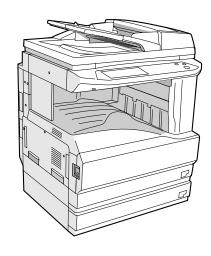




DIGITAL MULTIFUNCTIONAL SYSTEM

OPERATION MANUAL (for copier)

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	CORDS oss or theft, record and retain for reference the per located on the back of the unit.
Model Number	
Serial Number	
Date of Purchase	
Place of Purchase	
Authorized Sharp Co	opier
Authorized orialp of	

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

- Money
- Stamps
- Bonds
- Stocks
- Bank drafts

- Checks
- Passports
- Driver's licenses

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CAUTIONS

Follow the cautions below when using this machine.

CAUTIONS ON USING THE MACHINE

▲ Warning:

- The fusing area is hot. Exercise care in this area when removing misfed paper.
- Do not look directly at the light source. Doing so may damage your eyes.

(!) Caution:

- Do not switch the machine rapidly on and off. After turning the machine off, wait 10 to 15 seconds before turning it back on.
- Machine power must be turned off before installing any supplies.
- Place the machine on a firm, level surface.
- Do not install the machine in a humid or dusty location.
- When the machine is not used for a long time, for example, during prolonged holidays, turn the power switch off and remove the power cord from the outlet.
- When moving the machine, be sure to turn the power switch off and remove the power cord from the outlet.
- Do not cover the machine with a dust cover, cloth or plastic film while the power is on. Doing so may prevent heat dissipation, damaging the machine.
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous laser radiation exposure.
- The socket-outlet should be installed near the machine and should be easily accessible.

IMPORTANT POINTS WHEN SELECTING AN INSTALLATION SITE

Improper installation may damage the machine. Please note the following during initial installation and whenever the machine is moved.



If the machine is moved from a cool place to a warm place, condensation may form inside the machine. Operation in this condition will cause poor copy quality and malfunctions. Leave the machine at room temperature for at least 2 hours before use.

Do not install your machine in areas that are:

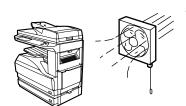
damp, humid, or very dusty



· exposed to direct sunlight



 poorly ventilated



 subject to extreme temperature or humidity changes, e.g., near an air conditioner or heater.



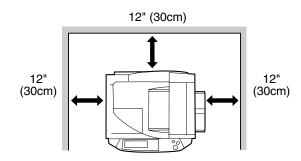
The machine should be installed near an accessible power outlet for easy connection and disconnection.

Be sure to connect the power cord only to a power outlet that meets the specified voltage and current requirements. Also make certain the outlet is properly grounded.



Connect the machine to a power outlet which is not used for other electric appliances. If a lighting fixture is connected to the same outlet, the light may flicker.

Be sure to allow the required space around the machine for servicing and proper ventilation.



A small amount of ozone is produced within the machine during operation.

The emission level is insufficient to cause any health hazard.

Note:

The present recommended long term exposure limit for ozone is 0.1 ppm (0.2 mg/m³) calculated as an 8 hr. time-weighted average concentration.

However, since the small amount that is emitted may have an objectionable odor, it is advisable to place the machine in a ventilated area.

CAUTIONS ON HANDLING THE MACHINE

Observe the following precautions when handling the machine to maintain top performance.

Do not drop the machine, subject it to shock or strike it against any object.

Store spare toner cartridges in a cool dry place without removing from the package before use.

• If they are exposed to direct sunlight or excessive heat, poor copies may result.

Do not touch the photoconductive drum (green portion).

• Scratches or smudges on the drum will cause dirty copies.

Safety precautions:

This Digital Copier is rated Class I and complies with 21 CFR 1040.10 and 1040.11 of the CDRH standards. This means that the machine does not produce hazardous laser radiation. For your safety, observe the precautions below.

- Do not remove the cabinet, operation panel or any other covers.
- The machine's exterior covers contain several safety interlock switches. Do not bypass any safety interlock by inserting wedges or other items into switch slots.

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ENVIRONMENTAL INFORMATION



As an ENERGY STAR® Partner, SHARP has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.



The Environmental Choice Program guidelines are applied to the products only in Canada. The products that meet the Environmental Choice Program guidelines carry the logo shown to the left. The products without the logo may not meet the Environmental Choice Program guidelines.

"BATTERY DISPOSAL"

THIS MACHINE CONTAINS MANGANESE DIOXIDE BATTERY WHICH MUST BE DISPOSED OF PROPERLY. CONTACT YOUR SHARP DEALER OR SERVICER FOR INSTRUCTIONS.

This product utilizes tin-lead solder, and a fluorescent lamp containing a small amount of mercury.

Disposal of these materials may be regulated due to environmental considerations.

For disposal or recycling information, please contact your local authorities or the Electronics Industries Alliance: www.eia.org

USING THE MANUAL

This machine has been designed to provide convenient copying features in a minimum amount of office space and with maximum operational ease. To get full use of all machine features, be sure to familiarize yourself with this manual and the machine. For quick reference during machine use, keep this manual in a handy location.

ABOUT THE OPERATION MANUALS

The operation manuals for the machine are as follows:

Operation Manual for copier (this manual)

This manual contains explanations of the product and procedures for using the machine as a copier.

Online manual (for printer)

This manual is on the CD-ROM, and explains the procedures for using the machine as a printer, network printer, and network scanner.

Software setup guide (for printer)

This manual contains instructions for installing the software that allows the machine to be used with your computer and procedures for establishing initial printer settings.

Operation manual (for network scanner) (When the network scanner is installed.)

This manual contains explanations of the product and procedures for using the machine as a network scanner.

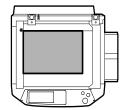
Key operator's guide

This explains key operator programs for machine management and copier related functions.

Key operator programs for the fax functions are explained in the operation manual for facsimile.

THE MEANING OF "R" IN ORIGINAL AND PAPER SIZE INDICATIONS

An "R" appearing at the end of an original or paper size (5-1/2" x 8-1/2"R, 8-1/2" x 11"R, etc.) indicates that the original or paper is oriented horizontally as shown below.



<Horizontal (Landscape) orientation>

Sizes that can be placed only in the horizontal (landscape) orientation (8-1/2" x 14", 11" x 17"), do not contain the "R" in their size indication.

CONVENTIONS USED IN THIS MANUAL



Warns that injury may result if the contents of the warning are not properly followed.



Cautions that damage to the machine or one of its components may result if the contents of the caution are not properly followed.

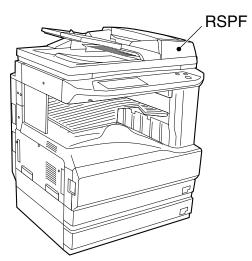


Notes provide useful information on the specifications, functions, performance, and operation of the machine.

Explanation of words and illustration

- This operation manual refers to the Reversing Single Pass Feeder as the "RSPF".
- The illustrations in this manual show the AR-M237/AR-M277 with the optional job separator tray kit (AR-TR3) installed.

The appearance of your machine may be different depending on the model and options installed, however, the basic operations are the same.



• For peripheral devices that can be installed, see "PERIPHERAL DEVICES" (p.76).

MAIN FEATURES

High-speed laser copying

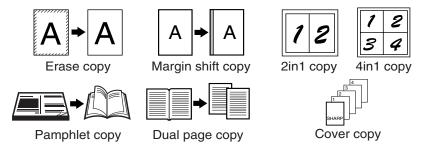
- First-copy time*1 at 600 dpi*2 is only 4.8 seconds.
- Copying speed is 23 copies/min. (AR-M237) or 27 copies/min. (AR-M277) at 600 dpi (not in the super photo mode). This is ideal for business use and provides a big boost to workplace productivity.
 - *1 First-Copy time may vary depending on the power-supply voltage, ambient temperature, and other operating conditions.
 - *2 "dpi" ("dots per inch") is unit that is used to measure resolution. Resolution indicates how much detail can be reproduced in a printed or scanned image.

High-quality digital image

- High-quality copying at 600 dpi or 1200 dpi (super photo mode) is performed.
- In addition to automatic exposure adjustment, four original type modes are available: "TEXT mode" for text-only
 originals, "TEXT/PHOTO mode" for mixed text and photo originals, "PHOTO mode" for photos, and "SUPER
 PHOTO mode" for high-quality reproduction of photos. The exposure can be manually adjusted to 5 levels in each
 mode.

Enhanced copying features

- Zoom copies can be made from 25% to 400% in increments of 1%.
- Continuous copying of up to 999 copies is possible.
- Automatic two-sided copying can be performed.
- Useful special features such as erase, margin shift, 2 in 1 and 4 in 1, pamphlet copy, dual page copy and cover copy are available.



Key operator programs allow the setting or modification of functions to meet your specific needs. The key operator
programs can also be used to enable audit mode, which allows the machine administrator to control use of the
machine.

Black and white LCD touch panel makes it easy to operate the machine

• Employing a backlit black and white LCD display, the touch panel provides step-by-step guidance for each function of the machine. The touch panel even provides instructions for removing paper misfeeds and other problems that occur.

Optional features

- An optional finisher allows automatic stapling of up to 30 sheets.
- This machine can be used as a network printer if the optional printer expansion kit is installed.
- This machine can be used as a facsimile machine if the optional facsimile expansion kit is installed.
- This machine can be used as a network scanner if the optional network scanner expansion kit is installed.

Environment and people friendly design

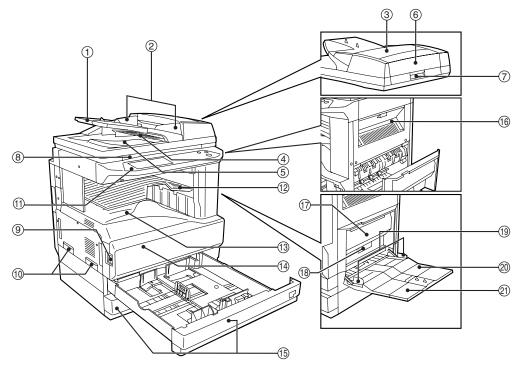
- Preheat and auto power shut-off modes are provided to reduce power consumption when the machine is not in use.
- A universal design has been implemented in the product whereby the height of the operation panel and shape of the keys are designed to be useable by as many people as possible.

Chapter 1 BEFORE USING THE MACHINE

This chapter contains basic information that should be read before using the machine.

PART NAMES AND FUNCTIONS

Exterior



Document feeder tray

Place the original(s) that you wish to scan face up here. (p.23)

② Original guides

Adjust to the size of the originals.

3 Document feeder cover

Open to remove misfed originals. (p.65)

4 Reversing tray

Pull out to remove misfed originals. (p.65)

(5) Exit area

Originals exit the machine here after copying.

6 Document transport cover

Open to remove misfed originals. (p.65)

⑦ Document transport cover knob

Pull to open the document transport cover (p.65)

® Document glass

Place an original that you wish to scan face down here. (p.22)

9 Power switch

Press to turn the machine power on and off. (p.13)

(10) Handles

Use to move the machine.

(1) Operation panel

Contains operation keys and the touch panel. (p.10)

② Job separator tray (Upper tray) (optional)

Print jobs and received faxes are delivered to this tray.

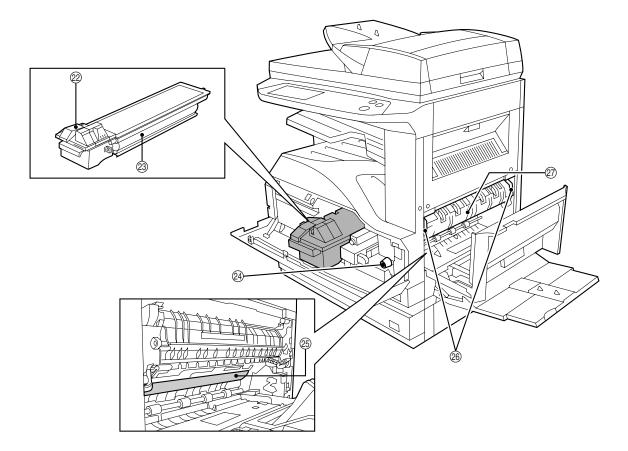
(3) Center tray

Finished copies are delivered to the center tray.

