placing originals on the exposure glass (inch version)

Original	11"×17"□	8 ¹ / ₂ "×14"□	8 ¹ / ₂ " × 11" 🖓 🕞
Paper			
11" × 17" D	*2	*2	*3
$8^{1}/_{2}$ " × 14"	*1	*2	*2
$8^{1}/_{2}$ " × 11" \square \square	*1	*1	*2
$5^1/_2$ " × $8^1/_2$ " D			*1

*1: You can use these original and paper sizes to repeat 2 images.

*2: You can use these original and paper sizes to repeat 2 or 4 images.

*3: You can use these original and paper sizes to repeat 2, 4 or 8 images.

Place the originals.

2 Press [Edit Image].



B Press [Edit Image].

Press [Image Repeat].

Select [2 Repeat], [4 Repeat], [8 Repeat], or [16 Repeat].

6 Press [**OK**] three times.

2 Press the **[Start]** key.

Custom Repeat

Use this function to print repeated images from a small original, such as a memo or name card. Images are repeated as often as the paper size allows.

The sizes of originals you can use are as follows:

Metric version	Vertical: 50 – 300 mm	
	Horizontal: 50 – 432 mm	
Inch version Vertical: 2.0 – 11.7 inch		
	Horizontal: 2.0 – 18 inch	

Limitation

□ You cannot use Image Rotation, Size Magnification, or Erase Border with this function.

Place the originals.

Press [Edit Image].

3 Press [Edit Image].

Press [Image Repeat].

5 Press [Custom Repeat].

6 Enter the vertical size of the original using the number keys, and then press [#].

2 Enter the horizontal size of the original using the number keys, and then press [#].

8 Press [OK] four times.

9 Press the **[Start]** key.

Centring

You can make copies with the image moved to the centre.



🔗 Note

Original sizes and orientations for centring are listed below.

✤ Metric version

Original placed on:	Original size and orienta- tion
Exposure glass	A3, B4 JIS, A4, C, B5 JIS, C
ADF	A3, B4 JIS, A4, C, B5 JIS, C, A5, C

Inch version

Original placed on:	Original size and orienta- tion
Exposure glass	$ \begin{array}{c} 11" \times 17" \square, 8^{1}/_{2}" \times 14" \square, \\ 8^{1}/_{2}" \times 11" \square \square \end{array} $
ADF	$\begin{array}{c} 11" \times 17" \square, 8^{1}/_{2}" \times 14" \square, \\ 8^{1}/_{2}" \times 11" \square \square, 5^{1}/_{2}" \times \\ 8^{1}/_{2}" \square \square \end{array}$

- **1** Place the originals.
- **2** Select paper.
- B Press [Edit Image].



- Press [Edit Image].
- **5** Press [Centring].
- **6** Press [**0**K] twice.
- **2** Press the **[Start]** key.

Erase Border

This function erases all four margins of the original or paper. You can select the Erase Original Border mode or Erase Paper Border mode.



🖉 Note

You can adjust the size of the margins with User Tools. The default is 2 mm, 0.1". See p.160 "Erase Original Border Width" p.160 "Erase Paper Border Width".

Erase Original Border

- Place the originals.
- **2** Press [Edit Image].



- Press [Edit Image].
- **4** Press [Erase Border].
- **5** Press [Erase Original Border].
- **5** Select the size and direction of the original.
- **2** Press [OK] four times.
- 8 Press the [Start] key.

Erase Paper Border

- **1** Place the originals.
- **2** Press [Edit Image].



- **E** Press [Edit Image].
- Press [Erase Border].
- **5** Press [Erase Paper Border].

- **5** Select the size and direction of the paper.
- **2** Press [OK] four times.
- 8 Press the [Start] key.

Margin Adjustment

You can make a binding margin.



🖉 Note

□ You can change the width of the binding margin as follows:

Metric version	0–30 mm (increments of 1 mm)
Inch version	0"–1.2" (increments of 0.1")

- **1** Place the originals.
- **2** Press [Edit Image].



- Press [Edit Image].
- Press [Margin Adjust].

Set a binding margin for the front pages. Press [←] and [→] when setting the left and right margins, and [↓] and [↑] when setting the top and bottom margins.

🖉 Note

□ To change the value entered, press [←], [→], [↓], [↑] to set it.

6 Press [OK] three times.

Press the [Start] key.

Overlay

The machine can merge two different originals onto a single sheet.

Three types of merging are available:

Image Overlay



Two different originals are merged onto a single sheet.

🖉 Note

□ You can select the background image from online data, scanned data or stored file.

Format Overlay (Scan + Scan)



The image of the original scanned first becomes the background image for all subsequent prints.

Format Overlay (Stored + Stored)



The image of the original selected from stored files first becomes the background image for all subsequent prints. The following originals selected from stored files are printed with this background.

🖉 Note

When using stored files to make overlay images, check if the orientation of stored files is appropriate.

Image Overlay



2 Press [Edit Image].



B Press [Overlay].

Press [Image Overlay].

5 Select the original overlay 1 type.

You can select the online data, scanner or stored file.

Select online data

Press [Online Data].

2 Start printing with your computer.

Select scanner

Press [Scanner].

2 Place the original, and then press the [Start] key.

Select stored file

🔗 Note

This function can be used only when the optional HDD board is installed.



- Press the stored file name you want to select, and then press [OK].
- **3** Press the **[Start]** key.

Format Overlay (Scan + Scan)

- **1** Place the first original.
- **2** Press [Edit Image].



- Press [Overlay].
- Press [Format Overlay (Scan + Scan)], and then press [OK].
- **5** Press the **[Start]** key.

Master making starts.

Delta Place the second original, and then press the [Start] key.

Format Overlay (Store + Store)

🖉 Note

- This function can be used only when the optional HDD board is installed.
- Press the [Master Making] mode select key.

2 Press [Edit Image].



- Press [Overlay].
- Press [Format Overlay (Store + Store)].

5 Press [Stored File (Page1)].

6 Press the stored file name you want to select as an original format, and then press [OK].

Press [Stored File].

- B Press the stored file name you want to select as an overlay original, and then press [OK].
- Press the [Start] key.

Preset Stamp

One of the following three messages can be stamped on prints with a frame around it:

CONFIDENTIAL

PRIORITY

PRELIMINARY



Limitation

Only one message can be stamped at a time.

🔗 Note

- □ This function can be used only when the optional HDD board is installed.
- The message "CONFIDENTIAL" is selected as a default. You can change this setting with User Tools. See p.160 "Stamp Type Defaults".

Stamp position and original orientation



- Place the originals.
- **2** Press [Edit Image].



- B Press [Preset Stamp].
- **4** Select the message.
- Press [All Pages] or [1st Page Only] to select the print page.

🖉 Note

□ You can change the stamp position, size, and density of the stamp. See p.81 "To change the stamp position, size, and density". **6** After you have specified all necessary settings, press [OK].

Press [OK] twice.

8 Press the [Start] key.

To change the stamp position, size, and density

Press [Change].

2 Select the position for print, size, and density, and then press [OK].

Make-Up Printing Features

Make-Up mode enables you to do more than just make an exact print of the original. A variety of editing and image processing functions allow you to quickly and easily customize your prints.

Main Features

Command sheet allows you to create special effects without cutting and pasting. By combining Make-Up modes and printing with different colour drums, you can create a variety of printing effects.

Make-Up Modes for Inside Areas



Make-Up Modes for Outside Areas

Mode		Sample		
		Command sheet/Original	Print	
1.	Text mode: The area out- side designated areas is printed in Letter mode.	HAWAII	HAWAII Pesse enjoy your Summer vacation.	
2.	Photo mode: The area out- side designated areas is printed in Photo mode.	WORLD Winds and a compare and prophytheral devices are equipped with	WORLD World compare and Polybeard articles are equipped with	
3.	Erase mode: The area out- side the designated areas is deleted.	HAWAII " State erby your Burmer vacation.	- AT	

🖉 Note

□ In Make-Up mode, commands must be given for both inside areas and outside areas.

Background Patterns

A total of 160 background patterns is available in Make-Up mode:

- 40 basic patterns
- 40 patterns similar to the basic patterns but with patterns elements at 4 times the size.
- 80 variants based on 90° rotations of all the basic and enlarged patterns.



* Paper Feed Direction

🔗 Note

The basic patterns are numbered 1 to 40.

Command Sheets for Make-Up Printing

Command sheets are fed first so that the machine can recognize the areas of the original which are to be edited as designated areas.

Command Sheets

The command sheet is a sheet of paper designating the areas to be edited. Command sheets must be made on white or translucent paper, and should be the same size as the original.

Do not designate areas within 5 mm, 0.2" from the top.

- Poor quality paper (such as newsprint, recycled paper, etc.) should not be used for command sheets because any dark spots or streaks will be read as designated areas.
- □ Do not use blotting paper or other absorbent paper for command sheets because ink might leak through the paper and get the exposure glass dirty.

Making a Command Sheet

There are two ways of designating areas: the closed area method and the diagonal line method.



Features

• You cannot use both the closed and diagonal line method on the same command sheet.



• There is no limit to the number of areas you can designate on a single command sheet.



• If you use Outline mode for letter images with a thickness of less than 3mm, 0.12", the print image might come out as expected.

. . . .

.

.....

. .

[©]Notes

The image might differ depending on how the designated area is drawn, so remember the following when making the command sheet.

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Designated area	Area recognized	Preferred designated area	
Part of the designated area is surrounded by 3 sides of the entire area.		Make a space of at least 2mm, 0.08", in front of the area surround- ed by 3 sides (relative to the feed direction). 1 1 2 2mm, 0.08"	
Double line pattern.	Only the outer line is recognized.	Make a gap of at least 2mm, 0.08" in width.	
The designated area is surrounded by 3 sides of another designated area.		Make a space of at least 2mm, 0.08" in front of the area surrounded by 3 sides (relative to the feeding di- rection). 2 1 • 1 1, 2 = 2mm, 0.08"	
Non-closed line		Designate the area with a closed line.	

.

Diagonal line method

Note

□ A diagonal line must be drawn through the area that you wish to edit.

1 Put the command sheet on top of the original.



2 Draw a line using a felt tip pen (black, red or blue) with a thickness of at least 1mm.



- □ Make sure there is no break in the line.
- **D** The diagonal line can be drawn from left to right or vice versa.
- □ Draw the line at least 2mm, 0.08", away from the image so that the whole image can be recognized.



a, b, c, d = 2mm, 0.08"

□ The line marking the designated area should be more than 2mm, 0.08", from any neighboring image.



a, b, c = 2mm, 0.08"

Closed area method

🖉 Note

□ The line designating the area must be a closed loop.

1 Put the command sheet on top of the original.



2 Using a black, red, or blue felt tip pen, draw a line around the area to designate. The line should have a thickness of at least 1mm.



- □ Make sure there is no break in the line.
- □ Draw the line at least 2mm, 0.08", away from the image so that the whole image can be recognized.



- a = Line marking the designated area
- b = 2mm, 0.08''
- c = Image within the designated area
- □ The line marking the designated area should be more than 2mm, 0.08", from any neighboring image.



- a = 2mm, 0.08"
- b = Neighboring image
- c = Line marking the designated area
- d = Image within the designated area

Command Sheets and Finished Prints

The following illustrations will help you understand how to draw a command sheet.

Drawing a command sheet using a diagonal line



The diagonal line method is easy to use for designating rectangular areas. It is also more precise, but it is difficult to use for designating complex areas.

Drawing a command sheet using a closed line



The closed line method is easier to use for complex areas, but it is less precise. It also takes longer to draw a command sheet with the closed line method.

Make-Up Printing

Place the command sheet face down on the exposure glass.



2 Press [Edit Image].

O Ready Set the original, then press t	he Start key to make	the new master.		
1 U D A 4 Standard			Feed Tray F	Paper Type
Full Size Auto Reduc	e /Enlarge A3→1 B4→1	A4 A4→A3 35 A5→A4	9 3%	100%
	12 Creat Marg Marg	e in		
Make Master Options	Edit Image	Combine	Reduce	/Enlarge

B Press [Make-Up].



- **5** Press [Edit Method].
- **6** Select the mode of inside area and outside area.

When you select the Photo mode

• Select the contrast and screen type, and then press [OK].

Press the [OK] key.

🔗 Note

- When you select Photo mode for both inside and outside areas, you cannot select different dot patterns and contrast.
- When you want to confirm your settings, press [Make-Up].

8 Press the [Start] key.

- Place the originals face down on the exposure glass or face up into the ADF, and then press the [Start] key.
 - Exposure glass







- If a command sheet or original misfeeds from the ADF, remove the misfed sheet or original and reset it in the ADF.
- □ It is not necessary to reset the previous command sheets or original.

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Printing Samples

•••••••

Sample 1

① Command Sheet, Frame shape, Inside area: Erase Area mode

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- Outside area: Text mode
- ③ Print



ZM-50

1. Command sheet

......

.....

2. Original

.

3. Print

.

Sample 2

- ① Print the original as it is
- Change the drum unit for colour printing

1

- 3 Command Sheet, Frame shape, Inside area: All Area pattern No. 39
- ④ Outside area: Text mode
- ⑤ Print







ZM-52

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- **1.** Command sheet
- 2. Original
- 3. Print

Quality Start

If the machine is not used for a long time, or when you change to a colour drum unit that has not been used recently, the ink on the drum may dry up. This might affect the print quality. To solve this problem, you can have the machine carry out a few idle spins of the drum before a print run.

