

DIGITAL FULL COLOR MULTIFUNCTIONAL SYSTEM

User's Manual









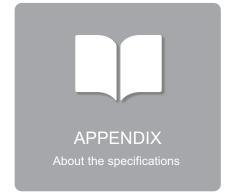










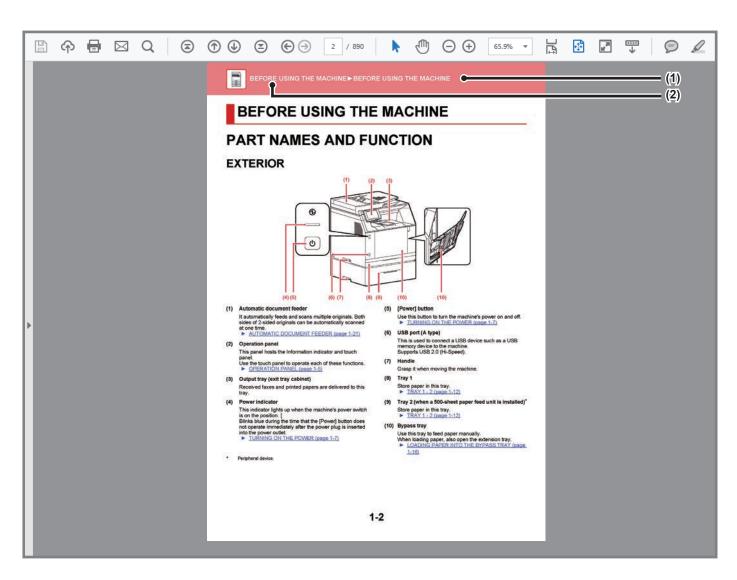


Click to go to chapter index

HOW TO USE THIS MANUAL

Click a button below to move to the page that you wish to view.

The following explanation assumes that Adobe Reader is being used (Some buttons do not appear in the default state.).



(1) Title button

Displays the page of the title indicated by the button.

(2) Contents button

Displays the contents of each chapter.

For example, if the current page is part of the printer chapter, the table of contents of the printer chapter appears.



If a button does not appear, refer to Adobe Reader Help to display the button.

ABOUT OPERATION MANUAL

This manual explains how to use the BP-C131WD digital full color multifunctional system.

Please note

- For information on installing the drivers and software cited in this manual, please refer to the Software Setup Guide.
- For information on your operating system, please refer to your operating system manual or the online Help function.
- The explanations of screens and procedures in a Windows environment are primarily for Windows® 10. The screens may be different depending on the version of the operating system or the software application.
- The explanations of screens and procedures for use in a macOS environment generally assume that macOS 14 is being used and a PPD driver is installed. The screens may be different depending on the version of the operating system or the software application.
- Wherever "BP-xxxxx" appears in this manual, please substitute your model name for "xxxxx".
- This manual contains references to the fax function. However, please note that the fax function is not available in some countries and regions.
- Considerable care has been taken in preparing this manual. If you have any comments or concerns about the manual, please contact your dealer or nearest SHARP Service Department.
- This product has undergone strict quality control and inspection procedures. In the unlikely event that a defect or other problem is discovered, please contact your dealer or nearest SHARP Service Department.
- Aside from instances provided for by law, SHARP is not responsible for failures occurring during the use of the product or its
 options, or failures due to incorrect operation of the product and its options, or other failures, or for any damage that occurs due
 to use of the product.

Warning

- Reproduction, adaptation or translation of the contents of the manual without prior written permission is prohibited, except as allowed under copyright laws.
- All information in this manual is subject to change without notice.

Illustrations and the operation panel and touch panel shown in this manual

The peripheral devices are generally optional, however, some models include certain peripheral devices as standard equipment. The explanations in this manual assume the BP-C131WD.

For some functions and procedures, the explanations assume that devices other than the above are installed.

The built-in server (Web page) of the machine

You can access the machine's built-in server from a Web browser and change the machine's settings on the Web page that appears. When "Web page" is used in this manual, it means this built-in server.

The display screens, messages, and key names shown in the manual may differ from those on the actual machine due to product improvements and modifications.

Icons used in the manuals

The icons in the manuals indicate the following types of information:

	This alerts you to a situation that could result in death or serious personal injury. This alerts you to a situation that could result in personal injury or damage to properties.	(This explains how to stop or correct an operation.
(!)	This alerts you to a situation where there is a risk of machine damage or failure.		This describes a routine work relevant to setting mode.
	This supplements function or operation procedure.		

BEFORE USING THE MACHINE



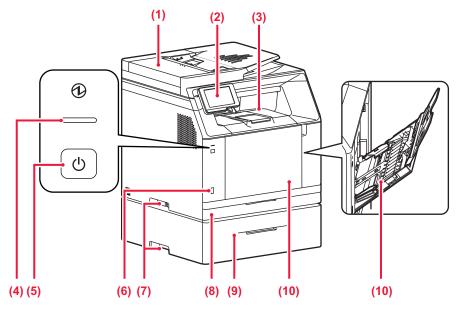
PART NAMES AND FUNCTION1-2
EXTERIOR 1-2 INTERIOR, SIDE AND BACK 1-3 AUTOMATIC DOCUMENT FEEDER AND DOCUMENT GLASS 1-4 OPERATION PANEL 1-5 INFORMATION INDICATOR 1-6 TURNING ON THE POWER 1-7 TURNING ON THE POWER 1-7 TURNING OFF THE POWER 1-7 RESTART THE MACHINE 1-7
LOADING PAPER
IMPORTANT POINTS ABOUT PAPER 1-8 NAMES AND LOCATIONS OF TRAYS 1-8 APPLICABLE PAPER TYPES 1-9 TRAY 1 - 2 1-12 LOADING ENVELOPE IN TRAY 1-15 LOADING PAPER INTO THE BYPASS TRAY 1-16 HOW TO LOAD THE PAPER 1-16 LOADING ENVELOPES 1-17
HOW TO PLACE THE ORIGINAL
SELECTING A PROCEDURE FOR PLACING THE ORIGINAL DEPENDING ON THE TYPE AND STATUS OF THE ORIGINAL
AUTOMATIC DOCUMENT FEEDER
DOCUMENT GLASS1-23
PERIPHERAL DEVICES



BEFORE USING THE MACHINE

PART NAMES AND FUNCTION

EXTERIOR



(1) Automatic document feeder

It automatically feeds and scans multiple originals. Both sides of 2-sided originals can be automatically scanned at one time.

► AUTOMATIC DOCUMENT FEEDER (page 1-21)

(2) Operation panel

This panel hosts the Information indicator and touch panel.

Use the touch panel to operate each of these functions.

▶ OPERATION PANEL (page 1-5)

(3) Output tray (exit tray cabinet)

Received faxes and printed papers are delivered to this tray.

Pull out the output extension tray when printing on paper larger than 8-1/2" x 11" (A4) size or when printing in large amounts.

(4) Power indicator

This indicator lights up when the power plug of the machine is plugged in.

Blinks blue during the time that the [Power] button does not operate immediately after the power plug is inserted into the power outlet.

► TURNING ON THE POWER (page 1-7)

Peripheral device.

(5) [Power] button

Use this button to turn the machine's power on and off.

► TURNING ON THE POWER (page 1-7)

(6) USB port (A type)

This is used to connect a USB device such as a USB memory device to the machine. Supports USB 2.0 (Hi-Speed).

(7) Handle

Grasp it when moving the machine.

(8) Tray 1

Store paper in this tray.

► TRAY 1 - 2 (page 1-12)

(9) Tray 2 (when a 500-sheet paper feed unit is installed)*

Store paper in this tray.

► TRAY 1 - 2 (page 1-12)

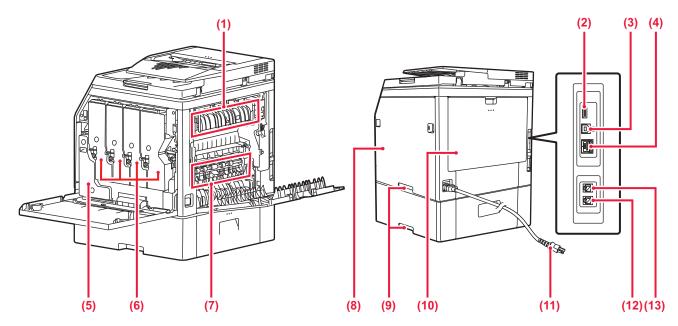
(10) Bypass tray

Use this tray to feed paper manually. When loading paper, also open the extension tray.

► LOADING PAPER INTO THE BYPASS TRAY (page 1-16)



INTERIOR, SIDE AND BACK



(1) Fusing unit

Heat is applied here to fuse the transferred image onto the paper.



The fusing unit is hot. Take care not to burn yourself when removing a misfeed.

(2) USB port (A type)

This is used to connect a USB device such as a USB memory device to the machine. Supports USB 2.0 (Hi-Speed).

(3) USB port (B type)

The machine does not use this connector.

(4) LAN connector

Connect the LAN cable to this connector when the machine is used on a network.

Use a shielded LAN cable.

(5) Toner collection container

This container collects excess toner that remains after printing

► REPLACING THE TONER COLLECTION CONTAINER (page 1-34)



A service technician collects replaced Toner collection container.

(6) Toner cartridge

This cartridge contains toner.

When the toner in a cartridge runs out, replace with new

► REPLACEMENT OF TONER CARTRIDGE (page 1-31)

(7) Transfer belt

During full color printing, the toner images of the four colors on the photoconductive drums are combined together on the transfer belt.

During black and white printing, only the black toner image is transferred onto the transfer belt.



Do not touch or damage the transfer belt. This may cause a defective image.

(8) Right side cover

Open this cover to replace a toner cartridge.

► REPLACEMENT OF TONER CARTRIDGE (page 1-31)

(9) Handle

Grasp it when moving the machine.

(10) Rear side cover

Open this cover to remove a paper misfeed. And open when user changing the setting to print envelope.

(11) Power plug

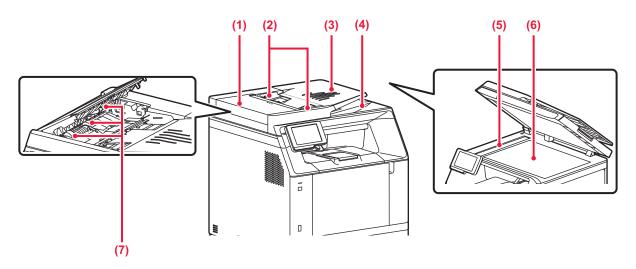
(12) Telephone line jack (LINE)

When the fax function of the machine is used, the telephone line is connected to this jack.

(13) Extension phone jack (TEL)

When the fax function of the machine is used, an extension phone can be connected to this jack.

AUTOMATIC DOCUMENT FEEDER AND DOCUMENT GLASS



(1) Document feeding cover

Open this cover to remove an original misfeed.

This cover is also opened to clean the paper feed roller.

► CLEANING THE PAPER FEED ROLLER (page 1-30)

(2) Original guides

These guides help ensure that the original is scanned correctly.

Adjust the guides to the width of the original.

(3) Document feeder tray

Place the original.

Place the original with the print side facing up.

► AUTOMATIC DOCUMENT FEEDER (page 1-21)

(4) Original exit tray

The original is discharged to this tray after scanning.

(5) Scanning area

Originals placed in the automatic document feeder are scanned here.

► CLEANING THE DOCUMENT GLASS AND AUTOMATIC DOCUMENT FEEDER (page 1-25)

(6) Document glass

If you want to scan books or other thick originals that cannot be fed through the automatic document feeder, place them on this glass.

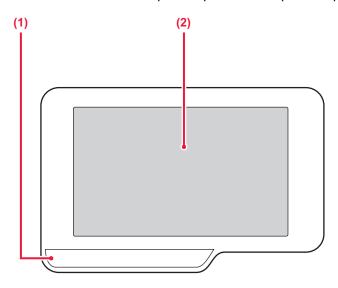
► DOCUMENT GLASS (page 1-23)

(7) Paper feed roller

This roller rotates to automatically feed the original.

OPERATION PANEL

This section describes the names and functions of the respective parts of the operation panel.



(1) Information indicator

This indicator illuminates and flashes during execution of a job or when paper misfeeds occur.

► INFORMATION INDICATOR (page 1-6)

(2) Touch panel

Messages and keys appear on the touch panel display. Operate the machine by directly tapping the displayed keys.

► TOUCH PANEL (page 2-2)



You can change the angle of the operation panel.





- Use your finger to operate the touch panel.
- Do not touch the touch panel while the unit is starting up. If you touch the touch panel, it may not operate normally. Example:

Press the [Power] button, and wait until the home screen is displayed. Returning from auto power shut-off.

INFORMATION INDICATOR

When turning the machine power ON/OFF; at user authentication when the user has logged in using IC card when connecting USB memory to the machine; when starting a job on the machine control panel; or during image adjustment or when adding toner; a fax is being received or an error has occurred in the machine, the LED lights blue, white and orange in response to the request/operation from the user to communicate to the user the machine status.



This light is used to communicate with users in front of the machine, therefore this is not lit as a result of remote operations.

Lighting patterns

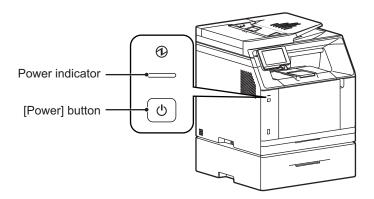
Lighting patterns differ depending on status.

Lighting color	Lighting patterns	Status
Blue	Pattern 1	Job in progress, such as paper feeding or output.
	Pattern 2	Ready state or other state where jobs can be accepted.
	Pattern 3	An original has been placed in the document feeder.
	Blinks	A fax is being received.
Orange	Lights*	Errors that do not stop machine operation, such as almost out of toner.
	Blinks*	Errors that stop machine operation, such as misfeeds and out of toner.

If the lighting state and the blinking state overlap, the blinking state takes priority.

TURNING ON THE POWER

This section describes how to turn on/off the machine's power and how to restart the machine. Operate the [Power] button on the operation panel.





- When turning off the power, be sure to press the [Power] button on the operation panel, tap the [Power Off] key on the touch panel. In a sudden case of power outage, turn the power for the machine back on and then turn it off in the correct order.
- Turn off the [Power] button and unplug the power cord if you suspect a machine failure, if there is a bad thunderstorm nearby, or when you move the machine.



- When using the fax function for reception at night or timer transmission, do not turn off the machine and switch it to the power saving mode.
- In order for some settings to take effect, the machine must be restarted. Depending on the condition of the machine, the settings may not be activated by rebooting with the [Power] button. In this case, unplug the power plug from the power outlet and plug it back in.
- Immediately after turning on the power or immediately after returning from sleep mode, printing and other operations are temporarily unavailable on the machine for a period of time to allow the machine to print properly. This is called warm-up.

TURNING ON THE POWER

- Insert the power plug in the power outlet.
- When the power indicator lights in blue, press the [Power] button to turn on the power.

TURNING OFF THE POWER

After pressing the [Power] button, tap the [Power Off] key on the touch.

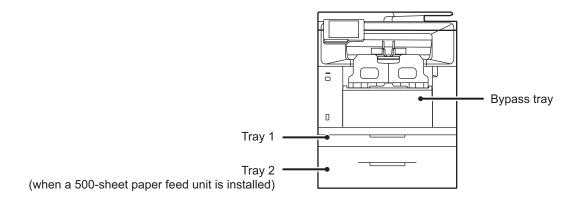
RESTART THE MACHINE

Press the [Power] button to turn off the power, and then tap the [Power Off] key on the touch panel. After that, press the [Power] button again to turn on the power.

LOADING PAPER

IMPORTANT POINTS ABOUT PAPER

NAMES AND LOCATIONS OF TRAYS



APPLICABLE PAPER TYPES

This section describes paper types that can be used and those that cannot be used. All types of paper other than plain paper are referred to as special media.



- Various types of paper are commercially available, some of which cannot be used on the machine. Before using any paper, consult the dealer or nearest SHARP Service Department.
- The image quality and toner fusibility of paper may change due to ambient conditions, operating conditions, and paper characteristics, resulting in image quality inferior to that of Sharp standard paper.

 Before using any paper, consult the dealer or nearest SHARP Service Department.
- The use of non-recommended or non-usable paper may result in skewed feeding, misfeeds, poor toner fusing (the toner does not adhere to the paper well and can be rubbed off), or machine failure.
- The use of non-recommended paper may result in misfeeds or poor image quality. Before using non-recommended paper, check whether printing can be performed properly.

Useable paper

Specifications of plain paper and heavy paper

Plain Paper*	Plain Paper 1	16 lbs. bond to 24 lbs. bond (60 g/m² to 89 g/m²)
	Plain Paper 2	24 lbs. bond to 28 lbs. bond (90 g/m² to 105 g/m²)
Heavy Paper Heavy Paper 1 28 lbs. bond to 65 lbs. cover (106 g/m² to 176		28 lbs. bond to 65 lbs. cover (106 g/m² to 176 g/m²)
	Heavy Paper 2	65 lbs. cover to 110 lbs. index (177 g/m² to 200 g/m²)

If the paper that you normally use is Recycled, Pre-Punched, Pre-Printed, Letter Head or Color, set an appropriate paper weight in the Web page –
[System Settings] → [Common Settings] → [Paper Settings] → [Paper Tray Settings] → [Paper Weight].



- The category of "Useable paper" is based on Sharp standard paper.
- If non-recommended paper is used, print quality may be affected even if a paper type setting that accords with the above paper divisions is selected. In that case, try setting the paper type to a type that is slightly heavier or slightly lighter than normal. For more information, consult the dealer or nearest SHARP Service Department.
- For paper specifications, see the specifications in the "Start Guide".
- Recycled paper, colored paper and pre-punched paper must meet the same specifications as plain paper. Before using any paper, consult the dealer or nearest SHARP Service Department.
- If the paper that was output is significantly curled, remove the paper from the cassette, turn the paper over so it is face down, and resume use.

Paper that can be used for the fax function

8-1/2" x 14", 8-1/2" x 13-2/5", 8-1/2" x 13", 8-1/2" x 11", 5-1/2" x 8-1/2", A4

Specifications of paper that can be used for two-sided printing

Paper Type	Plain, Recycled, Color, Letter Head, Pre-Printed, Punched, Heavy Paper 1 (28 lbs. bond to 65 lbs. cover (106 g/m² to 176 g/m²))
Paper Size	8-1/2" x 14", 8-1/2" x 13-1/2", 8-1/2" x 13-2/5", 8-1/2" x 13", 8-1/2" x 11", 5-1/2" x 8-1/2", A4, B5, A5, Custom (X direction: 8-3/8" to 14" (210 mm to 356 mm), Y direction: 5-1/2" to 8-1/2" (140 mm to 216 mm))

Types of paper that can be set in each tray



- For detailed information on the sizes and types of paper that can be loaded into each tray of the machine, see "SPECIFICATIONS" in the "Start Guide" and "Paper Tray Settings (page 8-59)".
- Recycled paper, colored paper and pre-punched paper must meet the same specifications as plain paper. Before using any paper, consult the dealer or nearest SHARP Service Department.



BEFORE USING THE MACHINE ► LOADING PAPER

	Tray 1	Tray 2*1	Bypass tray
Plain Paper 1*2	Permitted	Permitted	Permitted
Plain Paper 2*2	Permitted	Permitted	Permitted
Heavy Paper 1*3	Permitted	Permitted	Permitted
Heavy Paper 2*3	-	Permitted	Permitted
Pre-Printed	Permitted	Permitted	Permitted
Recycle Paper	Permitted	Permitted	Permitted
Letter Head	Permitted	Permitted	Permitted
Pre-Punched	Permitted	Permitted	Permitted
Color	Permitted	Permitted	Permitted
Labels	-	-	Permitted
Glossy Paper	-	-	Permitted
Envelope*4	Permitted	Permitted	Permitted

^{*1} when a 500-sheet paper feed unit is installed

[&]quot;Plain Paper 1" is plain paper 16 to 24 lbs. bond (60 to 89 g/m²), "Plain Paper 2" is plain paper 24 to 28 lbs. bond (90 to 105 g/m²). "Heavy Paper 1" is heavy paper up to 65 lbs. cover (176 g/m²), "Heavy Paper 2" is heavy paper up to 110 lbs. index (200g/m²). *2

^{*3}

For envelopes that can be used, see "SPECIFICATIONS".

Setting orientation of the print side

The setting orientation varies for the print side of paper, depending on the tray used. For "Letter Head" and "Pre-Printed", set the paper in the reverse orientation.

Place with the print side facing the direction indicated below.

Tray	In normal status	With letter head or pre-printed paper set
Trays 1 - 2, Bypass	Facing up	Facing down



When [Disabling of Duplex] is set for "Letter Head" or "Pre-Printed", set the print side in the same orientation as for the ordinary operation.

Paper that cannot be used

- · Tab paper
- Emboss
- OHP film
- Special media for an ink jet printer (fine paper, glossy paper, glossy film, etc.)
- · Carbon paper or thermal paper
- Pasted paper
- · Paper with clips
- · Paper with fold marks
- Torn paper
- · Oil-feed transparency film
- Thin paper less than 16 lbs (60 g/m²)
- Heavy paper as thick as 110 lbs. index (201 g/m²) over
- · Irregularly shaped paper
- Stapled paper
- · Damp paper
- · Curled paper
- Paper whose print side or reverse side has been already printed on by printer or multifunction device.
- Paper with a wave-like pattern due to moisture absorption
- · Paper with creases
- · Paper with dust

Non-recommended paper

- Iron-on transfer paper
- Perforated paper

TRAY 1 - 2

A maximum of 250 sheets of paper from size 5-1/2" x 8-1/2" to 8-1/2" x 14" (A6 to A4) can be loaded into tray 1. A maximum of 500 sheets of paper from size 5-1/2" x 8-1/2" to 8-1/2" x 14" (A6 to A4) can be loaded into tray 2.



If you loaded paper of a different type or size from the paper previously loaded, be sure to check the settings in "Settings (administrator)". Incorrect setting affects automatic paper selection action. It may cause print failure, printing on paper of a wrong size or type or paper misfeeds.



Do not place heavy objects on the tray or press down on the tray.



To check the type and size of paper:

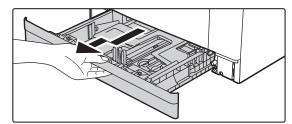
In the Web page, select [Status] \rightarrow [Machine Identification] \rightarrow [Paper Input Tray Status] \rightarrow [Paper Tray Settings].

To set the type and size of paper:

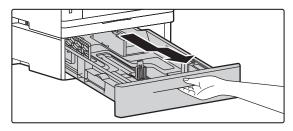
[Tray Settings] in the home scree



Tray 1



Tray 2



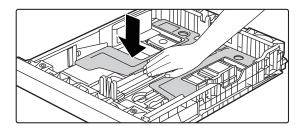
Removing the tray from the machine.

When the tray is pulled out, it stops in the middle and cannot be removed without removing it.

When the tray stops, gently lift it up and pull it out to remove it from the machine.

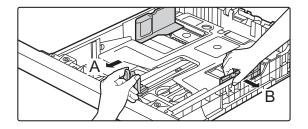


When using the tray, push the center of the pressure plate down until it locks into place.





2

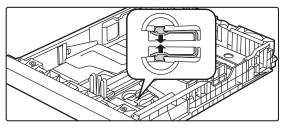


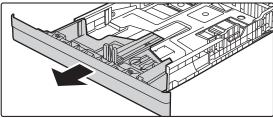
Move guide plates A and B in the tray to the maximum position.

The guide plates A and B are slidable. Squeeze the separator plate lever.

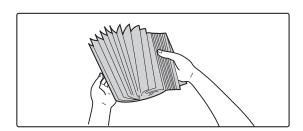


To load 8-1/2" x 14" size paper in tray 1 or tray 2, release the knob and stretch the tray to the point where it locks. After the tray is extended, move plate A to the front of the tray.





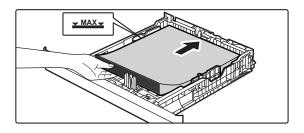
3



Fan the paper.

Fan the paper well before loading it. If the paper is not fanned, multiple sheets may feed at once and cause a misfeed.





Insert the paper into the tray.

Load the paper with the print side facing up. The stack must not be higher than the indicator line (Tray 1: maximum of 250 sheets, tray 2: maximum of 500 sheets). Do not load the paper as shown below.

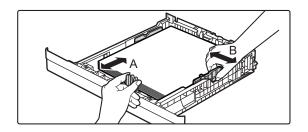




- If a paper misfeed occurs, turn the paper over and/or around, and reload.
- If the paper is curled, fix the curl before loading the paper.
- Adjust the divider plate so that there is no gap between the paper and divider plate.
- · Do not add paper.



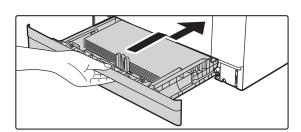
5



Adjust guide plates A and B with the paper.

Adjust to the paper size so that the paper will not be too loose or too tight.

6



Insert the tray into the machine.

Gently insert the tray into the machine, and when the tray stops in the middle, lower the entire tray down and insert it all the way to the back.

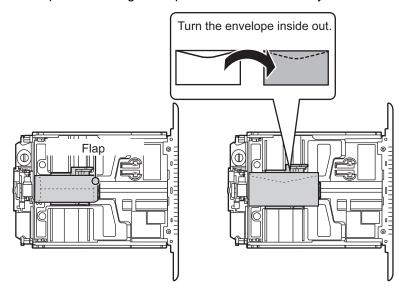
Forcefully inserting the tray may cause the paper to be skewed and misfeed.

Close the tray completely.

LOADING ENVELOPE IN TRAY

Load the paper with the copy and print side facing up. The diagram shows an example of printing on the front side. Envelopes may not exceed the maximum number of sheets (20) in tray 1 and the maximum number (50) in tray 2, and must not exceed the indicated line.

Envelopes with triangular flaps cannot be used in tray.



Cautions when placing envelopes

- · Removing curling
- Ensure these are flat, containing no air
- Ensure the four folded edges are pressed flat (for items with flaps, three edges)
- · Align on a flat surface



- Before printing envelopes in tray, print a trial print to check the results.
- If the envelope is not folded tightly, is warped or bent, it may cause misfeeds.

LOADING PAPER INTO THE BYPASS TRAY

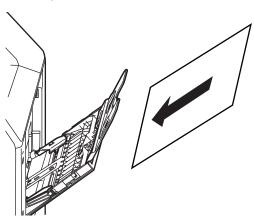
Use the bypass tray for printing on plain paper, envelopes, label sheets, and other special media. Up to 50 sheets of paper can be loaded (Heavy paper weighing between 28 lbs. bond and 110 lbs. Index (106 g/m² and 200 g/m²): 20 sheets, envelope: 10 sheets) for continuous printing, just like operation using other trays.



- When using plain paper other than Sharp standard paper or special media other than SHARP-recommended transparency film, glossy paper, or when printing on the reverse side of paper that has been printed on one side, load paper one sheet at a time. Loading more than one sheet at a time will cause misfeeds.
- Before loading paper, straighten any curling in the paper.
- To add paper, press down the pressure plate until it locks, remove any paper remaining in the bypass tray, combine it with the paper to be added, and place in the bypass tray again. If paper is added without removing the remaining paper, a paper jam may result. A paper jam may also result if more than the specified number of sheets are added, or if the paper stack exceeds the limit.
- · After loading paper in the bypass tray, always check the paper type and size.

HOW TO LOAD THE PAPER

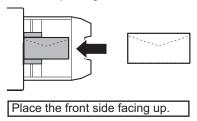
Load paper in landscape orientation. For information on how to load paper, see "Loading paper (page 1-19)".



LOADING ENVELOPES

When inserting envelopes in the bypass tray, place them aligned to the left side in the orientation shown below. Only the front side of envelopes can be printed or copied on. Place the front side facing up. Fold the flap and make a sharp crease at the fold.

When printing the front side



When placing DL

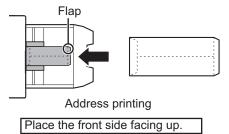
- Open the flap of the envelope.
- Place so that the flap is on the right.



When placing C5 or C6

- · Close the flap of the envelope.
- Place so that the flap is on the back side.

When printing the front side

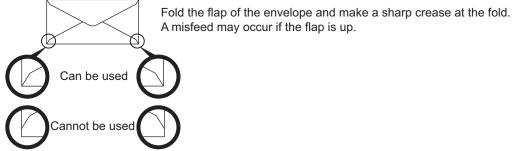


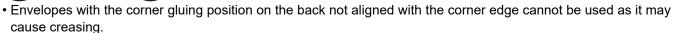


Before printing envelopes in bypass tray, print a trial print to check the results

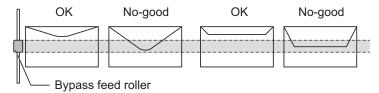
Important points when using envelopes

- Do not print the rear surface (the side with adhesive) of the envelope. This may result in misfeeds or poor print quality.
- Restrictions apply to some types of envelopes. For more information, consult a qualified service technician.
- Some operating environments may cause creasing, smudging, misfeeds, poor toner fusing, or machine failure.
- When placing multiple envelopes, they may not be fed if the print surface not being flat, instead being fed on an angle.
- Feeding of thick envelopes may not be possible.
- Envelopes with low surface smoothness may not be able to be fed.
- Do not use the following envelopes:
 - Those with a string for closing
 - Those with a metal piece, a plastic hook or a ribbon hook
 - · Those with a lining
 - · Those with an uneven surface, finished with titling or emboss
 - Lined envelopes and other items that use adhesives or other composites for sealing may have this substance melt because of heat from the fusing unit.
 - Hand-made envelopes
 - · Those containing air inside
 - Those with wrinkles, bending marks, cuts, or other damage.
 - Envelopes whose surface has deteriorated or whose shape has been deformed due to long-term storage or moisture absorption cannot be used.
 - Those with four or more layers of lamination cannot be fed.
 - · Those with a window





- Print quality is not guaranteed in the area 13/32" (10 mm) around the edges of the envelope.
- Print quality is not guaranteed on parts of envelopes where there is a large step-like change of thickness, such as on four-layer parts or parts less than three layers.
- In the case of landscape envelopes, make sure that flaps are not in the range where the bypass feed roller moves on.



- Press envelopes to bleed air inside, and press creases on all 4 sides well before setting. In addition, when envelopes are warped or bent, straighten them using hard objects such as pencil or ruler before setting.
- · Align on a flat surface
- Some envelopes may not be usable due to the shape of the flap or the type of envelope.

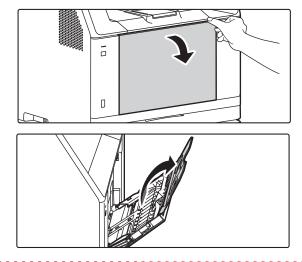


Important points when using label sheets

- Some labels may have to be loaded into the bypass tray in the specified orientation. Follow such instructions. If a form is already printed on the labels, and the print images and the preprinted form do not line up, adjust the application or printer driver settings to rotate the print images.
- Do not use the following types of label sheets.
 - · Label sheets without adhesive-free area or partially attached sections
 - · Label sheets with adhesive exposed
 - · Label sheets with a specified feeding direction that is not supported by the machine
- · A label sheet that has already been fed or has some labels removed
- · Label sheets consisting of multiple sheets
- · Label sheets that do not support laser printing
- · Label sheets that cannot withstand heat
- · Label sheets that have perforations in the backing paper
- · Label sheets with slits in the backing paper
- · Non-standard label sheets
- · Label sheets with adhesive that has deteriorated due to prolonged storage or otherwise
- Label sheets with cutouts that expose the backing paper
- · Curled or otherwise deformed label sheets
- · Torn or creased label sheets
- · Label sheets consisting of three sheets or more.

Loading paper





Open the bypass tray and the extension tray.



Do not place heavy objects on the bypass tray or press down on the tray.

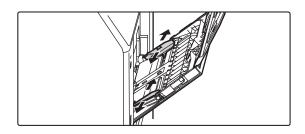




Push the center of the pressure plate down until it locks into place.



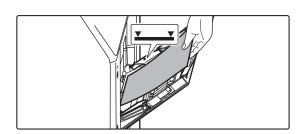
3



Set the bypass tray guides correctly to the width of the paper.

Adjust the bypass tray guides so that they slightly contact the loaded paper.





Load the paper with the print side facing down.

Insert the paper along the bypass tray guides all the way into the bypass tray until it stops slowly. Inserting the paper with excessive force may cause the leading edge to fold back. Inserting the paper too loosely may cause skewed feeding or misfeeds.

The paper must not exceed the maximum number of sheets and must not be higher than the indicator line.



- For "Letter Head" and "Pre-Printed", set the paper with the print side up. However, when [Disabling of Duplex] is enabled, set the print side in the same orientation as in the regular mode (facing down).
- To add paper, press down the pressure plate until it locks, remove any paper remaining in the bypass tray, combine it
 with the paper to be added, and place in the bypass tray again. If paper is added without removing the remaining
 paper, a paper jam may result. A paper jam may also result if more than the specified number of sheets are added, or
 if the paper stack exceeds the limit.



- Do not forcefully push in paper that you are loading. This may cause misfeeds.
- If the bypass tray guides are set wider than the paper, move the bypass tray guides in until they correctly fit the width of the paper. If the bypass guides are set too wide, the paper may skew or be creased.
- How to close the bypass tray.
 Remove any paper remaining in the bypass tray, and press down the center of the pressure plate until it locks. After you have locked the pressure plate, close the extension tray and then close the bypass tray.



To display the paper tray settings when paper is detected in the bypass tray

Set in the Web page [System Settings] \rightarrow [Common Settings] \rightarrow [Paper Settings] \rightarrow [Paper Feed Tray Settings] \rightarrow [Display Paper Tray Settings when bypass tray detects paper.].

HOW TO PLACE THE ORIGINAL

SELECTING A PROCEDURE FOR PLACING THE ORIGINAL DEPENDING ON THE TYPE AND STATUS OF THE ORIGINAL

Place the original in the automatic document feeder. Depending the type and status of the original, use the document glass. Follow the instructions to select the method for placing the original.

AUTOMATIC DOCUMENT FEEDER (page 1-21)

ORIGINAL SIZE SETTING

AB/Inch Type Setting

The numbers and units of the default settings and input ranges that appear in the setting screens can be switched between inches and AB sizes.

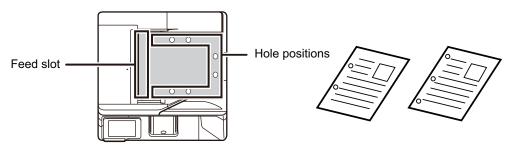
Default Original Size Settings

Specify this setting when a particular original size is frequently used. The setting will appear in the [Original] key.

AUTOMATIC DOCUMENT FEEDER

This section explains how to place originals in the automatic document feeder.

- Place originals of different sizes together, if needed, in the automatic document feeder. In that case, use the "Others" function in each mode to set [Mixed Size Original].
- · Before inserting originals into the document feeder tray, be sure to remove any staples or paper clips.
- If originals have damp spots due to correction fluid, ink or paste up glue, wait until the originals are dry before making copies. Otherwise the interior of the machine or the document glass may be soiled.
- Do not use the following originals. Transparency film or other transparent material for backup copy, tracing paper, carbon paper, thermal paper or originals printed with thermal transfer ink ribbon should not be fed through the document feeder. Originals to be fed through the feeder should not be damaged, crumpled, folded, loosely pasted together, or have cut-out holes. Originals with multiple punched holes other than two-hole or three-hole punched paper may not feed correctly.
- When using originals with two or three holes, place them so that the punched edge is at a position away from the feed slot of the document feeder tray. Specify the orientation of the original using [Original].





BEFORE USING THE MACHINE ► HOW TO PLACE THE ORIGINAL

- Depending on the condition of the original, the type of paper, and the temperature and humidity of the environment in which the machine is used, multiple sheets of paper may be fed at the same time and may not be scanned correctly, or the ejected originals may not be neatly aligned.
 - It may be improved by the following settings.
 - For copying: Set the resolution to 600x600dpi
- In fax mode, when sending a long original with the automatic document feeder, different paper sizes with the same width can be sent at the same time.

Allowed original sizes

Minimum original size	Maximum original size
Standard size 5-1/2" (longitudinal) x 8-1/2" (transversal) 148 mm (longitudinal) x 210 mm (transversal), or A5 Non-standard size (Minimum size that can be specified manually) 5-1/2" (longitudinal) x 5-1/2" (transversal) 140 mm (longitudinal) x 140 mm (transversal)	Standard size 8-1/2" (longitudinal) x 14" (transversal) 210 mm (longitudinal) x 297 mm (transversal) or A4 Non-standard size (Maximum size that can be specified manually) Copy mode: 8-1/2" (longitudinal) x 14" (transversal) 216 mm (longitudinal) x 356 mm (transversal) Fax mode: 8-1/2" (longitudinal) x 19-5/8" (transversal) 216 mm (longitudinal) x 500 mm (transversal)



- When the original is a non-standard size, see the appropriate explanation below for the mode you are using.
- IMAGE SEND: "SPECIFYING THE ORIGINAL SCAN SIZE USING NUMERIC VALUES (page 6-28)"
- In fax mode, to load a 19-11/16" (500 mm) long original, you need to set the scan size to [Long Size]. In fax mode, see "SPECIFYING THE ORIGINAL SCAN SIZE IN PAPER SIZE (page 5-40)".

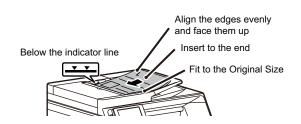
Allowed original weights

1-sided scanning: 13 to 28 lbs Bond (50 to 105 g/m²) 2-sided scanning: 13 to 28 lbs Bond (50 to 105 g/m²)



Make sure that there is no original on the document glass.

2



Place the original.

Up to 50 sheets can be inserted. After scanning is finished on the automatic document feeder, remove originals from the original exit tray.

DOCUMENT GLASS

This section describes the steps for setting the original on the document glass.



- · Close the automatic document feeder slowly. Abruptly closing the automatic document feeder may damage it.
- Take care that your fingers are not pinched when closing the automatic document feeder.

Allowed original sizes

Minimum original size	Maximum original size
Standard size	Standard size
8-1/2" (longitudinal) × 5-1/2" (transversal)	8-1/2" (longitudinal) x 14" (transversal)
A6: 148 mm (longitudinal) × 105 mm (transversal)	210 mm (longitudinal) x 297 mm (transversal) or A4
Non-standard size	Non-standard size
(Minimum size that can be specified manually)	(Maximum size that can be specified manually)
1" (longitudinal) x 1" (transversal)	8-1/2" (longitudinal) x 11" (transversal)
25 mm (longitudinal) x 25 mm (transversal)	216 mm (longitudinal) x 297 mm (transversal)



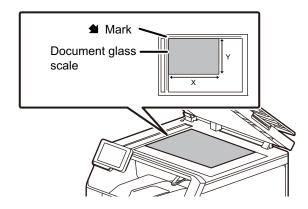
When the original is a non-standard size, see the appropriate explanation below for the mode you are using.

• IMAGE SEND: "SPECIFYING THE ORIGINAL SCAN SIZE USING NUMERIC VALUES (page 6-28)"



Open the automatic document feeder.

2



Load the paper with the print side facing down.

Place the original face down and align the top left corner of the original with back left (at the tip of the mark **1**) of the document glass.

3

Close the automatic document feeder.

After placing the original, close the automatic document feeder. If the unit is left open, parts outside of the original will be copied in black, causing excessive use of toner.



- When closing, open the automatic document feeder all the way and then close it.
- If originals have damp spots due to correction fluid, ink or paste up glue, wait until the originals are dry before making copies. Otherwise the interior of the machine or the document glass may be soiled.

PERIPHERAL DEVICES

PERIPHERAL DEVICES

Peripheral devices can be installed on the machine to increase its range of functionality.

The peripheral devices are generally optional. However, some models include certain peripheral devices as standard equipment.

(As of July, 2024)

Product name	Product number	Description
500-sheet paper feed unit	BP-CS13	TRAY 1 - 2 (page 1-12)

MAINTENANCE

REGULAR MAINTENANCE

To ensure that the machine continues to provide top quality performance, periodically clean the machine.



Do not use a flammable spray to clean the machine. If gas from the spray comes in contact with hot electrical components or the fusing unit inside the machine, fire or electrical shock may result.



- Do not use thinner, benzene, or similar volatile cleaning agents to clean the machine. These may degrade or discolor the housing.
- Use a soft cloth to gently wipe off dirt from the area on the operation panel with a mirror-like finish (shown at right). If you use a stiff cloth or rub hard, the surface may be damaged.

CLEANING THE DOCUMENT GLASS AND AUTOMATIC DOCUMENT FEEDER

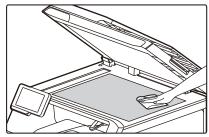
Wipe the parts with a clean, soft cloth.

If necessary, moisten the cloth with water or a small amount of neutral detergent. After that, wipe with a clean dry cloth. **Examples of lines in the image**

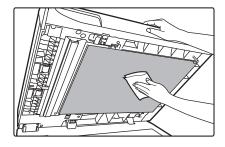




Document glass



Document backplate sheet

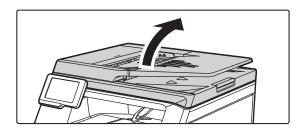




SCANNING AREA

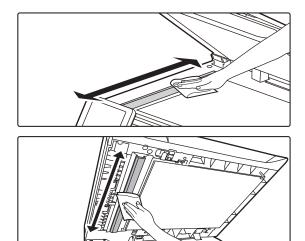
If black lines or white lines appear in images scanned using the automatic document feeder, clean the scanning area(the thin long glass next to the document glass).





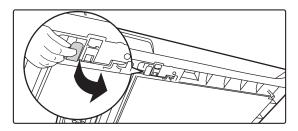
Open the automatic document feeder.





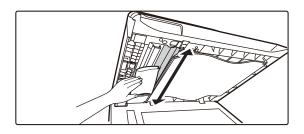
Clean the document scanning area on the document glass.





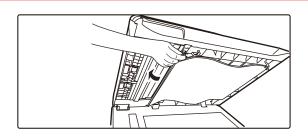
Open the cover of the document scanning area of the automatic document feeder.





Clean the document scanning area of the automatic document feeder.





Close the cover of the document scanning area of the automatic document feeder.

CLEANING THE LASER UNIT

When the laser unit inside the machine becomes dirty, line patterns (colored lines) may form in the printed image.

- Identifying lines (colored lines) caused by a dirty laser unit
- Colored lines always appear in the same place.
- · Colored lines appear in parallel with the direction of paper feeding.
- Colored lines appear not only on output from a copier but also on prints from a computer. (The same lines appear on both copies and print jobs.)

If conditions similar to the above occur, clean the laser unit as explained below.

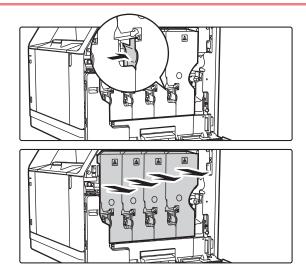




Open the right side cover.

Hold both sides and open.

2



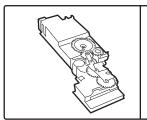
Remove all toner cartridges.

Spread newspaper or something similar in advance where you will place the toner cartridge.

Press the lock at the bottom of the toner cartridge to unlock it and pull the toner cartridge toward you.

(!)

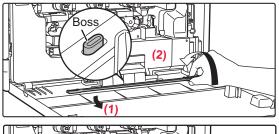
When the removed toner cartridge is placed, be sure to place it with the gear-mounted side facing up.

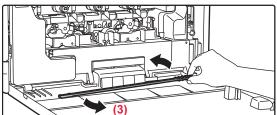






3



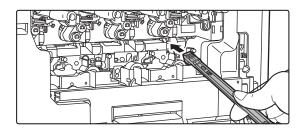


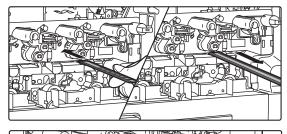
Take out the cleaning tool for the laser unit.

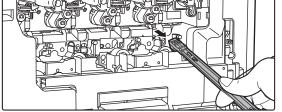
The cleaning tool is attached to the front cover.

- (1) Pull the knob on the right side of the cleaning tool to remove it from the hook.
- (2) Place the knob on the back side across the top of the hook.
- (3) Turn the cleaning tool around the boss to detach it from the left hand hook.

4







Clean the laser unit.

(1) Point the cleaner down and slowly insert the tool into the hole that you wish to clean.

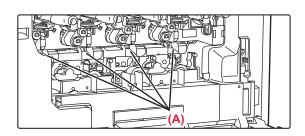
Be sure to point the cleaner down.

(2) Insert the cleaning tool all the way into the hole and then pull it back out.

Pull the cleaning tool out until you feel the tip of the tool leave the cleaning surface of the laser unit.

(3) Repeat step 2 two or three times and then remove the cleaning tool.

5

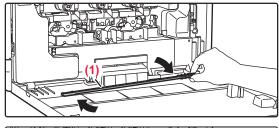


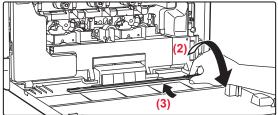
Repeat steps 4 to clean all holes (4 holes) in the laser unit.

The laser unit is cleaned in four locations, including the location cleaned in step 4. Clean all holes.



6

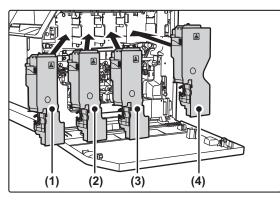


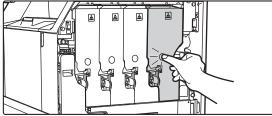


Replace the cleaning tool.

- (1) Engage the cleaning tool onto the boss and turn it around it, and then put the edge (the cleaner side) on the left hand hook.
- (2) Put the right hand side of the cleaning tool over the hook to place it on the near side.
- (3) Turn the cleaning onto hook.

7





Install all toner cartridges horizontally

- (1) Yellow
- (2) Magenta
- (3) Cyan
- (4) Black
- (1) Insert the toner cartridges into each color location.
- (2) Press in firmly until you hear a "click" sound

Push in the rounded indentation on each toner cartridge.



A toner cartridge of a different color cannot be installed. Be sure to install a toner cartridge of the same color.

8

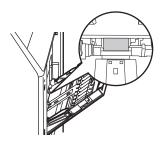


Close the right side cover.

Hold both sides and close.

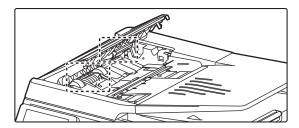
CLEANING THE BYPASS FEED ROLLER

If paper misfeeds frequently occur when feeding envelopes or heavy paper through the bypass tray, wipe the surface of the feed roller with a clean soft cloth moistened with water or a neutral detergent.



CLEANING THE PAPER FEED ROLLER

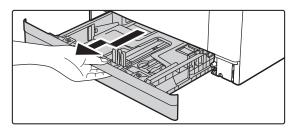
If lines or other dirt appear on the scanned original when the automatic document feeder is used, wipe the surface of the roller with a clean soft cloth moistened with water.



CLEANING THE FEED ROLLER OF TRAY

If the paper in tray frequently misfeeds, press down the center of the pressure plate until it locks, and wipe the surface of the feed roller with a clean, soft cloth moistened with water.



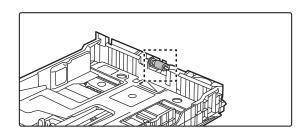


Removing the tray from the machine.

When the tray is pulled out, it stops in the middle and cannot be removed without removing it.

When the tray stops, gently lift it up and pull it out to remove it from the machine.



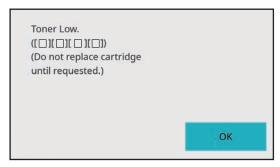


Clean the feed roller.

REPLACEMENT OF TONER CARTRIDGE

Always replace the toner cartridge after the "Change the toner cartridge." message appears. You should keep one set of replacement toner cartridges on hand so that you can replace a toner cartridge immediately when toner runs out.

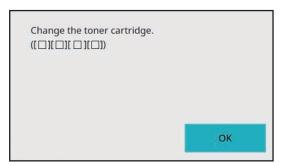
REPLACEMENT MESSAGE



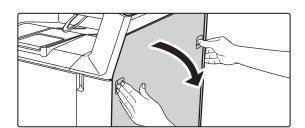
When this message appears, prepare a toner cartridge for replacement. (□□□□) shows the color of the toner cartridge that should be prepared. Y: Yellow toner, M: Magenta toner, C: Cyan toner, and Bk: Black toner Replace the toner cartridge with a one of the relevant color.



If you continue to use the machine, the following message will appear when the toner runs out.





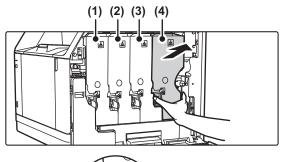


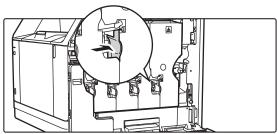
Open the right side cover.

Hold both sides and open.



2





Pull the toner cartridge toward you.

- (1) Yellow
- (2) Magenta
- (3) Cyan
- (4) Black

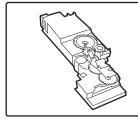
Spread newspaper or something similar in advance where you will place the toner cartridge.

(Example) Replacing the black toner cartridge

Press the lock at the bottom of the toner cartridge to unlock it and pull the toner cartridge toward you.

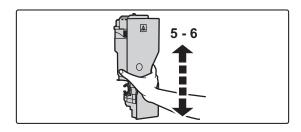


When the removed toner cartridge is placed, be sure to place it with the gear-mounted side facing up.



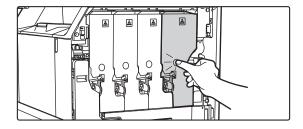


3



Take out a new toner cartridge from its package and shake it vertically five or six times.





Slowly insert the new toner cartridge on the level.

Push in the rounded indentation until it "clicks" into position.



A toner cartridge of a different color cannot be installed. Be sure to install a toner cartridge of the same color.



5



Close the right side cover.

- · Hold both sides and close.
- After the toner cartridge is replaced, the machine automatically enters image adjustment mode. Do not open the front cover while this is occurring.



- Do not throw a toner cartridge into a fire. Toner may fly and cause burns.
- Store toner cartridges out of reach of small children.
- If a toner cartridge is stored sideways, the toner may harden and become unusable. Always store toner cartridges in the upright position.
- If a toner cartridge other than a SHARP-recommended toner cartridge is used, the machine may not attain full quality and performance and there is a risk of damage to the machine. Be sure to use a SHARP-recommended toner cartridge.



- If any one of the toner colors runs out, color printing will no longer be possible.
 If the Y, M, or C toners run out but a quantity of Bk toner still remains, printing is performed in black and white.
- · Depending on your conditions of use, the color may become light or the image blurred.



- Be sure to install four toner cartridges (Y/M/C/Bk).
- Do not throw away the removed toner cartridge, instead place it in the plastic bag provided and keep it in the box in which it was packed. Your service technician will collect them.
- To view the approximate amount of toner remaining (indicated in %), hold down the [Home Screen] key during printing or in standby mode. When the percentage falls to "25-0%", keep a toner cartridge for replacement purposes before toner runs out
- When the toner cartridge included with the machine is installed, the remaining toner level will be displayed as "50-25%" from the beginning. (The toner cartridge that will be set at the time of installation has a lower print capacity than the normal toner cartridge.)
- When toner runs out while the home screen is displayed, the "Toner Empty" message appears in the screen. Additionally, if the toner quantity is displayed on the home screen, a "^" will be displayed above colors for which toner has run out.

REPLACING THE TONER COLLECTION CONTAINER

The toner collection container collects excess toner that is produced during printing. When the toner collection container becomes nearly full, the following message will appear. Prepare the toner collection container.





When the toner collection container becomes full, the following message will appear.



Replace the toner collection container as instructed by the message in the touch panel. When the [Next] key is tapped, instructions for replacing the toner collection container will appear. Follow the instructions. When the toner collection container is replaced, the message will automatically disappear.



- Do not throw the toner collection container into a fire. Toner may fly and cause burns.
- Store the toner collection container out of the reach of small children.

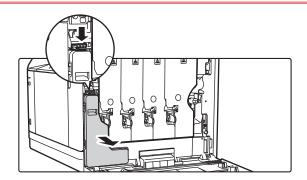




Open the right side cover.

Hold both sides and open.





Remove the toner collection container.

While gently pressing down on the hook at the top of the toner collection container, pull the toner collection container toward you.

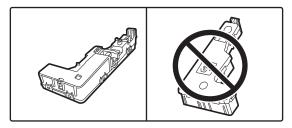
3

Place the toner collection container on a flat surface.

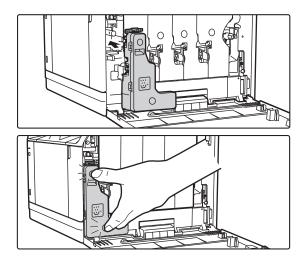
Place a sheet of paper such as newspaper on the surface before placing the toner collection container.



Do not point the holes down as used toner will spill out.







Install a new toner collection container.

Push in the rounded indentation until it "clicks" into position.





Close the right side cover.

Hold both sides and close.



- Do not throw away the removed toner collection container, instead place it in the plastic bag provided and keep it in the box in which it was packed. Your service technician will collect them.
- Keep the toner collection container in an upright position without collapsing it.

REPLACING THE IMAGING UNIT

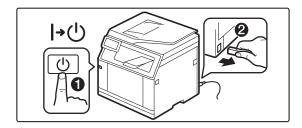


- Do not throw the imaging unit into a fire. Toner may fly and cause burns.
- Store the imaging unit out of the reach of small children.



- Do not expose the imaging unit to direct sunlight or other strong light.
- Do not touch or scratch the surface of the drum (green part) of the imaging unit.
- Do not place the imaging unit vertically.





Turn off the machine.

After turning off the machine, unplug it from the power outlet. For information on how to turn off the power of the machine, see "TURNING ON THE POWER (page 1-7)".

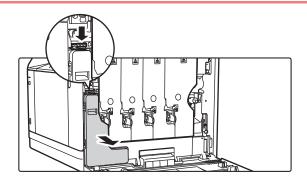
2



Open the right side cover.

Hold both sides and open.

3

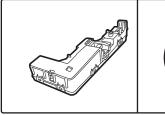


Remove the toner collection container.

While gently pressing down on the hook at the top of the toner collection container, pull the toner collection container toward you.

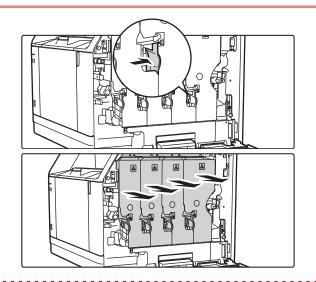


Place a sheet of paper such as newspaper on a flat surface before placing the toner collection container. Place the toner collection container on it. Do not point the holes down as used toner will spill out.









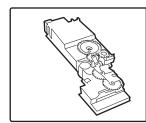
Remove all toner cartridges.

Spread newspaper or something similar in advance where you will place the toner cartridge.

Press the lock at the bottom of the toner cartridge to unlock it and pull the toner cartridge toward you.

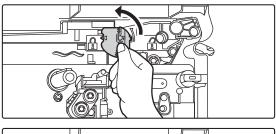


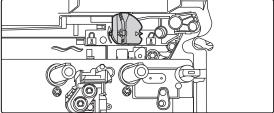
When the removed toner cartridge is placed, be sure to place it with the gear-mounted side facing up.





5

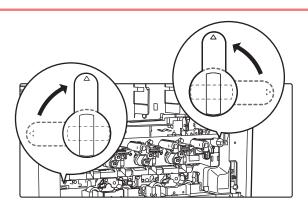




Unlock the primary transfer unit pressure transfer lever.

Turn the primary transfer unit pressure transfer lever 180 degrees to the left to set the <1 mark to the unlocked ($^{\bigcirc}_{\mathbb{Z}}$) position.

6

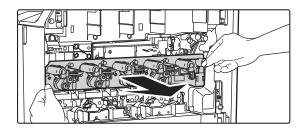


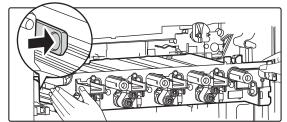
Unlock the imaging unit.

Turn the left lock of the imaging unit 90 degrees to the right.

Turn the right lock of the imaging unit 90 degrees to the left.







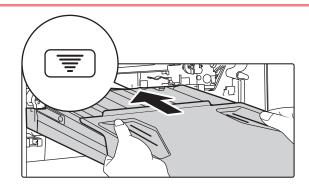
Remove the imaging unit.

At first, pinch the locks on the left and right sides of the imaging unit and pull it out slowly and horizontally. In the middle, release the lock while holding down the lock to prevent it from falling out, and pull it out by holding both sides firmly with both hands.



Imaging unit is heavy and handled with care.

8



Install the new imaging unit

(1) Insert the imaging unit, making sure that the mark on the imaging unit is aligned with the mark on the machine.

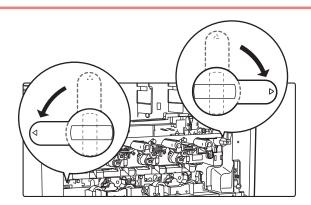
Insertion stops at the plastic cover.

- (2) Remove the plastic cover.
- (3) Pinch and push in the locks on the left and right sides of the imaging unit



- · The imaging unit can only be installed in the machine immediately after opening the package.
- When holding the imaging unit, be sure to hold the plastic cover part. Do not touch the green part.

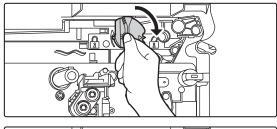
9

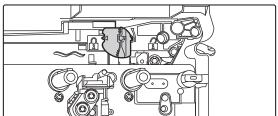


Lock the imaging unit.

Turn the left lock of the imaging unit 90 degrees to the left. Turn the right lock of the imaging unit 90 degrees to the right.







Lock the primary transfer unit pressure transfer lever.

Turn the primary transfer unit pressure transfer lever 180 degrees to the right to set the $<\!\!\!|$ mark to the locked ($\stackrel{\bigcirc}{\mathbb{E}}$) position.

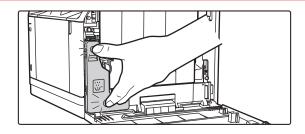
11



Slowly insert the toner cartridge on the level.

Push in the rounded indentation until it "clicks" into position.

12



Install a toner collection container.

Push in the rounded indentation until it "clicks" into position.

13



Close the right side cover.

Hold both sides and close.



After using up an imaging unit, pack it with the packing case, packing material and bag that are used for the original imaging unit. Your service technician will collect them during maintenance.

OPERATION OF THE MACHINE



TOUCH PANEL
TOUCH TYPES
HOME SCREEN AND PREVIEW SCREEN
HOME SCREEN
CHANGE THE DISPLAY OF THE TOUCH PANEL
EDITING THE HOME SCREEN
CHARACTER ENTRY
CHARACTER ENTRY2-1 NAMES AND FUNCTIONS OF SOFT KEYBOARD KEYS . 2-17
SET THE KEYBOARD SETTING2-1

TOUCH PANEL

TOUCH TYPES

OPERATION TYPES

In addition to tapping, equivalent to conventional touching, the touch panel of the machine can be operated by long touching.



Multi-touch cannot be used on the touch panel of the machine.



Tapping

Touch the panel with your finger and then lift it quickly. Use this method to select a key, tab or check box.



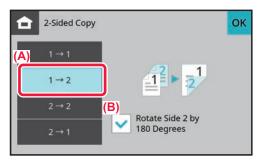
Long touching

Touch the panel with your finger and hold it for a while. Press and hold (long touch) the [Shift] key on the keyboard to lock the [Shift] key and continue typing uppercase letters. (Tap the [Shitt] key to unlock it in this state.)

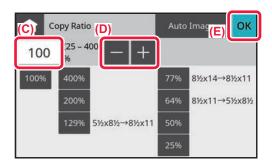
Operation on respective screens

Key (tapping)

- A. Tap to select an item. The selected key turns into a different color.
- B. Tap to enter a checkmark \checkmark and enable the setting.

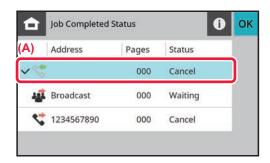


- C. Tap numeric keys to enter numbers.
- D. Tap to increase or decrease the value. Long touching causes the value to be increased or decreased until you stop touching.
- E. Tap here to close the screen



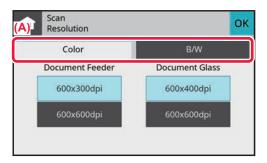
List (tapping, sliding and flicking)

- A. Tap to select an item. The selected item turns into a different color.
- B. Slide the bar up and down. It appears when the item does not fit in the screen.



Tab (tapping)

A. Tap a tab to switch what is displayed.

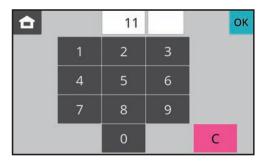


OPERATION OF FREQUENTLY USED KEYS

Numeric keys

Tap a number to enter it.

To clear the entered number, tap the [C] key





On the address screen, you can enter characters other than numbers, and a different key layout is provided. You can also move the cursor by using the $[\leftarrow]$ and $[\rightarrow]$ keys. Tap the [C] key to delete one character to the left of the cursor.

[B/W Start] key and [Color Start] key

Tap to perform a copy or send job.





In fax mode, [Start] key is displayed.

[Cancel Copy] key, [Cancel] key

Tap to stop copying, printing, or transmission.



[CA] key

Tap to cancel all settings and restore the initial status in each mode.



MACHINE INFORMATION SCREEN

Tap the machine information icon at the bottom of the touch panel to display the machine information screen.



(1) Machine Information

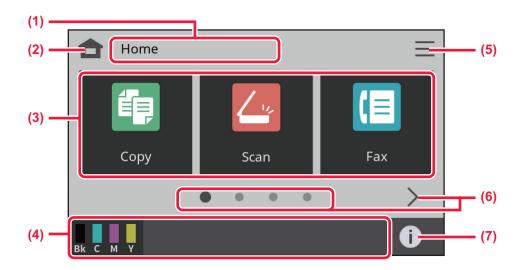
The status of the machine, such as network connection status and firmware version, will be displayed.

HOME SCREEN AND PREVIEW SCREEN

HOME SCREEN

Tapping the [Home Screen] key displays the home screen on the touch panel. The home screen displays the keys for selecting modes or functions.

OVERVIEW



(1) Mode title

The mode title is displayed.

(2) [Home Screen] key

Switch to the home screen.

(3) Shortcut keys

Select shortcut keys for modes or functions.

► EDITING THE HOME SCREEN (page 2-9)

(4) Fixed display area

Icons are displayed to inform you of the toner status and the status of the machine.

(5) "Menu" icon

Displays detailed settings of the machine.

(6) Home screen page switching key

Switch the pages for displaying shortcut keys.

(7) Machine Information icon

Tap this icon to display the machine information screen.

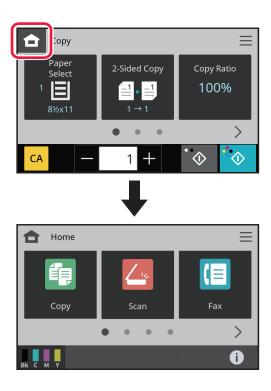
► MACHINE INFORMATION SCREEN (page 2-5)

ICON INDICATING THE STATUS OF THE MACHINE

Icon	Machine status	Icon	Machine status
j	Machine information icon MACHINE INFORMATION SCREEN (page 2-5)	?	Wireless LAN infrastructure mode connected (level 1)
-	A maintenance notification is issued.	?	Wireless LAN infrastructure mode connected (level 2)
-IC	When IC card is not connected.*	?	Wireless LAN infrastructure mode connected (level 3)
(F	Received data is held.	?	Wireless LAN infrastructure mode connected (level 4)
*	A USB device is installed.	w	The field support system is enabled.
8	A LAN cable is not connected.	6	When firmware update function is enabled
8	Wireless LAN not connected	8	Firmware update information is on.
1	Bad connection of the wireless LAN device in the machine*	a	Firmware update failed
<u> </u>	Wireless LAN enabled	=	Remote operation is in progress.

^{*} Consult your service technician.

SWITCH TO HOME SCREEN





OPERATION OF THE MACHINE ► HOME SCREEN AND PREVIEW SCREEN



For procedures for editing the home screen, see "EDITING THE HOME SCREEN (page 2-9)".

CHANGE THE DISPLAY OF THE TOUCH PANEL

EDITING THE HOME SCREEN

In the home screen, you can change the number of shortcut keys shown.

ADDING SHORTCUT KEYS

This section explains how to add a shortcut key to the home screen. You can add a shortcut key using the from the Web page.

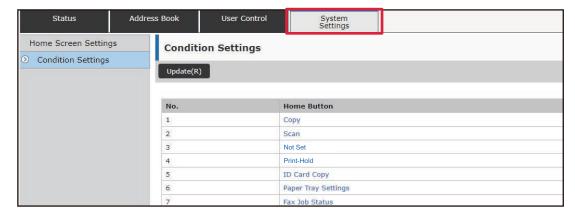




Enter the IP address set in the machine in the address bar of your web browser.

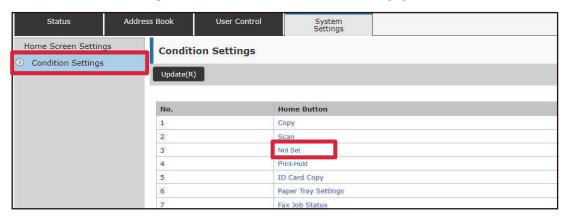
In the factory default state, you must enter your user password after entering the IP address.

On the Web page, click the [System Settings] tab → [Home Screen Settings]. Some settings may require that you enter your user password after clicking [Home Screen Settings]. If you did not perform user authentication, you must enter the administrator password.



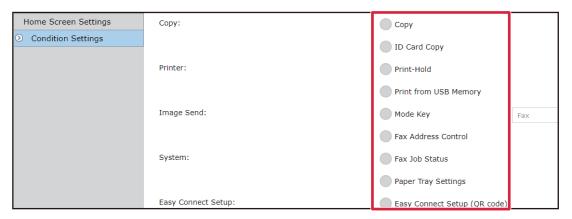


Click [Condition Settings] and click the shortcut key you want to add.



4

Select the function you want to add.



5

When you have finished configuring the settings, click the [Submit] button.

The settings are saved in the machine and applied.

When you have finished settings, click the [Logout] button and close your Web browser.

DELETING SHORTCUT KEYS

You can delete unneeded shortcut keys.

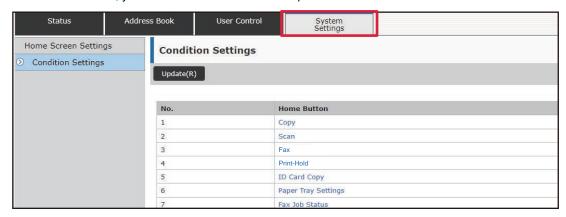
You can add a shortcut key using the from the Web page.



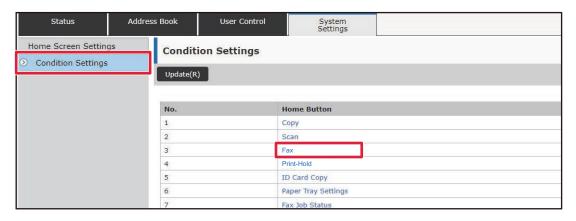
Enter the IP address set in the machine in the address bar of your web browser.

In the factory default state, you must enter your user password after entering the IP address.

On the Web page, click the [System Settings] tab → [Home Screen Settings]. Some settings may require that you enter your user password after clicking [Home Screen Settings]. If you did not perform user authentication, you must enter the administrator password.