(14) Front cover

Open to remove paper misfeeds and perform machine maintenance. (p.66)

Interior



15 Paper trays

Each tray holds 500 sheets of copy paper. (p.15)

(16) Upper right side cover

Open to remove misfeeds when an optional job separator tray kit or a optional finisher is installed. (p.70)

Side cover

Open to remove misfeeds. (p.66)

(18) Side cover handle

Pull to open the side cover. (p.66)

19 Bypass tray paper guides

Adjust to the width of the paper. (p.18)

② Bypass tray

Regular paper and special paper (such as transparency film) can be fed from the bypass tray. (p.18)

21) Bypass tray extension

Pull out the bypass tray extension before placing paper in the bypass tray. (p.18)

② Toner cartridge lock release lever

Use to unlock the toner cartridge. (p.72)

23 Toner cartridge

Contains toner. (p.72)

Roller rotating knob

Turn to remove misfed paper. (p.66)

② Photoconductive drum

Copy images are formed on the photoconductive drum.



Do not touch the photoconductive drum (green portion). Doing so may damage the drum and cause smudges on copies.

② Fusing unit release levers

To remove a paper misfeed in the fusing unit, push up on these levers and remove the paper. (p.67)



The fusing unit is hot. Do not touch the fusing unit when removing misfed paper. Doing so may cause a burn or injury.

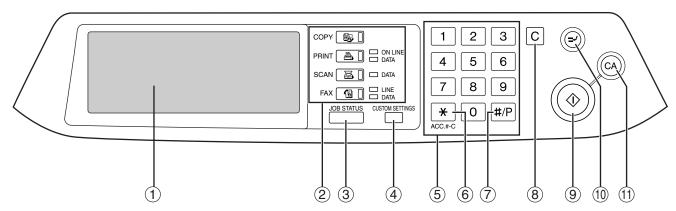
Fusing unit paper guide

Open to remove misfed paper. (p.67)



The model name is on the front cover of the machine.

OPERATION PANEL



1 Touch panel

The machine status, messages and touch keys are displayed on the panel. The display will show the status of printing, copying or network scanning according to the mode that is selected. For details see the next page.

2 Mode select keys and indicators

Use to change modes and the corresponding display on the touch panel.

Press to select copy mode.

[PRINT] key/ONLINE indicator/ DATA indicator

Press to select print mode.

ONLINE indicator

Print jobs can be received when this indicator is lit.

DATA indicator

A print job is in memory. The indicator lights steadily while the job is held in memory, and blinks while the job is printed.

Press to select network scan mode when the network scanner option is installed.

DATA indicator

Lights steadily or blinks while a scanned image is being sent.

(See "Operation manual (for network scanner)".)

[FAX] key/LINE indicator/DATA indicator (When the fax option is installed.)

Press to select fax mode when the fax option is installed.

LINE indicator

this lights up while faxes are being sent or received.

DATA indicator

Blinks when a fax has been received to memory and lights steadily when a fax is waiting in memory for transmission. (See operation manual for facsimile.)

③ [JOB STATUS] key

Press to display the current job status. (p.12)

(4) [CUSTOM SETTINGS] key

Use to adjust various settings of the machine including the contrast of the touch panel and key operator programs. (p.52)

⑤ Numeric keys

Use to enter numeric values for various settings.

⑥ [ACC.#-C] key (※)

When auditing mode is enabled, press this key after finishing a job to return the machine to account number entry standby.

⑦ [#/P] key (#/P)

Use this key to execute a job program in copy mode.

The key is also used to dial in fax mode.

(CLEAR) key (C)

Press to clear a copy number setting or cancel a job.

(9) [START] key ((4))

Press in copy mode, scanner mode, or fax mode to begin copying, network scanning, or faxing. This key blinks when auto power shut mode has activated. Press the key to return to normal operation.

(□) [INTERRUPT] key (□)

Use to perform an interrupt copy job. (p.34)

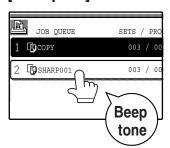
(1) [CLEAR ALL] key ((GA))

Resets the settings to the initial settings.

TOUCH PANEL

Using the touch panel

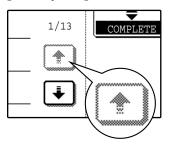
[Example 1]



Items on the touch panel are selected by touching the key associated with the item. A beep will sound to confirm that the item was selected and the key will be highlighted.

* A double-beep is sounded when an invalid key is touched.

[Example 2]



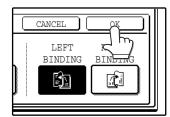
Keys which are grayed out cannot be selected.

The confirmation beeps can be disabled in the key operator programs. (See "Key operator's guide".)

The touch panel screens shown in this manual are printed images and may differ from the actual screens.

Selecting a function

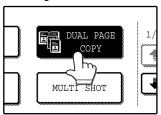
[Example 1]

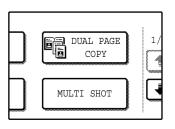


Items which are highlighted at the time a screen appears are already selected and will take effect when the [OK] key is touched.

[Example 2]

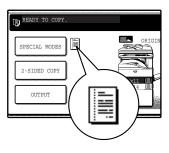
If you need to cancel a selection, simply press the key once again so that it is not highlighted.





The key is no longer highlighted and the selection is canceled.

[Example 3]



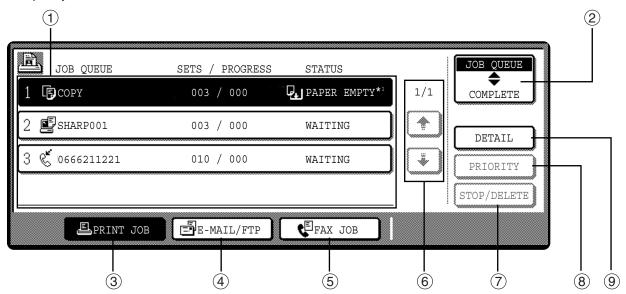
When the machine is used in copy mode or fax mode and a special mode is selected, a icon representing the feature will appear on the touch panel. If this icon is touched, the setting screen of the function (or a menu screen) will appear, allowing the settings to be checked, adjusted, or canceled.

Job status screen (common to copy, print, network scan and fax)

This screen appears when the [JOB STATUS] key on the operation panel is pressed.

A job list showing the current job and the stored jobs or a list showing completed jobs can be displayed.

The contents of jobs can be viewed and jobs can be deleted from the queue. The following screen shows the job queue for print jobs.



1 Job list

Shows stored jobs and the job currently being executed. Touch one of keys ③ to ⑤ in the above illustration to select the type of job. The icon next to each job name indicates the mode of the job as follows:





Fax mode (Send jobs)



Fax mode (Receive jobs)

The jobs in the job list appear in the form of keys. To give priority to a job or pause or delete a job, touch the key of the job and then use the key described in ⑦ or ⑧.

*1:"PAPER EMPTY" in the job status display

"PAPER EMPTY" in the job status display indicates that the machine is out of the specified size of paper. Add the specified size of paper. If the specified size of paper is not available and you are in printer mode, another size of paper can be loaded in the bypass tray to allow printing to take place. (See the "Online manual".)

② Mode switching keys

Use to select the job list mode: "JOB QUEUE" (Stored/currently executing jobs) or "COMPLETE" (Finished jobs).

"JOB QUEUE":

Shows jobs that have been stored and the job that is currently being executed.

"COMPLETE":

Shows the jobs that have been finished. Note that copy jobs do not appear in this list.

If the power is turned off, or if auto power shut-off mode activates when there are no jobs, the jobs in the "COMPLETE" list will be erased.

③ [PRINT JOB] key

Use to view the list of output jobs for all modes (print, copy, and fax).

(4) [E-MAIL/FTP] key

Displays a network scanner job (When the network scanner function is installed.).

(5) [FAX JOB] key

This displays stored fax jobs and the fax job currently being executed (When the fax option is installed.).

⑥ Display switching keys

Use to change the page of the displayed job list.

⑦ [STOP/DELETE] key

Use to pause or delete a job currently being executed, or to delete a stored job. Copy jobs and received faxes cannot be paused or deleted with this key. Copy jobs can be canceled by pressing the [CLEAR] key () or [CLEAR ALL] key ().

(8) [PRIORITY] key

Touch this key after selecting a stored job in this [JOB QUEUE] list to print the job ahead of the other jobs.

9 [DETAIL] key

Shows information on the selected job. This cannot be used for a received fax.

POWER ON AND OFF

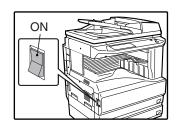
The power switch is located on the left side of the machine.



When the power switch is turned on, the machine starts up in the previously used mode. The following explanations assume that the previously used mode was copy mode.

POWER ON

Turn the power switch to the "ON" position.

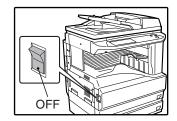


- When the power switch is turned to the "ON" position, the message "WARMING UP. A COPYING JOB CAN BE SET NOW." will appear in the message display and the machine will start warming up. When "READY TO COPY." appears, the machine is ready to copy. Copy settings can be selected during warm-up.
- If auditing mode is enabled, "ENTER YOUR ACCOUNT NUMBER." will appear. When a valid account number is entered, the account status will appear on the main screen for several seconds. Then copying can be performed. (See "Key operator's guide".)

POWER OFF

When the machine is not used for a long time, be sure to turn it off.

Make sure that the machine is not in operation and then turn the power switch to the "OFF" position.



If the power switch is turned off while the machine is in operation, a misfeed may occur and the job that was in progress will be canceled.



If the fax option is installed, be sure to keep the power turned on. Faxes cannot be received when the power is turned off.

INITIAL SETTINGS

The machine reverts to the initial settings when it is first turned on, when the [CLEAR ALL] key () is pressed, or the preset "auto clear time" elapses after the last copy is made in any mode. When the machine reverts to the initial settings, all settings and functions selected to that point are canceled. The auto clear time can be changed in the key operator programs. (See the "Key operator's guide".)

The initial settings that appear in the display are shown below.



Functions and settings are explained based on the above screen as applicable.

Copy ratio: 100%, Exposure: Automatic, Copy quantity: 0, Automatic two-sided: One side to One side,

Auto paper selection: On,

Paper tray: Upper paper tray (at power on, the previously selected paper tray will again be selected.)



The initial settings can be changed in the key operator programs. (See the "Key operator's guide".) For the initial settings (initial screen) of printer, fax, and scanner modes, see the operation manuals of those modes.

POWER SAVE MODES

The machine has two power save modes to reduce overall power consumption and thereby reduce the cost of operation. These modes help conserve natural resources and reduce environmental pollution. The two power save modes are "Preheat mode" and "Auto power shut-off mode".

The time settings for each mode can be changed in the key operator programs. (See the "Key operator's guide".)

Preheat mode

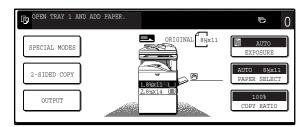
When the set time elapses, the temperature of the fusing unit is automatically lowered to reduce power consumption while on standby. The factory default setting is 15 minutes. To return to normal operation, touch any key on the operation panel. To make a copy when the machine is in this mode, simply select the desired copy selections and then press the [START] key (③).

Auto power shut-off mode

When the set time elapses, the power to the fusing unit automatically turns off to reduce power consumption (This is based on the guidelines of the International Energy Star Program.). The factory default setting is 60 minutes. When the machine enters this mode, the touch panel screen turns off and only the [START] key ($\textcircled{\textcircled{0}}$) blinks. To return to normal operation, press the [START] key ($\textcircled{\textcircled{0}}$). To copy after warm-up starts, make desired copy selections and press the [START] key ($\textcircled{\textcircled{0}}$).

LOADING PAPER

When a tray runs out of paper, a message appears in the touch panel. Load paper in the tray.



PAPER

The specifications for the types and sizes of paper that can be loaded in the paper trays are shown below. For best results, use only SHARP recommended paper.

Tray No.	Paper tray type	Paper type		Size	Weight	Capacity
1	Upper paper tray*1	Plain paper		5-1/2" x 8-1/2" to	15 lbs. to 28 lbs.	500 sheets*4
2	Lower paper tray*2	Letterhead paper Recycled paper		11" x 17" (A5 to A3)	(56 g/m ² to 105 g/m ²)	
3	500-sheet paper feed unit/ Upper paper tray of 2 x 500-sheet paper feed unit	Color paper				
4	Lower paper tray of 2 x 500-sheet paper feed unit					
	Bypass tray	Plain paper Letterhead paper Recycled paper Color paper		5-1/2" x 8-1/2" to 11" x 17" (A6 to A3)	15 lbs. to 34.5 lbs. (56 g/m² to 128 g/m²) *3	100 sheets*4
		Thin paper			14 lbs. to 15 lbs. (52 g/m² to 56 g/m²)	100 sheets
		Heavy paper Labels			Max. 54 lbs. (200 g/m²)	30 sheets
						40 sheets
		Transparency film				40 sheets
		Envelope	International DL (110 x 220 mm) International C5 (162 x 229 mm) Commercial 10 (4-1/8" x 9-1/2")			5 sheets

^{*1 5-1/2&}quot; x 8-1/2" (A5) size paper can only be loaded in tray 1 and the bypass tray.