🖉 Note

□ You can change the number of spins in Quality Start mode with User Tools. See p.155 "No.of ldling Rotations: Quality Start".

Place the originals.

Press [Make Master Options].



Press [Quality Start], and then press [OK].

4 Press the **[Start]** key.

The drum unit idles.

🖓 Auto Quality Start

You can program the machine to automatically carry out a few idle spins before a print run. This is called Auto Quality Start.

🖉 Note

- □ To use this function, you need to set Auto Quality Start to [On] using User Tools. See p.154 "Auto Quality Start Setting".
- To specify the number of idle spins according to the length of time for which the machine is not used, see p.154 "No.of Idling Rotations: Auto Quality Start".

3

Economy Mode

When you want to save ink, select economy mode.

🖉 Note

- □ Prints will be lighter in this mode.
- □ You can select the two kind of economy mode , level 1 and level 2.
- □ Level 2 will be lighter than level 1.

Place the originals.

2 Press [Make Master Options].



Press [Eco. Mode: Level 1] or [Eco. Mode: Level 2].

Press the [Start] key.

Skip Feed

If the backs of prints are dirty, you can use the Skip Feed function to make the drum rotate twice instead of once with every sheet of paper fed. This gives you time to remove prints one by one from the paper delivery tray or to insert a sheet of paper between two prints.

Preparation

The number of rotations can be set from 2 to 9. The default is 2. To change this setting, see p.154 "Skip Feed".

🖉 Note

- As the paper feeding time is longer than usual, you can use paper longer than the length limitation. The maximum length of paper in Skip Feed mode is 460 mm, 18.1".
- When you use paper longer than 432 mm, 17.0", prints will not be delivered to the paper delivery tray properly, so lower the paper delivery end plate and take out the prints by hand.

1 Place the originals.

2 Press [Skip Feed].

			1 NOV	2005 12:13	
s the Start key to make the new master.			Print 0		
		Feed Tray Paper Type		Separate	
uce / En large 83 84	→A4 A4→A3 →B5 A5→A4	93% 100%	С	lass Settings	
→ 12 → 34	ate rain		<u> </u>	Skip Feed	
			<u>.</u>	Security	
Edit Image	Combine	Reduce / En large		Store File	

To change the number of drum rotations

In this step, you can change the number of rotations temporarily. You can also have this step omitted by adjusting the User Tools settings. See p.154 "Skip Feed".

Select the number of drum rotations per sheet of paper fed with number keys.

🖉 Note

After printing is completed, the Skip Feed setting returns to the default.

2 Press [OK].

Press the [Start] key.
Security

When printing confidential documents such as examination papers, use this function to prevent others from using the master.

If you select Higher Security in the Security Option setting, the master eject unit will be locked and cannot be taken out.

Preparation

This function has two security options. Select which option to use in User Tools before using this function. See p.157 "Security Option".

- Normal: No additional prints can be made and the drum unit cannot be pulled out.
- Higher Security: No additional prints can be made. The drum unit and the master eject unit cannot be pulled out.

🖉 Note

The selected security mode cannot be cleared by turning off the main switch.

Setting "Normal" Security

After making prints, press [Security].

				2000 12:10
s the Start key to ma	ke the new master.			Print 0
		Feed Tray Paper Type		Separate
uce / Enlarge 83 B4	→A4 A4→A3 →B5 A5→A4	93% 100%	C	lass Settings
→ 12 Cn 3 4 Ma	eate min			Skip Feed
				Security
Edit Image	Combine	Reduce / Enlarge		Store File

A confirmation dialog box will appear.

Press [OK].

The master is protected by the security function.

Disabling "Normal" Security

Place a new original, and then press the [Start] key.

The security function is canceled.

Setting "Higher" Security

- **1** Select "Higher Security" in "Security Option" with the User Tools. See p.157 "Security Option".
- **2** Register a security code.

Disabling "Higher" Security

Press [Security].



2 Enter the security code using the number keys, and then press [OK].

The lock is canceled. You can pull out the master unit and drum unit.

🔗 Note

- Under this option, security can only be disabled temporarily and resumes automatically when following occurs:
 - the present print job finishes
 - you return the master eject unit to its original position after pulling it out
 - you close the front door after pulling out the drum unit and returning it to its original position
 - a certain period passes, during which neither the master eject unit nor the drum unit was pulled out, following security function cancellation
 - you press the [Start] key
 - the machine enters the Energy Saver or Auto Off mode
 - the machine enters the Auto Reset mode

Setting Security Timer

You can set the time that shifts to the security mode automatically. See p.157 "Security Timer".

Conserving the Master

The machine automatically changes the master length depending on the paper size you use. This saves both master and ink.



- a = Images on the master
- b = Masters
- c = Conserved area

Limitation

- □ This function is automatically turned on when you place two or more originals in the optional ADF.
- □ The paper sizes you can use are $A4[D, 8^1/_2" \times 11"]$ or B5 JIS D.

You can cancel Master Saving mode with User Tools. See p.156 "Master Cut Length". You can also save master using the optional A4 drum. See p.113 "Changing the Drum Size".

- When you select **[A3]** in Master Length, the masters are cut into A3 size.
- When you select **[Auto]** in Master Length, the masters are cut into A4 size. Only the last page is cut into A3 size.

Double Feed

When two or more sheets of paper feed at once, the machine stops and a warning message appears on the display.

Preparation

To use the Double Feed function, select **[On]** in "Double Feed Warning" with User Tools. See p.156 "Double Feed Warning".

🖉 Note

Double Feed function may not detect the paper properly when:

- there is a mixture of different coloured paper
- there is a mixture of paper of differing thickness
- □ Double feed is possible with paper size from A6 to A3, 11" × 17".

When a Double Feed is Detected

When a double feed is detected, the machine stops and a warning message appears on the display.

Check the output and press [Exit].

🔗 Note

- □ When the misfeeds message is displayed, remove the misfed paper. See p.130 "Sr Clearing Misfeeds".
- When paper is wrapped around the drum, open the front door and remove it. See p.132 "When the master is wrapped around the drum".

2 Remove the misfed paper.

🖉 Note

- If a double feed is wrongly detected while printing on the reverse side of paper or the face of printed paper, select [Off] for "Double Feed Warning" with User Tools. See p.156 "Double Feed Warning".
- □ To prevent double feed, see p.165 "Do's and Don'ts".

Storing File

Storing Data

🖉 Note

This function can be used only when the optional HDD board is installed.

File Name

Stored files will automatically be named as "COPY0001", "COPY0002". You can change assigned file names.

User Name

You can register a user name to distinguish the user that stored the files.

Password

You can set a password for stored files, and use it to prevent others printing them.

∰Important

- Data stored in the machine might be lost if some kind of failure occurs. The supplier shall not be responsible for any damage that might result from the loss of data.
- Be careful not to let anyone know your password, especially when entering a password or recording it. Keep any record of your password in a secure place.
- Avoid using a single number or consecutive numbers for a password such as "0000" or "1234", since the numbers like this are easy to guess, so using them will not provide a worthwhile level of security.
- □ A file accessed with a correct password remains selected even after operations are complete, and it can be accessed by other users. To stop this, be sure to press the **[Clear Modes]** key to cancel the file selection.

The user name used when adding a file to the machine is to identify the file creator and type. It is not to protect confidential files from others.

🖉 Note

- □ Enter a four-digit password.
- You can access to the files without entering a password temporarily. See p.157 "Temporarily Unlock Stored Files"
- You can specify the time taken for the stored data to be deleted automatically. See p.157 "Auto Delete File".
- If you do not want stored data to be automatically deleted, select [No] in Auto Delete File before storing a file. If you select [Yes] later, data stored afterward will be automatically deleted.
- When storing files sent from computers, the orientation may be changed depending on the paper orientation on the paper feed tray.

Place the originals.

Reference

For details on the types of originals and how to place them, see p.42 "Placing Originals".

2 Press [Store File].



Enter a user name, file name, or password if necessary.

🖉 Note

If you do not enter a file name, one will be automatically assigned.

Reference

p.101 "To register a user name"

p.101 "To change a file name"

p.102 "To set or change a password"

Press [OK].

5 Make settings as desired.

					I NOV	2005 12:13
Teot	O Ready					Print
	Set the original, then pr	ess the Start key to ma	ke the new master.			0
Original Type	1E D Auto Auto Standard		E	Feed Tray Paper Type		Separate
Normal Master Making Density	Full Size Auto Re	CI	ass Settings			
Original Orientation	12+12 1		Skip Feed			
6					L	Security
Select Stored File	Make Master Options	Edit Image	Combine	Reduce / Enlarge		Store File

Reference

For details, see p.57 "Printing Functions"

Press the [Start] key.

The file is stored in the machine.

🖉 Note

- □ To stop scanning, press the **[Clear/Stop]** key. To resume a paused scanning job, press **[Continue]** in the confirmation dialog box. To delete stored images and cancel the job, press **[Stop]**.
- □ When using the exposure glass, after the first original is scanned, place the subsequent one on the exposure glass, and then press the [Start] key again. After all the originals are scanned, press the [#]key.

To register a user name

- Press [Store File].
- Press [User Name].



The User Name display appears.

Enter a user name, and then press [OK].

Reference

p.175 "Entering Text"

🖉 Note

Up to 20 characters can be entered as a file name, but only 16 characters of each file name will be displayed in the file list.

To change a file name

- Press [Store File].
- **2** Press [File Name].



The File Name display appears.

Press [Delete All] to delete the old file name.



🖉 Note

- □ You can also use **[Backspace]** to delete unwanted characters.
- Enter a new file name, and then press [OK].

p.175 "Entering Text"

🖉 Note

Up to 20 characters can be entered as a file name, but only 16 characters of each file name will be displayed in the file list.

To set or change a password

Press [Store File].

Press [Password].

					NOV	2005 14:56
Text	O Ready					Print
	Stative Digitize	7			_	<u> </u>
Original Type				Freed Town Town	Store	File
	Standard			reed tray hapen type g		None
Normal	Full Size Arto Redu	ne /Enlarge 83	+R4 R4+R3	93% 100%		User Name
Master Making Density		10 / Cinage 84	→B5 А5→Н4	3 5/10 100%		COPY0001
Original Orientation		. 112 Cre	ate			File Name
1999 600	[[] → [] [] → [] [] Margin					None
						Password
Select Stored File	Make Master Options	Edit Image	Combine	Reduce / Enlarge	Car	icel OK

Enter the password (four-digits) using the number keys, and then press [#].

		1 NOV 2005 14:57
Text	() Ready	Password
Original Type	To make prints, press the Print key, then press the Start	Enter new password with the Number keys, then press (1).
Normal Master Making Density	Full Size Auto Reduce /Enlarge 83+R4 B4+B5	Change
Original Orientation		
Select Stored File	Make Master Options Edit Image Co	Cancel Cancel

Reenter the password (four-digits) for verification, and then press [#].

D Press [OK].

Changing a Stored File's User Name, File Name, or Password

1 Press [Select Stored File].

Text	() Ready	
	Set the original, then press the Start key to ma	ke the new master
Original Type	1 ■ D A 4 Standard	
Master Making Density	Full Size Auto Reduce / Enlarge B4-	→A4 A4→A3 →B5 A5→A4
Original Orientation	$\begin{array}{c} 1 \\ 1 \\ 2 \\ \hline \end{array} \\ 1 \\ 2 \\ \hline \end{array} \\ \begin{array}{c} 1 \\ 1 \\ 2 \\ \hline \end{array} \\ \begin{array}{c} 1 \\ 2 \\ 2 \\ \hline \end{array} \\ \begin{array}{c} 1 \\ 2 \\ 2 \\ \hline \end{array} \\ \begin{array}{c} 1 \\ 2 \\ 2 \\ 2 \\ \hline \end{array} \\ \begin{array}{c} 1 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\$	ate 'gin
Select Stored File	Make Master Options Edit Image	Combine

2 Select the file with the user name, file name, or password you want to change.

🖉 Note

- □ If a password has been set for the file, enter the password and press **[OK]**.
- B Press [File Management].



Press [Change User], [Change File], or [Change Password].

Select Stored File	File Management
Select file(s) for Master Making /Printing.	
User Name File Name M / D Page	AAA Department
All Filos OCC Department COPY0003 1 NOV 3 Detail	COPV0001
BBB Department COPY0002 1 NOV 1 1/1	Change File
A4A Department COPY0001 1 NOV 2	None
W Rec	Change Password
	ОК

Enter the new user name, file name, or password, and then press [OK].

Reference

p.101 "To register a user name"

p.101 "To change a file name"

p.102 "To set or change a pass-word"

6 Press [OK].

Searching for Stored Files

You can search for stored files in the machine. You can also list stored files in your order of preference.

Press [Select Stored File].

2 Press [Search File].



Enter the file name, and then press [OK].

Files beginning with the name entered appear.

p.175 "Entering Text"

🖉 Note

□ To display all files stored in the machine, press [All Files].

To Check Details of Stored Files

- Press [Select Stored File].
- **2** Select the file.

🖉 Note

□ If a password has been set for the file, enter the password, and then press **[OK]**.

Press [Details].



Detailed information about the file is displayed.



3

Printing Stored Files

🖉 Note

You can also print stored files via a Web browser from a computer in the network. For details on how to start the Web browser, see *Network Guide*.