Click [Condition Settings] and click the shortcut key you want to delete.



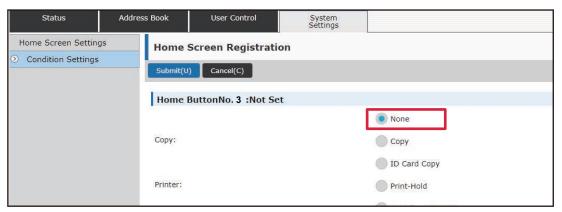


OPERATION OF THE MACHINE CHANGE THE DISPLAY OF THE TOUCH PANEL



Select [None] and click the [Submit] button.

When you click the [Submit] button, the [Home Screen Registration] screen closes.



5

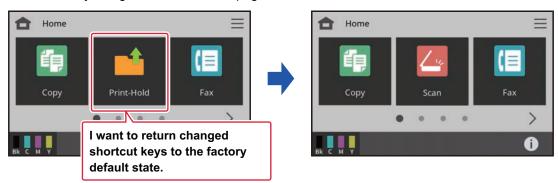
When you have finished configuring the settings, click the [Submit] button.

The settings are saved in the machine and applied.

When you have finished settings, click the [Logout] button and close your Web browser.

RETURNING THE SHORTCUT KEYS TO THE FACTORY DEFAULT STATE

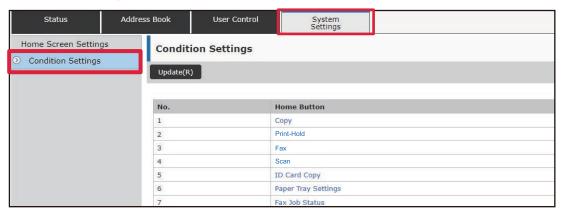
This section explains how to return the shortcut keys in the home screen to the factory default state. You can add a shortcut key using the from the Web page.



Enter the IP address set in the machine in the address bar of your web browser.

In the factory default state, you must enter your user password after entering the IP address.

On the Web page, click the [System Settings] tab → [Home Screen Settings]. Some settings may require that you enter your user password after clicking [Home Screen Settings]. If you did not perform user authentication, you must enter the administrator password.





OPERATION OF THE MACHINE ➤ CHANGE THE DISPLAY OF THE TOUCH PANEL

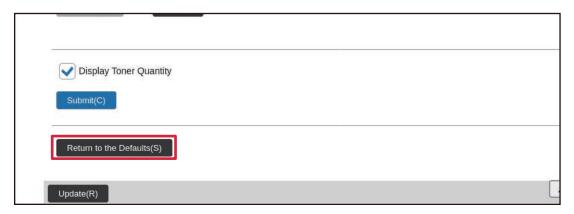
3

Click [Condition Settings], and click the [Return to the Defaults] button.

A confirmation window appears. Click the [OK] button.

The settings are saved in the machine and applied.

When you have finished settings, click the [Logout] button and close your Web browser.



TEMPORARILY CHANGE THE DISPLAY LANGUAGE OF THE MACHINE

Temporarily changes the display language. After restarting the machine, the language will return to the default display language.





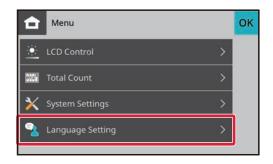






Tap the [Menu] icon.





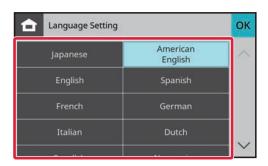
Tap the [Language Setting] key.

The shortcut key will be added to the selected location.



OPERATION OF THE MACHINE ➤ CHANGE THE DISPLAY OF THE TOUCH PANEL

3



Select the desired language and tap

ОК

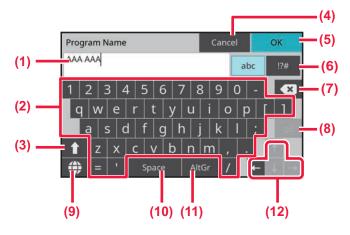
The display changes to the selected language.

CHARACTER ENTRY

CHARACTER ENTRY

NAMES AND FUNCTIONS OF SOFT KEYBOARD KEYS

Display the soft keyboard to register the name of a file, program, folder or user.



(1) Text input area

Displays the entered text.

(2) Keyboard

Tap a key to enter text.

The key types vary depending on the selected entry mode.

(3) [Shift] key

Switch the alphabet to upper case.

It can also be locked by pressing and holding it down. For example, when entering upper case letters consecutively. Tap while the lock is engaged to unlock it.

(4) [Cancel] key

Exits the soft keyboard.

(5) [OK] key

Finalizes the entered characters and exits the soft keyboard.

(6) [Symbols] key

Switch to other input modes.

(7) Backspace key

Deletes one character to the left.

(8) [Enter] key

Temporarily fixes the converted characters or inserts a line break.

(9) Keyboard Select

Switches the key layout.

(10) [Space] key

Converts the entered characters. The [Space] key inserts a space between words if there are no characters specified to be converted.

(11) [AltGr] key

Used to enter accented characters and special symbols.

(12) Cursor keys

Used to move the cursor or to change the range of the specified conversion target.



The soft keyboard shown here is an image for your reference. Different keys may be enabled depending on the actual situation and condition under which you enter characters.

SET THE KEYBOARD SETTING

From the operation panel, select [System Settings] \rightarrow [Common Settings] \rightarrow [Operation Settings] \rightarrow [Keyboard Settings].

Keyboard Settings

Keyboard Select

Change the key layout and display according to the set language.

COPIER



BEFORE USING THE MACHINE AS A COPIER
COPY MODE
BASIC PROCEDURE FOR MAKING COPIES
COPYING
ORIENTATION OF PLACED ORIGINAL
USING THE AUTOMATIC DOCUMENT FEEDER FOR
2-SIDED COPYING
USING THE DOCUMENT GLASS FOR 2-SIDED COPYING
3-10
CHANGING THE EXPOSURE AND ORIGINAL IMAGE TYPE
3-12
AUTOMATIC ADJUSTMENT OF EXPOSURE AND
ORIGINAL TYPE
MANUAL ADJUSTMENT OF EXPOSURE AND ORIGINAL
TYPE 3-12
ENLARGE/REDUCE
AUTO RATIO SELECT
MANUAL RATIO SELECTION
SELECTING THE SIZE OF THE ORIGINAL 3-17
SPECIFY THE ORIENTATION AND SIZE OF THE
ORIGINAL
SPECIFYING THE ORIENTATION AND SIZE OF A
NON-STANDARD SIZE ORIGINALS
MAKING COPIES USING THE BYPASS TRAY 3-19
MAKING COPIES USING THE BYPASS TRAY 3-19
SPECIFYING A TYPE AND SIZE OF PAPER LOADED ON
BYPASS TRAY
OUTPUT
SORT/GROUP SETTING
BATCH COPY FUNCTIONS
(N-Up)
(CARD SHOT)
PAGE (ID CARD COPY)
1 AGE (ID GAIND GOI 17

OTHER FUNCTIONS
ADJUSTING THE BACKGROUND BY MAKING LIGHT AREAS OF THE ORIGINAL LIGHTER (BACKGROUND ADJUSTMENT)
CONVENIENT COPY FUNCTIONS
PROGRAMS.3-32STORING A PROGRAM.3-32RETRIEVING A PROGRAM.3-34DELETING AND RENAMING A PROGRAM.3-34

BEFORE USING THE MACHINE AS A COPIER

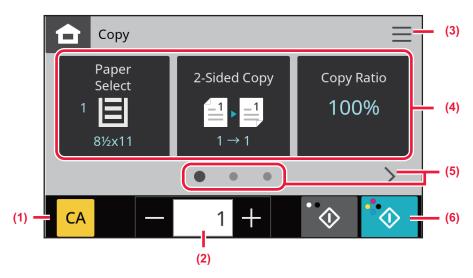
COPY MODE

There are two modes for copying: basic mode and menu mode.

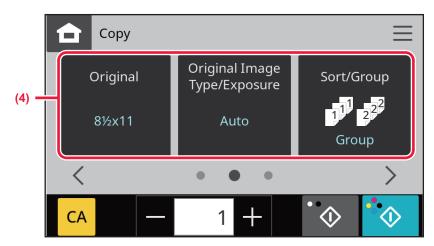
Basic mode is limited to frequently used functions that allow you to smoothly perform most copy jobs. If you need to select detailed settings or special functions, use menu mode.

BASIC MODE

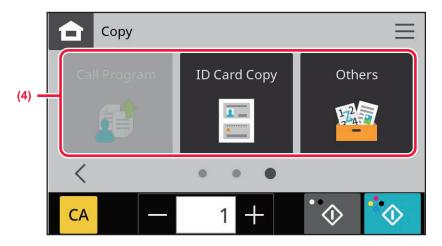
Basic mode makes it easy to select basic settings for copying. 1st screen



2nd screen



3rd screen



- (1) Reset all settings.
- (2) Enter the number of copies.
- (3) Switches to menu mode.
 - ► MENU MODE (page 3-4)

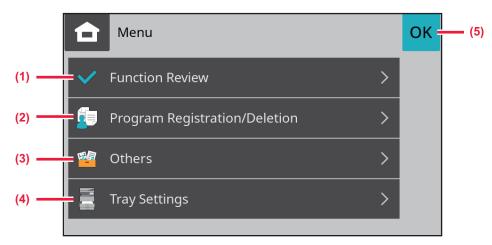
The following features can be set in basic mode.

- Paper Select
 - SELECTING THE PAPER TRAY FOR COPYING (page 3-8)
- 2-Side Copy
 - **AUTOMATIC 2-SIDED COPYING (page 3-9)**
- Copy Ration
 - ENLARGE/REDUCE (page 3-14)
- Original
 - SELECTING THE SIZE OF THE ORIGINAL (page 3-17)
- Original Image Type/Exposure
 - CHANGING THE EXPOSURE AND ORIGINAL IMAGE TYPE (page 3-12)
- Group/Sort
- SORT/GROUP SETTING (page 3-21)
- Call Program
 - PROGRAMS (page 3-32)
- ID Card Copy
 - COPYING BOTH SIDES OF A ID CARD AS A SINGLE PAGE (ID CARD COPY) (page 3-26)
- Others

- (4) Select function to be set up.
- (5) Change the function display.
- (6) Starts black and white or color copying.

MENU MODE

Menu mode lets you select any function setting that can be used for copying.



- (1) This function confirms the contents of the current settings.
- (2) Registers or deletes programs.
- (3) Displays "Others".
- (4) Set the paper tray settings.
- (5) Closes the menu.

BASIC PROCEDURE FOR MAKING COPIES

COPYING

This section explains the basic procedure for copying. Select settings in the order shown below to ensure that the copy operation takes place smoothly.

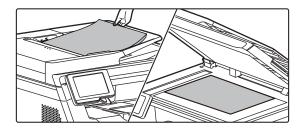
For detailed procedures for selecting the settings, see the explanation of each setting in this chapter.



Switch to copy mode.

SWITCH TO HOME SCREEN (page 2-7)

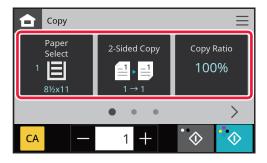
2



Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass. <u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>
<u>DOCUMENT GLASS (page 1-23)</u>





Select functions.

Specify the original scan size, exposure, resolution, etc.

SELECTING THE PAPER TRAY FOR COPYING (page 3-8)

AUTOMATIC 2-SIDED COPYING (page 3-9)

AUTO RATIO SELECT (page 3-14)

SELECTING THE SIZE OF THE ORIGINAL (page 3-17)

AUTOMATIC ADJUSTMENT OF EXPOSURE AND

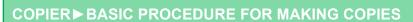
ORIGINAL TYPE (page 3-12)

SORT/GROUP SETTING (page 3-21)

PROGRAMS (page 3-32)

COPYING BOTH SIDES OF A ID CARD AS A SINGLE

PAGE (ID CARD COPY) (page 3-26)







Tap the [Color Start] or [B/W Start] key to start copying.



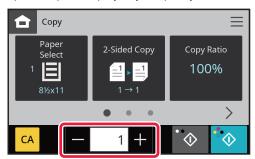
- To cancel all settings, tap the [CA] key.

 When the [CA] key is tapped, all settings selected to that point are cleared and you will return to the base screen.
- To cancel copying, tap the [Cancel Copy] key.



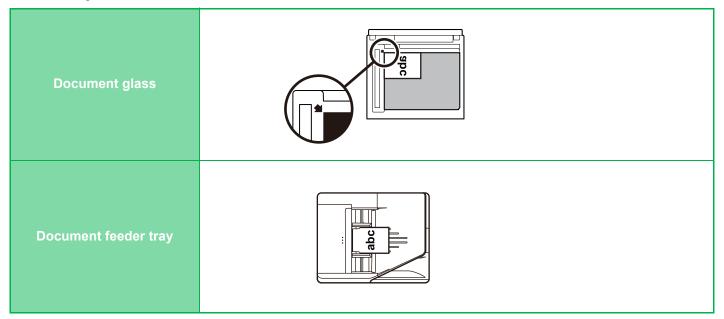
• To make two or more sets of copies:

Tap the copies display key to specify the number of copies.



ORIENTATION OF PLACED ORIGINAL

Place the original as shown below.



SELECTING THE PAPER TRAY FOR COPYING

The machine is set to automatically select a tray that has the same size of paper as the size of the placed original (Auto Paper Select).

When you want to change the paper size for copying, you can select the paper tray manually.



- If the selected tray runs out of paper during a copy job and there is another tray that has the same size and type of paper, that tray will be automatically selected and the copy job will continue.
- If a suitable size of copy paper is not loaded, copying may stop.



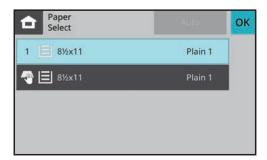
Tap the [Paper Select] key.

BASIC PROCEDURE FOR MAKING COPIES (page 3-5)

2

Tap the required tray key.

After the settings are completed, tap [OK] key.

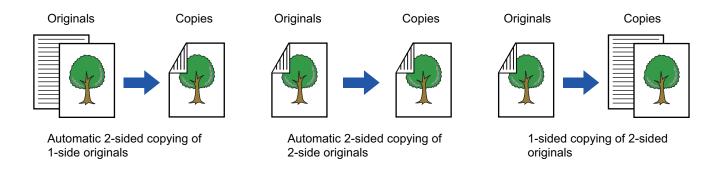




To automatically select the tray, tap the [Auto] key.

AUTOMATIC 2-SIDED COPYING

USING THE AUTOMATIC DOCUMENT FEEDER FOR 2-SIDED COPYING





- To make 2-sided copies, configure the 2-sided copy settings before scanning the original.
- · 2-sided copy helps to save paper.



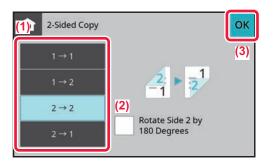
Place the original in the document feeder tray of the automatic document feeder.

AUTOMATIC DOCUMENT FEEDER (page 1-21)

2

Tap the [2-Sided Copy] key.

3



Select 2-sided copy mode.

- (1) Select the 2-sided copy type.
- (2) Check [Rotate Side 2 by 180 Degrees] if necessary.
- (3) After the settings are completed, tap [OK].



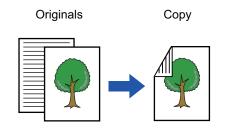
Check the paper (tray) and color mode you want to use for copying, and tap the keys for any other settings you want to select.

For details on the functions that can be set, see step 2 in "COPYING (page 3-5)".



Tap the [Color Start] or [B/W Start] key to start copying.

USING THE DOCUMENT GLASS FOR 2-SIDED COPYING



Automatic 2-sided copying of 1-sided originals



2-sided copy helps to save paper.



Place the original on the document glass.

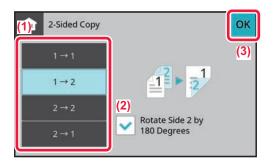
DOCUMENT GLASS (page 1-23)

2

Tap the [2-Sided Copy] key.

BASIC PROCEDURE FOR MAKING COPIES (page 3-5)

3



Select the 2-sided copy mode.

- (1) Tap the $[1 \rightarrow 2]$ key.
- (2) Check [Rotate Side 2 by 180 Degrees] if necessary.
- (3) After the settings are completed, tap [OK].



The $[2 \rightarrow 2]$ key and $[2 \rightarrow 1]$ key cannot be used when copying from the document glass.



Check the paper (tray) and color mode you want to use for copying, and tap the keys for any other settings you want to select.

For details on the functions that can be set, see step 2 in "COPYING (page 3-5)".

5

Tap the [Color Start] or [B/W Start] key.



COPIER ► BASIC PROCEDURE FOR MAKING COPIES

6

Set the next original, and tap the [Color Start] or [B/W Start] key to start copying.

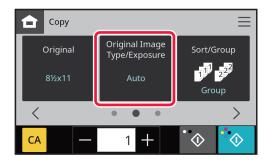
Tap the same key you tapped in step 5.

CHANGING THE EXPOSURE AND ORIGINAL IMAGE TYPE

AUTOMATIC ADJUSTMENT OF EXPOSURE AND ORIGINAL TYPE

Automatic exposure adjustment operates by default to automatically adjust the exposure level and original type as appropriate for the original being copied. ([Auto] is displayed.)

This function automatically adjusts the image during black & white copying and full color copying to obtain the most suitable copy.



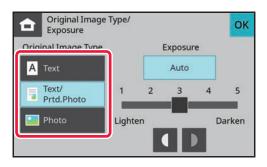
MANUAL ADJUSTMENT OF EXPOSURE AND ORIGINAL TYPE

This section explains how to select the original type depending on the original to be copied or manually adjust the exposure.



Tap the [Original Image Type/Exposure] key.





Tap the required original image type key to specify the original type.

Tap the key matching the original.

Original image type select keys

• Text:

Use this mode for regular text documents.

• Text/Printed Photo:

This mode provides the best balance for copying an original which contains both text and printed photographs, such as a magazine or catalogue.

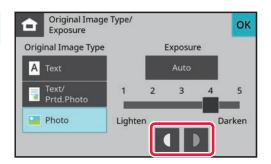
· Photo:

Use this mode to copy photos.



COPIER ► BASIC PROCEDURE FOR MAKING COPIES





Tap to adjust the copy exposure.

After the adjustment, tap [OK] key.



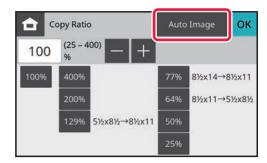
Guidelines for the exposure level when [Text] is selected for "Original Image Type"

- 1 to 2: Dark originals such as a newspaper
- 3: Normal density originals
- 4 to 5: Originals written in pencil or light colored text

ENLARGE/REDUCE

AUTO RATIO SELECT

This section explains how to automatically select the appropriate ratio to meet the paper size when manually changing the paper tray to make a copy on paper that has a size different from the original.





For a non-standard size original, the size must be entered in order to use Auto Image.



Manually select the paper tray, and place the original.

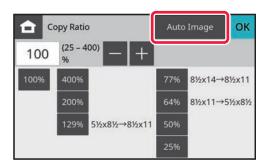
Place the original in the document feeder tray of the automatic document feeder, or on the document glass. <u>SELECTING THE PAPER TRAY FOR COPYING (page 3-8)</u>
<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>
<u>DOCUMENT GLASS (page 1-23)</u>

2

Tap the [Copy Ratio] key.

COPY MODE (page 3-2)

3



Tap the [Auto Image] key.

The reduction or enlargement ratio is automatically selected based on the original size and the selected paper size. The automatically selected ratio will appear in the ratio display.



- To cancel the Auto Ratio Selection setting:
 Tap [Auto Image] to deselect it.
- To return the ratio to 100%: Tap the [100%] key.

MANUAL RATIO SELECTION

This section explains how to specify any ratio when making a copy on paper that has a size different from the original or changing the image size for copying.

The following two methods can be used to specify the ratio.

Specifying the desired zoom ratio

You can adjust the zoom ratio in 1% increments using or the 10 key to specify the desired zoom ratio.

You can also select the enlargement or reduction ratio between commonly used fixed sizes from the preset ratio keys.

Specifying the paper size

Specify the paper sizes of the original and output to automatically obtain the appropriate ratio.

For example, when you select 8-1/2" \times 11" as the original size and 5-1/2" \times 8-1/2" as the paper size, the ratio is automatically set to 64%.





When the automatic document feeder is used, the vertical and horizontal ratio selection ranges are both between 25% to 200%.



To return the ratio to 100%:

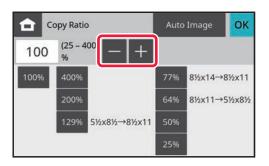
Tap the [100%] key.

Specifying the desired zoom ratio



Tap the [Copy Ratio] key.

COPY MODE (page 3-2)



Tap ____ to set the ratio.

After the settings are completed, tap [OK] key. Check that a paper size suitable for the ratio is selected.



To quickly set the area, first specify a value close to the desired value by the numeric keys, then adjust it with





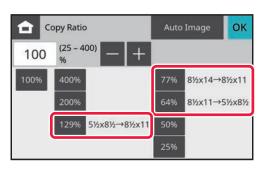
To cancel all settings: Tap the [CA] key.

Specifying the paper size



Tap the [Copy Ratio] key.

COPY MODE (page 3-2)



Specify the original size (paper size of the loaded original) and the copy size (paper size of the copy output).

After the settings are completed, tap [OK] key.



To cancel all settings: Tap the [CA] key.

SELECTING THE SIZE OF THE ORIGINAL

To change the original size, touch the [Original] key and set the original size.



Set the orientation and size of the original before scanning the original.

SPECIFY THE ORIENTATION AND SIZE OF THE ORIGINAL



Tap the [Original] key to set the orientation of the original.

COPY MODE (page 3-2)

2



Tap the appropriate original size key.

After the settings are completed, tap [OK] key.

SPECIFYING THE ORIENTATION AND SIZE OF A NON-STANDARD SIZE ORIGINALS

1

Tap the [Original] key to set the orientation of the original.

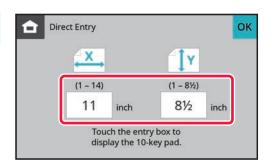
COPY MODE (page 3-2)

2

Tap the [Direct Entry] key.







Specify the original size.

After the settings are completed, tap [OK] key.



Tap the areas displaying width and height sizes respectively, and enter the sizes using the numeric keys.



Tap the [OK] key.

Make sure that the original size you have set is displayed in the upper left corner of the screen.

MAKING COPIES USING THE BYPASS TRAY

MAKING COPIES USING THE BYPASS TRAY

In addition to plain paper, the bypass tray allows you to make copies on transparency film, envelopes, and other special media.



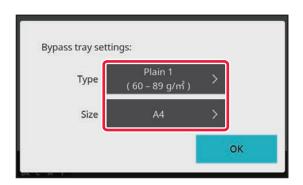
For detailed information on paper that can be loaded into the bypass tray, see "<u>APPLICABLE PAPER TYPES (page 1-9)</u>". For precautions on loading paper into the bypass tray, see "<u>LOADING PAPER INTO THE BYPASS TRAY (page 1-16)</u>".



Load paper into the bypass tray.

LOADING PAPER INTO THE BYPASS TRAY (page 1-16)

2



A dialog box appears, if you want to change the settings, tap [Type] or [Size] in the dialog box and select the paper size and type.

SPECIFYING A TYPE AND SIZE OF PAPER LOADED ON BYPASS TRAY (page 3-20)

To use the displayed paper type and paper size, tap the [OK] key.

3

Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

<u>DOCUMENT GLASS (page 1-23)</u>



Tap the [Color Start] or [B/W Start] key to start copying.

SPECIFYING A TYPE AND SIZE OF PAPER LOADED ON BYPASS TRAY

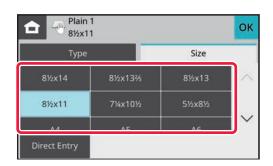


Tap the [Paper Select] key.

SELECTING THE PAPER TRAY FOR COPYING (page 3-8)

Tap the [Type and Size] key, and tap the key that meets the type of the loaded paper.

3



Tap the [Size] tab, and tap the key that meets the size of the loaded paper.

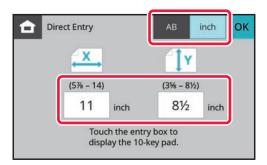
Tap the [Direct Entry] key to enter a numeric value for the size of the loaded paper.

After the settings are completed, tap [OK] key.



To directly enter a paper size

Tap the [inch] key to set a paper size in inches, or tap the [AB] key to set it in millimeters. After entering the desired value using the numeric keys, tap the [OK] key.



OUTPUT

SORT/GROUP SETTING

This section explains how to select the sorting method when outputting the scanned original.

Auto	Enables the sort mode when the original is placed in the automatic document feeder, and enables the group mode when the original is placed on the document glass.
Sort	Sorts the scanned original on a set basis, and outputs them. Example: When 5 is set for the number of copies in sorting 1 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Group	Groups the scanned original on a page basis, and outputs them. Example: When 5 is set for the number of copies in grouping 1 2 3



Tap the [Output] key.

2

Select the sorting method.

After the settings are completed, tap [OK] key.

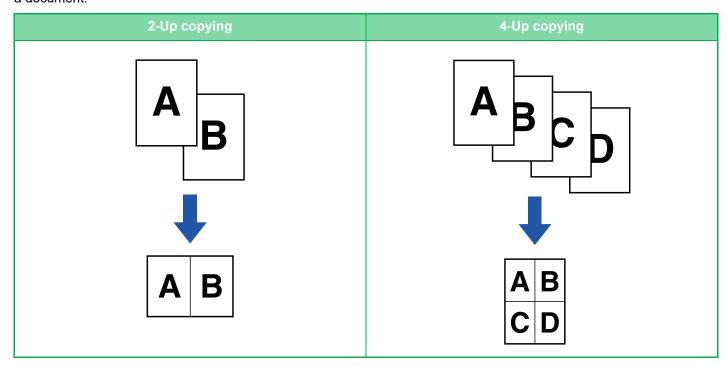
BATCH COPY FUNCTIONS

COPYING MULTIPLE ORIGINALS AS A SINGLE PAGE (N-Up)

This function copies multiple original pages onto a single sheet of paper in a uniform layout.

Select 2-Up to copy two original pages onto one sheet, 4-Up to copy four original pages onto one sheet, or 8-Up to copy eight original pages onto one sheet.

This function is convenient when you wish to present multiple pages in a compact format, or show a view of all pages in a document.





Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

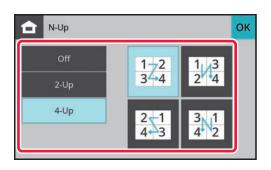
<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

<u>DOCUMENT GLASS (page 1-23)</u>

2

Tap the [Others] key, and tap the [N-Up] key.





Tap the key for the number of copies of the original you want to collect, and the key with the layout displayed.

After the settings are completed, tap [OK] key.



COPIER►BASIC PROCEDURE FOR MAKING COPIES



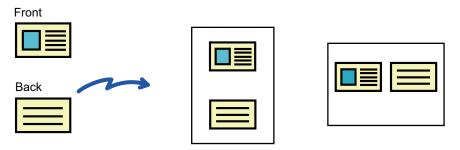
- To cancel the N-Up setting: Tap the [Off] key.
- To cancel all settings: Tap the [CA] key.



Tap the [Color Start] or [B/W Start] key to start copying.

COPYING BOTH SIDES OF A CARD AS A SINGLE PAGE (CARD SHOT)

This function copies the front and reverse sides of a card on one sheet, not on separate sheets. This function is convenient for making copies for identification purposes and helps save paper.



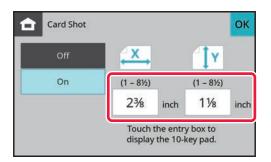
Example of a portrait copy

Example of a landscape copy



Tap the [Others] key, and tap the [Card Shot] key.

2



Tap the [On] key, and specify the original size as required.

After the settings are completed, tap [OK] keys in sequence.



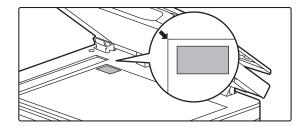
- Tap the areas displaying width and height sizes respectively, and enter the sizes using the numeric keys.
- If the image is missing, enter a slightly larger size.



To cancel the Card Shot settings:

Tap the [Off] key.





Place a card face down on the document glass, and tap the [Color Start] or [B/W Start] key.

DOCUMENT GLASS (page 1-23)



If the image is missing, shift the original inward and set it.





Place a card face up on the document glass, and tap the [Color Start] or [B/W Start] key to scan the reverse side.



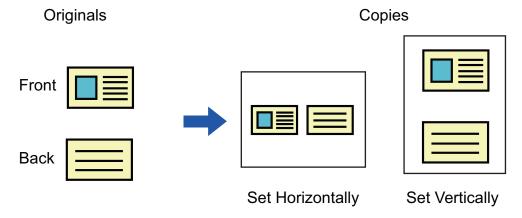
- Copy settings cannot be changed when scanning additional pages.
- To cancel all settings: Tap the [CA] key.



Tap the [Read-End] key to start copying.

COPYING BOTH SIDES OF A ID CARD AS A SINGLE PAGE (ID CARD COPY)

This function copies the front and reverse sides of a ID card on one sheet, not on separate sheets. This function is convenient for making copies for identification purposes and helps save paper.





Tap the [ID Card Copy] key.

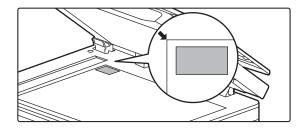
A checkmark appears on the key.



To cancel the ID Card Copy settings:

Tap the [ID Card Copy] key to clear the checkmark.

2



Place a ID card face down on the document glass, and tap the [Color Start] or [B/W Start] key.

DOCUMENT GLASS (page 1-23)



If the image is missing, shift the original inward and set it.

3

Place a ID card face up on the document glass, and tap the [Color Start] or [B/W Start] key to scan the reverse side and start copying.



To cancel all settings:

Tap the [CA] key.

OTHER FUNCTIONS

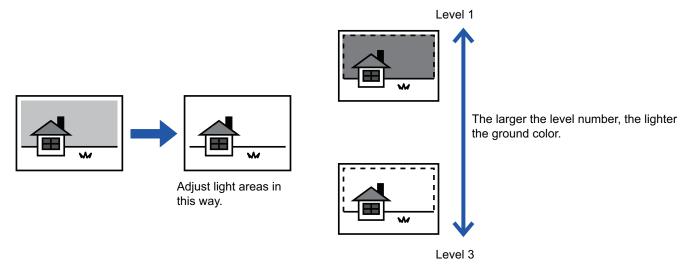
OTHER FUNCTIONS

ADJUSTING THE BACKGROUND BY MAKING LIGHT AREAS OF THE ORIGINAL LIGHTER (BACKGROUND ADJUSTMENT)

You can adjust the background by making light areas of the original lighter.

The larger the level number in [Background Adjustment], the lighter the ground color becomes.

Darkness of the light area can be adjusted by this function.



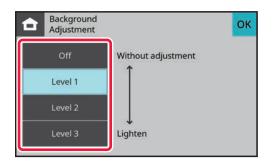


You must select Background Adjustment before scanning the original.



Tap the [Others] key, and tap the [Background Adjustment] key.





Tap the key for the level you want to adjust.

After the settings are completed, tap [OK] in sequence.



To cancel the Background Adjustment setting:

Tap the [Off] key.

3

Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

<u>DOCUMENT GLASS (page 1-23)</u>



To cancel all settings:

Tap the [CA] key.



Tap the [Color Start] or [B/W Start] key to start copying.

ADJUSTING RESOLUTION WHEN SCANNING (RESOLUTION)

This function adjusts the resolution when scanning the original, enabling the high-quality output or speed-priority output according to the application.

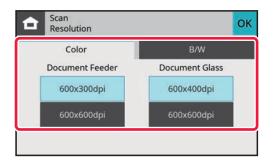


Resolution must be specified before scanning the original.



Tap the [Others] key, and tap the [Scan Resolution] key.

2



Tap the [Color] or [B/W] tab and select the resolution.

The resolution can be set to both the document feeder and document glass.

After the settings are completed, tap [OK] and [Back] keys in sequence.

3

Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

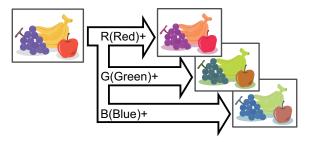
<u>DOCUMENT GLASS (page 1-23)</u>

4

Tap the [Color Start] or [B/W Start] key to start copying.

ADJUSTING RED/GREEN/BLUE IN COPIES (RGB ADJUST)

This function heightens or lightens any one of the three color components R (red), G (green), and B (blue).





RGB must be specified before scanning the original.

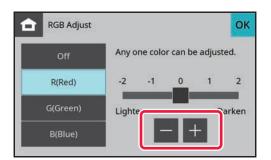


Tap the [Others] key, and tap the [RGB Adjust] key.

2

Tap the key of the color you want to adjust.

3



Tap ____ to adjust the coloring.

After the settings are completed, tap [OK] key.



- This function can be adjusted for only one of the colors. (If you adjust one color and then tap another color, the adjustment of the first color is canceled.)
- To cancel the RGB adjust setting: Tap the [Off] key.



Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

<u>DOCUMENT GLASS (page 1-23)</u>



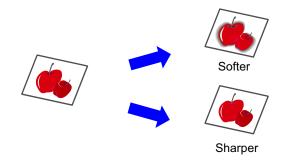
To cancel all settings: Tap the [CA] key.



Tap the [Color Start] key to start copying.

ADJUSTING THE SHARPNESS OF AN IMAGE (SHARPNESS)

This function adjusts the sharpness to make a sharper or softer image.



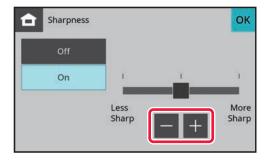


Sharpness must be specified before scanning the original.



Tap the [Others] key, and tap the [Sharpness] key.

2



Tap to adjust the sharpness.

Select [More Sharp] for sharper outlines, or [Less Sharp] for softer outlines.

After the settings are completed, tap [OK] key.



To cancel the sharpness setting: Tap the [Off] key.

3

Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

DOCUMENT GLASS (page 1-23)



To cancel all settings:

Tap the [CA] key.



Tap the [Color Start] or [B/W Start] key to start copying.

CONVENIENT COPY FUNCTIONS

PROGRAMS

Programs are set from the base screen of menu mode. BASIC MODE (page 3-2)

STORING A PROGRAM

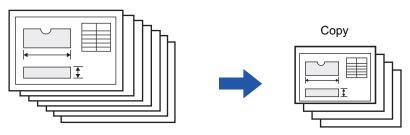
This function collectively stores copy settings as one program. The stored program can be retrieved using an easy operation.

For information about how to retrieve a program, see "RETRIEVING A PROGRAM (page 3-34)".

For example, suppose 8-1/2" x 11" (A4) size CAD drawings are copied once a month for archive purposes using the following settings:

- The 8-1/2" x 11" (A4) size CAD drawings are reduced to 5-1/2" x 8-1/2" (A5) size.
- To reduce paper use by half, 2-sided copying is used.

8-1/2" x 11" (A4) size CAD drawings



When a job program is not stored	When a job program is stored
Set reduction from 5-1/2" x 8-1/2" (A5) to 8-1/2" x 11" (A4)	Retrieve the stored program.
Change the exposure setting. Set 2-sided copying.	Tap the [Color Start] or [B/W Start] key.
Tap the [Color Start] or [B/W Start] key. Considerable time is required to copy the drawings each month because the above settings must be selected. In addition, mistakes are occasionally made when selecting the settings, so some copies must be redone.	The settings are stored in a program, so they can be selected by the touch of a key. This is simple and takes no time. In addition, the settings are all stored so there are no chances for mistakes, and thus no need to redo copies due to setting mistakes.



- Up to 8 programs can be stored.
- Program settings remains registered even when the power has been turned off.



Specify the copy function to be stored.

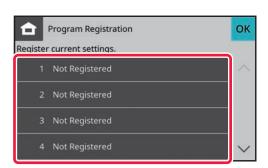


Tap the [Menu] icon and tap [Program Registration/Deletion].



Tap [Program Registration].





Tap an unused key.

A key with a program registered is marked with a checkmark.



If you do not set a name for the program, a serial number will be automatically assigned as the name.





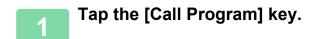
Set a name for the program and tap the [OK] key.

A registration completion message appears.



The number of copies cannot be stored.

RETRIEVING A PROGRAM



Tap the key of the program you want to retrieve.

DELETING AND RENAMING A PROGRAM

This section explains how to delete copy settings in a program and rename a program.

Deleting a program

- Tap the [Menu] icon and tap [Program Registration/Deletion].
- Tap [Delete Program].
- Tap the key of the program you want to delete, and tap [Delete].

Renaming a program

- Tap the [Menu] icon and tap [Program Registration/Deletion].
- Tap [Change Program Name].
- Tap the key of the required program, and rename the program. Then tap the [OK] key.

After the settings are completed, tap [OK] key.

PRINTER



PRINTER FUNCTION OF THE MACHINE PRINTER FUNCTION 4-2 WINDOWS ENVIRONMENT 4-2	FUNCTIONS TO ADJUST THE SIZE AND ORIENTATION OF THE IMAGE
macOS ENVIRONMENT	ROTATING THE PRINT IMAGE 180 DEGREES (ROTATE 180 DEGREES)
PRINTING IN A WINDOWS ENVIRONMENT BASIC PRINTING PROCEDURE 4-3 PRINTER DRIVER SETTINGS SCREEN / REFERRING TO HELP	ADJUST THE LINE THICKNESS (WIDTH)
PRINTING ON ENVELOPES	IMAGE (COLOR ADJUSTMENT/RGB ADJUSTMENT) .4-45 PRINTING FAINT TEXT AND LINES IN BLACK (TEXT TO BLACK/VECTOR TO BLACK)
PRINTING IN A macOS ENVIRONMENT BASIC PRINTING PROCEDURE	(OVERLAYS)
FREQUENTLY USED FUNCTIONS SELECTING THE COLOR MODE	PRINTING WITHOUT THE PRINTER
SELECTING THE COLOR MODE SELECTING THE RESOLUTION	EXTENSION OF PRINTABLE FILES
CONVENIENT PRINTING FUNCTIONS	APPENDIX
CONVENIENT FUNCTIONS FOR CREATING PAMPHLETS AND POSTERS	PRINTER DRIVER SPECIFICATIONS LIST 4-65 Main. 4-65 Paper Source Layout 4-65 Job Handling 4-66 Inserts 4-66 Stamp 4-66 Image Quality 4-66 Detailed Settings 4-67

PRINTER FUNCTION OF THE MACHINE

PRINTER FUNCTION

The machine is equipped with a full color printing function as standard. To enable printing from your computer, a printer driver must be installed.

See the table below to determine which printer driver to use in your environment.

WINDOWS ENVIRONMENT

Printer driver type

PCL₆

The machine support the Hewlett-Packard PCL6 printer control languages.

PS

- This machine can be used as a PostScript3 compatible printer with a printer driver that supports PCL, a page description language provided by Sharp.
- If it is desired to use the Windows standard PS printer driver, the PPD driver must be used.



- To install the printer driver and configure settings in a Windows environment, see the Software Setup Guide.
- The User's Manual mainly uses PCL6 printer driver screens to explain how to print in a Windows environment. The printer driver screens may differ slightly depending on the printer driver you are using.

macOS ENVIRONMENT

Printer driver type

PS

This machine can be used as a PostScript3 compatible printer with a printer driver that supports PCL, a page description language provided by Sharp.



- To install the printer driver and configure settings in a macOS environment, see the Software Setup Guide.
- The explanations of screens and procedures for use in a macOS environment generally assume that macOS 14 is being used and a PPD driver is installed. The screens may be different depending on the version of the operating system or the software application.



If a notice page is printed

If a print job cannot be printed as specified and the reason is not shown on the operation panel, a notice page indicating the reason will print. Read the message and take appropriate action. For example, a notice page will print if the following occurs:

- There is more print data than can be held in memory.
- You selected a function that has been prohibited by the administrator.

PRINTING IN A WINDOWS ENVIRONMENT

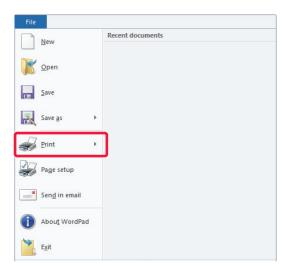
BASIC PRINTING PROCEDURE

The following example explains how to print a document from "WordPad", which is a standard accessory application in Windows.



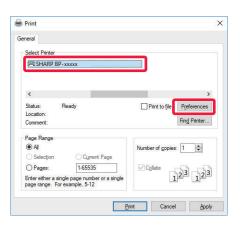
- The menu used to execute printing may vary depending on the application.
- The button that is used to open the printer driver properties window (usually [Property] or [Preferences]) may vary depending on the application.
- The machine name that normally appears in the [Printer] menu is [BP-xxxxx]. ("xxxxx" is a sequence of characters that varies depending on the machine model.)





Select [Print] from the [File] menu of WordPad.



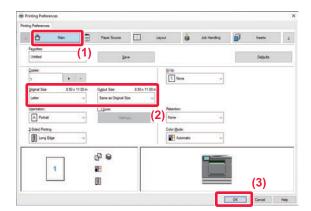


Select the printer driver for the machine and click the [Preferences] button.

The button that is used to open the printer driver properties window (usually [Property] or [Preferences]) may vary depending on the application.



3



Select print settings.

- (1) Click the [Main] tab.
- (2) Select the original size.
 - You can register up to seven user-defined sizes in the menu. To store an original size, select [Custom Paper] or one of [User1] to [User7] from the menu, and click the [OK] button.
 - To select settings on other tabs, click the desired tab and then select the settings.
 PRINTER DRIVER SETTINGS SCREEN /
 - PRINTER DRIVER SETTINGS SCREEN / REFERRING TO HELP (page 4-5)
 - If an original size larger than the largest paper size that the machine supports is set, select the paper size for printing in "Output Size".
 - If an "Output Size" different from the "Original Size" is selected, the print image will be adjusted to match the selected paper size.
- (3) Click the [OK] button.



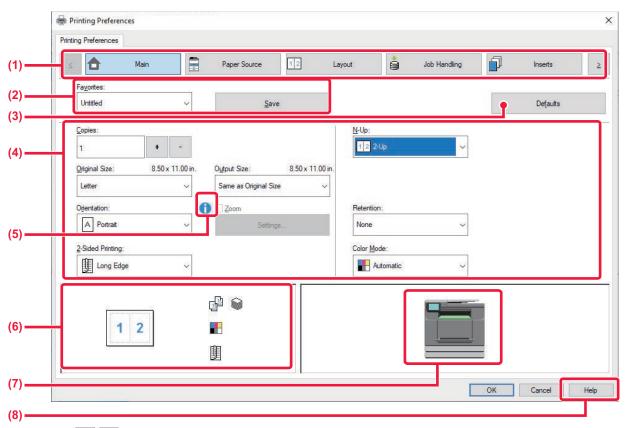
Click the [Print] button.

Printing begins.

PRINTER DRIVER SETTINGS SCREEN / REFERRING TO HELP

The printer driver settings screen consists of 8 tabs. Click a tab to select the settings on that tab.

You can check information on each of the settings in the Help screen. Click the [Help] button at the bottom right of the screen.



(1) Tabs: Click | 2 | to change the tabs shown.

•[Main]: Frequently used functions are grouped on this tab. The settings are also on other tabs,

and each setting on this tab is linked to the corresponding setting on the other tab.

•[Paper Source]: Set the size and type of paper used for printing, and the paper tray.

•[Layout]: Select functions related to the layout such as two-sided printing and booklet.

•[Job Handling]: Set retention and user authentication.

•[Inserts]: Select insertion functions such as covers and inserts.

•[Stamp]: Select the watermark or stamp function.
•[Image Quality]: Select various image quality settings.
•[Detailed Settings]: Select other detailed print settings.

(2) Favorites

Settings configured on each tab at the time of printing can be saved as Favorite.

► FREQUENTLY USED FUNCTIONS (page 4-10)

(3) Defaults

Return the settings on the currently selected tab to their default state.

(4) Setup Items

Displays the settings on each tab.

(5) Information icon(1)

Some restrictions exist on the combinations of settings that can be selected in the printer driver properties window. When a restriction exists on a selected setting, an information icon (1) will appear next to the setting. Click the icon to view an explanation of the restriction.

(6) Print image

This lets you visually check how the current settings affect the print image. Finishing settings and the color mode are indicated by icons.

(7) Machine image

This shows the options that are installed on the machine, and the paper trays and output trays that are used.

(8) [Help] button

Displays the Help window of the printer driver.



- Help can be displayed for a setting by clicking the setting and pressing the [F1] key.
- You can click the ? button in the upper right corner of the settings screen and then click a setting to show Help for that setting in a sub-window.

SELECTING THE PAPER

Before printing, check the paper sizes, paper types, and paper remaining in the machine's trays. To check the most recent tray information, click the [Tray Status] button in the [Paper Source] tab.

The "Output Size" setting and the "Paper Tray" setting are related as follows:

• When "Paper Tray" is set to [Auto Select]

The tray that contains paper of the size and type selected in "Output Size" and "Paper Type" is automatically selected.

• When "Paper Tray" is set to any setting other than [Auto Select]

The specified tray is used for printing regardless of the "Output Size" setting.

When you have set "Paper Type" to [Bypass Tray], be sure to select "Paper Type". Check the paper type that is set for the bypass tray of the machine, check that paper of that type is actually loaded into the bypass tray, and then select the appropriate paper type.

When "Paper Type" is set to [Auto Select]

A tray with plain paper or recycled paper of the size specified in "Output Size" is automatically selected. (The factory default setting is plain paper 1 only.)

• When "Paper Type" is set to anything other than [Auto Select]

A tray with the specified type of paper and the size specified in "Output Size" is used for printing.



Special media such as envelopes can also be placed in the bypass tray.

For the procedure for loading paper in the bypass tray, see "LOADING PAPER INTO THE BYPASS TRAY (page 1-16)".



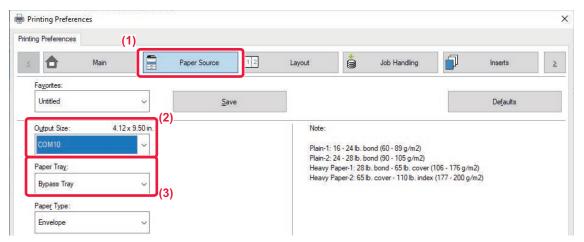
When [Enable Detected Paper Size in Bypass Tray] (disabled by factory default) or [Enable Selected Paper Type in Bypass Tray] (enabled by factory default), which you can reach by selecting in the Web page [System Settings] → [Printer Settings] → [Condition Settings] → [Bypass Tray Settings] is enabled, printing will not take place if the paper size or paper type specified in the printer driver is different from the paper size or paper type specified in the settings of the bypass tray.

PRINTING ON ENVELOPES

The bypass tray or tray can be used for envelope printing.



- For the types of paper that can be used in the tray, see "APPLICABLE PAPER TYPES (page 1-9)".
- For the procedure for loading paper in the bypass tray, see "LOADING PAPER INTO THE BYPASS TRAY (page 1-16)".
- For the procedure for loading paper in the tray, see "TRAY 1 2 (page 1-12)".
- For more information on the procedure for loading paper, see "SELECTING THE PAPER (page 4-6)".
- After printing, there may be creases in the envelope depending on the envelope type and format as well as on the printing environment. Before high-quantity printing, it is recommended that you conduct a test print.
- When using media such as envelopes that can be loaded only in a specific orientation, you can rotate the image 180 degrees. For more information, see "<u>ROTATING THE PRINT IMAGE 180 DEGREES</u> (<u>ROTATE 180 DEGREES</u>) (<u>page 4-38</u>)"



- (1) Click the [Paper Source] tab.
- (2) Select the envelope size from the "Output Size" menu.

When [Output Size] is set to envelope, [Paper Type] is automatically set to [Envelope]. When "Original Size" is set to envelope on the [Main] tab and "Output Size" is set to [Same as Original Size], "Paper Type" is automatically set to [Envelope].

(3) Select [Bypass Tray], [Tray 1] or [Tray 2] in "Paper Tray".

PRINTING WHEN THE USER AUTHENTICATION FUNCTION IS ENABLED

The user information (such as login name and password) that must be entered varies depending on the authentication method being used, so check with the administrator of the machine before printing.



- If you have configured "Printing Policy" on the [Configuration] tab so that user authentication is always performed, users are required to be authenticated for each print job. This is done by entering authentication information in a dialog box that appears each time printing is performed.
- The machine's user authentication function cannot be used when the PPD driver is installed and the Windows standard PS printer driver is used.
 - For this reason, the machine can be configured to prohibit users from executing printing unless their user information is stored in the machine.



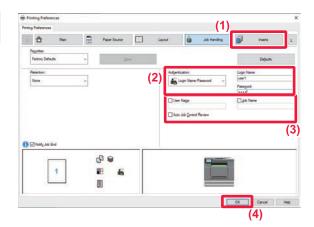
In the printer driver properties window of the application, select the printer driver of the machine and click the [Preferences] button.



The button that is used to open the printer driver properties window (usually [Property] or [Preferences]) may vary depending on the application.



2



Enter your user information.

(1) Click the [Job Handling] tab.

(2) Enter your user information.

- When authentication is performed by login name, select [Login Name] and enter your login name.
- When authentication is performed by login name/password, click [Login Name/Password] and enter your login name and password. Enter the password using 1 to 32 characters
- When authentication is performed by user number, select [User Number] and enter your 5 to 8 digit user number

(3) Enter the user name and job name as necessary.

- Click the [User Name] checkbox, and enter your user name using up to 32 characters. The entered user name will appear on the touch panel of the machine.
 If you do not enter a user name, your PC login name will appear.
- Click the [Job Name] checkbox, and enter a job name using up to 30 characters. The entered job name will appear as a file name on the touch panel of the machine. If you do not enter a job name, the file name set in the application will appear.
- To have a confirmation window appear before printing starts, select the [Auto Job Control Review] checkbox.

(4) Click the [OK] button to execute printing.

FREQUENTLY USED FUNCTIONS

SAVING SETTINGS AT THE TIME OF PRINTING

Settings configured on each of the tabs at the time of printing can be saved as Favorite. Saving frequently used settings or complex color settings under an assigned name makes it easy to select those settings the next time you need to use them.

Settings can be saved from any tab of the printer driver properties window. Settings configured on each tab are listed at the time of saving, allowing you to check the settings as you save them.



Deleting saved settings

In step 2 of "<u>USING SAVED SETTINGS</u> (page 4-11)", select the user settings that you want to delete and click the [Delete] button.



Select the machine's printer driver from the print window of the application, and click the [Preferences] button.



The button that is used to open the printer driver properties window (usually [Property] or [Preferences]) may vary depending on the application.

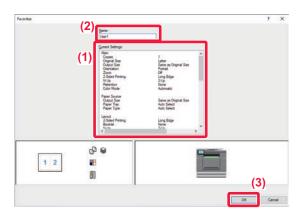




Register Print Settings.

- (1) Configure the print settings on each tab.
- (2) Click the [Save] button.

3



Check and save the settings.

- (1) Check the displayed settings.
- (2) Enter a name for the settings using up to 20 characters.
- (3) Click the [OK] button.

USING SAVED SETTINGS

You can specify the saved favorites through just one click to apply frequently used settings or complicated color settings to your printing.

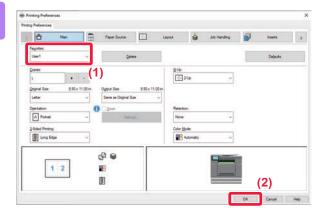


Select the machine's printer driver from the print window of the application, and click the [Preferences] button.



The button that is used to open the printer driver properties window (usually [Property] or [Preferences]) may vary depending on the application.





Select favorite settings.

- (1) Select the favorite settings you want to use.
- (2) Click the [OK] button.

3

Start printing.

CHANGING THE PRINTER DRIVER DEFAULT SETTINGS

You can change the default settings of the printer driver.

Changes you have made in the printer driver properties window when you execute printing from the application are returned to the default settings specified here when you exit the application.



Click the [Start] button, select [Settings] \rightarrow [Device] \rightarrow [Printers & scanners].



- In Windows 11, click the [Start] button, select [Bluetooth & devices] → [Printers & scanners].
- In Windows Server 2012, right-click the [Start] button, select [Control Panel] → [View devices and printers] (or [Devices and Printers]).





Click the printer driver name of the machine and click [Manage].

3

Click [Start].



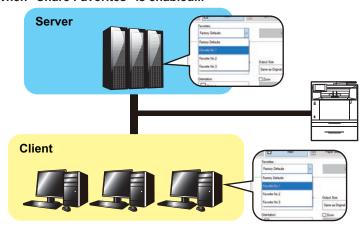
Configure the settings and click the [OK] button.

For explanations of the settings, see printer driver Help.

SHARE FAVORITE SETTINGS BETWEEN SERVER AND CLIENT

When using this machine as a shared printer, if "Favorite" is set in the printer driver of the shared server, this setting can also be used on the shared destination.

When "Share Favorites" is enabled...



The favorite settings configured on the server can be used on the client computer.

Configure the following settings in the printer driver of the shared server.



Click the [Start] button, select [Settings] \rightarrow [Device] \rightarrow [Printers & scanners].

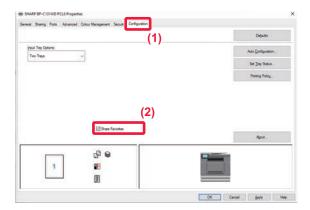


In Windows 11, click the [Start] button, select [Bluetooth & devices] \rightarrow [Printers & scanners].

- Click the printer driver name of the machine and click [Manage].
- Click [Printer Properties].







Configure the sharing settings.

- (1) Click the [Configuration] tab.
- (2) Set the [Share Favorites] check box to
 .

PRINTING IN A macOS ENVIRONMENT

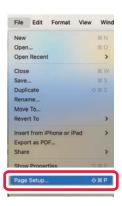
BASIC PRINTING PROCEDURE

The following example explains how to print a document from the standard accessory application "TextEdit" in macOS.



- To install the printer driver and configure settings in a macOS environment, see the Software Setup Guide.
- The explanations of screens and procedures for use in a macOS environment generally assume that macOS 14 is being used and a PPD driver is installed. The screens may be different depending on the version of the operating system or the software application.
- The menu used to execute printing may vary depending on the application.





Select [Page Setup] from the [File] menu and select the printer.

If the printer drivers appear as a list, select the name of the printer driver to be used from the list.

2



Select paper settings.

- (1) Make sure that the correct printer is selected.
- (2) Select paper settings.

Paper size, paper orientation, and enlarge/reduce settings can be selected.

(3) Click the [OK] button.

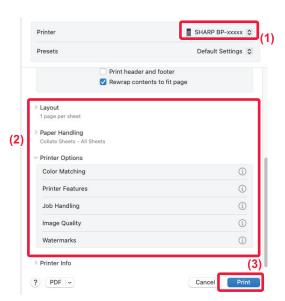


3



Select [Print] from the [File] menu.





Select print settings.

- (1) Make sure that the correct printer is selected.
- (2) Select an item from the menu and configure the settings as needed.
- (3) Click the [Print] button.



The layout of the settings menu is different in macOS 12 and earlier.

SELECTING THE PAPER

This section explains the [Paper Feed] settings in the print settings window.

• When [Auto Select] is selected:

A tray that is set for plain or recycled paper (only plain paper 1 in the factory default setting) of the size specified in "Paper Size" on the page setup screen is automatically selected.

• When a paper tray is specified:

The specified tray is used for printing regardless of the "Paper Size" setting on the page setup screen. For the bypass tray, also specify the paper type. Check that the paper type that is set for the bypass tray of the machine, check that paper of that type is actually loaded into the bypass tray, and then select the appropriate bypass tray (paper type).

• When a paper type is specified:

A tray with the specified type of paper and the size specified in "Paper Size" on the page setup screen is used for printing.



Special media can also be placed in the bypass tray.

For the procedure for loading paper in the bypass tray, see "LOADING PAPER INTO THE BYPASS TRAY (page 1-16)".



When [Enable Detected Paper Size in Bypass Tray] (disabled by factory default) or [Enable Selected Paper Type in Bypass Tray] (enabled by factory default), which you can reach by selecting [System Settings] in the Web page → [Printer Settings] → [Condition Settings] → [Bypass Tray Settings] is enabled, printing will not take place if the paper size or paper type specified in the printer driver is different from the paper size or paper type specified in the settings of the bypass tray.

PRINTING ON ENVELOPES

The bypass tray or tray can be used for envelope printing.



- For the types of paper that can be used in the tray, see "APPLICABLE PAPER TYPES (page 1-9)".
- For the procedure for loading paper in the bypass tray, see "LOADING PAPER INTO THE BYPASS TRAY (page 1-16)".
- For the procedure for loading envelope in the tray, see "TRAY 1 2 (page 1-12)".
- For more information on the procedure for loading paper, see "SELECTING THE PAPER (page 4-17)".
- When using media such as envelopes that can be loaded only in a specific orientation, you can rotate the image 180 degrees. For more information, see "<u>ROTATING THE PRINT IMAGE 180 DEGREES</u> (<u>ROTATE 180 DEGREES</u>) (<u>page 4-38</u>)".
- After printing, there may be creases in the envelope depending on the envelope type and format as well as on the printing environment. Before high-quantity printing, it is recommended that you conduct a test print.

Select the envelope size in the settings of the application ("Page Setup" in many applications) and then perform the following steps.





Select print settings.

- (1) Select the envelope size from the "Paper Size" menu.
- (2) Select [Printer Features] from the "Printer Options", and then select [Paper Source].

 In macOS 12 and earlier, select [Printer Features] and then select [Paper Source].
- (3) Select the [Auto Select] from the "Paper Tray" menu.



When [Enable Selected Paper Type in Bypass Tray] (enabled by factory default) is enabled in the Web page, set the paper type of the bypass tray to [Envelope].

PRINTING WHEN THE USER AUTHENTICATION FUNCTION IS ENABLED

The user information (such as login name and password) that must be entered varies depending on the authentication method being used, so check with the administrator of the machine before printing.



The menu used to execute printing may vary depending on the application.

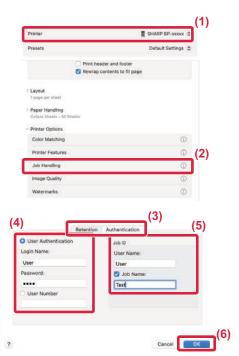




In the application, select [Print] from the [File] menu.



2



Enter your user information.

- (1) Make sure that the machine's printer name is selected.
- (2) Select [Job Handling] from the "Printer Options".

In macOS 12 and earlier, select [Job Handling].

- (3) Switch to [Authentication].
- (4) Enter your user information.
 - When authentication is carried out using the login name/password, enter your login name in "Login Name" and your password (1 to 32 characters) in "Password".
 - When authentication is carried out using the user number, enter your user number (5 to 8 digits) in "User Number".

(5) Enter the user name and job name as necessary.

User Name

Enter your user name using up to 32 characters. The entered user name will appear on the touch panel of the machine. If you do not enter a user name, your PC login name will appear.

Job Name
 Enter a job name using up to 32 characters. The
 entered job name will appear as a file name on the
 touch panel of the machine. If you do not enter a job
 name, the file name set in the application will
 appear.

(6) Click the [OK] button.

FREQUENTLY USED FUNCTIONS

SELECTING THE COLOR MODE

The following three selections are available for the "Color Mode" (a set of colors used for printing):

Automatic	The machine automatically determines whether each page is color or black and white and prints the page accordingly. Pages with colors other than black and white are printed using Y (Yellow), M (Magenta), C (Cyan) and Bk (Black) toner. Pages that are only black and white are printed using Bk (Black) toner only. This is convenient when printing a document that has both color and black and white pages, however, the printing speed is slower.
Color	All pages are printed in color. Both color data and black and white data are printed using Y (Yellow), M (Magenta), C (Cyan) and Bk (Black) toner.
Black and White	All pages are printed in black and white. Color data such as images or materials for a presentation is printed using black toner only. This mode helps conserve color toner when you do not need to print in color, such as when proofreading or checking the layout of a document.



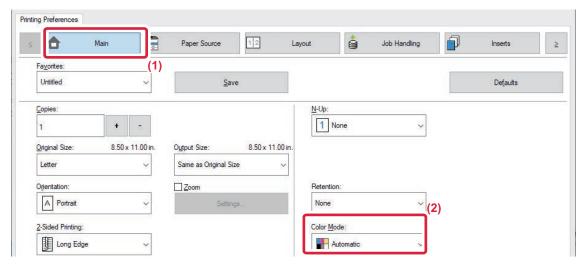
When "Color Mode" is set to [Automatic]:

Even if the print result is black and white, the following types of print jobs will be counted as 4-color (Y (Yellow), M (Magenta), C (Cyan), and Bk (Black)) print jobs.

When you want such jobs to be counted as black and white jobs, select [Black and White].

- When the data is created as color data.
- When the application treats the data as color data even though the data is black and white.
- When an image is hidden under a black and white image.

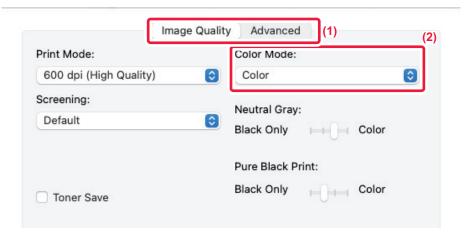
Windows



- (1) Click the [Main] tab.
- (2) Select "Color Mode".



In addition to the [Main] tab, [Color Mode] can also be set on the [Image Quality] tab.



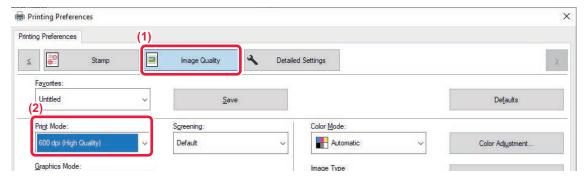
- (1) Select [Image Quality] from the "Printer Options". In macOS 12 and earlier, select [Image Quality].
- (2) Select "Color Mode".

SELECTING THE RESOLUTION

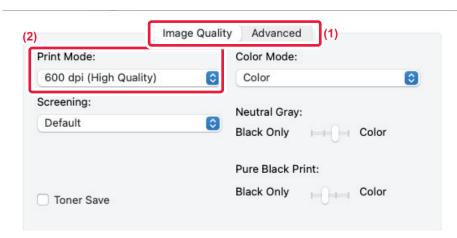
The following two selections are available for "Print Mode" (resolution):

600 dpi	This mode is suitable for printing data such as regular text or a table.
600 dpi (High Quality)	The print quality of color photos and text are high.

Windows



- (1) Click the [Image Quality] tab.
- (2) Select "Print Mode".



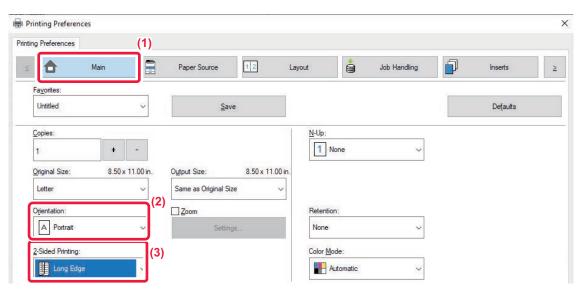
- (1) Select [Image Quality] from the "Printer Options". In macOS 12 and earlier, select [Image Quality].
-ago Qui
- (2) Select "Print Mode".

2-SIDED PRINTING

The machine can print on both sides of the paper. This function is useful for many purposes, and is particularly convenient when you want to create a simple pamphlet. 2-sided printing also helps conserve paper.

Paper orientation	Print results	
Portrait	Long Edge	Short Edge
Landscape	Short Edge	Long Edge
	2 3	2
	The pages are printed so that they can be bound at the left or right side.	The pages are printed so that they can be bound at the top.

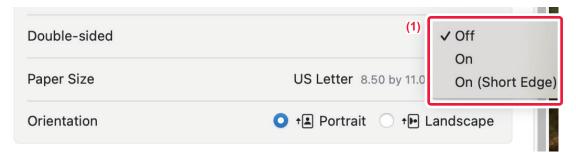
Windows



- (1) Click the [Main] tab.
- (2) Select the paper orientation.
- (3) Select [Long Edge] or [Short Edge].



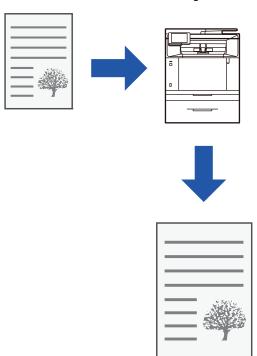
If necessary, you can select the method of implementing 2-sided printing. Click the [Other Settings] button on the [Detailed Settings] tab, and select the mode from "Duplex Style".



(1) Select [On] for long edge binding and [On (Short Edge)] for short edge binding.
In macOS 12 and earlier, select [Long-Edge binding] or [Short-Edge binding].

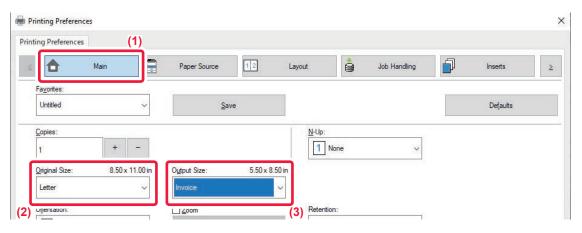
FITTING THE PRINT IMAGE TO THE PAPER

This function automatically enlarges or reduces the print image to match the size of the paper loaded in the machine. This function is convenient when enlarging an invoice or A5 size document to letter or A4 size to make it easier to view, or when printing a document on paper that is different in size from the original document.



The following example explains how to print an Invoice (or A5) size document on Letter (or A4) size paper.

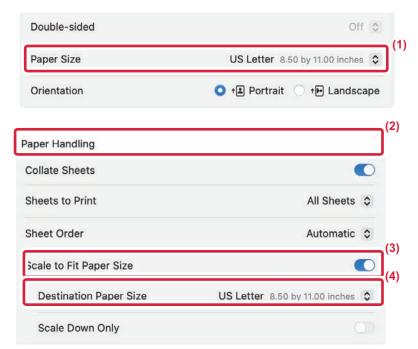
Windows



- (1) Click the [Main] tab.
- (2) Select the original size from [Original Size] (for example: Letter).
- (3) Select the actual paper size to be used for printing from [Output Size] (for example: Invoice). If the output size is larger than the original size, the printed image will be automatically enlarged.



If A0, A1, A2, B1, B2, B3, A3, B4, Ledger, or 8K size is selected in "Original Size", Letter (or A4) is automatically selected in "Output Size".



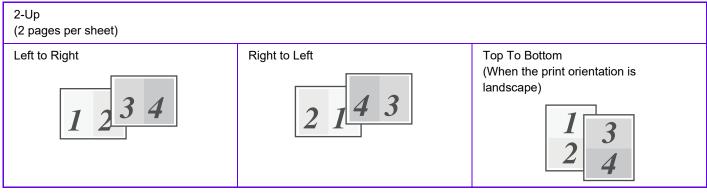
- (1) Check the paper size for the print image (for example: Invoice).
- (2) Select [Paper Handling].
- (3) Select [Scale to fit paper size].
- (4) Select the actual paper size to be used for printing (for example: US Letter) from "Destination Paper Size".