^{*2} B5 size paper cannot be loaded in tray 2 (However, B5R paper can be loaded.).

 $^{^{*3}}$ When loading paper larger than 8-1/2" x 11" (A4) size, do not use paper of weight greater than 28 lbs. (105 g/m²).

^{*4} The number of sheets of paper which can be loaded varies depending on the weight of the paper.

Special papers

Follow these guidelines when using special papers.

Envelopes

Do not use the following envelopes (Misfeeds will occur.).

- Envelopes with metal tabs, clasps, strings, holes, or windows.
- Envelopes with rough fibers, carbon paper, or glossy surfaces.
- Envelopes with two or more flaps.
- Envelopes with tape, film, or paper attached to the flap.
- Envelopes with a fold in the flap.
- Envelopes with glue on the flap to be moistened for sealing.
- Envelopes with labels or stamps.
- · Envelopes that are slightly inflated with air.
- Envelopes with glue protruding from the seal area.
- Envelopes with part of the seal area peeled off.

Letterhead paper

Letterhead paper is paper with information pre-printed at the top such as a company name and address.

SHARP

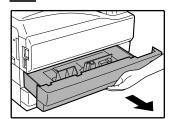
- Use SHARP recommended transparency film and label sheets. Using other than SHARP recommended paper may result in misfeeds or smudges on the output. If other than SHARP recommended media must be used, feed each sheet one at a time using the bypass tray (Do not attempt continuous copying or printing.).
- There are many varieties of special paper available on the market, and some cannot be used with this machine. Before using special paper, contact a SHARP service center.
- Before using other than SHARP recommended paper, make a test copy to see if the paper is suitable.

LOADING PAPER

Make sure that the machine is not copying, printing, or printing a received fax, and then follow these steps to load paper.

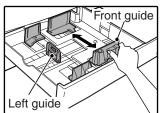
Loading the paper in the paper tray

1 Pull out the paper tray until it stops.

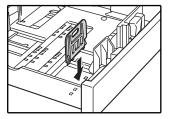


If you are loading the same size of paper as was loaded previously, go to step 4. If you are loading a different size of paper, continue with the following step.

2 Squeeze the lock lever of the front guide and slide the front guide to match the width of the paper.

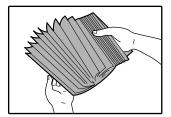


Move the left guide to the appropriate slot as marked on the tray.

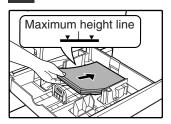


When using 11" x 17" copy paper, store the left guide in the slot at the left front of the paper tray.

4 Fan the copy paper.



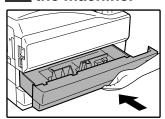
5 Load paper in the tray.



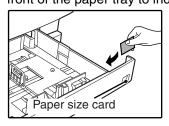


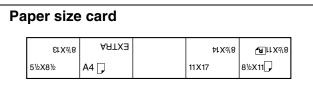
- Load the paper with the print side facing up.
- Insert the paper along the guides.
- The tray holds up to 500 sheets of 21 lb. (80g/m²) bond paper.
- Do not load paper above the maximum height line.
- When adding paper, first remove any paper remaining in the tray, combine it with the paper to be added, and then reload as a single stack.

6 Push the paper tray firmly back into the machine.



If you loaded a different size of paper that was loaded previously, place the appropriate paper size card in the front of the paper tray to indicate the new paper size.



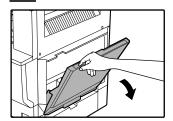


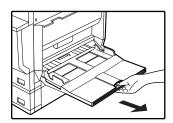


If you loaded a different size of paper that was loaded previously, go to "CHANGING A TRAY'S PAPER TYPE AND PAPER SIZE SETTINGS" (p.19).

Loading paper in the bypass tray

Unfold the bypass tray.

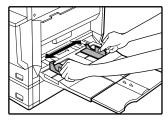




extension.

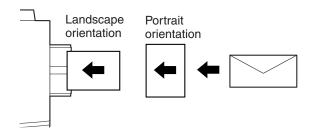
To enable correct detection of the paper size, be sure to pull out the bypass tray

Set the paper guides to the copy paper width.



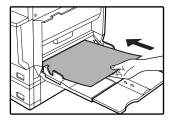
Important points when inserting paper in the bypass tray

- · Be sure to place envelopes horizontally as shown in the following diagram.
- · Load the paper with the print side facing down.



- When loading envelopes, make sure that they are straight and flat and do not have loosely glued construction flaps (not the closure flap).
- When adding paper, first remove any paper remaining in the bypass tray, combine it with the paper to be added, and then reload as a single stack. The paper to be added must be the same size and type as the paper already in the bypass tray.
- Do not use paper that is smaller than the original image. This may cause smudges or unclean images.
- Do not use paper that has already been printed on by a laser printer or plain paper fax machine. This may cause smudges or unclean images.

Insert the copy paper (print side down) all the way into the bypass tray.



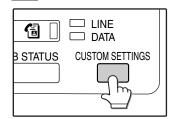
CHANGING A TRAY'S PAPER TYPE AND PAPER SIZE SETTINGS

When you change the paper in a tray, follow the steps below to change the tray's paper type and paper size settings. The settings cannot be changed when operation has stopped because the paper ran out or a misfeed occurred, or when an interrupt copy job is being performed.

Even in copy mode, the settings cannot be changed while a print job or received fax is being printed.

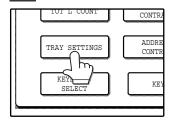


- 5-1/2" x 8-1/2" (A5) size paper can only be set for tray 1.
- B5 size paper cannot be set for tray 2 (However, B5R size paper can be set.).
- Tray settings for trays other than the bypass tray can be prohibited in the key operator programs. (See the "Key operator's guide".)
- Load paper in the tray as explained in "Loading the paper in the paper tray" (p.17).
- 2 Press the [CUSTOM SETTINGS] key.



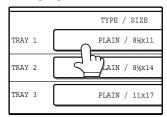
The custom settings menu screen will appear.

3 Touch the [TRAY SETTINGS] key.



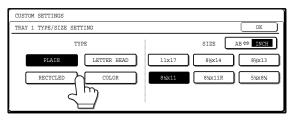
The tray settings screen will appear.

4 Select the tray in which you loaded paper.



For the tray numbers, see "PAPER" (p.15). If the desired tray does not appear in the display, use the *\(\psi\) key or *\(\psi\) key to scroll until it appears.

Select the size and type of paper that is loaded in the tray.



The currently selected paper type will be highlighted.

- To change the paper type selection, touch the appropriate type key.
- To change the paper size selection, touch the appropriate size key.
- To change the displayed size selections to AB sizes, touch [AB ⇔ INCH].
- 6 Touch the [OK] key.
- A message appears prompting you to check the paper in the tray. Check the paper and then touch the [OK] key.

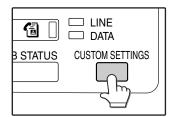
You will return to the tray settings screen.

Setting the paper type in the bypass tray

Use either of the following two methods to set the bypass tray's paper type setting.

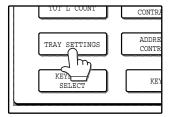
From the [CUSTOM SETTINGS] key

- Load paper in the bypass tray as explained in "Loading paper in the bypass tray" (p.18).
- **2** Press the [CUSTOM SETTINGS] key.



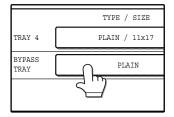
The custom settings menu screen will appear.

3 Touch the [TRAY SETTINGS] key.

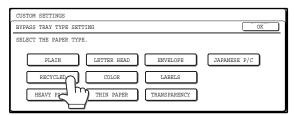


The tray settings screen will appear.

4 Touch the [BYPASS TRAY] key.



5 Select the type of paper that is loaded in the tray.



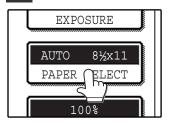
"JAPANESE P/C" refers to official postcards used in Japan.

6 Touch the [OK] key.

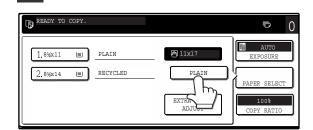
You will return to the tray settings screen.

From the [PAPER SELECT] key

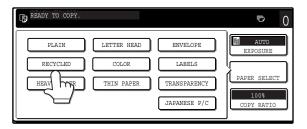
- Load paper in the bypass tray as explained in "Loading paper in the bypass tray" (p.18).
- 2 Touch the [PAPER SELECT] key.



3 Touch the paper type selection key.



4 Select the paper type.



"JAPANESE P/C" refers to official postcards used in Japan.

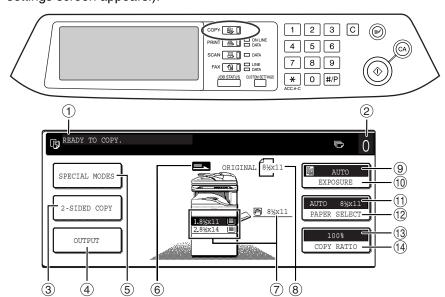
5 Touch the [PAPER SELECT] key.

You will return to the main screen of copy mode.

This chapter explains basic copying functions such as normal copying, reduction or enlargement, and exposure adjustment.

MAIN SCREEN OF COPY MODE

The main screen of copy mode shows messages, keys, and settings that are used for copying. Touch a key to make a selection. The main screen of copy mode appears when the [COPY] key is pressed (Except when the custom settings screen appears.).



The screen will vary depending on the equipment installed.

Message display

Status messages are displayed here.

2 Copy number display

Displays the selected number of copies before the [START] key (3) is pressed or the number of remaining copies after the [START] key (3) is pressed. A single copy can be made when "0" is displayed.

③ [2-SIDED COPY] key (p.27)

Touch to open the duplex copy mode setting screen.

(4) [OUTPUT] key (p.35)

Touch to select sort, group, staple sort, and other output settings.

(5) [SPECIAL MODES] key (p.39)

Touch to open the special modes selection screen.

6 Original feed display

This appears when an original is placed in the RSPF.

7 Paper size display

This shows the location of the paper trays, the size of the paper in the trays. $\|\|\|$ indicates whether or not there is paper. A paper tray can be touched to change the paper tray selection.

(8) Original size display

Displays the original size only when an original is placed for copying.

Exposure display

Displays the icon of the selected exposure type and the exposure scale.

(1) [EXPOSURE] key (p.29)

Use this key to adjust the copy exposure.

1) Paper select display

Displays the selected paper size. When auto paper select mode is selected, "AUTO" appears when auto paper select mode is selected.

(2) [PAPER SELECT] key (p.22, p.26)

Use this key to select the paper size.

(3) Copy ratio display

Displays the selected copy ratio.

(4) [COPY RATIO] key (p.31)

Use this key to select the copy ratio.

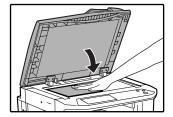
NORMAL COPYING

COPYING FROM THE DOCUMENT GLASS



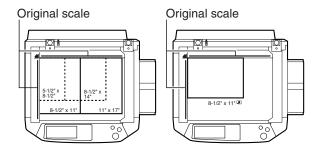
If "AUDITING MODE" (p.56) has been enabled, enter your 5-digit account number.

1 Open the RSPF and place the original face down on the document glass.

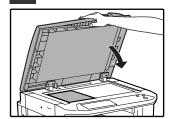


[How to place the original]

Align the corner or the original with the tip of the arrow () at the left rear corner of the glass as shown in the illustration.



2 Close the RSPF.

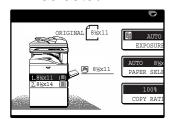


The original size appears in the touch panel.



If the original size is not automatically detected, manually set the original size. (p.47)

Make sure that the same size of paper as the original is automatically selected.



The selected tray is highlighted. If the tray contains a different size of paper than the original, "LOAD xxxx PAPER." will appear.

Even if the message above is displayed, copying can be performed using the selected paper tray.