Press [Select Stored File].

2 Select the file to be printed, and then press [OK].

ielect file(s) for Maste	er Making / Printing.				
	User Name	File Name	M / D Page		Fide telonogentier/
All Files	CCC Department	C0PY0003	1 NOV 3		Ceriele Fide
Crueb File	BBB Department	COPY0002	1 NOV 1		Prof. 15J Page
Search File	AAA Department	C0PY0001	1 NOV 2	A Prevelous	
				₩ Netz	

🖉 Note

- If a password has been set for the file, enter the password and then press [OK].
- You can search for a file using [Search File].
- You can sort file names in the list by user name, file name or date. To sort files, press [User Name], [File Name] or [M / D].
- □ If you cannot determine the contents of a file by its file name, you can print only the first page of the file for checking purposes. See p.104 "Printing the First Page".
- To cancel a selection, press the highlighted file name again.

U Make settings as desired.

			NOV 2005 14:23
User Name:	O Ready		Print 0
ARA Department File Name: COPY0001	Ato Auto	Feed Tray Paper Type	Separate
1 NOV	Full Size Auto Reduce / Enlage	14 14+05 93% 100%	Class Settings
Page: 2			Skip Feed
Select File	Make Master Options Edit Image	Cantona Reduce / Bolace	Security State File
3d	<u>, </u>		L

Enter the required number of prints using the number keys.

🖉 Note

- □ Up to 9999 can be entered.
- Press the [Start] key.

Printing the First Page

You can print the first page of a file selected to check its contents.

- Press [Select Stored File].
- **2** Select the file.

🔗 Note

- □ If a password has been set for the file, enter the password and then press **[OK]**.
- □ You can search for a file using **[Search File]**.
- You can sort file names in the list by user name, file name or date. To sort files, press [User Name], [File Name] or [M / D].
- If you cannot determine the contents of a file by its file name, you can print only the first page of the file for checking purposes.
- □ To cancel a selection, press the highlighted file name again.

Press [Print 1st Page].



4 Press the [Start] key.

3

Deleting Stored Files

∰Important

You can store up to 3,000 files in the machine. No more files can be stored when the limit is reached, and you should delete unnecessary files.

Note

- You can delete all stored files at once with User Tools. See p.157 "Delete All Files".
- You can also delete stored files via a Web browser from a computer in the network. For details on how to start the Web browser, see Network Guide.

Press [Select Stored File].

2 Select the file to be deleted.

🔗 Note

- □ If a password has been set for the file, enter the password and then press **[OK]**.
- □ You can search for a file using [Search File].
- You can sort file names in the list by user name, file name or date. To sort files, press [User Name], [File Name] or [M / D].
- If you cannot determine the contents of a file by its file name, you can print only the first page of the file for checking purposes.
- To cancel a selection, press the highlighted file name again.

Press [Delete File].



A confirmation dialog box will appear.

Press [Delete] to delete the file.

Printing or Deleting Stored Files Using a Web Browser

You can also print or delete the stored files using a web browser. For details, see the web browser's help.

Programs

You can store frequently used print job settings in machine memory and recall them for future use.

Note 🖉

- □ You can store up to 10 programs.
- □ You can select the standard mode or Program No.10 as the default mode to be set when modes are cleared or reset, or immediately after the operation switch is turned on.
- Programs are not deleted by turning the power off or pressing the [Clear Modes] key. They are canceled only when you delete or overwrite them with another program.

Storing a Program

1 Edit the print settings so all functions you want to store in this program are selected.

Press the [Program] key.



Press [Program].

scall	r progr	ani no. lo regioler.			
	1	* Noi Fregrammed		2 * Noi Emglannied	
Ē	3	# Nol Programmed	ĺ	\$ X Not Programmed	
Ľ	5	* Net Programmed	l	6 × Nei Programmed	
Ľ	ĩ	* Nei Fregrammed	l	8 🔺 Nei Fregrammed	
	5	# Rel Programmed	ſ	10 X Nol Programmed	

🖉 Note

- Program numbers displayed with \Rightarrow next to them already have settings.
- Press the program number you want to store.
- Enter the program name using the letter keys on the display panel.



You can enter up to 40 characters.

For details about entering characters, see p.175 "Entering Text".

🔗 Note

□ If you do not want to enter a program name, proceed to step **6**.

⁶ Press [OK].

When the settings are successfully stored, the \Rightarrow indicator followed by the program number and program name will be displayed.

Recalling a Program

Place the originals.

Press the [Program] key.

The stored settings are displayed.

🖉 Note

Program numbers displayed with
 next to them already have settings.

Press the number of the program you want to recall.

												_		
P	rogram lecall pro	ogr	am No. to rej	gister.								 		
	1		Print001			1	⊕ 2		Print0	02		 		
	⇒ 3		Print003			I	⊕ 4		Print0	04		 		
	* 5		Print005			I	ÿ		* Noi P	ngar	ned	 		
	7	f * Noi Freguenced					8		* 140 P	nyar	646-)	 		
	9		* Nei Prog	heweq			10		* Nei P	ngar	ned	 		
10000	÷	ß	icall	- ⊕ Program	Change Name	Ē	Pr	ote	et	Í.	Erase		Exit	

Press the [Start] key.

Changing a Stored Program

1 Edit the print settings so all functions you want to store in this program are selected.

2 Press the [Program] key.

B Press [Program].

Press the program number you want to change.

A confirmation dialog box will appear.

5 Press [Yes].

Repeat steps **5** and **6** of "Storing a program".

Changing a Program Name

- Press the [Program] key.
- Press [Change Name].
- Press the program number you want to change the name.
- Enter the new program name using the letter keys on the display panel.

5 Press [OK].

Protecting a Program

If you want to prevent someone from writing over your program, do the following.

🖉 Note

- If all the user programs have been protected, you cannot store any setting in program menu.
- Press the [Program] key.

Press [Protect].

Press the number of the program you want to protect.

🖉 Note

□ Already protected program number are shown in highlight.

Deleting a Program

Press the [Program] key.

- **2** Press [Erase].
- Press the number of the program you want to delete.

A confirmation dialog box will appear.

Press [Delete].

The program is deleted, and the screen returns to the initial display.

Making Colour Prints

Colour drum units are available as options in addition to the standard black unit. For making colour prints, a separate drum unit is necessary for each colour.

Changing the Colour Drum Unit

Open the front door.

2 Lower the drum unit lock lever (B1).



🔗 Note

Make sure the green light beside the drum unit lock lever is on before sliding out the drum. If the light is off, close the front door, wait for five seconds, and then open it.



Pull the drum unit handle out slowly (B2).



Lift the upper drum stay (B3) a little to unlock the drum unit, and then pull out the drum unit while holding the drum unit handle (B2) and the upper drum stay (B3).



Important

- Be careful not to let the drum unit fall.
- Make sure the optional colour drum lock is securely set.



1 Insert the colour drum unit along the guide rail.



2 Lower the drum unit lock lever (B1) of the inserted drum.



8 Slide in the drum unit until it locks in position.



9 Lift drum unit lock lever (B1).



Close the front door.

🖉 Note

□ Make sure that the **Open Cover/Unit** indicator turns off, and the colour drum status message appears on the display panel.

Making Colour Prints

- **1** Make sure that the colour drum status message displays on the display panel.
- **2** Place the originals.
- Press the [Start] key.

Printing in Two Colours

After printing in one colour, you can print in another colour on the same side of the print.



🖉 Note

- Let the ink on the prints dry for a while before printing on them again.
- If the prints are not dry, the paper feed roller might become dirty. In this case, wipe the roller with a cloth.
- □ You cannot print in two colours at a time.

- Prepare the two originals. Place the first original on the exposure glass or in the ADF.
 - Exposure glass







2 Enter the number of prints with the number keys.



B Press the [Start] key.



Remove the prints from the paper delivery tray and place them on the paper feed tray again as shown in the illustration.



5 Change the drum unit. See p.109 "Changing the Colour Drum Unit".



Delace the second original, and then press the [Start] key.

3

Changing the Drum Size

To save costs on master rolls and ink, you can shorten the length of each master by changing to an optional smaller drum.

Printing Area (At 23°C/73°F, 65% RH)

✤ Metric version

A3 drum	More than 290 × 410 mm, 11.4" × 16.2"
A4 drum	More than $290 \times 200 \text{ mm}$

Inch version

11" × 17"	More than 290 × 420 mm,
drum	11.4" × 16.6"
A4 (8 ¹ / ₂ " × 11") drum	More than 11.4" × 7.8"

Master Cut Length

A3 drum...320 × 539 mm, 12.5" × 21.3", 200 masters/roll

11" \times 17" drum...320 \times 549 mm, 12.5" \times 21.7", 190 masters/roll

Optional A4 drum...320 × 334 mm, 12.5" × 13.2", 320 masters/roll

🖉 Note

For changing the drum unit, see p.109 "Changing the Colour Drum Unit".

Combination Chart

This combination chart shows which functions can be used together.

	Can be used together.
×	Cannot be used together.
1	Cannot be used together. The first function selected takes priority.
2	Cannot be used together. The second function selected takes priority.

						2	2.Fi	unc	tio	n se	ele	cte	d a	fter					
		aster Making Density	lecting Original Type	onomy Mode	to Cycle	cle Setting	eset Reduce / Enlarge	unc E	to Reduce / Enlarge	ectional Magnification (%)	rectional Magnification (size)	eate Margin	mbine (2/4 images \Rightarrow 1 sheet) $[\mathbf{w}]$	age Repeat (2/4/8/16 images \Rightarrow 1 sheet) \overline{a}	istom Repeat	ase Original Border	ase Paper Border	ass Settings	parate
	Master Making Density Selecting Original Type Economy Mode	Σ	S		A T	0		Ž	Ā		Δ			<u></u>	0 	ш 	Ш 	<u> </u>	<u>ت</u>
	Cycle Setting Preset Reduce / Enlarge Zoom				2		2	2	2	2	2 2								
	Auto Reduce / Enlarge Directional Magnification (%) Directional Magnification (size) Create Margin		 	 			2	2 2 2	2	2	2			 1	2				
first	Combine (2Ĭ4 images ⇒ 1 sheet) Image Repeat (2/4/8/16 images ⇒ 1 sheet) Custom Repeat			 	 		+ + + + +		1			1 1 1	1	1	1	1	 		
elected .	Erase Original Border Erase Paper Border Class Settings Senarate		 	 	 	 	 	 					 		2		5	2	
nction s	Image Overlay (Select online data) Image Overlay (Select scanner) Image Overlay (Select stored file)						1	1 1	1 1	1 1	1 1	1 1 1	1 1 1	1 1 1	1 1 1		1	1	>
1.Fu	Format Overlay (Scan + Scan) Format Overlay (Store + Store) Preset Stamp Make-un	1	1				1	1	1	1	1	1 1 1	1	1	1 1 1	1			
	Auto Paper Select Auto Paper Select Adjusting the Position of Printed Images				 		 		1			- <u> </u> 			2	L	2		
	Online Storing File Printing Stored Files Printing Stored Files Using a Web Browser	1	1	1		2	1	1	1	1	1	1 1 1	1	1	1	1	1	1	
	Centring Margin Adjustment Changing the Printing Speed				+ +		 	 				1 1 1	1	1	1				
1	Image Rotation	-		1 -	1			X	X	X	X	X	-	×	×		(1		1

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\square						2	2.Fi	unc	tio	n s	ele	cte	d a	fter				
		Image Overlay (Select online data)	Image Overlay (Select scanner)	Image Overlay (Select stored file)	Format Overlay (Scan + Scan)	Format Overlay (Store + Store)	Preset Stamp	Make-up	Skip Feed	Auto Paper Select	Adjusting the Position of Printed Images	Online	Storing File	Printing Stored Files	Printing Stored Files Using a Web Browser	Centring	Margin Adjustment	Changing the Printing Speed
	Master Making Density					2						2		2	2			
	Selecting Original Type		L			2		2	ļ	i		2		_2_	2			
	Economy Mode												2					
	Auto Cycle																	
	Preset Reduce / Enlarge			2		2	÷		÷			2						
	Zoom	2		2		2	+		+	+		2		-4-	2			
	Auto Reduce / Enlarge	2		2		2				2		2		-4-	2			
	Directional Magnification (%)	2		2		2	+·		+·	<u> </u>		2		2	2			
	Directional Magnification (size)	2		2		2	;		;	i	i	2		2	2			
	Create Margin	1	1	1	1	1	1	1		h		2	1	2	2	1	1	
	Combine (2/4 images \Rightarrow 1 sheet)	1	1	1	1	1	1	1	;	;	i	2		2	2	1		
	Image Repeat (2/4/8/16 images \Rightarrow 1 sheet)	11	1	1	1	1	1	1	+	+		2		2	2	1	1	
rst	Custom Repeat		1	1	1	1	1	1	i	1	i	2		2	2	1	1	
Ξ	Erase Original Border					2						2		2	2			
le	Erase Paper Border	2								1		2	2					
ec	Class Settings	2										2						
<u>e</u>	Separate																	
L C	Image Overlay (Select online data)	$\overline{\mathbb{N}}$	2	2	2	2	1	1		1	[\sim	1	1	2	1	1	
Ē	Image Overlay (Select scanner)	2	\leq	2	2	2	1	1				2	1	1	2	1	1	
DC L	Image Overlay (Select stored file)	2	2	\sum	2	2	1	1				2	1	1	2	1	1	
1	Format Overlay (Scan + Scan)	2	2	2	\backslash	2	1	1				2	1	1	2	1	1	
1	Format Overlay (Store + Store)	2	2	2	2	\sum	1	1		 		2	1	1	2	1	1	
	Preset Stamp	1	1	1	1	1	\sum	1				2	1	_1_	2	1		
	Make-up	1	1	1	1	1	1	\geq	i	i	i 	2	1	1	2	1	1	
	Skip Feed																	
	Auto Paper Select	2					İ		i	\geq	į	2						
	Adjusting the Position of Printed Images	k																
		$\left \right\rangle$	1	1	1	1	1.	1		1		$ \geq $	1	_1_	1_	1	1	
	Storing File	1-1-	1	1	1	1	1	1		¦		1		1_	1	1	1	
	Printing Stored Files	1-1-	1-	1	1	1	1	1				1_1_	1	->	1	1-	1	
	Contring Stored Files Using a web Browser	1-	1	1	1	1	1	1				1	1	1	2	1	1	
	Centring Margin Adjustment	1-1-	11-	1	1	1	<u> 1</u> .	1	i	i	i	2	1	-1-	2		1	
	Changing the Printing Speed	<u> 1</u> _	-1-	11	1	1.		1				2	-1-	_1_	_ <u>Z_</u>	-1-	>	k
			L	Ļ.,		L			÷	į	i				L	L	L	Ļ
1	Image Notation	×	· ~	1 ×	- A i				E			· 2	1 A I	× 1				

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4. Troubleshooting

If Your Machine Does Not Operate as You Want

The following chart gives explanations of common problems and messages. If other messages appear, follow the instructions displayed. If a malfunction or a misfeed occurs, the following messages will appear on the display.