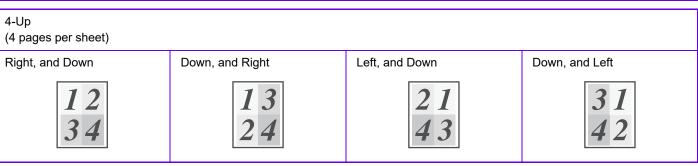
PRINTING MULTIPLE PAGES ON ONE PAGE

This function reduces the print image and prints multiple pages on a single sheet of paper. You can print only the first page in the original size and print multiple reduced pages on the subsequent sheets.

For example, when [2-Up] (2 pages per sheet) or [4-Up] (4 pages per sheet) is selected, the following print results will be obtained, depending on the selected page order.

This is convenient when you want to print multiple images such as photos on a single sheet of paper, and when you want to conserve paper. When used in combination with 2-sided printing, this function saves more paper.





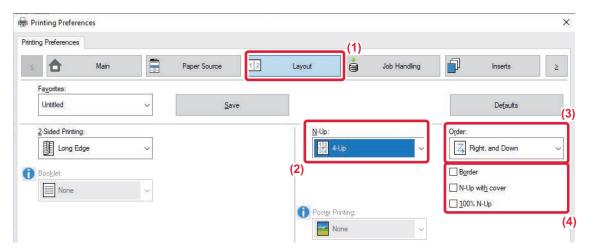


- [N-Up] that can be set on the [Layout] tab can also be set on the [Main] tab. ("Order" can only be set in the [Layout] tab.)
- · Note the following when printing multiple pages on one sheet:
- The page orders for 6-Up, 8-Up, 9-Up, and 16-Up are the same as for 4-Up.
- In a Windows environment, the page order can be viewed in the print image in the printer driver properties window.
- In a macOS environment, the page orders are displayed as selections.
- In a macOS environment, the number of pages that can be printed on a single sheet is 2, 4, 6, 9, or 16. Printing 8 pages on one sheet is not supported.

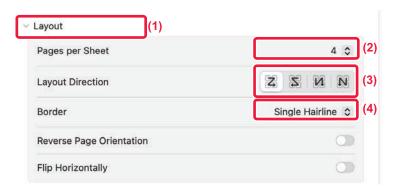


The function for printing only the first page normally can only be used in the PCL6 printer driver.

Windows



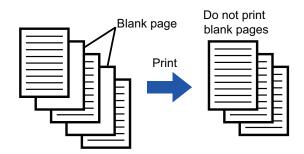
- (1) Click the [Layout] tab.
- (2) Select the number of pages per sheet.
- (3) Select the order of the pages.
- (4) If you wish to print borderlines, click the [Border] checkbox so that the checkmark **✓** appears.
 - To print the first page normally (as a cover), select the [N-Up with cover] checkbox (☑). (PCL6 only)
 - When [100% N-Up] is selected (✓) for jobs such as N-Up copying of two A5 size pages onto one A4 sheet, the pages will be printed at the full size of the original. If you select [Border] at this time, only the border will be printed. ✓



- (1) Select [Layout].
- (2) Select the number of pages per sheet.
- (3) Select the order of the pages.
- (4) If you wish to print borderlines, select the desired type of borderline.

PRINTING WHILE SKIPPING BLANK PAGES

If the scanned original contains blank pages, the blank pages are skipped during printing. The machine detects blank pages and does not print them. This eliminates unnecessary printing without you having to check for blank pages before printing.



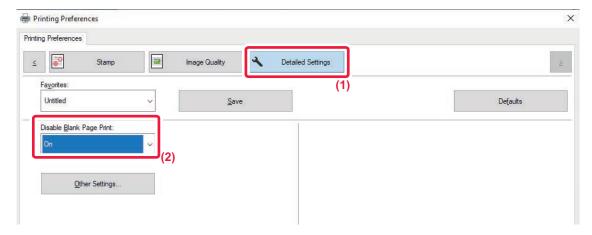


This function is available in a Windows environment.



- Depending on the state of the original, some pages that are not blank may be detected as blank pages and thus not being printed, or some pages that are blank may not be detected as blank and thus printed.
- In N-Up Print, blank pages are not excluded and are printed.

Windows



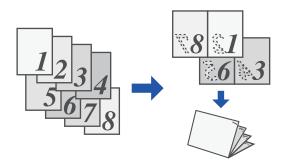
- (1) Click the [Detailed Settings] tab.
- (2) Select [On] in [Disable Blank Page Print].

CONVENIENT PRINTING FUNCTIONS

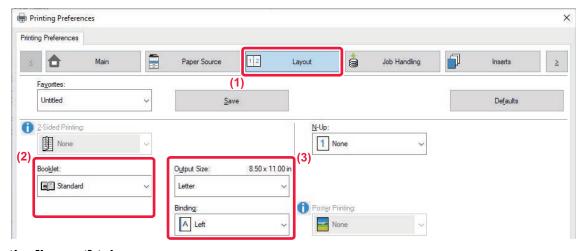
CONVENIENT FUNCTIONS FOR CREATING PAMPHLETS AND POSTERS

CREATE A PAMPHLET (BOOKLET)

The pamphlet function prints on the front and back of each sheet of paper so that the sheets can be folded and bound to create a pamphlet.



Windows



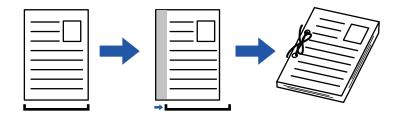
- (1) Click the [Layout] tab.
- (2) Select [Standard] in "Booklet".
 The printed image will be enlarged or reduced to fit the paper selected in "Output Size".
- (3) Select the specified output size and the binding edge.



- (1) Select [Printer Features] from the "Printer Options", and then select [Output]. In macOS 12 and earlier, select [Printer Features] and then select [Output].
- (2) Select "Binding Edge".
- (3) Select "Booklet".

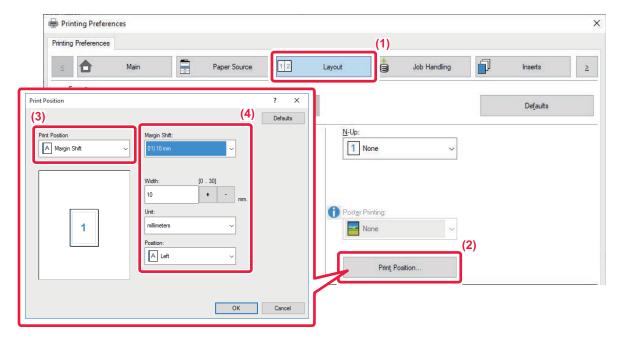
PRINTING WITH MARGIN SHIFT SETTING (MARGIN)

This function shifts the print image to increase the margin at the left, the right, or the top of the paper.



By shifting the image, the part of the image that is outside the print area will not be printed.

Windows



- (1) Click the [Layout] tab.
- (2) Click the [Print Position] button.
- (3) Select [Margin Shift].
- (4) Select the shift width.

Select from the "Margin Shift" menu. If you wish to configure another numeric setting, select the setting and click + - buttons or directly enter the number.



- (1) Select [Printer Features] from the "Printer Options", and then select [Output].

 In macOS 12 and earlier, select [Printer Features] and then select [Output]
- (2) Select "Binding Edge".
- (3) Select "Margin Shift".

CREATE A LARGE POSTER (POSTER PRINTING)

One page of print data is enlarged and printed using multiple sheets of paper (2 sheets (1 x 2), 4 sheets (2 x 2), 9 sheets (3 x 3) or 16 sheets (4 x 4)). The sheets can then be attached together to create a large poster.

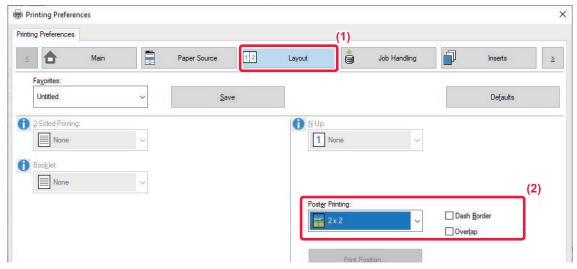
To enable precise alignment of the edges of the sheets during attachment, borderlines can be printed or overlapping edges can be created (overlap function).





This function is available in a Windows environment.

Windows



- (1) Click the [Layout] tab.
- (2) Select the number of sheets to be used in "Poster Printing".

If you wish to print borderlines and/or use the overlap function, click the corresponding checkboxes so that the $\boxed{\checkmark}$ appears.

FUNCTIONS TO ADJUST THE SIZE AND ORIENTATION OF THE IMAGE

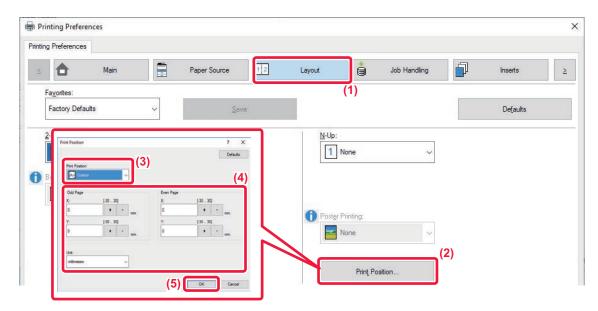
ADJUST PRINT POSITION ON ODD AND EVEN PAGES SEPARATELY (PRINT POSITION)

This function sets different print positions (margins) separately for odd and even pages and prints the pages.



This function is available in a Windows environment.

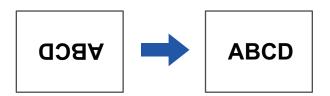
Windows



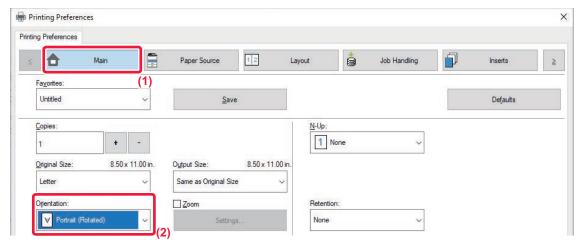
- (1) Click the [Layout] tab.
- (2) Click the [Print Position] button.
- (3) Select [Custom].
- (4) Set the amount of shifting of the print position for odd-numbered pages and even-numbered pages.
- (5) Click the [OK] button.

ROTATING THE PRINT IMAGE 180 DEGREES (ROTATE 180 DEGREES)

This feature rotates the image 180 degrees so that it can be printed correctly on paper that can be loaded in only one orientation (such as envelopes or paper with punch holes).



Windows



- (1) Click the [Main] tab.
- (2) Select [Portrait (Rotated)] or [Landscape (Rotated)] in "Orientation".

macOS



- (1) Select [Layout].
- (2) Enable [Reverse Page Orientation].

In macOS 12 and earlier, select the [Reverse Page Orientation] checkbox so that V appears.

ENLARGING/REDUCING THE PRINT IMAGE (ZOOM SETTING/ENLARGE OR REDUCE)

This function enlarges or reduces the image to a selected percentage.

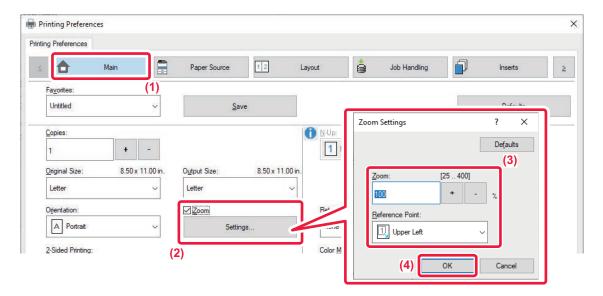
This allows you to enlarge a small image or add margins to the paper by slightly reducing an image.





When using the PS printer driver (Windows), you can set the width and length percentages separately to change the proportions of the image.

Windows



- (1) Click the [Main] tab.
- (2) Click the [Zoom] checkbox so that **☑** appears, and click the [Settings] button.
- (3) Enter the percentage.

By clicking the + - button, you can specify the value in increments of 1%. In addition, select [Upper Left] or [Center] for the base point on the paper.

(4) Click the [OK] button.



- (1) Select [Page Setup] from the [File] menu and enter the ratio (%).
- (2) Click the [OK] button.

ADJUST THE LINE THICKNESS (WIDTH)

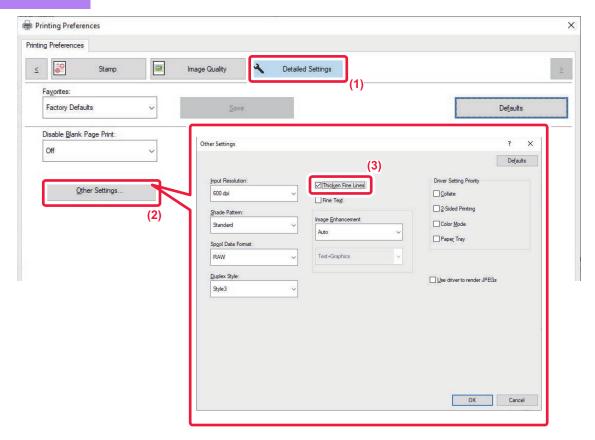
Thickening fine lines in Excel

When fine border lines in Excel do not print correctly, you can make the lines thicker.



- · This function is available in a Windows environment.
- This function can be used when the PCL6 printer driver is used.
- · Normally this setting is not necessary.

Windows

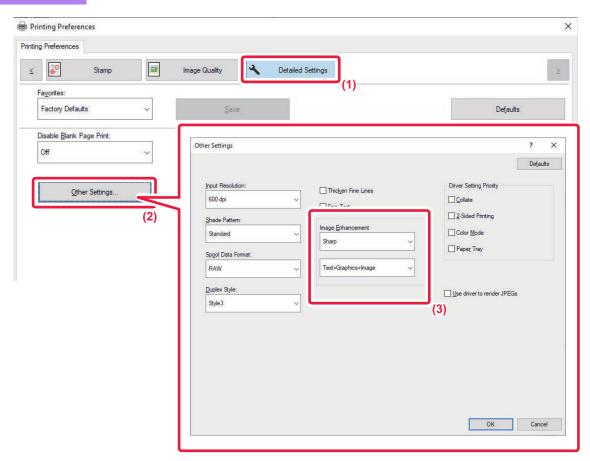


- (1) Click the [Detailed Settings] tab.
- (2) Click the [Other Settings] button.
- (3) Select the [Thicken Fine Lines] checkbox (✓).

Image Enhancement

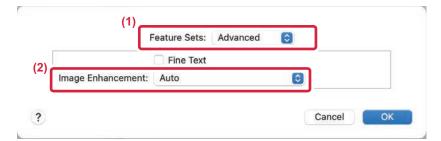
Image enhancement can be used to adjust the thickness of text and lines.

Windows



- (1) Click the [Detailed Settings] tab.
- (2) Click the [Other Settings] button.
- (3) Specify the settings.

Item			Description	
Image Enhancement	Auto		You can make the edges of text and graphics smoother	
	Off		or sharper.	
	Sharp	Text	Auto: Perform optimal image enhancement. Off: No image enhancement is applied.	
		Text+Graphics	Sharp: Image enhancement is applied sharply.	
		Text+Graphics+ Image		

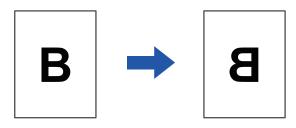


- (1) Select [Printer Features] from the "Printer Options", and then select [Advanced].
 In macOS 12 and earlier, select [Printer Features] and then select [Advanced].
- (2) Specify the settings.

PRINT A MIRROR-IMAGE (MIRROR-IMAGE REVERSE/VISUAL EFFECTS)

The image is reversed to create a mirror image.

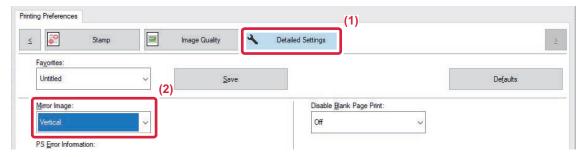
This function is conveniently used to print a design for a woodblock print or other printing medium.





In a Windows environment, this function is only available when using the PS printer driver.

Windows



- (1) Click the [Detailed Settings] tab.
- (2) If you wish to reverse the image horizontally, select [Horizontal]. If you wish to reverse the image vertically, select [Vertical].

macOS



- (1) Select [Layout].
- (2) Enable the [Flip Horizontally].

In macOS 12 and earlier, select the [Flip Horizontally] checkbox ().

COLOR MODE ADJUSTING FUNCTION

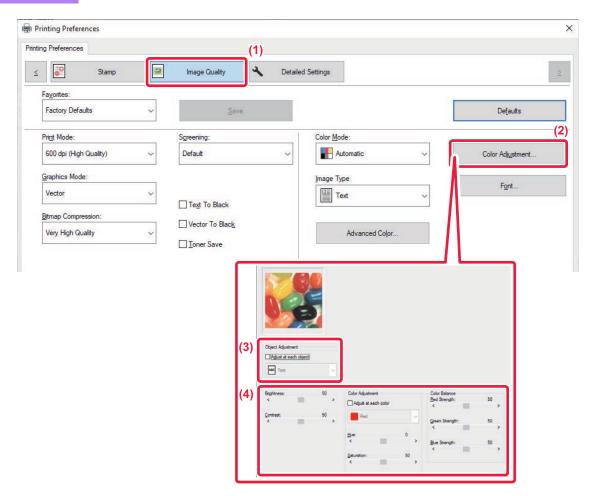
ADJUST THE BRIGHTNESS AND CONTRAST OF THE IMAGE (COLOR ADJUSTMENT/RGB ADJUSTMENT)

This function adjusts the brightness and contrast in the print settings when a photo or other image is printed. This function makes simple corrections even if image editing software is not installed on your computer.



This function is available in a Windows environment.

Windows

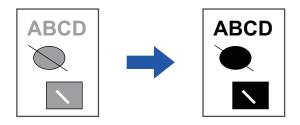


- (1) Click the [Image Quality] tab.
- (2) Click the [Color Adjustment] button.

 When using the PS printer driver, click the [RGB Adjustment] button. Proceed to step (4).
- (3) To adjust objects (text, graphics, photos) individually, select the [Adjust at each object] checkbox (✓) and select the object.
- (4) Drag the slide bar or click D buttons to adjust the image.

PRINTING FAINT TEXT AND LINES IN BLACK (TEXT TO BLACK/VECTOR TO BLACK)

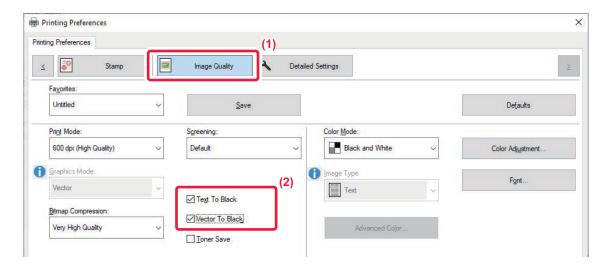
When printing a color image in grayscale, text and lines that are drawn in faint colors are printed in black. This function allows you to bring out color text and lines that are faint and difficult to see when printed in grayscale.





- Raster data such as bitmap images cannot be adjusted.
- · This function is available in a Windows environment.

Windows



- (1) Click the [Image Quality] tab.
- (2) Select the [Text To Black] checkbox and/or the [Vector To Black] checkbox so that **☑** appears.
 - When [Text To Black] is selected, all text other than white text is printed in black.
 - When [Vector To Black] is selected, all vector graphics other than white lines and areas are printed in black.

SELECTING COLOR SETTINGS TO MATCH THE IMAGE TYPE (ADVANCED COLOR SETTINGS)

Preset color settings are available in the machine's printer driver for various uses. These enable printing using the most suitable color settings for the color image type.

Advanced color settings, such as the color management settings and the screening setting for adjusting the color tone expression, are also available for meeting the needs of color image printing.

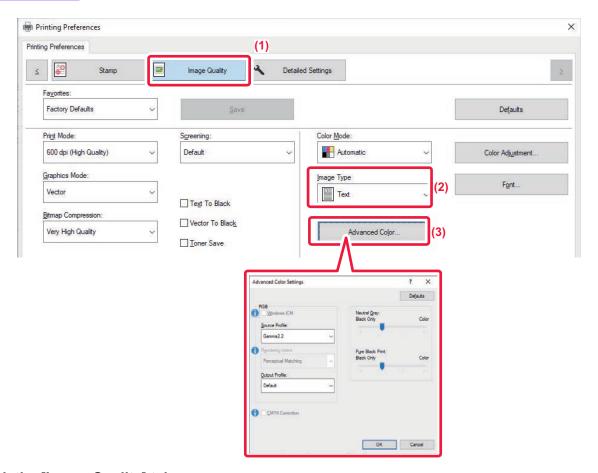
The following color management settings are available.

Windows ICM	Color management method in a Windows environment		
ColorSync	Color management method in a macOS environment		
Source Profile	Select a source color profile of color matching.		
Rendering Intent	The selections below provide the ability to modify color image processing to suit specific preferences. (Color matching method: Method of color converting RGB colors on the display, etc. into CMYK colors in the printer)		
Output Profile	Select a color profile for the image to be printed		
CMYK Correction*1	Correct the image to obtain the optimum printing result when printing a CMYK image.		
Screening	Select the screening to modify the image to suit specific preferences, according to the appropriate image processing method.		
Neutral Gray	Select a creating method of neutral gray.		
Pure Black Print	Select whether you want to print black data area with only black toner.		
Black Overprint*2	Prevents whitening of the outline of black text.		
CMYK Simulation*2	Adjusts the colors to simulate printing that would be obtained with the process colors used in printing presses.		
Simulation Profile*2	Select the simulation target.		

^{*1} Can only be used when using the PCL6 printer driver.

^{*2} Can only be used when using the PS printer driver (Windows/macOS).

Windows



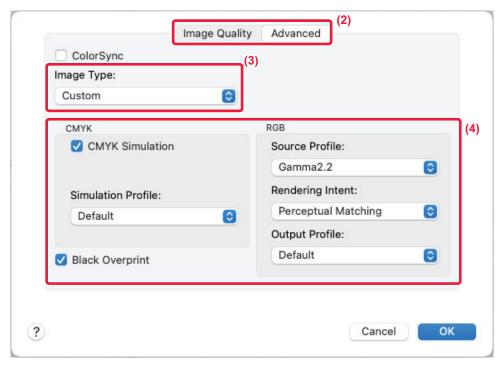
(1) Click the [Image Quality] tab.

(2) Select [Image Type].

- · Text: Data consisting mostly of text
- Presentation: Data with many photos or illustrations
- · Photo: Photo data or data that uses photos
- CAD: Engineering drawing data
- Scan: Data scanned by a scanner
- Colorimetric: Data to be printed in colors as viewed on the screen
- Custom: Data to be printed with special settings

(3) Click the [Advanced Color] button and specify the settings.

- To configure color management using the Windows OS ICM, set "Image Type" to [Custom] in step (2). Then, click the [Windows ICM] checkbox so that the checkmark ✓ appears.
- To configure "Source Profile" and other detailed color management tasks, select the desired settings from the menus.



(1) Select [Image Quality] from the "Printer Options".

In macOS 12 and earlier, select [Image Quality].

(2) Click the [Advanced] tab.

To use the macOS color management function, select the [ColorSync] checkbox so that the checkmark \checkmark appears. In this case, you cannot select "Image Type".

(3) Select [Image Type].

To configure color management settings, select the desired settings from the menus. To select a "CMYK Simulation" setting, select [Custom] in "Image Type", select the [CMYK Simulation] checkbox (), and then select the desired setting.

- · Text: Data consisting mostly of text
- · Presentation: Data with many photos or illustrations
- Photo: Photo data or data that uses photos
- · CAD: Engineering drawing data
- Scan: Data scanned by a scanner
- Colorimetric: Data to be printed in colors as viewed on the screen
- · Custom: Data to be printed with special settings

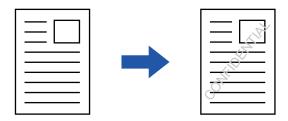
(4) Specify the settings.

FUNCTIONS TO COMBINE TEXT AND IMAGES

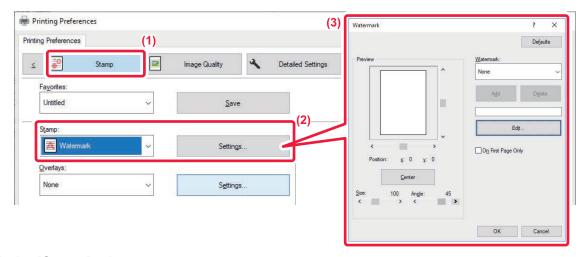
ADDING A WATERMARK TO PRINTED PAGES (WATERMARK)

This function adds faint shadow-like text as a watermark in the background of the printed image. The size and angle of the watermark text can be adjusted.

The watermark text can be selected from the previously registered text in the list. When necessary, you can enter text to create an original watermark.



Windows



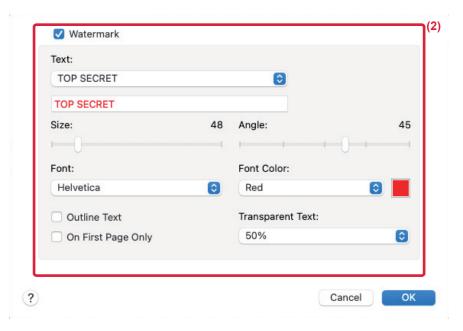
- (1) Click the [Stamp] tab.
- (2) Select [Watermark] from "Stamp" and click the [Settings] button.
- (3) Select the watermark to be used and click the [OK] button.

Click the [Edit] button to edit the font color and select other detailed settings.



If you want to create a new watermark, enter the text of the watermark in the text box and click the [Add] button.

macOS



(1) Select [Watermarks] from the "Printer Options".

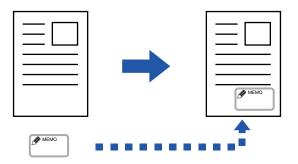
In macOS 12 and earlier, select [Watermarks].

- (2) Click the [Watermark] checkbox and configure watermark settings.
 - Configure detailed watermark settings such as selection of the text.
 - Adjust the size and angle of the text by dragging the slide bar].

PRINTING AN IMAGE OVER THE PRINT DATA (IMAGE STAMP)

This function prints a bitmap or JPEG image stored on your PC over the print data.

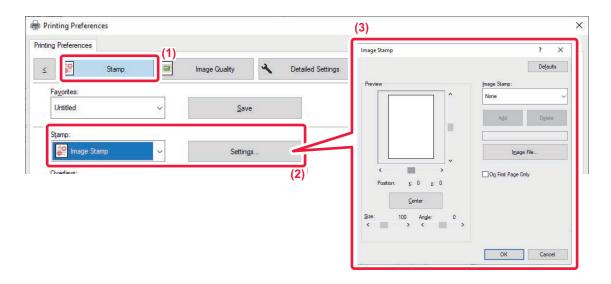
This function prints a frequently used image or an icon of your own creation as if it is stamped on the print data. The size, position, and angle of the image can be adjusted.





This function is available in a Windows environment.

Windows

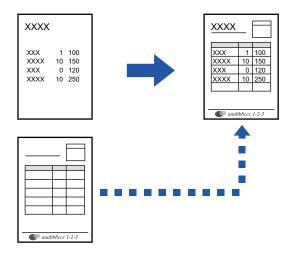


- (1) Click the [Stamp] tab.
- (2) Select [Image Stamp] from "Stamp" and click the [Settings] button.
- (3) Select the image stamp to be used, and click the [OK] button.
 - If an image stamp has already been stored, it can be selected from the menu.
 - If you have not stored an image stamp, click the [Image File], select the file you wish to use for the image stamp, and click the [Add] button.

OVERLAY A FIXED FORM ON THE PRINT DATA (OVERLAYS)

This function overlays data on a fixed form you have prepared.

By creating table rulings or a decorative frame in an application different from that of the text file and registering the data as an overlay file, an attractive print result can be easily obtained without the need for complex manipulations.

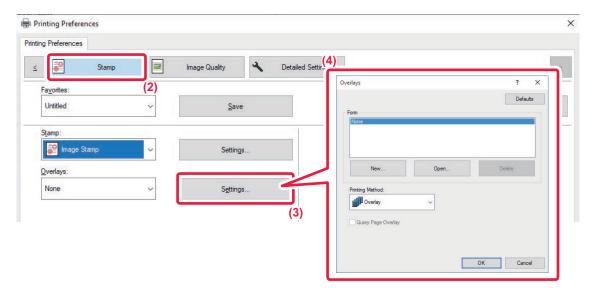




This function is available in a Windows environment.

Windows

Creating an overlay file



- (1) Open the driver properties window from the application that is used for creating overlay data.
- (2) Click the [Stamp] tab.
- (3) Click the [Settings] button.

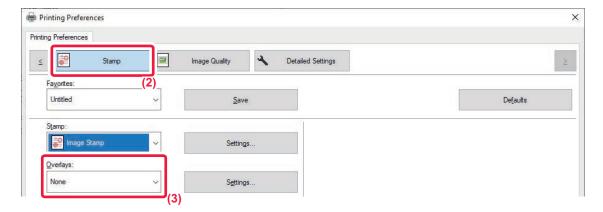
(4) Click the [New] button and specify the name and folder to be used for the overlay file that you wish to create.

The file will be created when the settings are completed and printing is started.



- When printing is started, a confirmation message will appear. The overlay file will not be created until the [Yes] button is clicked.
- When you click the [Open] button, the existing overlay file is registered.

Printing with an overlay file



- (1) Open the driver properties window from the application that is used for printing with an overlay file.
- (2) Click the [Stamp] tab.
- (3) Select an overlay file.

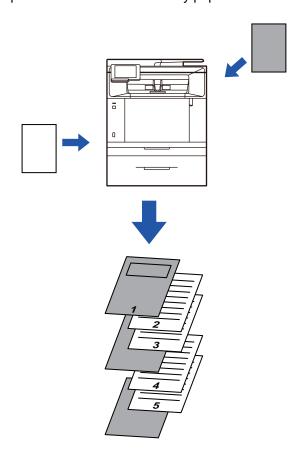
A previously created or stored overlay file can be selected from the menu.

PRINT FUNCTIONS FOR SPECIAL PURPOSES

PRINTING SPECIFIC PAGES ON DIFFERENT PAPER (COVER PAGE)

In a Windows environment

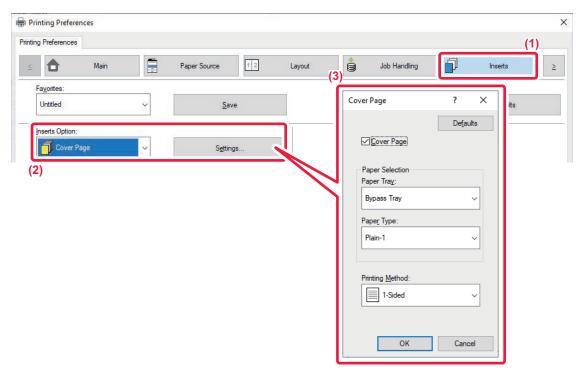
The front covers of a document are printed on paper that is different from the other pages. Use this function when you wish to print the front covers on heavy paper.



In a macOS environment

The front covers of a document are printed on paper that is different from the other pages. Use this function when you wish to print the front covers on heavy paper.

Windows



- (1) Click the [Inserts] tab.
- (2) Select [Cover] from [Inserts Option], and click the [Settings] button.
- (3) Select the cover page settings.

 Click the "Cover Page" checkbox, select the tray and paper type to be used for the cover, and set the print method.



When [Bypass Tray] is selected in "Paper Tray", be sure to select the "Paper Type" and load that type of paper in the bypass tray.

macOS

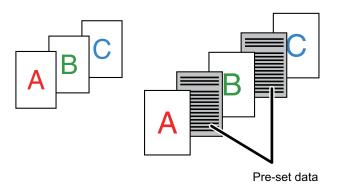


- (1) Select [Printer Features] from the "Printer Options", and then select [Cover Page].
 In macOS 12 and earlier, select [Printer Features] and then select [Cover Page].
- (2) Select the print settings for the "Cover Page".
- (3) Select the cover insertion settings.
 Select the paper tray and paper type for the front covers.

INSERT PRESET DATA BEFORE OR AFTER EACH PAGE (PAGE INTERLEAVE)

This function inserts a preset data item into every page during printing.

You can easily create documents with opened page spread that is made up of text on the left-hand page and a memo space on the right-hand page.





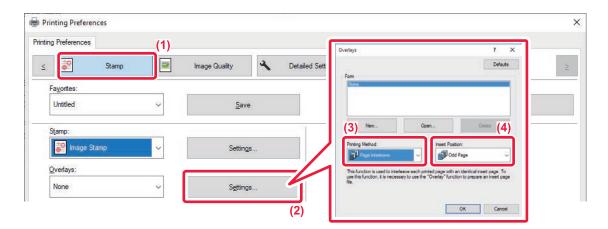
- This function is available in a Windows environment.
- This function can be used when the PCL6 printer driver is used.



You have to create page data to be inserted in advance.

For the procedure for creating page data, see "Creating an overlay file (page 4-53)" in "OVERLAY A FIXED FORM ON THE PRINT DATA (OVERLAYS) (page 4-53)".

Windows



- (1) Click the [Stamp] tab.
- (2) Click the [Settings] button.
- (3) Select [Page Interleave] from the "Printing Method".
- (4) Set the overlay data to be inserted and set its insertion position.

CONVENIENT PRINTER FUNCTIONS

SAVING AND USING PRINT FILES (RETENTION)

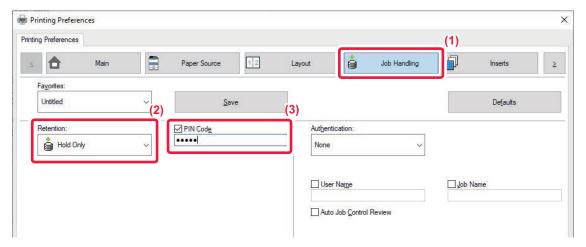
This function stores a print job as a file on the machine's memory, allowing the job to be printed from the operation panel when needed. Setting a password (5 to 8 digit PIN) when printing from a computer enhances the confidentiality of stored data.

When a password is set, the password must be entered when printing stored data from the machine.



Print data exceeding 1 GB cannot be saved.

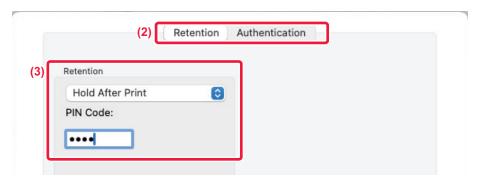
Windows



- (1) Click the [Job Handling] tab.
- (2) Select "Retention".

To enter a password (5 to 8-digit number), click the [PIN Code] checkbox so that the checkmark 🗹 appears.

macOS

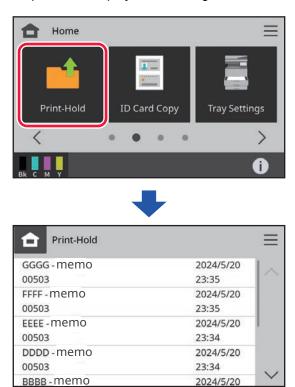


- (1) Select [Job Handling] from the "Printer Options".
 - In macOS 12 and earlier, select [Job Handling].
- (2) Select [Retention].
- (3) Select how to save the print data in "Retention".

If necessary, you can enter a password (5 to 8-digit number).

Printing retentioned data

When retention is performed, the touch panel will display the following.



Tap the data you want to print, and a confirmation screen for printing will appear. To print, tap the "Print" button.

To delete the data after printing, tap the "Print and Delete the Data" button.

To delete the data without printing, tap the "Delete" button.

For data for which a password has been set, the password entry screen will appear before the print confirmation screen.

PRINTING WITHOUT THE PRINTER DRIVER

EXTENSION OF PRINTABLE FILES

When you do not have the printer driver installed on your PC, or when the application used to open a file that you wish to print is not available, you can print directly to the machine without using the printer driver.

The file types (and corresponding extensions) that can be printed directly are shown below.

File Type	TIFF	JPEG	PNG	PCL	PS	PDF
Extension	tiff, tif	jpeg, jpg, jpe, jfif	png	pcl, prn, txt	ps, prn	pdf



- Even if the print result is black and white, the following types of print jobs will be counted as 4-color (Y (Yellow), M (Magenta), C (Cyan), and Bk (Black)) print jobs. When you want such jobs to be counted as black and white jobs, select the black and white printing option.
 - · When the data is created as color data.
 - · When the application treats the data as color data even though the data is black and white.
 - · When an image is hidden under a black and white image.
- Some files may not print correctly even if shown in the above table.

DIRECTLY PRINTING A FILE IN USB MEMORY

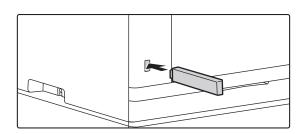
Files in a USB memory device connected to the machine are printed from the operation panel of the machine without using the printer driver.

When the printer driver of the machine is not installed on your PC, you can copy a file into a commercially available USB memory device and connect the device to the machine to print the file directly.



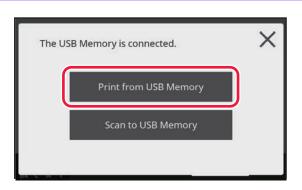
Use FAT32, NTFS or exFAT format for USB memory device.





Connect the USB memory device to the machine.

2



When the screen for selecting the action appears, tap [Print from USB Memory].

If the screen does not appear, tap the "Print from USB Memory" key.





Tap the key of the file that you wish to print, and tap the [Choose Print Settings] key.

- The icon appears to the left of keys of files that can be printed.
- The icon is displayed to the left of keys of folders in the USB memory device. To display a folder or a file in a folder, tap this key.



- · A total of 100 keys of files and folders can be displayed in one level.
- Tap to move up one folder level.
- Tap the menu icon and then tap the [Sort Method Setting] key to change the sort order of files and folders displayed on the screen. Tap the [File Name (Ascending Order)] key or the [File Name (Descending Order)] key that appears to change the ascending or descending order.



Select the print conditions.

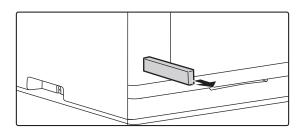
If you selected a PS or PCL file that includes print conditions in step 3, the print conditions in the file will be given priority.

5

Tap the [Start] key.

Printing begins after the selected file is transferred.

6



Remove the USB memory device from the machine.

DIRECTLY PRINTING FROM A COMPUTER

FTP PRINT

You can print a file from your PC by simply dragging and dropping the file onto the FTP server of the machine. **Performing FTP print**

Enter the IP address of this machine in the server name field of your FTP client application to connect to this machine. When you upload the file you want to print in the "Ip" folder on the FTP server of this machine, printing will start automatically.



- If you selected a PS or PCL file that includes print conditions, the print conditions in the file will be given priority.
- When user authentication is enabled in the settings from the operation panel, the print function may be restricted. For more information, ask your administrator.

APPENDIX

PRINTER DRIVER SPECIFICATIONS LIST

For information on the setting items, refer to printer driver Help.

PRINTER DRIVER SETTINGS SCREEN / REFERRING TO HELP (page 4-5)



The specifications of each function in Windows PPD and macOS PS vary depending on the operating system version and the application.

Main

Function	PCL6	PS	Windows PPD	macOS PS
Copies	1-999	1-999	1-9999	1-9999
Collate	Yes	Yes	Yes	Yes
Original Size	Yes	Yes	Yes	Yes
Output Size	Yes	Yes	No	No
Orientation	Yes	Yes	Yes	Yes
Adjust to Paper Size	No	No	No	Yes
Zoom	Yes	Yes	Yes	Yes
2-Sided	Yes	Yes	Yes	Yes
N-Up	2, 4, 6, 8, 9, 16	2, 4, 6, 8, 9, 16	2, 4, 6, 9,16	2, 4, 6, 9,16
Retention	Yes	Yes	No	Yes
Color Mode	Yes	Yes	Yes	Yes



Zoom (PCL6/Windows PPD/macOS PS): The horizontal and vertical proportion cannot be set separately.

Paper Source

Function	PCL6	PS	Windows PPD	macOS PS
Output Size	Yes	Yes	No	No
Paper Tray	Yes	Yes	Yes	Yes
Paper Type	Yes	Yes	Yes	Yes
Tray Status	Yes	Yes	No	No

Layout

Function	PCL6	PS	Windows PPD	macOS PS
2-Sided	Yes	Yes	Yes	Yes
Booklet	Yes	Yes	Yes	Yes

Fun	ction	PCL6	PS	Windows PPD	macOS PS
N-Up	Page No.	2, 4, 6, 8, 9, 16	2, 4, 6, 8, 9, 16	2, 4, 6, 9,16	2, 4, 6, 9,16
	Order	Yes	Yes	Yes	Yes
	Border	Yes	Yes	Yes	Yes
	N-Up with cover	Yes	No	No	No
	100% N-Up	Yes	Yes	No	No
Poster Printing		Yes	Yes	No	No
Print Position	Margin Shift	0 inch to 1.2 inch (0mm to 30mm)			
	Custom	Yes	No	No	No

Job Handling

Function	PCL6	PS	Windows PPD	macOS PS
Notify Job End	Yes	Yes	No	No
Authentication	Yes	Yes	No	Yes

Inserts

Function	PCL6	PS	Windows PPD	macOS PS
Cover Page	Yes	Yes	Yes	Yes

Stamp

Function	PCL6	PS	Windows PPD	macOS PS
Watermark	Yes	Yes	Yes	Yes
Image Stamp	Yes	Yes	No	No
Overlay	Yes	Yes	No	No

Image Quality

Function	PCL6	PS	Windows PPD	macOS PS
Print Mode	Yes	Yes	Yes	Yes
Graphics Mode	Yes	No	No	No
Bitmap Compression	Yes	Yes	No	No
Screening	Yes	Yes	Yes	Yes
Text To Black	Yes	Yes	No	No
Vector To Black	Yes	Yes	No	No
Toner Save	Yes	Yes	Yes	Yes
Color Mode	Yes	Yes	Yes	Yes
Image Type	Yes	Yes	Yes	Yes
Advanced Color	Yes	Yes	No	No
Color Adjustment	Yes	No	No	No
RGB Adjustment	No	Yes	No	No

Function	PCL6	PS	Windows PPD	macOS PS
Font	Yes	Yes	Yes	No



Toner Save: This setting may not operate in some applications and operating systems.

Detailed Settings

Function	PCL6	PS	Windows PPD	macOS PS
Mirror Image	No	Yes	Yes	Yes
PS Error Information	No	Yes	Yes	No
PS Pass-Through	No	Yes	No	No
Job Compression	No	Yes	No	No
Disable Blank Page Print	Yes	Yes	No	No
Other Settings				
Input Resolution	Yes	Yes	No	No
Shade Pattern	Yes	No	No	No
Spool Data Format	Yes	Yes	No	No
Duplex Style	Yes	Yes	No	No
Use driver to render JPEGs	Yes	Yes	No	No
Expand	No	No	No	No
Thicken Fine Lines	Yes	No	No	No
Fine Text	Yes	Yes	Yes	Yes
Image Enhancement	Yes	Yes	Yes	Yes
Driver Setting Priority	Yes	Yes	No	No

FACSIMILE



BEFORE USING THE MACHINE AS A FAX
BEFORE USING THE MACHINE AS A FAX 5-3 FAX MODE 5-5 BASIC MODE 5-5 MENU MODE 5-7 SELECTING FAX MODE 5-7 FAX TRANSMISSION SEQUENCE 5-8 IF PAPER MISFEEDS IN THE AUTOMATIC DOCUMENT FEEDER COMMUNICATION SETTINGS 5-10
ENTERING DESTINATIONS
ENTERING DESTINATIONS. 5-12 ENTERING A DESTINATION NUMBER USING THE NUMERIC KEYS . 5-12 RETRIEVING A DESTINATION FROM AN ADDRESS BOOK . 5-13 THE SELECTED DESTINATIONS . 5-15 USING A SEARCH NUMBER TO RETRIEVE A DESTINATION . 5-16 USING A TRANSMISSION LOG TO RESEND . 5-17 SENDING BY CHAIN DIALING . 5-18 ADDRESS BOOK DESTINATION REGISTRATION . 5-19 GROUP REGISTRATION . 5-20 EDITING DESTINATION . 5-21 DELETING DESTINATION . 5-22
BASIC TRANSMISSION METHODS
BASIC TRANSMISSION METHODS 5-23 FAX TRANSMISSION METHODS 5-23 WHEN THE LINE IS BUSY 5-24 WHEN A COMMUNICATION ERROR OCCURS 5-25 FAX DEST. CONFIRMATION MODE 5-25 FAX TRANSMISSION METHODS 5-27 USING THE AUTOMATIC DOCUMENT FEEDER FOR TRANSMISSION 5-27 USING THE AUTOMATIC DOCUMENT FEEDER FOR FAXING IN DIRECT TX MODE 5-28 USING THE DOCUMENT GLASS FOR TRANSMISSION 5-30
USING THE DOCUMENT GLASS TO SEND A FAX IN DIRECT TX MODE. 5-32 TRANSMISSION USING THE SPEAKER 5-34 SENDING THE SAME FAX TO MULTIPLE DESTINATIONS (BROADCAST TRANSMISSION) 5-35 RESENDING TO UNSUCCESSFUL BROADCAST TRANSMISSION DESTINATIONS 5-37 SENDING A FAX DIRECTLY FROM A COMPUTER (PC-Fax) 5-38

DELETING A TRANSMISSION LOG
CHANGING THE EXPOSURE
FAX RECEPTION
RECEIVING A FAX RECEIVING A FAX AUTOMATICALLY RECEIVING A FAX MANUALLY PRINTING RECEIVED DATA PRINTING A RECEIVED DATA (Hold setting for received data print) 5-46 FORWARDING RECEIVED DATA FORWARDING RECEIVED FAXES (FAX DATA FORWARD). 5-46 FORWARD). 5-46
OTHERS FUNCTIONS
STORING FAX OPERATIONS (PROGRAM)
USING AN EXTERNAL TELEPHONE
CONNECTING AN EXTERNAL TELEPHONE

EXTERNAL TELEPHONE (REMOTE RECEPTION) . . . 5-56 MAKING AND RECEIVING PHONE CALLS. 5-57



CHECK THE COMMUNICATION STATUS FAX JOBS...... 5-58 CANCEL A CURRENTLY JOB. 5-58 CANCEL A RESERVED JOB......5-59 CHECK THE DETAILS OF THE RESERVED JOB 5-59 CHECK THE DETAILS OF THE RESERVED JOB 5-59 CHECK THE DETAILS OF THE COMPLETED JOB... 5-59 **COMPLETED FAX TRANSMISSION/RECEPTION JOBS 5-60** FAX RECEPTION JOBS 5-60 TIMER TRANSMISSION JOBS 5-60 RETRY JOBS......5-60 RECEIVED DATA IS NOT PRINTED......5-60 RECEIVED FAX IS PRINTED 5-60 CHECKING IMAGE SENDING ACTIVITIES..... 5-61 PRINTING IMAGE SENDING ACTIVITY REPORTS... 5-61 INFORMATION APPEARING IN THE RESULT COLUMN ... 5-61

BEFORE USING THE MACHINE AS A FAX

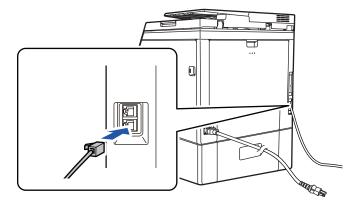
BEFORE USING THE MACHINE AS A FAX

To use the machine as a facsimile, connect the telephone line, and set the telephone line type.



Connecting to the telephone line.

Insert the plug on one end of the telephone line cord into the telephone line jack (LINE) of the machine as shown until it clicks, and insert the other plug into a wall telephone jack until it clicks.





If the connection cable is not properly connected, "Sending has failed. Please check network connection." will appear when you attempt to send a fax. Properly connect the connection cable.

2

Make sure the power plug is inserted in the power outlet.

When the power indicator is lit up, the power plug is inserted in the power outlet. If the power indicator is not lit up, insert the power plug in the power outlet.

TURNING ON THE POWER (page 1-7)



When using the machine for faxing, do not turn it off, and keep it in the standby mode using the power save mode.





Setting the telephone line type.

The machine's dial mode setting must be set to match the type of telephone line you are using.

* If the setting is incorrect, it may result in dialing failures or cause calls to be made to the wrong destination.



• If you want to set the type of telephone line automatically

From the operation panel, select [System Settings] \rightarrow [Fax Settings] \rightarrow [Condition Settings] \rightarrow [Dial Mode Setting], and tap the [Auto Select] key. (in the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Default Settings] \rightarrow [Dial Mode Setting], and tap the [Auto Select] key.)

• If necessary, you can set the type of telephone line manually.

When you connect to a digital line When Digital Line Network is enabled, the send level will be 15 dB or less when you connect to a digital line. From the operation panel, select [System Settings] \rightarrow [Fax Settings] \rightarrow [Condition Settings] \rightarrow [Digital Line Network] (in the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Default Settings] \rightarrow [Digital Line Network]).



Checking the date and time.

Verify that the correct date and time are set in the machine.



To set the date and time of the machine:

In the operation panel or Web page, select [System Settings] \rightarrow [Common Settings] \rightarrow [Device Control] \rightarrow [Clock Adjust].



Storing the sender fax number.

Store a sender name in [Sender Name] and a fax number in [Fax No.]. Be sure to configure this information, as it is required for communication.



To store the sender's name and address:

From the operation panel, select [System Settings] \rightarrow [Fax Settings] \rightarrow [Condition Settings] \rightarrow [Own Number and Name Set] (In the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Common Settings] \rightarrow [Own Number and Name Set] \rightarrow [Sender Data Registration]).

Registering destinations for each sending method in the Address Book

When using the machine for faxing, it is convenient to register the destination in the Address Book in advance. For details on how to use the Address Book and register destinations, see the following.

ADDRESS BOOK DESTINATION REGISTRATION (page 5-19)

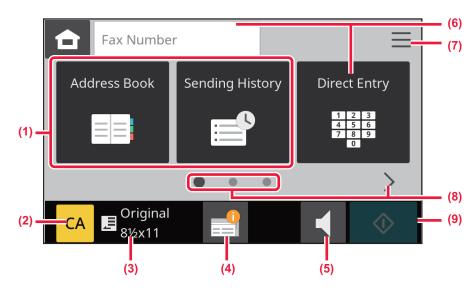
FAX MODE

Fax mode has two modes: basic mode and menu mode.

Basic mode is limited to frequently used functions that allow you to smoothly perform most fax jobs. If you need to select detailed settings or special functions, use menu mode.

BASIC MODE

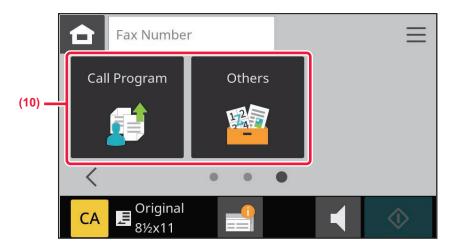
Basic mode makes it easy to select basic settings for fax. [1st screen]



[2nd screen]



[3rd screen]



- (1) Select an address.
- (2) Reset the address and settings.
- (3) Show the size of the placed original.
 - ► SPECIFYING THE ORIGINAL SCAN SIZE IN PAPER SIZE (page 5-40)
- (4) Opens the Job Status screen.
 - ► FAX JOBS (page 5-58)

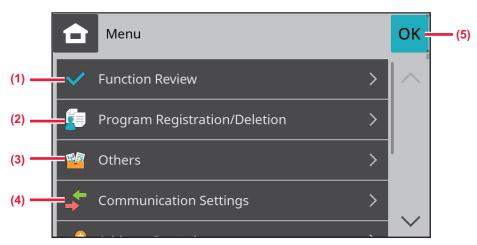
You can select these functions in basic mode.

- SET THE SCANNING OF THE ORIGINALS (page 5-39)
- CHANGING THE EXPOSURE (page 5-41)
- CHANGING THE RESOLUTION (page 5-42)

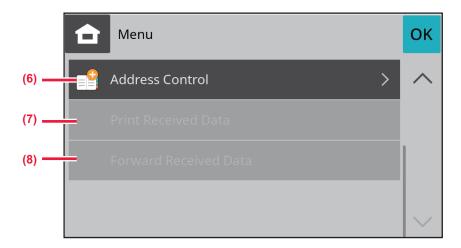
- (5) Connects a line before starting sending a fax.
- (6) Tap this key to display the numeric keys.
- (7) Switches to menu mode.
 - ► MENU MODE (page 5-7)
- (8) Change the function display.
- (9) Immediately starts sending a fax.
- (10) Select function to be set up.

MENU MODE

Menu mode lets you select any function setting that can be used for fax. [1st screen]



[2nd screen]



- (1) This function confirms the contents of the current settings.
- (2) Registers or deletes programs.
- (3) Displays "Others".
- (4) Set the communication settings.
- (5) Closes the menu.
- (6) Edit the fax destination.
- (7) Prints the received hold data.
- (8) Forwards received data.

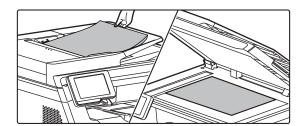
SELECTING FAX MODE

Change the fax mode to other mode as explained in **SWITCH TO HOME SCREEN** (page 2-7).

FAX TRANSMISSION SEQUENCE

This section explains the basic steps for sending a fax.





Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

<u>DOCUMENT GLASS (page 1-23)</u>

2

Enter the destination fax number.

Tap the numeric keys to enter the destination number directly, or search and retrieve the address book or number.



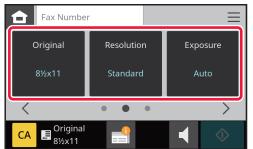
- ENTERING A DESTINATION NUMBER USING THE NUMERIC KEYS (page 5-12)
- RETRIEVING A DESTINATION FROM AN ADDRESS BOOK (page 5-13)
- <u>USING A TRANSMISSION LOG TO RESEND (page 5-17)</u>



3

Configure the settings.

Specify the original scan size, exposure, resolution, etc. If necessary, you can refer to the following functions for the setting.



- <u>SET THE SCANNING OF THE ORIGINALS (page 5-39)</u>
- CHANGING THE EXPOSURE (page 5-41)
- CHANGING THE RESOLUTION (page 5-42)



Send the original.

Tap the [Start] key.



- When the original is placed on the document glass:
 - When sending a fax normally (memory transmission)
 Repeat the steps for placing and scanning the originals the same number of times as there are originals. After scanning all originals, tap the [Read-End] key.
- When sending a fax in direct transmission mode

 Multi-page originals cannot be scanned in direct transmission mode. Tap the [Start] key to start transmission.

IF PAPER MISFEEDS IN THE AUTOMATIC DOCUMENT FEEDER

2 patterns can be set.

In the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Send Setting] \rightarrow [Quick On Line Sending].

- If enabled
 - When an original misfeeds, scanning stops, and scanned data up until that point is sent.
- If disabled

Even if an original misfeeds, scanning does not stop, the misfed original is set again, and scanning starts again. After all of the original has been scanned, the scanned data is sent.

COMMUNICATION SETTINGS

Set "Send Settings" and "Receive Settings".

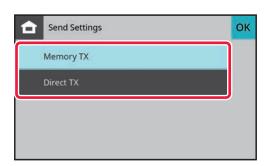
Send Settings





Tap the [Menu] icon, [Communication Settings] and [Send Settings]



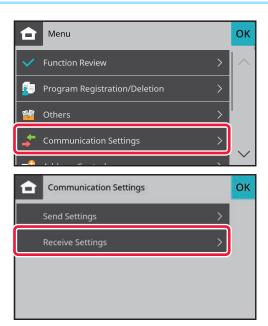


Select a transmission method from [Memory TX] or [Direct TX].

After the confirmation is completed, tap ok.

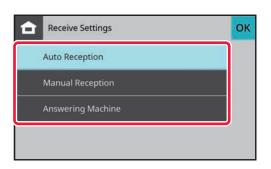
Receive Settings





Tap the [Menu] icon, [Communication Settings] and [Receive Settings]





Select a receiving method from [Auto Reception], [Manual Reception] or [Answering Machine].

After the confirmation is completed, tap ok.

ENTERING DESTINATIONS

ENTERING DESTINATIONS

This section explains how to enter a destination from the initial screen of basic mode. BASIC MODE (page 5-5)

ENTERING A DESTINATION NUMBER USING THE NUMERIC KEYS





Tap the [Direct Entry] key or [Fax Number] to enter the destination fax number.

If you want to specify multiple destinations, tap + and enter the next fax number.

If you enter an incorrect number, tap the [C] key to delete the number and re-enter.

Entering a Pause Between Digits of the Number

Enter a pause after the number used to dial out from a PBX (for example, after "0"), or after the country code when dialing an international number.



Tap the [Pause] key.

A hyphen "-" is entered when the [Pause] key is tapped once.



If you want to enter a pause between digits of the number:

Enter a pause after the number used to dial out from a PBX (for example, after "0"), or after the country code when dialing an international number.

The [Pause] key appears on the numeric keys when the destination fax number is entered.

A hyphen "-" is entered when the [Pause] key is tapped once.



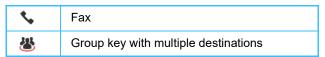
To set the length of pause:

In the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Default Settings] \rightarrow [Pause Time Setting].

RETRIEVING A DESTINATION FROM AN ADDRESS BOOK

A destination fax number is retrieved by simply tapping the one-touch key of that destination on the address book screen. (One-touch dialing)

It is also possible to store multiple fax numbers in a one-touch key, allowing you to retrieve all the numbers by simply tapping the key. This dialing method is convenient when you wish to send a fax to (or poll) multiple fax destinations. When destinations of other scan modes are stored in addition to fax destinations, an icon indicating the mode appears together with the name of the destination in each one-touch key.



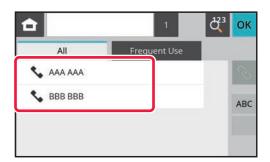
- For information on the address book, see "ADDRESS BOOK (page 6-10)".
- For the procedure for storing an address in the address book, see "<u>DESTINATION REGISTRATION (page 5-19)</u>", "<u>GROUP REGISTRATION (page 5-20)</u>",





Tap the [Address Book] key.





Tap a one-touch key of contact or group that includes the fax destination.

- The destinations displayed on the list can be narrowed with frequent use and indexes.
- When adding a destination, tap another one-touch key.
- If two or more destinations are selected or specified, the total number of addresses appears next to address.
- Even if only a single destination is selected, the number of addresses appears when the destination is a contact or group in which multiple addresses are stored. For more information, see "ADDRESS BOOK (page 6-10)".



• If you select an incorrect destination:

Tap the key again to cancel the selection.

• To cancel a selected destination

Select the destination you want to cancel in the destination list screen, and tap the [Delete] key.

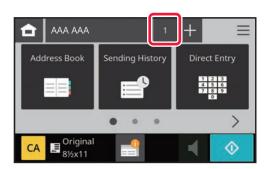


- To select a destination from the transmission log, tap the [Sending History] key. USING A TRANSMISSION LOG TO RESEND (page 5-17)
- To check the entered destinations, tap the [Address Review] key. THE SELECTED DESTINATIONS (page 5-15)
- The destination for transmission can be selected by tapping a stored destination.
- If an address that you do not have permission to use is included in the addresses, a message will appear when you press the [Start] key. To send only to the permitted addresses, press the [OK] key and then the [Enter for send] key.

THE SELECTED DESTINATIONS

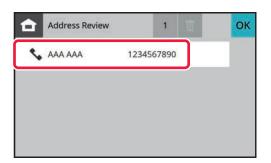
When multiple destinations have been selected, you can display and check the destinations. You can also delete a destination (cancel selection of the destination) if necessary.





Tap the All Destinations key.



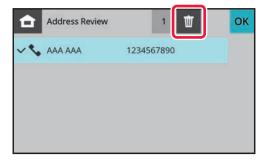


Confirm the destination.

After the confirmation is completed, tap ox.

DELETING SPECIFIED DESTINATIONS

Select the address and tap 🔳 .



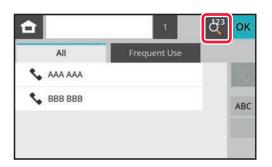


If you placed the original on the document glass and tapped the [Start] key, you cannot delete an address when changing settings.

USING A SEARCH NUMBER TO RETRIEVE A DESTINATION

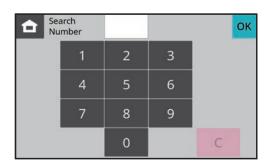
The search number can be used to specify a destination stored in an address book.





Tap the [Address book] key, and tap the [Call Search Number] key.





Enter a search number (3 digits) using the numeric keys and tap ok.

When the search number is entered, the stored address is retrieved and specified as a destination.



If an incorrect search number is entered:

Tap the [C] key to clear the number and enter the correct number.



- The search number is programmed when the destination is stored in the address book.
- When entering search numbers such as "001" and "011", "0" can be omitted. For example to enter "001", enter "1" and tap ok.

USING A TRANSMISSION LOG TO RESEND

Select a destination from a transmission log and resend the data.

The destinations of the most recent 10 transmissions by fax are stored. One of these can be selected to resend to that destination.



- · If numeric keys were tapped during the previous transmission, the number may not be redialed correctly.
- The fax addresses below are not stored as addresses for which resend is possible.
 - · Group destinations
 - · Broadcasting destinations





Tap the [Sending History] key.





Tap the key of the fax destination that you wish to redial.

The last 10 addresses used for transmission are displayed.



To cancel the resend setting:

Tap the highlighted key.

SENDING BY CHAIN DIALING

Number sequences entered using the numeric keys and/or one-touch keys can be linked together with pauses and dialed as a single number.

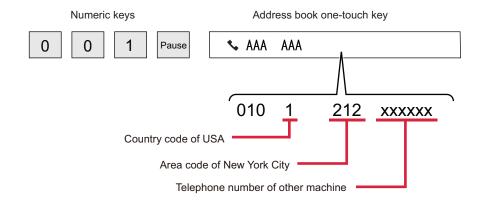
For example when dialing an international number, tap the [Pause] key between the identification number of an international telephone service company (e.g., "001") and the country code (e.g., "81" for Japan) to insert a pause for smoother line connection.

The time (in seconds) set in the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Pause Time Setting] defines the length of pause. Set a value from 1 to 15 seconds in increments of 1 second.

On the screen, a hyphen "-" indicates a pause.

If two seconds are set in [Pause Time Setting], tapping the [Pause] key three times enters pauses for 6 seconds.

Example: Using chain dialing to dial an international number





- Addresses that can be selected are addresses that only have one fax address saved.
- After selecting the address from the address book, select [Chain Dial Combine with Direct Input] to enter the next number with the numeric keys, or [Chain Dial Combine with Address Book] to select an address from the address book.

ADDRESS BOOK DESTINATION REGISTRATION

Store new names or addresses in the address book by directly entering them.

DESTINATION REGISTRATION

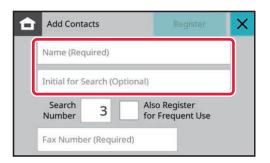


Tap the [Fax Address Control] key on the Home Screen, the [Address Control] key on the menu, or the [Address Control] icon on the Address Book screen.



Tap the [Add Contacts] key.

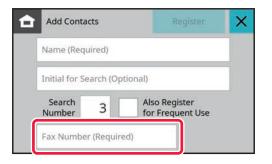
3



Enter basic information.

Be sure to enter [Name] and [Initial for Search]. To register for frequent use, select the [Also Register for Frequent Use] checkbox .





Tap [Fax Number], enter the fax number and tap ox.

Be sure to enter [Name] and [Initial].

To register for frequent use, select the [Also Register for Frequent Use] checkbox .



E-mail, FTP, Desktop, and Network Folder addresses can be registered from [Address Book] in the Web page.



Tap the [Register] key.

The first address of each address type is set as the default address. If no address has the checkbox next to it selected, a confirmation screen will appear asking you if you want to select a default address.

GROUP REGISTRATION

"Group" is used to select and register a destination that has already been registered in "Contact". In this case, the total number of addresses in the address book (up to 300) will not be increased, since it only refers to the addresses that have already been registered. You can also enter a new destination directly in "Group".

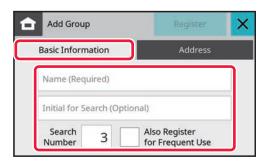


Tap the [Fax Address Control] key on the Home Screen, the [Address Control] key on the menu, or the [Address Control] icon on the Address Book screen.



Tap the [Add Group] key.





Enter basic information.

Be sure to enter [Name] and [Initial for Search]. To register for frequent use, select the [Also Register for Frequent Use] checkbox .



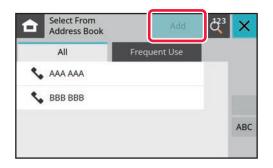


Tap the [Address] tab and [Address book] key.



Tap [Fax Number] to enter a new destination directly in [Group].





Tap the address to be registered in the "Group", and then tap the [Add] key.

You can select more than one address.



Repeat steps 3 through 5 to register addresses. After address registration is completed, tap [Register] key.

EDITING DESTINATION

- Tap the [Fax Address Control] key on the Home Screen, the [Address Control] key on the menu, or the [Address Control] icon on the Address Book screen.
- Tap the [Edit Address] key.

 Only one contact or group can be selected. If two or more are selected, the [Edit Address] key will not appear.
- All Frequent Use

 AAA AAA

 BBB BBB

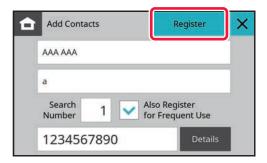
 ABC

Select the destination to be edited



You cannot edit or delete an address for a job in a job queue.





Edit an address.

After editing, tap the [Register] key.

DELETING DESTINATION



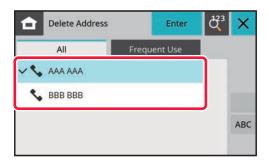
Tap the [Fax Address Control] key on the Home Screen, the [Address Control] key on the menu, or the [Address Control] icon on the Address Book screen.

2

Tap the [Delete Address] key.

Only one contact or group can be selected. If two or more are selected, the [Edit Address] key will not appear.



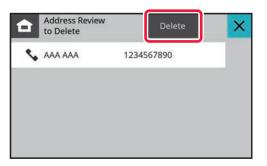


Select the destination to be deleted



You cannot edit or delete an address for a job in a job queue.





Tap the [Delete] key.



Confirm the destination to be deleted.

After confirming, tap the [Delete] key.

BASIC TRANSMISSION METHODS

BASIC TRANSMISSION METHODS

This section explains how to enter a destination from the initial screen of basic mode. SELECTING FAX MODE (page 5-7)

FAX TRANSMISSION METHODS

The methods that can be used to send a fax from the machine are described below. Select the method that best suits your needs.

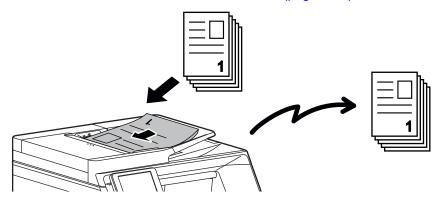
To fax a large number of sheet originals:

Use the automatic document feeder.

The originals will be scanned into memory and then transmitted (memory transmission).

When multiple original sheets are placed in line idle state, they will be sent in sequence from the scanned page in parallel with the scanning process (Quick On Line Sending).

If transmission cannot begin immediately because the line is in use, all pages will be scanned and stored in memory. USING THE AUTOMATIC DOCUMENT FEEDER FOR TRANSMISSION (page 5-27)



Storing a fax job

If transmission cannot begin immediately because the line is in use, all pages will be scanned and stored in memory. If you want to attempt to send a fax while another job is in progress, you can store the fax job. To check the stored fax job, display the job status screen.