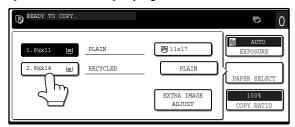


- To load paper, see "LOADING PAPER" (p.15). If you change the paper size in the tray, you will also need to change the tray's paper size and paper type settings. (p.19)
- The paper types for the auto paper selection function can be selected, or the function disabled, in the key operator programs. (See the "Key operator's guide".)

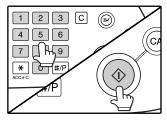
Manually selecting the paper size (paper tray)

If auto paper selection is disabled in the key operator programs, or if you wish to use a different size of paper than the original, touch the [PAPER SELECT] key and select the paper tray with the desired paper size. (The selected paper will be highlighted and the paper selecting screen will close.)

To close the screen without selecting a paper size, touch the [PAPER SELECT] key again.



4 Select the number of copies and any other desired copy settings, and then press the [START] key (③).



- The number in the copy quantity display will decrease by 1 each time a copy is made.
- If you are only making a single copy, the copy can be made with the copy number display showing "0".
- To clear a mistake, press the [CLEAR] key (©).



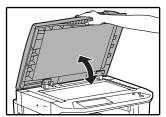
- Press the [CLEAR] key (C) to stop copying in the middle of a run.
- To repeat the same copy sequence for a different original, simply replace the original and press the [START] key (③).
- If copying stops because the tray has run out of paper, you can resume copying by touching the [PAPER SELECT] key and selecting the bypass tray or a paper tray that has the same size and type of paper loaded in the same orientation.

COPYING FROM THE RSPF



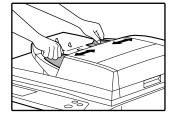
- If "AUDITING MODE" (p.56) is enabled, enter your 5-digit account number.
- If the RSPF is disabled in the key operator programs, the RSPF cannot be used. See the "Key operator's guide".

1 Make sure that an original has not been left on the document glass and then close the RSPF.



If an original remains on the document glass after a copy was made, "REMOVE THE ORIGINAL FROM THE DOCUMENT GLASS." will appear in the touch panel.

Adjust the original guides to the size of the original.



Place the originals face up in the document feeder tray.

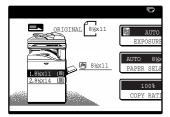


Insert the originals all the way into the feed slot. The original size appears in the touch panel.



- Up to 100 pages (24 lbs. (90 g/m²)) can be inserted at once.
- If the original size is not automatically detected, manually set the original size. (p.47)

4 Make sure that the same size of paper as the original is selected.



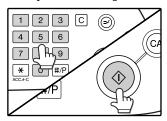
The selected tray is highlighted. If none of the trays have the same size of paper as the original, "LOAD xxxx PAPER." will appear.

Even if the message above is displayed, copying can be performed using the selected paper tray.

MNote

- To load paper, see "LOADING PAPER" (p.15). If you change the paper size in the tray, you will also need to change the tray's paper size and paper type settings. (p.19)
- If needed, manually select the paper tray that has the desired size of paper as explained on page 22.
- The paper types for the auto paper selection function can be selected, or the function disabled, in the key operator programs. (See the "Key operator's guide".)
- If the original size is larger than the paper size, the result of copying from the document glass may differ from the result of copying from the RSPF. (p.22)

5 Select the number of copies and any other desired copy settings, and then press the [START] key (⊚).



- The number in the copy quantity display will decrease by 1 each time a copy is made.
- If you are only making a single copy, the copy can be made with the copy number display showing "0".
- To clear a mistake, press the [CLEAR] key (C).



- Press the [CLEAR] key (C) to stop copying in the middle of a run.
- If copying stops because the tray has run out of paper, you can resume copying by touching the [PAPER SELECT] key and selecting the bypass tray or a paper tray that has the same size and type of paper loaded in the same orientation.

Stream feeding mode

If stream feeding mode is enabled in the key operator programs, "SET ORIGINALS FOR STREAM FEEDING." will appear in the touch panel for approximately 5 seconds after the originals are fed. Any new originals placed in the RSPF while this message appears will be fed and copied automatically.

Copying a large number of originals

Job Build mode is useful when you need to copy more originals that can be placed in the RSPF at once. For information on Job Build mode, see "JOB BUILD MODE" (p.45).

POINTS TO NOTE WHEN MAKING COPIES

Document glass and RSPF

- Paper in a different orientation from the original can be selected if the auto paper select or auto image function has been selected. In this case, the image of the original will be rotated.
- When copying a book or an original that has been folded or crumpled, press down gently on the RSPF. This will reduce shadow lines caused by uneven contact between the original and the document glass.
- When the center tray counter function is enabled, the number of pages that can be delivered to the output tray is limited to 500 (A4 and 8-1/2" x 11" sizes only; the limit for all other sizes is 300 pages.). When the offset function is used, the limit is approximately 300 pages. When the limit is reached, copying stops and the [START] key (③) light turns off. Remove the copies from the center tray and then press the [START] key (④) to resume copying. The center tray counter function can be disabled in the key operator programs. (See the "Key operator's guide".)

Originals that can be used in the RSPF

A maximum of 100 sheet originals of equal size (8-1/2" x 11", 24 lbs. (90g/m²)) can be placed in the RSPF. Originals of different length can be placed together in the RSPF as long the widths are equal; however, some copy functions may not operate correctly.

Acceptable originals

Originals of size 5-1/2" x 8-1/2" to 11" x 17" having a weight of 9 lbs. to 34 lbs. $(35g/m^2 \text{ to } 128g/m^2)$ or 14 lbs. to 28 lbs. $(52g/m^2 \text{ to } 105g/m^2)$ for two-sided originals can be used.

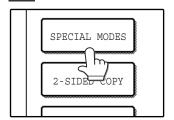
Other considerations

- Use originals that are within the specified size and weight ranges. Originals outside the specified ranges may cause misfeeds.
- Make sure that there are no paper clips or staples on the original.
- If an original has damp spots from correction fluid or ink, or glue from pasteups, be sure it has dried completely before using it to make a copy. Otherwise the interior of the RSPF or the document glass may become soiled.
- The following originals cannot be used. These may cause misfeeds, smudging, and unclear images.
 - Transparencies, tracing paper, other transparent or translucent paper, photographs
 - Carbon paper
 - Thermal paper
 - Originals that are creased, folded, or torn
 - Glued originals, cut-out originals
 - · Originals with binder holes
 - Originals printed using an ink ribbon (thermal transfer printing), originals printed on thermal transfer paper

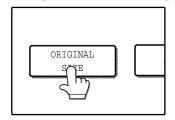
Copying originals of mixed length (Mixed feeding)

When using the RSPF, originals of mixed length can be fed together as long as the width of the originals is the same. To copy originals of mixed length, follow these steps:

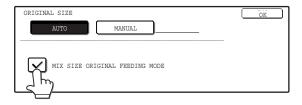
1 Touch the [SPECIAL MODES] key.



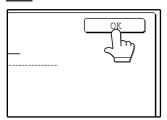
2 Touch the → key and then the [ORIGINAL SIZE] key.



3 Select the "MIX SIZE ORIGINAL FEEDING MODE" checkbox.



4 Touch the [OK] key.



The setting is entered and you return to the main screen.

The original size icon changes to () to indicate that mixed feeding is selected.

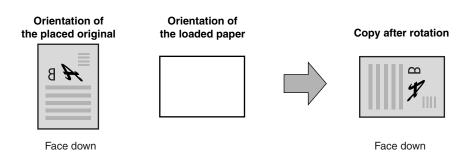


When copying is started in mixed feeding mode, all originals are scanned before copying begins.

Automatic copy image rotation (Rotation copying)

If the originals are placed in a different orientation than the copy paper, the original image will be automatically rotated 90° . (When an image is rotated, a message will be displayed.) If a function is selected that is not suitable for rotation, such as enlarging the copy to greater than 8-1/2" x 11" (A4) size or margin shift copy, rotation will not be possible.

[Example]

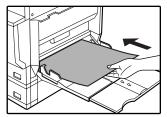


• This function operates in both the auto paper select and auto image modes. Rotation copying can be disabled in the key operator programs. (See the "Key operator's guide".)

BYPASS FEED (special paper)

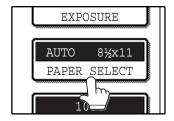
The bypass tray must be used to feed special papers such as transparency film and labels. The bypass tray can also be used to feed standard copy paper.

- Place the original(s). (p.22, p.23)
- Insert the paper (print face down) all the way into the bypass tray.



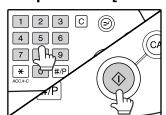
For paper that can be used in the bypass tray, see "PAPER" (p.15). To load paper, see "Loading paper in the bypass tray" (p.18).

Touch the [PAPER SELECT] key or the tray in the image of the machine in the touch panel, and select the bypass tray.



Set the type of paper that you loaded in the bypass tray. (p.20)

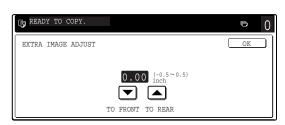
4. Select the number of copies and any other desired copy settings, and then press the [START] key (③).



Shifting the starting position of copying

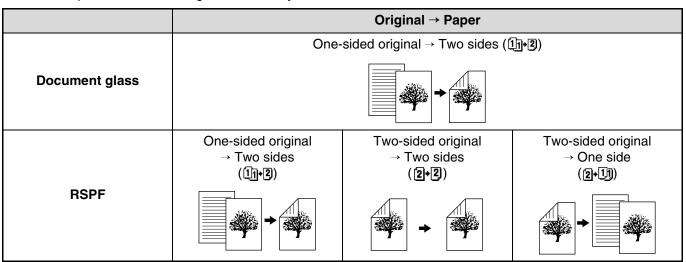
When copying on a special size of paper in the bypass tray, the starting position of printing can be shifted vertically for fine adjustment of the image position. To adjust the starting position of printing, follow the steps below. This function can only be used when feeding special sizes of paper from the bypass tray.

- 1 Touch the [PAPER SELECT] key and then touch the [EXTRA IMAGE ADJUST] key on the bypass tray.
- 2 Use the ▼ key or ▲ key to adjust the printing position, and then touch the [OK] key.
- The position can be adjusted from -0.5 inch to +0.5 inch in 0.02 inch increments.
- When a setting from -0.5 inch to -0.02 inch is selected, the starting
 position of printing is moved to front from the standard position. When
 a setting from +0.02 inch to +0.5 inch is selected, the starting position
 of printing is moved to rear.



AUTOMATIC TWO-SIDED COPYING

Two originals can be automatically copied onto both sides of a single sheet of paper. When the RSPF is used, two-sided copies of two-sided originals can easily be made.

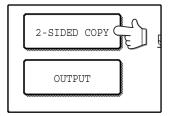




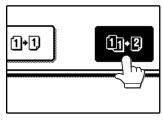
- Paper sizes that can be used are 8-1/2" x 11", 8-1/2" x 11"R, 8-1/2" x 13", 8-1/2" x 14" and 11" x 17" (A5, B5, B5R, A4, A4R, B4, and A3).
- When making two-sided copies on letterhead paper, place the side with the letterhead face down if using a tray, or face up if using the bypass tray (This is the opposite of normal.).
- Automatic two-sided copying is not possible on thick paper, thin paper, labels, transparency film, envelopes, and other special types of paper.
- If automatic two-sided copying is performed using super photo mode, the memory may become full ("MEMORY IS FULL, SELECT ANOTHER EXPOSURE MODE." will appear.). Touch the [OK] key to cancel automatic two-sided copying, set the exposure setting to other than super photo mode, and select automatic two-sided copying once again.
- Automatic two-sided copying can be disabled in the key operator programs. (See the "Key operator's guide".)
- When dual page copy (p.43) is selected, two-sided original to two sides or two-sided original to one side cannot be used.

USING THE DOCUMENT GLASS

- Place the original on the document glass. (p.22)
- 2 Touch the [2-SIDED COPY] key.



Touch the [One-sided to two-sided copy] key.



Touch the [BINDING CHANGE] key when making the tablet binding, or when making automatic two-sided copies of a one-sided 11" x 17" or 8-1/2" x 14" size portrait original, touch the [BINDING CHANGE] key.

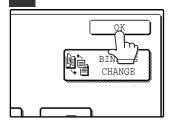
Portrait-oriented original (11" x 17" or 8-1/2" x 14" size)

Before [BINDING CHANGE] After [BINDING CHANGE]

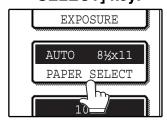




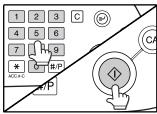
4 Touch the [OK] key.