🖉 Note

□ For "Troubleshooting" about printing from a computer, refer to the other manuals for this machine.

✤ When a Message is Displayed

Message	Causes	Solutions						
Check the paper size and paper	The paper is not placed in the same direction as the original.	Place the original in the same di- rection as the paper.						
direction.		If you press the [Start] key, the selected paper will be used for printing.						
#### and paper size mismatch.	The paper you loaded does not match with the reproduction ra- tio you selected.	Set a paper size that matches the reproduction ratio you have se- lected and your original.						
	The reproduction ratio selected by Auto Magnification mode is too big or too small.	 Note You can make prints if you press the [Start] key. 						
Set original.	You have not changed the original on the exposure glass before pressing the [Start] key.	Place the next original on the exposure glass or in the ADF.						
	Original is not placed.	Place your originals.						
Maximum quantity: ####	The number of prints exceeds the maximum print quantity.	You can change the maximum number of prints that can be made in one operation with User Tools. See p.161 "Maximum Print Quantity".						
Minimum quantity: ####	The number of prints does not exceed the minimum print quantity.	You can change the minimum number of prints that can be made in one operation with User Tools. See p.161 "Minimum Print Quantity".						
Drum Unit is not set correctly.	_	Slide in the drum until it clicks. Make sure that the drum is com- pletely set in position.						

Message	Causes	Solutions
Communication error has oc- curred. Turn the operation switch off then on.	_	Turn the operation switch off and on. If the message appears again, contact your service representa- tive.
Print image is larger than the selected paper size. Change pa-	The master image previously printed is larger than the paper. The image exceeds the paper size.	Make prints after pressing [Exit] and selecting the paper size again.
per size.		□ If you press [Exit] to erase the message and press the [Start] key, the machine starts to make the prints. However, the image might not fit on the paper.

$\widehat{\mathbb{Q}}^{\mathsf{W}}$ When a service call message is shown on the display panel

Press **[Exit]**. Then turn the main switch off and back on again. If a service code appears again, contact your service representative.

.

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🖉 Note

- □ If a service code appears on the display panel after you turn the main switch off and on a few times, do not continue turning it on and off. Leave the machine off.
- □ When you make masters continuously using originals with solid images, "SC203" tends to appear on the display panel. In this case, turn off the main switch and wait for a while. Then turn on the main switch.

If you Cannot Make Clear Prints

Faint Prints

If the machine is not used for a long period of time or you change the colour drum unit, the ink on the drum might dry causing print quality to deteriorate. To solve this problem, use Quality Start mode. See p.95 "Quality Start".

If the print density is still too light even if you use Quality Start mode, remake the master.

Black Lines/Stained Prints

Check the exposure glass cover and clean it if dirty. See p.170 "Cleaning the exposure glass cover".

Check the exposure glass and clean it if dirty. See p.170 "Cleaning the Exposure Glass".

Check the sheet of the optional ADF and clean it if dirty. See p.171 "Cleaning the Auto Document Feeder".

🖉 Note

□ If black lines or stains still appear on prints even following the cleaning procedures above, please contact your service representative.

Dirty Background

If the background of prints is dirty, the drum unit might be dirty.

A CAUTION:

• If ink comes into contact with your eyes, rinse immediately in running water. For other symptoms, consult a doctor.

A CAUTION:

• Keep the ink or ink container out of reach of children.

A CAUTION:

• If ink is ingested, induce vomiting by drinking a strong saline solution. Consult a doctor immediately.

A CAUTION:

• If your skin comes into contact with ink, wash the affected area thoroughly with soap and water.

🖉 Note

- □ To avoid getting dirty background prints when printing onto paper smaller than the original image, select a suitable reduction ratio or use larger print paper.
- When printing onto paper that does not absorb ink well, like postcards, the background of prints might be dirty. In this case, lower the printing speed or use Skip Feed mode to dry the ink on the prints.
- □ The drum unit is locked if the security mode is active. See p.97 "Security".
- **U** Turn off the power.
- **2** Pull out the drum unit.



🖉 Note

□ For taking out the drum unit, see p.109 "Changing the Colour Drum Unit".

While pressing the drum lock, turn the drum until you can see the trailing edge of the master.



With a dry soft cloth, remove any ink that has accumulated on the trailing edge of the drum unit.



∰Important

Do not use benzine, thinner, or other organic liquids—doing so can damage the machine.

5 Turn the drum unit and lock it after cleaning.



1 Insert the drum unit until it locks into position, and then lower the drum unit lock lever.



Close the front door.Turn on the main switch.

If You Cannot Make Prints as You Want

Problem	Causes	Solutions
Misfeeds occur frequently.	Improper paper type is select- ed.	Select proper paper type. See p.47 "Printing onto Various Kinds of Paper".
When you try to set several functions at a time, you can- not set some functions.	Some functions cannot be used together.	See p.114 "Combination Chart".
Parts of the image are not	Erase margin is too wide.	Set a narrower erase margin
printed in Erase border mode.	Edge margins of original are too narrow.	"Erase Border".
Prints are blank or parts of the image are not printed.	The paper feed side plates are not set correctly.	Make sure that the paper feed side plates touch the paper lightly and the proper paper size is displayed in the dis- play.
2nd printing with another drum is unsatisfactory.	The 1st print image is still wet.	Wait until the 1st image be- comes dry.
An uneven solid image appears.	Large solid image wrinkles the master.	Increase the print speed or se- lect photo mode.
"Double feed detected at out- put. Check the output." is dis- played frequently.	The reverse or the face of printed paper is printed again.	Set to "OFF" in "Double Feed Warning" with User Tools.

Combine

Problem	Causes	Solutions
Prints are blank or parts of the image are not printed.	Original size and orientation are not correct.	You cannot use originals of different sizes and orientation in Combine function. Use originals of same size and ori- entation.
Print image is not correct.	Original set order is not cor- rect.	Place originals face up in the optional ADF. The first origi- nal should be on top.
		Place original face down on the exposure glass. The first original should be set first.

Storing Files

Problem	Solution
"Exceeded max. number of pages per file. Do you want to store the scanned pages as 1 file? " appears.	The number of scanned pages exceeds the ca- pacity per file of the machine. To store scanned pages as a file, press [Yes] . Scanned data is stored as a file in the machine.
	If you don't want to store scanned pages, press [No] . Scanning data will be cleared.
You forgot your password.	You can access password-protected files tem- porarily. Press [Unlock] in Temporarily Unlock Stored File in User Tools. See p.157 "Tempo- rarily Unlock Stored Files".
	. You can delete all stored files at once with User Tools. See p.157 "Delete All Files".
	Make sure no important files are stored in the machine before deleting all stored files.
You cannot find out what is stored in a file.	Check the date or time column on the display in the machine.
	Check the contents of the document by print- ing the first page. Press the desired file on the display in the machine, and press [Print 1st Page] followed by the [Start] key.
Memory becomes full frequently.	Press [Delete File] to delete selected files, there- by increasing available memory.

Loading Paper

Loading Paper into the Paper Feed Tray

∰Important

Load paper when the paper feed tray is completely empty. If you add paper when some paper is left in the tray, it may cause multiple feeds or misfeeds.

For available paper sizes, see p.26 "Recommended Paper Size and Type".

For loading paper into the LCIT, see p.125 "Loading Paper into LCIT".

1 Raise the lock lever for the paper feed side plates to release the lock.



2 Load the paper in the paper feed tray.



🔗 Note

- □ Correct any paper curl before loading the paper.
- Adjust the paper feed side plates to match the paper size.



Push the lock lever for the paper feed side plates down to lock the side plates into position.



🖉 Note

Make sure that the paper size and orientation shown on the display panel match the size and orientation of paper loaded in the paper feed tray.

Loading Paper into LCIT

1 Turn the side guide adjustment knob to adjust the side guides to the paper size.



2 Tighten the screw to lock the side guides.



3 Load paper.



🖉 Note

□ The leading edge of the paper must touch the inside of the LCIT.

When 📥 lights, it is time to supply ink.

A CAUTION:

Keep the ink or ink container out of reach of children.

A CAUTION:

• Be careful not to get ink on your clothes when replacing an ink container. Ink stains on clothes are hard to remove.

A CAUTION:

• When disposing of a used ink container, reattach the cap to prevent ink from splattering.

A CAUTION:

• If your skin comes into contact with ink, wash the affected area thoroughly with soap and water.

A CAUTION:

• If ink comes into contact with your eyes, rinse immediately in running water. For other symptoms, consult a doctor.

A CAUTION:

• If ink is ingested, induce vomiting by drinking a strong saline solution. Consult a doctor immediately.

∰Important

- □ Faults may occur if you use ink other than the recommended type.
- Our products are engineered to meet high standards of quality and functionality, and we recommend that you use only the expendable supplies available at an authorized dealer.

🖉 Note

- **D** Be sure to supply ink of the same colour as the current drum.
- □ Store ink in a cool, dry place. Do not store ink where it will be exposed to heat or direct sunlight.
- □ Store ink on a flat surface.





• 3: Remove the used ink cartridge.



• 5: Insert the new cartridge into the ink holder.

🖉 Note

- □ Always supply ink of the same colour.
- 6: Return the ink holder to its original position until it clicks.
 7: Close the front door.

The machine will start idling to supply ink to the drum.







i Beplacing the Master Roll

When is lights, it is time to replace the master roll. It also lights when the master roll is not set properly.

∰Important

□ Faults may occur if you use the master roll other than the recommended type.

🖉 Note

□ When the **Master End** indicator is lit, it is necessary to replace the master roll even if some master remains on the old roll.









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• 1: Pull out the master tray until it stops.

- 2: Push the button.
- 3: Open the master guide.

- 4: Open the master tray cover.
- 5: Remove the used master roll.

- 6: The new master roll must be positioned as shown in the illustration.
- 7: Close the master tray cover.

ACVOHS



ACTORS



Note

•

- □ Make sure the leading edge reaches the interior of the master holder.
- 9: Close the master guide.

8: Insert the master roll.

• 10: Push in the master tray until it stops.

% Clearing Misfeeds

A CAUTION:

 Be careful not to cut yourself on any sharp edges when you reach inside the machine to remove misfed sheets of paper or masters.

🖉 Note

- □ After clearing misfeeds, make sure that all the doors, covers, and units are closed and the **%** indicator is off.
- To prevent misfeeds, do not leave any torn scraps of paper, originals, or masters in the machine.
- When clearing misfeeds, do not turn off the main switch. If you do, your print settings will be cleared.
- The master eject unit or the drum unit may be locked if the security mode is active. Enter the security code or ask your administrator if necessary.
- □ If misfeeds occur repeatedly, contact your service representative.

"[®] + A" Paper Misfeeds in the Paper Feed Section

Remove the misfed paper.



$\mathbf{\hat{\nabla}}$ To prevent paper misfeeds:

Check the following before restarting the printing run.

Did you select an appropriate paper type with [Feed Tray Paper Type]?



• Are the side pads in the correct positions?



To print on thin paper (47.1 g/m², 12.5 lb), slide the levers behind the paper feed side plates in the direction of the arrow (see illustration).

• When paper is curled, correct as shown.



4

• When paper edges stick together or paper is not fed in, fan the paper as shown.



- When printing onto postcards or thick paper, lower the printing speed to setting 1 or 2. See p.55 "Changing the Printing Speed".
- When a multiple feed occurs or the paper comes out skewed, make sure that the paper feed side plates are properly adjusted. When you load paper in the paper feed tray, make sure that the paper edge touches the back fence and paper is placed on the proper paper size scale. Only use paper where the leading edge has two right angle corners.