FAX JOBS (page 5-58)



- If memory becomes full while the first original page is being scanned, transmission will stop.
- In the following situations, the transmission will be automatically reserved (memory transmission)
- When the line is busy or a communication error occurs and automatic resending is enabled.
 WHEN A COMMUNICATION ERROR OCCURS (page 5-25)
- The line of the machine will be busy if another fax is being sent, received, or if the machine is in the busy state.
- · Another fax transmission was reserved ahead of your fax.
- One of the following functions is being used for transmission.
 - Broadcast transmission, Timer transmission
- The document glass is being used (except when the speaker is being used to dial).



To disable the Quick On Line Sending setting:

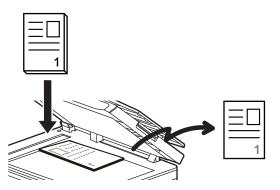
In the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Send Settings] \rightarrow [Quick On Line Sending].

If you disable this setting, transmission will not begin until all pages have been scanned. Note that this setting does not apply to manual transmission.

To fax thick originals or pages of a book:

Place the original on the document glass.

USING THE DOCUMENT GLASS FOR TRANSMISSION (page 5-30)





- Quick On Line Sending is not available when a fax is being sent from the document glass.
- When the document glass is used, multiple original pages cannot be scanned at a time. In this case, the original pages can be separated into multiple times of scanning.

If you wish to send a fax ahead of other previously reserved fax transmissions:

Send the fax in direct transmission mode. The original is transmitted directly to the receiving fax machine without being scanned into memory.

When direct transmission mode is used, transmission will begin as soon as the transmission in progress is completed (ahead of any previously reserved transmissions).

Tap the menu icon and then the [Communication Settings] key to change the setting to direct transmission.

<u>USING THE AUTOMATIC DOCUMENT FEEDER FOR FAXING IN DIRECT TX MODE (page 5-28)</u>
USING THE DOCUMENT GLASS TO SEND A FAX IN DIRECT TX MODE (page 5-32)

WHEN THE LINE IS BUSY

If the line is busy when you send a fax, transmission will be attempted again automatically after a preset interval. This function only operates in memory transmission mode. In direct transmission mode or manual transmission mode, the transmission will be canceled. Wait for a brief period and then try sending the fax again.



To cancel transmission:

Do so from the job status screen.

FAX JOBS (page 5-58)



To set the number of recall attempts and the interval between attempts when the connection cannot be established because the line is busy, or for other reasons:

From the operation panel, select [System Settings] \rightarrow [Fax Settings] \rightarrow [Send Settings] \rightarrow [Recall in Case of Line Busy] (In the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Send Settings] \rightarrow [Recall in Case of Line Busy]).

When this setting is enabled, note that the machine will not attempt the call again when manual transmission or direct transmission is used.

WHEN A COMMUNICATION ERROR OCCURS

If a communication error occurs or the other fax machine does not answer the call within a preset period of time, transmission will automatically be attempted again after a preset interval. This function only operates in memory transmission mode.



Faxes sent by direct transmission or manual transmission are not automatically resent.



To cancel transmission:

Do so from the job status screen.

CANCEL A CURRENTLY JOB (page 5-58)



To set the number of recall attempts and the interval between attempts when a transmission fails due to an error: From the operation panel, select [System Settings] \rightarrow [Fax Settings] \rightarrow [Send Settings] \rightarrow [Recall in Case of Communication Error] (In the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Send Settings] \rightarrow [Recall in Case of Communication Error]).

FAX DEST. CONFIRMATION MODE

This mode displays a destination confirmation message when a fax is sent to prevent accidental transmission to the wrong destination. Set it in setting mode. If a fax is sent while this function is enabled, an address confirmation message will appear when the [Start] key is tapped.

The message that appears will vary depending on the method used to specify the destination.



After tapping the [Speaker] key while "Fax Dest. Confirmation Mode" is enabled, the destination cannot be specified using the [Address Book] key, [Direct Entry key, or [Sending History] key. However, it is possible to send through a telephone.



To display the destination confirmation message prior to fax transmission:

In the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Default Settings] \rightarrow [Fax Dest. Confirmation Mode].

Destination specified using the numeric keys

With "Fax Dest. Confirmation Mode" enabled, and "Require Re-entry when Directly Entering the Fax Destination" enabled

Tap the [OK] key to display the re-enter request message.

Re-enter the destination using the numeric keys and tap the [OK] key.

If the re-entered destination is correct, tap the [+] key to directly enter the next destination, and tap the [OK] key to return to the basic screen.

If the re-entered destination is not correct, a message will appear.

Tap the [OK] key and re-enter the destination.

Tap the [Start] key to display the destination you entered on the Destination Confirmation screen. After confirming that the destination is correct, tap the [Confirm Send] key to start loading the original.

With "Fax Dest. Confirmation Mode" enabled, and "Require Re-entry when Directly Entering the Fax Destination" disabled

Tap the [Start] key to display entered destinations in the destination confirmation screen. Check that the destinations are correct, and tap the [Enter for send] key to start scanning of the original.



- You can use the numeric keys to enter fax numbers serially. In that case, tap 🛨 to enter the destination fax number to be added.
- If chain dialing was used, tap the [Pause] key to enter "-" during confirmation.
- Before tapping the [Enter for send] key, you can change scan or other settings.



To set whether to re-enter at direct entry:

In the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Condition Settings] \rightarrow [Fax Dest. Confirmation Mode] \rightarrow [Require Re-entry when Directly Entering the Fax Destination].

When a fax that was selected from the Sending History has been resent

A confirmation screen is displayed based on the method used to specify the destination during the previous transmission.

FAX TRANSMISSION METHODS

USING THE AUTOMATIC DOCUMENT FEEDER FOR TRANSMISSION

Storing scanned originals in machine's memory before transmitting them is called "Memory TX".

This section explains how to scan the original through the automatic document feeder and send the data by the memory transmission function.



- To fax a thick original or other original that cannot be placed in the automatic document feeder, open the automatic document feeder and place the original on the document glass.
- If there is a fax job in progress when the transmission operation is performed, the fax is transmitted when the job in progress is finished.
- If the memory becomes full while the originals are being scanned, a message will appear and scanning will stop. When Quick On Line Sending is enabled for transmission, the scanned originals are sent.



• To disable the Quick On Line Sending setting:

In the web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Send Settings] \rightarrow [Quick On Line Sending].

If you disable this setting, memory transmission will not begin until all pages have been scanned.

• To set the scan complete sound:

From the operation panel, select [System Settings] \rightarrow [Sound Settings] \rightarrow [Beep Sound Settings (Common)] \rightarrow [Scan Complete Sound (Scan/Fax)].



Place the original in the document feeder tray of the automatic document feeder.

AUTOMATIC DOCUMENT FEEDER (page 1-21)

2

Specify the destination fax number.

- ENTERING A DESTINATION NUMBER USING THE NUMERIC KEYS (page 5-12)
- RETRIEVING A DESTINATION FROM AN ADDRESS BOOK (page 5-13)
- USING A SEARCH NUMBER TO RETRIEVE A DESTINATION (page 5-16)
- USING A TRANSMISSION LOG TO RESEND (page 5-17)

3

Tap the [Start] key to begin transmission.

When scanning is completed, the machine beeps.



When all originals have been scanned, "Job stored." will be displayed. This number is recorded in the transaction report and image sending activity report and can be used to check fax jobs.

PRINTING IMAGE SENDING ACTIVITY REPORTS (page 5-61)



To cancel scanning the original:

Tap the [Cancel Scan] key.

USING THE AUTOMATIC DOCUMENT FEEDER FOR FAXING IN DIRECT TX MODE

Sending a scanned original without saving it in the machine's memory is called "Direct TX". This section explains how to scan the original through the automatic document feeder and directly send it.



To fax a thick original or other original that cannot be placed in the automatic document feeder, open the automatic document feeder and place the original on the document glass.



- The following functions cannot be used with direct transmission: Timer Transmission, 2-Sided Scan, Speaker
- Resending will not take place when a direct transmission is not successful due to a communication error or other reason.
- If a fax transmission is already in progress when the direct transmission operation is performed, the direct transmission will wait until the previous transmission is finished. When the previous transmission is completed, the direct transmission will begin.
- While the direct transmission is waiting, the job status display can be tapped to display the job status screen. No other
 operations are possible.

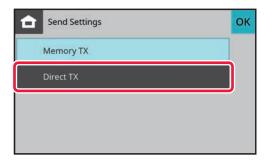
FAX JOBS (page 5-58)



Place the original in the document feeder tray of the automatic document feeder.

AUTOMATIC DOCUMENT FEEDER (page 1-21)

2



Select [Direct TX] from [Communication Settings].

COMMUNICATION SETTINGS (page 5-10)

3

Specify the destination fax number.

- ENTERING A DESTINATION NUMBER USING THE NUMERIC KEYS (page 5-12)
- RETRIEVING A DESTINATION FROM AN ADDRESS BOOK (page 5-13)
- USING A SEARCH NUMBER TO RETRIEVE A DESTINATION (page 5-16)
- USING A TRANSMISSION LOG TO RESEND (page 5-17)



Only one destination can be specified. A one-touch key in which multiple destinations are stored cannot be used.



Tap the [Start] key to begin transmission.



If a fax transmission is already in progress when the direct transmission operation is performed, the direct transmission will wait until the previous transmission is finished. When the previous transmission is completed, the direct transmission will begin.

While the direct transmission is waiting, you can only check the job status. FAX JOBS (page 5-58)



To cancel scanning the original:

Tap the [Cancel Scan] key.

USING THE DOCUMENT GLASS FOR TRANSMISSION

Storing scanned originals in machine's memory before transmitting them is called "Memory TX". This section explains how to scan the original placed on the document glass and send the data by the memory transmission function.



- If a fax is being received when the transmission operation is performed, the transmission will be reserved and transmission will take place after fax reception is completed.
- If the memory becomes full while the originals are being scanned, a message will appear and transmission will be canceled.



Place the original on the document glass.

DOCUMENT GLASS (page 1-23)



When faxing a multi-page original, scan each page in order starting from the first page.

2

Specify the destination fax number.

- ENTERING A DESTINATION NUMBER USING THE NUMERIC KEYS (page 5-12)
- RETRIEVING A DESTINATION FROM AN ADDRESS BOOK (page 5-13)
- USING A SEARCH NUMBER TO RETRIEVE A DESTINATION (page 5-16)
- USING A TRANSMISSION LOG TO RESEND (page 5-17)
- 3

Tap the [Start] key to begin transmission.

When scanning is completed, the machine beeps.

4

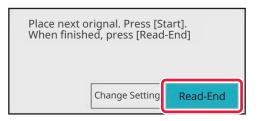
If you have another page to scan, change pages and then tap the [Start] key.

Repeat until all originals have been scanned.



If no action is taken for one minute, scanning automatically ends and the transmission is reserved.





Tap the [Read-End] key.

A beep sounds.

Open the automatic document feeder and remove the original.



To cancel scanning:

Tap the [CA] key before the [Read-End] key is tapped.



- When all originals have been scanned, "Job stored." will be displayed.
- If no action is taken for one minute after the confirmation screen is displayed, scanning automatically ends and the transmission is reserved.
- The [Change Setting] key can be tapped, if necessary, to change the exposure, resolution, scan size, and send size for each original page scanned.

USING THE DOCUMENT GLASS TO SEND A FAX IN DIRECT TX MODE

Sending a scanned original without saving it in the machine's memory is called "Direct TX". This section explains how to scan the original placed on the document glass and directly send data. When sending a fax from the document glass in direct transmission mode, only one page can be transmitted.



- The following functions cannot be used with direct transmission: Timer Transmission, 2-Sided Scan, Speaker
- Resending will not take place when a direct transmission is not successful due to a communication error or other reason.
- If a fax transmission is already in progress when the direct transmission operation is performed, the direct transmission will wait until the previous transmission is finished. When the previous transmission is completed, the direct transmission will begin.
- While the direct transmission is waiting, the job status display can be tapped to display the job status screen. No other
 operations are possible.

FAX JOBS (page 5-58)



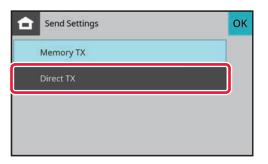
Place the original on the document glass.

DOCUMENT GLASS (page 1-23)



When faxing a multi-page original, scan each page in order starting from the first page.

2



Select [Direct TX] from [Communication Settings].

COMMUNICATION SETTINGS (page 5-10)

3

Specify the destination fax number.

- ENTERING A DESTINATION NUMBER USING THE NUMERIC KEYS (page 5-12)
- RETRIEVING A DESTINATION FROM AN ADDRESS BOOK (page 5-13)
- USING A SEARCH NUMBER TO RETRIEVE A DESTINATION (page 5-16)
- USING A TRANSMISSION LOG TO RESEND (page 5-17)



Only one destination can be specified. A one-touch key in which multiple destinations are stored cannot be used.





Tap the [Start] key to begin transmission.

When the line has been connected to the destination, scanning of the original starts.



If a fax transmission is already in progress when the direct transmission operation is performed, the direct transmission will wait until the previous transmission is finished. When the previous transmission is completed, the direct transmission will begin.



To cancel scanning the original:

Tap the [Cancel Scan] key.

TRANSMISSION USING THE SPEAKER

When the speaker is used to dial, the fax is sent after the number is dialed and the connection is established.



- If a person answers, you will be able to hear his or her voice, but you will not be able to speak.
- When the speaker is used, transmission takes place without scanning the original into memory.
- A one-touch key that has multiple destinations or has a non-fax destination cannot be used.



Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

<u>DOCUMENT GLASS (page 1-23)</u>

2



Tap the [Speaker] key.

When the connection is established, you will hear the dial tone through the machine's speaker.



Tapping allows you to adjust the volume of the speaker.

3

Specify the destination fax number.

- ENTERING A DESTINATION NUMBER USING THE NUMERIC KEYS (page 5-12)
- RETRIEVING A DESTINATION FROM AN ADDRESS BOOK (page 5-13)
- USING A SEARCH NUMBER TO RETRIEVE A DESTINATION (page 5-16)
- USING A TRANSMISSION LOG TO RESEND (page 5-17)



A one-touch key in which multiple destinations are stored cannot be used



When the connection is made, tap the [Start] key to begin transmission.



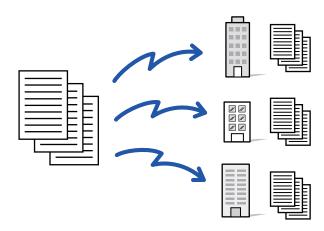
To cancel transmission:

To stop transmission, tap the [Cancel] key.

SENDING THE SAME FAX TO MULTIPLE DESTINATIONS (BROADCAST TRANSMISSION)

You can send a fax to multiple destinations in a single operation when, for example, sending a report to branch offices in different regions. This function is called "Broadcasting".

One operation allows you to send data to up to 100 destinations, including the reserved send jobs. (For example, if broadcast transmission jobs with 70 destinations are already reserved, data can be broadcasted to up to 30 destinations.)



It is convenient to store destinations you frequently use for broadcast transmission as contacts or groups. A maximum of 100 destinations can be stored in one contact.

For broadcast transmission, the contact or group key can be simply tapped to retrieve multiple fax numbers. <u>ADDRESS BOOK DESTINATION REGISTRATION (page 5-19)</u>



If this function is combined with "Timer Transmission", broadcast transmission can be performed at any time, such as at night.

A broadcast transmission can also be used in combination with other convenient functions.



Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

<u>DOCUMENT GLASS (page 1-23)</u>



Specify all destinations.

- ENTERING A DESTINATION NUMBER USING THE NUMERIC KEYS (page 5-12)
- USING A SEARCH NUMBER TO RETRIEVE A DESTINATION (page 5-16)

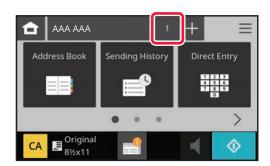


After entering a destination using the numeric keys, if you wish to enter another destination using the numeric keys, tap before entering the next destination.

🛨 can be omitted before or after a destination entered using a one-touch key.

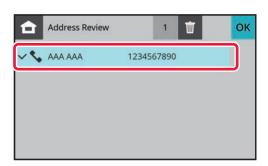
If "Be sure to press Next Address Key ([+]) before selecting the next address." is enabled in setting mode, tap \pm before specifying the next destination.





Tap the All Destinations key.





Confirm the destination.



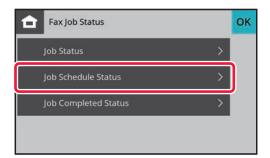
Tap the [Start] key to start scanning of the original.

- If you inserted the original pages in the document feeder tray, all pages are scanned. A beep will sound to indicate that scanning and transmission have ended.
- When you place the original on the document glass, scan each page one at a time.
 When scanning finishes, place the next original and tap the [Start] key.
 Repeat the procedure until all pages have been scanned and then tap the [Read-End] key.
 A beep will sound to indicate that scanning and transmission have ended.

RESENDING TO UNSUCCESSFUL BROADCAST TRANSMISSION DESTINATIONS

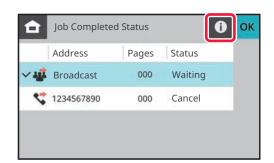
The results of a completed broadcast transmission can be checked in the job status screen. If transmission to any of the destinations failed, resend the fax to those destinations.





Tap the [Fax Job Status] key, then tap the [Job Completed Status] key.





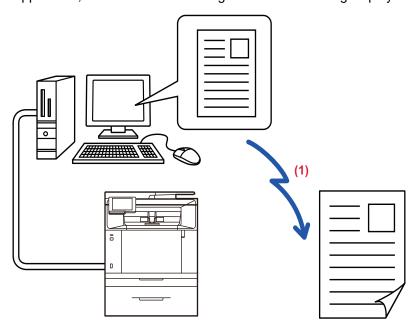
Tap the sequential broadcast transmission key to finish transmission, and then tap 0.



After tapping the [Failed] tab, tap [Resend to All Addresses Which Failed in Sending] to resend the image.

SENDING A FAX DIRECTLY FROM A COMPUTER (PC-Fax)

A file on a computer can be sent via the machine as a fax (PC-Fax function). Faxes are sent using the PC-Fax function in the same way that documents are printed. Select the PC-Fax driver as the printer driver for your computer and then select the Print command in the application. Image data for transmission will be created and sent as a fax. By using the "Log Viewer" application, faxes can be sent using the transmission log displayed in the Log Viewer.



(1) Log Viewer

Re-send faxes using the transmission log

For the procedures for using this function, see the PC-Fax driver Help.



- To use the PC-Fax function, the PC-Fax driver must be installed. For more information, see the Software Setup Guide.
- This function can only be used on a Windows® computer.



Only transmission is available for this function. Faxes cannot be received by your computer.

DELETING A TRANSMISSION LOG

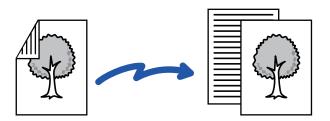
You can check transmission logs from the Sending Histroy screen. You can delete an address selected in a transmission log. FAX JOBS (page 5-58)

SET THE SCANNING OF THE ORIGINALS

AUTOMATICALLY SCANNING BOTH SIDES OF AN ORIGINAL (2-Sided Original)

The automatic document feeder will automatically scan both sides of the document.

For example, a 2-sided original can be scanned, and its front and back sides can be sent as 2 pages.





- · 2-sided scanning is not possible when direct transmission or speaker transmission is performed.
- You cannot use 2-sided scanning when the original size is set to Long Size.



2-sided scanning automatically turns off after transmission has ended.





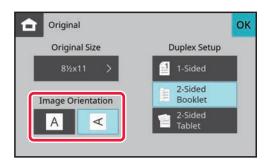


Tap the [Original] key, and tap the [Book] key or [Tablet] key.

See the figure on the left to check the binding edge of the original and select the key to be tapped.

- (1) Book
- (2) Tablet





Tap the [Image Orientation] key with the same orientation as the placed original.

If this setting is not correct, a suitable image may not be transmitted.

After the settings are completed, tap ok.

SPECIFYING THE ORIGINAL SCAN SIZE IN PAPER SIZE

Specify the original size manually.

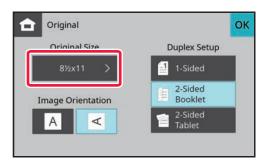


When [Long Size] is selected, the 2-sided scanning setting and send size cannot be changed.



Tap the [Original] key.

2



Tap the [Size] key.





Tap a key of the desired original size.

After the settings are completed, tap ok.



If you are sending a long original, tap the [Long Size] key.

Use the automatic document feeder to scan a long original. The maximum width that can be scanned is 19-5/8" (500 mm) (the maximum height is 8-1/2" (216 mm)).

CHANGING THE EXPOSURE

The exposure can be changed to suit the darkness of the original.



When using the automatic document feeder, the exposure setting cannot be changed once scanning has begun.

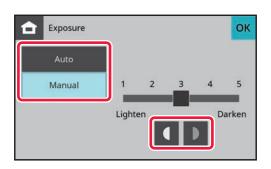
Exposure settings

E	xposure	Suggestion
Auto		This setting automatically adjusts the exposure for light and dark parts of the original.
Manual	1-2	Select this setting when the original consists of dark text.
	3	Select this setting for a normal original (neither dark nor light).
	4-5	Select this setting when the original consists of light text.



After tapping the [Exposure] key, tap the [Manual] key.

2



Adjust the exposure with ______.

After the adjustment, tap ok.



When [Auto] is selected, the exposure will be set to "3".

CHANGING THE RESOLUTION

The resolution can be specified to match the characteristics of the original, such as text or photo, the size of the text, and the darkness of the image.

Resolution settings

Resolution	Suggestion
Standard	Select this setting when your original consists of normal-sized text (like the text in this manual).
Fine	Select this setting when your original has small text or diagrams with fine lines. The original will be scanned at twice the resolution of the [Standard] setting.
Super Fine	Select this setting when your original has intricate pictures or diagrams. A higher-quality image will be produced than with the [Fine] setting.
Ultra Fine	Select this setting when your original has intricate pictures or diagrams. This setting gives the best image quality. However, transmission will take longer than with the other settings.
Half Tone	Select this setting when your original is a photograph or has gradations of color (such as a color original). This setting will produce a clearer image than [Fine], [Super Fine], or [Ultra Fine] used alone. Halftone cannot be selected when [Standard] is used.

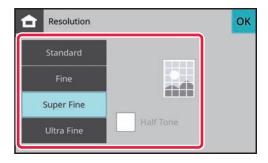


- When using the automatic document feeder, the resolution setting cannot be changed once scanning has begun.
- When a fax is sent at [Ultra Fine], [Super Fine], or [Fine] resolution, a lower resolution will be used if the receiving machine does not have that resolution.



Tap the [Resolution] key.

2



Tap the key of the desired resolution.

When your original is a photograph or has gradations of color (such as a color original), and you wish to produce a clearer image than [Fine], [Super Fine], or [Ultra Fine] used alone, set the [Half Tone] checkbox to .

Halftone cannot be selected when [Standard] is used.

After the settings are completed, tap ok.

FAX RECEPTION

RECEIVING A FAX

RECEIVING A FAX AUTOMATICALLY

When the reception mode is set to "Auto Reception", the machine will receive and print faxes automatically.



 When fax reception is in progress, it is possible to reserve a transmission by performing the transmission in memory transmission mode.

FAX TRANSMISSION METHODS (page 5-23)

- The information indicator blinks in white from the start of fax reception until printing is completed.
- To print received faxes, make sure that the required paper is loaded into the machine's paper trays.

 When a fax smaller than 8-1/2" x 11" (A4) size is received, the size of the paper used for printing will vary depending on the orientation (vertical or horizontal) in which the sender placed the original.
- If a print job such as the copy or printer function has already been executed when printing the received data, the first reserved job is printed before the received data.
- Received faxes will not be printed when the machine cannot print due to an error condition such as out of paper, out of toner, or a paper misfeed. The faxes will be printed automatically when the error condition is cleared. (If the paper has run out, add paper and tap or on the touch panel.)
- · You can check current fax reception mode in the Receive Settings screen.



• To switch between auto reception and manual reception modes: Set in Receive Settings.

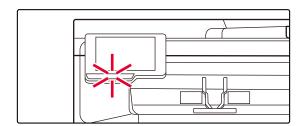
Receive Settings (page 5-11)

• Distinctive Ring Detection

If multiple telephone numbers have been assigned to your telephone line, the number called can be identified by its ringing pattern. By using one number for voice calls and another number for faxes, you can tell which type of call you are receiving by the ringing pattern. You can set your machine to automatically receive faxes when your fax number is called by setting the pattern that corresponds to your fax number.

From the operation panel, select [[Delete] button] \rightarrow [Fax Settings] \rightarrow [Condition Settings] \rightarrow [Distinctive Ring Detection] (in the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Condition Settings] \rightarrow [Distinctive Ring Detection].).



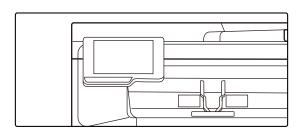


The machine rings and fax reception begins automatically.

When reception begins, the information indicator blinks in blue.

A beep sounds when reception ends.

2



The faxes are printed automatically.

When printing ends, the Information indicator turns off.

RECEIVING A FAX MANUALLY

A fax can be received manually using the touch panel (manually).



To switch between auto reception and manual reception modes:

Set in Receive Settings.

Receive Settings (page 5-11)



When the machine rings, and tap the [Speaker] key.

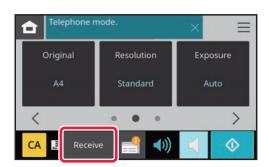
When the [Speaker] key is tapped, the [Receive] and appears.

<u>BASIC MODE (page 5-5)</u>



To adjust the speaker volume, tap the 🚺 key.

2



Tap the [Receive] key to receive a fax.

When printing ends, the Information indicator turns off.

PRINTING RECEIVED DATA

PRINTING A RECEIVED DATA (Hold setting for received data print)

Enable this setting to have faxes received and stored in memory without being printed. .



To enable the hold setting for received data print:

From the operation panel, select [System Settings] \rightarrow [Fax Settings] \rightarrow [Condition Settings] \rightarrow [Hold Setting for Received Data Print] (In the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Common Settings] \rightarrow [Condition Settings] \rightarrow [Hold Setting for Received Data Print]).

These settings can only be configured when there is no received data in the machine memory .

Important points when using this function

If the received fax data is not printed, the fax memory will run low, and the machine will not be able to receive any faxes. When using this function, you should print the received data as soon as possible without leaving it in the fax memory. You can view the remaining fax memory capacity on the fax mode base screen.

When little space remains in the fax memory, "Manual receive is disabled. Due to out of memory." appears on the touch panel.



The received faxes will be stored in memory regardless of whether they are received automatically or manually



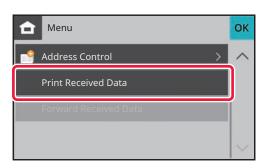
To transfer received data to another machine:

In the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Receive Settings] \rightarrow [Set the Telephone Number for Data Forwarding].

1

Tap the [Menu] icon.

2



Tap the [Print Received Data] key.

3

When a message appears, tap the [Print] key.



To cancel the settings:

Tap the [Cancel] key.



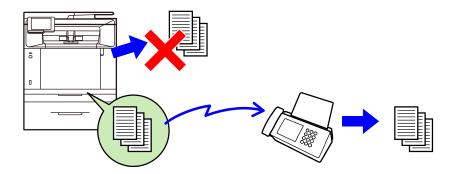
- Prints all received data. Specific received data cannot be printed.
- When a fax is received during printing, that data is printed on the next printing.

FORWARDING RECEIVED DATA

FORWARDING RECEIVED FAXES (FAX DATA FORWARD)

When the machine cannot print because it is out of paper or out of toner, received faxes can be forwarded to another previously stored fax machine. Store a recipient by selecting [Send Setting (page 8-48)] in Setting mode. If the machine has received data, the information indicator blinks in blue.

This function is convenient in an office or work area that has two or more telephone lines and another fax machine is connected to a different line than the machine.





- If some pages of a fax that is being forwarded were successfully printed, only those pages that were not printed will be forwarded.
- A forwarded fax becomes a fax transmission job. If transmission does not take place because the transmission was canceled or an error occurred, the fax will be held in memory until it can be printed.
- · All faxes received are forwarded.



Make sure that the information indicator is blinking in blue.



Tap the [Menu] icon and [Forward Received Data] to begin forwarding.

After the forwarding is completed, the received data retained in the memory of the device will be deleted.

OTHERS FUNCTIONS

STORING FAX OPERATIONS (PROGRAM)

This function collectively stores various settings as one program. The stored program can be retrieved using an easy operation.

The following settings can be registered with the program.

- · Destination setting
- Original
- Resolution
- Exposure
- Timer



- The settings stored in a program will be retained even after the program is used for transmission. The same settings can be used repeatedly for transmission.
- · The following contents cannot be stored in programs:
 - · [Speaker] key
- Up to 8 programs can be stored.
- Up to 100 destinations can be stored in one program.



Place the original.

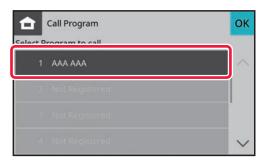
According to the function stored in the program, place the original in the document feeder tray of the automatic document feeder, or on the document glass.

AUTOMATIC DOCUMENT FEEDER (page 1-21)
DOCUMENT GLASS (page 1-23)

2

Tap [Call Program].

3



Tap the desired program key.



Configure additional settings as required.



Some settings cannot be added depending on the contents of the called program.

5

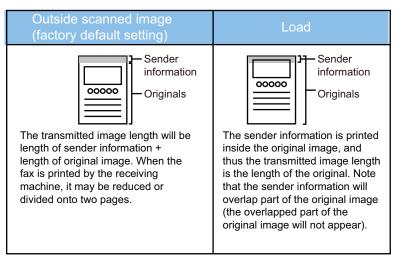
Tap the [Start] key to start scanning of the original.

If you inserted the original pages in the document feeder tray, all pages are scanned. When you place the original on the document glass, scan each page one at a time. After you have scanned the last original, tap the [Read-End] key. A beep will sound to indicate that scanning and transmission have ended.

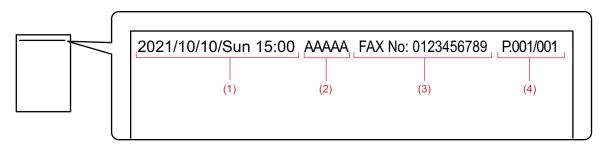
SENDER-RELATED FEATURES

ADDING YOUR SENDER INFORMATION TO FAXES (FAX OWN NUMBER SENDING)

Your sender information (date, time, sender name, sender fax number, number of pages) is automatically added to the top of each fax page you transmit.



Example of the sender information printed



- (1) Date, time: The date and time of transmission.
- (2) Sender name: The sender name programmed in the machine.
- (3) Sender fax number
- (4) Page numbers: Page number/total pages (Total pages only for memory transmission)



- To set the date and time:
 - In the operation panel or Web page, select [System Settings] → [Common Settings] → [Device Control] → [Clock Adjust].
- To store a sender name and sender fax number:

In the operation panel or Web page, select [System Settings] \rightarrow [Fax Settings] \rightarrow [Condition Settings] \rightarrow [Own Name and Destination Set] (In the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Common Settings] \rightarrow [Own Name and Destination Set] \rightarrow [Own Number and Name Set] \rightarrow [Sender Data Registration]). When you use the Own Number Setting, always configure this information.

ASSUMING A SPECIFIC USAGE

CHANGING THE PRINT SETTINGS FOR THE TRANSACTION REPORT (TRANSACTION REPORT)

A transaction report is automatically printed out to alert you when a transmission fails.

The transaction report contains a description of the transmission (date, start time, name of destination, time required, number of pages, result, etc.).

INFORMATION APPEARING IN THE RESULT COLUMN (page 5-61)



Transaction reports are printed based on conditions set in "System Settings".



To set the printing conditions of transaction report:

In the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Default Settings] \rightarrow [Transaction Report Print Select Setting].

Original image in transaction report

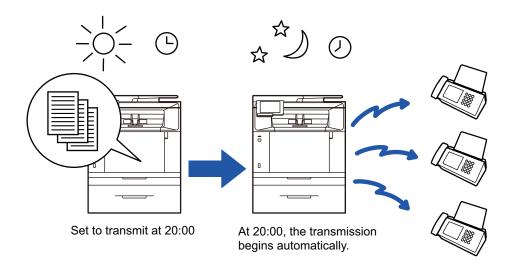
When [Print Original Image] is enabled, the first page of the transmitted original is printed on the same sheet as the transaction report. If the vertical scanning length (X direction) of the original is longer than 17-1/64" (432 mm), the part that exceeds 17-1/64" (432 mm) may be cut off.

STARTING A TRANSMISSION AT A SPECIFIED TIME (TIMER TRANSMISSION)

Specify a time at which a transmission or broadcast transmission will automatically take place. Transmission begins automatically at the specified time.

This function is helpful when you wish to perform reserved, broadcast or other transmissions during your absence or at night or other times when telephone rates are low.

For example, When originals are loaded and set to transmit at 20:00, the scanned data will not be transmitted immediately, instead, it will automatically start transmitting at 20:00.





- · When using timer transmission, do not turn off the machine and switch it to the power saving mode.
- When performing a timer transmission, you must scan the original into memory when you set up the transmission. It is not possible to leave the document in the document feeder tray or on the document glass and have it scanned at the reserved time of transmission.
- Up to 50 timer transmissions can be stored at once.
- · In fax mode, this function cannot be used in direct transmission mode or when the speaker is used to dial.



- Settings selected for a timer transmission (exposure, resolution, and other functions) are automatically cleared after the transmission is finished.
- If another transmission is in progress when the specified time arrives, the timer transmission will begin after that transmission is finished.
- The time can be specified up to a week in advance.
- After the timer transmission settings are specified, start the transmission in the same way as other functions.



Place the original.

When in fax mode, then after completing this procedure, proceed to Step 3.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

AUTOMATIC DOCUMENT FEEDER (page 1-21)

DOCUMENT GLASS (page 1-23)

2

Specify the destination.

When in fax mode, enter the destination number.

ENTERING A DESTINATION NUMBER USING THE NUMERIC KEYS (page 5-12)

RETRIEVING A DESTINATION FROM AN ADDRESS BOOK (page 5-13)

USING A SEARCH NUMBER TO RETRIEVE A DESTINATION (page 5-16)

USING A TRANSMISSION LOG TO RESEND (page 5-17)

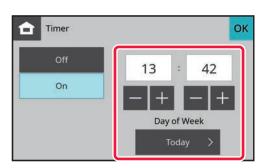


Tap the [Others] key, and tap the [Timer] key.



Tap [On] key.

5



Specify the time.



Specify the time (hour and minute) in 24-hour format.

After the settings are completed, tap ox and [Back] keys in sequence.



- Tap the areas displaying the hour and minute respectively, and enter the values using the numeric keys.
- It is convenient to use + to finely adjust the time.
- The setting will show the current time. If the time is not correct, press the [CA] key to cancel the operation. Correct the time in setting mode and then perform the timer transmission procedure.



To cancel the Timer Transmission settings:

Tap the [Off] key.



To set the date and time of the machine:

In the operation panel or Web page, select [System Settings] \rightarrow [Common Settings] \rightarrow [Device Control] \rightarrow [Clock Adjust].



Tap the [Start] key to start scanning of the original.

- If you inserted the original pages in the document feeder tray, all pages are scanned.

 A beep will sound to indicate that scanning has ended, and the machine stands by for transmission.
- When you place the original on the document glass, scan each page one at a time.
 When scanning finishes, place the next original and tap the [Start] key.
 Repeat until all pages have been scanned and then tap the [Read-End] key.
 A beep will sound to indicate that scanning has ended, and the machine stands by for transmission.



The original is scanned into memory. The original cannot be scanned at a specified time.

USING AN EXTERNAL TELEPHONE

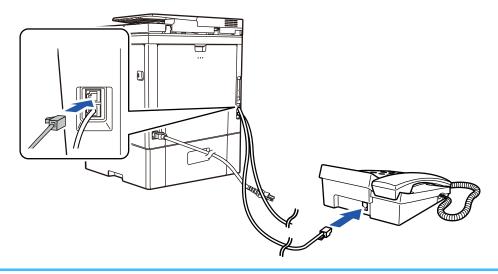
CONNECTING AN EXTERNAL TELEPHONE

CONNECTING AN EXTERNAL TELEPHONE

You can connect an existing telephone to the machine.

The telephone can be used for voice calls and to start fax reception on the machine. Connect the external telephone as shown below.

Insert the plug on one end of the telephone line cord into the external telephone connection jack of the machine as shown until it clicks, and insert the other plug into a wall telephone jack until it clicks.





- You cannot send a fax from your telephone.
- You can connect a telephone with a modular cable plug to your machine. Also, use the two-wire cable for telephone connection. If another type of cable is used, the telephone may not operate normally.
- If the plug on the telephone line cord does not fit into the jack on your external phone, contact your dealer or nearest SHARP Service Department.

RECEIVING A FAX AFTER ANSWERING A CALL ON THE EXTERNAL TELEPHONE (REMOTE RECEPTION)

Follow the steps below if you need to start fax reception after answering a call and speaking on the external telephone. Dial [5], [*] and [*] buttons of the external telephone.

If you are using a pulse line, set the extension to send tone signals.



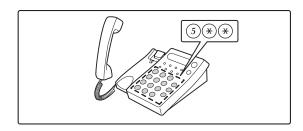
- To receive a fax after answering a call on the external telephone:
 Set [Manual Reception] in "Receive Settings".
 Receive Settings (page 5-11)
- To change the number to receive faxes:
 In the Web page, select [System Settings] → [Image Send Settings] → [Fax Settings] → [Default Settings] → [Remote Reception Number Setting]. Set a value from 00 to 99.





While the machine is ringing, pick up the receiver to speak.

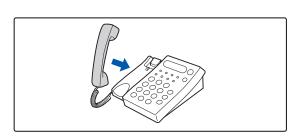
2



Signal the machine to start fax reception.

Press (5) (*) (*) from the external telephone.

3



Replace the receiver.

The machine beeps when reception ends.

MAKING AND RECEIVING PHONE CALLS

You can make and receive calls like normal on your external phone. A phone call can also be made by dialing on the machine.

CHECK THE COMMUNICATION STATUS

FAX JOBS

When you tap the [Fax Job Status] key, Fax Job Status screen is displayed.

The fax job status screen is selected from the following three keys

Job Status

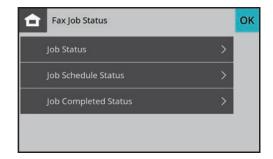
Displays one job in communication.

Job Schedule Status

Displays jobs that are waiting (including time-specified jobs and jobs waiting to be called again. (Including time-specified jobs and jobs waiting for recall.)

Job Completed Status

Displays jobs that have completed communication. (Including jobs that failed or aborted communication.)





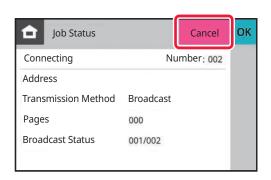
Fax jobs include reception, timer transmission, and data forwarding as well as usual transmission. For information on jobs in fax mode, see "COMPLETED FAX TRANSMISSION/RECEPTION JOBS (page 5-60)".

CANCEL A CURRENTLY JOB



Tap the [Fax Job Status] key and tap the [Job Status] key





Tap the [Cancel] key.

Tap the [Cancel] key when a screen appears confirming that the job is canceled.

CANCEL A RESERVED JOB

- Tap the [Fax Job Status] key and tap the [Job Schedule Status] key
- Tap the job you want to delete, then tap .

 Tap the [Cancel] key when a screen appears confirming that the job is canceled.

CHECK THE DETAILS OF THE RESERVED JOB

- Tap the [Fax Job Status] key and tap the [Job Schedule Status] key
- Tap the job you want to see the contents of, then tap
 Tap the [Cancel] key when a screen appears confirming that the job is canceled.

CHECK THE DETAILS OF THE RESERVED JOB

Tap the [Fax Job Status] key and tap the [Job Status] key

CHECK THE DETAILS OF THE COMPLETED JOB

- Tap the [Fax Job Status] key and tap the [Job Completed Status] key
- Tap the job you want to see the contents of, then tap ①.

 The jobs whose contents can be reviewed are keyed with the items so that they can be tapped.

COMPLETED FAX TRANSMISSION/RECEPTION JOBS

A usual transmission job moves to the job list when transmission is completed. Then the status field displays "Send OK".

FAX RECEPTION JOBS

When a fax is being received, the status field displays "Receiving" in the job queue list.

When reception is completed, the job moves to the completed job list. After the fax is printed, the status changes to "Received".

TIMER TRANSMISSION JOBS

A timer transmission job appears at the end of the job queue list until the specified time is reached.

Transmission begins at the specified time. When transmission is completed, the job moves to the completed job list and the status field displays "Send OK".

RETRY JOBS

A retry job appears at the end of the job queue list.

Transmission of the retry job starts according to the [Recall in Case of Line Busy] setting in "Settings". When the transmission is completed, the retry job moves to the completed job list and the status changes to "Send OK".

RECEIVED DATA IS NOT PRINTED

When a data is being received, "Receiving" appears in the job queue list. When the reception is completed, the status changes to "Waiting".

RECEIVED FAX IS PRINTED

When reception is completed, the job moves to the completed job list. After the fax is printed, the status changes to "Received". Then a job is added for which the status field displays "Waiting" in the job queue list. When forwarding the received fax is completed, the job moves to the completed job list and the field changes to "Forward OK".

CHECKING IMAGE SENDING ACTIVITIES

PRINTING IMAGE SENDING ACTIVITY REPORTS

You can have the machine print a log of recent image sending activity (date, name of other party, time required, result, etc.). The Image Sending Activity Report contains useful information such as the types of errors that occurred. The most recent 50 transactions are included in the report.

The image sending activity report can be printed from the machine's System Settings→Data List→ List for Administrator→Image Sending Activity Report (Fax) (for Web page, Status→Data List→List for Administrator→Image Sending Activity Report (Fax)).



The contents of the Image Sending Activity Report are erased when the report is printed, and thus it cannot be reprinted.



To configure the image sending activity report:

In the Web page, select [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Default Settings] \rightarrow [Activity Report Print Select Setting].

INFORMATION APPEARING IN THE RESULT COLUMN

Error types and other information are printed in the result column of transaction and activity reports. When a transaction or activity report is printed, check the result of the transaction in the result column and take action as needed.

Examples of messages that are printed in the result column

Print Page	Description
OK	The transaction was completed normally.
G3	Communication took place in G3 mode.
ECM	Communication took place in G3 ECM mode.
SG3	Communication took place in Super G3 mode.
Forward	The received data was forwarded.
No Response	No response from the receiving party.
Busy	Transmission was not possible because the other party was already using the line.
Error	The transmission was canceled while in progress.
MEMORY OVER	The memory became full during quick on-line transmission.
FULL	The memory became full during reception.
LENGTH OVER	The transmitted fax was over 59" (1.5 m) long and therefore could not be received.
ORIGINAL ERROR	Direct transmission or manual transmission was not successful because a misfeed occurred.

SCANNER



NETWORK SCANNER	
BEFORE USING THE MACHINE AS A NETWORK SCANNER FUNCTION	6-2 6-3 6-4 6-5 6-5 6-7
SELECTING NETWORK SCANNER MODE IMAGE SEND SEQUENCE. ORIGINAL SIZE TRANSMITTABLE ORIGINAL SIZES ADDRESS BOOK ADDRESS BOOK SCREEN SELECTING "CONTACTS" OR "GROUP". 6. DELETING THE TRANSMISSION HISTORY. 6. DELETING A SELECTED HISTORY. 6. REGISTER AN ADDRESS BOOK IN THE WEB PAGE. 6. ADDRESS BOOK. 6.	6-8 6-9 6-9 -10 -11 -12 -12
ENTERING DESTINATIONS	
ENTERING DESTINATIONS	-14 -16
ENTER DESTINATION MANUALLY	-19

BEFORE USING THE MACHINE AS A

TRANSMITTING AN IMAGE
TRANSMITTING AN IMAGE
SENDING AN IMAGE IN SCAN MODE 6-22
SENDING THE SAME IMAGE TO MULTIPLE
DESTINATIONS (BROADCAST TRANSMISSION) 6-24
IMAGE SETTINGS
ORIGINAL (2-SIDED ORIGINAL)6-26
SPECIFYING THE ORIGINAL SCAN SIZE IN PAPER SIZE
6-27
SPECIFYING THE ORIGINAL SCAN SIZE USING
NUMERIC VALUES
CHANGING THE EXPOSURE AND ORIGINAL IMAGE
TYPE6-30
CHANGING THE RESOLUTION6-31
CHANGING FORMAT IN SCAN
SCANNING SETTINGS FOR B&W SCANNING 6-34
SCAN TO USB MEMORY DEVICE6-35
OTHER FUNCTIONS
STORING SCAN OPERATIONS (PROGRAM)6-37
STORING SCAN OPERATIONS (PROGRAM)6-37 SCANNING AND SENDING ORIGINALS COLLECTIVELY
STORING SCAN OPERATIONS (PROGRAM)6-37 SCANNING AND SENDING ORIGINALS COLLECTIVELY 6-39
STORING SCAN OPERATIONS (PROGRAM)6-37 SCANNING AND SENDING ORIGINALS COLLECTIVELY 6-39 SCANNING A BUSINESS CARD (BUSINESS CARD SCAN)
STORING SCAN OPERATIONS (PROGRAM)6-37 SCANNING AND SENDING ORIGINALS COLLECTIVELY 6-39 SCANNING A BUSINESS CARD (BUSINESS CARD SCAN) 6-39
STORING SCAN OPERATIONS (PROGRAM)6-37 SCANNING AND SENDING ORIGINALS COLLECTIVELY 6-39 SCANNING A BUSINESS CARD (BUSINESS CARD SCAN) 6-39 ADJUSTING COLORS AND SHADING6-41
STORING SCAN OPERATIONS (PROGRAM)



BEFORE USING THE MACHINE AS A **NETWORK SCANNER**

BEFORE USING THE MACHINE AS A **NETWORK SCANNER FUNCTION**

USES OF THE NETWORK SCANNER

The network scanner allows you to create an image file from the original data scanned by the machine, and send the file over a network to a PC, FTP server, or other destinations. If necessary, it scans the original using a TWAIN-compliant application on your PC.

The network scanner function provides the following scanning modes.

Scanner mode

The scanner function of the machine sends a scanned original as described below based on the specification of the destination.

Scan to E-mail

You can send a scanned file as an e-mail attachment. You can also save the file to the machine's memory and send only a URL link (without attaching the file) that allows the recipient to download the file.

Scan to FTP

The scanned file is sent to a specified folder of an FTP server.

When the file is sent, it is also possible to send an e-mail to a previously stored e-mail address to inform the recipient of the location of the file.

Scan to Desktop

The scanned file is sent to a specified folder on your computer.

For information on Scan to Desktop, consult your dealer.

Scan to Network Folder

The scanned file is sent to a network folder on a Windows PC on the same network as the machine.

When the file is sent, it is also possible to send an e-mail to a previously stored e-mail address to inform the recipient of the location of the file.

For the operating procedure, see "SENDING AN IMAGE IN SCAN MODE (page 6-22)".



BEFORE USING THE NETWORK SCANNER

To use the machine as a network scanner, you must store sender information, configure server settings, store destinations in the address book, and perform other required operations.



Make sure the power plug is inserted in the power outlet.

When the power indicator is lit up, the power plug is inserted in the power outlet. If the power indicator is not lit up, insert the power plug in the power outlet.

TURNING ON THE POWER (page 1-7)

2

Check the date and time.

Verify that the correct date and time are set in the machine.



To set the date and time of the machine:

In the operation panel or Web page, select [System Settings] \rightarrow [Common Settings] \rightarrow [Device Control] \rightarrow [Clock Adjust].

3

Configure settings required in the setting mode.



- · To configure server settings:
- In the Web page, select [System Settings] \rightarrow [Network Settings] \rightarrow [Services Settings].
- To configure basic settings for the network scanner:
 In the Web page, select [System Settings] → [Image Send Settings] → [Scan Settings].

4

Store the destination addresses for each scan mode in the address book.

You can send an image by directly entering an address when using Scan to Image. It is convenient to previously store addresses in the address book.

Up to 300 addresses can be stored in the address book. For information on the address book, see "ADDRESS BOOK". For how to use the address books and how to store addresses, see the following item.

RETRIEVING A DESTINATION FROM AN ADDRESS BOOK (page 6-14)

VIEWING A LIST OF THE SELECTED DESTINATIONS (page 6-17)

ENTER DESTINATION MANUALLY (page 6-18)

RETRIEVING A DESTINATION FROM A GLOBAL ADDRESS BOOK (page 6-19)

USING A TRANSMISSION LOG TO RESEND (page 6-21)

STORING DESTINATIONS FOR SCAN TO DESKTOP

To store your computer in the machine as a destination for Scan to Desktop, Network Scanner Tool Lite must be installed.

To scan an image to your computer, Network Scanner Tool Lite must be running on your computer.



For information on how to obtain and install Network Scanner Tool Lite, see the following URL. https://global.sharp/products/copier/products/nst_lite/tips/index.html



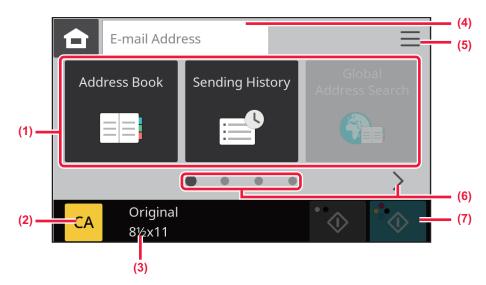
NETWORK SCANNER MODE

Network scanner mode has two modes: basic mode and menu mode.

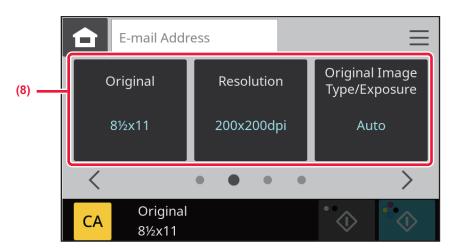
Basic mode is limited to frequently used functions that allow you to smoothly perform most image send jobs. If you need to select detailed settings or special functions, use menu mode.

BASIC MODE

Basic mode makes it easy to select basic settings for network scanner mode. [1st screen]



[2nd screen]

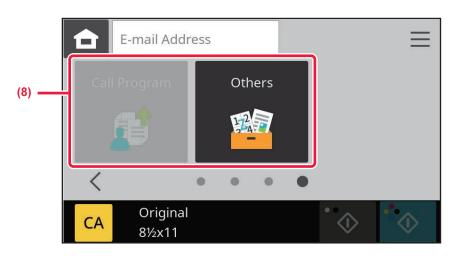




[3rd screen]



[4th screen]



- (1) Set an address.
- (2) Reset the address and settings.
- (3) The original size is displayed.
- (4) Tap to display the soft keyboard.
- (5) Switches to menu mode.
 - ► MENU MODE (page 6-7)

You can select these functions in basic mode.

- SPECIFYING THE ORIGINAL SCAN SIZE IN PAPER SIZE (page 6-27)
- CHANGING THE EXPOSURE AND ORIGINAL IMAGE TYPE (page 6-30)
- CHANGING THE RESOLUTION (page 6-31)
- CHANGING FORMAT IN SCAN (page 6-32)
- SCANNING SETTINGS FOR B&W SCANNING (page 6-34)
- SCAN TO USB MEMORY DEVICE (page 6-35)

If My Address Search is available, the 💹 (Find My Address) key will appear next to the address entry.

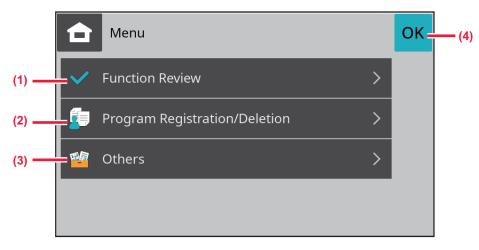
(6) Change the function display.

(7) Starts black and white or color transmission.

(8) Select the function you want to use.

MENU MODE

Menu mode lets you select any function setting that can be used for network scanner.



- (1) This function confirms the contents of the current settings.
- (2) Registers or deletes programs.
- (3) Displays "Others".
- (4) Closes the menu.

SELECTING NETWORK SCANNER MODE

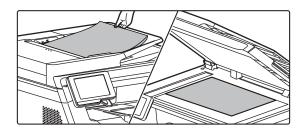
Change the network scanner mode to other mode as explained in **SWITCH TO HOME SCREEN** (page 2-7).



IMAGE SEND SEQUENCE

First, to place the machine in a desired image send mode, tap the appropriate icon in the Home screen. SWITCH TO HOME SCREEN (page 2-7)





Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

- ► AUTOMATIC DOCUMENT FEEDER (page 1-21)
- DOCUMENT GLASS (page 1-23)

2

Enter the destination.

Tap the address key to directly enter the destination, or search and retrieve the address book or destination.



RETRIEVING A DESTINATION FROM AN ADDRESS

BOOK (page 6-14)

USING A TRANSMISSION LOG TO RESEND (page

6-21)

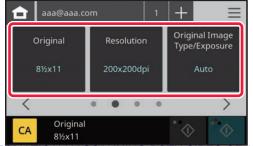
RETRIEVING A DESTINATION FROM A GLOBAL

ADDRESS BOOK (page 6-19)

3

Select functions.

Specify the original scan size, exposure, file format, and other items. If necessary, you can refer to the following functions for the setting.



<u>AUTOMATICALLY SCANNING BOTH SIDES OF AN</u>

ORIGINAL (2-SIDED ORIGINAL) (page 6-26)

CHANGING THE RESOLUTION (page 6-31)

CHANGING FORMAT IN SCAN (page 6-32)







Send the original.

Tap the [B/W Start] or [Color Start] key .



When the original is placed on the document glass, repeat the placing original and transmission procedures until all originals have been sent. After scanning all originals, tap the [Read-End] key.

ORIGINAL SIZE

TRANSMITTABLE ORIGINAL SIZES

For information on the original sizes that can be loaded, see "<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>" and "<u>DOCUMENT GLASS (page 1-23)</u>".



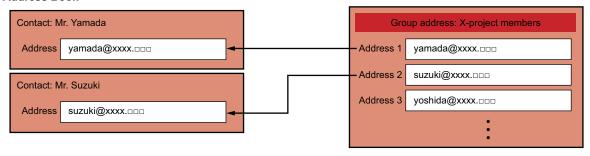
ADDRESS BOOK

"Contacts" and "Group" can be stored in the address book.

When "Type" is set to [Fax] in the "Address Book" on the web page, addresses can be registered to fax destinations. When "Type" is set to [Scan] in the "Address Book" on the web page, addresses can be registered such as E-mail, FTP, Desktop, etc.

Registering addresses stored as "Contacts" as "Group" enables you to easily send messages to multiple destinations simply by specifying a group.

Address Book





- Up to 300 entries in all can be stored for "Contacts" and "Group".
- One "Contacts" can store up to One addresses.
- One "Group" can store up to 100 addresses (E-mail address only).

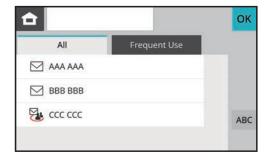
ADDRESS BOOK SCREEN

To display the address book, tap the [Address Book] key on the basic mode.

"Contacts" and "Group" registered are enabled for alphabetical search.

"Contacts" and "Group" are registered on the Web page.

Address Book (page 8-24)

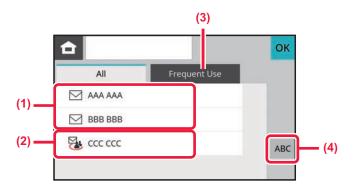




SELECTING "CONTACTS" OR "GROUP"

Tap a "Contacts" or "Group", and the tapped "Contacts" or "Group" is selected. After selection, tap ok.

To add "Contacts" and "Group", refer to the following.



(1) One touch keys of "Contacts"

(3) [Frequent Use] key

(2) One touch keys of "Group"

(4) [Index] key

Narrowing by frequent Use

Tap the [Frequent Use] key and select an address in the screen that appears. Addresses registered as "Frequent Use" addresses are shown.

Narrowing by index

Search by alphabet to narrow down addresses.

For example, tap "A" on the index screen to display "Contacts" stored with search text starting with "A".

DELETING THE TRANSMISSION HISTORY

You can delete the image send transmission history.

DELETING A SELECTED HISTORY

- Tap the history you want to delete.
- In the transmission log screen, tap [Delete the Selected History] .
- The message "Delete the selected history?" will appear, tap the [Delete] key.

 The selected transmission log is deleted.

REGISTER AN ADDRESS BOOK IN THE WEB PAGE

ADDRESS BOOK

Transmission destinations (contacts) such as fax and Scan to E-mail addresses, and groups of transmission destinations, can be stored in the address book. In setting mode, a list of stored contact and group information is displayed.

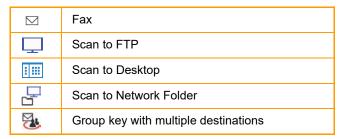
To edit a contact or group, select the name of the contact/group. To add a new contact or group, click the [Add] key. Address Book (page 8-24)

ENTERING DESTINATIONS

ENTERING DESTINATIONS

RETRIEVING A DESTINATION FROM AN ADDRESS BOOK

In the address book screen, simply tap the one-touch key of a registered destination to retrieve the destination. If necessary, store multiple destinations in a one-touch key. Tapping the key will retrieve all the stored destinations. The address book screen shows all destinations used in each mode. Each one-touch key shows the name of the destination and an icon indicating the mode used for the destination.

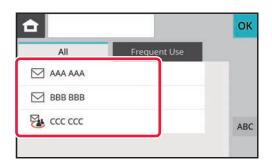






Tap the [Address Book] key.





Tap the one-touch key of contact or group that has a destination.

- The destinations displayed on the list can be narrowed with frequent use and indexes.
- When adding a destination, tap another one-touch key.
- If two or more destinations are selected or specified, the total number of addresses appears next to address.
- Even if only a single destination is selected, the number of addresses appears when the destination is a contact or group in which multiple addresses are stored For more information, see "<u>ADDRESS BOOK SCREEN (page</u> 6-10)".





If you select an incorrect destination:

Tap the key again to cancel the selection.



- To select a destination from the transmission log, tap the [Sending History] key. USING A TRANSMISSION LOG TO RESEND (page 6-21)
- To check the entered destinations, tap the [Address Review] key. VIEWING A LIST OF THE SELECTED DESTINATIONS (page 6-17)
- The destination for transmission can be selected by tapping a stored destination.
- If an address that you do not have permission to use is included in the addresses, a message will appear when you press the [B/W Start] or [Color Start] key. To send only to the permitted addresses, press the [OK] key and then the [Enter for send] key.

MY ADDRESS

My Address is the user's own e-mail address, and is the e-mail address that has been registered in the user list.

My Address can be used when login by login name / password is enabled in user authentication.

Use this address when you want to send a scanned image to your own e-mail address.

In E-mail mode, [Find My Address] appears to let you immediately find and use My Address.

When you use the address book in easy scan screen or E-mail mode, the [Find My Address] button also appears at the top of the user list for easy access from the address book.

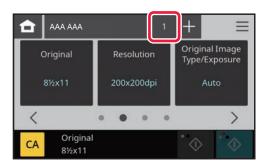


- My Address cannot be used in the following instances:
 - · When [Disabling of Find My Address] is enabled in the system settings of the Web page
- · When user authentication is disabled, or is only by user number
- When the e-mail address of the logged in user has not been registered
- After the [Next Address] key is pressed when [Be sure to press Next Address Key ([+]) before selecting the next
 address.] is enabled in System Settings of the Web page [Image Send Settings] → [Common Settings] → [Condition
 Settings]
- Even if "Verify Signature of Server Certificate of the Other Party" is enabled in the System Settings of the Web page, when "My Address Search" is performed only when the search destination is an LDAP server, the server certificate of the destination is not validated.

VIEWING A LIST OF THE SELECTED DESTINATIONS

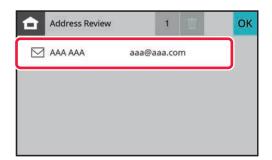
When multiple destinations have been selected, you can display and check the destinations. You can also delete a destination from the list (cancel selection of the destination).





Tap the [Address Review] key.



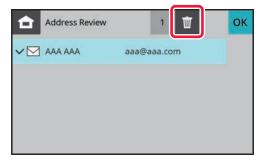


Confirm the destination.

After the confirmation is completed, tap ok.

Deleting Specified Destinations

In step 2 of "VIEWING A LIST OF THE SELECTED DESTINATIONS", select the destination and tap 🔳 .



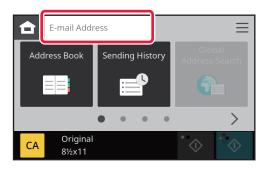


If you placed the original on the document glass and tapped the [B/W Start] or [Color Start] key, you cannot delete an address when changing settings.

ENTER DESTINATION MANUALLY

The search number can be used to specify a destination stored in an address book.





Tap a text box on the basic mode.





Enter the destination address on the soft keyboard that appears.

When you have finished entering the destination address, tap or to close the soft keyboard.



For details on how to input text, see "CHARACTER ENTRY (page 2-17)"

RETRIEVING A DESTINATION FROM A GLOBAL ADDRESS BOOK

When an LDAP server is configured in the "Settings (Web version)", look up an address in a global address book and retrieve the destination address for Scan to E-mail transmission.

You can add an address retrieved by searching to the address book.



Even if "Verify Signature of Server Certificate of the Other Party" is enabled in the System Settings of the Web page, when "Global Address Search" is performed only when the search destination is an LDAP server, the server certificate of the destination is not validated.





Tap the [Global Address Search] key.





Enter a keyword.

When you tap the keyword entry box, the soft keyboard appears.

The search results will appear after a brief interval.



How to search

Enter the search characters (maximum of 64 characters). The system will look for names starting with the entered letters.

An asterisk * is used as follows:

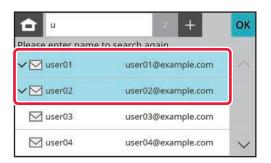
XXX : Names beginning with "XXX"

XXX : Names that end with "XXX"

XXXX : Names containing "XXX"

AA XX : Names that start with "AA" and end with "XX".





Select the search target.

When the authentication screen to the LDAP server appears, enter the user name and password.



• If no destination is found:

Tap the [Search Again] key to add more search letters.

• To continuously add other destination. Tap the destination.

USING A TRANSMISSION LOG TO RESEND

Select a destination from a transmission log and resend the data.

The destinations of the most recent 10 transmissions are stored. Select one of these to resend to that destination.



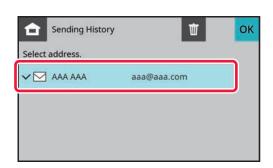
- The following types of addresses are not stored for resending.
- · Group destinations
- · Broadcasting destinations
- The user name and password are not stored for security reasons. If a screen requiring you to enter such information appears, enter the information again.





Tap the [Sending History] key





Tap the key of the destination to resend.

The last 10 addresses used for transmission are displayed. If a screen requiring you to enter the user name and password appears, enter the information.



To cancel the resend setting:

Tap the highlighted key.

TRANSMITTING AN IMAGE

TRANSMITTING AN IMAGE

SENDING AN IMAGE IN SCAN MODE



- If the memory becomes full while the originals are being scanned, a message will appear and scanning will stop.
- When performing Scan to E-mail, take care not to send a file that is too large. In particular, multi-page files tend to be large. When sending a multi-page file or other large file, it may be necessary to reduce the number of scanned pages or reduce the send size.



Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

<u>DOCUMENT GLASS (page 1-23)</u>



When placing the originals, orient them as shown below.

Originals	Document feeder tray Place the original face up.	Document glass Place the original face down and align the corner with the tip of the ■ mark in the top left corner of the document glass scale.
Portrait orientation Landscape orientation	abc	₩ Spc

2

Specify the destination.

RETRIEVING A DESTINATION FROM AN ADDRESS BOOK (page 6-14)

ENTER DESTINATION MANUALLY (page 6-18)

RETRIEVING A DESTINATION FROM A GLOBAL ADDRESS BOOK (page 6-19)

USING A TRANSMISSION LOG TO RESEND (page 6-21)

The icon on the key indicates the type of destination stored in the key.

Scan to E-mail
 Scan



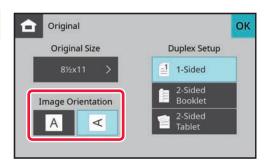
Multiple destinations can be specified.



3

Tap the [Original] key.





Tap the appropriate orientation key.

Specify the orientation of the original placed in step 1. After the settings are completed, tap OK.



- You can change exposure, resolution, file format, color mode, and other settings.
 AUTOMATICALLY SCANNING BOTH SIDES OF AN ORIGINAL (2-SIDED ORIGINAL) (page 6-26)
 CHANGING THE EXPOSURE AND ORIGINAL IMAGE TYPE (page 6-30)
 CHANGING THE RESOLUTION (page 6-31)
 CHANGING FORMAT IN SCAN (page 6-32)
- Tapping the [Others] key allows you to configure various functions, for example, collectively sending two original pages as one sheet or original pages with different sizes.

5

Tap the [B/W Start] or [Color Start] key to start scanning of the original.

- If the original was inserted in the document feeder tray, a beep will sound when scanning is completed and transmission will take place.
- If the original is placed on the document glass, the [Read-End] key appears in the touch panel. If the original is only one page, go to step 7. To scan more pages, go to step 6.
- 6

If the original was placed on the document glass, replace it with the next original and tap the [B/W Start] or [Color Start] key.

Repeat until all originals have been scanned.



Tap the [Read-End] key.

A beep will sound to indicate that the operation is completed.



To set the scan complete sound:

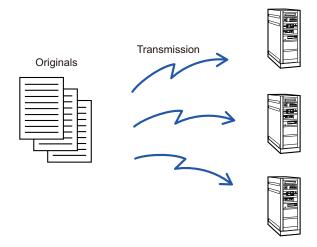
From the operation panel, select [System Settings] \rightarrow [Sound Settings] \rightarrow [Beep Sound Settings (Common)] \rightarrow [Scan Complete Sound (Scan/Fax)].

SENDING THE SAME IMAGE TO MULTIPLE DESTINATIONS (BROADCAST TRANSMISSION)

Send the same scanned image to multiple scan destinations in a single operation.

One operation allows you to send data to up to 300 destinations, including the reserved send jobs. (For example, if broadcast transmission jobs with 300 destinations are already reserved, data can be broadcasted to up to 300 destinations.)

No addresses other than E-mail can be set.



It is convenient to store destinations you frequently use for broadcast transmission as contacts or groups. One destination can be stored in one contact.

For broadcast transmission, the contact or group key can be simply tapped to retrieve multiple addresses.



Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

DOCUMENT GLASS (page 1-23)

2

Specify all destinations.

RETRIEVING A DESTINATION FROM AN ADDRESS BOOK (page 6-14)
ENTER DESTINATION MANUALLY (page 6-18)
RETRIEVING A DESTINATION FROM A GLOBAL ADDRESS BOOK (page 6-19)
USING A TRANSMISSION LOG TO RESEND (page 6-21)



The function for broadcast transmission can only be used in the E-mail.

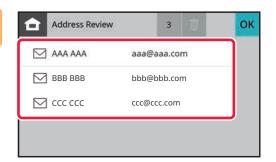


If [System Settings] \rightarrow [Image Send Settings] \rightarrow [Common Settings] \rightarrow [Condition Settings] \rightarrow [Be sure to press Next Address Key ([+]) before selecting the next address.] is enabled in the Web page, tap $\stackrel{\blacksquare}{=}$ before specifying the next destination.

3

Tap the [Address Review] key.





Confirm the destination.