Make sure that a suitable paper size is automatically selected, or select another size using the [PAPER SELECT] key.

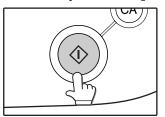


Select the number of copies and any other desired copy settings, and then press the [START] key (③).



The original for the front side is scanned.

Remove the first original and then place the original for the back side on the document glass. Close the RSPF and then press the [START] key (③).



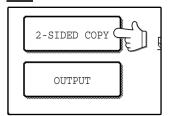
To cancel automatic two-sided copying, press the [CLEAR] key (C).



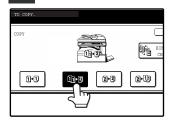
When making two-sided copies of an odd number of originals, touch the [READ-END] key after scanning the last original.

USING THE RSPF

- Place the original(s) in the document feeder tray. (p.23)
- 2 Touch the [2-SIDED COPY] key.



3 Touch the desired copy mode.



Touch the [BINDING CHANGE] key when making the tablet binding, or when making automatic two-sided copies of a one-sided 11" x 17" or 8-1/2" x 14" size portrait original, touch the [BINDING CHANGE] key.

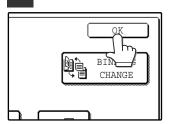
Portrait-oriented original (11" x 17" or 8-1/2" x 14" size)

Before [BINDING CHANGE] After [BINDING CHANGE]

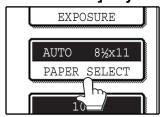


A B E F G H

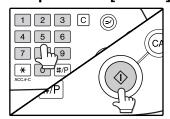
4 Touch the [OK] key.



Make sure that a suitable paper size is automatically selected, or select another size using the [PAPER SELECT] key.



Select the number of copies and any other desired copy settings, and then press the [START] key (③).

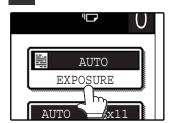


EXPOSURE ADJUSTMENT

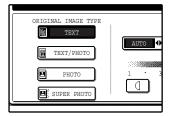
SELECTING THE ORIGINAL IMAGE TYPE AND MANUALLY ADJUSTING THE EXPOSURE

[AUTO] is selected by default for automatic adjustment of the image according to the original. If you wish to specify the original image type or manually adjust the exposure, place the original in the RSPF or on the document glass, check the paper size, and then perform the following steps.

1 Touch the [EXPOSURE] key.



2 Select [TEXT], [TEXT/PHOTO], [PHOTO], or [SUPER PHOTO] as appropriate for the original.

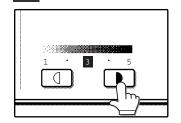


Selecting the original image type

• Four original image type selections are available.

TEXT	Use for regular text, blueprints, and light pencil writing.	
TEXT/PHOTO	Use for mixed text/photo originals and printed photos.	
РНОТО	Use for photos and when you desire clearer halftones.	
SUPER PHOTO	Use to copy photos at a high resolution of 1200 dpi.	

 Automatic exposure adjustment can only be selected when [TEXT] is selected for the original image type. 3 Manually adjust the copy exposure.



If [TEXT] was selected for the original image type, touch the [AUTO ♠ MANUAL] key to select [MANUAL] and then adjust the copy exposure.

Touch the key to make darker copies. Touch the key to make lighter copies.



Exposure value guidelines

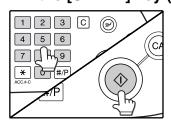
- 1 2 Dark originals like newspapers
- 3 Normal originals
- 4 5 Light colored text or text written in pencil

To change back to automatic exposure adjustment, follow these steps:

- 1 Touch the [EXPOSURE] key.
- 2 Touch the [TEXT] key. The [AUTO ♠ MANUAL] key appears when [TEXT] is selected.
- 3 Touch the [AUTO ♠ MANUAL] key so that [AUTO] is highlighted.
- 4 Touch the [OK] key.
- 4 Touch the [OK] key.

You will return to the main screen of copy mode.

Check the paper size, select the number of copies and any other desired copy settings, and then press the [START] key (③).



REDUCTION/ENLARGEMENT/ZOOM

There are three ways to enlarge and reduce copies:

- Specifying a ratio with the reduce key, enlarge key, or zoom key......MANUAL RATIO SELECTION (p.31)

Ratios that can be selected vary depending on the following conditions:

Original type setting	Original position	Selectable ratios
Other than augus photo made	Document glass	25 to 400%
Other than super photo mode	RSPF	50 to 200%
Super photo mode	Document glass	50 to 200%
Super photo mode	RSPF	50 to 141%

AUTOMATIC RATIO SELECTION

The ratio is automatically selected based on the original size and paper size.

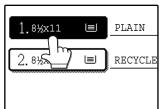
1 Place the original(s). (p.22, p.23)

The original size appears in the touch panel.



- If the original size does not appear in the touch panel, specify the original size manually. (p.47)
- Automatic ratio selection is not possible if the original or paper is a non-standard size.

2 Touch the [PAPER SELECT] key and then select the desired paper size.

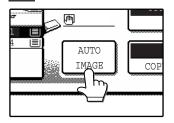


The selected key is highlighted and the paper selection screen closes.



If paper of the desired size is not loaded in any of the trays, load paper of the required size in a paper tray or in the bypass tray. (p.19)

3 Touch the [AUTO IMAGE] key.

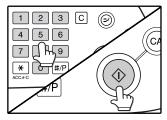


A suitable ratio is selected based on the original size and selected paper size. (The ratio appears in the touch panel.)



- When automatic ratio selection is selected, the [AUTO IMAGE] key is highlighted in the main screen.
- If the original and paper are in different orientations, the image is automatically rotated to match the paper orientation (for paper sizes 8-1/2" x 11" (A4) or less).
- Rotation of the image can be disabled in the key operator programs. (See the "Key operator's guide".)
- If "IMAGE IS LARGER THAN THE COPY PAPER." appears in the touch panel, part of the image will be cut off in the copy.

4 Select the number of copies and any other desired settings, and then press the [START] key (③).



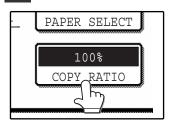


To cancel automatic ratio selection, touch the [AUTO IMAGE] key.

MANUAL RATIO SELECTION

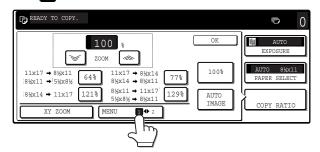
There are four preset reduction ratios and four preset enlargement ratios. In addition, the [ZOOM] keys (,) can be pressed to select the ratio in increments of 1%.

- 1 Place the original(s). (p.22, p.23)
- 2 Touch the [COPY RATIO] key.



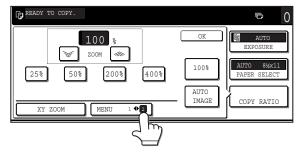
3 Use the [MENU] key to select menu [1] or menu [2] for copy ratio selection.

Menu



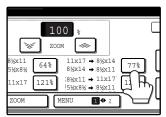
Preset reduction keys: 64%, 77%
Preset enlargement keys: 121%, 129%
[100%] key 100%

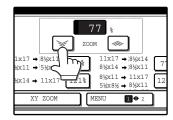
Menu 2



Preset reduction keys: 25%, 50%
Preset enlargement keys: 200%, 400%
[100%] key 100%

4 Use the enlargement key or reduction key, or the [ZOOM] key (☑/☑) to set the desired copy ratio.

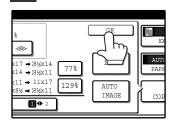




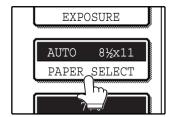


- Touch a reduction or enlargement key to set the approximate ratio, then touch the [] key to decrease the ratio or the [] key to increase the ratio.
- If "IMAGE IS LARGER THAN THE COPY PAPER." appears, the selected copy ratio is too large for the paper size. However, if you press the [START] key (③), a copy will be made.

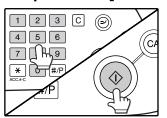
5 Touch the [OK] key.



Make sure that a suitable paper size is automatically selected, or select another size using the [PAPER SELECT] key.



If AUTO PAPER SELECT is enabled, the appropriate copy paper size is automatically selected based on the original size and selected copy ratios. Select the number of copies and any other desired copy settings, and then press the [START] key (③).



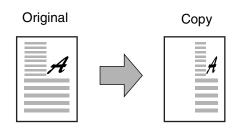


To return the ratio setting to 100%, touch the [COPY RATIO] key to display the ratio menu and then touch the [100%] key. (p.31, step 3)

SELECTING THE VERTICAL AND HORIZONTAL COPY RATIOS SEPARATELY (XY ZOOM copying)

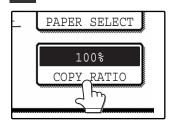
The XY ZOOM feature allows the horizontal and vertical copy ratios to be changed independently.

Example: Vertical ratio set to 100% and horizontal ratio set to 50%.

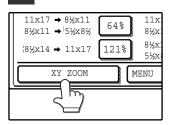




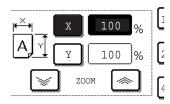
- The AUTO IMAGE/MULTI SHOT/PAMPHLET COPY feature cannot be used in combination with the XY ZOOM function.
- To use the XY ZOOM feature with the DUAL PAGE COPY feature (p.43), set the DUAL PAGE COPY feature first and then the XY ZOOM feature.
- 1 Place the original(s). (p.22, p.23)
- 2 Touch the [COPY RATIO] key.



3 Touch the [XY ZOOM] key.

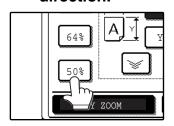


4 Touch the [X] key.

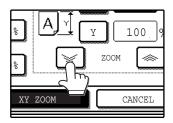


The [X] key is selected (highlighted) by default, so there is normally no need to perform this step (Go to step 5.). If the [X] key is not highlighted, perform this step.

Use the reduction, enlargement, and [ZOOM] keys () to change the copy ratio in the horizontal (X) direction.



A fixed ratio key will not become highlighted when touched.



The [ZOOM] keys

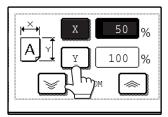
(/) can be used to change the ratio in increments of 1%

Touch the key to increase the ratio, or the key to decrease the ratio. Continuing to touch a [ZOOM] key (/) makes the ratio change faster.

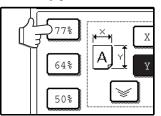


Touch a reduction or enlargement key to set the approximate ratio, then touch the [] key to decrease the ratio or the [] key to increase the ratio.

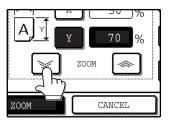
6 Touch the [Y] key.



7 Use the reduction, enlargement, and [ZOOM] keys (☑/☑) to change the copy ratio in the vertical (Y) direction.

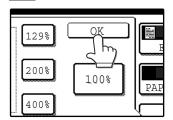


A fixed ratio key will not become highlighted when touched.

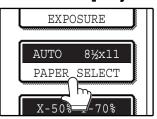


If you need to readjust the horizontal ratio, touch the [X] key again.

8 Touch the [OK] key.



9 Make sure that a suitable paper size is automatically selected, or select another size using the [PAPER SELECT] key.



If AUTO PAPER SELECT is enabled, the appropriate copy paper size is automatically selected based on the original size and selected copy ratios.

Select the number of copies and any other desired copy settings, and then press the [START] key (③).



To cancel this function, touch the [CANCEL] key in the XY ZOOM screen.

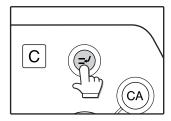
INTERRUPTING A COPY RUN

A copy run can be temporarily interrupted to allow another copy job to be performed. When the other job is finished, the copy run will resume using the original copy settings.



Automatic two-sided copying, sort/group copying, staple sort, pamphlet copy, job build, cover copy, job build, job programs, or multi shot copying cannot be used for interrupt copying.

1 Press the [INTERRUPT] key (⊚) to interrupt the copy run.

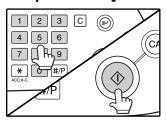


The [INTERRUPT] key (⊕) blinks until the machine is ready for the interrupt job, after which it lights steadily.

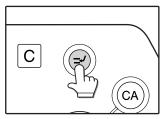
If you decide to cancel the interrupt job while selecting settings, press the [INTERRUPT] key (⊚).