"औ + A + B" Paper Misfeeds in the Paper Feed Section

1 Open the front door.

2 Lower drum unit lock lever (B1).



1 Take out the drum.





🖉 Note

□ For taking out the drum unit, see p.109 "Changing the Colour Drum Unit".

Gently pull out the misfed paper from the inside.



5 If you cannot remove the misfed paper, remove it from the paper feed tray.



6 Set the drum unit and close the front door.

Note 🖉

□ For setting the drum unit, see p.109 "Changing the Colour Drum Unit".



See p.130 ""₩ + A" Paper Misfeeds in the Paper Feed Section".

" [®] [™] ⁺ ^B [™] ^{Paper} ^{or} ^{Master} Wrapped Around the Drum

When the master is wrapped around the drum

1 Open the front door.

• • • • • • • • • • • • • • • •

2 Lower drum unit lock lever (B1).



1 Take out the drum.





Note

□ For taking out the drum unit, see p.109 "Changing the Colour Drum Unit".



While pressing the drum lock, grasp the edge of the master (the white area) and peel it off.



E Return the drum lock to its original position.

6 Set the drum unit and close the front door.

Note 🖉

□ For setting the drum unit, see p.109 "Changing the Colour Drum Unit".
When paper is wrapped around the drum

Open the front cover.

2 Lower drum unit lock lever (B1).









Note

□ For taking out the drum unit, see p.109 "Changing the Colour Drum Unit".

Remove the misfed paper from the drum.



5 If you cannot find misfed paper around the drum (as in step \Box), check the pressure cylinder. Remove any misfed paper.

6 Set the drum unit and close the front door.

Note Note

□ For setting the drum unit, see p.109 "Changing the Colour Drum Unit".

When paper is misfed inside the machine



- **1** Open the front cover.
- **2** Lower drum unit lock lever (B1).







Note Note

□ For taking out the drum unit, see p.109 "Changing the Colour Drum Unit".

Remove the misfed paper from the inside as shown in the illustration.



5 If you cannot remove the misfed paper, remove paper from the pressure cylinder.

Set the drum unit and close the front door.

🖉 Note

For setting the drum unit, see p.109 "Changing the Colour Drum Unit".

$\widehat{\mathbf{V}}$ To prevent paper misfeeds:

If the paper is curled or the original's leading edge margin is too narrow, the following action is necessary.

• When you use curled paper, correct as shown.



• When the leading edge margin of the original is less than 6 mm, 0.24" or there is a solid image on the leading edge, insert the original with the widest margin first or make a leading edge margin by making a print.



*: Less than 6 mm, 0.24"

.

"औ + C" Paper Misfeeds in the Paper Exit Section

Slowly, but firmly pull out the misfed paper.



$\sqrt[n]{}$ To prevent paper misfeeds:

When thin paper misfeeds in the paper exit section, reduce the printing speed with the [] [] [] of speed setting keys. See p.55 "Changing the Printing Speed". If you cannot reduce the printing speed, close the trailing edge guides or move the end plate toward the paper delivery tray edge.

"औ + D" Master Misfeeds in the Master Feed Section

- **1** Pull out the master tray until it stops.
- **2** Push the button and open the master guide.



B Rotate the spool backward to remove the remaining masters.







E Reset the master roll (1), and then close the master tray cover (2).



6 Position the master roll so that the edge reaches the interior of the master holder.







8 Push in the master tray until it stops.

"S√r + B + D" Master Misfeeds in the Master Feed Section

1 Open the front door.

2 Lower drum unit lock lever (B1).









🖉 Note

□ For taking out the drum unit, see p.109 "Changing the Colour Drum Unit".

4 Pull out the misfed master from inside.



5 Set the drum unit and close the front door.

Note Note

□ For setting the drum unit, see p.109 "Changing the Colour Drum Unit".

"[®]**√** + B + E" Master Misfeeds in the Master Eject Section

Open the front door.

2 Lower drum unit lock lever (B1).









Note 🖉

□ For taking out the drum unit, see p.109 "Changing the Colour Drum Unit".

Grasp handle (E1) and pull out the master eject unit until it stops.



5 Pull out lever (E3) and remove the misfed master.





6 Return lever (E3) and the master eject unit to their original positions.

2 Set the drum unit and close the front door.

Note

□ For setting the drum unit, see p.109 "Changing the Colour Drum Unit".

"औ + E" Master Misfeeds in the Master Eject Section

Open the front door.

2 Grasp handle (E1) and pull out the master eject unit until it stops.



Check where the misfed master is. Remove the misfed master.



A Return the master eject unit to its original position and close the front door.

If master misfeeds occur frequently

If the master misfeeds frequently, fragments of the master might be left in the bottom of the master tray. Remove the fragments.

.

1 Slide out the master tray.



2 Open the cover at the bottom of the master tray while holding the lever and remove the fragments.



Close the cover and slide in the master tray.

🖉 Note

□ Make sure that you securely close the cover before sliding in the master tray.

"औr + P" Original Misfeeds Occur in the Auto Document Feeder

1 Open the ADF cover.



2 Pull out the misfed original gently.



- If you cannot remove misfed originals as in step **2**, open the ADF.
- Pull the green knob towards you and remove the misfed original.



- **E** Return the document feed sheet to its original position.
- **6** Close the ADF cover until it clicks in position and if necessary, close the ADF.



To prevent originals misfeeding:

Placing some kinds of originals in the ADF may cause paper misfeeds. Place them on the exposure glass instead.

🖉 Note

- Do not mix different sizes of originals in the optional ADF.
- Remove staples or paper clips from originals. Fan originals that have had staples or paper clips removed.
- Do not stack originals above the limit mark.

.

When Paper Misfeeds in the LCIT

1 Turn the cover release lever to unlock the cover of the intermediate feeding section of the LCIT.



2 Open the cover, and then remove the paper.



∰Important

□ When opening the cover, always hold the handle to prevent the cover from dropping and causing an injury.

🖉 Note

- If you open the cover, be sure to remove the paper even if it is not misfed.
- When small size paper is misfed and cannot be removed, detach the LCIT, and then remove the paper.

3 Close the cover, and then move the cover release lever back to the original position.



🔗 Note

□ If a paper misfeed message appears on the machine, remove the paper misfed in the machine also.

Changing the Paper Size

Changing the Paper Size of the Paper Feed Tray

1 Remove the paper from paper feed tray.



The paper feed tray will lower.

2 Make sure that the paper feed side plates knob lock lever is raised (lock is released), and then grasp the paper feed side plates knob and adjust the paper feed side plates to match the paper size.



∰Important

Always adjust the position with the lock lever for the paper feed side plates in the raised position (lock released). Place the paper on the paper feed tray.



🖉 Note

- Correct the paper curl before loading the paper. If you cannot do so, stack the paper with the curl face down.
- A Make sure that the paper feed side plates are touching both sides of the paper, and then push the lock lever for the side plates down to lock the side plates into position.



∰Important

Always make sure that you push the lock lever for the side plates down to lock the side plates into position.

🖉 Note

Make sure that the paper size and orientation in the display panel correspond with the actual paper size and orientation set on the paper feed tray.

Changing the Paper Size of LCIT

Take the paper stack out of the input tray.



2 Remove the paper remaining in the intermediate feeding section.

℅ Reference

p.140 "When Paper Misfeeds in the LCIT"

E Loosen the screw to unlock the side guides.



Turn the side guide adjustment knob to adjust the side guides to the new paper size.



- **5** Tighten the screw to lock the side guides.
- **6** Load paper.



🖉 Note

The leading edge of the paper must touch the inside of the LCIT.

[∕•When the Open Cover/Unit Indicator Lights

A message is displayed explaining the place where the doors/covers are not properly closed.

Front door

Close the front door completely.



Optional ADF cover

Close the ADF over until it locks in position.



Optional LCIT Unit

① Close the LCIT Unit cover.



② Move the cover release lever back to the original position.



♦ Optional LCOT Unit Lower the end plate arm.



CRemoving the Used Master

When **1** lights, it is time to empty the master eject unit. It also lights when the master eject unit is not set properly.

🖉 Note

- Ink is easily removed from skin by waterless hand cleaners followed by washing with soap and water.
- Be careful not to get any ink on your clothing while emptying the master eject unit.
- When Higher Security is on, you have to enter the security code to unlock the master eject unit.
- Prepare a container for the used master.
- **2** Open the front door.
- Use handle (E1) to pull out the master eject unit until it stops.



Pull up handle (E2) and pull out the master eject unit completely.



- Hold the master eject unit upper handle and turn it clockwise with one hand while holding handle (E1) with other hand (1).
- **6** Remove the used master by pushing down the handle (1) towards the waste container (2).



🔗 Note

- If you cannot remove the used master completely, repeat step
 until all the master is removed.
- **7** Reinstall the master eject unit, making sure it clicks into position.
- **8** Close the front cover.

When Multiple Sheets Are Fed at the Same Time

Follow the procedure below to correct a multiple sheet feed problem of the LCIT.

Adjust the feeding pressure lever of the LCIT according to the thickness of the paper loaded.



🔗 Note

The appropriate feeding pressure lever positions according to the weight of the paper are as follows.

	Metric version	Inch ver- sion
Thick	127.9 – 209.3 g/m ²	34.0 – 55.6 lb.
Standard	52.3 – 127.9 g/m ²	13.9 – 34.0 lb.
Thin	47.1 – 52.3 g/m ²	12.5 – 13.9 lb.

- If multiple sheets of paper are fed at the same time when the feeding pressure lever is set to Standard, set the feeding pressure lever to Thin.
- □ If paper is not fed at all when the feeding pressure lever is set to Thin, set the feeding pressure lever to Standard.
- Paper heavier than 127.9 209.3 g/m² (34.0 55.6 lb.) is categorized as thick paper. However, for B5 JIS paper heavier than 127.9 g/m² (34.0 lb.), set the feeding pressure lever to Standard.
- When paper is still not fed properly even after the feeding pressure lever is adjusted, increase the paper feeding pressure of the machine.
- 2 If the problem still persists, take the paper out and fan it before loading it again.



When Prints Are Not Delivered in a Neat Stack

When Printing on Small Size Paper

Slightly lower the end plate to raise the screw.



2 Adjust the angle of the end plate by turning the screw clockwise or counterclockwise.



When paper sides do not stack neatly

Adjust the paper delivery side plates to a size a little larger than the paper size.



5. User Tools

User Tools Menu

System Settings

✤ General Features (See p.153 "General Features".)

	Default
Panel Beeper	Warning Only
mm/inch	• Metric version: <i>mm</i>
	• Inch version: <i>inch</i>

✤ Timer Settings (See p.153 "Timer Settings".)

	Default
Set Date	
Set Time	
System Auto Reset Timer	off
Energy Saver Timer	3 min
Auto Off Timer	off

Mode Settings (See p.154 "Mode Setting".)

	Default
Energy Saver Option	Energy Saving
Auto Cycle	On
Ignore Paper Size	Do not Ignore
Longer Paper	Do not Use
Skip Feed	2 times
Auto Quality Start Setting	On
No.of Idling Rotations: Auto Quality Start	
No.of Idling Rotations: Quality Start	7 times
Deflector Angle	Auto
Auto Class	Stop
Master/Ink Remaining Volume	Off
Paper Type	Standard
Paper Type: User1–2	Standard: No Feed
Master Cut Length	Auto
Double Feed Warning	Off

Interface Settings

• For details about network settings, see "User Tools Menu (System Settings)", *Network Guide*.

Administrator Tools (See p.156 "Administrator Tools".)

	Default
User Code Management	Off
Key Operator Code	Off
Restricted Access	Off
Security Option	Normal
Security Timer	Off
Display/Clear/Print Counter per User	
Program/Change/Delete User Code and Name	
Auto Delete File	No
Delete All Files	
Temporarily Unlock Stored Files	Do not Unlock

Master Making/Print Settings

	Default
Shortcut Reduce/Enlarge 1–3	Metric version
	•Shortcut Reduce/Enlarge 1: 71%
	•Shortcut Reduce/Enlarge 2: 141%
	•Shortcut Reduce/Enlarge 3: 93%
	Inch version
	•Shortcut Reduce/Enlarge 1: 74%
	•Shortcut Reduce/Enlarge 2: 155%
	•Shortcut Reduce/Enlarge 3: 93%
Enlarge 1–4	Metric version
	•Enlarge 1: 115%
	•Enlarge 2: 122%
	•Enlarge 3: <i>141%</i>
	•Enlarge 4: 200%
	Inch version
	•Enlarge 1: 121%
	•Enlarge 2: 129%
	•Enlarge 3: 155%
	•Enlarge 4: 200%
Priority Setting:Enlarge	Metric version 141%
	Inch version 155%
Reduce 1–5	Metric version
	•Reduce1: 50%
	•Reduce2: 61%
	•Reduce3: 71%
	•Reduce4: <i>82</i> %
	•Reduce5: <i>8</i> 7%
	Inch version
	•Reduce1: 50%
	•Reduce2: 65%
	•Reduce3: 74%
	• Reduce4: 77%
	•Reduce5: <i>85</i> %
Priority Setting:Reduce	Metric version 71%
	Inch version 74%
Ratio for Create Margin	93%
Reduce/Enlarge Priority	Reduce

✤ Reproduction Ratio (See p.158 "Reproduction Ratio".)

✤ Original Setting (See p.159 "Original Setting".)