5

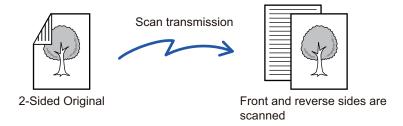
Tap the [B/W Start] or [Color Start] key to start scanning of the original.

- If you inserted the original pages in the document feeder tray, all pages are scanned. A beep will sound to indicate that scanning and transmission have ended.
- When you place the original on the document glass, scan each page at a time.
 When scanning finishes, place the next original and tap the [B/W Start] or [Color Start] key. Repeat until all pages have been scanned and then tap the [Read-End] key.
 A beep will sound to indicate that transmission has ended.

IMAGE SETTINGS

AUTOMATICALLY SCANNING BOTH SIDES OF AN ORIGINAL (2-SIDED ORIGINAL)

The automatic document feeder is used to automatically scan both sides of an original.

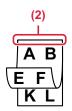




The settings on 2-sided scanning are cleared when transmission has completed.





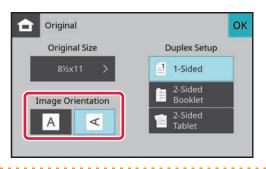


After tapping the [Original] key, tap the [Book] or [Tablet] key.

See the figure on the left to check the binding edge of the original and select the key to be tapped.

- (1) Book
- (2) Tablet





Tap the [Image Orientation] key with the same orientation as the placed original.

If this setting is not correct, a suitable image may not be transmitted

After the settings are completed, tap ok.



To cancel the 2-sided original settings:

Tap the [1-Sided] key.

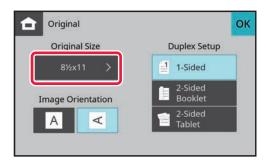
SPECIFYING THE ORIGINAL SCAN SIZE IN PAPER SIZE

If you placed originals of size other than the original size specified in "Default Original Size Settings" in the system settings, specify the original size manually



Tap the [Original] key.

2



Tap the [Orignal Size] key.

3



Tap a key of the desired original size.

After the settings are completed, tap ok.

SPECIFYING THE ORIGINAL SCAN SIZE USING NUMERIC VALUES

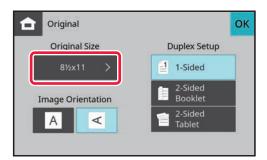
When scanning a non-standard size original such as a card or postcard, specify the original size using numeric values after placing the original.

The width can be from 1" to 14" (25 mm to 356 mm), and the height can be from 1" to 8-1/2" (25 mm to 216 mm).



Tap the [Original] key.

2



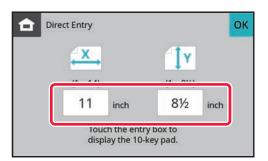
Tap the [Original Size] key.





Tap the [Direct Entry] key.





Specify the original size.



Tap the areas displaying width and height sizes respectively, and enter the sizes using the numeric keys.



5

Tap [OK].

On the base screen, check that the specified size is displayed on the [Original] key.

CHANGING THE EXPOSURE AND ORIGINAL IMAGE TYPE

Optimum scanning is ensured by selecting exposure and original image type based on the original.

How to select the original type

Setup Items	Description
Text	Use this mode for regular text documents.
Text/Printed Photo	This mode provides the best balance for scanning an original which contains both text and printed photographs, such as a magazine or catalogue.
Photo	Use this mode to scan photos.

Exposure settings

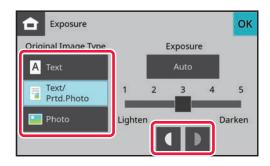
Exp	osure	Suggestion	
Auto		This setting automatically adjusts the exposure for light and dark parts of the original.	
Manual	1-2	Select this setting when the original consists of dark text.	
	3	Select this setting for a normal original (neither dark nor light).	
	4-5	Select this setting when the original consists of light text.	



Tap the [Exposure] key.

Tap the key assigned to the original type you wish to set based on the original type.

3



Tap **I** to adjust the exposure.

After the settings are completed, tap ok.

CHANGING THE RESOLUTION

Specify the resolution setting.

How to select the resolution

For normal text originals, 200 x 200 dpi produces an image that is sufficiently legible.

For photos and illustrations, a high resolution setting (600 x 600 dpi, etc.) will produce a sharp image.

However, a high resolution setting will result in a large file, and if the file is too large, transmission may not be possible.

In this event, reduce the number of pages scanned or take other measures to decrease the file size.

CHANGING FORMAT IN SCAN (page 6-32)

SPECIFYING THE ORIGINAL SCAN SIZE IN PAPER SIZE (page 6-27)



When using the automatic document feeder, the resolution setting cannot be changed after scanning has begun.

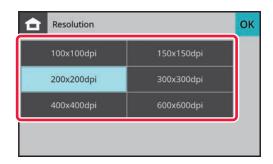


When using the document glass to scan multiple original pages, change the resolution setting each time you change pages.



Tap the [Resolution] key.

2



Tap the key of the desired resolution.

After the settings are completed, tap ok.

CHANGING FORMAT IN SCAN

Change the file format (file type and compression mode/compression ratio) for sending a scanned image at the time of transmission. In addition, if the scanned originals are divided into separate files, the number of pages per file can be changed.

File format combinations

[Color/Grayscale] tab	[B/W] tab
PDF	PDF
TIFF	TIFF
JPEG	TIFF



Tap the [File Format] key.

If you are in data input mode, start from step 5.

2

Tap the [Color/Grayscale] or [B/W] tab.



- The format setting for [B/W] mode is the file format with the [B/W Start] key is tapped.
- The format setting for [Color/Grayscale] mode is the file format with the [Color Start] key is tapped

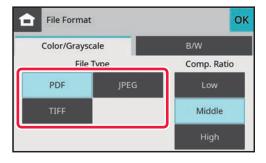
3

Tap the key of the desired file type.

When the [B/W] tab is selected



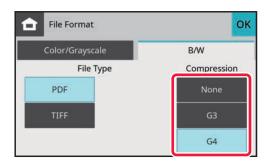
When the [Color/Grayscale] tab is selected



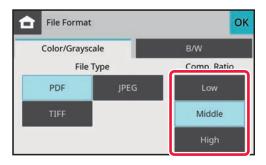
4

Tap the Compression key or Compression Ratio key.

When the [B/W] tab is selected



When the [Color/Grayscale] tab is selected





When you want to file per page when [TIFF] is selected as the file format, set the [File per page] checkbox to \checkmark .



- After the settings are completed, tap ok.
- When the checkmark is removed, one file is created for all pages.

SCANNING SETTINGS FOR B&W SCANNING

The [Mono2/Gray] key changes the tone of the black and white original scanning when transmitting scans.

Mode	Scanning method
Mono2	Colors in the original are scanned as black or white. This mode is best for text-only originals.
Grayscale	The colors in the original are scanned in black and white as shades of gray (grayscale).



Tap the [Resolution] key.

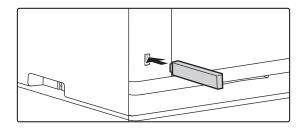
2

Tap the [Mono2] key or [Grayscale] key.

When scanning a black and white original, set whether the original is to be scanned in mono2 or grayscale After the settings are completed, tap OK.

SCAN TO USB MEMORY DEVICE





Connect the USB memory device to the machine.

Use FAT32, NTFS or exFAT format for USB memory device.

2



Tap the [Scan to USB Memory] key.

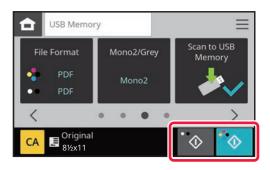
Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

<u>DOCUMENT GLASS (page 1-23)</u>

4



Tap the [Color Start] key or [B/W Start] key.





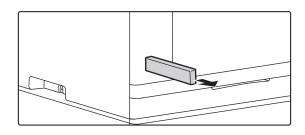
After scanning all originals, tap the [Read-End] key.



When you scan the original using the automatic document feeder, this screen does not appear.



6



Check the [Sending data has been completed.] message, and remove the USB memory device from the machine.

OTHER FUNCTIONS

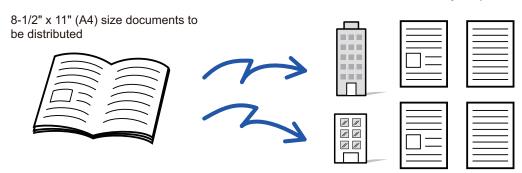
STORING SCAN OPERATIONS (PROGRAM)

This function collectively stores various settings as one program. The stored program can be retrieved using an easy operation.

For example, suppose A4 (8-1/2" x 11") size documents are scanned into a file and sent to each branch office once a month.

- The same documents are sent to each branch office
- · Each page of a bound document is successively transmitted

Scan data received by recipients.



When a job program is not stored	When a job program is stored
Enter the address of each branch office.	Tap the key of a stored program.
◆	◆
Tap the [Color Start] or [B/W Start] key. Scan and send the original.	Tap the [Color Start] or [B/W Start] key. Scan and send the original.
Considerable time is required to send the documents each month because the above settings must be selected. In addition, mistakes are occasionally made when selecting the settings.	When a program is stored, settings are selected with ease by simply tapping the key of the program. In addition, transmission takes place based on the stored settings so there are no chances for mistakes.



- The settings stored in a program will be retained even after the program is used for transmission. The same settings can be used repeatedly for transmission.
- Up to 8 programs can be stored.
- Up to 300 destinations can be stored in one program.

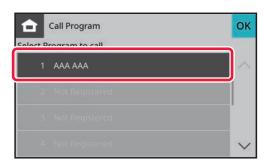


Place the original and tap [Call Program].

According to the function stored in the program, place the original in the document feeder tray of the automatic document feeder, or on the document glass.

AUTOMATIC DOCUMENT FEEDER (page 1-21)
DOCUMENT GLASS (page 1-23)





Tap the desired program key.

3

Configure additional settings if needed.



Some settings cannot be added depending on the contents of the called program.



Tap the [Color Start] or [B/W Start] key to start scanning of the original.

- A beep will sound to indicate that scanning and transmission have ended.
- When you place the original on the document glass, scan each page one at a time.
 When scanning finishes, place the next original and tap the [Color Start] or [B/W Start] key.
 Repeat until all pages have been scanned and then tap the [Read-End] key.

SCANNING AND SENDING ORIGINALS COLLECTIVELY

SCANNING A BUSINESS CARD (BUSINESS CARD SCAN)

You can scan a business card.



Place one business card that you want to scan on the document glass.

DOCUMENT GLASS (page 1-23)



Cautions when placing business cards

- Available business card sizes are 55 x 91 mm.
- If the shape of a business card is not square or rectangular, the business card may not be cropped correctly.

2

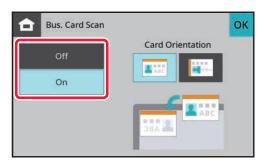
Specify the destination.

RETRIEVING A DESTINATION FROM AN ADDRESS BOOK (page 6-14)
VIEWING A LIST OF THE SELECTED DESTINATIONS (page 6-17)
ENTER DESTINATION MANUALLY (page 6-18)
RETRIEVING A DESTINATION FROM A GLOBAL ADDRESS BOOK (page 6-19)
USING A TRANSMISSION LOG TO RESEND (page 6-21)

3

Tap the [Others] key, and tap the [Bus. Card Scan] key.





Tap the [On] key, and change settings as needed.

When you have completed the settings, tap ok.



To cancel the business card scan setting Tap the [Off] key.

5

Tap the [Color Start] or [B/W Start] key to start scanning the originals.

When scanning is completed, place the next group of originals and tap the [Color Start] or [B/W Start] key. Repeat the above step until you have scanned all originals, and then tap the [Read-End] key. When transmission is completed, a beep sounds.

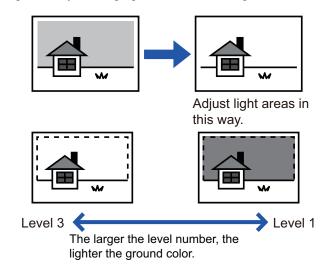


- When the Business Card Scan setting is canceled, the following items retain the setting changes that occurred when Business Card Scan was enabled.
 Resolution, File Type
- Depending on the business card, it may not be extracted to the file correctly.

ADJUSTING COLORS AND SHADING

ADJUSTING THE BACKGROUND BY MAKING LIGHT AREAS OF THE ORIGINAL DARKER OR LIGHTER (BACKGROUND ADJUSTMENT)

You can adjust the background by making light areas of the original darker or lighter.



Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

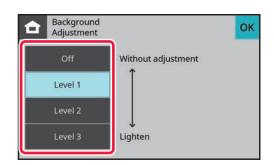
<u>DOCUMENT GLASS (page 1-23)</u>

Specify the destination.

RETRIEVING A DESTINATION FROM AN ADDRESS BOOK (page 6-14)
VIEWING A LIST OF THE SELECTED DESTINATIONS (page 6-17)
ENTER DESTINATION MANUALLY (page 6-18)
RETRIEVING A DESTINATION FROM A GLOBAL ADDRESS BOOK (page 6-19)
USING A TRANSMISSION LOG TO RESEND (page 6-21)

Tap the [Others] key, and tap the [Background Adjustment] key.





Tap the key for the level you want to adjust.

After the settings are completed, tap ok.



To cancel the background adjustment setting:

Tap the [Off] key.



Tap the [Color Start] or [B/W Start] key to start scanning of the original.

- If you inserted the original pages in the document feeder tray, all pages are scanned. A beep will sound to indicate that scanning and transmission have ended.
- When you place the original on the document glass, scan each page one at a time.
 When scanning finishes, place the next original and tap the [Color Start] or [B/W Start] key.
 A beep will sound to indicate that transmission has ended.



When the color mode setting is [Mono2], the background adjustment function will not operate.

ENHANCING THE OUTLINE OF THE SCANNED ORIGINAL BEFORE TRANSMISSION (SHARPNESS)





Place the original.

Place the original in the document feeder tray of the automatic document feeder, or on the document glass.

<u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

DOCUMENT GLASS (page 1-23)

2

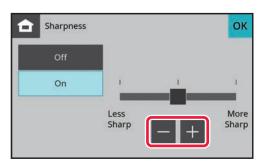
Specify the destination.

RETRIEVING A DESTINATION FROM AN ADDRESS BOOK (page 6-14)
ENTER DESTINATION MANUALLY (page 6-18)
RETRIEVING A DESTINATION FROM A GLOBAL ADDRESS BOOK (page 6-19)
USING A TRANSMISSION LOG TO RESEND (page 6-21)

3

Tap the [Others] key, and tap the [Sharpness] key.





Tap **to adjust the sharpness.**

After the settings are completed, tap ok.



To cancel the sharpness setting:

Tap the [Off] key.

5

Tap the [Color Start] or [B/W Start]] key to start scanning of the original.

- If you inserted the original pages in the document feeder tray, all pages are scanned.
 A beep will sound to indicate that scanning and transmission have ended.
- When you place the original on the document glass, scan each page one at a time.
 When scanning finishes, place the next original and tap the [Color Start] or [B/W Start] key. Repeat the procedure until all pages have been scanned and then tap the [Read-End] key.
 A beep will sound to indicate that scanning and transmission have ended.



SCANNING FROM A COMPUTER (PC Scan Mode)

BASIC SCANNING PROCEDURE

You can install the scanner driver on your computer and use a TWAIN* compliant application to scan an image using your computer.

Scanning from your computer is most useful for scanning a single original such as a photo, particularly when you want to adjust scan settings as you scan. By contrast, scanning at the machine is most useful for continuous scanning of multiple originals.

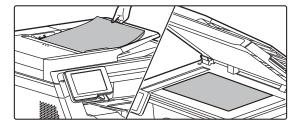
* An interface standard used for scanners and other image input devices. When the scanner driver is installed on your computer, you can use any TWAIN-compliant application to scan an image.



- For the procedures for installing the scanner driver and configuring settings, see the Software Setup Guide.
- This function cannot be used when it has been disabled using "Disable Scan Function" in the system settings (administrator).
- The procedures for selecting the scanner driver and starting scanning vary depending on the TWAIN-compliant application. For more information, see the manual for the application or Help.
- When a large image is scanned at high resolution, the amount of data will be very large and scanning will take a long time. Be sure to select appropriate scan settings for the original (text, photo, etc.).

[At the machine]





Place the original.

Place the original face up in the document feeder tray, or face down on the document glass.





Tap the [PC Scan] mode icon to switch to PC Scan mode.

If the [PC Scan] mode icon does not appear, tap \triangleright to move the screen.



When PC scan mode is selected, only the [Exit] key displayed in the touch panel can be used on the machine; no other keys can be used.

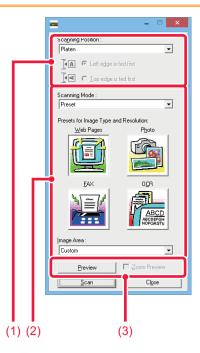
[At your computer]



Start the TWAIN-compliant application on your computer and select [SHARP MFP TWAIN V] in the application's scanner selection.







Preview the image.

(1) Select the location where the original is placed.

"Scanning Source" menu:

- If the original is a one-sided original and is placed in the document feeder tray, select [SPF(Simplex)].
- If the original is a 2-sided original and is placed in the document feeder tray, select [SPF(Duplex - Book)] or [SPF(Duplex - Tablet)] depending on whether the original is a book-style or tablet-style original. In addition, select [Left edge is fed first] or [Top edge is fed first] depending on the orientation of the original.

(2) Select scan settings.

"Scanning Mode" menu:

Switch between the "Preset" screen and the "Custom Settings" screen. In the "Preset" screen, select ""Web Pages", "Photo", "FAX" or "OCR" depending on the original type and your scanning purpose.

If you wish to change the initial settings of any of the four buttons or select the resolution or other advanced settings, change to the "Custom Settings" screen.

"Image Area" menu:

Select the scan area. If "Auto" is selected, the original size set will be scanned. You can also set the scanning area in the preview window with your mouse.

(3) Click the [Preview] button.

The preview image will appear in the scanner driver. If you are not satisfied with the preview image, repeat (2) and (3).

If the [Zoom Preview] checkbox is selected before the [Preview] button is clicked, the selected area will be enlarged in the preview window. If the checkmark is removed, the preview image will return to normal. Note that if SPF is selected in the "Scanning Source" menu, the [Zoom Preview] function cannot be used.



- For further information on the scan settings, click the 👔 button in the preview image screen of step 7 to open scanner driver Help.
- If the [Preview] button is clicked when scanning from the document feeder tray, only one original page will be scanned for the preview image. If you wish to include that original in the scan, return it to the document feeder tray.



5



Select scanning settings while viewing the image.

[Rotate] button:

Each time this button is clicked, the preview image rotates 90 degrees. This lets you change the orientation of the image without picking up and placing the original again. The image file will be created using the orientation that appears in the preview window.

[Image Size] button:

Click this button to specify the scan area by entering numerical values. Pixels, mm, or inches can be selected for the units of the numerical values. If a scanning area has already been specified, the entered numbers will change the area relative to the top left corner of the specified area.

X button:

When a preview image is displayed and a scanning area is not specified, you can click the button to automatically set the scanning area to the entire preview image.



- For further information on the scan settings, click 🙎 button to open scanner driver Help.
- If the originals are placed in the document feeder tray, only the top page will be previewed. The top page will be delivered to the original exit tray. Be sure to return the previewed page to the document feeder tray before previewing again or scanning.





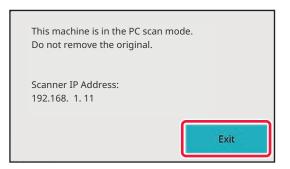
Click the [Scanning] button.

Scanning begins. The image appears in your application. Assign a file name to the scanned image and save it as appropriate in the software application you are using.



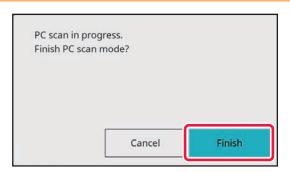
[At the machine]

7



Tap the [Exit] key.





Tap the [Finish] key.

CONVENIENT USE OF THE MACHINE

USE ENVIRONMENTALLY FRIENDLY
ECO
MANAGING THE USE OF THE MACHINE
USER AUTHENTICATION
USING THIS MACHINE IN A NETWORK
ENVIRONMENT
USING WI-FI 7-11 WI-FI 7-11 WPS 7-12 CONNECTING AND USING A MOBILE DEVICE WITH THIS MACHINE 7-13 CONNECTING BY QR CODE 7-13 PRINTING AND SCANNING USING A MOBILE DEVICE 7-14 REMOTE OPERATION OF THE MACHINE 7-15
UNIVERSAL DESIGN IN THE MACHINE
UNIVERSAL DESIGN IN THE MACHINE

USE ENVIRONMENTALLY FRIENDLY

ECO

ECO FUNCTIONS OF THE MACHINE

Mode Settings

The eco function settings are set in a batch. "Custom Mode" and "Eco Mode" are available. Setting values applied by each mode is as follows.

Eco mode	Setting value
Preheat Mode Setting	1min.
Auto Power Shut-Off Timer: Remote Job	Earliest
Auto Power Shut-Off Timer: Other Job	11 min.
Sleep Mode Power Level	Low Power
Eco Scan	Enabled (giving priority to job)

PREHEAT MODE

This mode lowers the temperature of the fusing unit and makes the machine wait in low power consumption state.

Preheat mode will activate when the set duration of time elapses in waiting status without executing a job.

Compared to Auto Power Shut-Off Mode, the amount of energy saved is less and the wakeup time is shorter.

The touch panel goes off.

The power indicator lights in blue when the machine is in preheat mode.

The touch panel is cleared when it is tapped.



To set preheat mode:

From the operation panel, select [System Settings] \rightarrow [Energy Save] \rightarrow [Preheat Mode Setting]. (in the Web page, select [System Settings] \rightarrow [Energy Save] \rightarrow [Eco Setting] \rightarrow [Preheat Mode Setting].)

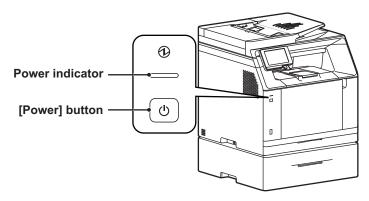
AUTO POWER SHUT-OFF MODE

This mode turns off the power to the operation panel and the fusing unit, and makes the machine wait in the lowest power consumption state.

Auto Power Shut-Off mode will activate when the set duration of time elapses in waiting status without executing a job. Compared to preheat mode, the power-saving rate is considerably higher but the wakeup time is longer.

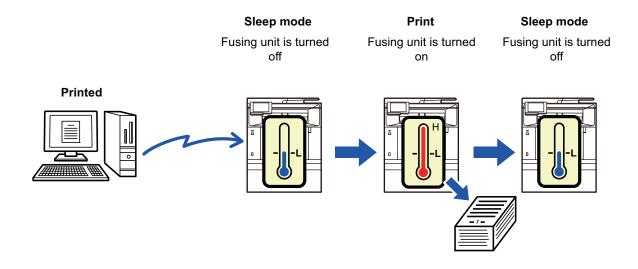
The power indicator blinks when the machine is in Auto Power Shut-Off mode.

This mode is cleared when print data is being received, fax data is being output, or when the [Power] button is pressed while it is blinking.



AS SOON AS THE REMOTE JOB IS FINISHED, ENTER AUTO POWER SHUT OFF MODE

Printing or outputting received fax data in Auto Power Shut-Off Timer turns on the power, and then the machine returns to Auto Power Shut-Off Mode immediately after completing the print job.





To set "As soon as the remote job is finished, enter Auto power shut off mode.":

From the operation panel, select [System Settings] \rightarrow [Energy Save] \rightarrow [Auto power shut off mode] and enable "Earliest". (in the Web page, select [System Settings] \rightarrow [Energy Save] \rightarrow [Eco Setting] \rightarrow [Auto power shut off mode] and enable "Earliest".)

Sleep Mode Power Level

Low Power: The machine switches to the power saving mode, but it takes some time to recover.

Fast Wake Up: Compared with Low Power, the power value rises by a certain degree, but it results in faster recovery.

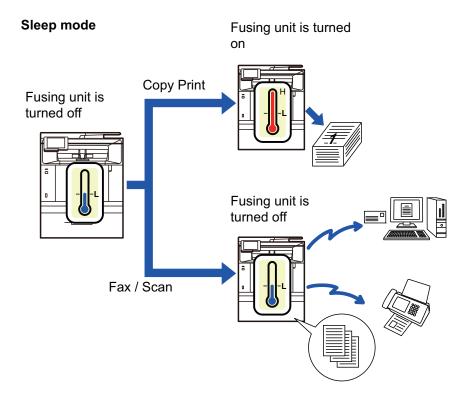


To set Sleep Mode Power Level:

In the Web page, select [System Settings] → [Energy Save] → [Eco Setting] → [Sleep Mode Power Level].

ECO SCAN

Non-print jobs such as sending a scanned original are performed with the fusing unit turned off.



ECO SCAN SETTING

Set "Eco Scan Setting" to ✓, and select a mode or screen in which to enable Eco Scan Setting.



To set Eco scan:

In the Web page, select [System Settings] → [Energy Save] → [Eco Scan Setting] .

TONER SAVE MODE

This mode is used to reduce toner consumption.

Toner consumption can be set for each print job of "Copy" and "Printer".

MANAGING THE USE OF THE MACHINE

USER AUTHENTICATION

User authentication restricts the use of the machine to users that have been registered. The functions that each user is allowed to use can be specified, allowing the machine to be customized to meet the needs of your workplace.

When the administrator of the machine has enabled user authentication, each user must log in to use the machine.

There are different types of user authentication, and each type has a different login method.

For more information, see the explanations of the login methods.

AUTHENTICATION BY USER NUMBER (page 7-5)

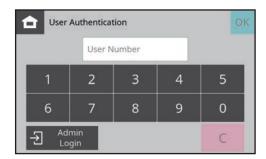
AUTHENTICATION BY LOGIN NAME/PASSWORD (page 7-7)

For the settings that are required for user authentication, refer to <u>USER CONTROL</u> (page 7-9).

AUTHENTICATION BY USER NUMBER

The following procedure is used to log in using a user number received from the administrator of the machine. When starting the machine, the login screen appears.

When controlled by user number





- If "A Warning when Login Fails" is enabled in the system settings, the operation panel will be locked for five minutes if an incorrect user number is entered three times in a row.
- Contact the machine administrator to check the user number assigned for you.

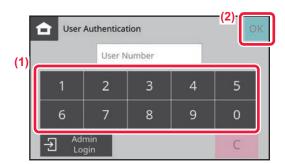


Enter your user number (5 to 8 digits) using the numeric keys.

Each entered digit will be displayed as "* ".







Tap the [OK] key.

If the entered user number is authenticated, the number of remaining pages that the user can copy is displayed. When a limitation is set for the number of pages that a user can use, the use count for the user that has logged in is displayed.



- To limit the number of pages that a user can use:
 In the Web page, select [User Control] → [Access Control Settings] → [Pages Limit Group].
- To hide the number of pages that can be used after login:
 In the Web page, disable [System Settings] → [Authentication Settings] → [Default Settings] → [Display Usage Status after Login].
- To change the message display time:

 From the operation panel, select [System Settings] → [Common Settings] → [Operation Settings] → [Message Time Setting].



When the user number is an 8-digit number, this step is not necessary. Login takes place automatically after the user number is entered.





When you have finished using the machine and are ready to log out, tap [Logout].



AUTHENTICATION BY LOGIN NAME/PASSWORD

This method enables users to log in using a login name and password received from the administrator of the machine or the administrator of the LDAP server.

When starting the machine, the login screen appears.

When controlled by login name and password





- To set [A Warning when Login Fails]:
 - In the Web page, select [System Settings] → [Authentication Settings] → [A Warning when Login Fails].
- To store a user name:

In the Web page, select [User Control] \rightarrow [User Settings] \rightarrow [User List]. Also register detailed information such as the login name, user number, and password. Ask the administrator of the machine for the information that you need to use the machine.





Enter the login name.

Entering using the soft keyboard

If user name registration has not been performed in setting mode, a user only using LDAP authentication should tap the [Login Name] text box and enter the login name using the soft keyboard.

Selecting from a list

Tap = and select a user name from the User List screen.





Enter the password.

Enter the from the soft keyboard. Each entered character will be displayed as "* ". After entering, tap the [OK] key.



To have the user name and password registered:

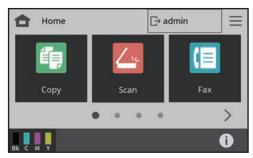
In the Web page, select [User Control] \rightarrow [User Settings] \rightarrow [User List].



3







Tap the [OK] key.

If the entered login name and password are authenticated, the number of remaining pages that the user can copy is displayed.



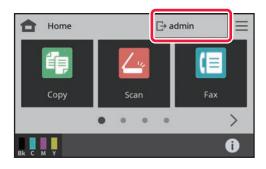
When a limitation is set for the number of pages that a user can use, the use count for the user that has logged in is displayed.



- To limit the number of pages that a user can use:
 In the Web page, select [User Control] → [Access Control Settings] → [Pages Limit Group].
- To hide the number of pages that can be used after login:
 In the Web page, disable [System Settings] → [Authentication Settings] → [Default Settings] → [Display Usage Status after Login].
- To change the message display time:

 From the operation panel, select [System Settings] → [Common Settings] → [Operation Settings] → [Message Time Setting].





When you have finished using the machine and are ready to log out, tap [Logout].

USER CONTROL

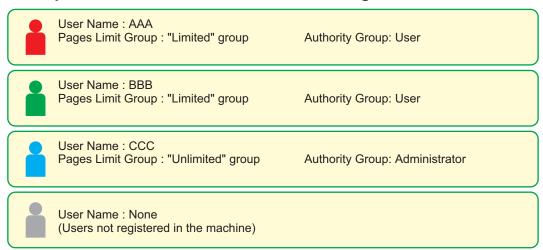
You can perform user management such as registering login users and specifying the user authentication method. In [User Control] of the Web page and System Settings] of [Authentication Settings] of the Web page.

User Control allows you to register and manage the users who use the machine.

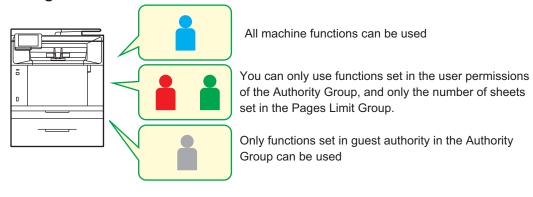
By limiting the number of pages and functions that a user or a group of users can use, incorrect use of the machine can be prevented.

To prevent unauthorized use, persons who are not registered can be prohibited from using the machine or prohibited from using certain functions.

Example: Information stored in User Name Registration



Using the machine



PAGE LIMIT GROUP LIST

A Page Limit Group List can be used to limit the number of sheets that users in a specific group can use for copies or print jobs. The users can also be prohibited from using certain functions.

Page Limit Group List A

Copy:

B/W : Page Limit (10000) Full Color : Page Limit (10000)

Printer:
B/W: Unlimited
Full Color: Prohibited

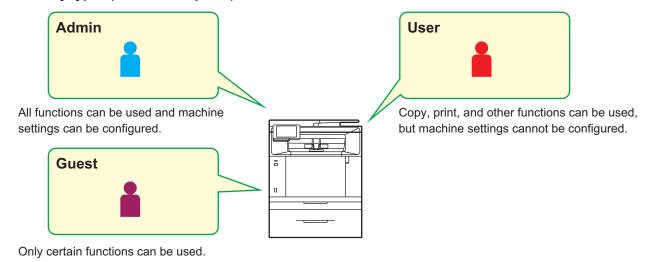
This section explains how to set the Page Limit Group List.

- Users in this group can use up to 10,000 pages for each color and black & white copying.
- There is no limit on black & white printing.
- · Color printing cannot be used.

AUTHORITY GROUP

Authority Group is used to restrict the functions and settings that users who belong to a specific group can use. By setting restrictions on functions and settings, you can prevent inexperienced users from performing incorrect operations and settings, and thereby enable safe use of the machine.

Main authority types (Default Group List)





USING THIS MACHINE IN A NETWORK ENVIRONMENT

USING WI-FI

WI-FI

This machine can connect to mobile devices and others via Wi-Fi.

This machine can use three communication modes.

Wi-Fi environment can be configured from System Settings.

COMMUNICATION MODES OF WI-FI

Infrastructure Mode

The machine and mobile device can communicate via network with an access point installed.

Data flow Since the machine and mobile device are connected to the same Network access point, they can communicate with the network where the access point is Access point connected.

Direct Communication

Access Point Mode

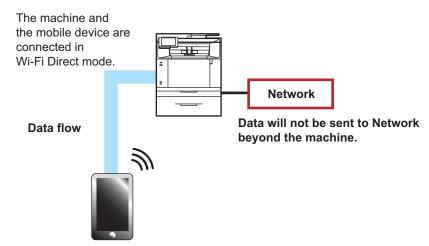
The machine can be set as an access point and communicate with a mobile device. In this mode, communication with the network to which the machine is connected is unavailable.

Machine = Access point The machine and mobile device are connected with Wi-Fi. **Network Data flow** Data will not be sent to the network beyond the machine.



Wi-Fi Direct Mode

The machine and mobile device directly communicate via Wi-Fi. In this mode, communication with the network to which the machine is connected is unavailable.





This function can be used on an Android device.

WPS

When connecting with Wi-Fi, connection to the network environment can be done simply with WPS, instead of manually configuring SSID and security setting.



WPS is available for the infrastructure mode only.



CONNECTING AND USING A MOBILE DEVICE WITH THIS MACHINE

You can connect by displaying a QR code on the machine's touch panel and scanning the code with a mobile device that has a dedicated application installed.

QR codes can also be used to connect to access points other than this machine.



For dedicated applications that can be used, consult your dealer or nearest SHARP Service Department.

CONNECTING BY QR CODE

You can connect by displaying the QR code on the machine's touch panel and then having your mobile device (with the dedicated application already installed) read the QR code.

The machine sends the information required for connection to the mobile device, and the information is saved. No settings are required on the mobile device, and setup is quickly accomplished.

Configure settings on the machine in advance to enable connection by QR code.



This function can be used on an Android device and on an iOS device.



Tap the [Easy Connect (QR code)] key in the home screen.

The QR code appears on the touch panel.

In advance, enable QR codes in [Easy Connection Setting] in the Web page and enable display of the [Easy Connect Setup (QR code)] key in [Home Screen Settings].

Start the dedicated application on your mobile device

Read the QR code on the touch panel with your mobile device



The QR code is the machine's connection information. This information is saved on your mobile device. You can also set an external access point as the connection destination.

PRINTING AND SCANNING USING A MOBILE DEVICE

Use the following application to connect your mobile device to the machine to print data on the mobile device or to send scanned data from the mobile device's camera or other device to the machine.



- Before connecting the mobile device to the machine, set the machine to be able to connect to the mobile device by setting the machine to [System Settings] → [Network Settings] → [Wireless Settings (Infrastructure Mode)/Wireless Settings (Access Point Mode)] from the operation panel (in the Web page, select [System Settings] → [Network Settings] → [Wireless Settings])
- See the application's user manual for details on using the application with the corresponding mobile device.
- Sharpdesk Mobile is available for use with Wi-Fi Direct. See the Sharpdesk Mobile manual for details.

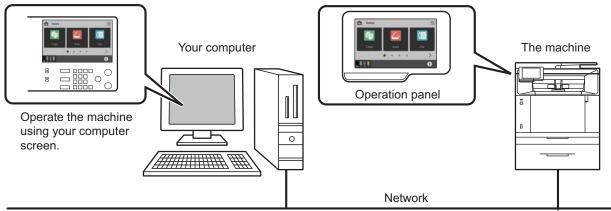
	iOS	Android
Print	Sharpdesk Mobile	Sharpdesk Mobile Print Service Plugin
Scan	Sharpdesk Mobile	Sharpdesk Mobile



REMOTE OPERATION OF THE MACHINE

Remotely operate the machine on your computer or mobile device such as smartphone.

You can operate the machine from the same panel as the machine's operation panel that is displayed on your PC, with the same feel as operating in front of the machine.



The remote operation function can only be used on one device at a time.

Before you can use the remote operation function, the following preparation is required.

- From the operation panel, select [System Settings] → [Common Settings] → [Operation Settings] → [Remote Operation Settings] → [Remote Software Operation] and select [Allow] for [Operational Authority].
- Connect the machine to the network.
- Install a VNC application software in your device.

After the preparation is completed, you can operate the machine from a VNC client. For instructions on how to connect to the machine from a VNC client, see the VNC application manual.



- When the VNC client connects to the machine, a message will appear on the operation panel of the machine. Follow the message on the operation panel of the machine to permit the connection.
- When the machine is connected to a VNC application software, = appears on the fixed display area of the machine's touch panel. If you wish to disconnect, exit the VNC application software or tap = .
- Use the operation panel in the same way as you would on the machine. However, you cannot enter values in series by continuously clicking the key.

UNIVERSAL DESIGN IN THE MACHINE

UNIVERSAL DESIGN IN THE MACHINE

The structure of the machine and the software are designed to allow all people to use the machine with ease.

UNIVERSAL DESIGN RELATED TO OPERATION

Adjustment of operation panel angle

The angle of the entire operation panel can be adjusted to enable use even when seated.



Changing of key response time

The response time of the keys can be changed as needed.

From the operation panel, select [System Settings] \rightarrow [Common Settings] \rightarrow [Operation Settings].

• Time for Accepting Key Entry

This setting determines how long a key in the touch panel must be tapped until the key input is registered. The time can be set from 0 to 2 seconds in increments of 0.5 seconds.

By lengthening the time setting, key input can be prevented when a key is tapped accidentally. Keep in mind, however, that when a longer setting is selected more care is required when tapping keys to ensure that key input is registered.

• Disable Auto Key Repeat

This is used to disable key repeat.

Key repeat causes a setting to change continuously not only each time the key is tapped but while a key is tapped.

Long-touch Detection Time

Select a time when a long key touch is detected.

UNIVERSAL DESIGN RELATED TO HEARING

Audible alert sounds when changing settings

When moving through copy ratio or exposure settings, the user is alerted by an audible sound at the default setting (copy ratio 100%, exposure 3).

From the operation panel, select [System Settings] \rightarrow [Sound Settings] \rightarrow [Beep Sound Settings (Common)] \rightarrow [Keys Touch Sound/Powering Off Sound] and [Reference Tone].

Keys Touch Sound

Control the key touch sound level, or turns the sound off. You can also have two peeps sound at initial values when setting the ratio in copy mode or when adjusting the exposure in any mode.

Screen in which setting is effective	Initial value
Ratio setting screen in base screen of copy mode	Ratio 100%
Exposure setting screen in base screen of copy mode	Exposure level: 3 (medium)
Exposure adjustment screen in base screen of fax and network scanner modes	

UNIVERSAL DESIGN FEATURES

The machine has design features and settings that are compatible with universal design.

Easy-to-use user interface

• Customizing the home screen - changing the display order

You can change the order of the items in the home screen so that the items you use most frequently appear first. To change the order of the items in the home screen, change in [System Settings] \rightarrow [Home Screen Settings] \rightarrow [Condition Settings] \rightarrow [Home Button] in the web page.

• Customizing the home screen - intuitive and easy-to-use design

A flat icon design is used to make the screen intuitive and easy to view. The toner level is always shown, eliminating the need to perform an action to check the toner level.



For the procedures for editing the home screen, see "EDITING THE HOME SCREEN (page 2-9)".

• Multi-language display

The language used in the touch panel can be changed to another language such as English or French. Select the desired language in "Language Settings".

Intuitive operation

• Easy operation by storing programs

The program function lets you store groups of settings for copying, fax, and other functions. By storing groups of settings that you frequently use, you can easily select those settings.

PROGRAMS (page 3-32)

STORING FAX OPERATIONS (PROGRAM) (page 5-49)

STORING SCAN OPERATIONS (PROGRAM) (page 6-37)

Remote operation

You can display the machine's touch panel on a computer on the same network to operate the machine from the computer. You can show how to use the machine on a computer, and people who have difficulty using the touch panel can operate the machine from a computer.

REMOTE OPERATION OF THE MACHINE (page 7-15)

Easier operation at the machine

Darkened output tray color

Output tray colors are darkened to make it easy to distinguish the tray to which a job has been output.

Simple toner replacement

· Toner box can be opened with one hand

The box that contains a toner cartridge can be easily opened with one hand.

• Prevention of toner cartridge mis-installation

To prevent installation of a toner cartridge in the wrong location, each color of toner cartridge can only be installed in its own location.

REPLACEMENT OF TONER CARTRIDGE (page 1-31)

SETTING MODE



SETTING MODE
SETTING MODE
SETTING MODE LIST
SETTING MODE LIST
STATUS
Status 8-20 Machine Identification 8-20 Total Count 8-21 Device Status 8-21 Network Status 8-21 Security Status 8-21 Firmware Version 8-21 Power Reset 8-22 Data List 8-22
ADDRESS BOOK
Address Book
USER CONTROL
User Settings 8-26 User List 8-26 User Information Print 8-28 Access Control Settings 8-29 Pages Limit Group 8-30 Authority Group 8-30 User Count 8-32 View User Count 8-32 Save User Count 8-33
SYSTEM SETTINGS
Total Count

Copy Settings	
ID Card Copy Setting	. 8-35
Card Shot Settings	. 8-35
Original Size Settings	
Default Tray Set	. 8-35
Auto Selects the Paper Tray that was Last Replenishe	d 8-35
Disabling of Auto Paper Selection	
Original Image Type/Exposure Settings	
Sort/Group Setting	
Select Magnification Automatically According to Paper	Size
8-36	
Setting a Maximum Number of Copies	. 8-36
Scan Resolution Setting	
Printer Settings	
Condition Settings	
Interface Settings	
Initial Status Settings	
PCL Settings	
PostScript Settings	
Print Setting from PC/Mobile Terminal	
Print-Hold Setting	
Common Settings	
Condition Settings	
Enable/Disable Settings	
Own Name and Destination Set	
Scan Settings	
Initial Status Settings	.8-43
Condition Settings	. 8-44
Subject Name Settings	. 8-44
File Name Settings	
Fax Settings	
Condition Settings	
Send Setting	. 8-48
Receive Settings	. 8-49
Fax Data Receive/Forward (Manual)	
Fax Settings	
Inbound Routing Settings	
Inbound Routing Settings	. 8-52
Administration Settings	
Authentication Settings	
Default Settings	
Administration Settings	
Actions when the user is authenticated	
Screen Display Settings after the authentication	
Card Reader Settings	
Paper Settings	
Paper Tray Settings	8-59



Operation Settings	
Message Time Setting	
Language Setting	
Default Display Settings	
Display IP Address on the Machine Information Screen	
Icon is Displayed when Network Cable is not Connected	l
8-60	
Display Confirmation Dialog when job is canceled	8-60
Restrict Total Count display	
Alignment Order of 10-Key	
Auto Clear Setting	
Disable Display Timeout	
Time for Accepting Key Entry	
Disable Auto Key Repeat	
Time for Accepting Key Entry of Long Touch	
Remote Operation Settings	
Data List	
Keyboard Select	
Custom Links	
Device Control	
Condition Settings	
Status Indicator Setting	
Machine Identification Settings	
Clock Adjust	
Enable/Disable Settings	
Product Key	
Sound Settings	
Beep Sound Settings (Common)	
Beep Sound Settings (Continue)	
Network Settings (Operation panel)	8-70
Confirmation of Network	
Connection Type	
Wired Settings	
Wireless Settings (Infrastructure Mode)	
Wireless Settings (Access Point Mode)	
Quick Settings (Web page)	
Network Name Setting	
Interface Settings	
Services Settings	
Print Port Settings	
LDAP Settings	
Proxy Setting	
<u> </u>	
Easy Connection Setting	
Device Web Page Setting	
Security Settings	
Password Change	
Password Setting	
Condition Settings	
Port Control	
Filter Setting	
Enable Filter	
SSL/TLS Settings	
IPsec Settings	
Audit Log	
Certificate Management	
Initialize Data in Machine	
Energy Save	
Eco Setting	
Eco Scan Setting	
Toner Save Mode	3-104

System Control
Storage Backup8-105
Device Cloning
Reset Settings8-105
E-mail Alert and Status
Enhanced FSS Settings
Firmware Update Settings8-109
Image Quality Adjustment
Fusing Cleaning8-110
Registration Adjustment
Auto Calibration8-110
Display warning message for black streaks detection8-110
Initial Installation Settings
SETTING MODES FROM THE OPERATION PANEL OTHER
THAN THE SYSTEM SETTINGS8-112
LCD Control
Total Count
Language Setting

SETTING MODE

SETTING MODE

"Settings" allows management of various functions that will make it easier to use the machine, such as default registration for each function, network connection setting, and log check of operation status.

Setting mode can also be selected using the Web browser by accessing the machine from a PC connected to the same network as the machine.



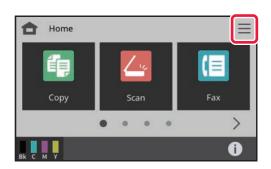
· Administrator password

To maintain security, the machine administrator should promptly change the password after the machine is purchased. (For the default administrator password, see Start Guide.) To change the password, see "CHANGE PASSWORD".

- The built-in server (Web page) of the machine
 - You can access the machine's built-in server from a Web browser and change the machine's settings on the Web page that appears. When "Web page" is used in this manual, it means this built-in server.
- Items that are not displayed on the Web page can be set on the machine.

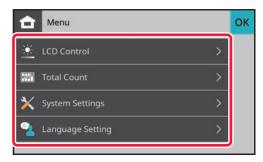
DISPLAYING THE SETTING MODE ON THE MACHINE





Tap the [Menu] icon.





Tap the item that you want to set.



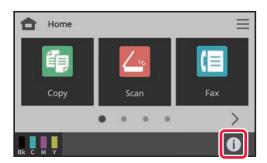
- To quit the setting mode, tap the [OK] key in the upper right corner of the screen.
- For details on login procedures when user authentication is enabled, see "USER AUTHENTICATION (page 7-5)".

DISPLAYING THE SETTING MODE (WEB VERSION)

When the machine is connected to the network, access the built-in Web server of the machine using the PC's Web browser.

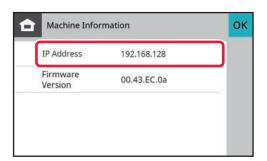
From the setting mode of the machine, print the IP address of the machine and enter the address on the PC's Web browser.





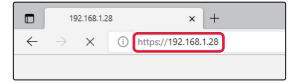
Tap the [Machine Info.] icon.





Check the IP address in the machine information.





Start the Web browser on the PC, and enter the IP address of the machine.

Start a Web browser on a PC on the same network the machine is on, and enter the IP address of the machine.

Recommended Web browsers:

Microsoft Edge (Windows®),

Firefox (Windows®),

Safari (Mac OS®)

Chrome (Windows®)

Latest version and previous major release

Displays the setting mode (Web version).

In the factory default state, the user password must be entered.

Depending on the machine settings, user authentication may be required to display the setting mode (Web version). For password and other information required for user authentication, contact the administrator of the machine.



Select a login name and enter your password.

Entering a password



- If you click an item that requires administrator rights, the password entry screen will appear regardless of the settings.
- Select a user that has administrator rights and enter the user password.
- If user authentication is not enabled, you can set the login name to "Administrator" and enter the administrator password to log in to the Web page.

Once you have logged in to the Web page with administrator rights, the password entry screen will not appear when you click other items that require administrator rights (until you log out).



At the bottom of the login screen you will find links to download manuals, such as the User's Manual, and the latest printer drivers.

SETTING MODE SCREEN

This section describes typical items in the operation method in the setting mode.

OVERVIEW OF SETTING MODE



(1) Menu tab

This tab shows the first level of the setting menu. Click this tab to show the tab's setting items in the setting menu.

Some settings such as the system settings do not appear in the setting menu when the tab is clicked. Instead, further setting item buttons appear in the setting area.

(2) Setting menu

This shows the items that can be set on the Web page. The items are in a tree structure.

When you click an item that requires machine administrator rights, the password entry screen appears. Select the previously registered login name and enter the password.

(3) Custom links

You can register custom links in advance to show the custom links in the setting menu.

► Custom Links (page 8-62)

(4) User's Manual Download

Go to the website of the instruction manual in PDF format such as the user's manual.

(5) Driver/Software

Go to the website where you can download the printer driver and software.

(6) Sitemap

This shows a sitemap of the website.

(7) Language

Set the language that appears on the Web page.

(8) [Login/Logout] button

[Login] button

Click to log in to the Web page.

[Logout] button

When you have completed all settings in the Web pages, click this button to log out and exit the web browser.

(9) Setting area

This shows the setting screen of the item selected in the setting menu at left.

SETTING METHOD

This section explains the basic procedure for configuring settings using "Home Screen Settings" as an example. This setting is used to change the background image of a home screen to an image provided by the user.



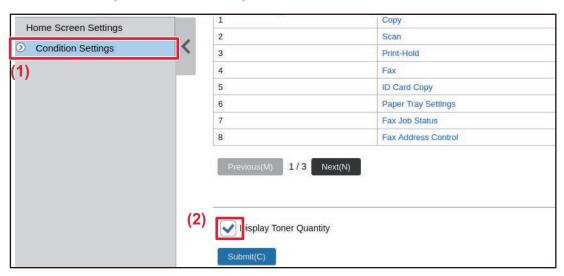
Connect to the Web page as explained in "<u>DISPLAYING THE SETTING MODE</u> (WEB VERSION) (page 8-4)".

- 2
- Display the "Home Screen Settings" setting screen.
- (1) Click the [System Settings] tab (system Settings).

 The setting items of the system settings appear in the setting area.
- (2) Click the [Home Screen Settings] button (home Screen Settings).

3

Check the "Display Toner Quantity" checkbox and click the [Submit] button.



If you have another item you want to set, configure the setting from the setting menu or menu tab.



If you use the "Forward" or "Back" function of the web browser to move to a different item, the item that you set may not be saved. Use the setting menu or menu tab to move to a different item.

When you have finished configuring settings, click the [Logout] button and exit.

When you exit the settings, a message may appear on the touch panel of the machine. Read and then close the message.

SETTING MODE LIST

SETTING MODE LIST

Click the link file to see the details of each description.

In the setting mode, there are some that can be set only on the Web page and some that can be set only on this machine.



- · Depending on the machine specifications and peripheral devices installed, it may not be possible to use settings.
- The System Settings section can be found by following the breadcrumb trail at the top if you are referring to it in the HTML manual
- The setting items that are common to both the operation panel and the Web page are described in the Web page. The location of setting items may differ depending on the machine and the Web page.

THE SETTING MODE LIST OF THE OPERATION PANEL

This list is displayed when you tap the [Menu] icon on the home screen.

■LCD Control

OLCD Control

■Total Count

Total Count

■System Settings-Copy Settings

Copy Settings

- ▶ ID Card Copy Setting
- ► Card Shot Settings
- ▶ Original Size Settings
- ▶ Default Tray Set
- ▶ Auto Selects the Paper Tray that was Last Replenished
- ▶ Disabling of Auto Paper Selection
- ▶ Original Image Type/Exposure Settings
- ▶ Sort/Group Setting
- ▶ Select Magnification Automatically According to Paper Size
- ▶ Setting a Maximum Number of Copies
- ► Scan Resolution Setting

■ System Settings-Fax Settings-Condition Settings

Condition Settings

- ▶ Press Next Address Key ([+]) or [Add] before Selecting the Next Address
- ▶ Hold Setting for Received Data Print
- ▶ Own Name and Destination Set
- ▶ Dial Mode Setting
- ▶ Super G3 Setting
- ▶ Digital Line Network
- **▶** Distinctive Ring Detection

■ System Settings-Fax Settings-Send Settings

Send Setting

- ▶ Recall in Case of Line Busy
- ▶ Recall in Case of Communication Error

■ System Settings-Fax Settings-Receive Settings

Receive Settings

Number of Calls in Auto Reception

■ System Settings-Common Settings-Operation Settings

Operation Settings

- ► Message Time Setting
- ▶ Language Setting
- ► Default Display Settings
- ▶ Display IP Address on the Machine Information Screen
- ▶ Icon is Displayed when Network Cable is not Connected.
- ▶ Display Confirmation Dialog when job is canceled.
- ▶ Restrict Total Count display
- ► Alignment Order of 10-Key
- ► Auto Clear Setting
- ▶ Disable Display Timeout
- ▶ Time for Accepting Key Entry
- ▶ Disable Auto Key Repeat
- ▶ Time for Accepting Key Entry of Long Touch
- ▶ Remote Operation Settings
- ▶ Data List
- ▶ Keyboard Select

■ System Settings-Common Settings-Device Control

- **Device Control**
 - ▶ Clock Adjust
 - ▶ Paper Type for Auto Paper Selection
 - ▶ Disabling of Tray Settings

■System Settings-Common Settings-Sound Settings

- Sound Settings
 - ▶ Beep Sound Settings (Common)
 - ◆Keys Touch Sound/Powering Off Sound
 - **♦**Reference Tone
 - ◆Scan Complete Sound (Scan/Fax)
 - ▶ Beep Sound Settings (Fax)
 - ◆Speaker Volume Setting
 - **◆**Transmission Complete Sound
 - ◆Transmission Complete Sound Time Setting

■System Settings-Network Settings

- Network Settings (Operation panel)
 - ▶ Confirmation of Network
 - **▶** Connection Type
 - ▶ Wired Settings
 - ► Wireless Settings (Infrastructure Mode)
 - ▶ Wireless Settings (Access Point Mode)

■ System Settings-Security Settings

- Security Settings
 - ▶ Password Setting
 - ▶ Enable Filter
 - ▶ Initialize Data in Machine

■ System Settings-Energy Save

- **Energy Save**
 - ► Auto Power Shut-Off Mode
 - ▶ Preheat Mode Setting

■ System Settings-System Control

- **System Control**
 - ▶ Reset the NIC
 - ▶ Firmware Update Settings

■ System Settings-Image Quality Adjustment

- •Image Quality Adjustment
 - ▶ Fusing Cleaning
 - ▶ Registration Adjustment
 - ► Auto Calibration
 - ▶ Display warning message for black streaks detection.

■ System Settings-Data List

- **●Data List**
 - ▶ List for User
 - ▶ List for Administrator

■Language Setting

Language Setting

THE SETTING MODE LIST ON THE WEB PAGE

This is the list of setting modes that can be set on the Web page.

■Status

- Status
 - ► Machine Identification
 - ▶ Total Count
 - ▶ Device Status
 - ▶ Network Status
 - ▶ Security Status
 - ▶ Firmware Version
 - ▶ Power Reset
 - ▶ Data List
 - **♦**List for User
 - **◆List for Administrator**

■Address Book

Address Book

■User Control-User Settings

- User Settings
 - **▶** User List
 - ▶ User Information Print

■ User Control-Access Control Settings

- Access Control Settings
 - ▶ Pages Limit Group
 - ► Authority Group

■User Control-User Count

- **Ouser Count**
 - ▶ View User Count
 - ▶ Save User Count

■ System Settings-Home Screen Settings

- Home Screen Settings
 - **▶** Condition Settings

■System Settings-Printer Settings

Printer Settings

- ▶ Condition Settings
 - ◆Prohibit Notice Page Printing
 - ◆Prohibit Test Page Printing
 - ◆A4/Letter Size Auto Change
 - ◆Bypass Tray Settings
- ► Interface Settings
 - **♦I/O Timeout**
 - ◆Network Port Emulation Switching
- ▶ Initial Status Settings
- ▶ PCL Settings
- ► PostScript Settings
- ▶ Print Setting from PC/Mobile Terminal
 - **◆FTP Print**
 - **♦**Port Number
 - ◆IPP Print (Driverless)
 - ◆geo URI (RFC 5870)
- ▶ Print-Hold Setting

■ System Settings-Image Send Settings-Common Settings

Common Settings

- ▶ Condition Settings
 - ◆Address Book Default Selection
 - ◆Image Orientation
 - ◆Press Next Address Key ([+]) or [Add] before Selecting the Next Address
 - ◆Hold Setting for Received Data Print
 - ◆Settings to Disable Transmission
 - ◆Sender Data Registration
- ► Enable/Disable Settings
 - ◆Disable Storing to USB Memory
 - ◆Disabling of Find My Address
- ▶ Own Name and Destination Set
 - ◆Sender Data Registration

■ System Settings-Image Send Settings-Scan Settings

Scan Settings

- ▶ Initial Status Settings
 - ◆Mono2/Gray Settings
 - ◆Initial File Format Setting
 - ◆Resolution Setting
- ► Condition Settings
 - **♦**Bcc Setting
 - ◆Maximum Size of Send Data (E-Mail)
 - ◆Preset restriction of E-mail for direct input
- ▶ Subject Name Settings
 - **◆**Default Subject
- ► File Name Settings
 - ◆Default Settings for File Names

■ System Settings-Image Send Settings-Fax Settings

Fax Settings

- ▶ Condition Settings
 - ◆Resolution Setting
 - ◆Dial Mode Setting
 - ◆Pause Time Setting
 - ◆Fax Dest. Confirmation Mode
 - ◆Remote Reception Number Setting
 - Original Print on Transaction Report
 - ◆Transaction Report Print Select Setting
 - ◆Activity Report Print Select Setting
 - ◆Super G3 Setting
 - ◆Digital Line Network
 - ◆ Distinctive Ring Detection
- ▶ Send Setting
 - ◆Quick On Line Sending
 - **◆**Date/Own Number Print Position Setting
 - ◆Recall in Case of Line Busy
 - ◆Recall in Case of Communication Error
 - ◆Disable Fax Broadcasting
- ▶ Receive Settings
 - ◆Number of Calls in Auto Reception
 - ◆2-Sided Printing of Received Data
 - ◆Auto Receive Reduce Setting
 - **♦**Print Style Setting
 - Set the Telephone Number for Data Forwarding
 - ◆Allow/Reject Number Setting

■ System Settings-Image Send Settings-Fax Data Receive/Forward (Manual)

- Fax Data Receive/Forward (Manual)
 - ► Fax Settings

■ System Settings-Image Send Settings-Inbound Routing Settings

- Inbound Routing Settings
 - ▶ Inbound Routing Settings
 - ► Administration Settings

■ System Settings-Authentication Settings

- Authentication Settings
 - ▶ Default Settings
 - **◆**User Authentication
 - ◆Authentication Settings
 - Default Network Authentication Server Setting
 - Specify network server access control
 - ◆Authentication Method Setting
 - ◆Card Setting
 - ► Administration Settings
 - ◆Disable Printing by Invalid User
 - ◆Automatic Logout Setting
 - ◆A Warning when Login Fails
 - ◆Allow Remote Scanner Using Before Login
 - ◆Enable IPP Authentication Except for Printer Driver
 - Actions when the user is authenticated
 - ◆Display only the Files of Logged-in Users
 - ◆Reset Counter After Sending E-mail Status
 - ◆Disable Display/Change of Other User's Information in the Fax Job Status
 - ▶ Screen Display Settings after the authentication
 - **♦**Login Name Display
 - ◆Display Usage Status after Login
 - ▶ Card Reader Settings
 - **◆**Condition Settings

■ System Settings-Common Settings-Paper Settings

Paper Settings

- ▶ Paper Tray Settings
 - ◆ Auto Switching of Tray
 - ◆Display Paper Tray Settings when bypass tray detects paper.
 - ◆Paper Weight Setting
 - ◆Feeding Approved Job (Fax)

■ System Settings-Common Settings-Operation Settings

- Operation Settings
 - **▶** Custom Links

■ System Settings-Common Settings-Device Control

- Device Control
 - ▶ Condition Settings
 - ◆AB/Inch Type Setting
 - **◆**Default Original Size Settings
 - ◆Paper Type for Auto Paper Selection
 - ◆Plain Paper Compatibility Settings
 - ◆Disabling of Tray Settings
 - ► Status Indicator Setting
 - ◆Data Indicator Setting
 - **◆Error Light Setting**
 - ▶ Machine Identification Settings
 - ► Clock Adjust
 - ◆Daylight Saving Time Setting
 - ► Enable/Disable Settings
 - **◆Printer Settings**
 - ◆Image Send Settings
 - **◆**Device Control
 - ► Product Key

■ System Settings-Network Settings

- Network Settings (Web page)
 - ▶ Quick Settings
 - **♦**Wireless Settings
 - ♦IPv4 Settings
 - ◆Network Name Settings
 - **◆DNS Settings**
 - **♦SMTP Settings**
 - **♦LDAP Settings**
 - ▶ Network Name Setting
 - **◆**Device Name
 - **◆**Domain Name
 - **◆Comment**
 - ▶ Interface Settings
 - **♦**Connection Type
 - **♦**General Settings
 - ♦IPv4 Settings
 - ◆IPv6 Settings
 - **◆DNS Settings**
 - ◆IEEE802.1X Setting
 - ▶ Services Settings
 - **♦**SMTP
 - **♦**Kerberos
 - **♦mDNS**
 - **♦SNMP**
 - **♦SMB**
 - ► Print Port Settings
 - **◆LPD**
 - **◆RAW**
 - **♦WSD**
 - ► LDAP Settings
 - ▶ Proxy Setting
 - ▶ Wireless Settings
 - **◆**Connection Type
 - **♦**Current Setting
 - **♦**Current Wireless Status
 - ◆Wireless Setting (infrastructure mode)
 - ◆Wireless Setting (Direct Connection)
 - ► Easy Connection Setting
 - **♦**QR code
 - **◆**Destination

- ▶ Device Web Page Setting
 - **♦**HTTP Access Settings
 - **♦**View Login User
 - **♦**Current Login User
 - **♦**Logout All Users

■ System Settings-Security Settings

Security Settings

- ▶ Password Change
 - ◆Restrict Device Web Page Access Via Password
 - ◆Administrator Password
 - **♦**User Password
- ▶ Condition Settings
 - ◆Restrict Print Jobs other than the current Print-Hold Job
 - ◆Automatic Deletion of Suspended Print Jobs
 - ◆Clear All Data When the Jobs are Completed
 - ◆Reject Requests from External Sites
 - ◆Mandatory Access Control
 - ◆ Job Status Jobs Completed List Display Setting
- ► Port Control
- ▶ Filter Setting
 - ◆IP Address Filter Settings
 - ◆MAC Address Filter Settings
- ▶ SSL/TLS Settings
 - ◆Setting of SSL/TLS
- ▶ IPsec Settings
 - **◆**Condition Settings
 - **♦IPsec Rules**
- ► Audit Log
 - **◆**Audit Log
 - ◆Storage/Send Settings
 - ◆Save/Delete Audit Log
- ▶ Certificate Management
 - ◆Device Certificate Management
 - ◆Certificate Signing Request (CSR) Management
 - ◆CA Certificate Management

■ System Settings-Energy Save

- Energy Save
 - ▶ Eco Setting
 - ◆Preheat Mode Setting
 - ◆Auto Power Shut-Off Mode
 - ◆Sleep Mode Power Level
 - ► Eco Scan Setting
 - ▶ Toner Save Mode

■ System Settings-System Control

- System Control
 - ▶ Storage Backup
 - **♦**Export Settings
 - **♦Import Settings**
 - ▶ Device Cloning
 - **◆**Export Settings
 - **♦Import Settings**
 - ▶ Reset Settings
 - **♦**Reset the NIC
 - ▶ E-mail Alert and Status
 - **♦**Status Message
 - **♦**Alerts Message
 - **♦SMTP Settings**
 - ▶ Enhanced FSS Settings
 - ▶ Firmware Update Settings

■ System Settings-Initial Installation Settings

Initial Installation Settings

STATUS

Status



All items except for the Data List are available in the system settings of the Web page.

For Device Control on the operation panel, see the following "THE SETTING MODE LIST OF THE OPERATION PANEL (page 8-8)".

Machine Identification

The Machine Identification displays the system information of the machine.

It displays the model name, current status, and machine location.

This setting can also be set by general users, except for some items.

Item	Description
Serial Number	Indicates the serial number of the machine.
Name	When you tap the [Not Set] key, the [Machine Identification] screen appears. If [Name] is not set, [Not Set] appears.
Model Name	Displays the standard model name of the machine.
Machine Location	The information entered in the [Machine Location] item in [Machine Identification] appears. If no name has been set, [Not Set] appears.
Current Status	Displays the current status of the machine. If two or more errors occur at the same time, only one status is displayed according to the priority order. The errors and machine conditions are displayed in the following priority order. Printer Error Account Limit Incorrect Paper Overdue service maintenance Paper Jam Marker Supply Missing Toner Empty Replace toner collection container. Cover Open Paper Empty Input Tray Empty Specified Input Tray Open Specified Output Tray Full Offline Printer Warning Toner Low Paper Low Input Tray Open Output Tray Open Output Tray Full Output Tray Nearly Full Near to overdue service maintenance Online Auto Power Shut-Off Warming Up Busy

ltem	Description
Supply Status	Displays the current status of supplies. If staples are installed, their status is displayed.
Paper Input Tray Status	Displays the current status of the paper trays installed in the machine.
Display Pattern Setting	Switches the display pattern of the home screen.
[Reboot the Machine] key	Displays the restart screen. (Administrator rights are required.)
[Enter the Power Save Mode] key	Displays the power save mode screen. (Administrator rights are required.)

Total Count

This function shows the page count in each mode.

This setting may require administrator privileges.



- · Pages printed directly from the machine such as list prints are included in the "Other Prints" count.
- The items displayed (or printed) will vary depending on the machine specifications and peripheral devices installed.
- When "Restrict Total Count display" is set, only administrators can confirm this.

Device Status

This screen shows the device status.

This setting can also be made by general users.

Item	Description
Paper Input Tray Status	Displays the current status of the paper trays installed in the machine.
Output Tray Status	Displays the current status of the output tray installed in the machine.
Supply Status	Displays the current status of supplies. If staples are installed, their status is displayed.
Device Configuration	Displays the information of options installed in the machine.

Network Status

Displays general, TCP / IP, and DNS status information.

The contents displayed here are the items to be set in the network settings and their setting values.

For each setting, see the following "Network Settings (Web page) (page 8-73)".

This setting can also be made by general users.

Security Status

Displays the security settings status of the machine.

The contents displayed here are the items to be set in the security settings and their setting values.

For each setting, see the following "Security Settings (page 8-91)".

This setting can also be made by general users.

Firmware Version

Shows the firmware version of the machine as a list.

This function requires administrator rights.

Power Reset

The Power Reset screen enables you to restart the machine or enter the power save mode.



This function requires administrator rights.

Item	Description
Reboot the Machine	Reboots the machine. Tapping the [Execute] key opens the Restart screen, and then tapping the [Execute] key again restarts the machine.
Enter the Power Save Mode	Shifts the machine to power save mode. Tap the [Execute] key to open the power saving mode screen.

Data List

Lists showing the settings and information registered in the machine can be printed.



- The two-sided or one-sided list printing setting is determined by Operation Settings Data List 1-Sided/2-Sided.
- ullet This item is located under "System Settings" o "Data List" in the system settings from the operation panel.

List for User

This setting can also be made by general users.

List name	Description
Machine Status List	This list shows information needed by regular users, such as hardware statuses, software statuses, printer environment settings, and paper tray settings.
NIC Page (This is displayed in the system settings from the operation panel.)	This is used to print the NIC page (network interface settings, etc.).
Printer Test Page (This is displayed in the "Status" of the Web page.)	This is used to print the PCL Symbol Set List, various font lists, and the NIC page (network interface settings, etc.). • PCL Symbol Set List • PCL Internal Font List • PS Font List • NIC Page
Sending Address List	Lists can be printed of various addresses stored in the machine. Individual List (Scan) Individual List (Fax) Group List (E-mail) Group List (Fax)



Prohibit Test Page

You cannot print the test page when [Prohibit Test Page Printing] is enabled. In the Web page, select [System Settings] \rightarrow [Printer Settings] \rightarrow [Condition Settings] \rightarrow [Prohibit Test Page Printing].