- If audit mode is enabled, a message will appear prompting you to enter your account number. Enter your account number with the numeric keys. The copies that you make will be added to your account's count.
- If an original is being scanned when the [INTERRUPT] key (②) is pressed, the interrupt job will begin after the original is scanned. If a copy is being printed, the interrupt job will begin after the copy is printed.
- Remove the previous original(s) and place the original(s) of the interrupt copy job. (p.22, p.23)
- Select the number of copies and any other desired copy settings, and then press the [START] key (③).



The interrupt copies will be offset from the previous copies. (Offset function, p.35) 4 When the copy job is finished, press the [INTERRUPT] key (②) and remove the original(s).



Feplace the previous original(s) and press the [START] key (⊚) to resume copying.

Replace only the originals that have not yet been scanned.

Chapter 3 CONVENIENT COPY FUNCTIONS

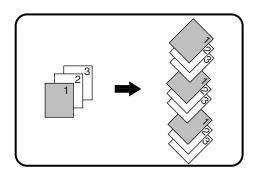
This chapter explains special finishing functions and other convenient functions.

COPY FINISHING FUNCTIONS

This section explains the sort, group, and offset functions, as well as the staple sort function which is used to staple output collated with the sort function when a finisher is installed.

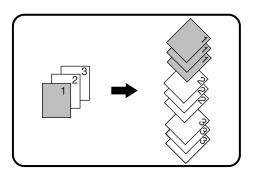
SORT COPY

This function is used to collate sets of copies. The copies are delivered to the center tray, and to other trays when a job separator tray or finisher is installed.



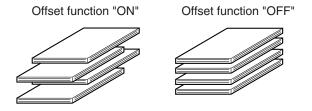
GROUP COPY

This function is used to group sets of copies by page. The copies are delivered to the center tray, and to other trays when a job separator tray or finisher is installed.



OFFSET FUNCTION

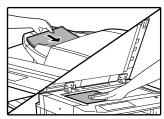
Each set of copies is offset from the previous set in the output tray, making it easy to distinguish one set from another. (The offset function can be used in the center tray or in the offset tray of the finisher.)



Enabling the offset function

The offset function operates when a checkmark appears in the [OFFSET] checkbox, which is displayed by touching the [OUTPUT] key. (If a checkmark doesn't appear, touch the checkbox.)

Place the originals in the RSPF or on the document glass. (p.22, p.23)



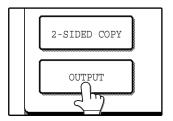
If originals are placed in the RSPF, the sort function is automatically selected. (To disable this function, see the "Key operator's guide".)

Example: 5 sets of copies or 5 copies per page of 3 originals

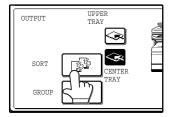
Originals



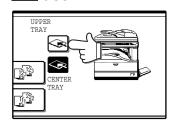
2 Touch the [OUTPUT] key.



3 Touch the [SORT] or [GROUP] key.



4 Touch the output tray that you wish to use.

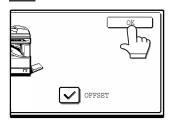


The output tray can only be selected when a job separator or finisher is installed.

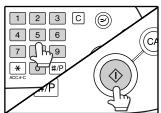
MNote

To enable the offset function (p.35), touch the [OFFSET] checkbox so that a checkmark appears. To disable the offset function, touch the [OFFSET] checkbox again to clear the checkmark.

5 Touch the [OK] key.



Select the number of copies and any other desired copy settings, and then press the [START] key (③).

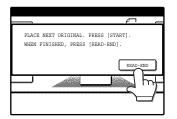


[When using the RSPF:]

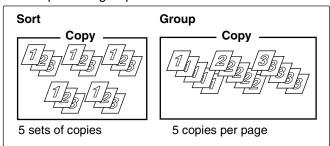
Copying will start after all the originals are scanned.

[When using the document glass:]

Replace the original with the next original and press the [START] key (③). Repeat this step until all originals have been scanned, and then touch the [READ-END] key.



The copies are grouped as follows:



If the memory becomes full while scanning the originals, "MEMORY IS FULL. PRESS [START] TO BEGIN COPYING OR [CA] TO CANCEL." will appear. To copy only the originals that have been scanned, press the [START] key (③). To cancel the job, press the [CLEAR ALL] key (④).



The number of originals that can be scanned into memory can be increased by increasing the memory allocation in the key operator programs, or by installing more memory. (See the "Key operator's guide".)

STAPLE SORT (when the finisher (AR-FN5N) is installed)

This function collates the copies, staples each set, and delivers the sets to the offset tray. The staple sort function can only be used when a finisher is installed.

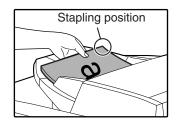
Stapling position	F	Portrait orientation	La	ndscape orientation
Top left corner	Ī .	Available paper sizes: 8-1/2" x 11" (A4 and B5) Stapling capacity: For each size, up to 30 sheets can be stapled.		Available paper sizes: 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11" R, (A3, B4 and A4R) Stapling capacity: For each size, up to 30 sheets can be stapled.

ORIENTATION OF THE ORIGINAL AND STAPLING POSITIONS

If the orientation of the originals does not match that of the copy paper, the images will be rotated. The stapling position varies with the orientation of the original.

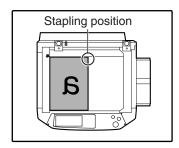
Using the RSPF

Insert the originals face up.

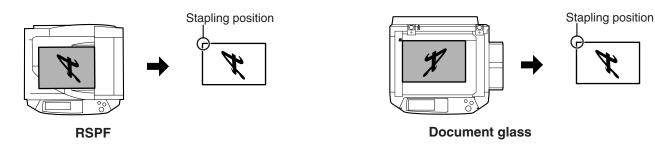


Using the document glass

Place each original face down.



When copying 8-1/2" x 14" or 11" x 17" (B4 or A3) vertically oriented originals, the copies will be stapled at the position shown below.



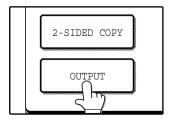


• When using letterhead paper in the staple sort, load the paper with the letterhead to the front or to the right as shown in the diagram.

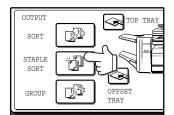


- Different sized originals cannot be copied on the corresponding sizes of paper.
- The staple sort function cannot be used if disabled in the key operator programs. (See the "Key operator's guide".)
- The offset function (p.35) cannot be used.

- Place the original(s). (p.22, p.23)
- 2 Touch the [OUTPUT] key.

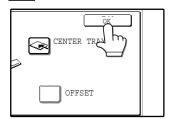


3 Touch the [STAPLE SORT] key.

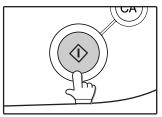


When the [STAPLE SORT] key is selected, the offset tray is automatically selected as the output tray. The top tray and center tray cannot be used.

4 Touch the [OK] key.



Select the number of copies and other copy settings, and then press the [START] key (③).

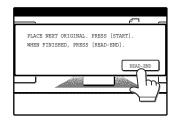


6 [When using the RSPF:]

Copying will start after all originals have been scanned.

[When using the document glass:]

Replace the original with the next original and press the [START] key (③). Repeat this step until all originals have been scanned, and then touch the [READ-END] key.



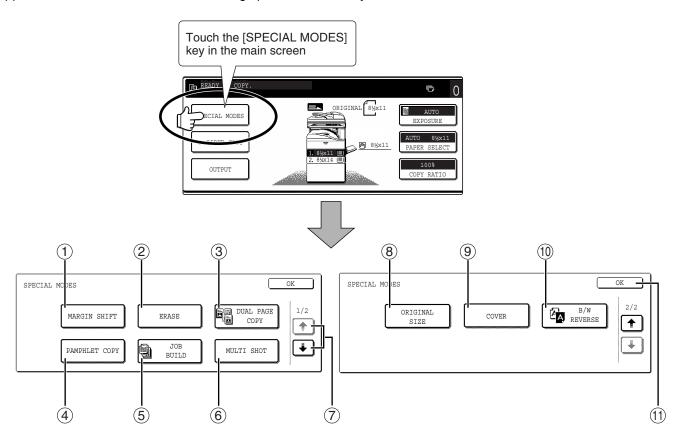
If the memory becomes full while scanning the originals, "MEMORY IS FULL. PRESS [START] TO BEGIN COPYING OR [CA] TO CANCEL." will appear. To copy only the originals that have been scanned, press the [START] key (③). To cancel the job, press the [CLEAR ALL] key (④).



The number of originals that can be scanned into memory can be increased by increasing the memory allocation in the key operator programs, or by installing more memory. (See the "Key operator's guide".)

SPECIAL MODES

When the [SPECIAL MODES] key in the main screen of copy mode is touched, the special modes screen will appear. This screen contains the following special function keys.



① [MARGIN SHIFT] key (p.41)

Use this to shift the image on the copy paper to create binding margins.

② [ERASE] key (p.42)

Use this to erase peripheral shadows that occur when making copies of books and other thick originals.

③ [DUAL PAGE COPY] key (p.43)

Use this to make separate copies of the left and right pages of bound documents.

(4) [PAMPHLET COPY] key (p.44)

The pamphlet copy function is used to arrange copies in the proper order for center-stapling and folding into a booklet. Two original pages are copied onto each side of the paper, such that a total of four pages are copied onto one sheet.

5 [JOB BUILD] key (p.45)

Use this when you need to copy more originals than can be placed in the RSPF at once. This allows you to divide the originals into sets and scan them sequentially in the RSPF.

6 [MULTI SHOT] key (p.46)

The multi shot copy function is used to copy two or four originals onto one sheet of copy paper in any of four layout patterns.

⑦ (♣) key, (♠) key

Use these to change pages in the special functions screen.

® [ORIGINAL SIZE] key (p.47)

Use to manually select the original size. When the original size is selected, the auto ratio select function will automatically select an appropriate ratio based on the paper size.

9 [COVER] key (p.48)

Press this to use a different type of paper for front and back covers (When the RSPF is used.).

(i) [B/W REVERSE] key (p.50)

Use to reverse black and white areas.

(1) [OK] key

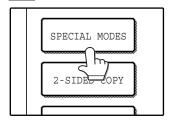
Touch to return to the main screen of the copy mode.



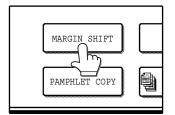
Some functions cannot be used in combination with each other. If a prohibited combination of functions has been selected, a message will appear in the touch panel.

GENERAL PROCEDURE FOR USING THE SPECIAL FUNCTIONS

1 Touch the [SPECIAL MODES] key.



2 Touch the key of the desired special mode.

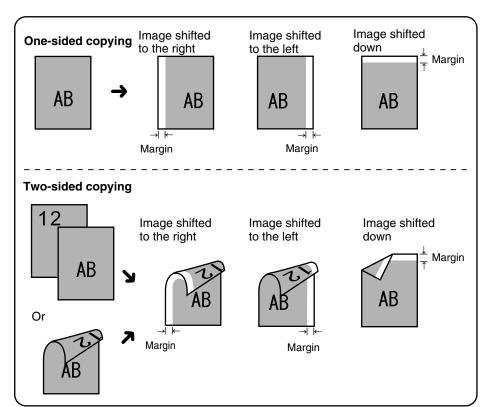


Example: Selecting the margin shift function

Procedures for modes that require further settings are explained starting on the next page.

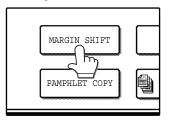
MARGIN SHIFT COPY

The margin shift function is used to automatically shift the text or image on the copy paper approximately 1/2" in its initial setting.



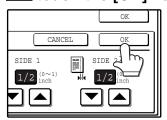
- Right, left or down can be selected for the shift direction as shown in the illustration.
- The shift width (margin) can be set from 0" to 1" in increments of 1/8".
- If [DOWN] key is selected, set the original(s) so that the margin to be increased is set to the rear side of the RSPF or the document glass.

1 Touch the [MARGIN SHIFT] key in the special modes screen.



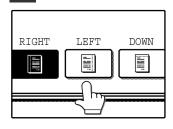
The margin shift setting screen will appear.
The margin shift icon (, etc.) will also appear in the screen to indicate that the function is turned on.

Adjust the shift width as needed and touch the [OK] key.



Use the ▼ and ▲ keys to set the shift width. The shift amount can be set from 0" to 1" in increments of 1/8".

2 Select the shift direction.



Touch the [RIGHT], [LEFT], or [DOWN] key. The selected key will be highlighted.

Touch the [OK] key in the special modes screen.

You will return to the main screen of copy mode.