	Default
Master Making Density	Normal
Original Type	Text
Text/Photo Contrast	Normal
Photo Contrast	Normal
Photo (Screen)	Normal
Background Correction	Off

✤ Edit Setting (See p.159 "Edit Setting".)

	Default
Combine/Image Repeat Separation Line	None
Erase Original Border Width	Metric version: 2 mm
	Inch version: 0.1"
Erase Paper Border Width	Metric version: 2 mm
	Inch version: 0.1"
Stamp Type Defaults	CONFIDENTIAL
Stamp Size	1 X
Stamp Density	Normal
Stamp Position	Metric version
	Position: Top Right
	• Top Margin: 24 mm
	• Right Margin: 24 mm
	Inch version
	Position: Top Right
	• Top Margin: 1.0"
	• Right Margin: 1.0"

Others (See p.160 "Others".)

	Default
Ignore ADF Original Size	Do not Ignore
Ignore Exposure Glass Original Size	Do not Ignore
Cancel Combine/Repeat Setting	Do not cancel
Auto Separate (Class)	On
Auto Rotation	On
Minimum Print Quantity	0 sheet(s)
Maximum Print Quantity	9999 sheet(s)
Economy Mode	Off

Prog.Key Settings (See p.161 "Prog.Key Settings".)

	Default
Function Key:F1-F5	• F1: 1 Sided \rightarrow 1 Sided Combine: 2 originals
	• F2: 1 Sided \rightarrow 1 Sided Combine: 4 originals
	• F3: Create Margin
	• F4: <i>Off</i>
	• F5: <i>Off</i>

Accessing User Tools (System Settings/Master Making/Print Settings)

User Tools allow you to change or set defaults.

🖉 Note

- Operations for system settings are different from normal operations. Always quit User Tools when you have finished.
- Any changes you make with User Tools remain in effect even if the main switch or operation switch is turned off, or the [Clear Modes] key is pressed.

Changing Default Settings

🖉 Note

□ If a key operator code is already set, the operator code entry display appears. Enter the key operator code, and then press **[OK]**. See p.156 "Key Operator Code".

Press the [User Tools] key.



2 Press [System Settings] or [Master Making / Print Settings].

- Select the desired menu, and then press the appropriate key.
- Change settings by following instructions on the display panel, and then press [OK].

🖉 Note

□ To cancel changing settings and return to the initial display, press the **[User Tools]** key.

Quitting User Tools

Press the [User Tools] key.



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🖉 Note

You can also exit from User Tools by pressing [Exit].

Settings You Can Change with User Tools

System Settings

General Features

Panel Beeper

Turns the beeper on or off.

- All On (The beeper sounds when you press a key or when warning messages appear on the display.)
- Warning Only (The beeper sounds only when warning messages are shown on the display and not when you press a key.)
- All Off (The beeper does not sound at all.)

🔗 Note

Default: Warning Only

✤ mm/inch

You can select the units of measurement shown on the display.

🖉 Note

D Default:

- Metric version: mm
- Inch version: inch

Timer Settings

Set Date

You can set the date for the machine's internal clock using the number keys.

🖉 Note

□ To change between year, month and day, press [←] and [→].

Set Time

You can set the time for the machine's internal clock using the number keys.

🖉 Note

□ To change between hours, minutes and seconds, press [←] and [→].

System Auto Reset Timer

The System Reset setting automatically switches to the initial screen when no operations are in progress, or when an interrupted job is cleared. This setting determines the system reset interval.

🖉 Note

- □ Default: off
- □ The time can be set from 1 to 5 minutes.

Energy Saver Timer

You can set the time that the machine waits before switching to lower power mode after printing has finished or the last operation is performed.

The time can be set from 1 minute to 120 minutes.

🖉 Note

- Default: 3 min
- When in "Energy Saver Mode", the machine is ready for use within 240 seconds.

Auto Off Timer

You can select to use the auto off timer and set the daily power off time.

🖉 Note

□ Default: Off

Mode Setting

Energy Saver Option

You can select to **[Energy Saving]** or **[Auto Off]**.

🖉 Note

Default: Energy Saving

✤ Auto Cycle

Specifies whether Auto Cycle mode is selected at power on.

🖉 Note

 \Box Default: *On*

Ignore Paper Size

If you are making prints on custom size paper and the original image does not entirely appear on the print, select "Ignore". The machine will not detect the paper length.

🔗 Note

Default: Do not Ignore

Longer Paper

You can select "Use" to allow the use of paper longer than 432 mm, 17.0".

🖉 Note

Default: Do not Use

Skip Feed

You can select **[Display]** or **[Do not Display]** and set the number of Skip Feed.

🔗 Note

- Default: 2 times
- □ The time can be set from 2 to 9 times.

Auto Quality Start Setting

You can select **[On]** to have the machine automatically carry out a few idle spins when the power is turned on. When selecting **[Off]**, you can restore the density by making a few extra prints or by using the Manual Quality Start mode.

🔗 Note

Default: On

No.of Idling Rotations: Auto Quality Start

You can select how many times the drum unit idles after the displayed time periods have passed in Auto Quality Start mode.

🖉 Note

□ Default settings are follows.

		Ti ri	ime od	e po	5-
		0-4 hours	4 – 24 hours	24 – 72 hours	Over than 72 hours
ure	Low Tmp. ^{*1}	0	7	7	7
erat	Normal Tmp. ^{*2}	0	5	5	5
Temp	High Tmp. *3	0	5	5	5

- ^{*1} (Below 19°C or 66.2°F)
- ^{*2} (19 29°C, 66.2 84.2°F)
- ^{*3} (Over 29°C or 84.2°F)
- To increase the print image density, increase the number of drum rotations, and vice versa.

✤ No.of Idling Rotations: Quality Start

When you use the Quality Start mode, you can select how many times the drum unit idles.

🖉 Note

Default: 7 times

✤ Deflector Angle

You can change the angle of the wing guide depending on the paper type you use.

- Up (Select this setting when standard thickness or thin paper misfeeds at the paper exit section occur frequently.)
- Down (Select this setting when A4 – B5 JIS, 8¹/₂" × 11" thick paper is not delivered properly to the paper delivery tray.)

🖉 Note

Default: Auto

Auto Class

Instead of using the Separate mode, you can make the following settings:

- Start Automatically (After the last page of each printing set is fed out to the paper delivery tray, the machine stops for a few seconds. Then, the next cycle begins.)
- Stop (After the last page of each printing set is fed out to the paper delivery tray, the machine stops. If you press the **[Start]** key, the next cycle begins.)

🔗 Note

□ Default: *Stop*

Master/Ink Remaining Volume

Specifies whether you can check the amount of ink and master.

- **[Off]** (You cannot check the remaining amount of ink or master.)
- **[On (Below half)]** (When the remaining amount of ink or master is less than half, the display panel indicates these amounts when you turn on the main switch.)

🖉 Note

□ Default: Off

Paper Type

You can select the paper type.

🖉 Note

Default: Standard

Paper Type: User1–2

You can register a frequently used paper type and have it shown on the paper type menu as **[User 1]** or **[User 2]**.

🖉 Note

Default: Standard: No Feed

- ① Select the paper type.
 - Standard: "No feed" "Double feed"
 - Thick Paper: "No feed" "Double feed" "Medium"
- Press [OK].

5

Master Cut Length

The machine determines the master length according to the number of originals placed in the optional ADF and the paper sizes. If you wish to use A3, $11" \times 17"$ master regardless of the number of originals set and the paper sizes, select "A3".

🖉 Note

Default: Auto

Double Feed Warning

Specifies whether a warning is displayed or not when a double feed is detected.

🔗 Note

□ Default: Off

Administrator Tools

User Code Management

You can select whether or not to use User Code mode. If user codes are turned on, users must enter their user codes before they can operate the machine. The machine keeps count of the number of copies made under each user code. User code must registered for User Code Management. See p.162 "User Code".

🔗 Note

□ Default: Off

Key Operator Code

You can specify whether or not to use key operator codes to control Administrator Tools settings for access codes.

🖉 Note

- □ Default: Off
- If you select [On], enter the key operator code (max.4 digits) using the number keys, and then select [Partial] or [All Initial Settings] to set the access limit.
 - If you selected **[Partial]** A key operator code is only required to access Administrator Tools for System Settings.
 - If you selected [All Initial Settings]

A key operator code is required to access all items in System Settings, Master Making/Print Settings, and Online Print Features.

□ If you select **[On]**, you must enter an access code to access the Key Operator Code display.

Restricted Access

In Key Counter mode, you have to set the key counter before making prints. (To turn on Key Counter mode, contact your service representative.) If Key Counter mode is on, Restricted Access is turned on automatically. If you turn Restricted Access off, you can make prints without inserting the key counter.

🔗 Note

□ Default: Off

Security Option

You can specify the setting of security mode.

🖉 Note

- Default: Normal
- You have to set a security code (4 digits) to enable Higher Security mode.
- When selecting Higher Security mode, a security mark appears on the left side of the date, in the upper right of the display panel.

✓ Reference

See p.97 "Security".

Security Timer

Set the amount of time the machine waits before switching to the Higher Security mode.

🖉 Note

Default: Off

Display/Clear/Print Counter per User Allows you to view and print the

various counters accessed with users and to set the values to 0.

🖉 Note

- □ Press **[**▲**Prev.]** and **[**▼**Next]** to show all counters.
 - Print Counter List Prints the counter values for all the users.
 - Clear All Counter Sets the counter value of all users to 0.
 - Clear Per User Sets the counter value of a selected user to 0.

Program/Change/Delete User Code and Name

You can register, change, or delete user codes and names.

🖉 Note

□ Up to 200 user codes (up to 4 digits) can be registered.

Reference

p.162 "User Code".

Auto Delete File

You can specify whether documents stored in the machine will be deleted or not after a specified period of time.

🖉 Note

- □ Default: No
- □ If you select **[Yes]**, documents stored subsequently will be deleted.
- □ If you select **[No]**, documents will not be deleted automatically.
- □ If you select **[Yes]**, enter a number of days in the range of 1 to 180.

Delete All Files

All documents stored will be deleted.

🖉 Note

- Even if a password has been set, all documents will be deleted.
- □ A confirmation dialog box will appear. To delete all documents, select **[Yes]**.

Temporarily Unlock Stored Files

Access to the files will be temporarily available without entering a password.

🖉 Note

- Default: Do not Unlock
- Select [Unlock] only when you forget the password. After accessing the document, be sure to select [Do not Unlock].

Master Making/Print Settings

Reproduction Ratio

Shortcut Reduce/Enlarge 1–3

You can register up to three frequently used Reduce/Enlarge ratios other than the fixed Reduce/Enlarge ratio and have them shown on the initial display. You can also change registered Reduce/Enlarge ratios.

If no Reduce/Enlarge ratio has been set when selecting [Shortcut Reduce/Enlarge 1], [Shortcut Reduce/ Enlarge 2], or [Shortcut Reduce / Enlarge 3], enter the ratio using the number keys.

Enlarge 1–4

You can customize available enlargement ratios by pressing [Reduce / Enlarge], followed by [Enlarge].

🖉 Note

D Default:

- Metric version:
 - Enlarge 1: 115%
 - Enlarge 2: 122%
 - Enlarge 3: 141%
 - Enlarge 4: 200%
- Inch version:
 - Enlarge 1: 121%
 - Enlarge 2: 129%
 - Enlarge 3: 155%
 - Enlarge 4: 200%
- □ When selecting [User Enlrg. Ratio], enter a ratio using the number keys (in the range of 101 to 200%).

Priority Setting:Enlarge

You can set the ratio with priority when **[Reduce / Enlarge]** is pressed, followed by **[Enlarge]**.

🖉 Note

- **D** Default:
 - Metric version: 141%
 - Inch version: 155%

Reduce 1–5

You can customize available reduction ratios by pressing **[Reduce / Enlarge]**, followed by **[Reduce]**

🖉 Note

- **D** Default:
 - Metric version:
 - Reduce 1: 50%
 - Reduce 2: 61%
 - Reduce 3: 71%
 - Reduce 4: 82%
 - Reduce 5: 87%
 - Inch version:
 - Reduce 1: 50%
 - Reduce 2: 65%
 - Reduce 3: 74%
 - Reduce 4: 77%
 - Reduce 5: 85%
- □ When selecting **[User Redc.Ra**tio], enter a ratio using the number keys (in the range of 25 to 99%).

Priority Setting:Reduce

You can set the ratio with priority when **[Reduce / Enlarge]** is pressed, followed by **[Reduce]**.

🖉 Note

D Default:

- Metric version: 71%
- Inch version: 74%

✤ Ratio for Create Margin

You can set a Reduce /Enlarge ratio when registering Create Margin in a shortcut key.

🖉 Note

□ Default: 93%

Reduce/Enlarge Priority

Specifies which tab has priority on the display panel when **[Reduce / Enlarge]** is pressed.

🔗 Note

D Default: *Reduce*

Original Setting

Master Making Density

Specifies the image density at power on.

🖉 Note

Default: Normal

Original Type

Specifies the original type at power on.

🖉 Note

D Default: *Text*

Text/Photo Contrast

Specify the contrast level for text/Photo when the power is switched on or after mode settings are cleared.

🖉 Note

Default: Normal

Photo Contrast

Specify the contrast level for Photo when the power is switched on or after mode settings are cleared.