List for Administrator

You can print out the lists and reports that only the administrator can refer to.

Network Settings

Network Settings List

Image Sending Activity Report

The following Image Sending Activity Reports can each be separately printed.

- Image Sending Activity Report (Fax)
- Image Sending Activity Report (Scan)
- Inbound Routing List

User List (This is displayed in the system settings from the operation panel.)

ADDRESS BOOK

Address Book

Transmission destinations (contacts) such as fax and Scan to E-mail addresses, and groups of transmission destinations, can be stored in the address book.

To edit a contact or group, select the name of the contact/group. To add a new contact or group, click the [Add] key. For the procedure for storing contacts and groups using the machine's

touch panel, see "ADDRESS BOOK SCREEN (page 6-10)". In setting mode, a list of stored contact and group information is displayed.

This setting can also be made by general users.



This setting can only be set on the Web pages.

Item Description		
Туре	Select the contact or group. Factory default settings: Contacts	
Address Name	Store a name for an address.	
Group Name	Store a name of group.	
Initial	Store an initial that can be used to search for a contact or group.	
Register this Address to be added to the [Frequent Use] index.	Add a contact to the "Frequent Use" index. Factory default settings: Disabled	
Fax		
Fax Number	To store a new fax number, select [New Address] and enter the fax number in the fax number entry field.	
Global Address Search	To search for a fax number stored as a global address, click this key and select the fax number from the list.	
Transmission Mode	Select the communication speed and International Correspondence Mode. Factory default settings: Transmission Speed: 33.6kbps, Transmission Mode: None	
E-mail		
E-mail Address	To store a new address, select [New Address] and enter the address in the address entry field.	
Global Address Search	To search for an address stored as a global address, click this key and select the address from the list.	
FTP		
FTP Address	To add a new address, select [New Address] and enter the address in [Hostname or IP Address].	
Port Number	Set the port number used by the FTP server. Factory default settings: 21	
Directory	Specify a directory in the FTP server to be used for transmission.	
User Name	Enter a user name in the FTP server to be used for transmission.	

Item	Description
Password	Enter the password associated with the entered user name. Factory default settings: Change Password: Disabled
Enable SSL/TLS	Use SSL/TLS to encrypt data before transmission. Factory default settings: Disabled
Use PASV mode	Send data to an FTP server in PASV mode. Factory default settings: Disabled
Desktop	
Desktop Destination	To add a new address, select [New Address] and enter the address in [Hostname or IP Address].
Port Number	Enter the port of the destination computer.
Process Directory	Specify the directory to which the data is be to sent.
User Name	Enter a user name in the computer to be used for transmission.
Password	Enter the password associated with the entered user name. Factory default settings: Change Password: Disabled
Enable SSL/TLS	Use SSL/TLS to encrypt data before transmission. Factory default settings: Disabled
Network Folder	
Network Folder Path	To store a new path, select [New Address] and enter the path in the path entry field.
User Name	Enter a user name in the computer to be used for transmission.
Password	Enter the password associated with the entered user name. Factory default settings: Change Password: Disabled

USER CONTROL

User Settings

It manages users such as registration of users to log in and user authentication methods.



This setting can only be set on the Web page.

User List

Add, edit, and delete users for user authentication, and configure user authentication settings.

• [Add] key

Add a new user.

• [Delete All Users] key

Deletes all registered users. (Excluding users stored as factory default.) Only the administrator of the machine can use this function.

User List

This shows the users stored as factory default and the currently stored users. An asterisk [*] appears in front of the user name of auto-registered users.

When you select a user name, the user edit or delete screen appears.



The [Vender] and [Vender2] options are displayed only when the vender is connected.

Storing a user

When you tap the [Add] key, the registration screen appears. Up to 100 groups can be registered. For each setting, see the following "Settings (page 8-28)".

Editing and deleting a user

When you select a user from the list, the user edit/delete screen appears.

For each setting, see the following "Settings (page 8-28)".

A user can be deleted using the [Delete] key.



- If the login authentication with a Fixed User is set, the "Delete All Users" option cannot be used.
- Users stored as factory default cannot be deleted.

Users stored as factory default

The following users are stored in the machine at the factory.

• Administrator:

The administrator account of the machine, stored as factory default.

• User:

This is used when network authentication is used and a login name that is not stored in the machine is entered directly. (This cannot be selected from the login user screen.)

• Other User

This is used when a print job is executed using invalid user information. (This cannot be selected from the login user screen.)

For settings related to each of the users, see the following table.

User Name	Administrator	User	Other User
Login Name	admin	users	Other
Password	(Refer to the Start Guide)*1	users*1	-
My Folder	No	No	No
Authentication Settings	Login Locally		-
Pages Limit Group	Unlimited* ¹		
Authority Group*2	Admin	User*1	Guest*1

^{*1} Items that can be changed

^{*2} For detailed information about each of the settings, see "List of settings and factory default settings of template groups".

Settings

Item	Description	
User Name	This user name is used as the key name in the authentication screen and the sender name.	
Apply User Name to Log-in Name.*1	Select this vertical to enter the entered user name in the login name. Factory default settings: Disabled	
Initial	This determines where the user name will appear in the user list. Enter a maximum of 10 characters for the initials.	
Index	Select a custom index to be stored. The custom index names are the same as those used in the address book. Factory default settings: User 1	
Login Name ^{*1}	Login name/password Enter the login name to be used when setting authentication. Enter the password, consisting of 1 to 255 characters, that is used for user authentication by login name and password (the password is optional).	
Password*1,*3	Enter the password used when setting the authentication by login name / password using 1 to 255 characters. (Optional) After entering the password, enter once again in "Password (for confirmation)".	
Change Password	Check this when you want to change the set password. (Displayed when amending/deleting.) Factory default settings: Disabled	
Release Operation Lock Status	Displayed when login has failed, and subsequent login to the printer is not possible. Tap the [Execute] to clear this login lock, and allow the user to log in again.	
User Number*2	Enter a user number in 5 to 8 digits.	
E-mail Address	Enter the e-mail address that is used in the sender list and for LDAP authentication.	
Authentication Settings*1	Select either [Login Locally], [Network Authentication] (when LDAP is enabled) for authentication. Factory default settings: Login Locally	
Authentication Server	When the [Network Authentication] is selected, select the server to be used for user authentication from the LDAP server list that is stored using Setting mode (Web version).	
Pages Limit Group	Specify the page limit for the user by selecting one of the stored page limit groups. For more information, see "Pages Limit Group (page 8-29)". Factory default settings: Unlimited	
Authority Group	Specify the user authority by selecting one of the stored authority groups. For more information, see "Authority Group (page 8-30)". Factory default settings: User	

^{*1} It is not displayed when "User Number" is selected for the authentication method.

User Information Print

Prints the following item lists.

Select each item and tap the [Print] key to print it out.

^{*2} It is displayed when "User Number" is selected for the authentication method.

^{*3} When using network authentication, the password registered in the LDAP server is used, so there is no need to set it.

Access Control Settings



This setting can only be set on the Web page.

Pages Limit Group

This is used to register the page limit settings in advance for each group.

The page limit for each user is specified by selecting one of these registered groups when the user is registered.

- [Add] key
 - Use this to add a new group.
- List Display

This shows the currently stored groups. Selecting a group name displays the edit screen for that group.

Storing page limit groups

When you tap the [Add] key, the registration screen appears. Up to 8 groups can be registered.

Editing a page limit group

Selecting a group from the list displays the edit screen for that group.

To return a group to the factory default state, set "Select the Group Name to be the Registration Model" to "Unlimited" on the edit screen.

Settings

Item	Description
Group Name	Store a name of group (up to 32 characters).
Select the Group Name to be the Registration Model	Select one of the previously stored groups for use as a template for the new group. When selected, the settings of this group are applied.
Function Names	The name of the functions that can be configured is displayed. Set a limit for each function.
Page Limit	When [Prohibited] is selected for a mode, input from the mode is prohibited. When [Unlimited] is selected for a mode, there is no limit to the number of pages that can be input/output in that mode. When [Limited] is selected, enter a page limit (1 to 99999999 pages).

Authority Group

This is used to store the settings relevant to user authorities in advance for each group. The authority of each user is specified by selecting one of these registered groups when the user is registered.

List Display

This shows the currently stored groups. Selecting a group name displays the edit screen for that group.

Editing an authority group

Selecting a group from the list displays the editing screen for that group.

To return a group to the factory default state, select the group from the list and select any of options [Return to the Administrator Authority], [Return to the User Authority], and [Return to the Guest Authority].

Item	Description		
Group Name	Displays the group name.		
	The factory default groups and their settings are shown below.		
	Admin	User	Guest
Job Settings			
Copier			
Color Mode Approval Setting	All allowed	All allowed	Only Black & White Allowed
Printer			
Color Mode Approval Setting	Allowed	Allowed	Only Black & White Allowed
USB Memory Direct Print	Allowed	Allowed	Prohibited
Image Send			
Approval Settings for Each Mode			
Scan	Allowed	Allowed	Allowed
Fax	Allowed	Allowed	Allowed
Machine Settings			
Total Count	Allowed	Allowed	Prohibited
Device / Network Status	Allowed	Allowed	Prohibited
Power Reset	Allowed	Prohibited	Prohibited
List for User	Allowed	Allowed	Prohibited
List for Administrator	Allowed	Prohibited	Prohibited
Address Registration	Allowed	Allowed	Prohibited
User Control (Admin)	Allowed	Prohibited	Prohibited
Home Screen Settings	Allowed	Prohibited	Prohibited
Copy Settings	Allowed	Prohibited	Prohibited
Printer Settings (Admin)	Allowed	Prohibited	Prohibited
Printer Settings (User)	Allowed	Allowed	Prohibited
Image Send Settings > Common Settings	Allowed	Prohibited	Prohibited
Scan Settings	Allowed	Prohibited	Prohibited
Fax Settings	Allowed	Prohibited	Prohibited
Fax Data Receive/Forward (Manual)	Allowed	Allowed	Prohibited

Item	Description		
Inbound Routing Settings (Admin)	Allowed	Prohibited	Prohibited
Inbound Routing Settings (User)	Allowed	Allowed	Prohibited
Paper Settings (Bypass Tray Excluded)	Allowed	Allowed	Prohibited
Paper Settings (Bypass Tray)	Allowed	Allowed	Prohibited
Operation Settings	Allowed	Prohibited	Prohibited
Keyboard Settings	Allowed	Prohibited	Prohibited
Device Control	Allowed	Prohibited	Prohibited
Machine Identification Settings	Allowed	Prohibited	Prohibited
Clock Adjust	Allowed	Prohibited	Prohibited
Product Key	Allowed	Prohibited	Prohibited
Custom Link Setting	Allowed	Prohibited	Prohibited
Network Settings	Allowed	Prohibited	Prohibited
Security Settings	Allowed	Prohibited	Prohibited
Energy Save	Allowed	Prohibited	Prohibited
System Control	Allowed	Prohibited	Prohibited
Image Quality Adjustment	Allowed	Prohibited	Prohibited



Depending on the machine specifications and peripheral devices installed, it may not be possible to use some settings.

User Count

This displays the total number of pages printed by each user.

• [Select All] key

This selects all users.

• [Clear Checked] key

This clears all selections.

• [Show] key

This shows the counts of the selected user.

• [Clear Count] key

Use this to reset the counts of the selected user.

User List

This shows the users stored as factory default and the currently stored users. When you select a user name, the user is selected.



This setting can only be set on the Web page.

View User Count

When you select a user and tap the [Show] key, this user count is displayed.

Item	Description
Next	Displays the next user (in the order of the registration numbers).
Previous	Displays the previous user (in the order of the registration numbers).
Show Counts	Displays the counts and the number of pages remaining of the selected user for each function.
Page Limit	The page limit set for the user appears in parentheses below the count.



If peripheral devices are not mounted, their count is not displayed.

Resetting user counts

Select a user in the setting screen and tap the [Delete] key. A count reset screen for that user will appear.

The reset screen will vary depending on whether a single user or multiple users were selected. The items disp

The reset screen will vary depending on whether a single user or multiple users were selected. The items displayed in each case are described in the table below.

When a single user is selected

Item	Description
Next	Displays the next user (in the order of the registration numbers).
Previous	Displays the previous user (in the order of the registration numbers).
Show Counts	Displays the counts and the number of pages remaining of the selected user for each function.
Clear Count	Reset the count of the selected item to "0".

When multiple users are selected

ltem	Description
Show Counts	Displays the counts and the number of pages remaining of the selected user for each function.
Clear Count	Reset the count of the selected item to "0".

Save User Count

Clicking the [Save] button saves the user count information as a data file.

To delete the user count information in the machine, click the checkbox next to the "Save and Delete the Data" so that it is selected and click the [Save] button.

SYSTEM SETTINGS

Total Count

Displays the total number of sheets used by the machine, the total number of sheets used for each function, and a breakdown of the number of sheets used in black and white and full color.



This setting can only be set on the operation panel.

Home Screen Settings

You can change the layout, icons, and background of the machine's home screen. This setting requires administrator privileges.



This setting can only be set on the Web page.

Condition Settings

ltem	Description
Home Screen List	The order of arrangement of the shortcut keys in the home screen is indicated by the "No.", and the displayed keys appear in the home button column. To edit the home buttons, click the Home Button item.
Display Toner Quantity	Select this to display the toner level in the fixed area. Factory default settings: Enable

Copy Settings

The following settings are related to copying.

This setting requires administrator privileges.



This setting can only be set on the operation panel.

ID Card Copy Setting

Select an image layout.

Factory default settings: Set Vertically

Card Shot Settings

This is used to set the default original size for the card shot function.

Specify a value from 1" (25 mm) to 8-1/2" (216 mm) in increments of 1/8" (3 mm) for both the X (horizontal) and Y (vertical) dimensions of the original.

Factory default settings: Original Size:X: 3-3/8" (86 mm), Y: 2-1/8" (54 mm)

Original Size Settings

Specify the standard value of the original size to be used for copying.

Factory default settings: 8-1/2" x 11" (A4)

Default Tray Set

Specify the paper tray that will be initially selected for copying.

Factory default settings: Tray 1

Auto Selects the Paper Tray that was Last Replenished

When this setting is enabled and paper is loaded into a tray while the machine is on standby in copy mode, that tray is automatically selected.

Factory default settings: Disable

Disabling of Auto Paper Selection

Disables the Auto Paper Selection function.

When this setting is enabled, automatic selection of paper that is the same size as the original on the document glass or in the automatic document feeder does not take place.

Factory default settings: Disable

Original Image Type/Exposure Settings

Configure default Original Image Type/Exposure settings.

Factory default settings: Original Image Type: Text/Prtd.Photo, Exposure: Auto

Sort/Group Setting

Configure default Sort/Group settings.

Factory default settings: Auto

Select Magnification Automatically According to Paper Size

The magnification is automatically selected according to the paper tray size.

Factory default settings: Disabled

Setting a Maximum Number of Copies

This is used to set the maximum number that can be entered for the number of copies (number of continuous copies). Select from "99" and "999".

Factory default settings: 999

Scan Resolution Setting

Specify a standard resolution for scanning copies.

Factory default settings: Color: Document Feeder: 600x300dpi, Document Glass: 600x400dpi, B/W: Document Feeder: 600x300dpi,

Document Glass: 600x400dpi

Printer Settings

Settings related to the printer function can be configured.



This setting can only be set on the Web page.

Condition Settings

Printer condition settings are described below.

Prohibit Notice Page Printing

Disables to print a notice page. Factory default settings: Enable

Prohibit Test Page Printing

Disables to print the test page.

When this setting is enabled, [Status] \rightarrow [Data List] \rightarrow [List for User] \rightarrow [Printer Test Page] in the Web page cannot be used to print test pages.

Factory default settings: Disable

A4/Letter Size Auto Change

When printing an 8-1/2" x 11" (letter) size image, this setting allows A4 size paper to be used if 8-1/2" x 11" size paper is not loaded. In addition, when printing an A4 size image, this setting allows 8-1/2" x 11" (letter) size paper to be used if A4 size paper is not loaded.

Factory default settings: Disable

Bypass Tray Settings

Enable Detected Paper Size in Bypass Tray

This is used to prohibit printing when the paper size specified for a print job is different from the paper size inserted in the bypass tray.

Factory default settings: Disable

Enable Selected Paper Type in Bypass Tray

This is used to prohibit printing when the paper type specified for a print job is different from the paper type inserted in the bypass tray.

Factory default settings: Enable

Interface Settings

Settings related to the printer function can be configured.

These settings are used to control and monitor data transmitted to the network port of the machine.

I/O Timeout

The I/O timeout can be set to any number of seconds from 1 to 999.

The I/O timeout function temporarily breaks the connection if the set duration of time elapses without any data being received by the port. After the connection is broken, the port is set to auto selection or the next print job is begun.

Factory default settings: 60sec

Network Port Emulation Switching

This setting is used to select the emulated printer language when the machine is connected by a network port. The following settings can be configured.

Auto

PostScript

PCL

Factory default settings: Auto



Unless printer errors occur frequently, it is recommended that you use the factory default setting "Auto".

Initial Status Settings

If you print data in an environment where the printer driver is not used (that is, if you print data using the MS-DOS system or if you print data using the PC that does not have the provided printer driver installed), set the detailed printing conditions. (However, the "Disable Blank Page Print" function will be effective even when the PCL printer driver is used.)

Settings

Setting item	Description
Orientation	Portrait Landscape Factory default settings: Portrait
Paper Size	Set the default paper size. Factory default settings: Varies depending on the machine configuration
Paper Type	Set the default paper type. Factory default settings: Plain Paper 1
Resolution Setting	600dpi 600dpi (High Quality) Factory default settings: 600dpi (High Quality)
Disable Blank Page Print	✓ (Enabled) ☐ (Disabled) Factory default settings: It does not prohibit
2-Sided Print	1-Sided 2-Sided (Booklet) 2-Sided (Tablet) Factory default settings: 1-Sided
Color Mode	Auto Black & White Factory default settings: Auto
Fit To Page [*]	✓ (Use Fit to Page) ☐ (Do not use Fit to Page) Factory default settings: Use Fit to Page

^{*} Only effective when printing PDF, JPEG, and TIFF files.

PCL Settings

This is used to set the symbol sets, fonts, and line feed code used in a PCL environment.

Settings

Setting item	Settings
PCL Symbol Set Setting	Specify the symbol set used for printing. Factory default settings: PC-8
PCL Font Setting	Select a font used for printing. Factory default settings: 0: Nimbus Mono
PCL Line Feed Code	This setting is used to select how the printer responds when a line feed command is received. Factory default settings: 0.CR=CR; LF=LF; FF=FF
Wide A4	When this is enabled, 80 characters per line are printed on the 8-1/2" x 11" (A4) size paper using a 10-pitch font. (When this setting is disabled, up to 78 characters are printed per line.) Factory default settings: Disable

PostScript Settings

When an error occurs during PostScript printing, these settings determine whether or not an error notice is printed and whether or not the PostScript data is received in binary format.

Setting item	Settings
Print PS Errors	When a PS (PostScript) error occurs during PostScript printing, this setting determines whether or not an error notice is printed. Factory default settings: Disable
Binary Processing	Receive PostScript data in binary format. Factory default settings: Disable

Print Setting from PC/Mobile Terminal

Configure these settings to print files on a computer or mobile terminal by direct print.

FTP Print

Specify whether or not FTP print settings are used for direct print.

Factory default settings: Enable

Port Number

Enter the port number used for direct print.

Factory default settings: 21

IPP Print (Driverless)

Print from the network using the IPP protocol without using a printer driver.

Factory default settings: Enable

geo URI (RFC 5870)

You can set the location information of this machine.

Factory default settings: geo

Print-Hold Setting

Specify settings for hold print setting.

Delete All Print-Hold Data

Delete all hold print data remaining in the memory of the machine.

Common Settings

Settings related to the image send function can be configured. The operation settings below apply to all image send functions.



- In the Common Settings of the Image Send Settings on the web page, there are three settings under common settings: Condition Settings, Enable/Disable Settings and Own Name and Destination Set.

 In the Fax Settings on the operation panel, there are no Common Settings, however, there are Condition Settings.

 For Condition Settings, see the following "THE SETTING MODE LIST OF THE OPERATION PANEL (page 8-8)".
- The description in this section is based on the Web page.

Condition Settings

Address Book Default Selection

Higher priority is given to the display of address book.

If image send mode is enabled, the Address Book is displayed in place of the initial screen of this mode.

Factory default settings: Disable

Image Orientation

Sets the default image orientation. Factory default settings: Landscape

Press Next Address Key ([+]) or [Add] before Selecting the Next Address

Set whether or not the Next Address ([+]) key or [Add] key must be pressed before an address is added for a multi-address job such as broadcast transmission.

Factory default settings: Disable



This item is located under "Fax Settings" → "Condition Settings" in the system settings from the operation panel.

Hold Setting for Received Data Print

This function holds received faxes in memory without printing them.

Factory default settings: Disable



- These settings can only be configured when there is no received data in the machine memory.
- This item is located under "Fax Settings" → "Condition Settings" in the system settings from the operation panel.

Enable/Disable Settings

Settings to Disable Transmission

These settings are used to disable the following transmission operations.

Disable Selection from Address Book

Disables the selection of destinations from the address book.

Configure the setting for each of the following items:

- E-Mail
- Network Folder/FTP/Desktop

Select All: Select all items.

Clear Checked: Deselect all items. Factory default settings: All Invalid

Disable Direct Entry

Disables the direct entry of destination address and others.

Configure the setting for each of the following items:

- E-Mail
- Fax

Select All: Select all items.

Clear Checked: Deselect all items. Factory default settings: All Invalid

Disable Storing to USB Memory

Prohibits saving scan data to a USB Memory.

Factory default settings: Disable

Disabling of Find My Address

This prohibits Find My Address. Factory default settings: Disable

Own Name and Destination Set

Stores the Fax sender information.



This item is located under "Fax Settings" → "Condition Settings" in the system settings from the operation panel.

Sender Data Registration

Use this to store the sender name for fax. The stored sender name and sender fax number will be printed at the top of the received fax.

Sender Name

Enter the default sender name.

Sender Fax Number

Sets the sender fax number.

To insert a pause between digits of the number, tap the [-] key.

To insert a space between digits of the number, tap the [Space] key.

Scan Settings

The following settings are related to the scanner.



This setting can only be set on the Web page.

Initial Status Settings

Mono2/Gray Settings

Configure default Mono2/Gray settings.

Settings

Grayscale, Mono2

Factory default settings: Mono2

Initial File Format Setting

Specify the initial file format for sending a file in E-mail, Network Folder, FTP, or Desktop mode. Specify "Scanner Common" unless E-mail is specified.

File Type

PDF, TIFF, JPEG

Factory default settings: PDF

Black & White

Compression Mode: None, MH (G3), MMR (G4)

Factory default settings: MMR (G4)

Color/Grayscale

Data compression ratio: Low, Medium, High

Factory default settings: Medium

Reduce Colors

Factory default settings: Disable Specified Pages per File

Generates a separate file for each scanned page when multiple pages are scanned.

Factory default settings: Disable



When "TIFF" is selected as the file type, [Specified Pages per File] can be set.

Resolution Setting

The following settings are available for the default resolutions. 100X100dpi, 150X150dpi, 200X200dpi, 300X300dpi, 400X400dpi, 600X600dpi

Factory default settings: 200×200dpi

Condition Settings

Bcc Setting

Enable Bcc

Enable this setting if you wish to use Bcc transmission. Bcc transmission is sent to the address entered in the E-mail address.

Factory default settings: Disable

Maximum Size of Send Data (E-Mail)

To prevent the transmission of excessively large image files by Scan to E-mail, a file size limit can be set from 1 MB to 99 MB in increments of 1 MB. If the total size of the image files created by scanning the original exceeds the limit, the image files are discarded.

If you do not wish to set a limit, select [Unlimited].

Factory default settings: Unlimited

Preset restriction of E-mail for direct input

Enable this setting to prohibit e-mail transmission to an address that has an unsuitable domain. A file will not be sent if the e-mail address is entered directly and the domain is one of the set domains.

Subject Name Settings

Default Subject

Set the title of the e-mail, such as sending an e-mail.

File Name Settings

Default Settings for File Names

File Naming

You can select the information included in the name of scanned files.

Sender Name

You can add the sender's name to the file name.

Factory default settings: Enable

Date & Time

You can add the date and time of transmission to the file name.

Factory default settings: Enable Session Page Counter

You can add counter information to the file name.

Factory default settings: Disable

Unique Identifier

An ID number can be created for each file and added to the file name.

Factory default settings: Disable

Fax Settings

You can select the image send settings of fax functions.



• In the Fax Settings of the Fax/Image Send Settings on the web page, there are three settings: Condition Settings, Send Setting and Receive Settings.

There are three fax settings on the operation panel: Condition Settings, Send Setting and Receive Settings. For Condition Settings on the operation panel, see the following "THE SETTING MODE LIST OF THE OPERATION PANEL (page 8-8)".

· The description in this section is based on the Web page.

Condition Settings

The fax settings can be enabled or disabled to suit the needs of your workplace.

Resolution Setting

You can select the resolution setting for faxes.

Factory default settings: Disabled, Resolution: Standard, Half Tone: Disabled

Default Exposure Settings

Configure default exposure settings.

Factory default settings: Auto

Dial Mode Setting

Select this after the line has been connected to have the machine automatically detect whether your line is a pulse dial line or a tone dial line. (Set manually when using a 10 pps rotary dial.)

Factory default settings: Tone



This item is located under "Fax Settings" → "Condition Settings" in the system settings from the operation panel.

Pause Time Setting

Changes the length of pauses inserted in fax numbers.

If a hyphen (-) is entered when dialing or storing a fax number, a pause of 2 seconds is inserted.

It can be set between 1 and 15 seconds, in every 1 seconds.

Factory default settings: 2 seconds (in South Africa, 4 seconds)

Fax Dest. Confirmation Mode

This setting specifies whether or not a destination verification message is displayed when sending a fax in order to prevent accidental transmission to the wrong destination.

Factory default settings: Disabled, Apply to Addresses Other Than Fax: Disabled, Require Re-entry when Directly Entering the Fax Destination: Enabled

Remote Reception Number Setting

You can set the machine to the fax reception mode by entering a two-digit number from the connected external telephone and by tapping the \circledast key. This one-digit number is called the Remote Reception number, and it can be between 0 and 9.

Factory default settings: 5

Original Print on Transaction Report

When a transaction report is printed, this is used to print part of the first page of the transmitted original on the transaction report. Select one of the settings below.

- Print Out All Report
- Print Out Error Report Only
- No Print Report

This setting will not be effective if the next "<u>Transaction Report Print Select Setting (page 8-46)</u>" is set to "No Printed Report".

Factory default settings: Print Out Error Report Only

Transaction Report Print Select Setting

Selects whether or not a transaction report will be printed, and if printed, the condition for being printed. Select a setting for each of the following operations:

Single Sending

- Print Out All Report
- Print Out Error Report Only
- No Printed Report

Broadcasting

- Print Out All Report
- Print Out Error Report Only
- · No Printed Report

Receiving

- Print Out All Report
- Print Out Error Report Only
- No Printed Report

When a transaction report is printed, this is used to print part of the first page of the transmitted original on the transaction report. For more information, see "Original Print on Transaction Report (page 8-46)".

Factory default settings: Single Sending: Print Out Error Report Only, Broadcasting: Print Out All Report, Receiving: No Printed Report, Confidential Reception: Print Out Notice Page



Even if a print setting is enabled for "Receiving", a transaction report will not be printed if you receive from a number that is rejected with the "Allow/Reject Number Setting (page 8-50)".

Activity Report Print Select Setting

You can set the machine to periodically print the activity report that is stored in memory.

The Image Sending Activity Report can be set to print each time the number of transactions reaches 50, or at a specified time (once a day only). (The settings can be simultaneously enabled.)

Factory default settings: Auto Print at Memory Full:Disabled, Print Daily at Designated Time:Disabled, Time:00:00



If you only select the "Print Daily at Designated Time" setting $\overline{\ \ }$ and the number of recorded transactions reaches 200 before the specified time, each new transaction will delete the oldest transaction (the oldest transaction will not be printed). The Transaction Report can be printed out manually as needed. For more information, see "<u>List for Administrator (page 8-23)</u>".

Super G3 Setting

This setting is set when the destination does not correspond to Super G3.

Factory default settings: Enable



This item is located under "Fax Settings" → "Condition Settings" in the system settings from the operation panel.

Digital Line Network

When this setting is enabled, the send level will be 15 dB or less when you connect to a digital line.

Factory default settings: Disable



This item is located under "Fax Settings" → "Condition Settings" in the system settings from the operation panel.

Distinctive Ring Detection

This Setting can only be activated in Canada, Australia, New Zealand, and Hong Kong.

If multiple telephone numbers have been assigned to your telephone line, the number called can be identified by its ringing pattern. By using one number for voice calls and another number for faxes, you can tell which type of call you are receiving by the ringing pattern. You can set your machine to automatically receive faxes when your fax number is called by setting the pattern that corresponds to your fax number. (Note that in Canada, six selections are available.)

Factory default settings: Disable

Send Setting

Make settings related to fax transmission.

Quick On Line Sending

When this setting is enabled, the machine starts transmitting a fax as soon as the first page is scanned.

Transmission takes place at the same time as the remaining pages are being scanned.

Factory default settings: Enable

Date/Own Number Print Position Setting

This setting determines the position of the date and sender information printed at the top of faxes by the receiving machine. To have the information printed outside the transmitted document image, tap the [Outside the Original Image] key. To have the information printed inside the document image, tap the [Inside the Original Image] key. For more information on the print position, see "ADDING YOUR SENDER INFORMATION TO FAXES (FAX OWN NUMBER SENDING) (page 5-51)".

Factory default settings: Outside the Original Image

Recall in Case of Line Busy

This program is used to set the number of recall attempts and the interval between recall attempts when a transmission is not successful due to the line being busy or other reason.

Number of Times to Recall When Line is Busy

This setting specifies whether or not recalling is performed when the line is busy. During recalling, you can set the number of recall attempts. Any number from 1 to 15 can be selected.

Factory default settings: 2 Time(s)

Interval to Wait Between Recall Attempts (min.) When Line is Busy

The interval between recall attempts can be set. Any number of minutes from 1 to 15 can be selected.

Factory default settings: 3 minutes



- When this setting is enabled, note that the machine will not attempt the call again when manual transmission or direct transmission is used.
- This item is located under "Fax Settings" → "Send Setting" in the system settings from the operation panel.

Recall in Case of Communication Error

This determines how many times the machine will automatically attempt the call again if a fax transmission fails due to a communication error.

Number of Times to Recall in Case of Error

Specify how many times the machine will attempt the call again when a communication error occurs. During recalling, you can set the number of recall attempts. Any number from 1 to 15 can be selected.

Factory default settings: 2 Time(s)

Interval to Wait Between Recall Attempts (min.) in Case of Error

The interval between recall attempts can be set. Any number of minutes from 1 to 15 can be selected.

Factory default settings: 3 minutes



- When this setting is enabled, note that the machine will not attempt the call again when manual transmission or direct transmission is used.
- This item is located under "Fax Settings" → "Send Setting" in the system settings from the operation panel.

Disable Fax Broadcasting

Disables facsimile broadcasting. Factory default settings: Disable

Receive Settings

Settings for fax transmission can be configured.

Number of Calls in Auto Reception

This setting is used to select the number of rings on which the machine automatically receives a call and begins fax reception in auto reception mode.

The "Number of Calls in Auto Reception" that can be set in each area are shown in the following table.

Factory default settings: 2 Time(s)



- If you select "0" for the number of rings, the machine will immediately answer and begin fax reception without ringing in auto reception mode.
- This item is located under "Fax Settings" → "Receive Settings" in the system settings from the operation panel.

2-Sided Printing of Received Data

This is used to have received faxes printed on both sides of the paper.

When this setting is enabled and a fax consisting of 2 or more pages is received (the pages must be the same size), the pages are printed on both sides of the paper.

Factory default settings: Disable

Auto Receive Reduce Setting

When a fax is received that includes printed information such as the sender's name and address, the received image is slightly larger than the standard size. This setting is used to automatically reduce the image to fit the standard size. **Factory default settings:** Enable



If Auto Receive Reduce is disabled, the edges of the image outside the standard size will be cut off. However, the image will be clearer because it will be printed at the same size as the original.

Standard sizes are sizes such as 8-1/2" x 11" and 5-1/2" x 8-1/2" (A4 and B5).

Print Style Setting

This setting determines the paper selection condition when printing received faxes. Select one of the three conditions below.

Print Actual Size Cut off Enabled

Each received image is printed at full size. If necessary, the image is divided onto multiple sheets of paper.

Auto Size Select

Each received image is printed at actual size when possible. When not possible, the image is automatically reduced before printing.

Factory default settings: Auto Size Select

Set the Telephone Number for Data Forwarding

When a problem prevents the machine from printing a received fax, the received fax can be forwarded to another fax machine. This setting is used to program the fax number of the destination fax machine. Only one forwarding fax number can be programmed (maximum of 64 digits).

To insert a pause between digits of the number, tap the [-] key.

Allow/Reject Number Setting

Use this setting to specify whether reception from a stored number is to be allowed or rejected.

ltem	Description
Reject Reception	Reject reception from the stored number.
Allow Reception	Allow reception from the stored number.
All Invalid	Even if numbers have been stored, disregard the numbers and allow reception from all numbers.
Add New	Adds a new address or domain (maximum of 50) from which reception is to be rejected or allowed. Enter the number (maximum of 20 digits) and tap the [Store] key.
Registration Number List	A list of the stored numbers can be displayed. When you select a number from this screen, it is deleted from the list.

Factory default settings: All Invalid

Fax Data Receive/Forward (Manual)

Fax Settings



This setting can only be set on the Web page.

Item	Description
Receive Settings	Set the fax reception method. Auto Reception: When a call comes in, the machine rings and then automatically begins fax reception. Manual Reception: Used when an existing external telephone is connected to the machine. You can answer to a phone call first, and then receive a fax by manual operation. Factory default settings: Auto Reception



- If there is no forwarding data or if the destination is not registered, no data is forwarded.
- If some pages of a fax that is being forwarded were successfully printed, only those pages that were not printed will be forwarded.
- A forwarded fax becomes a fax transmission job. If transmission does not take place because the transmission was canceled or an error occurred, the fax will be held in memory until it can be printed.
- For destination number registration, see "Set the Telephone Number for Data Forwarding (page 8-49)".

Inbound Routing Settings

Inbound Routing Settings



This setting can only be set on the Web page.

The fax received data can be forwarded according to the stored forwarding table.

Table Registration

You can store or edit the data forwarding table that has the received data forward settings.

Up to 10 data forwarding tables can be stored.

A single forwarding table can store up to 5 sets of sender number and source address combinations.

Up to 50 destinations can be stored in all data forwarding tables combined.

Item	Description
Table Name	Display a forward table name.
Sender Settings for Received Data Fax No. Setting	Select the sender facsimile number. Before you select a sender number or address, store the destination number or address. To forward all received data, select [Forward All Received Data]. Factory default settings: Forward All Received Data
Sender Settings for Received Data Forward Condition	You can set the conditions for forwarding. No Forwarding: Do not forward. Always Forward: Always forward. Factory default settings: No Forwarding
Forwarding Destination List	Lists the addresses that can be set as the destination. Select a destination by setting it to $\overline{\mathbf{w}}$.
Add (Selecting from Address Book)	Open the address book and enter a forwarding destination.
Add (Direct Entry)	Enter the destination name directly.
Delete	Deletes the selected address.

Administration Settings

Stores the administration settings to be used for inbound routing.

List name	Settings
Inbound Routing	Sets the inbound routing function. Factory default settings: Disable
Print Style Setting	Sets print conditions for received data. Factory default settings: Print at Error
Preset of Character	Set the characters added to the file name when a file is saved. When "Characters" is set in "File Naming No. 1 to No. 6", the set characters are added to the file name. Enter up to 64 full-width/half-width characters.
File Naming No.1 to No.6	Set the information included in the file name when saving a file. Factory default settings: No.1:Sender Name, No.2:Date & Time, No.3~No.7:None



Enable the [Inbound Routing] function.

Tap the [Administration Settings] from the menu.

Enable the [Inbound Routing] function from the setting screen.

2

Store the sender number or address.

Tap the [Sender Number /Address Registration] from the menu. Enter the destination number or address that you wish to store.



If you wish to forward all received data, you need not store the sender number and address separately.

3

Store a forwarding table.

Tap the [Inbound Routing Settings] from the menu.

Tap the [Add] key on the displayed screen.

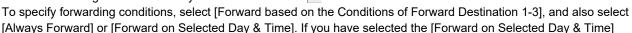
When the [Table Registration] screen appears, store the forwarding table.

4

Enable the stored forwarding table.

Tap the [Inbound Routing Settings] from the menu.

Set the forwarding table name that you wish to enable to $\overline{\mathbf{v}}$.



option, you can set the forwarding date and time in advance.

Transaction Report Print Select Setting

Specify the settings for printing the Transaction Report.

Factory default settings: Print at Error

Authentication Settings



This setting can only be set on the Web page.

Default Settings

User Authentication

This setting enables or disables user authentication and specifies the authentication method.

When the user authentication is enabled, each user of the machine is registered. When a user logs in, the separate authentication settings apply to the user. This function allows greater control of security and cost management than that on previous machines.

Even if user information is not stored on the machine, you can directly enter the user information stored in an LDAP server to log in the machine if necessary. For more information see "<u>Users stored as factory default (page 8-27)</u>". **Factory default settings:** Disable



- For the procedure for storing users, see "User List (page 8-26)".
- For details on login procedures when user authentication is enabled, see "USER AUTHENTICATION (page 7-5)".

User Authentication

When [User Authentication] is enabled, the authentication screen appears before an operation is carried out in any mode.

Log in as an already registered user.

After logging in, you can move freely through the modes.

Authentication Settings

Set the location where user authentication is to be enabled.

Login Locally: User authentication is performed on this machine.

LDAP: User authentication by LDAP server.

Factory default settings: Login Locally

Default Network Authentication Server Setting

Use this to set the default network authentication server.

When you log into Setting mode (Web version) or send a print job to the machine using user information that is not registered in the machine, the authentication server is not known.

This setting is used to select one of the LDAP servers registered in the machine as the authentication server.



When login is performed by network authentication using user information that is not registered in the machine, the login user will be the "User" registered as factory default. For more information see "Users stored as factory default (page 8-27)".

Specify network server access control

Register the access control information for page count limits, and authorities can be registered on an network server in advance. By using this network server for network authentication, perform the user authentication based on the registered access control information.

Use this function when user authentication is performed by network authentication using an LDAP server.

Before using this function, configure settings for authentication by network server, obtain control numbers for the "Pages Limit Group" and "Authority Group" (including base settings for each group), and associate these with the control numbers registered in the machine.

To use this function, add the properties associated with "Pages Limit Group" and "Authority Group" to the directory information of the network server used for user authentication.

The property information is indicated below. Settings previously stored in the machine cannot be changed.

Property	Name of property in factory default state	Settings
Pages Limit Group	pagelimit	Registration number of Pages Limit Group registered in the machine, or a group name previously registered in the machine. Unlimited: unlimited
Authority Group	authority	Registration number of Authority Group registered in the machine, or a group name previously registered in the machine. Admin: admin User: user Guest: guest

Rename the properties that the machine obtains from the LDAP server as follows. In the Web page, select [Network Settings] → [LDAP Settings]. From the Global Address Book setting screen that is displayed, select [Linkage with User Control Function] and then select [Pages Limit Group] and [Authority Group].

The [Pages Limit Group] and [Authority Group] information that is registered in each machine determines the authority and settings that the user is actually granted. To use this function to ensure that users are granted the same authority and settings on any machine, register the [Pages Limit Group] and [Authority Group], information with the same authority so that they will be registered in each machine using the same registration numbers.

The directory information of the network server that is used cannot be changed from the machine. Consult the administrator of the network server.

If 100 users have already been manually registered, login will not be possible. Consult the administrator of the machine. **Factory default settings:** Disable



- If Access Control is enabled and the access control information cannot be acquired from the authentication server, user authentication will not be possible.
- If a user that is registered in the machine is authenticated by network authentication, the user registration settings in the machine will be given priority for the page count limit group and authority group.
- If the access control obtained from the LDAP server is not registered in the machine, the factory default user authority will be applied.
- When this function is not enabled and a user is authenticated by network authentication as a non-registered user, the factory default user authority will be applied.

Authentication Method Setting

This selects the authentication method. When using user authentication, be sure to configure this setting first. The items to be configured for users stored after setting the user authentication method vary depending on the selected authentication method.

Authenticate a User by Login Name and Password

Standard authentication method using a login name and password.

Authenticate a User by User Number Only

Use this option for simple authentication if you skip the network authentication.

Factory default settings: Authenticate a User by Login Name and Password



- The login screen will vary depending on the authentication method that is selected. For more information see "<u>USER AUTHENTICATION</u> (page 7-5)".
- When "Authenticate a User by User Number Only" is selected for the authentication method, network authentication cannot be used.

Case sensitivity of login name is enabled.

Set whether or not to make login names used at the time of user authentication case sensitive. If the checkbox is set to $\boxed{}$, login names with identical spelling but different cases (upper and lower) will be identified as different login names. Therefore, login names with identical spelling but different cases will be authenticated as user names of different users. If the checkbox is set to $\boxed{}$, case sensitivity for login names is disabled. Therefore, identically spelled user names with upper and lower case character differences will be authenticated as the user name of the same user.

Factory default settings: Enable



If the selected checkbox is changed to ___, and identical user names with only upper and lower case character differences exist, the user names that have already been registered are identified as user names of different users.

Card Setting

Use IC Card for Authentication

Allows the IC card to be used when authenticating the user.

Factory default settings: Disable

Administration Settings

Disable Printing by Invalid User

Print jobs by users who have not registered user information in this machine, such as jobs for which appropriate user information has not been entered in the printer driver, are prohibited.

Factory default settings: Disable

Automatic Logout Setting

When user authentication is enabled, this setting specifies whether or not to enable automatic logout.

The time until logout can be specified up to 240 seconds in increments of 10 seconds.

Factory default settings: Enable

A Warning when Login Fails

When entering passwords, including administrator passwords, during user authentication, the number of incorrect password attempts is counted, and if the number of attempts reaches the specified number (three), the user account is locked, and the user is blocked from making any more attempts at authenticating their account until a period of five minutes has elapsed. The number of incorrect entries made is counted separately for each user, and the count is reset when the correct password is entered.

This prevents an unauthorized person from attempting to guess a password. (The number of failed login attempts is retained even if the power is turned off.)

Factory default settings: Disable



- Lockout only applies to the user who failed to login, not all users. Even if one user is locked out, the other users can still log in
- When LDAP network authentication is used, lockout is executed by the server, not the machine. Select appropriate lockout settings on the server.
- If the same user has been locked out, the [Release Operation Lock Status] key is displayed in the "User Registration" screen for that user. An administrator can tap this key to carry out a manual clear.

Allow Remote Scanner Using Before Login

This setting specifies whether scanning can be performed by remote operation before a user has logged in. **Factory default settings:** Disable

Enable IPP Authentication Except for Printer Driver

Enable IPP authentication on a non-printer driver.

Factory default settings: Enable

Actions when the user is authenticated

Display only the Files of Logged-in Users

When retention is enabled in the printer driver and print data has been spooled to the machine, you can have the spooled print data automatically print out when the user who enabled retention logs in.

Factory default settings: Disable

Reset Counter After Sending E-mail Status

After E-mail Status has been sent, the counter is reset. Displayed only when E-mail Alert and Status is enabled.

Factory default settings: Disable

Disable Display/Change of Other User's Information in the Fax Job Status

Prohibits the display or modification of other users' information on the fax job status screen.

Factory default settings: Disable

Screen Display Settings after the authentication

Login Name Display

When user authentication is enabled, select whether the login name is shown or asterisks are shown.

Factory default settings: Display login name

ltem	Description	
Display login name	Show the login name.	
Display login name with "*"	Hide the login name with asterisks.	

Display Usage Status after Login

When user authentication is enabled, this setting specifies whether or not to display the page counts of a user when the user logs in.

Factory default settings: Disable

Card Reader Settings

Condition Settings

Card Type/Card Reader

Specify the card type and card reader to be used.

Factory default settings: 200

Card ID Registration/Change Authority

Set whether the logged-in user can register/change/delete his/her card ID information in this machine.

Factory default settings: Disable Check Facility Code in HID mode

Set whether to check the facility code when using a HID card.

When this setting is enabled, the facility code (up to 128 single-byte characters) is registered.

Factory default settings: Disable

Facility Code

Enters the facility code of a HID card. When you tap the [Store] key, the facility code is stored.

Importing from the setup file

When you enter the configuration file name and tap the [Execute] key, the card area settings are read from the configuration file. If you tap the [Clear] key, all files that match the current search conditions are deleted.

Paper Settings

Paper Tray Settings

Paper tray and paper type settings are explained in this section.

These settings specify the paper type, paper size, and functions allowed for each paper tray.

When the [Paper Tray Settings] key is tapped, a list appears showing the trays and the current settings.



This setting can only be set on the Web page.

Auto Switching of Tray

When a tray runs out of paper during printing, this determines whether or not another tray with the same size and type of paper is automatically selected and printing continues.

Factory default settings: Disable

Display Paper Tray Settings when bypass tray detects paper.

You can have the paper tray settings appear automatically when paper is detected in the bypass tray. **Factory default settings:** Disable

Paper Weight Setting

These are used to control the toner fusing temperature according to the weight of the paper.

These settings apply to recycled paper, punched paper, pre-printed paper, letterhead paper and colored paper.

You can select "16 to 24 lbs." or "24+ to 28 lbs." ("60g/m² to 89g/m²" or "90g/m² to 105g/m²").

Factory default settings: 16 - 24 lbs (60 - 89g/m²)

Feeding Approved Job (Fax)

Enable the paper trays available for the Fax.

Operation Settings



All items except for the Custom Link are available in the system settings from the operation panel.

Message Time Setting

The duration of time that messages appear in the touch panel (the time until a message is automatically cleared) can be set to any number of seconds from 1 to 12.

Factory default settings: 6 seconds

Language Setting

The language that appears in the touch panel can be changed to any language.

Factory default settings: Varies depending on country and region

Default Display Settings

Set the screen that appears after auto clear and login.

Factory default settings: Home Screen

Display IP Address on the Machine Information Screen

This setting specifies whether or not to display the IP address of the machine on the "Machine Information" screen. Factory default settings: Enable

Icon is Displayed when Network Cable is not Connected.

Show an icon when a LAN cable is not connected.

Factory default settings: Enable

Display Confirmation Dialog when job is canceled.

Show a confirmation dialog box when a job is canceled.

Factory default settings: Disable

Restrict Total Count display

When this setting is enabled, the total count is hidden when checking the total count from the home screen.

Factory default settings: Disable

Alignment Order of 10-Key

Set whether the numeric keys are arranged in ascending order with "1" in the upper left corner, or "1" in the lower left corner.

Factory default settings: Ascending order from upper left

Auto Clear Setting

Cancel Auto Clear Timer

Disables the auto clear mode. **Factory default settings:** Disable

Auto Clear Setting

The time until Auto Clear activates can be set to any number of seconds from 10 to 240 in increments of 10 seconds. If the machine is not used for the duration of time set here, the auto clear function will clear any settings that have been selected and return the default display screen.

Factory default settings: 60 seconds

Disable Display Timeout

When auto clear time has elapsed in fax mode or scanner mode, the operation screen returns to the basic screen Factory default settings: Disable

Time for Accepting Key Entry

This setting determines how long a key in the touch panel must be tapped until the key input is registered. The time can be set from 0 to 2 seconds in increments of 0.5 seconds.

By lengthening the time setting, key input can be prevented when a key is tapped accidentally. Keep in mind, however, that when a longer setting is selected more care is required when tapping keys to ensure that key input is registered. **Factory default settings:** 0.0 seconds

Disable Auto Key Repeat

This is used to disable key repeat. Factory default settings: Disable

Time for Accepting Key Entry of Long Touch

Select a time when a long key touch is detected.

Factory default settings: 0.5 seconds

Remote Operation Settings

Configure settings required for remote operation of the machine from a PC connected to the same network.

Remote Software Operation

• Allow Operational Authority:

This is used when remote software is used to operate the machine remotely.

View Password Entry Screen:

When operating the machine by remote control using the remote software, the password entry screen will appear on both the computer and the machine, or on only the computer.

Factory default settings: Allow Operational Authority: Prohibited, View Password Entry Screen: Display in Both PC and Machine

Operation from Specified PC

· Allow Operational Authority:

This is used to allow remote operation of the machine using the specified PC.

· Hostname or IP Address of PC:

Enter the host name or IP address of the PC to be connected to the machine.

· View Password Entry Screen:

When operating the machine by remote control using the remote software, the password entry screen will appear on both the computer and the machine, or on only the computer.

Factory default settings: Allow Operational Authority: Prohibited, View Password Entry Screen: Display in Both PC and Machine

Operation by User who Has Password

· Allow Operational Authority:

This is used to allow a user who has a password to operate the machine remotely. For information on the password, consult your service technician.

View Password Entry Screen:

When operating the machine by remote control using the remote software, the password entry screen will appear on both the computer and the machine, or on only the computer.

Factory default settings: Allow Operational Authority: Prohibited, View Password Entry Screen:Display in Both PC and Machine

Data List

Set whether to print the data list with 1-sided print or 2-sided print.

Factory default settings: 1-sided print

Keyboard Select

Change the key layout and display according to the set language.

Factory default settings: Varies depending on country and region

Custom Links

You can display registered web addresses in the display field of the setting menu. By clicking on a custom link, you can jump to the web site of the registered address.



This setting can only be set on the Web page.

Device Control

Various devices mounted on the machine can be set.



All items except for the Clock Adjust, Daylight Saving Time Setting, Paper Type for Auto Paper Selection and Disabling of Tray Settings are available in the system settings of the Web page.

For Device Control on the operation panel, see the following "THE SETTING MODE LIST OF THE OPERATION PANEL (page 8-8)".

Condition Settings

AB/Inch Type Setting

The numbers and units of the default settings and input ranges that appear in the setting screens can be switched between inches and AB sizes.

Factory default settings: Inch (AB)

Default Original Size Settings

Specify this setting when a particular original size is frequently used. The setting will appear in the [Original] key. Specifying this setting allows the original size setting to be omitted.

Factory default settings: All 8-1/2" x 11" (A4)

Paper Type for Auto Paper Selection

The paper types* that the Auto Paper Selection function will select can be specified. Select one of the following settings:

- Plain 1
- Plain 2
- Recycled

The Auto Paper Selection function will not select any paper types other than the paper types specified with this setting.

* The paper type set for each paper tray by selecting [System Settings] in "Settings" → [Paper Tray Settings].

Factory default settings: Plain1, Plain2



This item is located under "Device Control" in the system settings from the operation panel.

Plain Paper Compatibility Settings

Set the basis weight of plain paper that is normally used.

Select from Plain1 and Plain2.

The weight of Plain Paper 1 is 16 to 24 lbs bond (60 to 89 g/m 2). The weight of Plain Paper 2 is 24 to 28 lbs bond (90 to 105 g/m 2).

Factory default settings: Plain1

Disabling of Tray Settings

This setting is used to prohibit tray settings (except for the bypass tray).

Factory default settings: Disable



This item is located under "Device Control" in the system settings from the operation panel.

Status Indicator Setting

Data Indicator Setting

Sets the operation of the information lamp. For details on the settings, see "INFORMATION INDICATOR (page 1-6)". Factory default settings: Pattern 1

Information Indicator will blink if data is received

Set whether to blink the information lamp when there is received fax data.

Factory default settings: Enable

Prioritize the indicator display of received data over the error indicator display

If there is received fax data, give priority to lighting the error display.

Factory default settings: Disable

Error Light Setting

Sets the operation of the error lamp. For each setting, see the following "INFORMATION INDICATOR (page 1-6)".

Factory default settings: Light & Blink

Machine Identification Settings

Enter a name or code to identify the machine.

Clock Adjust

Use this to set the date and time in the machine's built-in clock.

Item	Description
Specify Time Zone	If your region is ahead of GMT (Greenwich Mean Time), select [+]. If your region is behind GMT, select [-]. Next, specify the time difference between your region and GMT in hours and minutes. (Example: If your region is Japan, + 9 hours 00 minutes.)
Date&Time Settings	Select and set the year, month, day, hour, and minute.



This item is located under "Device Control" in the system settings from the operation panel.

Daylight Saving Time Setting

Enable daylight saving time.

Item	Description
Daylight Saving Time Setting	Select whether or not the Daylight Saving Time Setting is enabled. If disabled, the following settings will not be possible. Factory default settings: Disabled
Select Setting Type	Specify whether the starting and ending day of daylight saving time are to be set using the day of the week or the date.
Start Time	Set the starting time of daylight saving time. If you selected "Day of the Week" in "Select Setting Type", set the starting week of daylight saving time and then the starting day. If you selected "Date" in "Select Setting Type", set the starting date. Set the hour and minute and the UTC (Coordinated Universal Time) setting.

ltem	Description
Completing Time	Set the ending time of daylight saving time in the same way as you set the starting time.
Adjustment Time	Set the time to be adjusted when daylight saving time begins.



This item is located under "Device Control" in the system settings from the operation panel.

Enable/Disable Settings

The following settings enables or disables certain functions.

The prohibited setting items in the settings of each function such as Printer Settings and the items in this prohibited setting are linked.

Printer Settings

Prohibit Notice Page Printing

Disables to print a notice page. Factory default settings: Enable Prohibit Test Page Printing Disables to print the test page.

When this setting is enabled, [Status] \rightarrow [Data List] \rightarrow [List for User] \rightarrow [Printer Test Page] in the Web page cannot be

used to print test pages.

Factory default settings: Disable

Exclude Bypass-Tray from Auto Paper Select

When [Auto] is selected for paper type selection, the bypass tray is excluded from the trays that can be selected. It is

recommended when special paper is set up in the bypass tray frequently.

Factory default settings: Disable Disable Blank Page Print Disables to print a blank page. Factory default settings: Disable

Image Send Settings

Disable Fax Broadcasting

Disables the facsimile broadcasting.

Factory default settings: Disable

Disable Scan Function

Disable Storing to USB Memory

Set this when you want to prohibit data saving to a USB memory.

Factory default settings: Disable
Settings to Disable Transmission

These settings are used to disable the following transmission operations.

Disable Selection from Address Book

Disables the selection of destinations from the address book.

Configure the setting for each of the following items:

- E-mail
- Network Folder/FTP/Desktop

Select All: Select all items.

Clear Checked: Deselect all items. Factory default settings: All Invalid

Disable Direct Entry

Disables the direct entry of destination address and others.

Configure the setting for each of the following items:

- E-mail
- Fax

Select All: Selects all items.

Clear Checked: Clears all selections.

Factory default settings: All Invalid
Disabling of Find My Address
This prohibits Find My Address.

Factory default settings: Disable

Device Control

Disabling of Tray Settings

This setting is used to prohibit tray settings (except for the bypass tray).

Factory default settings: Disable

Product Key

E-mail Alert and Status

Enter the product key and application number for the above functions.



Depending on the activation status of the extended function of the machine, the items displayed will change. For the product key to be entered, contact your dealer.

Sound Settings

Configure machine notification sounds and their volume.



This setting can only be set on the operation panel.

Beep Sound Settings (Common)

Keys Touch Sound/Powering Off Sound

Controls the key touch sound level, or turns the sound off.

Factory default settings: Low

Reference Tone

This turns the sound on when changing the copy ratio or exposure, and the setting reaches the standard value (copy ratio 100%, exposure 3). Control the reference tone sound level, or turns the sound off.

Factory default settings: Low

Scan Complete Sound (Scan/Fax)

Control the fax or scanner scanning completed notification sound level, or turns the sound off.

Factory default settings: Low

Beep Sound Settings (Fax)

Adjust the sound volume of functions used in fax operations.

Speaker Volume Setting

Adjust the sound volume of functions used in fax operations.

On Hook Volume

Adjusts the on-hook volume. **Factory default settings:** Middle

Ringer Volume

Adjusts the volume of the ringer. Factory default settings: Middle

Line Monitor Volume

Adjusts the volume of the line monitor.

Factory default settings: None

Transmission Job Complete Sound Volume

Adjusts the volume of the communication completion sound.

Factory default settings: Middle

Transmission Complete Sound

Sets the tone for the respective end tones during transmission and reception.

Sending

Sets the end tone for the sending. Factory default settings: Pattern 2

Receiving

Sets the end tone for receiving. Factory default settings: Pattern 2

Transmission Complete Sound Time Setting

Sets the time to sound the end of communication.

Factory default settings: 3.0sec

Network Settings (Operation panel)

This section describes the Network Settings in the System Settings from the operation panel.



This setting can only be set on the operation panel.

Confirmation of Network

The current network configuration of the machine is displayed.

Connection Type

Switch between [Wired Only], [Wireless (Infrastructure Mode)] or [Wired+Wireless (Direct Connection)] according to the network connection status.

Factory default settings: Wired + wireless (Direct Connection)

Wired Settings

Configure the wired connection settings.

IPv4 Settings

When using the machine on a TCP/IP (IPv4) network, use this setting to configure the IP address of the machine.

Enable DHCP

Use this setting to have the IP address obtained automatically using DHCP (Dynamic Host Configuration Protocol)/BOOTP (Bootstrap Protocol). When this setting is enabled, it is not necessary to manually enter an IP address.

Factory default settings: Enable



If DHCP/BOOTP is used, the IP address assigned to the machine may change automatically. If the IP address changes, printing will not be possible.

IPv4 Address

Enter the IP address of the machine.

Subnet Mask

Enter the IP subnet mask.

Default Gateway

Enter the default gateway address.

IPv6 Settings

When using the machine on a TCP/IP (IPv6) network, use this setting to configure the IP address of the machine.

Enable IPv6

Enable this setting.

Enable DHCP

Use this setting to have the IP address obtained automatically using DHCP (Dynamic Host Configuration Protocol)/BOOTP (Bootstrap Protocol). When this setting is enabled, it is not necessary to manually enter an IP address

Factory default settings: Enable



If DHCP/BOOTP is used, the IP address assigned to the machine may change automatically. If the IP address changes, printing will not be possible.

Manual Address

Enter the IP address of the machine.

Prefix Length

Enter the prefix length (0 to 128).

Default Gateway

Enter the default gateway address.

Wireless Settings (Infrastructure Mode)

Set up a wireless infrastructure mode connection.

WPS

Connect the machine to the wireless router using WPS.

Push Button Method

Connect to your wireless router using WPS. After tapping this key, press the WPS button on the wireless router to connect.

PIN Code Method

When you tap this key, a PIN code will be displayed. Enter this PIN code into the configuration page of the wireless router you will be connecting to within 2 minutes.

SSID

Enter the SSID using up to 32 characters.

Security Type

Sets the security type of the wireless connection.

Encryption

Select the encryption method according to the item selected in "Security Type".

Security Key

Select a security key according to the item selected in "Security Type".

Security Type	Security Key
WEP	5 single-byte alphanumeric or 10 hexadecimal digits (64bit) or 13 single-byte alphanumeric or 26 hexadecimal digits (128bit)
WPA/WPA2-mixed Personal WPA/WPA2-mixed Enterprise WPA2 Personal WPA2 Enterprise WPA2/WPA3-mixed Personal WPA3 Personal WPA2/WPA3-mixed Enterprise WPA3 Enterprise	8 to 63 single-byte alphanumeric characters or 64 hexadecimal digits

Wireless Settings (Access Point Mode)

Set up a wireless access point mode connection.

Frequency Band

Sets which frequency band to use.

Security Type

Sets the security type of the wireless connection.

Encryption

Select the encryption method according to the item selected in "Security Type".

Security Key

Select a security key according to the item selected in "Security Type".

Security Type	Security Key
WEP	5 single-byte alphanumeric or 10 hexadecimal digits (64bit) or 13 single-byte alphanumeric or 26 hexadecimal digits (128bit)
WPA/WPA2-mixed Personal WPA2 Personal WPA2/WPA3-mixed Personal WPA3 Personal	8 to 63 single-byte alphanumeric characters or 64 hexadecimal digits

Device IP Address Settings

Sets the IP address of the access point.

Channel Settings

Sets the channel used for the access point.

IP Address Distribution Range Setting

Sets the IP address lease range (beginning of IP address and end of IP address) and lease period to be used by the access point.

Network Settings (Web page)



This setting can only be set on the Web page.

Quick Settings

Select the minimum required settings for the machine connection to the network.

Wireless Settings

Connection Type

Switch between [Wired Only], [Wireless (Infrastructure Mode)] or [Wired+Wireless (Direct Connection)] according to the network connection status.

Factory default settings: Wired + wireless (Direct Connection)

When wired + wireless (Direct connection) selected

Wireless (Direct Connection)" and "Access Point Mode" is enabled.

Factory default settings: Access Point Mode

When "Wireless (Infrastructure Mode)" is selected in "Connection Type"

Access Point Search

Click this to search access points. When the search results are displayed, select the access point to use and click [OK]. [SSID], [Security Type], and [Encry.] are automatically applied.

SSID

Enter the SSID.

Security Type

Select a security type.

Factory default settings: No Sound

Encry.

Select an encryption type.

Factory default settings: No Sound

Security Key

Enter a security key.

Security Type	Security Key
None WEP WPA/WPA2-mixed Personal WPA/WPA2-mixed Enterprise WPA2 Personal WPA2 Enterprise WPA2/WPA3-mixed Personal WPA3 Personal WPA3/WPA3-mixed Enterprise WPA3 Enterprise	WEP64bit: 5 characters or 10-digit hexadecimal number WEP128bit: 13 characters or 26-digit hexadecimal number WPA/WPA2/WPA3: 8 to 63 characters or 64-digit hexadecimal number

Show Security Key

If it is set to ON, the security key appears.

Factory default settings: No Sound

IPv4 Settings

When using the machine on a TCP/IP (IPv4) network, use this setting to configure the IP address of the machine. The settings are shown below.

DHCP

Use this setting to have the IP address obtained automatically using DHCP (Dynamic Host Configuration Protocol)/BOOTP (Bootstrap Protocol). When this setting is enabled, it is not necessary to manually enter an IP address

Factory default settings: Enable



If DHCP/BOOTP is used, the IP address assigned to the machine may change automatically. If the IP address changes, printing will not be possible.

IPv4 Address

Enter the IP address of the machine.

Subnet Mask

Enter the IP subnet mask.

Default Gateway

Enter the default gateway address.

Network Name Settings

Device Name

Enter a device name.

Domain Name

Enter the domain name.

Factory default settings: Sharp-Printer

DNS Settings

Primary Server

Enter the IP address of primary DNS server.

Secondary Server

Enter the IP address of secondary DNS server.

Domain Name

Enter the domain name where the selected DNS server exists.

SMTP Settings

Primary Server

Enter the IP address or the host name of the primary SMTP server.

Port Number

Enter a port number.

Factory default settings: 25

Sender Address

Enter the sender's address.

Enable SSL/TLS

If w the SSL/TLS is enabled, the SMTP-over-TLS encryption communication can be used by STARTTLS command. This requires the server to support the STARTTLS command.

To allow SSL/TLS communication, set the "Port Number" to the same port number as the normal SMTP.

Factory default settings: Disable

SMTP Authentication

Specify the authentication method for SMTP.

Factory default settings: Disable

User Name

Enter the user name.

Password

Enter the password.

To change the password, set [Change Password] to <a>.

Connection Test

Tap the [Execute] button to test the connection to the SMTP server.

LDAP Settings

Name

Enter the address book name.

Search Root

Enters the search defaults to search for a specific area of the LDAP directory information tree.

Example: o = ABC, ou = NY, cn = Everyone

Entries must be separated by semicolons or commas.

LDAP Server

Enter the IP address or host name of the LDAP server.

User Name

Enter the account name for LDAP setting.

Password

Enter the password.

Change Password

To change the password, set <a>.

Authentication Type

Select the authentication server from the drop-down list.

Factory default settings: Anonymous

KDC Server

Enter the IP address or host name of the Kerberos authentication server.

Realm

Enter the Kerberos realm.

Enable SSL/TLS

If $\overline{\vee}$ is set, the SSL/TLS encryption communication is enabled.

For encrypted communication as SMTP over TLS, set "Port Number" to 465.

For encrypted communication as STARTTLS, set "Port Number" to the same port number as normal SMTP or a port number other than 465.

Connection Test

Tap the [Execute] button to test the connection to the LDAP server.

Network Name Setting

Device Name

Enter a device name.

Domain Name

Enter the domain name.

Factory default settings: Sharp-Printer

Comment

Enter a comment.

Interface Settings

Mainly set items related to TCP/IP.

Connection Type

Switch between [Wired Only], [Wireless (Infrastructure Mode)] or [Wired+Wireless (Direct Connection)] according to the network connection status.

Factory default settings: Wired+Wireless (Direct Connection)

When wired + wireless (Direct connection) selected

Select from Access Point Mode and Wi-Fi Direct Mode.

Factory default settings: Access Point Mode

General Settings

Auto-Negotiation

Automatically optimizes both communication speeds and communication modes (full/half duplex) when connected via LAN connector.

Factory default settings: Enable

Speed

Specify the communication speed of the network.

Factory default settings: 100BASE-TX

Duplex Mode

Specify the communication speed of the network.

Factory default settings: HALF

IPv4 Settings

When using the machine on a TCP/IP (IPv4) network, use this setting to configure the IP address of the machine. The settings are shown below.

DHCP

Use this setting to have the IP address obtained automatically using DHCP (Dynamic Host Configuration Protocol). When this setting is enabled, it is not necessary to manually enter an IP address.

Factory default settings: Enable



If DHCP/BOOTP is used, the IP address assigned to the machine may change automatically. If the IP address changes, printing will not be possible.

IPv4 Address

Enter the IP address of the machine.

Subnet Mask

Enter the IP subnet mask.

Default Gateway

Enter the default gateway address.

IPv6 Settings

When using the machine on a TCP/IP (IPv6) network, use this setting to configure the IP address of the machine.

IPv₆

Enable this setting.

Factory default settings: Enable

DHCPv6

Use this setting to have the IP address obtained automatically using DHCP (Dynamic Host Configuration Protocol) v6. When this setting is enabled, it is not necessary to manually enter an IP address.

Factory default settings: Enable

Manual Address / Prefix Length

Enter the IP address and the prefix length (0 to 128) of the machine.

Factory default settings: 0

Default Gateway

Enter the default gateway.



If DHCPv6 is used, the IP address assigned to the machine may change automatically. If the IP address changes, printing will not be possible.

DNS Settings

Primary Server

Enter the IP address of primary DNS server.

Secondary Server

Enter the IP address of secondary DNS server.

Domain Name

Enter the domain name where the selected DNS server exists.

IEEE802.1X Setting

IEEE802.1X can be used to authenticate a user to allow use of the machine.

IEEE802.1X protocol defines port-based authentication for both wired and wireless networks.

Use IEEE802.1X authentication to allow only authenticated devices to use network, and protect against network abuse by third parties.

Depending on the Web page settings, connection to the machine may not be allowed, or the settings may not allow printing, scanning, or Setting mode (Web version) display. In this case, deselect this setting and change the Setting mode (Web version) settings.

IEEE802.1X Authentication (Wired)

Set whether to use authentication using IEEE802.1X.

Factory default settings: Disable

EAP Authentication Method

Set the EAP authentication method in IEEE802.1X.