About the steps that follow

If you are using the document glass, see page 22. If you are using the RSPF, see page 23.

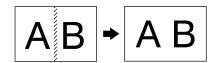


- When margin shift is selected, rotation copying will not function.
- This feature cannot be used with paper that is not a standard size.
- To cancel the margin shift function, touch the [CANCEL] key in the margin shift setting screen. (See the screen of step 3.)

ERASE COPY

The erase function is used to erase the shadow lines on copies that are produced when copying thick originals or books. The erase modes that can be selected are shown below. The erase width is initially set to 1/2".







EDGE ERASE

Eliminates shadow lines around the edges of copies caused when heavy paper or a book is copied.

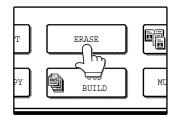
CENTER ERASE

Eliminates shadow lines produced by the bindings of bound documents.

EDGE + CENTER ERASE

Eliminates both the shadow lines around the edges of copies and the shadow at the center.

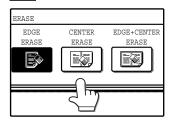
1 Touch the [ERASE] key in the special modes screen.



The erase setting screen will appear.

The erase icon (), etc.) will also appear in the screen to indicate that the function is turned on.

2 Select the desired erase mode.



Select one of the three erase modes. The selected key will be highlighted.

Touch the [OK] key in the special modes screen.

You will return to the main screen of copy mode.

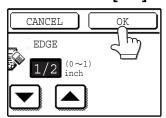
About the steps that follow

If the document glass is being used, see page 22. If the RSPF is being used, see page 23.



- This feature cannot be used with non-standard size originals.
- This feature cannot be selected when mixed feeding (p.25) is used.
- To cancel the erase copy function, touch the [CANCEL] key in the erase setting screen. (See the screen of step 3.)

Adjust the erase width as needed and touch the [OK] key.

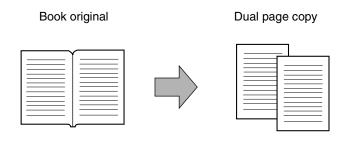


Use the ▼ and ▲ keys to adjust the erase width. The erase width can be set from 0" to 1" in increments of 1/8".

DUAL PAGE COPY

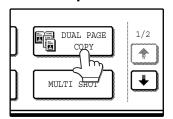
The dual page copy function produces separate copies of two adjoining pages on the document glass. It is especially useful when copying books and other bound documents.

[Example] Copying the right and left pages of a book



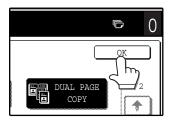
- A reduction setting can be selected when using the dual page copy function, however, an enlargement setting cannot be selected.
- The dual page copy function can only be used when copying from the document glass. The RSPF cannot be used.
- Only 8-1/2" x 11" paper can be used.

1 Touch the [DUAL PAGE COPY] key in the special modes screen.



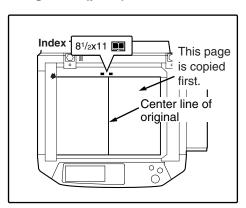
The [DUAL PAGE COPY] key is highlighted to indicate that the function is enabled, and the dual page copy icon (
| will appear in the screen.

2 Touch the [OK] key in the special modes screen.



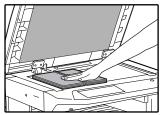
You will return to the main screen of copy mode.

Place the originals on the document glass. (p.22)

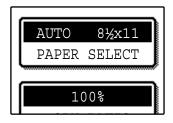


When copying book originals:

When copying a thick book, press down gently on the book to flatten it against the document glass.

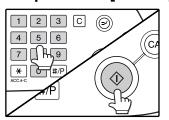


4. Make sure that 8-1/2" x 11" size paper is selected.



If 8-1/2" x 11" size paper is not selected, touch the [PAPER SELECT] key to select 8-1/2" x 11" paper.

5 Select the number of copies and any other desired copy settings, and then press the [START] key (③).





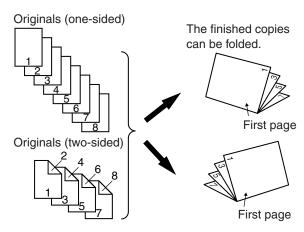
- To cancel the dual page copy function, touch the [DUAL PAGE COPY] key in the special modes screen. (The key will no longer be highlighted.) (See the screen of step 1.)
- To erase shadows caused by the document binding, use the edge erase function (p.42). (Center Erase and Edge + Center Erase cannot be used with the dual page copy function.)

PAMPHLET COPY

The pamphlet copy function is used to arrange copies in the proper order for center-stapling and folding into a booklet. Two original pages are copied onto each side of the copy paper, such that a total of four pages are copied onto each sheet.

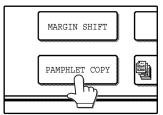
This function is convenient for arranging copies into an attractive booklet or pamphlet.

[Example]: Copying 8 originals with pamphlet copy



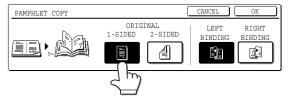
- Scan the originals in order from the first page to the last page. The order of copying will be automatically adjusted by the machine.
- Either left binding (opening from right to left) or right binding (opening from left to right) can be selected.
- Four originals will be copied onto one sheet. Blank pages may be automatically added at the end, depending on the number of the originals.

Touch the [PAMPHLET COPY] key in the special modes menu screen.

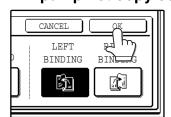


The pamphlet copy setting screen will appear. The pamphlet copy icon (), etc.) will also appear in the upper left corner of the screen to indicate that the function is enabled.

2 Specify whether 1-sided or 2-sided originals will be copied.



3 Select the binding position ([LEFT BINDING] or [RIGHT BINDING]) and then touch the [OK] key in the pamphlet copy setting screen.



You will return to the special modes menu screen.

4. Touch the [OK] key in the special modes screen.

You will return to the main screen of copy mode.

- 5 Place the original(s). (p.22, p.23)
- Make sure that a suitable paper size has been automatically selected.



If the desired copy paper size is not selected, use the [PAPER SELECT] key to select the paper size. After the paper size is selected, touch the [AUTO IMAGE] key. A suitable ratio will be automatically selected.

7 Select the number of copies and any other desired copy settings, and then press the [START] key (③).

[When using the RSPF:]

Copying will start after all originals have been scanned.

[When using the document glass:]

Replace the original with the next original and press the [START] key (). Repeat this step until all originals have been scanned, and then touch the [READ-END] key.

When the pamphlet copy function is selected, two-sided copying will be automatically enabled.



To cancel the pamphlet copy function, touch the [CANCEL] key in the pamphlet copy setting screen. (See the screen of step 2.)

JOB BUILD MODE

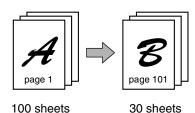
Use this function when you need to copy more originals than can be placed in the RSPF at once. (The maximum number of originals that can be placed in the RSPF at once is 100.)



- If the memory becomes full while scanning the originals, "MEMORY IS FULL. PRESS [START] TO BEGIN COPYING OR [CA] TO CANCEL." will appear. To copy only the originals that have been scanned, press the [START] key (③). To cancel the job, press the [CLEAR ALL] key (△).
- Depending on the content of the originals, the memory may become full before 100 originals have been scanned. In this case, press the [START] key (③) to copy the originals that have been scanned, and then place the originals that weren't scanned in the RSPF once again and repeat the copy procedure.
- To increase the number of originals that can be scanned, install more memory or increase the memory allocation in the key operator programs. (See the "Key operator's guide".)

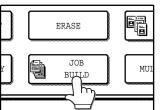
Example: Copying 130 sheets (8-1/2" x 11" size originals)





* Divide the originals into sets so that each set is no more than 100 pages. Scan the sets in order beginning from the first page of set A.

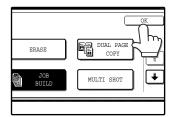
Touch the [JOB BUILD] key in the special modes menu screen.



The [JOB BUILD] key is highlighted.

The job build copy icon () will also appear in the screen to indicate that the function is enabled.

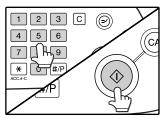
2 Touch the [OK] key in the special modes screen.



You will return to the main screen of copy mode.

Place the original(s) in the RSPF. (p.23)

4. Make sure that a suitable paper size is selected, select the number of copies and any other desired copy settings, and then press the [START] key (③).

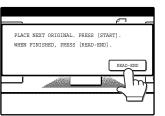


Scanning begins. When scanning of the first set of originals (A in the above example) is finished, insert the second set and press the [START] key (③).

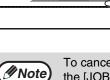
Repeat this step until all the remaining originals (B in the above example) have been scanned.

Remove each scanned set of originals before inserting the next set.

5 Touch the [READ-END] key.



Copying begins.

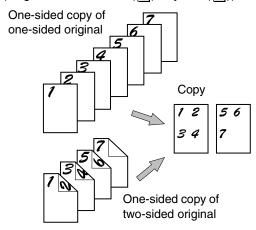


To cancel the job build mode function, touch the [JOB BUILD] key in the special modes screen so that it is no longer highlighted. (See the screen of step 1.)

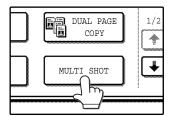
MULTI SHOT COPY

The multi shot copy function is used to copy two or four originals onto one sheet of copy paper in a specified order.

Example: Copying four originals onto one sheet of paper (Page number: 4 in 1 (\square), layout: (\square 3|4))

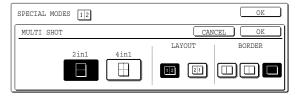


1 Touch the [MULTI SHOT] key in the SPECIAL MODES menu screen.

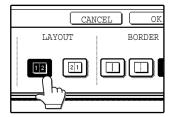


The multi shot copy setting screen will appear. The multi shot copy icon ([12], etc.) will also appear in the screen to indicate that the function is enabled.

2 Select the number of originals to be copied onto one sheet in the multi shot copy selection screen.



3 Select the layout.

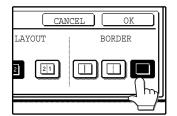


Select the order in which the originals will appear on the copy.

When using the multi shot copy function, place the originals, select the desired paper size, and select the copy mode before selecting the multi shot copy function in the special modes screen.

• When using the multi shot copy function, the appropriate copy ratio will be automatically set based on the original size, paper size, and the number of originals to be copied onto one sheet. The minimum reduction ratio is 25%. (The minimum ratio is 50% when SUPER PHOTO is selected for the original image type in the copy exposure settings or when the RSPF is used.) Depending on the original size, paper size, and the number of originals to be copied onto one sheet, portions of original images may be cut off.

4 Select a borderline setting.



Select [], [], or [].

Touch the [OK] key in the multi shot setting screen.

You will return to the special modes menu screen.

Touch the [OK] key in the special modes menu screen.

You will return to the main screen of copy mode.

- 7 Select the number of copies and any other desired copy settings, and then press the [START] key (⊚).
- [When using the RSPF:]
 Copying will start after all originals have been scanned.

[When using the document glass:]

Replace the original with the next original and press the [START] key (③). Repeat this step until all originals have been scanned, and then touch the [READ-END] key if necessary.

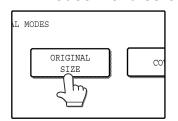


- The images may be rotated depending on the number of originals and the orientation of the originals and copy paper.
- To cancel the multi shot copy function, touch the [CANCEL] key in the multi shot setting screen (the screen of step 2).

ORIGINAL SIZE

If you wish to use the paper other than the automatically selected original size, original size setting is specified by the special modes. The mix feeding setting (p.25) is also selected here.

Touch the key and then touch the [ORIGINAL SIZE] key in the special modes menu screen.



The original size setting screen will appear.

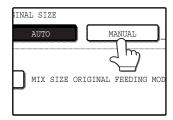
Touch the [OK] key in the special modes menu screen.

You will return to the main screen of the copy mode.

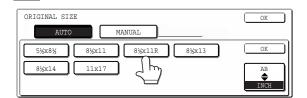


To select mixed feeding, select the "MIX SIZE ORIGINAL FEEDING MODE" checkbox. Mixed feeding is explained on page 25.

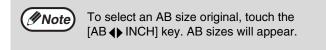
2 Touch the [MANUAL] key.



3 Select the original size.



[MANUAL] key is highlighted and the selected paper size is displayed.