🖉 Note

Default: Normal

Photo (Screen)

Specify the screen image in Photo mode when you press **[Original Type]**

🖉 Note

Default: Normal

Background Correction

When you make prints in Photo, Text/Photo, or Pale mode, the background of the prints might become dirty. You can select "On" to improve the clarity of your prints.

🖉 Note

□ Default: Off

Edit Setting

Combine/Image Repeat Separation Line You can select a separation line using the Combine function from: None, Solid, Broken A, Broken B, or Crop Marks.



- a=None
- b=Solid
- c=Broken A
- d=Broken B
- e=Crop Marks

🖉 Note

□ Default: None

Erase Original Border Width

You can specify the width of erased border margins for originals using this function.

🖉 Note

Default:

- Metric version: 2 mm
- Inch version: 0.1"

* Erase Paper Border Width

You can specify the width of erased border margins for prints using this function.

🖉 Note

Default:

- Metric version: 2 mm
- Inch version: 0.1"

Stamp Type Defaults

You can select the stamp message at power on with the Stamp mode.

🖉 Note

Default: CONFIDENTIAL

Stamp Size

You can edit the preset stamp sizes.

🔗 Note

Default: 1 X

Stamp Density

You can select the density of the stamps.

🖉 Note

Default: *Normal*

Stamp Position

You can set the position where the stamp is printed.

Press the arrow keys to adjust the position.

🖉 Note

- Default:
 - Metric Version:
 - Position: Top Right
 - Top Margin: 24 mm
 - Right Margin: 24 mm
 - Inch Version:
 - Position: Top Right
 - Top Margin: 1.0"
 - Right Margin: 1.0"

Others

Ignore ADF Original Size

When you place long originals in the optional ADF, set original detection to "Ignore". The machine will not detect the original size.

🖉 Note

Default: Do not Ignore

✤ Ignore Exposure Glass Original Size

When you place custom sizes originals on the exposure glass, set original detection to "Ignore". The machine will not detect the original size.

🖉 Note

□ Default: Do not Ignore

Cancel Combine/Repeat Setting

Specifies whether Combine settings is cleared after finishing your print job.

🖉 Note

Default: Do not Cancel

✤ Auto Separate (Class)

Specifies whether Separate mode is automatically selected when you make prints in Class Setting mode.

🖉 Note

Default: On

Auto Rotation

When the orientation in which your original is placed differs from that of the paper, the machine automatically rotates the original image by 90° to match the paper orientation.

🔗 Note

Default: On

Minimum Print Quantity

The minimum print quantity can be set between 0 and 9999. Example: If you specify 20 as the minimum number of prints, runs of 20 or more prints will be accepted, print runs of less than 20 prints will not be accepted.

🖉 Note

□ Default: 0 sheet(s)

Maximum Print Quantity

The maximum print quantity can be set between 0 and 9999.

🖉 Note

□ Default: 9999 sheet(s)

Economy Mode

Specify the economy mode level of ink.

🖉 Note

Default: Off

Prog.Key Settings

✤ Function Key:F1–5

You can assign frequently used functions to function keys F1 to F5.

🖉 Note

D Default:

- Function Key: F1: 1 Sided→1 Sided Combine: 2 originals
- Function Key: F2: 1 Sided→1 Sided Combine: 4 originals
- Function Key: F3: Create Margin
- Function Key: F4: Off
- Function Key: F5: Off

User Code

If the machine has user codes set, users must enter their user code before they can use the machine. The machine keeps count of the number of masters and prints made under each user code.

🔗 Note

If you want to use this feature, select [On] in "User Code Management" with User Tools menu. See p.156 "User Code Management".

Registering a User Code

You can register up to 200 user codes.

Press the [User Tools] key.



- **2** Press [System Settings].
- E Press [Administrator Tools].
- Press [Program / Change/ Delete User Code and Name].
- **5** Press [New Program].

6 Enter the user code (up to four digits) using the number keys, and then press [#].

► User Code	[Clear (#			
 User Name 		E	nter Name]	

🔗 Note

- □ If you make a mistake, press [Clear] or the [Clear/Stop] key, and then enter the code again.
- Press [Enter Name].
- Enter the user name, and then press [OK].



🖉 Note

□ To continue registering user codes and name, repeat the procedure from step **5**.

Reference

p.175 "Entering Text"

- Press [OK].
- D Press [Exit].
- Press the [User Tools] key.

Changing a User Code

🖉 Note

Even if you change a user code, the counter value will not be cleared.

Press the [User Tools] key.

Press [System Settings].



Press [Program / Change / Delete User Code and Name].

Select the registered user code you want to change.

Program / Change / Delete User Code and Name Program code or select key to change.	
	Program 3/200 New Program
Program / Change Delate	V Nezt Exit

Enter the new user code and user name, and then press[OK].

7 Press [Exit].

Bress the [User Tools] key.

Deleting a User Code

🖉 Note

- □ After clearing the user code, the counter is automatically cleared.
- Press the [User Tools] key.
- Press [System Settings].
- Press [Administrator Tools].
- Press [Program / Change / Delete User Code and Name].

5 Press [Delete].



Select the user code you want to delete, and then press [OK].

🖉 Note

- □ If you want to delete all user codes, press [Delete All].
- □ To delete all user codes on the page, press [All on The Page].

A confirmation dialog box will appear.

Press [Yes].

B Press [Exit].

Press the [User Tools] key.

Displaying the Counter for Each User Code

- Press the [User Tools] key.
- **2** Press [System Settings].
- E Press [Administrator Tools].
- Press [Display / Clear / Print Counter per User].

Counters of each user code appear.

Printing the Counter for All User Codes

- Press the [User Tools] key.
- **2** Press [System Settings].
- Press [Administrator Tools].
- Press [Display / Clear / Print Counter per User].
- **5** Press [Print Counter List].



A confirmation dialog box will appear.

6 Press [Yes].

Clearing the Counter

- Press the [User Tools] key.
- Press [System Settings].
- B Press [Administrator Tools].
- Press [Display / Clear / Print Counter per User].

5 Select the user code to clear.

To clear the counter for each user code

• Select the user code from the left side of the display.

D	lis	ilay	/CI	ear	/Prin	t Cour	iter p	er Us	er															F	Program	imed	User	(\$)	3
Select All on the Page							Sele B	ect u Black	ser(s : Ma	s) fin ister	st, th	en select a function. Black: Print				Colour: Master			Colour: Print										
10		1	11	11	AAA	Depa	irt	0 0) O	0 0	0	0 0	0 0	0 0	00	0 0	0 0	0 0	0.0	0	0 0	0 0	0.0	0	Pri	nt Ci	ounte	rList	_
10		2	22	22	BBB	Depa	urt	0.0	0 0	0 0	0	0 0	0 0	0 0	00	0 0	0 0	0 0	0.0	0	0 0	0 0	0.0	0	CI	ear A	II Co	unter	
6		3	33	33	CCC	Depa	irt	0.0	0 0	0 0	0	0 0	0 0	0 0	00	0 0	0 0	0 0	0.0	0	0 0	0 0	0.0	0	<u> </u>	ie a	Per U	80]
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🖉 Note

Press [Select All on the Page] to select all user codes on the page.

2 Press [Clear Per User].



A confirmation dialog box will appear.

8 Press [OK].

To clear the counters for all user codes

Press [Clear All Counter].



A confirmation dialog box will appear.

2 Press [OK].

6 Press [Exit].

2 Press the **[User Tools]** key.

6. Remarks

Do's and Don'ts

A WARNING:

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

A CAUTION:

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

∰Important

- □ Make sure that the Data In � indicator is off before unplugging the power cord.
- While printing, do not turn off the main switch.
- While printing, do not unplug the power cord.
- While printing, do not open the door or covers.
- While printing, do not move the machine.
- Open and close all doors and covers carefully.
- When printing onto paper that contains images on the back, make sure there is a 6 mm (0.24") margin at the back leading edge. If there is no margin, the machine might wrongly detect that paper is wrapped around the drum and stop printing.
- When you use envelopes or pasted print paper, the leading edge of the prints might be damaged.
- Always make a few trial prints to check the image position because the image position of the trial print might not correspond with that of the original.
- The leading edge of the prints might become stained if the edge touches the image of prints on the paper delivery tray.
- Print ink on the paper delivery tray might stick to the back side of the next print.
- Press the **[Proof]** key to perform a test print as the image density of the first few prints might be light.
- When the machine is on and the power source is less than 90% of the specified amount, printing quality will decrease. Therefore, make sure the supply from your electrical outlet is at least 90% of the required amount.
- When you make a lot of prints from a small image, ink might ooze out from the edges of the master, especially in high temperatures and when printing in two or more colours. In these cases, make a new master.

- Remove the paper from the tray before relocating the machine. If you relocate the machine leaving the paper on the tray, reset the paper after the relocation. If the main switch of the machine is turned on without resetting the paper correctly, the sensor might be broken.
- If the printed paper is stored for more than one day, the paper may become wrinkled. If this paper is used, wrinkles may also appear on the master. If the paper will be stored for more than one day, store it in its original wrapping paper or other protective covering.
- Shadowing may occur if the printed image at the rear edge of the paper is a solid colour, when the printing speed is set to 1. If this occurs, print the image with the printing speed set to 3.
- If there are fine lines within 5 mm to 10 mm, 0.2" to 0.4" of the edge of the image, shadowing may occur.
- Depending on the type of paper being used, speckles may appear within 5 mm to 10 mm, 0.2" to 0.4" of the edge of the image at around 1000 prints.
- When two or more sheets of paper feed at once, you can select whether the warning message is displayed or not. Set to "On" of the "Double Feed Warning" with User Tools. See p.156 "Double Feed Warning".
- When two or more sheets of paper feed at once, set paper on the paper feed side plates securely. See p.31 "Using the Paper Feed Tray and Delivery Tray"
- When paper misfeeds occur, select the proper paper type from **[Feed Tray Paper Type]**. See p.47 "Printing onto Various Kinds of Paper". If the problem persists, fan or turn the paper over.
- If the paper skews, make sure to set the paper feed side plates securely. See p.31 "Using the Paper Feed Tray and Delivery Tray".
- Make sure originals on the exposure glass are correctly positioned and aligned with the scale.
- If the edges of the paper are rounded, skewing might occur. Change the paper's orientation or replace.
- If the paper becomes creased, make sure the correct paper type has been selected in **[Feed Tray Paper Type]**. See p.47 "Printing onto Various Kinds of Paper".
- If custom paper crease frequently, use the standard paper type.

Where to Put Your Machine

Machine Environment

Your machine's location should be carefully chosen because environmental conditions greatly affect its performance.

Optimum environmental conditions

A CAUTION:

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

A CAUTION:

• If you use the machine in a confined space, make sure there is a continuous air turnover.

A CAUTION:

- After you move the machine, use the caster fixture to fix it in place. Otherwise the machine might move or come down to cause an injury.
- Temperature: 10 30°C, 50 86°F
- Humidity: 20 90% RH
- A strong and level floor.
- The machine must be level within 5 mm, 0.2" both front to rear and left to right.

Environments to avoid

- Locations exposed to direct sunlight or strong light (more than 1500 lux).
- Locations directly exposed to cool air from an air conditioner or heated air from a heater (sudden temperature changes might cause condensation within the machine).
- Places where the machine might be subjected to frequent strong vibration.
- Dusty areas.
- Areas with corrosive gases.

Moving

A CAUTION:

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

∰Important

- When moving the machine, the following precautions should always be followed:
 - Turn off the main switch.
 - Unplug the power cord from the wall outlet. When you do, grip the plug to avoid damaging the cord and causing fire or electric shock.
 - Close all covers and trays including the front cover.

Limitation

- □ Carefully move the machine. If you do not, the machine might be damaged or a stored file might be deleted.
- □ Avoid any strong shock to the machine. This could damage the hard disk and cause stored files to be deleted. For precautionary reasons, files should be copied to another local computer.

Power Connection

\land WARNING:

- Connect the power cord directly into a wall outlet and never use an extension cord.
- Only connect the machine to the power source describe in the manual.
- Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it. Do not pull it hard nor bend it more than necessary. These actions could cause an electric shock or fire.

A CAUTION:

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

A CAUTION:

- When you disconnect the power plug from the wall outlet, always pull the plug (not the cable).
- The socket-outlet shall be installed near the machine and shall be easily accessible.
- Voltage must not fluctuate more than 10%.
Access to the Machine

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



- * Paper delivery tray
- 1. More than 10 cm, 4.0"
- 2. More than 60 cm, 23.7"
- 3. More than 60 cm, 23.7"
- 4. More than 60 cm, 23.7"

Note

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

Maintaining Your Machine

To maintain high print quality, clean the following parts and units regularly.

Cleaning the machine

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

∰Important

- Do not use chemical cleaner or organic solvents, such as thinner or benzene. If they get into the machine or melt plastic parts, a failure might occur.
- Do not clean parts other than those specified in this manual. Such parts should be cleaned by your service representative.

Cleaning the Exposure Glass

Lift the exposure glass cover or ADF.

2 Clean (1) and (2).

🖉 Note

When using the exposure glass, clean (2) only.



Cleaning the exposure glass cover



2 Clean the exposure glass cover with a damp cloth and wipe it with a dry cloth.



🖉 Note

If you do not clean the exposure glass cover, marks on the cover will be printed.

Cleaning the Auto Document Feeder

1 Lift the ADF.

2 Clean the sheet with a damp cloth and wipe it with a dry cloth.



🔗 Note

If you do not clean the sheet, marks on the sheet will be printed.