Factory default settings: EAP-TLS

EAP User Name

Enter the EAP user name when authenticating.

Password

Enter the EAP password for authentication.

Server Authentication

Set whether to use server authentication.

Factory default settings: Enable

EAP Timeout

Set the EAP timeout.

Factory default settings: 10 seconds

Number of EAP Retries

Set the number of times to re-access the EAP when communication fails.

Factory default settings: 3 Time(s)

Certificate Status

Shows the status of the certificate required for transmission using IEEE802.1X. To install a certificate, click [Install].

CA Certificate Status

Shows the status of the CA certificate required for transmission using IEEE802.1X. To install a certificate, click [Install].

Services Settings

Make settings for SMTP, Kerberos Authentication Settings, SNTP, mDNS, SNMP, and SMB.



When settings are changed, the changes will take effect after the machine is restarted. For details on restarting this machine, see "TURNING ON THE POWER (page 1-7)".

SMTP

SMTP Settings

Primary Server

Enter the IP address or the host name of the primary SMTP server.

Secondary Server

Enter the IP address or the host name of the secondary SMTP server.

Port Number

Enter a port number.

Factory default settings: 25

Timeout

Enter a timeout. This value is used for connection to the SMTP server and for data transmission according to the e-mail system specifications.

Factory default settings: 20 seconds

Sender Address

Enter the sender's address

Enable SSL/TLS

If $\overline{\mathbf{v}}$ the SSL/TLS is enabled, the SMTP-over-TLS encryption communication can be used by STARTTLS command.

This requires the server to support the STARTTLS command.

To allow SSL/TLS communication, set the "Port Number" to the same port number as the normal SMTP.

Factory default settings: Disable

SMTP Authentication

Specify the authentication method for SMTP.

Factory default settings: Disable

User Name

Enter the user name.

Password

Enter the password.

To change the password, set [Change Password] to ✓.

POP before SMTP

If <u>v</u> is set, you are authenticated to the POP server before using the SMTP communication.

• POP3 Server: Enter the IP address or the host name of the secondary SMTP server.

Factory default settings: Disable

• Port Number: Enter the POP3 port number for POP before SMTP communication. The default setting is port 110.

Factory default settings: 110

• POP Authentication: If ✓ is set, the authentication protocol (including APOP) is used for authentication to the POP3 server

Factory default settings: Disable

- User Name: Enter the user name for POP before SMTP communication.
- Password: Enter the password required for POP before SMTP communication. To change the password, set [Change Password] to ✓.

Factory default settings: Disable

Connection Test

Tap the [Execute] button to test the connection to the SMTP server.

Kerberos

Kerberos Authentication Settings

KDC Server

Enter the IP address or host name of the Kerberos authentication server.

Port Number

Enter the port number of the Kerberos authentication server.

Factory default settings: 88

Realm

Enter the Kerberos realm.

mDNS

mDNS Settings

mDNS

Set this option to use the mDNS settings.

Factory default settings: Enable

Service Name

Enter a service name.

Domain Name

Display the domain name.

Highest Priority Service

Select a service you use with the priority.

Factory default settings: LPD

SNMP

SNMP v1 Settings

SNMP v1 Settings

Set this option to use the SNMPv1 settings.

Factory default settings: Enable

Access Method

Set an access method.

Factory default settings: Read-write Access

GET Community

Enter the GET community name to fetch the device information using SNMP.

Factory default settings: public

SET Community

Enter the SET community name required for SNMP setting.

Factory default settings: private

Change SET Community

To change the SET community, set .

Factory default settings: Disable

TRAP Community

Enter the community name to be used for the SNMP TRAP sent from the device.

Factory default settings: public

TRAP Target Address

Enter the IP address of the destination computer for SNMP TRAP communication.

SNMP v3 Settings

SNMP v3 Settings

Set this option to use the SNMPv3 settings.

Factory default settings: Disable

User Name

Enter the user name.

Authentication Key

Enter the authentication key.

Factory default settings: Algorithm: MD5

Privacy Key

Enter the privacy key.

Factory default settings: Algorithm: DES

Context Name

Display the context name.

SMB

SMB Settings (Client)

Set the version of SMB protocol that is used for functions such as Scan to Network Folder.

Use this setting to connect to a device that cannot automatically change the SMB protocol version, or when there is a problem in the connection with another device due to different versions.

Set the version to SMBv1, SMBv2, or SMBv3.

Factory default settings: All Enabled



SMBv1 has a configuration item, however, the settings are always enabled and cannot be disabled.

When one version is disabled, all settings for higher versions are disabled. Also, when one version is enabled, all lower version settings are enabled.

Print Port Settings

LPD

LPD Settings

LPD

Set this option to use LPD. **Factory default settings:** Enable

Timeout

Enter a timeout.

Factory default settings: 90 seconds

Use Banner

Set this option to use the banner. Factory default settings: Disable

RAW

Raw Print Settings

Raw Print

Set this option to use RAW printing. Factory default settings: Enable

Port Number

Enter a port number.

Factory default settings: 9100

Timeout

Enter a timeout.

Factory default settings: 90 seconds

WSD

WSD Settings

WSD Print

Set this option to use WSD printing. Factory default settings: Disable

Use Multicast Discovery

Set this option to use multicast discovery.

Factory default settings: Enable

LDAP Settings

The following explains the LDAP settings.

When you tap the [Store] key, the LDAP settings are updated with your entries.

The default address book is set to \bigvee .

Add

To add a global address book, tap the Add key.

Delete

To delete the global address book, select the item and tap the [Delete] key.

Settings

Setting item	Settings
Name	Enter the address book name.
Search Root	Enters the search defaults to search for a specific area of the LDAP directory information tree. Example: o = ABC, ou = NY, cn = Everyone Entries must be separated from each other by semicolons or commas.
LDAP Server	Enter the IP address or host name of the LDAP server.
Server Type	Select the Default or Custom from the service type list. Factory default settings: Default
User Identity Attribute	Set the user ID property. Factory default settings: uid
Search Attribute	Set the LDAP search property. Factory default settings: cn
Obtain E-mail address from	Set the e-mail address search. Factory default settings: mail
Obtain Fax number from	Set the fax number search. Factory default settings: facsimileTelephoneNumber
Pages Limit Group	Set the Storing Page Limit Group Search. Factory default settings: pagelimit
Authority Group	Set the Storing Authority Group Search. Factory default settings: authority
Card ID	Sets the card ID search. Factory default settings: cardid
Port Number	Enter a port number. Factory default settings: 389
Timeout	Enter a timeout. Factory default settings: 5 seconds
User Name	Enter the account name for LDAP setting.
Password	Enter the password. To change the password, set [Change Password] to <u>·</u> .
Authentication Type	Select the authentication server from the drop-down list. Factory default settings: Anonymous
Bind Prefix	Set the Bind prefix. Factory default settings: uid

Setting item	Settings
Server Usage	Set the server application. Set the address book and user authentication. Factory default settings: All EnabledLPD
To Be Used as Default	Specify whether or not to use the selected global address as default. Factory default settings: Disable
Enable SSL/TLS	Encrypted communication by SSL/TLS is performed. Factory default settings: Disable
Connection Test	Tap the [Execute] button, and the connection test is executed and its result is displayed.



When settings are changed, the changes will take effect after the machine is restarted. To restart the machine, see "TURNING ON THE POWER (page 1-7)".

Proxy Setting

Access the network through a proxy server.

Settings

Item	Description
Proxy Setting	Access the network through a proxy server. Factory default settings: Disable
Proxy Server Address	Enter the proxy server address.
User Name	Enter a user name to access the proxy server.
Password	Enter a password to allow access to the proxy server.
Port Number	Enter the proxy server port number. Factory default settings: 8080

Wireless Settings

Used to enable or disable the wireless LAN and show the status of wireless LAN.

Connection Type

Switch between [Wired Only], [Wireless (Infrastructure Mode)] or [Wired+Wireless (Direct Connection)] according to the network connection status.

Factory default settings: Wired+Wireless (Direct Connection)

When wired + wireless (Direct connection) selected

This can be set when "Connection Type" is "Wired + Wireless (Direct Connection)" and "Access Point Mode" is enabled. Factory default settings: Access Point Mode

Current Setting

Shows settings, such as the SSID of a wireless LAN and security type. If the wireless LAN is disabled, "--" appears.

Current Wireless Status

This shows reception levels (Max. 100) of the wireless LAN and IP addresses.

Show Wireless Setting Screen

Click the [Setup] button.

In the Wireless Setting screen, you can configure the SSID of a wireless LAN, Security Type, Encry., and Security Key.

Initialize Wireless Settings

Click the [Initialize] button.

The settings for SSID, Security Type, Encry., and Security Key are initialized.

Wireless Setting (infrastructure mode)

If you click the [Setup] button when [Switch Connection Type] is set to [Wireless (Infrastructure Mode)], the Infrastructure Mode Wireless Setting screen is displayed.

Configure the SSID of a wireless LAN, Security Type, Encry., and Security Key. Clicking the [Submit] button stores the settings.

Access Point Search

Click this to search access points. When the search results are displayed, select the access point to use and click [OK]. [SSID], [Security Type], and [Encry.] are automatically applied.

SSID

Enter the SSID.

Security Type

Select a security type.

Factory default settings: None

Encry.

Select an encryption type.

Factory default settings: None

Security Key

Enter a security key.

Security Type	Security Key
WEP WPA/WPA2-mixed Personal WPA/WPA2-mixed Enterprise WPA2 Personal WPA2 Enterprise WPA2/WPA3-mixed Personal WPA3 Personal WPA3 Personal WPA2/WPA3-mixed Enterprise WPA3 Enterprise	WEP64bit: 5 characters or 10-digit hexadecimal number WEP128bit: 13 characters or 26-digit hexadecimal number WPA/WPA2/WPA3: 8 to 63 characters or 64-digit hexadecimal number

Show Security Key

If it is set to ON, the security key appears.

Factory default settings: Disable

Wireless Setting (Direct Connection)

If the [Setup] button is clicked while [Connection Type] is set to [Wired+Wireless (Direct Connection)], the Wireless Settings (Direct Connection) screen is displayed.

When "Access Point Mode" is selected in "Wired+Wireless (Direct Connection)", the access point mode can be set. Configure the SSID of a wireless LAN, Security Type, Encry., and Security Key.

Clicking the [Submit] button stores the settings.

Frequency Band

Set the frequency band used for a wireless LAN.

Factory default settings: No Sound

SSID

Enter the SSID.

Security Type

Select a security type.

Factory default settings: WPA/WPA2-mixed Personal

Encry.

Select an encryption type.

Factory default settings: AES

Security Key

Enter a security key.

Security Type	Security Key
WEP WPA/WPA2-mixed Personal WPA2 Personal WPA2/WPA3-mixed Personal WPA3 Personal WPA2/WPA3-mixed Enterprise WPA3 Enterprise	WEP64bit: 5 characters or 10-digit hexadecimal number WEP128bit: 13 characters or 26-digit hexadecimal number WPA/WPA2/WPA3: 8 to 63 characters or 64-digit hexadecimal number

Show Security Key

When enabled, the security key will be displayed.

Factory default settings: Disable

Device IP Address

Enter the IP address.

Channel to Be Used

Select the channel to be used in wireless LAN.

Factory default settings: When the frequency band is 2.4GHz: 1, when the frequency band is 5GHz: 36

IP Address Distribution Range Setting

Configure the range to be used the IP address.

Factory default settings: Start IP Address:11, End IP Address:15

Lease Period

Set the validity period of the IP address assigned by DHCP.

Factory default settings: 15 minutes

Easy Connection Setting

Set when using Easy Connection.

QR code

You can install the dedicated application on the mobile device in advance, scan the displayed QR code, send the connection settings to the mobile device, and register it.

Factory default settings: Enable

Destination

Set the connection destination to connect to and the connection destination to be registered in the QR code. To connect to this machine, select [Connect with the machine]. The information required when connecting to this machine is registered in the application.

To select a connection destination other than this machine, select [Connect with the following access point].

When setting manually, obtain the network information of the connection destination in advance.

If you select [Connect with the following access point], make the following settings.

Factory default settings: Connect with the machine



Set [Connection Type] in the [Wireless Settings] to [Access Point Mode] to connect with the machine.

Access Point Search

Click this to search access points. When the search results are displayed, select the access point to use and click [OK]. [SSID], [Security Type], and [Encry.] are automatically applied.

Name

Enter the name of the connection destination.

SSID

Enter the SSID.

Security Type

Select a security type.

Factory default settings: WPA2 Personal

Encry.

Select an encryption type.

Factory default settings: AES

Security Key

Enter a security key.

Security Type	Security Key
WEP WPA/WPA2-mixed Personal WPA2 Personal WPA2/WPA3-mixed Personal WPA3 Personal	WEP64bit: WEP64bit: 5 characters or 10-digit hexadecimal number WEP128bit: 13 characters or 26-digit hexadecimal number WPA/WPA2/WPA3: 8 to 63 characters or 64-digit hexadecimal number

Show Security Key

When enabled, the security key will be displayed.

Factory default settings: Disable

Device Web Page Setting

The following explains the access settings to Setting mode (Web version).

HTTP Access Settings

Number of Users who can Log-in at the Same Time

Enter a number of users who can access Setting mode (Web version) simultaneously.

Factory default settings: 32

Auto Logout Time

Enter a time to automatically log out when no communication continues with the machine.

Factory default settings: 60 minutes



When settings are changed, the changes will take effect after the machine is restarted. For details on restarting this machine, see "<u>TURNING ON THE POWER (page 1-7)</u>".

View Login User

The user or users who have logged in this machine are displayed.

Current Login User

Shows the currently logged in user and IP address.

Logout All Users

The current login users are logged out.



When settings are changed, the changes will take effect after the machine is restarted. For details on restarting this machine, see "TURNING ON THE POWER (page 1-7)".

Security Settings



- When settings are changed, the changes will take effect after the machine is restarted. For details on restarting this machine, see "TURNING ON THE POWER (page 1-7)".
- All items except for the Password Setting, Enable Filter and Initialize Data in Machine are available in the system settings of the Web page.

For Security Settings on the operation panel, see the following "THE SETTING MODE LIST OF THE OPERATION PANEL (page 8-8)".

Password Change

The administrator password and user password can be changed.

When you change the password, be sure to remember the new password.

(It is recommended that you periodically change the administrator password.)

- Enter a password consisting of 1 to 255 characters (when the administrator password is changed: 5 to 255). Your setting is made valid only when the machine is turned On again.
 - The user-level authentication password is required to add, edit or delete the destination. When you log on, enter "users" as the user name. Then, enter the user password that you have registered with this option.
 - The administrator-level authentication password is required to select all settings and the same functions as those available with the user-level password. When you log on, enter "admin" as the user name. Then, enter the administrator password that you have registered with this option.
- If you tap the [Store] key without entering a password, the previously set value is assumed. Password protection is enabled by default.

Restrict Device Web Page Access Via Password

Use this setting to display the login screen and require login in order to access the Web server.

Administrator Password

Changes the setting of the administrator password.

When setting a password, make sure that it contains at least one or more numbers, uppercase and lowercase letters of the alphabet, and symbols.

The characters that can be entered are as follows.

- Numbers: 0 to 9
- Upper case alphabet: A to Z
- Lower case alphabet: a to z
- Symbols: ! @ # \$ % ^ & * () " ' + , . / : ; < = > ? [\] _ ` { | } ~ and spaces

User Password

Changes the setting of the user password.

When setting a password, make sure that it contains at least one or more numbers, uppercase and lowercase letters of the alphabet, and symbols.

The characters that can be entered are as follows.

- · Numbers: 0 to 9
- Upper case alphabet: A to Z
- · Lower case alphabet: a to z
- Symbols: ! @ # \$ % ^ & * () " ' + , . / : ; < = > ? [\] _ ` { | } ~ and spaces

Password Setting

The administrator password and user password can be changed.

When you change the password, be sure to remember the new password.

(It is recommended that you periodically change the administrator password.)

• Enter a password consisting of 5 to 255 characters and tap the [Store] key. Your setting is made valid only when the machine is turned on again.

The administrator-level authentication password is required to select all settings and the same functions as those available with the user-level password. When you log on, enter "admin" as the user name. Then, enter the administrator password that you have registered with this option.



This setting can only be set on the operation panel.

The characters that can be entered are as follows.

- Numbers: 0 to 9
- Upper case alphabet: A to Z
- · Lower case alphabet: a to z
- Symbols: ! @ # \$ % ^ & * () " ' + , . / : ; < = > ? [\] _ ` { | } ~ and spaces

Condition Settings

Restrict Print Jobs other than the current Print-Hold Job

You can select settings to cancel print jobs that are not print hold jobs, or force all print jobs to be held. When [Restrict Print Jobs other than the current Print-Hold Job] is turned ON, the settings below can be selected.

Item	Description
Force Retention	This setting forcibly sets all print jobs as print hold jobs, even jobs for which print hold is not selected.
Disable Job	Prohibit all print jobs other than print hold jobs.

Factory default settings: Force Retention

Automatic Deletion of Suspended Print Jobs

If the print job is interrupted due to a paper jam, etc., the job is automatically deleted after the time set in "Time until Suspended Print Jobs are Automatically Deleted" has elapsed.

Factory default settings: Disable

Time until Suspended Print Jobs are Automatically Deleted

Set the time after stopping a job to automatically deleting the job.

Factory default settings: 5 minutes

Clear All Data When the Jobs are Completed

Completely deletes the data from the memory of the machine when the job is completed.

Factory default settings: Disable

Reject Requests from External Sites

You can reject the request from external sites.

Factory default settings: Enabled

Mandatory Access Control

Set whether to perform forced access control. Once set, access to all files inside the machine will be forcibly controlled. **Factory default settings:** Disable

Job Status Jobs Completed List Display Setting

Set to show/hide the completion screen of the fax job status screen.

Factory default settings: Enable

Port Control

For the various major ports used in the system, set the prohibition/permission and port number, and tap the [Store] key. The ports that can be set are as follows.

Server Port	Factory default settings		Client Port	Factory default settings	
	Port Control	Enable / Disable		Port Control	Enable / Disable
HTTP	80	Enabled	HTTP		Enabled
HTTPS	443	Enabled	HTTPS		Enabled
FTP Print	21	Enabled	FTP		Enabled
Raw Print	9100	Enabled	FTPS		Enabled
LPD	515	Enabled	SMTP		Enabled
IPP	631	Enabled	SMTP-SSL/TLS		Enabled
IPP-SSL/TLS	443	Disabled	POP3		Enabled
PC Scan	52000	Enabled	SNMP-TRAP	162	Enabled
Remote Operation Panel	5900	Enabled	Notify Job End		Enabled
SNMPD	161	Enabled	LDAP		Enabled
WSD		Enabled	LDAP-SSL/TLS		Enabled
			SMB		Enabled
			mDNS		Enabled
			syslog	514	Enabled
			syslog-SSL/TLS	6514	Enabled

Filter Setting

You can set the filter by an IP or MAC address to prevent an unauthorized access to the machine via a network. Set the IP or MAC address filter and tap the [Store] key.

Factory default settings: Disable

IP Address Filter Settings

This option sets an IP address.

You can specify whether to allow or prohibit access to the machine from the IP address you set.

Factory default settings: Enable

MAC Address Filter Settings

This option sets a MAC address.

It allows access to the machine from the MAC address you set.

Enable Filter

Enable the settings made in [System Settings] → [Security Settings] → [Filter Setting] on the Web page.

Factory default settings: Disable



This setting can only be set on the operation panel.

SSL/TLS Settings

SSL/TLS can be used for data transmission over a network.

SSL/TLS is a protocol that enables the encryption of information communicated over a network. Encrypting data makes it possible to transmit and receive sensitive information safely.

Data encryption can be set by the following protocols.

Setting of SSL/TLS

Server Port

• HTTPS: Apply SSL/TLS encryption to HTTP communication.

Factory default settings: Enable

• IPP-SSL/TLS: Apply SSL/TLS encryption to IPP communication.

Factory default settings: Disable

• Redirect HTTP to HTTPS in Device Web Page Access: When this setting is enabled, all communication that attempts to access the machine by HTTP is redirected to HTTPS.

Factory default settings: Disable

Client Port

• HTTPS:

Apply SSL/TLS encryption to HTTP communication.

Factory default settings: Enable

• FTPS:

Apply FTP encryption to HTTP communication.

Factory default settings: Enable

• SMTP-SSL/TLS:

Apply SMTP encryption to HTTP communication.

Factory default settings: Enable

LDAP-SSL/TLS:

Apply SSL/TLS encryption to communication using LDAP.

Factory default settings: Enable

• syslog-SSL/TLS:

Apply SSL/TLS encryption when sending audit logs.

Factory default settings: Enable

• Verify Signature of Server Certificate of the Other Party:

Validate the certificate of the server you are communicating with.

Factory default settings: Disable



Even if "Verify Signature of Server Certificate of the Other Party" is enabled, when "Global Address Search" or "My Address Search" is performed only when the search destination is an LDAP server, the server certificate of the destination is not validated.

• TLS1.2: Use only TLS1.2. Factory default settings: Enable

• TLS1.3: Use only TLS1.3. Factory default settings: Enable

Device Certificate

Certificate Status

Displays the status of the certificate required for SSL/TLS communication. Click the [Select] key to install the certificate.

Certificate Information

If the device certificate is installed, click the [Show] key to display the certificate information.

Select Device Certificate

Click the [Select] key to display the device certificates that have already been registered. Select from them.

IPsec Settings

IPsec can be used for data transmission/reception on a network.

When IPsec is used, data can be sent and received safely without the need to configure settings for IP packet encryption in a Web browser or other higher-level application.

When enabling this settings, take the following notes.

- It may take some time to reflect on the machine settings, and you cannot connect to the machine during this time.
- If the settings in the Web page are not correctly selected, connection to the machine may not be allowed, or the settings may not allow printing, scanning, or Sin the Web page display. In this case, deselect this setting and change the System Settings in the Web pages).

Condition Settings

IPsec Settings

Sets whether to use IPsec for transmission.

Factory default settings: Disable

IKEv1 Settings

Pre-Shared Key

Enter the Pre-Shared Key to be used for IKEv1.

SA Lifetime (time)

Set the SA lifetime.

Factory default settings: 28800 seconds

IKE Lifetime

Set the IKE lifetime.

Factory default settings: 30 seconds

IPsec Rules

The registered IPsec rules are displayed.

To add a new rule, click the [Add] key.

To delete a rule, select the rule you want to delete and click the [Delete] key.

IPsec Rule Registration

Rule Name

Enter a name for the IPsec rule.

Priority

Set the priority level.

Factory default settings: 1

Select the Rule Name to be the Registration Model

If there is a previously registered rule that is similar to the rule you want to create, you can create the new rule based on the registered rule.

Device Address

Set the type of IP address to be used on the machine and the port number (for IPv6, set the port number / prefix length).

Client Address

Set the destination IP address type and port number (for IPv6, set the port number / prefix length).

Protocol

Set the protocol to be used. Factory default settings: TCP

Filter Mode

Configure settings for the authentication method used for IPsec.

Factory default settings: IPsec

IPsec Encryption

Configure settings for the authentication method used for IPsec.

ESP

Select to use ESP authentication. Factory default settings: Enable

Allow Communication not using ESP

Specify whether or not communication that does not use ESP is allowed.

Factory default settings: Enable

AΗ

Select to use AH authentication. **Factory default settings:** Disable

Allow Communication not using AH

Specify whether or not communication that does not use AH is allowed.

Factory default settings: Disable

Audit Log

Logs are created and saved for various events relating to security functions and settings.

Audit logs are created and saved in English. However, setting values such as filenames which are input from external sources are saved as-is.

Audit logs which have been saved in the internal memory can be exported by an administrator to a PC as TSV files. You can select either the internal memory or an external server as the destination for saving audit logs.



When the space for saving audit logs internally becomes full, the logs are overwritten starting from the oldest ones.

Audit Log

"Audit Log" can be carried out as follows.

In the Web page, select [System Settings] → [Security Settings] → [Audit Log]

Select "Security Control", "Storage/Send Settings" or "Save/Delete Audit Log".

Factory default settings: Disable

Storage/Send Settings

"Storage/Send Settings" can be carried as follows.

In the Web page, select [System Settings] \rightarrow [Security Settings] \rightarrow [Audit Log] \rightarrow [Storage/Send Settings] Then make the storage and transmission settings.

Factory default settings: Server Send:Disable, Enable SSL/TLS:Disable, Port Number:514, Port Number (Use SSL/TLS):6514

Save/Delete Audit Log

"Save/Delete Audit Log" can be carried out as follows.

In the Web page, select [System Settings] \rightarrow [Security Settings] \rightarrow [Audit Log] \rightarrow [Save/Delete Audit Log] Select "Save Audit Log" or "Delete Audit Log".



- "Save Audit Log" can only be carried out from the Web page.
- It will not be displayed if audit logging is disabled or storage is disabled.

Audit Log specifications

If the audit log is saved to an external server, the audit log is temporarily saved in the buffer area reserved in the internal memory until the transmission to the external server is successful.

- Audit logs that are successfully sent to the external server are cleared from the buffer area.
- If the transmission to the external server fails, a warning message will be displayed on the operation panel and the screen of the Web page, and the transmission will be periodically retransmitted to the external server until the transmission is successful.

The audit events and information stored in the audit log are as shown in the following table.



If the power of this machine is turned off by a method other than the procedure described in the user's manual or due to a power failure, the [End Audit] event may not be recorded. Make sure to turn off the power of this machine according to the correct procedure. We also recommend using an uninterruptible power supply (UPS) in the event of an unforeseen event such as a power outage.

Event name	Date & Time*1	Operation I/F*2	Login Name	Result*3	Additional Information
Audit Start	Yes	N/A	N/A	Yes	Reasons for starting Other: security erase
Audit End	Yes	N/A	N/A	Yes	N/A
Job Completion	Yes	Yes	Job owner (SYSTEM)	Yes	Finished job name
I&A Success	Yes	Yes	The string entered as your login name	N/A	IP address of the login source 127.0.0.1 for the operation panel
I&A Failure	Yes	Yes	The string entered as the login name	N/A	IP address of the login source 127.0.0.1 for the operation panel
Add User	Yes	Yes	User who added	Yes	Added login name
Login Terminated	Yes	Yes	The string entered as your login name	N/A	Active termination/ Timeout
Change Password	Yes	Yes	The user who made the change	Yes	Login name of the user whose password has been changed
Change Login Name	Yes	Yes	The user who made the change	Yes	Login name after change
Delete user	Yes	Yes	User who deleted	Yes	Deleted login name (ALL if all users are deleted)
Add Auth Group	Yes	Yes	User who added	Yes	Added authority group name
Change Role	Yes	Yes	The user who made the change	Yes	Login name of the user whose authority group has been changed Changed authority group name
Change Auth Group Setting	Yes	Yes	The user who made the change	Yes	Privilege changed settings Group Name
Add Page Limit Group	Yes	Yes	Users with additional functions	Yes	Name of the additional page limit group
Delete Page Limit Group	Yes	Yes	Users whose functions are deleted	Yes	Name of the deleted page limit group
Change Page Limit Group Setting	Yes	Yes	Users who have changed the settings	Yes	Name of the changed page limit group
Change Time Setting	Yes	Yes	The user who made the change	Yes	N/A

Event name	Date & Time*1	Operation I/F*2	Login Name	Result*3	Additional Information
Change Setting	Yes	Yes	User who made the change ("ByPolicy" when applying AD policy)	Yes	Setting items whose setting values have been changed Set value after change
Firm Recovery	Yes	N/A	N/A	Yes	Firmware name Firmware version after recovery
Exec Rejection	Yes	N/A	N/A	Yes	Distinguished name of firmware or embedded OSA app
TLS, IPsec communication failure (Comm Failure) * Communication partner is other than the audit server	Yes	N/A	Users who are communicating	N/A	 IP address of the communication starter IP address of the communication partner Communication direction Reason for failure
Modify AddrBook	Yes	Yes	User who updated	Yes	At the time of addition: Internal management ID and destination name of the added entry When deleting / changing: Internal management ID of deleted / changed entry
Firm Update	Yes	Yes	User who updated	Yes	Firmware name Firmware version before update Firmware version after update
Release Denied Addr	Yes	Yes	Users who have been released	Yes	Released IP address
Send External Dest	Yes	Yes	Users who sent	Yes	Destination e-mail address/IP address/SMB folder path
Web Push Print	Yes	Yes	Users of the function	Yes	IP address from which the file was downloaded
Change Service Setting	Yes	Yes	Users who have changed the settings	Yes	Changed settings and their values
Switch to service mode	Yes	Yes	Service	Yes	N/A
Running in service mode	Yes	Yes	Service	Yes	Changed setting values

The date and time when the event occurred is displayed in the extended format of ISO 8601.

^{*2} *3 Either Ope/Web/sNet is displayed as the operation interface. However, if it is "N / A" in the table, it will be written as "N / A".

Either Success / Failure will be displayed as the result of the event.

Certificate Management

Device Certificate Management

Import

Import the certificate/private key.

Export

Export the certificate/private key.

Certificate Information

Shows the status of the certificate.

Creation of Certificate and Private Key

Common Name (Required)

Enter the name to be used.

Organization

Enter the name of the organization.

Organizational Unit

Enter the name of the unit within the organization.

City/Locality

Enter the city or locality.

State/Province

Enter the state or province.

Country/Region (Required)

Enter the country code.

Certificate Start Date

Enter the start date and time for the certificate.

Certificate Validity Period

Enter the expiration date of the certificate.

Certificate Information

Enter the Certificate Information.

Certificate Signing Request (CSR) Management

Installation of Certificate

Install the certificate.

Certificate Information

Shows the status of the certificate.

Make of Certificate Signing Request(CSR)

Common Name (Required)

Enter the name to be used.

Organization

Enter the name of the organization.

Organizational Unit

Enter the name of the unit within the organization.

City/Locality

Enter the city or locality.

State/Province

Enter the state or province.

Country/Region (Required)

Enter the country code.

Key Length of Certificate

Specify the key length of the certificate.

Factory default settings: 1024bit

CA Certificate Management

Import

Import the certificate.

Certificate Information

Shows the status of the certificate.

Initialize Data in Machine

Press the [OK] key to initialise the following personal information and data in the machine.

- All data in address book and related personal information
- · All user information data
- · All job data in this machine
- Log information
- · Data and areas for internal processing
- Data in the machine registered/stored by the user



This setting can only be set on the operation panel.

Energy Save



All items except for the Auto Power Shut-Off Mode and Preheat Mode Setting are available in the system settings of the Web page.

For Security Settings on the operation panel, see the following "THE SETTING MODE LIST OF THE OPERATION PANEL (page 8-8)".

Eco Setting

The machine's power consumption can be reduced by Eco Mode setting. Although each function setting can be changed separately, the machine has the "Custom" and "Eco Mode" to allow simultaneous changing of settings.

Preheat Mode Setting

The time until the preheating mode works is 1 to 60 minutes in 1-minute units.

Preheat Mode will activate when the set duration of time elapses after printing ends and no further operations are performed. This function reduces your power costs, and at the same time helps conserve natural resources and reduce pollution.

Select the time that best suits the needs of your workplace.

The panel display can be turned Off in the Preheat mode.

Factory default settings: 1 minutes



- · Preheat mode cannot be disabled.
- This item is located under "Energy Save" in the system settings from the operation panel.

Auto Power Shut-Off Mode

Specify the time to transition to Auto Power Shut-Off Mode.

Specify this setting for remote jobs and for all other jobs.

Factory default settings: Remote Job: Earliest, Other Job: 11 min.



This item is located under "Energy Save" in the system settings from the operation panel.

Sleep Mode Power Level

Low Power: The machine switches to the power saving mode, but it takes some time to recover.

Fast Wake Up: Compared with Low Power, the power value rises by a certain degree, but it results in faster recovery.

Factory default settings: Low Power

Eco Scan Setting

This setting keeps the fusing unit off when you perform an operation that does not involve printing, such as sending a scanned document.

Factory default settings: Enable (giving priority to job)

Toner Save Mode

This mode is used to reduce toner consumption.

Toner consumption can be set for each print job of "Copy" and "Printer".

Toner consumption can be selected from three levels.

• Toner Save1 (Toner Consumption: Much)

• Toner Save2 (Toner Consumption: Middle)

• Toner Save3 (Toner Consumption: Little)

Factory default settings: All Invalid



Items may not be displayed depending on country and region.

System Control



All items except for the Reset Settings and Firmware Update Settings are available in the system settings of the Web page. For Security Settings on the operation panel, see the following "THE SETTING MODE LIST OF THE OPERATION PANEL (page 8-8)".

Storage Backup

Address book information and user information stored in the machine can be saved to and retrieved from a USB memory device.

To use the machine to manipulate a file, first insert the USB memory device in the machine. If you need to select settings on the Web page, use your computer to manipulate the file.

Export Settings

Exports data.

Factory default settings: All Invalid

Import Settings

Imports data into the machine.

Device Cloning

Saves the machine setting information in XML format and copies the information to another machine. This function saves you the trouble of repeatedly configuring the same settings in multiple machines.

To use the machine to manipulate a file, first insert the USB memory device in the machine. If you need to select settings on the Web page, use your computer to manipulate the file.

Export Settings

Exports data.

Factory default settings: All Invalid

Import Settings

Imports data into the machine.



- For models that can be imported, please contact the store where you purchased the product.
- The following data is not copied when device cloning is performed:
 - · List print and fax forwarding items.
 - Count and device status display items.
 - IP address of the machine, device name, administrator password, sender names for image send, and other information that is specific to the machine.
 - · Adjustment values unique to each hardware, such as screen contrast.

Reset Settings



This setting can only be set on the operation panel.

Reset the NIC

This returns all "Network Settings" to the factory default settings.

E-mail Alert and Status

Status Message

Selects the Standard E-mail Status function or Advanced E-mail Status function settings.

The E-mail Status function can periodically transmit the machine status information to the stored address.

Standard

Sets the E-mail status address list 1, E-mail status address list 2, and E-mail status dealer address list separately.

Item	Description
E-mail Address	Enter the destination e-mail address for transmission of machine status information. When you enter multiple addresses, separate them by a semicolon (;) or a comma (,).
Send Now	When tapped, the status message is sent to the destination of the e-mail address list.
Send on Schedule 1	If checked as ☑ , an E-mail is sent periodically according to the preset schedule.
Send on Schedule 2	If checked as ☑ , an E-mail is sent periodically according to the preset schedule.
Time Schedule	Select a schedule to send E-mails.

Advanced

Status Message by E-mail Request Setup

Item	Description
Status Message by E-mail Request	Status Message by E-mail Request can be enabled. Factory default settings: Disable
POP3 Server	Enter the IP address or host name of the POP3 server.
Port Number	Enter the port number of the POP3 server. Factory default settings: 110
Pop Authentication	Specify the authentication method for POP. Factory default settings: Disable
User Name	Enter the user name. The special user account is required for bi-directional e-mail status transmission.
Password	Enter the password. To change the password, set [Change Password] to .
Check Interval	Enter the polling interval for the POP3 server. The default setting is five minutes.
Connection Test	Tap the [Execute] button to test the connection to the POP3 server.

Alerts Message

Selects the E-mail Alert function settings.

The E-mail Alert function can report a trouble of the machine to the administrator or dealer using e-mail.

Sets the E-mail Alert Message List 1, E-mail Alert Message List 2, and Dealer E-mail Alert Message List separately.

E-mail Address

Enter the destination E-mail address for alert message transmission. You can enter multiple addresses by separating them by a semicolon or comma.

Example: aaa@xxxxx.uuu; bbb@xxxxx.uuu

A report will be sent by e-mail in the following situations. You can individually set the status for sending alerts for each address list. When the unit becomes the target of the alert, an email will be sent to the set address.

Jam, Toner Low, Toner Empty, Paper Empty, Service Request, PM Request, Waste Toner Almost Full, Waste Toner Full, Job Log Full, Security Alert

Factory default settings: All enable except security alerts

SMTP Settings

Use SMTP Server in [Network Settings].

Set the SMTP server settings used for e-mail status and E-mail alert to the same settings as <u>SMTP (page 8-80)</u> of network setting.

SMTP Settings

Use this setting when not using "Use SMTP Server in [Network Settings].".

Primary Server

Enter the IP address or the host name of the primary SMTP server.

Secondary Server

Enter the IP address or the host name of the secondary SMTP server.

Port Number

Enter a port number.

Factory default settings: 25

Timeout

Enter a timeout. This value is used for connection to the SMTP server and for data transmission according to the e-mail system specifications.

Factory default settings: 20 seconds

Sender Address

Enter the sender's address

Enable SSL/TLS

If w the SSL/TLS is enabled, the SMTP-over-TLS encryption communication can be used by STARTTLS command. This requires the server to support the STARTTLS command.

To allow SSL/TLS communication, set the "Port Number" to the same port number as the normal SMTP.

Factory default settings: Disable

SMTP Authentication

Specify the authentication method for SMTP.

Factory default settings: Disable

User Name

Enter the user name.

Password

Enter the password.

To change the password, set [Change Password] to ✓.

POP before SMTP

If vis set, you are authenticated to the POP server before using the SMTP communication.

• POP3 Server: Enter the IP address or the host name of the secondary SMTP server.

Factory default settings: Disable

• Port Number: Enter the POP3 port number for POP before SMTP communication. The default setting is port 110.

Factory default settings: 110

• POP Authentication: If w is set, the authentication protocol (including APOP) is used for authentication to the POP3 server.

Factory default settings: Disable

- User Name: Enter the user name for POP before SMTP communication.
- Password: Enter the password required for POP before SMTP communication. To change the password, set [Change Password] to ✓.

Factory default settings: Disable

Connection Test

Tap the [Execute] button to test the connection to the SMTP server.

Enhanced FSS Settings

This function is for connection to Synappx Manage, a cloud service for device management.



- · Use of this function requires the use of this cloud service.
- This setting may not be available in all countries and regions.

Enhanced FSS

Sets whether to enable the Enhanced FSS feature.

Switching this function requires a reboot of the machine.

Factory default settings: Disable

URL

Enter the initial connection URL provided by the tenant of the cloud service.

After the connection is completed, if the URL is registered as blank, the previous connection information will be initialized.

Check Now

Checks for requests to retrieve information from the cloud service or to change the control of the machine.

Firmware Update Settings

The firmware of the machine can be updated via LAN without using a USB memory.

See the data security kit manual for details on settings with the data security kit.

For more information on "Advanced Security Settings", contact your dealer or nearest SHARP Service Department.

Firmware Update

Specify the timing for firmware updates.

Schedule Time of Automatic Mode

Set the time to accept firmware when "Automatic Mode" is selected under "Firmware Update." When "No Specified Time Schedule" is selected, the firmware update will be executed when the firmware is downloaded.



- · Before enabling this setting, check the "Terms and Conditions for Firmware Update Service".
- When this setting is set to [Automatic Mode] or [Admin Mode], you agree to the "Terms and Conditions for Firmware Update Service".
- Do not turn off the power to the machine while updating the firmware.
- This item is located under "System Control" in the system settings from the operation panel.

Image Quality Adjustment



This setting can only be set on the operation panel.

Fusing Cleaning

Use this function to clean the machine's fusing unit when dots or other dirt appear on the printed side of the paper. When this function is executed, yellow printed paper is output and the fusing unit is cleaned.



If improvement is not noticed after the first time you use the function, try executing the function again.

Registration Adjustment

If the printed colors shift out of position when you print by Color printing, you can adjust the print position of each color to reduce color shifting.

Tap the [Execute] key.

Auto Calibration

Performs automatic color correction when the color is off.

The machine prints a test patch, the test patch is scanned, and the color is automatically corrected.

After the [Execute] key is tapped and a test patch is printed, a message appears prompting you to begin automatic calibration.

Follow the instructions in the message to perform color adjustment.



- · If the color is still off after performing Auto Calibration, repeating Auto Calibration once again may improve the color.
- Before executing Auto Calibration, check to see if the registration adjustment is correct. If the registration adjustment is not correct, perform "Registration Adjustment."

Display warning message for black streaks detection.

Set this option to display a warning message when black streaks are detected by the document feeder.

Cleaning the relevant area following the message will reduce black streak defects.

Factory default settings: Enable

Initial Installation Settings

This is a group of settings that are required when you initially install the machine. The initial installation setting items are the same as the regular setting items that have the same name. For information on a setting item, see the explanation of the regular item.



This setting can only be set on the Web page.

ltem	Description
Condition Settings	
Name	System Settings - Common Settings - Machine Identification Settings (page 8-64)
Machine Code	
Machine Location	
Clock Adjust	System Settings - Common Settings - Clock Adjust (page 8-64)
Daylight Saving Time Setting	
Preheat Mode Setting	System Settings - Energy Save - Eco Setting (page 8-103)
Auto Power Shut-Off	
Sleep Mode Power Level	
Network Quick Settings	System Settings - Network Settings - Quick Settings (page 8-73)
Tray Settings	System Settings - Common Settings - Paper Settings- Paper Tray Settings (page 8-59)
Product Key	System Settings - Common Settings - Product Key (page 8-67)

SETTING MODES FROM THE OPERATION PANEL OTHER THAN THE SYSTEM SETTINGS

This section describes the setting modes other than the system settings from the operation panel.

LCD Control

Adjusts the brightness of the touch panel.

Total Count

The total number of sheets used by the machine and the total amount used in black-and-white and full color are displayed.

It also displays the amount of toner remaining for each color.

Language Setting

Switches the language displayed on the touch panel.

TROUBLESHOOTING



Q&A	
GENERAL PROBLEMS 9-	-2
CHECK LIST	-2
COPYING PROBLEMS9-1	4
CHECK LIST	
PRINTING PROBLEMS9-1	7
CHECK LIST	7
FAX PROBLEMS 9-2	5
CHECK LIST	-
IMAGE SEND PROBLEMS9-3	2
CHECK LIST	2
REMOVING MISFEEDS	
REMOVING MISFEEDS 9-3	8

Q&A

GENERAL PROBLEMS

Have functions been disabled by the administrator?

Some functions may have been disabled in the setting mode. When user authentication is enabled, the functions that you can use may be restricted in your user settings. Check with your administrator.

CHECK LIST

? Problem	✓ Check	Page
I CAN'T USE A PARTICULAR FUNCTION OR PERIPHERAL DEVICE	Have functions been disabled by the administrator?	9-4
I DON'T KNOW HOW TO CHECK	Hold down the [Home Screen] key.	9-4
THE TOTAL NUMBER OF PAGES USED	You can check in the status of setting mode.	9-4
THE OPERATION PANEL CANNOT	Is the power indicator lit?	9-4
BE USED	Did you just power on the machine?	9-4
	Is the power indicator blinking?	9-5
	Is a cover open or a device separated from the machine?	9-5
	Did login fail three times in a row?	9-5
	Does the message "Call for service. Code:xx-xx*." appear in the touch panel?	9-5
PRINTING IS NOT POSSIBLE OR	Is a tray out of paper?	9-5
STOPS DURING A JOB	Is the machine out of toner?	9-5
	Has a paper misfeed occurred?	9-5
	Is the output tray full?	9-5
	Is the toner collection container full?	9-5
	Are restrictions placed on the trays that can be used in fax mode.	9-5
DON'T KNOW HOW TO PROHIBIT	You can prohibit color printing in User Control.	9-6
COLOR PRINTING	For printing mode, you can set printing to black & white priority in the printer driver settings.	9-6
THE DISPLAYED TRAY PAPER SIZE IS NOT CORRECT	Is the paper size loaded to the bypass tray same with the paper size being displayed in the touch panel?	9-6
THE ORIGINAL MISFEEDS	Is too much paper loaded into the document feeder tray?	9-6
AUTOMATIC DOCUMENT FEEDER)	Is the original a long original?	9-6
	Is the feed roller dirty?	9-6
MULTIPLE ORIGINALS ARE FED AT THE SAME TIME AND CANNOT BE LOADED CORRECTLY (AUTOMATIC DOCUMENT FEEDER)	Are your originals warped or folded? Are you using a pasted originals?	9-7
THE EJECTED MANUSCRIPTS ARE NOT ALIGNED NEATLY (AUTOMATIC DOCUMENT FEEDER)	Is the manuscript set correctly? Depending on the condition of the original, the type of paper, the temperature at the time of use, and the humidity environment, the ejected originals may not be aligned neatly.	9-7

? Problem	✓ Check	Page
THE PAPER MISFEEDS	Is tray properly inserted all the way into the machine?	9-7
	Is a torn piece of paper remaining in the machine?	9-7
	Is too much paper loaded in the tray?	9-7
	Are multiple sheets feeding at once?	9-7
	Are you using paper that is not within the specifications?	9-8
	Has paper in the paper tray absorbed moisture?	9-8
	Are the bypass tray guides adjusted to the width of the paper?	9-8
	Are the tray guides adjusted to the width of the paper?	9-8
	Is the feed roller dirty?	9-8
	Is the paper size specified?	9-8
	Did you add paper to the tray?	9-8
	Are you using punched paper?	9-8
	Are you using label sheets that cannot be used?	9-8
	Remove the paper, turn it over, and reload it. Using a different paper type may solve the problem.	9-8
	Have you forgotten to remove the divider plate even though A4 size paper is loaded in tray?	9-8
	Did you load an envelope?	9-8
PAPER DOES NOT FEED FROM	Is the paper loaded correctly into the paper tray?	9-9
THE PAPER TRAY	Has the tray been prohibited in fax modes?	9-9
I DON'T KNOW HOW TO CHANGE THE PAPER SIZE	Set the paper size used in each tray in the tray settings.	9-9
THE OUTPUT IS NOTICEABLY CURLED AND UNEVEN	Remove the paper, turn it over, and reload it. Using a different paper type may solve the problem.	9-9
THE IMAGE IS SKEWED ON THE	Is too much paper loaded into the a tray?	9-9
PAPER	Are the tray guides adjusted to the width of the paper?	9-9
	Are the original guides adjusted to the width of the paper?	9-9
LINES APPEAR IN THE IMAGE	Are the scanning areas of the document glass or automatic document feeder dirty?	9-10
	Is the bypass feed roller dirty?	9-10
	Did you clean the laser unit?	9-10
SMUDGES APPEAR ON PRINTED	Are you using paper that is not within the specifications?	9-10
OUTPUT	Are you printing on pre-punched paper?	9-10
	Does a message appear indicating the need for maintenance?	9-10
	Remove the paper, turn it over, and reload it. Using a different paper type may solve the problem.	9-10
WHEN PRINTING ON THICK PAPER, THE PRINT RESULT IS DIRTY FROM THE 2ND PAGE ON	Has the paper type been set correctly?	9-10
PART OF THE IMAGE IS CUT OFF	Set the original size.	9-11
	Was the original placed in the correct position?	9-11
PRINTING TAKES PLACE ON THE WRONG SIDE OF THE PAPER	Is the paper loaded with the print side facing in the correct direction?	9-11
THE CONNECTED USB DEVICE	Is the USB device compatible with the machine?	9-11
CANNOT BE USED	Is the connected USB device recognized correctly?	9-11
THE TOUCH PANEL DISPLAY IS DIFFICULT TO VIEW	Is the brightness properly adjusted?	9-11
YOU WERE LOGGED OUT WITHOUT LOGGING OUT YOURSELF	Did Auto Clear activate?	9-12
I DON'T KNOW WHERE THE IP ADDRESS SETTING IS	The IP address is set in the Network Settings of Setting mode.	9-12

? Problem	✓ Check	Page
I DON'T KNOW HOW TO ADJUST THE TIME THE MACHINE ENTERS ENERGY SAVE MODE	Set the time the machine enters energy save mode in the Energy Save settings of setting mode.	9-12
I FORGOT THE ADMINISTRATOR PASSWORD	Was the administrator password changed from the factory default setting?	9-13
I DON'T KNOW WHOM TO CONTACT FOR MAINTENANCE AND SERVICE	Please check the customer support information.	9-13
"The inside of the machine is being cooled down. Please wait." MESSAGE IS DISPLAYED	Is there an obstruction blocking the machine's ventilation openings or is the room temperature too hot?	9-13

I CAN'T USE A PARTICULAR FUNCTION OR PERIPHERAL DEVICE



Check



Solution

Have functions been disabled by the administrator?

Check with your administrator. Some functions may have been disabled in the setting mode. When user authentication is enabled, the functions that you can use may be restricted in your user settings.

I DON'T KNOW HOW TO CHECK THE TOTAL NUMBER OF PAGES USED



Check



Solution

Hold down the [Home Screen] key.

■ When you hold down the [Home Screen] key, a message showing the total page usage and toner level will appear.

You can check in the status of setting mode.

■ [Total Count] appears in the [Status] of setting mode. You can check the total pages used from this item.

THE OPERATION PANEL CANNOT BE USED



Check



Solution

Is the power indicator lit?

- If the power indicator is not lit up, insert the power plug in the power outlet.
- Make sure that the power plug is firmly inserted in the power outlet, turn the power switch on.

Did you just power on the machine?

■ Wait until a message appears indicating that the machine is ready.

After the [Power] button is turned on, the machine requires some time to complete warmup operation. During warmup operation, functions can be selected, but a job cannot be run.

/	Ch

Check



Solution

Is the power indicator blinking?

Auto Power Shut-Off mode has activated. To return the machine to normal operation, press the [Power] button. For more information, see <u>TURNING ON</u> <u>THE POWER (page 1-7)</u>.

Is a cover open or a device separated from the machine?

■ Read the message and take appropriate actions.
A warning message will appear when a cover is open or a device is separated from the machine.

Did login fail three times in a row?

After operation unlocks, log in using the correct user information.
When [A Warning when Login Fails] is enabled in the setting mode and login fails 3 times in a row, a warning will be displayed and user authentication operation will lock for 5 minutes.

(If you do not know your user information, contact your administrator.)

⇒ In the Web page, [System Settings] → [Authentication Settings] → [Default Settings] → [A Warning when Login Fails]

Does the message "Call for service. Code:xx-xx*." appear in the touch panel?

- *Letters and numbers appear in xx-xx.
- Turn on the machine power again.
- Make sure that no jobs are running in the fixed display area, and press the [Power] button and then tap [Power Off] key on the touch panel. Wait for a while after the screen turns off, unplug the power plug from the power outlet, wait at least 10 seconds, plug it in the power outlet, and press the [Power] button to turn on the power.
- If the message still appears after switching the power off and on several times, it is likely that a failure has occurred that requires service. In this event, stop using the machine, unplug the power plug, and contact your dealer or nearest SHARP Service Department. (When contacting your dealer or nearest SHARP Service Department, inform them of the displayed error code.)

PRINTING IS NOT POSSIBLE OR STOPS DURING A JOB



Check



Solution

Is a tray out of paper?

Add paper as instructed by the message in the touch panel.

Is the machine out of toner?

■ Replace the toner cartridge.

REPLACEMENT OF TONER CARTRIDGE (page 1-31)

Has a paper misfeed occurred?

■ Remove the misfeed as instructed by the message in the touch panel.

Is the output tray full?

■ The maximum number of output sheets in the output tray has been reached. Remove the paper from the tray and tap the [Resume Print] key to continue printing.

Is the toner collection container full?

■ Replace the toner collection container as instructed by the message in the touch panel.

Are restrictions placed on the trays that can be used in fax mode.

■ Check the settings in [Paper Tray Settings] and see if checkmarks appear in the checkboxes of each mode ([Feeding Approved Job]).
Functions without a checkmark cannot be used for printing using that tray.
⇒ From the operation Panel, [Paper Tray Settings] → [Feeding Approved Job]

I DON'T KNOW HOW TO PROHIBIT COLOR PRINTING



Check



Solution

You can prohibit color printing in User Control.

- When user authentication is enabled, you can prohibit color printing for specific users.
 - \Rightarrow In the Web page \rightarrow [User Control] \rightarrow [User Settings] \rightarrow [User List].
 - \Rightarrow In the Web page \rightarrow [User Control] \rightarrow [Access Control Settings] \rightarrow [Page Limit Group].

For printing mode, you can set printing to black & white priority in the printer driver settings.

- Although this does not prohibit color copies, you can set the color mode to black & white priority as a means of reducing the number of color pages printed. Printing
 - ⇒ Select [Grayscale] on the [Main] tab of the printer driver.

THE DISPLAYED TRAY PAPER SIZE IS NOT CORRECT



Check



Solution

Is the paper size loaded to the bypass tray same with the paper size being displayed in the touch panel?

■ Set the "Tray Settings" setting on the home screen and change to the paper size loaded with the paper size setting of the bypass tray.

THE ORIGINAL MISFEEDS (AUTOMATIC DOCUMENT FEEDER)



Check



Solution

Is too much paper loaded into the document feeder tray?

■ Make sure that the stack of paper in the tray is not higher than the indicator line. <u>AUTOMATIC DOCUMENT FEEDER (page 1-21)</u>

Is the original a long original?

■ When using the automatic document feeder to scan a long original, set the scan size to [Long Size].

(Note that long originals can be scanned using the fax function.)

Is the feed roller dirty?

■ Clean the surface of the paper feed roller.
CLEANING THE PAPER FEED ROLLER (page 1-30)

MULTIPLE ORIGINALS ARE FED AT THE SAME TIME AND CANNOT BE LOADED CORRECTLY (AUTOMATIC DOCUMENT FEEDER)



Check



Solution

Are your originals warped or folded? Are you using a pasted originals?

Fix any warps or folds in the originals. Fan the originals well and load them in automatic document feeder. Align the edges of the original and set the original size.

Depending on the condition of the original, the type of paper, and the temperature and humidity of the environment in which the machine is used, multiple sheets of paper may be fed at the same time and may not be loaded correctly, or the ejected originals may not be neatly aligned.

It may be improved by the following settings.

• For copying: Set the resolution to 600x600dpi

AUTOMATIC DOCUMENT FEEDER (page 1-21)

THE EJECTED MANUSCRIPTS ARE NOT ALIGNED NEATLY (AUTOMATIC DOCUMENT FEEDER)



Check



Solution

Is the manuscript set correctly?

Depending on the condition of the original, the type of paper, the temperature at the time of use, and the humidity environment, the ejected originals may not be aligned neatly.

■ Depending on the condition of the original, the type of paper, the temperature at the time of use, and the humidity environment, the ejected originals may not be aligned neatly.

It may be improved by the following settings.

• For copying: Set the resolution to 600x600dpi AUTOMATIC DOCUMENT FEEDER (page 1-21)

THE PAPER MISFEEDS



Check



Solution

Is tray properly inserted all the way into the machine?

■ Push the tray firmly all the way into the machine.

Is a torn piece of paper remaining in the machine?

■ Follow the instructions in the touch panel to remove all paper.

Is too much paper loaded in the tray?

■ Reload the paper. Load no more than the maximum number of sheets and do not exceed the indicator line.

LOADING PAPER (page 1-8)

Are multiple sheets feeding at once?

■ Fan the paper well before loading it.





Solution

Are you using paper that is not within the specifications?	 ■ Use SHARP-recommended paper. Using paper that is for other models or special paper that is not supported may result in misfeeds, creases, or smudges. ⇒ - "SUPPLIES" in Start Guide ■ For paper that is prohibited or not recommended, see IMPORTANT POINTS ABOUT PAPER (page 1-8).
Has paper in the paper tray absorbed moisture?	If you will not use paper for a long period, remove it from the tray, place it in a plastic bag and store in a cool, dark place, to prevent moisture absorption.
Are the bypass tray guides adjusted to the width of the paper?	 Adjust the bypass tray guides to the width of the paper so that they slightly contact the sides of the paper. LOADING PAPER INTO THE BYPASS TRAY (page 1-16)
Are the tray guides adjusted to the width of the paper?	Adjust the tray guides to the size of the paper so that they are neither too tight nor too loose. TRAY 1 - 2 (page 1-12) LOADING PAPER INTO THE BYPASS TRAY (page 1-16)
Is the feed roller dirty?	■ Clean the surface of the feed roller. CLEANING THE BYPASS FEED ROLLER (page 1-30) CLEANING THE PAPER FEED ROLLER (page 1-30) CLEANING THE FEED ROLLER OF TRAY (page 1-30)
Is the paper size specified?	If you are using a non-standard size, be sure to specify the paper size. If the size of paper loaded into a tray was changed, be sure to check the paper size setting.
Did you add paper to the tray?	■ To add paper, press down the pressure plate until it locks, remove any paper remaining in the bypass tray, combine it with the paper to be added, and place in the bypass tray again. If paper is added without removing the remaining paper, a misfeed may occur. Do not add paper in tray 1 to 2.
Are you using punched paper?	■ When using punched paper, set the paper type to punched.
Are you using label sheets that cannot be used?	Labels without a carrier sheet may stick to the transfer surface and cause a misfeed.
Remove the paper, turn it over, and reload it. Using a different paper type may solve the problem.	■ This may improve some states of paper curling. LOADING PAPER (page 1-8)
Have you forgotten to remove the divider plate even though A4 size paper is loaded in tray?	 When loading A4 size paper in tray, remove divider plate. Move divider plate all the way to the paper feed opening (right side), and pull up. TRAY 1 - 2 (page 1-12) Configure the paper size setting in Paper Tray Settings. I DON'T KNOW HOW TO CHANGE THE PAPER SIZE (page 9-9)
Did you load an envelope?	 When loading envelopes in tray, do not exceed the indicator line. Set the paper type to "Envelope", and for the paper size, specify the paper size you set.

PAPER DOES NOT FEED FROM THE PAPER TRAY



Check



Solution

Is the paper loaded correctly into the paper tray?

■ Set the guides to the size of the paper.

Reload the paper. Load no more than the maximum number of sheets and do not exceed the indicator line.

LOADING PAPER (page 1-8)

Has the tray been prohibited in fax modes?

- Check the settings in [Paper Tray Settings] and see if checkmarks appear in the checkboxes of fax mode ([Feeding Approved Job]). Functions without a checkmark cannot be used for printing using that tray.
 - ⇒ From the operation panel, [Paper Tray Settings] → [Feeding Approved Job]

I DON'T KNOW HOW TO CHANGE THE PAPER SIZE



Check



Solution

Set the paper size used in each tray in the tray settings.

■ The "Tray Settings" key can be found in the home screen. Tap this key to display the tray settings screen.

Tap the tray whose paper size you want to change, select the paper type, and then tap the [Size] tab. Select the paper size and tap the [OK] key. If you loaded a special size of paper in the bypass tray, tap the [Direct Entry] key after tapping the [Size] tab, enter the paper size manually, and tap the [OK] key.

THE OUTPUT IS NOTICEABLY CURLED AND UNEVEN



Check



Solution

Remove the paper, turn it over, and reload it. Using a different paper type may solve the problem.

■ This may improve some states of paper curling. LOADING PAPER (page 1-8)

THE IMAGE IS SKEWED ON THE PAPER



Check



Solution

Is too much paper loaded into the a tray?

■ Reload the paper. Load no more than the maximum number of sheets and do not exceed the indicator line.

The maximum number of sheets varies depending on the paper type setting.

Are the tray guides adjusted to the width of the paper?

Adjust the bypass tray guides to the width of the paper so that they slightly contact the sides of the paper.

Are the original guides adjusted to the width of the paper?

■ Adjust the original guides to the width of the paper.

LINES APPEAR IN THE IMAGE



Check



Solution

Are the scanning areas of the document glass or automatic document feeder dirty?

■ Clean the scanning areas of the document glass or automatic document feeder.

<u>CLEANING THE DOCUMENT GLASS AND AUTOMATIC DOCUMENT</u>

<u>FEEDER (page 1-25)</u>

Is the bypass feed roller dirty?

■ Clean the surface of the bypass feed roller.

<u>CLEANING THE BYPASS FEED ROLLER (page 1-30)</u>

Did you clean the laser unit?

■ Clean the laser unit. For details on cleaning, refer to the CLEANING THE LASER UNIT (page 1-27).

SMUDGES APPEAR ON PRINTED OUTPUT



Check



Solution

Are you using paper that is not within the specifications?

- Use SHARP-recommended paper.
 - Using paper that is for other models or special paper that is not supported may result in misfeeds, creases, or smudges.
 - ⇒ "SUPPLIES" in Start Guide
- Try setting the paper type to a type that is slightly heavier or slightly lighter than normal. (For plain paper, switch plain paper 1 to plain paper 2 or plain paper 2 to plain paper 1.) Depending on the paper type, print quality may be improved. For details, contact your dealer or nearest SHARP Service Department.

Are you printing on pre-punched paper?

■ Take care that the image does not overlap the punch holes.

If the printed image overlaps the punch holes, smudges may appear on the reverse side of the paper following 1-sided printing, or on both sides following 2-sided printing.

Does a message appear indicating the need for maintenance?

■ Contact your dealer or nearest SHARP Service Department as soon as possible.

Remove the paper, turn it over, and reload it. Using a different paper type may solve the problem.

■ This may improve some states of paper curling.

LOADING PAPER (page 1-8), HOW TO PLACE THE ORIGINAL (page 1-21)

WHEN PRINTING ON THICK PAPER, THE PRINT RESULT IS DIRTY FROM THE 2ND PAGE ON



Check



Solution

Has the paper type been set correctly?

- Set the correct paper type in the tray settings. Make sure that the following did not occur:
- When using heavy paper, change the paper type in the tray settings to Heavy.
 (The image may disappear if rubbed.)
- Paper other than heavy paper is being used, but heavy paper is selected in the tray settings. (This may cause creases and misfeeds.)

PART OF THE IMAGE IS CUT OFF



Check



Solution

Set the original size.

■ Set the original size.

Was the original placed in the correct position?

■ If you are using the document glass, be sure to place the original in the far left corner of the document glass.

LOADING PAPER (page 1-8), HOW TO PLACE THE ORIGINAL (page 1-21)

PRINTING TAKES PLACE ON THE WRONG SIDE OF THE PAPER



Check



Solution

Is the paper loaded with the print side facing in the correct direction?

- Make sure that the print side of paper is facing in the correct direction.
- Trays 1 to 2, Bypass Tray:

Place the paper with the print side face down.*

* When the paper type is "Pre-Printed" or "Letter Head", load the paper in the opposite way.

(Except when [Disabling of Duplex] is enabled in the setting mode (administrator). For information about the setting mode, consult your administrator.)

THE CONNECTED USB DEVICE CANNOT BE USED



Check



Solution

Is the USB device compatible with the machine?

■ Check the file format of the USB memory device. If the USB memory is formatted as other than FAT32, NTFS or exFAT, use a computer to change the format to FAT32, NTFS, or exFAT.

Is the connected USB device recognized correctly?

■ When a USB device is connected to the machine and correctly recognized, an icon () will appear at the bottom of the touch panel. If it is not recognized, connect it once again.

THE TOUCH PANEL DISPLAY IS DIFFICULT TO VIEW



Check



Solution

Is the brightness properly adjusted?

■ Tap the [LCD Control] key on the Menu screen to adjust the brightness.

YOU WERE LOGGED OUT WITHOUT LOGGING OUT YOURSELF



Check



Solution

Did Auto Clear activate?

- When user authentication is used, the currently logged in user will be automatically logged out if Auto Clear activates. Log in again. If you are the administrator, change the time setting of Auto Clear or disable Auto Clear in [Auto Clear Setting].
 - \Rightarrow From the operation panel, [System Settings] \rightarrow [Common Settings] \rightarrow [Operation Settings] \rightarrow [Auto Clear Setting]

I DON'T KNOW WHERE THE IP ADDRESS SETTING IS



Check



Solution

The IP address is set in the Network Settings of Setting mode.

- To set a permanent IP address, ask your network administrator for the IP address assigned to the machine and other information necessary for the Network Settings.
 - \Rightarrow In the Web page \rightarrow [System Settings] \rightarrow [Network Settings]
 - → [Interface Settings]
 - ⇒ From the operation panel, [System Settings] → [Network Settings] → [Wired Settings] → [IPv4 Settings], [IPv6 Settings]

I DON'T KNOW HOW TO ADJUST THE TIME THE MACHINE ENTERS ENERGY SAVE MODE



Check



Solution

Set the time the machine enters energy save mode in the Energy Save settings of setting mode.

■ Set the time the machine enters energy save mode in the Energy Save settings of setting mode.

Set the time the machine enters Preheat Mode.

- \Rightarrow In the Web page, [System Settings] \rightarrow [Energy Save] \rightarrow [Eco Setting] \rightarrow [Preheat Mode Setting]
- \Rightarrow From the operation panel, [System Settings] \rightarrow [Energy Save] \rightarrow [Preheat Mode Setting]
- Set the time that Auto Power Shut-Off takes place
 - \Rightarrow In the Web page, [System Settings] \rightarrow [Energy Save] \rightarrow [Eco Setting] \rightarrow [Auto Power Shut-Off Timer]
 - \Rightarrow From the operation panel, [System Settings] \rightarrow [Energy Save] \rightarrow [Auto Power Shut-Off Timer]

I FORGOT THE ADMINISTRATOR PASSWORD



Check



Solution

Was the administrator password changed from the factory default setting?

Contact your dealer or nearest SHARP Service Department.
For the factory default administrator password, see "FOR THE ADMINISTRATOR" in Start Guide. After changing the password, take special care to remember it.

I DON'T KNOW WHOM TO CONTACT FOR MAINTENANCE AND SERVICE



Check



Solution

Please check the customer support information.

■ Contact your dealer or nearest SHARP Service Department.

"The inside of the machine is being cooled down. Please wait." MESSAGE IS DISPLAYED



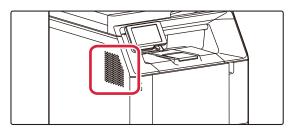
Check



Solution

Is there an obstruction blocking the machine's ventilation openings or is the room temperature too hot?

■ If the inside of the machine becomes hot, it will automatically shift to the cooling mode and print out with an interval between printouts. Check to make sure that there is no obstruction blocking the ventilation openings of the machine and that the room temperature is not too hot. If the message continues to appear, turn off the power, wait a few minutes, and try again.



COPYING PROBLEMS

Have functions been disabled by the administrator?

Some functions may have been disabled in the setting mode. When user authentication is enabled, the functions that you can use may be restricted in your user settings. Check with your administrator.

CHECK LIST

? Problem	✓ Check	Page
2-SIDED COPYING DOES NOT	Are you using a special size or type of paper?	9-14
TAKE PLACE	Are you copying using settings that do not allow 2-sided copying?	9-14
ENLARGE/REDUCE DOES NOT WORK	Are the original, paper, and ratio settings correct?	9-14
THE IMAGE IS TOO LIGHT OR TOO	Is the image too light?	9-15
DARK	Is the image too dark?	9-15
	Has an appropriate exposure mode for the original type been selected?	9-15
COLORS ARE OFF	Did you perform "Registration Adjustment"?	9-15
PART OF THE IMAGE IS CUT OFF	Has an appropriate ratio been selected for the original size and paper size?	9-15
COPIES COME OUT BLANK	Is the original placed face up or face down correctly?	9-15
I WANT TO COPY MULTIPLE A4 PAGES ONTO ONE A4 SHEET OF PAPER	Use N-Up.	9-16

2-SIDED COPYING DOES NOT TAKE PLACE



Check



Solution

Are you using a special size or type of paper?

■ For the paper types and sizes that can be used for two-sided copying, read "SPECIFICATIONS" in Start Guide.

Are you copying using settings that do not allow 2-sided copying?

■ 2-Sided Copy can generally be combined with other modes as required, however, some combinations are not possible. If a prohibited combination is selected, a message will appear in the touch panel.

ENLARGE/REDUCE DOES NOT WORK



Check



Solution

Are the original, paper, and ratio settings correct?

■ Check if the original size that appears on the screen is correct. After that, check if the correct paper is selected. Tap the [Ratio] key and then tap the [Auto Image] key. The appropriate ratio for the original and paper will appear.