Cleaning the paper feed roller (paper feed tray)

1 Wipe dust off the paper feed roller with a damp cloth, and then wipe it with a dry cloth.



🖉 Note

If you do not clean the paper feed roller, paper misfeeds tend to occur.

Cleaning the paper feed roller (LCIT)

Wipe dust off the paper feed roller with a damp cloth, and then wipe it with a dry cloth.



🖉 Note

Keep the paper feed roller clean to avoid paper misfeeds.

Other Functions

Inquiry

The inquiry functions lets you confirm the telephone numbers to contact for repairs or to order ink. Be sure to contact your service engineer to verify the following:

* Machine Maintenance/Repair

- Telephone No.
- Serial No. of Machine

Sales Representative

• Telephone No.

Press the [User Tools] key.



AJK135S

2 Press [Enquiry].

🐼 User Tools / Count	er / Enquiry		Exit
	Master Making / Print Settings	\$ 5 °	Français
	Conline Print Features		
Deg System Settings		i	Enquiry
		123	Counter / Data Print

Enquiry information is displayed.

Printing Enquiry information

Press [Print Enquiry List].

1 Enquiry		2005/ 9/24 4:23 Exit
Consumables Telephone No. to order Ink Master	Machine Maintenaoc-Reg Telephone No. Serial No. of Machine Sales Regresentative Telephone No.	123-5678-0123
		Print Enquiry List

2 Press the **[Start]** key.

Enquiry information is printed.

- B Press [Exit].
- 4 Press [Exit].

Changing the Display Language

You can change the language used on the display. English is set as default setting.

Press the [User Tools] key.



AJK135S

2 Press [Français].

🔕 User Tools / Count	er / Enquiry	1 NOV 2005 12:33 Exit
	Aaster Making / Print Settings	🔂 Français
Sustem Settings	Coline Print Features	
C. Oyani toningo		É Enquiry
		123 Counter / Data Print

The display language is changed to French.

B Press [Sortie].

The menu appears in French.

🖉 Note

□ If you want to return the display language to "English", repeat step **1** and press **[English]**.

Counter/Data Print

Displaying the Counter

Display the number of sheets used for master making and the number of sheets used for printing.

Two types of counter can be displayed.

You can check the number of total sheets using counter, and check the number of sheet after resetting.

You can also reset the resettable counter.

Press the [User Tools] key.

Press [Counter / Data Print].

🐼 User Tools / Counte	er / Enquiry	1 NOV 2005 12:33 Exit
	Master Making / Print Settings	ç⊟° Français
	Online Print Features	
System Settings		i Enquiry
		123 Counter / Data Print

Reset the Counter

Press [Clear] below the master making figures and print figures in the resettable counter area.

123 Counter / D	ata Print		2005/ 3/24 4:23 Exit
 Resettable Counter Master Making 	21 Clear	Print	563 Clear
 Counter Master Making 	128	Print	2635
		Print Log Data	Print Programmed Class List

Print the log data and programmed class list

Print the log data or programmed class list.

✤ Log Data

Check the making master and print log data.

Program Class List

Check the programmed class registered in the Class Settings function.

p.67 "Class Settings"

- Press the [User Tools] key.
- **2** Press [Counter / Data Print].

🗞 User Tools / Counter / Enquiry		
	Master Making / Print Settings	දුපුර් Français
	Conline Print Features	
aystein aetungs		1 Enquiry
		E23 Counter / Data Print

To print a log data , press [Print Log Data].

 Resettable Counter 			
Master Making	21	Print	563
	Clear		Clear
► Counter			
Master Making	128	Print	2635
		Print Log Data	Print Programmed Class L

🔗 Note

When you need the programmed class list, press [Print Programmed Class List].

4 Press [Yes].

7. Entering Text

Entering Text

This section describes how to enter characters. When you enter a character, it is shown at the position of the cursor. If there is a character at the cursor position, the entered character is shown before that character.

Available Characters

- Alphabetic characters
 ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz
- Symbols
- Numerals 0123456789

Keys



🖉 Note

□ When entering uppercase or lowercase letters continuously, use [Shift Lock] to lock the case.

Entering Text

Entering letters

1 Press [Shift] to switch between uppercase and lowercase.

2 Press the letters you want to enter.

Deleting characters

Press [Backspace] or [Delete All] to delete characters.



8. Specifications

Main Unit

- Configuration:
 Floor standing
- Printing Process:
 Full automatic one drum system
- Original Type: Sheet/Book
- ✤ Original Size: Maximum 300 mm × 432 mm, 11.8" × 17.0"

Pixel Density:

600 × 600 dpi (dots per inch)

✤ Image Mode:

Text mode Text/Photo mode Photo mode Pencil mode Pale mode

Reduction Ratios:

- Metric version: 93%, 87%, 82%, 71%, 61%, 50%
- Inch version: 93%, 85%, 77%, 74%, 65%, 50%

Enlargement Ratios:

- Metric version: 141%, 122%, 115%
- Inch version: 155%, 129%, 121%

Zoom:

From 50% to 200% in increments of 1%

Directional Magnification:

- Vertical: From 50% to 200% in increments of 1%
- Horizontal: From 50% to 200% in increments of 1%

Printing Area:

- Metric version:
 - A3 drum: more than 290 × 412 mm, 11.4" × 16.3"
 - A4 drum: more than 290 × 202 mm, 11.4" × 8.0"
- Inch version:
 - 11" × 17" drum: more than 290 × 422 mm, 11.4" × 16.7"
 - A4 drum: more than 290 × 202 mm, 11.4" × 8.0"

Print Paper Size:

Maximum recommended: 297 mm × 432 mm, 11.6" × 17.0" (Maximum: 325 mm × 447 mm, 12.8" × 17.6") Minimum: 70 mm × 148 mm, 2.8" × 5.8"

✤ Leading Edge Margin:

Less than 6 mm, 0.24"

Print Paper Weight:

• $47.1 - 209.3 \text{ g/m}^2$, 12.5 - 55.6 lb

Print Speed:

Paper length of 364 mm, 14.4" or more: 60 – 120 cpm (5 increments) Paper length of less than 364 mm, 14.4": 60 – 135 cpm (6 increments)

First print Time (Master Process Time):

Less than 28 seconds (A3, $11" \times 17"\Box$) Less than 20 seconds (A4, $8^1/_2" \times 11"\Box$)

Colour Printing:

Drum unit replacement system

Image Position:

- Vertical:
 - Inch version: $\pm 10 \text{ mm}, \pm 0.4$ "
 - Metric version: $\pm 15 \text{ mm}, \pm 0.6$ "
- Side: ± 10 mm, ± 0.4" (for either side)
- Paper Size and Paper Capacity: 1,000 sheets (80 g/m², 20 lb)
- Paper Delivery Tray Capacity: 1,000 sheets (80 g/m², 20 lb)

✤ Master Eject Unit Capacity:

- A3 drum More than 100 masters
- 11" × 17" drum 90 masters
- A4 drum 140 masters

Dimensions (W × D × H)

	Width	Depth	Height
Stored	750 mm, 29.5"	700 mm, 27.6"	585 mm, 23"
Stored with ADF	750 mm, 29.5"	700 mm, 27.6"	695 mm, 27.4"
Set up	1420 mm, 55.9"	700 mm, 27.6"	585 mm, 23"
Set up with cabinet	1420 mm, 55.9"	700 mm, 27.6"	1020 mm, 40.2"
Set up with cabinet and ADF (when you use A3, 11" × 17" or larger paper)	1420 mm, 55.9"	700 mm, 27.6"	1130 mm, 44.5"

✤ Weight:

• Machine: Less than 104 kg, 229.3 lb

Noise Emission *1

Sound power level

	Printing speed	Noise emission
Stand-by		38dB (A)
During printing	135 cpm	81dB (A)

Sound pressure level *2

	Printing speed	Noise emission
Stand-by		22dB (A)
During printing	135 cpm	67dB (A)

^{*1} The above measurements made in accordance with ISO 7779 are actual value.

 $^{\ast 2}~$ It is measured at the position of the operator.

Power Consumption:

- Making a master: Less than 0.34 kW
- Printing: Less than 0.27 kW (when printing speed is 135 cpm)

Options

Auto Document Feeder (ADF: DF Type 85)

- Original Type: Sheet
- ♦ Original Weight: 52.3 g/m² to 127.9 g/m², 13.9 lb to 34 lb

✤ Original Size:

Max. 297 mm × 864 mm, 11.7" × 34.0" Min. 149 mm × 210 mm, 5.9" × 8.3"

✤ First print Time:

Less than 33 seconds (A3, $11" \times 17"$) Less than 25 seconds (A4, $8^1/_2" \times 11"$)

✤ Original Capacity:

50 sheets (80 g/m², 20 lb) 7.5 mm, 0.3" height

Twin Colour Press Roller Printing System TC-IIR

Configuration:

Floor standing

 Printing Process: Twin colour press roller printing system

Print Paper Size:

Maximum: 297 mm × 432 mm, 11.6" × 17.0" Minimum: 70 mm × 250 mm, 2.8" × 9.8"

Print Paper Weight:

• $52.3 - 209.3 \text{ g/m}^2$, 13.9 - 55.6 lb

Print Speed:

90 - 120 cpm (3 increments)

- Colour Printing: Drum unit replacement system
- Paper Size and Paper Capacity: 1,000 sheets (80 g/m², 20 lb)
- Paper Delivery Tray Capacity: 1,000 sheets (80 g/m², 20 lb)
- **\Rightarrow** Dimensions (W \times D \times H)

	Width	Depth	Height
Stored	920 mm, 36.2"	630 mm, 24.8"	555 mm, 21.9"
Set up	1,610 mm, 63.4"	630 mm, 24.8"	555 mm, 21.9"

✤ Weight:

• Machine: Less than 88 kg, 194 lb

Power Consumption:

• Printing: 0.55kW(Max)

Optional Equipment:

• Drum unit:

Metric version: Drum Type 90 <A3> / <A4> Inch version: Drum Type 90 <A4> ($8^{1}/_{2}$ " × 11") / <11" × 17">

Note 🖉

□ Specifications are subject to change without notice.

Large Capacity System (LCS: LS3000R)

Configuration:

Optional large paper capacity system

Paper type:

Corresponds to the machine specification

Printing paper size:

• LCIT:

Maximum 297 × 432 mm, 11.6" × 17.0" (325 × 447 mm, 12.7" × 17.5" *1) Minimum 128 × 182 mm, 5.1" × 7.1"

• LCOT: Mayim

Maximum 297 × 432 mm, 11.6" × 17.0" (325×447 mm, 12.7" × 17.5" ^{*1}) Minimum 70 × 148 mm, 2.8" × 5.9" (When the LCIT is installed: 128×182 mm, $5.1" \times 7.1"$)

- ^{*1} When the image position is set to 0 mm (0").
- ♦ Print paper weight: 47.1 - 209.3 g/m², 12.5 - 55.61 lb.
- Feed tray capacity:

3000 sheets (80 g/m², 20 lb.) Paper stack height: Less than 320 mm (12.5")

Output tray capacity:

3000 sheets (80 g/m², 20 lb.) Paper stack height: Less than 345 mm (13.5")

Print speed:

Corresponds to the machine specification

Power consumption:

Standby	Less than 25 W
Printing	Less than 88 W

Dimensions (W×D×H):

- LCIT: 968 × 545 × 778 mm (38.1" × 21.4" × 30.6")
- LCOT: 560 × 512 × 778 mm (22" × 20.1" × 30.6")

✤ Weight:

- LCIT: Less than 45 kg, 99 lb.
- LCOT: Less than 30 kg, 66 lb.

Other Options

- Drum Unit Metric version: Drum Type 90 <A3> / <A4> Inch version: Drum Type 90 <A4> (8¹/₂" × 11") / <11" × 17">
- Platen Cover Type 1018
- Key Counter
- PostScript3 Board Type 2
- IEEE 1284 Parallel Board Type 1
- IEEE 802.11b I/F Unit Type 1
- Memory Unit TypeC (128 MB/256 MB)
- Extension HDD Type 1

Consumables

Name	Size	Remarks
Master:	Length: 110 m, 410 ft/roll	A3 drum
	Width: 320 mm, 12.6" 2 rolls/case	More than 200 masters can be made per roll
		11" × 17" drum
		190 masters can be made per roll
		A4 drum
		320 masters can be made per roll
Ink-Black	1,000ml/pack	Environmental conditions: -5 to 40°C 10 – 95% RH
Ink-Red	1,000ml/pack	
Ink-Blue		
Ink-Green		
Ink-Brown		
Ink-Purple		
Ink-Yellow		
Ink-Navy		
Ink-Maroon		
Ink-Teal		
Ink-Orange		
Ink-Gray		
Ink-Violet		
Ink-Hunter green		
Ink-Burgundy		
Ink-Gold		
Ink-Reflex Blue		

🖉 Note

□ Specifications are subject to change without notice.

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Symbols

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

means POWER ON.

O means POWER OFF.

CE

Declaration of Conformity

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

Notice To Wireless LAN Interface (optional) Users (if applicable)

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Notice to Users in EEA Countries

This product complies with the essential requirements and provisions of Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

The CE Declaration of Conformity is available on the Internet at URL:

http://www.ricoh.co.jp/fax/ce_doc/

Outdoor use of this product is prohibited in France and Italy.