THE IMAGE IS TOO LIGHT OR TOO DARK



Check



Solution

Is the image too light?

Is the image too dark?

Has an appropriate exposure mode for the original type been selected?

- Select an appropriate exposure mode for the original being copied and adjust the
- exposure level manually.
- Select one of the following modes depending on the original type.
- Text

Use this mode for regular text documents.

· Text/Prtd. Photo

This mode provides the best balance for copying an original which contains both text and printed photographs, such as a magazine or catalogue.

Photo

Use this mode to copy photos.

COLORS ARE OFF



Check



Solution

Did you perform "Registration Adjustment"?

- Ask your administrator to perform "Registration Adjustment".
 - ⇒ From the operation panel, [System Settings] → [Image Quality Adjustment] → [Registration Adjustment]
- If the color tones are off, perform [Auto Calibration] after finishing registration adjustment. (If the colors are still off after calibration, repeating calibration may improve the results.)
 - \Rightarrow From the operation panel, [System Settings] \rightarrow [Image Quality Adjustment] \rightarrow [Auto Calibration]

PART OF THE IMAGE IS CUT OFF



Check



Solution

Has an appropriate ratio been selected for the original size and paper size?

■ Select an appropriate ratio setting.

COPIES COME OUT BLANK



Check



Solution

Is the original placed face up or face down correctly?

■ When using the document glass, the original must be placed face down. When using the automatic document feeder, the original must be placed face up.

I WANT TO COPY MULTIPLE A4 PAGES ONTO ONE A4 SHEET OF PAPER



Check



Solution

Use N-Up.

■ N-Up lets you reduce and copy the images of up to eight A4 pages on one sheet. Tap the [N-Up] key.

PRINTING PROBLEMS

Have functions been disabled by the administrator?

Some functions may have been disabled in the setting mode. When user authentication is enabled, the functions that you can use may be restricted in your user settings. Check with your administrator.

CHECK LIST

? Problem	✓ Check	Page
PRINTING DOES NOT TAKE PLACE	Is your PC connected correctly to the machine?	9-18
	Is the machine connected to the same network (LAN, etc.) as your PC?	9-18
	Have you changed your network environment by replacing a computer or adding a new router?	9-18
	Is the IP address selected correctly? (Windows)	9-18
	Are you using a printer port created using Standard TCP/IP Port? (Windows)	9-18
	Is your computer in an unstable state?	9-18
	Is the machine specified correctly in the application that you are using for printing?	9-19
	Are the network connection devices operating normally?	9-19
	Is the I/O timeout setting too short?	9-19
	Was a Notice Page printed?	9-19
	Have functions been disabled by the administrator?	9-19
	Did you save settings in the Condition Settings that cannot be used with your current option configuration?	9-19
DON'T KNOW WHICH PRINTER DRIVER TO INSTALL	Check the features of each printer driver before installing.	9-19
DON'T KNOW HOW TO CANCEL PRINTING	Follow the steps below to cancel printing	9-20
COLOR PRINTING DOES NOT TAKE	Is the color mode set to "Color"?	9-20
PLACE	Have functions been disabled by the administrator?	9-20
DON'T KNOW HOW TO SWITCH BETWEEN COLOR AND BLACK & WHITE PRINTING	The color mode setting is configured in the printer driver.	9-20
DON'T KNOW HOW TO PRINT ON SPECIAL MEDIA (ENVELOPES, ETC.)	For envelopes*, use tray or the bypass tray, and for special papers such as label paper, use the bypass tray.	9-21
-SIDED PRINTING DOES NOT	Are you using a special size or type of paper?	9-21
AKE PLACE	Have functions been disabled by the administrator?	9-21
DIRECT PRINTING OF A FILE IN A SHARED FOLDER ON A COMPUTER IS NOT POSSIBLE	Is [IPsec Settings] enabled on the machine?	9-21
A TRAY OR OTHER PERIPHERAL DEVICE INSTALLED ON THE MACHINE CANNOT BE USED	Have the peripheral devices that are installed on the machine been configured with the printer driver?	9-22
THE IMAGE IS GRAINY	Are the printer driver settings appropriate for the print job?	9-22
THE IMAGE IS TOO LIGHT OR TOO DARK	Does the image (particularly a photo) need correction? (Windows)	9-22
COLORS ARE OFF	Did you perform "Registration Adjustment"?	9-22
TEXT AND LINES ARE FAINT AND DIFFICULT TO SEE	Was color data printed in black and white? (Windows)	9-23

? Problem	✓ Check	Page
PART OF THE IMAGE IS CUT OFF	Does the paper size specified by the job match the size of paper loaded into the tray?	9-23
	Is the print orientation setting (portrait or landscape) correct?	9-23
	Are the margins set correctly in the layout settings of the application?	9-23
PART OF THE IMAGE IS CUT OFF	Are you using a type of paper (envelopes, punch paper, etc.) that can only be loaded in a fixed orientation?	9-23
	Is the correct binding position selected for 2-sided printing?	9-23
MANY GARBLED CHARACTERS ARE PRINTED	Is your computer or the machine in an unstable state?	9-24
AFTER THE ROUTER WAS REPLACED, I CAN NO LONGER PRINT TO THE MACHINE	Does your computer connect to the machine?	9-24

PRINTING DOES NOT TAKE PLACE

T KINTING BOLOT	
Check	Solution
Is your PC connected correctly to the machine?	■ Make sure that the cable is connected securely to the LAN connector of your PC and that of the machine. If you are connecting to a network, make sure that the LAN cable is securely connected to the hub as well. INTERIOR , SIDE AND BACK (page 1-3)
Is the machine connected to the same network (LAN, etc.) as your PC?	■ The machine must be connected to the same network as your PC. If you do not know which network the machine is connected to, ask the network administrator.
Have you changed your network environment by replacing a computer or adding a new router?	■ The connection to the computer may not be correct due to a change in IP address caused by replacing your computer or by a change in the network environment. Contact your network administrator to confirm that the settings between the machine and your computer or network environment are correct.
Is the IP address selected correctly? (Windows)	 Check the IP address setting. If the machine does not have a permanent IP address (the machine receives an IP address from a DHCP server), printing will not be possible if the IP address changes. You can check the machine's IP address in [Network Status] of setting mode. If the IP address has changed, change the port setting in the printer driver.
Are you using a printer port created using Standard TCP/IP Port? (Windows)	■ Check the PC settings. When a port created with Standard TCP/IP Port in Windows is used and the [SNMP Status Enabled] checkbox is ✓, it may not be possible to print correctly. Change the [SNMP Status Enabled] checkbox to □. See: Software Setup Guide
Is your computer in an unstable state?	Restart your computer. Printing is sometimes not possible when you run multiple applications at once or there is insufficient memory or local drive space. Restart your computer.



Check



Solution

Is the machine specified correctly in the application that you are using for printing? ■ Check whether the machine's printer driver has been selected from the print window of the application.

If the machine's printer driver does not appear in the list of available printer drivers, it may not be installed correctly. Remove the printer driver and then install it once again.

See: Software Setup Guide

Are the network connection devices operating normally?

■ Make sure that the routers and other network connection devices are operating correctly.

If a device is not powered on or is in an error state, see the manual of the device to correct the problem.

Is the I/O timeout setting too short?

■ Check with your administrator.

If the I/O timeout setting is too short, errors may occur while writing to the printer. Ask the administrator of the machine to configure an appropriate time in "I/O Timeout".

- \Rightarrow In the Web page \rightarrow [System Settings] \rightarrow [Printer Settings]
 - \rightarrow [Condition Settings] \rightarrow [I/O Timeout].

Was a Notice Page printed?

■ Check the Notice Page.

A Notice Page will be printed to indicate the cause of the problem if a print job cannot be performed as specified and the cause is not shown in the display. Read the printed page and take appropriate actions.

For example, a Notice Page will be printed in the following situations.

- The print job is too large to fit in memory.
- A function that has been prohibited by the administrator is specified.
 By factory default, Notice Pages are not printed.

Have functions been disabled by the administrator?

■ Check with your administrator.

When user authentication is enabled, the functions that you can use may be restricted in your user settings. Check with your administrator.

Did you save settings in the Condition Settings that cannot be used with your current option configuration? Initialize the Condition Settings.

If you change your option configuration after changing the Condition Settings, the Print Settings screen may not appear. Return to your original option configuration, or initialize the Condition Settings.

I DON'T KNOW WHICH PRINTER DRIVER TO INSTALL



Check



Solution

Check the features of each printer driver before installing.

- Each printer driver has specific features. Install and use the printer drivers that match your needs.
 - PCL6 printer driver

The machine supports the Hewlett-Packard PCL6 printer control languages. Prints fast and is good for regular print jobs.

· PS printer driver

The PS printer driver supports the PostScript 3 page description language developed by Adobe Inc.

Excellent reproduction of images that include fine graphics.

PPD driver

The PPD driver enables the machine to use the standard Windows PS printer driver.

I DON'T KNOW HOW TO CANCEL PRINTING



Check



Solution

Follow the steps below to cancel printing

If the print data has not been spooled to the machine, refer to the manual for your operating system or application.

COLOR PRINTING DOES NOT TAKE PLACE



Check



Solution

Is the color mode set to "Color"?

■ Select "Auto" or "Color" for the color mode setting.

Windows:

The setting is selected in the [Main] tab or [Image Quality] tab of the printer driver. macOS:

The color mode setting is configured in the [Image Quality] menu of the print window.

Have functions been disabled by the administrator?

■ Check with your administrator.

When user authentication is enabled, the functions that you can use may be restricted in your user settings.

I DON'T KNOW HOW TO SWITCH BETWEEN COLOR AND BLACK & WHITE PRINTING



Check



Solution

The color mode setting is configured in the printer driver.

■ Select "Auto" or "Color" for the color mode setting. Windows:

The setting is selected in the [Main] tab of the printer driver.

The print mode setting is configured in the [Image Quality] menu of the print window.

I DON'T KNOW HOW TO PRINT ON SPECIAL MEDIA (ENVELOPES, ETC.)



Check



Solution

For envelopes*, use tray or the bypass tray, and for special papers such as label paper, use the bypass tray.

- For envelopes, set envelopes in tray or in the bypass tray. For special papers such as label paper, set the paper in the bypass tray. After loading the media, set the paper size and paper in [Tray Settings] in the home screen. In addition, check the method of setting the paper, and the type and size of paper, such as the envelope type, etc. When you have completed the settings on the machine, set the "Original Size" and "Paper Size" appropriately on the [Main] tab of the printer driver.
 - * Depending on the countries or regions, envelopes may not be available.

2-SIDED PRINTING DOES NOT TAKE PLACE



Check



Solution

Are you using a special size or type of paper?

■ Check the paper types and sizes that can be used for two-sided copying.

Have functions been disabled by the administrator?

■ Check with your administrator.

Some functions may have been disabled in the setting mode. Check with your administrator

When user authentication is enabled, the functions that you can use may be restricted in your user settings. Check with your administrator.

DIRECT PRINTING OF A FILE IN A SHARED FOLDER ON A COMPUTER IS NOT POSSIBLE



Check



Solution

Is [IPsec Settings] enabled on the machine?

■ Check with your administrator.

When [IPsec Settings] is enabled in the setting mode, direct printing of a file in a shared folder may not be possible in your PC environment. For information about [IPsec Settings], consult your administrator.

⇒ In the Web page → [Security Settings] → [IPsec Settings]

A TRAY OR OTHER PERIPHERAL DEVICE INSTALLED ON THE MACHINE CANNOT BE USED



Check



Solution

Have the peripheral devices that are installed on the machine been configured with the printer driver?

 Open the printer properties dialog box and click [Auto Configuration] on the [Options] tab. (Windows)

If auto configuration cannot be executed, see the Software Setup Guide.

THE IMAGE IS GRAINY



Check



Solution

Are the printer driver settings appropriate for the print job?

■ Check the settings of the printer driver.

When selecting print settings, select a print mode from [600dpi] or [600dpi (High Quality)]. When you need a very clear image, select [600dpi (High Quality)]. Windows:

The resolution setting is selected in the [Image Quality] tab of the printer driver properties window.

macOS:

The resolution setting is configured in the [Printer Features] menu of the print window.

THE IMAGE IS TOO LIGHT OR TOO DARK



Check



Solution

Does the image (particularly a photo) need correction? (Windows)

■ Check the settings of the printer driver.

Correct brightness and contrast with [Image Quality] on the [Color Adjustment] tab of the printer driver. Use these settings to make simple corrections in a case such as when image editing software is not installed on your computer.

COLORS ARE OFF



Check



Solution

Did you perform "Registration Adjustment"?

- Ask your administrator to perform "Registration Adjustment".
 - \Rightarrow From the operation panel, [System Settings] \rightarrow [Image Quality Adjustment] \rightarrow [Registration Adjustment].
- If the color tones are off, perform [Auto Calibration] after finishing registration adjustment. (If the colors are still off after calibration, repeating calibration may improve the results.)
 - ⇒ From the operation panel, [System Settings] → [Image Quality Adjustment] → [Auto Calibration].

TEXT AND LINES ARE FAINT AND DIFFICULT TO SEE



Check



Solution

Was color data printed in black and white?
(Windows)

■ Check the settings of the printer driver.

When color text and lines are printed in black and white, they may become faint and difficult to see. To have color text or lines (areas) that could become faint converted to black, select [Text To Black] or [Vector To Black] on the [Image Quality] tab of the printer driver. (Raster data such as bitmap images cannot be adjusted.)

PART OF THE IMAGE IS CUT OFF



Check



Solution

Does the paper size specified by the job match the size of paper loaded into the tray?

■ Make sure that the paper size setting matches the size of paper loaded into the tray.

Windows: The setting is selected in the [Paper Source] tab of the printer driver. If [Paper Tray] is selected, check the loaded paper and the paper size setting. macOS: The setting is selected in the [Page Setup] menu.

Is the print orientation setting (portrait or landscape) correct?

Set the print orientation to match the image.
Windows: The setting is selected in the [Main] tab of the printer driver.
macOS: The setting is selected in the [Page Setup] menu.

Are the margins set correctly in the layout settings of the application?

■ Select an appropriate paper size and margins in the layout settings of the application.

If the edge of the image extends outside the printable area of the machine, the edge will be cut off.

THE IMAGE IS UPSIDE DOWN



Check



Solution

Are you using a type of paper (envelopes, punch paper, etc.) that can only be loaded in a fixed orientation?

■ Rotate the image 180 degrees before printing.

When the image size and paper size are the same but the orientations are different, the orientation of the image is automatically rotated to match the paper. However, when the paper can only be loaded in a fixed orientation, the image may be printed upside down. In this event, rotate the image 180 degrees before printing.

Windows: The setting is selected in "Orientation" on the [Main] tab of the printer driver

macOS: The setting is selected in the [Layout] menu of the print window.

Is the correct binding position selected for 2-sided printing?

■ Be sure to set the appropriate binding position.

When 2-sided printing is performed, every other page is printed upside down when tablet binding is selected for the binding position.

Windows: The setting is selected in the [Main] tab of the printer driver. macOS: The setting is selected in the [Layout] menu of the print window.

MANY GARBLED CHARACTERS ARE PRINTED



Check



Solution

Is your computer or the machine in an unstable state?

■ Cancel printing, restart your PC and the machine, and try printing again. If there is only a small amount of free space remaining in the memory or local drive of your PC, or if a large number of jobs have been spooled on the machine and only a small amount of free space remains, text may be printed as garbled characters.

To cancel printing:

· Windows:

Double-click the printer icon that appears at the lower right of the task bar and click "Cancel All Documents" (or "Purge Print Documents") in the [Printer] menu.

macOS

Double-click the name of the machine in the printer list, select the job that you wish to delete, and delete it.

If some printed characters are still garbled after restarting, ask your administrator to lengthen the timeout setting of [I/O Timeout] in the setting mode.

- \Rightarrow In the Web page \rightarrow [System Settings] \rightarrow [Printer Settings]
 - → [Condition Settings] → [I/O Timeout].

If garbled characters are being still printed after the above measures are taken, remove and then reinstall the printer driver.

AFTER THE ROUTER WAS REPLACED, I CAN NO LONGER PRINT TO THE MACHINE



Check



Solution

Does your computer connect to the machine?

- The network connection between the machine and your computer may not be working correctly. Check the machine's IP address and your computer's IP address, and make sure that your computer can connect to the machine. Also check if the correct "Print Port" is specified in your computer's driver settings.
- · Check the IP address setting.

If the machine does not have a permanent IP address (the machine receives an IP address from a DHCP server), printing will not be possible if the IP address changes.

You can check the machine's IP address in [Network Status] of setting mode. If the IP address has changed, change the port setting in the printer driver.

- ⇒ In the Web page → [Status] → [Network Status] See: Software Setup Guide
- If the IP address changes frequently, it is recommended that a permanent IP address be assigned to the machine.
- In the operation panel or Web page, \rightarrow [System Settings] \rightarrow [Network Settings]
- Check if the correct print port is set on the computer.
 Windows:

Click the [Start] button, select [Settings] \rightarrow [Device] \rightarrow [Devices and Printers]. (In Windows 11, click the [Start] button, select [Bluetooth & devices] \rightarrow [Printers & scanners].)

Select and then right-click the printer → [Printer properties]→ [Port] macOS:

Delete and then reinstall the printer.

FAX PROBLEMS

Have functions been disabled by the administrator?

Some functions may have been disabled in the setting mode. When user authentication is enabled, the functions that you can use may be restricted in your user settings. Check with your administrator.

CHECK LIST

? Problem	✓ Check	Page
TRANSMISSION DOES NOT TAKE	Is the telephone line connected securely?	9-26
PLACE	Is a busy signal received?	9-26
	Did a communication error occur?	9-26
	Does a message appear indicating that the memory is full?	9-26
	Does the job status screen (completed jobs) or a transaction report indicate that the transmission was not successful?	9-26
	Did you place an original that is folded?	9-26
THE TRANSMITTED FAX PRINTS	Is the original placed face up or face down correctly?	9-27
OUT BLANK AT THE RECEIVING SIDE	If the receiving machine is using thermal paper, was the thermal paper loaded with the wrong side out?	9-27
TRANSMISSION DOES NOT BEGIN	Is the machine's clock set to the correct time?	9-27
AT THE SPECIFIED TIME	Is a transmission in progress?	9-27
PRINTING DOES NOT TAKE PLACE	Is forwarding (Inbound Routing function) enabled for a received fax?	9-27
AFTER RECEPTION	Is the paper other than the size that can be printed by fax reception loaded?	9-27
THE RECEIVED IMAGE IS FAINT	Is the original that was faxed also faint?	9-28
THE MACHINE DOES NOT BEGIN FAX RECEPTION	Has the reception mode been set to [Manual Reception] in the setting mode?	9-28
	Is little free memory remaining?	9-28
DIALING IS NOT POSSIBLE	Is the external telephone connected?	9-28
	Is the line busy?	9-28
YOU CANNOT TALK TO THE OTHER PARTY	Did you dial using the speaker?	9-28
AN ADDRESS (A ONE-TOUCH INDIVIDUAL KEY OR GROUP KEY) CANNOT BE STORED	Has the maximum number of keys been stored?	9-29
AN ADDRESS (A ONE-TOUCH INDIVIDUAL KEY OR GROUP KEY)	Is the key being used in a reserved transmission or a transmission in progress?	9-29
CANNOT BE EDITED OR DELETED	Have functions been disabled by the administrator?	9-29
	Has your administrator enabled a function that prevents editing/deleting?	9-29
WANT TO CHECK THE	Press the [Sending History] key. (Send history only)	9-29
SEND/RECEIVE HISTORY	Check with the [Fax Job Status] key.	9-29
DON'T KNOW HOW TO FORWARD RECEIVED FAXES	Use the received fax forwarding settings in setting mode.	9-30
NOTIFICATION SOUNDS ARE TOO	Have you adjusted the volume in the speaker settings of setting mode?	9-30
LOUD OR TOO SOFT, OR ARE NOT AUDIBLE (VOLUME ADJUSTMENT)	You can adjust the volume of the original scan complete sound in the scan complete sound setting of setting mode.	9-30
DON'T KNOW HOW TO STORE OR PRINT SENDER INFORMATION	You can store sender information in "Own Name and Destination Set" in setting mode.	9-30
BROADCAST TRANSMISSION DOES NOT WORK	Has broadcast setting been disabled in the setting mode (administrator)?	9-30
THE INFORMATION INDICATOR DOES NOT TURN OFF	Is an error preventing received faxes from being printed?	9-31

Problem
I DON'T KNOW HOW TO CHECK AN
ADDRESS WHEN SENDING A FAX

✓ Check	Page
Tap the [Address Review] key.	9-31
Is "Fax Dest. Confirmation Mode" enabled in setting mode?	9-31

TRANSMISSION DOES NOT TAKE PLACE



Check



Solution

Is the telephone line connected securely?

■ Check the telephone line jack, the wall jack, and any extension adapters to make sure that all connections are secure.
INTERIOR, SIDE AND BACK (page 1-3)

Is a busy signal received?

- If a busy signal is received, the transmission is temporarily canceled and then automatically attempted again after a brief interval. The factory default setting: Two attempts at 3-minute intervals.
 - \Rightarrow In the Web page \rightarrow [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Send Setting] \rightarrow [Recall in Case of Line Busy]
 - ⇒ From the operation panel, [System Settings] → [Fax Settings] → [Send Setting] → [Recall in Case of Line Busy]

 To cancel transmission, tap the [Cancel] key.

Did a communication error occur?

- If an error occurs preventing transmission, the transmission is temporarily canceled and then automatically re-attempted after a brief interval.
 - \Rightarrow In the Web page \rightarrow [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Send Setting] \rightarrow [Recall in Case of Communication Error]
 - ⇒ From the operation panel, [System Settings] → [Fax Settings] → [Send Setting] → [Recall in Case of Communication Error]
- To cancel transmission, tap the [Cancel] key.

The machine supports error correction mode (ECM) and is configured to automatically resend any part of a fax that is distorted due to noise on the line.

 \Rightarrow In the Web page \rightarrow [System Settings] \rightarrow [Image Send Settings] \rightarrow [Fax Settings] \rightarrow [Condition Settings] \rightarrow [ECM]

Does a message appear indicating that the memory is full?

■ Divide the originals into sets and fax each set separately, or use direct transmission.

If the memory becomes full, the transmission will be canceled.

Does the job status screen (completed jobs) or a transaction report indicate that the transmission was not successful?

■ Perform the transmission again.

If the transmission is still not successful after recalling is performed as set in [Recall in Case of Line Busy] or [Recall in Case of Communication Error], the transmission failure will be indicated in the job status screen and the transaction report.

Did you place an original that is folded?

■ Following the instructions in the display, unfold the original, place it in the automatic document feeder again, and re-scan it.

THE TRANSMITTED FAX PRINTS OUT BLANK AT THE RECEIVING SIDE



Check



Solution

Is the original placed face up or face down correctly?

Place the original again in the correct orientation, and resend.
When using the document glass, the original must be placed face down. When using the automatic document feeder, the original must be placed face up. Place the original correctly and send the fax again.

If the receiving machine is using thermal paper, was the thermal paper loaded with the wrong side out?

■ Check with the operator of the other machine.

TRANSMISSION DOES NOT BEGIN AT THE SPECIFIED TIME



Check



Solution

Is the machine's clock set to the correct time?

- Set the clock to the correct time.
 - \Rightarrow In the operation panel or Web page, [System Settings] \rightarrow [Common Settings] \rightarrow [Device Control] \rightarrow [Clock]

Is a transmission in progress?

■ If another transmission is in progress when the specified time arrives, the timer operation will begin after that transmission is finished.

PRINTING DOES NOT TAKE PLACE AFTER RECEPTION



Check



Solution

Is forwarding (Inbound Routing function) enabled for a received fax?

- If you need to print a received fax, ask your administrator.
 When the Inbound Routing function is enabled, received faxes are automatically forwarded to a specified address. If [Print at Error] is selected when Inbound Routing is enabled, received faxes will only be printed when an error occurs.
 ⇒ In the Web page → [Image Send Settings] → [Inbound Routing Settings] →
 - ⇒ In the Web page → [Image Send Settings] → [Inbound Routing Se [Administration Settings] → [Inbound Routing Settings]

Is the paper other than the size that can be printed by fax reception loaded?

■ If the paper other than the size with 5-1/2"x8-1/2", 8-1/2"x11", 8-1/2"x13", 8-1/2"x13-2/5", 8-1/2"x14", A4, B5 (A5, B5, A4, 8-1/2"x11", 8-1/2"x13", 8-1/2"x13-2/5", 8-1/2"x13-1/2") is loaded in the machine, printing does not take place even if a fax is received. Load the papers of the above size.

THE RECEIVED IMAGE IS FAINT



Check



Solution

Is the original that was faxed also faint?

Ask the other party to send the fax again using a suitable (darker) exposure setting.

THE MACHINE DOES NOT BEGIN FAX RECEPTION



Check



Solution

Has the reception mode been set to [Manual Reception] in the setting mode?

■ Set the reception mode to [Auto Reception].

When the reception mode is set to [Manual Reception], the machine will not receive faxes automatically.

⇒ In the Web page → [System Settings] → [Image Send Settings] → [Fax Data Receive/Forward (Manual)] → [Receive Settings]

Is little free memory remaining?

- Increase the amount of free memory.
- The memory contains data that has been received with the received image check setting enabled.

DIALING IS NOT POSSIBLE



Check



Solution

Is the external telephone connected?

Check the connections.

Check the telephone line jack, the wall jack, and any extension adapters to make sure that all connections are secure.

Is the line busy?

■ Wait until the communication is completed.

YOU CANNOT TALK TO THE OTHER PARTY



Check



Solution

Did you dial using the speaker?

Use the external telephone.

When you dial using the speaker, you will be able to hear the voice of the other party, but he or she will not hear your voice. Use the external telephone. (When the external telephone is not installed, you cannot talk to the other party.)

AN ADDRESS (A ONE-TOUCH INDIVIDUAL KEY OR GROUP KEY) CANNOT BE STORED



Check



Solution

Has the maximum number of keys been stored?

Adjust the number of stored keys.
Delete addresses (one-touch keys and group keys) that are not being used.

AN ADDRESS (A ONE-TOUCH INDIVIDUAL KEY OR GROUP KEY) CANNOT BE EDITED OR DELETED



Check



Solution

Is the key being used in a reserved transmission or a transmission in progress?

■ Wait until the transmission is finished or cancel the reserved transmission and then edit or delete the key.

Have functions been disabled by the administrator?

Check with your administrator.
Some functions may have been disabled in the setting mode.

Has your administrator enabled a function that prevents editing/deleting?

■ Check with your administrator.

If your administrator has enabled settings such as [Inbound Routing Settings], keys cannot be edited or removed.

- \Rightarrow In the Web page \rightarrow [Image Send Settings]
 - → [Inbound Routing Settings] → [Inbound Routing Settings]

I WANT TO CHECK THE SEND/RECEIVE HISTORY



Check



Solution

Press the [Sending History] key. (Send history only)

■ Tap the [Sending History] key to show the send history.

Check with the [Fax Job Status] key.

■ Tap the [Fax Job Status] key to check the status of fax jobs. To check previous send or receive histories, tap the [Job Complete Status] key.

I DON'T KNOW HOW TO FORWARD RECEIVED FAXES



Check



Solution

Use the received fax forwarding settings in setting mode.

■ You can forward received faxes to a forwarding destination set in advance. Enable [Inbound Routing Settings] in the Web page → [System Settings] → [Image Send Settings] → [Inbound Routing Settings] → [Administration Settings]. Tap [Add] and set the forwarding destination and forwarding conditions. When the settings are completed, received faxes will be forwarded according to the set conditions.

NOTIFICATION SOUNDS ARE TOO LOUD OR TOO SOFT, OR ARE NOT AUDIBLE (VOLUME ADJUSTMENT)



Check



Solution

Have you adjusted the volume in the speaker settings of setting mode?

- Adjust the on-hook volume, ringing volume, line monitor volume, send/receive completion volume, and send/receive error volume.
 - \Rightarrow From the operation panel, [System Settings] \rightarrow [Sound Settings] \rightarrow [Beep Sound Settings (Fax)]

You can adjust the volume of the original scan complete sound in the scan complete sound setting of setting mode.

■ A complete sound is heard when scanning of the original is completed. From the operation panel, select [System Settings] → [Sound Settings] → [Beep Sound Settings (Common)] → [Scan Complete Sound (Scan/Fax)] to adjust the volume.

I DON'T KNOW HOW TO STORE OR PRINT SENDER INFORMATION



Check



Solution

You can store sender information in "Own Name and Destination Set" in setting mode.

■ To store sender information, select - [System Settings] → [Image Send Settings] → [Common Settings] → [Own Name and Destination Set] in the Web page.

BROADCAST TRANSMISSION DOES NOT WORK



Check



Solution

Has broadcast setting been disabled in the setting mode (administrator)?

■ Broadcast transmission cannot be performed when [System Settings] → [Image Send Settings] → [Fax Settings] → [Send Setting] → [Disable Fax Broadcasting] in the Web page is disabled.

THE INFORMATION INDICATOR DOES NOT TURN OFF



Check



Solution

Is an error preventing received faxes from being printed?

■ The information indicator blinks in white until the received fax print is removed. Clear the error that is preventing printing.

I DON'T KNOW HOW TO CHECK AN ADDRESS WHEN SENDING A FAX



Check



Solution

Tap the [Address Review] key.

■ Tap the [Address Review] key to view a list of the addresses.

Is "Fax Dest. Confirmation Mode" enabled in setting mode?

■ Enable [System Settings] → [Image Send Settings] → [Fax Settings] → [Condition Settings] → [Fax Dest. Confirmation Mode] In the Web page. When this setting is enabled, an address confirmation message will appear when you send a fax to prevent erroneous transmission.

IMAGE SEND PROBLEMS

Have functions been disabled by the administrator?

Some functions may have been disabled in the setting mode. When user authentication is enabled, the functions that you can use may be restricted in your user settings. Check with your administrator.

CHECK LIST

? Problem	✓ Check	Page
TRANSMISSION DOES NOT TAKE PLACE	Did you select the correct destination (destination information)? Is the correct information (e-mail address or FTP server information) stored for that destination?	9-33
	Does the image file exceed the e-mail attachment limit set in the setting mode (administrator)?	9-33
	Did the image file exceed the file attachment size limit of your mail server?	9-33
	Has the folder on the destination computer been set as a shared folder so that files can be sent to it?	9-33
	Is [IPsec Settings] enabled on the machine?	9-33
	Did you place an original that is folded?	9-33
THE RECEIVED IMAGE FILE CANNOT BE OPENED	Does the viewer program used by the recipient support the format of the received image data?	9-33
TRANSMISSION TAKES A LONG TIME	Is the resolution setting appropriate at the time of scanning?	9-34
THE SCANNED IMAGE IS CLIPPED	Is the original scan size setting smaller than the actual original size?	9-34
THE QUALITY OF THE SCANNED	Is the original printed matter such as a book or magazine?	9-34
MAGE IS POOR	When scanning a color or grayscale original, is the color mode set to [Mono2]?	9-34
	Is the resolution setting too low?	9-34
	Is the compression ratio too high?	9-35
THE SCANNED IMAGE IS BLANK	Is the original placed face up or face down correctly?	9-35
JPEG WAS SELECTED FOR THE FILE TYPE BUT THE FILE WAS CREATED AS A TIFF FILE	Did you select [Mono2] in color mode?	9-35
THE FILE SIZE IS LARGE	Was the color mode set to [Grayscale] when you scanned a monochrome original?	9-35
	Is the resolution setting too high?	9-35
	Is the compression ratio too low?	9-35
AN ADDRESS (A ONE-TOUCH INDIVIDUAL KEY OR GROUP KEY) CANNOT BE STORED	Has the maximum number of keys been stored?	9-36
AN ADDRESS (A ONE-TOUCH INDIVIDUAL KEY OR GROUP KEY)	Is the key being used in a reserved transmission or a transmission in progress?	9-36
CANNOT BE EDITED OR DELETED	Has your administrator enabled a function that prevents editing/deleting?	9-36
WANT TO CHANGE THE FORMAT OR COMPRESSION OF A SCANNED MAGE	Use the [Format] key.	9-36
DON'T KNOW HOW TO CHECK AN ADDRESS WHEN SENDING AN MAGE	Tap the [Address Review] key.	9-36
AFTER THE ROUTER WAS REPLACED, I CAN'T USE SCAN TO NETWORK FOLDER OR SCAN	Has the machine's IP address been changed?	9-37

TRANSMISSION DOES NOT TAKE PLACE



Check



Solution

Did you select the correct destination (destination information)? Is the correct information (e-mail address or FTP server information) stored for that destination?

Make sure that the correct information is stored for the destination and that the destination is correctly selected.

If delivery by e-mail (Scan to E-mail) is unsuccessful, an error message such as "Undelivered Message" may be sent to the designated administrator's e-mail address. This information may help you determine the cause of the problem.

Does the image file exceed the e-mail attachment limit set in the setting mode (administrator)?

Check with your administrator. If your administrator has set a limit on the size of transmitted files, a file that exceeds the limit cannot be transmitted.

Did the image file exceed the file attachment size limit of your mail server?

■ Reduce the size of the file attachment (reduce the number of pages to scan) for one e-mail transmission.

(When Scan to E-mail is used)

The size of the file can also be reduced by scanning using a lower resolution setting. Ask your mail server administrator (or Internet service provider, etc.) what the file size limit is for one e-mail transmission.

Has the folder on the destination computer been set as a shared folder so that files can be sent to it? (When using Scan to Network Folder) ■ If the destination folder is not configured as a shared folder, select "Sharing" in the folder properties.

If the folder was moved or otherwise changed, the "Sharing" setting may have been canceled.

Is [IPsec Settings] enabled on the machine?

(When using Scan to Network Folder)

Check with your administrator.

When [IPsec Settings] is enabled in setting mode, it may not be possible to scan to a shared folder in some computer environments.

 \Rightarrow In the Web page \rightarrow [System Settings] \rightarrow [Security Settings] → [IPsec Settings]

Did you place an original that is folded?

■ Following the instructions in the display, unfold the original, place it in the automatic document feeder again, and re-scan it.

THE RECEIVED IMAGE FILE CANNOT BE OPENED



Check



Solution

Does the viewer program used by the recipient support the format of the received image data?

■ Use a software program that is capable of opening the selected file type and compression mode.

The recipient may be able to open the file if you change the file type and compression mode selected at the time of transmission.

TRANSMISSION TAKES A LONG TIME



Check



Solution

Is the resolution setting appropriate at the time of scanning?

Select resolution and data compression settings that are suited to the purpose of transmission.

To create image data that is balanced in terms of resolution and file size, pay attention to the following points:

Resolution modes:

The default resolution setting is [200x200dpi] in "E-Mail". If the original does not contain a halftone image such as a photo or illustration, scanning at the default resolution will create a more practical and useful image. A higher resolution setting should only be selected if the original contains a photo and you wish to give priority to the quality of the photo image. Exercise caution in this case as a larger file will be created than when the default setting is used.

THE SCANNED IMAGE IS CLIPPED



Check



Solution

Is the original scan size setting smaller than the actual original size?

■ Set the scan size to the actual original size.

If you have intentionally set a smaller size than the actual original size, place the original considering the reference placement position for the selected scan size. For example, when scanning an $8-1/2" \times 11"$ (A4) original using a $5-1/2" \times 8-1/2"$ (B5) setting on the document glass, align the original using the document glass scale at the left edge to fit the area you wish to scan into the $5-1/2" \times 8-1/2"$ (B5) scanning area.

THE QUALITY OF THE SCANNED IMAGE IS POOR



Check



Solution

Is the original printed matter such as a book or magazine?

■ To reduce the moire effect, take the following procedure: When the original is printed matter, vertical patterns (moire) may occur. Select [Others] → [Sharpness] and soften the edges of image to reduce the moire effect (only in "E-Mail"). It may also be possible to reduce the moire effect by changing the resolution setting or shifting the original (or changing its angle) slightly on the document glass.

When scanning a color or grayscale original, is the color mode set to [Mono2]?

■ Setting the color mode to [Mono2] replaces the colors in the original with either black or white. This is suitable for text-only originals; however, for originals that contain illustrations, it is best to use the [B/W Start] key with the color mode set to [Grayscale], or set the color mode of the [Color Start] key to [Full Color] or [Grayscale] and then scan.

Is the resolution setting too low?

■ A low resolution setting results in a coarser image.

Increasing the resolution setting produces a smoother image. (The higher the resolution, the larger the file size.)





Is the compression ratio too high?

■ If the compression ratio is set to a high value when "Color Mode" transmission is set to full color or grayscale, noise may be noticeable and colors may appear dull. Set [File Format] → "Compression Ratio" to a lower value to reduce noise and dulling of color. (The lower the compression ratio, the larger the file size.)

THE SCANNED IMAGE IS BLANK



Check



Solution

Is the original placed face up or face down correctly?

Place the original again in the correct orientation, and resend.
When using the document glass, the original must be placed face down. When using the automatic document feeder, the original must be placed face up.

JPEG WAS SELECTED FOR THE FILE TYPE BUT THE FILE WAS CREATED AS A TIFF FILE



Check



Solution

Did you select [Mono2] in color mode?

■ Select "Color/Grayscale" on the Format screen as "JPEG" and tap the [Color Start] key. Tapping the [B&W Start] key will not save the file as a JPEG.

THE FILE SIZE IS LARGE



Check



Solution

Was the color mode set to [Grayscale] when you scanned a monochrome original?

■ [Grayscale] is suitable when you want a high-quality image of text or a photo, but the file size will be larger. Using [Mono2] for a text-only original will significantly reduce the file size.

Is the resolution setting too high?

The higher the resolution setting, the larger the file size.Lowering the resolution results in a coarser image, but produces a smaller file size.

Is the compression ratio too low?

If the compression ratio is set to a low value when Color Mode is set to [Full Color] or [Grayscale], the file size will be large.
 If [File Format] → [Compression Ratio] is set to a higher value, noise may become noticeable and colors may appear duller, but the file size will be smaller.

AN ADDRESS (A ONE-TOUCH INDIVIDUAL KEY OR GROUP KEY) CANNOT BE STORED



Check



Solution

Has the maximum number of keys been stored?

Adjust the number of stored keys.
Delete addresses (one-touch keys and group keys) that are not being used.

AN ADDRESS (A ONE-TOUCH INDIVIDUAL KEY OR GROUP KEY) CANNOT BE EDITED OR DELETED



Check



Solution

Is the key being used in a reserved transmission or a transmission in progress?

■ Wait until the transmission is finished or cancel the reserved transmission and then edit or delete the key.

Has your administrator enabled a function that prevents editing/deleting?

Check with your administrator.
If your administrator has enabled settings such as [Inbound Routing Settings], keys cannot be edited or removed.

I WANT TO CHANGE THE FORMAT OR COMPRESSION OF A SCANNED IMAGE



Check



Solution

Use the [Format] key.

■ You can use the [Format] key to set the format and compression percentage of a file to be saved or sent. [Specified Pages per File] can be used.

I DON'T KNOW HOW TO CHECK AN ADDRESS WHEN SENDING AN IMAGE



Check



Solution

Tap the [Address Review] key.

■ Tap the [Address Review] key to view a list of the addresses.

AFTER THE ROUTER WAS REPLACED, I CAN'T USE SCAN TO NETWORK FOLDER OR SCAN



Check



Solution

Has the machine's IP address been changed?

■ Check the IP address setting.

If the machine does not have a permanent IP address (the machine receives an IP address from a DHCP server), scanning to network folder or scanning will not be possible if the IP address changes.

You can check the machine's IP address in [Network Status] of setting mode. If the IP address has changed, change the port setting in the printer driver.

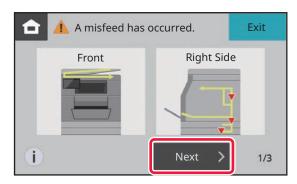
- ⇒ In the Web page → [Status] → [Network Status] See: Software Setup Guide
- If the IP address changes frequently, it is recommended that a permanent IP address be assigned to the machine.
 - \Rightarrow In the operation panel or Web page \rightarrow [System Settings] \rightarrow [Network Settings]

REMOVING MISFEEDS

REMOVING MISFEEDS

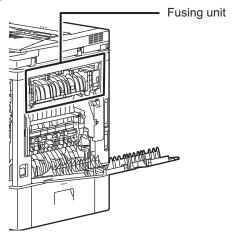
If a paper misfeed occurs, the "Paper Jam" message will appear in the touch panel and printing and scanning will stop. In this event, tap the [Next] key in the touch panel.

When the key is tapped, instructions for removing the misfeed will appear. Follow the instructions. When the misfeed is cleared, the message will automatically disappear.





- The fusing unit and paper output area are hot.
- When removing a misfeed, do not touch the fusing unit. You may burn yourself.



APPENDIX



SPECIFICATIONS	
SPECIFICATIONS	-2
Basic Specifications / Copier Specifications 10	-2
Automatic Document Feeder	-2
Paper feed unit	-2
Network Printer Specifications	-3
Network Scanner Specifications	-3
Fax Specifications	-3
Wireless LAN Specifications	-3
TRADEMARK ACKNOWLEDGEMENTS 10	-4

SPECIFICATIONS

SPECIFICATIONS

Basic Specifications / Copier Specifications

Name	BP-C131WD		
Туре	Desktop		
Color	Full color		
Copier system	Laser electrostatic copier		
Scanning resolution	Scan Automatic document feeder: 600 x 600 dpi, 600 x 300 dpi Document glass: 600 x 600 dpi, 600 x 400 dpi Print: 600 x 600 dpi, equivalent to 9600 dpi x 600 dpi		
Gradation	Scan: equivalent to 256 levels Print: equivalent to 256 levels		
Original paper sizes	Max. 8-1/2" × 14" (A4) for sheets and bound documents		
Copy sizes	8-1/2" × 14" to 5-1/2" × 8-1/2" (A4 to A6), Envelope (Monarch, COM9, COM10, DL, C5, C6) Main tray (Tray 1): 8-1/2" × 14" to 5-1/2" × 8-1/2" (A4 to A6), Envelope (COM10) Bypass tray: 8-1/2" × 14" to 5-1/2" × 8-1/2" (A4 to A6), Envelope (Monarch, COM9, COM10, DL, C5, C6) Lost margin Leading edge: 13/64" ± 3/64" (5.0 mm ± 1.0 mm) Trailing edge: 3/32" to 17/64" (2.0 mm to 6.4 mm) Left edge / Right edge: total 21/64" (8 mm) or less		
Paper type	Main tray (Tray 1): Plain, Heavy paper, Envelopes, Recycled, Color, Letter Head, Pre-Printed, Pre-Punched Bypass tray: Plain, Heavy paper, Envelopes, Special media, Recycled, Color, Letter Head, Pre-Printed, Pre-Punched Paper weight: Main tray (Tray 1): 16 lbs. bond to 65 lbs. Cover (60 g/m² to 176 g/m²) Bypass tray: 16 lbs. bond to 110 lbs. Index (60 g/m² to 200 g/m²) Some usage conditions or paper types may prevent correct printing. To use special media (labels, glossy paper, etc.), or paper from 28 lbs. bond to 110 lbs. Index (106 g/m² to 200 g/m²), contact your dealer or nearest SHARP Service Department.		
Warm-up time	33 seconds* This may vary depending on the ambient conditions. *From the power button.		
First-copy time*	Full color B/W		
	Document glass 7.2 seconds 6.0 seconds DSPF 9.2 seconds 7.4 seconds		
Cartinus	This may vary depending on the state of the machine. * Portrait feeding of 8-1/2" x 11" (A4) sheets.		
Continuous copying speeds*	8-1/2" × 11", A4 31 copies/min. 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 26 copies/min. 13-2/5", 8-1/2" x 13-1/2"		
	7-1/4" × 10-1/2", 5-1/2" × 8-1/2", 15 copies/min. B5, B6 A5, A6, 16K * Portrait feeding, continuous speed for same original source. Output may be temporarily interrupted to stabilize image quality The speed may drop in some environments.		
Copy ratios	Same size: 1: 1 ± 0.8 % Enlarge (AB size): 115 %, 122 %, 141 %, 200 %, 400 % (Inch size: 121 %, 129 %, 200 %, 400 %) Reduce (AB size): 25 %, 50 %, 70 %, 81 %, 86 % (Inch size: 25 %, 50 %, 64 %, 77 %) Zoom range: 25 to 400 % in 1 % increments, total 376 increments. Can calculate zoom rate when mm is specified. (25 - 200 % using automatic document feeder)		
Paper feed / capacity	300 sheets in 1 tray (250) plus 50-sheet bypass tray • Using 20 lbs. bond (80 g/m²) weight paper		

Max. paper feed / max. capacity	800 sheets in 2 trays (250 + 500) plus 50-sheet bypass tray • Using 20 lbs. bond (80 g/m²) weight paper		
Continuous copy	Max. 999 copies		
Memory	Memory 2 GB, eMMC: 16 GB • 1 GB = One billion bytes when referring to hard drive capacity. Actual format capacity is less.		
Required power supply	Power consumption (including options): Max. 1.44 kW (AC 120 V/8 A, 60 Hz)		
Ambient environment	Operating environment: 50 °F to 91 °F (10 °C to 35 °C) (20 % to 85 % RH) 800 - 1,013 hPa		
	Standard environment: 69.5 °F to 77 °F (21 °C to 25 °C) (50 ± 10 % RH)		
Dimensions	16-5/32" (W) x 16-5/32" (D) x 15-23/32" (H) (410 mm (W) x 410 mm (D) x 399 mm (H))		
Weight	Approx. 48.6 lbs (22 kg)		
Overall dimensions	16-5/32" (W) x 25-29/32" (D) (410 mm (W) x 658 mm (D)) *With the bypass tray is extended		

Automatic Document Feeder

Document feeder types	Duplex Single Pass Feeder (DSPF)
Original paper sizes	8-1/2" × 14" to 5-1/2" × 8-1/2" (A4 to A5)
Paper weight of original	Two-sided: 13 to 28 lbs. bond (50 to 105 g/m ²)
Paper storage capacity	50 sheets (20 lbs. (80 g/m²)) (or maximum stack height of 17/64" (6.5 mm))
Scan speed (copy)	B/W: 30 sheets/minute: 600 × 300 dpi (one-sided) 15 sheets/minute: 600 × 600 dpi (one-sided) 60 pages/minute: 600 × 300 dpi (two-sided) 30 pages/minute: 600 × 600 dpi (two-sided) Color: 20 sheets/minute: 600 × 300 dpi (one-sided) 10 sheets/minute: 600 × 600 dpi (one-sided) 30 pages/minute: 600 × 300 dpi (two-sided) 20 pages/minute: 600 × 600 dpi (two-sided) • When scanning in A4 (8-1/2" × 11") portrait

Paper feed unit

Name	500-sheet paper feed unit (BP-CS13)
Paper sizes	8-1/2" × 13-1/2", 8-1/2" × 13-2/5", 8-1/2" × 13", 8-1/2" × 11", 7-1/4" × 10-1/2", 5-1/2" × 8-1/2", A4, B5, A5, B6, A6, 8-1/2" × 14", 16K, Envelope (COM10)
Useable paper	16 lbs. bond to 110 lbs. Index (60 g/m ² to 200 g/m ²)
Paper capacity	500 sheets
Required power supply	Supplied from main machine
Dimensions	16-5/32" (W) × 16-5/32" (D) × 6-7/64" (H)
	(410 mm (W) × 410 mm (D) × 155 mm (H))
Weight	Approx. 8.6 lbs. (3.9 kg)

Network Printer Specifications

Туре	Built-in type
Continuous print speed	Same as continuous copy speed
Resolution	600 × 600 dpi
Page description language	PCL6 emulation, PostScript® 3 emulation
Compatible protocols	TCP/IP (LPD, Port9100, IPP, FTP, WSD)
Compatible OS	Windows 10, Windows 11, Windows Server 2016, Windows Server 2019, Windows Server 2022 macOS (10.10, 10.11, 10.12, 10.13, 10.14, 10.15, 11, 12, 13, 14)
Internal fonts	80 fonts for PCL, 136 fonts for PostScript® 3 emulation
Memory	Machine system memory and memory
Interface	10BASE-T/100BASE-TX, USB 2.0 (Host, Hi speed mode), IEEE802.11 a/b/g/n/ac

Network Scanner Specifications

Туре	Color scanner
Scan resolution (main × vertical)	100 × 100 dpi, 150 × 150 dpi, 200 × 200 dpi, 300 × 300 dpi, 400 × 400 dpi, 600 × 600 dpi (push scan) 50 to 9600 dpi *1 (pull scan)
Scan speed (8-1/2" × 11" (A4))	One-sided B/W: 30 sheets/minute (200 x 200/300 x 300dpi, 1bit) Color: 20 sheets/minute (200 x 200/300 x 300dpi, 8bit) Two-sided B/W: 60 pages/minute (200 x 200/300 x 300dpi, 1bit) Color: 40 pages/minute (200 x 200/300 x 300dpi, 8bit) When in standard mode using Sharp standard paper (A4 (8-1/2" x 11") size with 6% coverage). The speed varies depending on the data volume of the original.
Interface	10BASE-T/100BASE-TX, USB 2.0, IEEE802.11 a/b/g/n/ac
Compatible protocols	TCP/IP
Compatible OS (Pull scan (TWAIN)) *2	Windows 10, Windows 11, Windows Server 2016, Windows Server 2019, Windows Server 2022
Output format	(B/W) TIFF, PDF Compression method: decompression, G3 (MH), G4 (MMR) (Gray scale/color) TIFF, JPEG, PDF Compression method: JPEG (high, mid, and low compression)
Driver	TWAIN compliant

Fax Specifications

Name	Standard (Built-in type)		
Useable lines	General phone lines, private branch exchange (PBX)		
Resolution	Standard:8 dot/mm x 3.85 line/mm Fine:8 dot/mm x 7.7 line/mm Super Fine: 8 dot/mm x 15.4 line/mm Ultra Fine: 16 dot/mm x 15.4 line/mm		
Connection speed	Super G3: 33.6 kbps, G3: 14.4 kbps		
Coding method	MH, MR, MMR, JBIG		
Connection mode	Super G3 / G3		
Original paper sizes for transmission	A4 to A6 (8-1/2" x 14" to 5-1/2" × 8-1/2") (Paper with a max. length of 500 mm can be transmitted (one-sided / B/W only).)		
Registered paper size	8-1/2"x11", 8-1/2"x13", 8-1/2"x13-2/5", 8-1/2"x13-1/2", A5, B5, and A4		
Transmission time	Approx. 2 seconds * (8-1/2" × 11" (A4) Sharp standard paper, normal characters, Super G3 (JBIG)) Approx. 6 seconds (G3 ECM)		
Memory	64 MB		
Notes	Address Entries per group Mass transmissions	Max. of 300 entries Max. of 100 entries Max. of 100 recipients	

Complies with the 33.6 kbps transmission method for Super G3 facsimiles standardized by the International Telecommunications Union (ITU-T). This is the speed for when sending an 8-1/2" × 11" (A4) size piece of paper of around 700 characters at standard image quality (8 \times 3.85 chars/mm) in Hi-speed mode (33.6 kbps).

This is the transmission speed for image information only and does not include time for transmission control.

The actual time needed for a transmission depends on the content of the text, type

of receiving fax machine, and telephone line conditions.

Wireless LAN **Specifications**

Туре	Standard (Built-in type)
Compliance standards	IEEE802.11a/b/g/n/ac
Transmission method	OFDM (IEEE802.11a/g/n/ac), DS-SS (IEEE 802.11b)
Frequency range	2400 to 2483.5 MHz / 5150 to 5350 MHz / 5470 to 5725 MHz / 5725 to 5850 MHz
Channel number	See "Channels that can be used in wireless LAN" in the Start Guide.
Transmission speed (value of standard) *1	IEEE802.11b max. 11 Mbps IEEE802.11a/g max. 54 Mbps IEEE802.11n max. 150 Mbps IEEE802.11ac max. 433 Mbps
Compatible protocols	TCP/IP (IPv4)
Security	WEP, WPAWPA2-mixed PSK, WPAWPA2-mixed EAP*2, WPA2 PSK, WPA2 EAP*2, WPA2/WPA3-mixed PSK/SAE, WPA3 SAE, WPA2/WPA3-mixed EAP*2, WPA3 EAP*2

The indicated values are maximum theoretical values for the Wireless LAN Standard. The values do not indicate actual data transmission speeds.

^{*1:} You must decrease the scan size when increasing the resolution.
*2: There are cases when a connection cannot be established. Please contact your local dealer for more information.

^{*2:} Cannot be used in Access Point mode.

TRADEMARK ACKNOWLEDGEMENTS

- The following trademarks and registered trademarks are used in conjunction with the machine and its peripheral devices and accessories.

 Microsoft, Windows, Windows 10, Windows 11, Windows Server 2016, Windows Server 2019 and Windows Server 2022 are trademarks of the Microsoft group of
- Server 2019 and Windows Server 2022 are trademarks of the Microsoft group of companies.

 Intel® is a trademark of Intel Corporation in the U.S. and/or other countries.

 Adobe and PostScript are either registered trademarks or trademarks of Adobe in the US and/or other countries.

 Apple and Mac are trademarks of Apple Inc., registered in the US and other
- countries.
- countries.

 Mozilla® and Firefox® are registered trademarks or trademarks of the Mozilla Foundation in the U.S.A. and other countries.

 Sharpdesk is a trademark of Sharp Corporation.

 Sharp OSA is a trademark of Sharp Corporation.

 © 2021 ACCESS CO., LTD.



RealVNC is a trademark of RealVNC Limited.
Android, Google Play, Gmail and Google Drive are trademarks of Google LLC. Use of this trademark requires a license from Google.
Wi-Fi and Wi-Fi Direct is a registered trademark of Wi-Fi Alliance.
WPA/WPA2/WPA3 are trademarks of Wi-Fi Alliance.
WPA/WPA2/WPA3 are trademarks of Wi-Fi Alliance.
All other trademarks and copyrights are the property of their respective owners. The built-in fonts of this printer use MicroType® font compression technology of Monotype Imaging, and also use the scalable font rendering subsystem of UFST® (Universal Font Scaling Technology) of Monotype Imaging, Inc. registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions. CG Omega, CG Times, Garamond Antiqua, Garamond Halbfett, Garamond Kursiv, Garamond and Halbfett Kursiv are trademarks of Monotype Imaging, Inc. and may be registered in certain jurisdictions. registered in certain jurisdictions.

registered in certain jurisdictions.

Albertus, Arial, Ashley Script, Coronet, Gill Sans, Joanna and Times New Roman are trademarks of The Monotype Corporation registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions.

Avant Garde, ITC Bookman, Lubalin Graph, Mona Lisa, Zapf Chancery and Zapf Dingbats are trademarks of International Typeface Corporation registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions.

Clarendon, Eurostile, Helvetica, Optima, Palatino, Stempel Garamond, Times and Univers are trademarks of Heidelberger Druckmaschinen AG, which may be registered in certain jurisdictions, exclusively licensed through Linotype Library GmbH, a wholly owned subsidiary of Heidelberger Druckmaschinen AG.

Apple Chancery, Chicago, Geneva, Monaco and New York are trademarks of Apple Inc. and may be registered in certain jurisdictions.

Wingdings is a registered trademark of Microsoft Corporation in the United States and other countries.

Marigold and Oxford are trademarks of Arthur Baker and may be registered in some jurisdictions.

Antique Olive is a trademark of Marcel Olive and may be registered in certain jurisdictions. Hoefler Text is a trademark of Johnathan Hoefler and may be registered in some

Jurisdictions.

HGGothicB, HGMinchoL, HGPGothicB and HGPMinchoL are trademarks of Ricoh Company, Ltd. and may be registered in some jurisdictions. ITC is a trademark of International Typeface Corporation registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions.

Agfa is a trademark of the Agfa-Gevaert Group and may be registered in certain jurisdictions.

Intellifont, MicroType and UFST are trademarks of Monotype Imaging, Inc. registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions. TrueType is trademark of Apple Inc. registered in the United States Patent and Trademark

Office and other countries.

PostScript is a trademark of Adobe and may be registered in some jurisdictions.

HP, FontSmart and LaserJet are trademarks of Hewlett-Packard Company and may be

registered in some jurisdictions.

The Type 1 processor resident in Monotype Imaging's UFST product is under license from Electronics For Imaging, Inc. All other trademarks are the property of their respective

LICENSE INFORMATION

Information on the Software License for This Product

Software composition

The software included in this product is comprised of various software components whose individual copyrights are held by SHARP or by third parties.

Software developed by SHARP and open source software

The copyrights for the software components and various relevant documents included with this product that were developed or written by SHARP are owned by SHARP and are protected by the Copyright Act, international treaties, and other relevant laws. This product also makes use of freely distributed software and software components whose copyrights are held by third parties. These include software components covered by a GNU General Public License (hereafter GPL), a GNU Lesser General Public License (hereafter LGPL) or other license agreement.

Obtaining source code

Some of the open source software licensors require the distributor to provide the source code with the executable software components. GPL and LGPL include similar requirements. For information on obtaining the source code for the open source software and for obtaining the GPL, LGPL, and other license agreement information, visit the following website:

http://sharp-world.com/products/copier/source/download/index.html

We are unable to answer any questions about the source code for the open source software. The source code for the software components whose copyrights are held by SHARP is not distributed.

Software Copyrights

Copyright (c) 2000 Carnegie Mellon University. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1.Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2.Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- 3.The name "Carnegie Mellon University" must not be used to endorse or promote products derived from this software without prior written permission. For permission or any other legal details, please contact Office of Technology Transfer Carnegie Mellon University 5000 Forbes Avenue Pittsburgh, PA 15213-3890 (412) 268-4387, fax: (412) 268-7395 tech-transfer@andrew.cmu.edu
- 4.Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by Computing Services at Carnegie Mellon University (http://www.cmu.edu/computing/)."

CARNEGIE MELLON UNIVERSITY DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL CARNEGIE MELLON UNIVERSITY BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Copyright (c) 1995 - 2008 Kungliga Tekniska Högskolan (Royal Institute of Technology, Stockholm, Sweden). All rights reserved.

All rights reserved. Export of this software from the United States of America may require a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

WITHIN THAT CONSTRAINT, permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of M.I.T. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Furthermore if you modify this software you must label your software as modified software and not distribute it in such a fashion that it might be confused with the original MIT software. M.I.T. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

THIS SOFTWARE IS PROVIDED "**AS IS**" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Individual source code files are copyright MIT, Cygnus Support, OpenVision, Oracle, Sun Soft, FundsXpress, and others.

Project Athena, Athena, Athena MUSE, Discuss, Hesiod, Kerberos, Moira, and Zephyr are trademarks of the Massachusetts Institute of Technology (MIT). No commercial use of these trademarks may be made without prior written permission of MIT.

"Commercial use" means use of a name in a product or other for-profit manner. It does NOT prevent a commercial firm from referring to the MIT trademarks in order to convey information (although in doing so, recognition of their trademark status should be given).

OpenSSL License

Copyright (c) 1998-2004 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1.Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2.Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- 3.All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)"
- 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
- 5.Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
- 6.Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)"

THIS SOFTWARE IS PROVIDED BY THE OPENSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tipi@cryptsoft.com).

Original SSLeay License

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com). The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA,lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1.Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
- 2.Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- 3.All advertising materials mentioning features or use of this software must display the following acknowledgement: "This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)" The word 'cryptographic' can be left out if the rouines from the library being used are not cryptographic related :-).
- 4.If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tih@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version orderivative of this code cannot be changed. i.e. this code cannot simply becopied and put under another distribution licence [including the GNU Public Licence.]

D3DES License

Copyright (c) 1988,1989,1990,1991,1992 by Richard Outerbridge. (GEnie : OUTER; CIS : [71755,204]) Graven Imagery, 1992.

GNU GENERAL PUBLIC LICENSE Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

- 2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
 - a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
 - b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
 - c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same

sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

- 3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:
 - a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
 - b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
 - c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

- 4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.
- 5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.
- 6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You

may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

- 8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
- 9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO

THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.> Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'. This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989 Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the

library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

- 2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
 - a) The modified work must itself be a software library.
 - b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

- 7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:
 - a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
 - b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.
- 8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.
- 9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.
- 10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.
- 11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

- 12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
- 13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

- 15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.
- 16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY

YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.> Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990 Ty Coon, President of Vice

That's all there is to it!

GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. http://fsf.org/ Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps:

(1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section
- 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.

d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its

Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
 - d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
 - e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits

relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see http://www.gnu.org/licenses/.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

This program comes with ABSOLUTELY NO WARRANTY; for details type 'show w'.

This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary.

For more information on this, and how to apply and follow the GNU GPL, see http://www.gnu.org/licenses/.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read http://www.gnu.org/philosophy/why-not-lgpl.html.

	lihtiff	
	1101111	
Copyright (c) 1988-1997 Sam Leffler		

Copyright (c) 1988-1997 Sam Lenier Copyright (c) 1991-1997 Silicon Graphics, Inc.

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that (i) the above copyright notices and this permission notice appear in all copies of the software and related documentation, and (ii) the names of Sam Leffler and Silicon Graphics may not be used in any advertising or publicity relating to the software without the specific, prior written permission of Sam Leffler and Silicon Graphics.

THE SOFTWARE IS PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL SAM LEFFLER OR SILICON GRAPHICS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER OR NOT ADVISED OF THE POSSIBILITY OF DAMAGE, AND ON ANY THEORY OF LIABILITY, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

-----libjpeg-------libjpeg-------

This software is based in part on the work of the Independent JPEG Group.

SOFTWARE LICENSE

PLEASE READ THIS LICENSE CAREFULLY BEFORE USING THE SOFTWARE. BY USING THE SOFTWARE, YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS LICENSE.

1. License

The application, demonstration, system and other software accompanying this License, whether on disk, in read only memory, or on any other media (the "Software") and related documentation are licensed to you by SHARP. You own the disk on which the Software is recorded but SHARP and/or SHARP's Licensors retain title to the Software and related documentation. This License allows you to use the Software on one or more computers connected to a single printer and make one copy of the Software in machine-readable form for backup purposes only. You must reproduce on such copy the SHARP copyright notice, the copyright notice of SHARP's Licensors and any other proprietary legends of SHARP and/or its Licensors that were on the original copy of the Software. You may also transfer all your license rights in the Software, the backup copy of the Software, the related documentation and a copy of this License to another party, provided the other party reads and agrees to the terms and conditions of this License.

2. Restrictions

The Software contains copyrighted material, trade secrets and other proprietary material which is owned by SHARP and/or its Licensors and in order to protect them you may not decompile, reverse engineer, disassemble or otherwise reduce the Software to a human-perceivable form. You may not modify, network, rent, lease, loan, distribute or create derivative works based upon the Software in whole or in part. You may not electronically transmit the Software from one computer to another or over a network.

3. Termination

This license is effective until terminated. You may terminate this License at any time by destroying the Software and related documentation and all copies thereof. This License will terminate immediately without notice from SHARP and/or SHARP's Licensors if you fail to comply with any provision of this License. Upon termination you must destroy the Software and related documentation and all copies thereof.

4. Export Law Assurances

You agree and certify that neither the Software nor any other technical data received from SHARP, nor the direct product thereof, will be exported outside the United States except as authorized and as permitted by the laws and regulations of the United States. If the Software has been rightfully obtained by you outside of the United States, you agree that you will not re-export the Software nor any other technical data received from SHARP, nor the direct product thereof, except as permitted by the laws and regulations of the United states and the laws and the regulation of the jurisdiction in which you obtained the Software.

5. Government End Users

If you are acquiring the Software on behalf of any unit or agency of the United States Government, the following provisions apply. The Government agrees:

- (i) if the Software is supplied to the Department of Defense (DoD), the Software is classified as "Commercial Computer Software" and the Government is acquiring only "restricted rights" in the Software and its documentation as that term is defined in Clause 252.227-7013 (c)(1) (Oct., 1988) of the DFARS; and
- (ii) if the Software is supplied to any unit or agency of the United States Government other than DoD, the Software is classified as "Commercial" that term is defined at 48 C.F.R. 2.101 and as "Commercial Computer Software" that term is defined in 48 C.F.R. 12.212, and the Government's rights in the Software and its documentation will be as defined in Clause 52.227-19 (c)(2) of the FAR or, in the case of NASA, in Clause 18-52.227-86 (d) of the NASA Supplement to the FAR.

6. Limited Warranty on Media.

SHARP warrants the disks on which the Software is recorded to be free from defects in materials and workmanship under normal use for a period of ninety (90) days from the date of purchase as evidenced by a copy of the receipt. The entire liability of SHARP and/or its Licensors and your exclusive remedy will be replacement of the disk which fails to meet the limited warranty provided by this Clause 6. A disk will be replaced when it is returned to SHARP or a SHARP authorized representative with a copy of the receipt. SHARP will have no responsibility to replace a disk damaged by accident, abuse or misapplication.

ANY IMPLIED WARRANTIES ON THE DISKS, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO NINETY (90) DAYS FROM THE DATE OF DELIVERY. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION.

7. Disclaimer of Warranty on Software

You expressly acknowledge and agree that use of the Software is at your sole risk. The Software and related documentation are provided "AS IS" and without warranty of any kind and SHARP and SHARP's Licensor(s) (for the purpose of provisions 6 and 7, SHARP and SHARP's Licensor(s) shall be collectively referred to as "SHARP") EXPRESSLY DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SHARP DOES NOT WARRANT THAT THE FUNCTIONS CONTAINED IN THE SOFTWARE WILL MEET YOUR REQUIREMENTS. OR THAT THE OPERATION OF THE SOFTWARE WILL BE UNINTERRUPTED OR ERROR-FREE, OR THAT DEFECTS IN THE SOFTWARE WILL BE CORRECTED. FURTHERMORE, SHARP DOES NOT WARRANT OR MAKE ANY REPRESENTATIONS REGARDING THE USE OR THE RESULTS OF THE USE OF THE SOFTWARE OR RELATED DOCUMENTATION IN TERMS OF THEIR CORRECTNESS, ACCURACY, RELIABILITY, OR OTHERWISE. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY SHARP OR A SHARP AUTHORIZED REPRESENTATIVE SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS WARRANTY. SHOULD THE SOFTWARE PROVE DEFECTIVE, YOU (AND NOT SHARP OR A SHARP AUTHORIZED REPRESENTATIVE) ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION, SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU.

8. Limitation of Liability

UNDER NO CIRCUMSTANCES INCLUDING NEGLIGENCE, SHALL SHARP BE LIABLE FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES THAT RESULT FROM THE USE OR INABILITY TO USE THE SOFTWARE OR RELATED DOCUMENTATION, EVEN IF SHARP OR A SHARP AUTHORIZED REPRESENTATIVE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME JURISDICTIONS DO NOT ALLOW THE LIMITATION OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

In no event shall SHARP's total liability to you for all damages, losses, and causes of action (whether in contract, tort (including negligence) or otherwise) exceed the amount paid by you for the Software.

9. Controlling Law and Severability

For a portion of the Software related with Apple Macintosh and Microsoft Windows, this license shall be governed by and construed in accordance with the laws of the state of California and Washington, respectively. If for any reason a court of competent jurisdiction finds any provision of this License, or portion thereof, to be unenforceable, that provision of the License shall be enforced to the maximum extent permissible so as to effect the intent of the parties, and the remainder of this License shall continue in full force and effect.

10. Complete Agreement

This License constitutes the entire agreement between the parties with respect to the use of the Software and related documentation, and supersedes all prior or contemporaneous understandings or agreements, written or oral, regarding such subject matter. No amendment to or modification of this License will be binding unless in writing and signed by a duly authorized representative of SHARP.