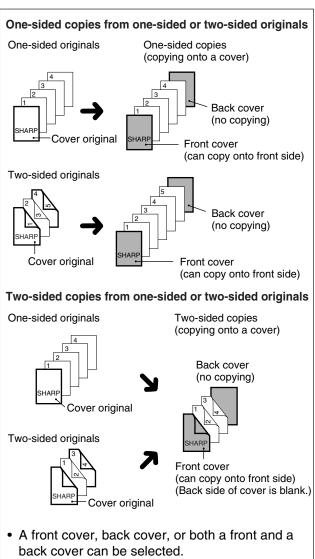
4 Touch the inside [OK] key.

You will return to the special modes menu screen.

COVER COPY

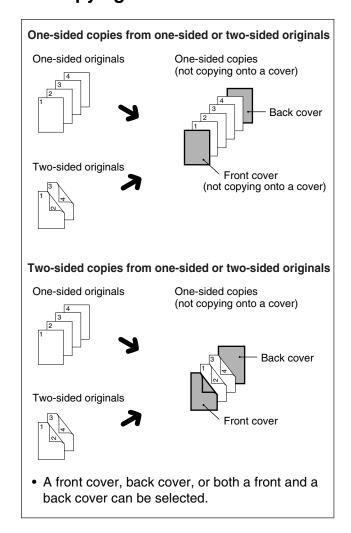
Cover copy mode is used to add a cover to the front or back, or both the front and back, of a multipage document. To use cover copy mode, the RSPF must be used.

Copying onto a cover

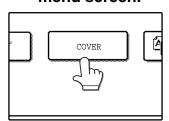


- You can specify whether or not the front cover is copied on.
- Copying is not possible on either side of a back cover.

Not copying onto a cover



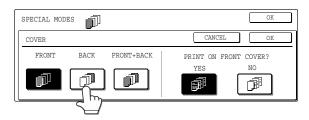
Touch the → key and then touch the [COVER] key in the special modes menu screen.



The cover setting screen will appear.

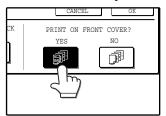
The cover icon (,, etc.) will also appear in the screen to indicate that the function is turned on.

2 Select the cover(s) that you wish to add.



To add only a front cover, touch the [FRONT] key. To add only a back cover, touch the [BACK] key. To add both a front and back cover, touch the [FRONT+BACK] key.

3 Specify whether or not the front cover is to be copied on.



Select [YES] or [NO] in the touch panel. If [YES] is selected, the first page of the document will be copied onto the front cover sheet.

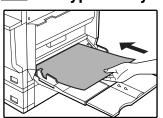
4. Touch the [OK] key in the cover setting screen.

Return to the special modes screen.

Touch the [OK] key in the special modes screen.

You will return to the main screen of copy mode.

6 Load the cover paper to be used into the bypass tray.



Load the same size of paper as the paper to be used for the copy job.

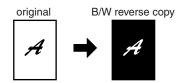
About the steps that follow See page 23.



- It is not possible to copy on the inside of a front cover, nor on either side of a back cover
- Be sure to place the originals in the RSPF.
 The document glass cannot be used for this function.
- During cover copying, stream feeding mode will not function even if enabled in the key operator programs. (See the "Key operator's guide".)
- To cancel the cover copy function, select the cover copy function again and touch the [CANCEL] key. (See the screen of step 2.)

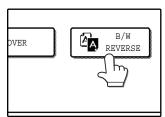
B/W REVERSE COPY

The B/W REVERSE feature is used to reverse black and white in a copy to create a negative image.



When the B/W reverse function is selected, the exposure mode will be automatically set to TEXT mode. Other exposure modes cannot be selected. If B/W reverse is canceled, TEXT mode will not automatically be canceled.

Touch the key and then touch the [B/W REVERSE] key in the special modes menu screen.



The [B/W REVERSE] key is highlighted.
The B/W reverse icon
(() will also appear in the screen to indicate that the function is enabled.

2 Touch the [OK] key in the special modes screen.

You will return to the main screen of copy mode.

About the steps that follow

If the document glass is being used, see page 22. If the RSPF is being used, see page 23.



To cancel the B/W reverse copy function, touch the [B/W REVERSE] key in the special modes screen. (The key will no longer be highlighted.) (See the screen of step 1.)

CUSTOM SETTINGS

The custom settings let you adjust certain features of the machine to better suit your needs. The custom settings include the following settings:

●TOTAL COUNT	This displays the number of pages output by the machine. (p.53)
●DISPLAY CONTRAST	This is used to adjust the contrast of the touch panel. (p.53)
●LIST PRINT*1	This is used to print a setting list or a font list. (p.53)
●CLOCK	This is used to set the date and time of the machine's built-in clock. (p.53)
●TRAY SETTINGS	This is used to configure the paper type and paper size settings for each
	tray, and select whether or not automatic switch over to another tray with the
	same size and type of paper will take place if the paper runs out during
	continuous printing. (p.53)

The following settings are expl	ained in detail in the operation manual for facsimile.
●ADDRESS CONTROL*2	If your machine has the fax option, this setting is used to store fax numbers for automatic dialing. Group keys and user indexes can also be programmed.
	This is used to select the fax receive mode (automatic or manual) This is used to forward faxes received in memory to another destination.
●KEYBOARD SELECT*3	When using the fax or network scanner function, use this setting to change the layout of the keyboard in the letter entry screen. (p.53)

●KEY OPERATOR PROGRAMS.. Settings for key operators (administrators of this machine). A key appears for these settings in the custom settings menu screen. For explanations of the settings, see the Key operator's guide. (For explanations of key operator programs for the fax option, see the operation manual for facsimile.)

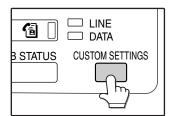
^{*1} The fax option or network printer function must be installed.

^{*2} The fax option must be installed.

^{*3} The fax option or network scanner function must be installed.

GENERAL PROCEDURE FOR CUSTOM SETTINGS

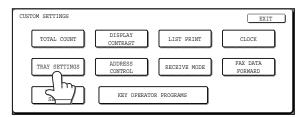
1 Press the [CUSTOM SETTINGS] key.



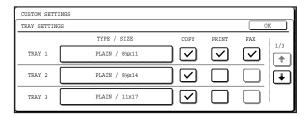
2 Touch the key of the desired setting. The setting screen will appear.

Each of the custom settings is explained on the following pages.

The [TRAY SETTINGS] key is selected in the following example.

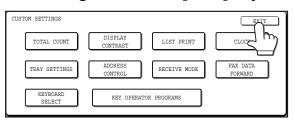


When the [TRAY SETTINGS] key is selected, the following screen appears.



- **M**Note
- When a checkbox appears next to an item in a screen, touch the checkbox (__) to select the item. A checkmark (__) will appear to indicate that the item is selected.
 - In the above settings, tray 1 can be used for printer, copy, and fax mode. Tray 2 and tray 3 can only be used for copy mode.
- For a detailed explanation of the trays, see "CHANGING A TRAY'S PAPER TYPE AND PAPER SIZE SETTINGS" (p.19).

- Touch the [OK] key in the setting screen to close it.
- 4. When you are ready to exit the custom settings, touch the [EXIT] key.



SETTINGS

Total count

The total page count display shows the following counts:

- Total number of copies and printed pages
- Number of pages fed through the RSPF
- Number of two-sided copies
- Number of times the stapler was used
- Number of pages sent using the network scanner function
- Number of sent and received fax pages
 The counts that appear will vary depending on the
 peripheral equipment installed.
- Each sheet of paper that is 11" x 17" (A3) size is counted as two sheets.
- Each sheet of paper used for automatic two-sided copying is counted as two sheets (11" x 17" (A3) paper is counted as four sheets.).

Display contrast

Screen contrast adjustment is used to make the touch panel easier to view under various lighting conditions. Touch the [LIGHTER] key to make the screen lighter, or the [DARKER] key to make the screen darker.

List print

Use this to print the PRINTER TEST PAGE, the FAX REPORT, or the SENDING ADDRESS LIST.

Clock

Use this to set the date and time of the machine's built-in clock. The date and time are used for functions that require date and time information.

Tray settings

The paper type, paper size, and enabled modes can be set for each tray. Auto tray switching and disabling of two-sided printing on letterhead paper can also be set. See page 19 and 20 for details on setting the paper type and paper size.

- To select which trays can be used in each of copy, printer, and fax modes, select the checkboxes (☑) of the desired trays in each mode.
- When a tray runs out of paper in the middle of a job, the auto tray switching function automatically switches the paper source to another tray that has the same paper size and paper type settings. (The auto tray switching function cannot be set for the bypass tray.)

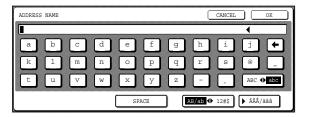
Keyboard select

When using the fax or network scanner function, you can change the layout of the keyboard that appears in the letter entry screen. Select the layout that you find easiest to use.

The following three keyboard configurations are available:

- Keyboard 1 (QWERTY configuration)*
- Keyboard 2 (AZERTY configuration)
- Keyboard 3 (ABCDEF configuration)
 *The default setting is "Keyboard 1".

(Example: Letter entry screen when Keyboard 3 is selected.)

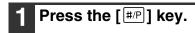


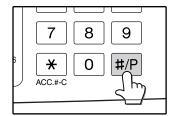
JOB PROGRAM MEMORY

If you frequently use the same settings for copy jobs, you can store in the settings in a job program. Up to 10 job programs can be stored, and the programs are retained even when the power is turned off. By storing frequently used copy settings in a program, you can eliminate the bother of selecting the settings each time you use them for a copy job.

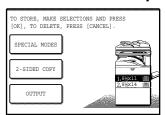
- After a job program is stored, if any settings of the key operator programs related to the stored job program are prohibited, the related settings in the job program will not be recalled.
- If the overwriting of job programs is prohibited in the key operator programs, it will not be possible to overwrite or delete a job program.
- To exit job program memory mode, press the [CLEAR ALL] key () on the operation panel or touch the [EXIT] key on the touch panel.

STORING A JOB PROGRAM



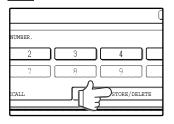


4 Select the copy settings that you wish to store in the program.

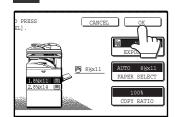


The number of copies cannot be stored.

2 Touch the [STORE/DELETE] key.

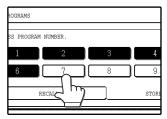


5 Touch the [OK] key.



The selected settings will be stored under the program number selected in step 3.

Touch a program number from 1 to 10 in the storage register screen.

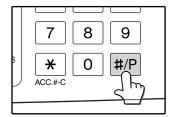




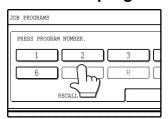
If a numeric key is selected that has already been programmed, a confirmation screen will appear. To replace the existing program with the new program, touch the [STORE] key and continue from step 4. If you do not wish to replace the existing program, touch the [CANCEL] key to return to the above screen and select a different numeric key.

EXECUTING A JOB PROGRAM

1 Press the [#/P] key.



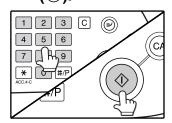
2 Touch the program number key of the desired program.



The job program will be executed. A number for which no job program has been stored cannot be selected.

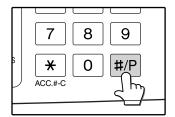
Place the original, check the original size, and then set the number of copies and any other desired copy settings not stored in the program.

When finished, press the [START] key (③).

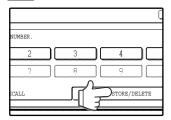


DELETING A STORED JOB PROGRAM

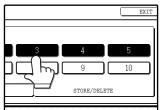
1 Press the [#/P] key.



2 Touch the [STORE/DELETE] key.



Select the program number of the program to be deleted.



If a number key for which no job program has been stored is selected, the proceed to step 4 on the previous page (for storing a job program).

4 Touch the [DELETE] key.



The selected program will be deleted and you will return to the screen of step 3. If the [CANCEL] key is touched, you will return to the screen of step 3 without deleting the program.

If you are finished deleting programs, touch the [EXIT] key in the screen of step 3 to exit.

AUDITING MODE

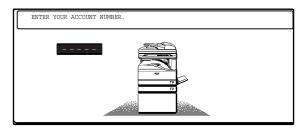
When auditing mode is enabled, a count is kept of the number of pages printed or copied by each account (maximum of 100 accounts). The counts can be viewed whenever necessary.



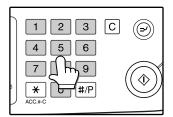
- Auditing mode can be enabled for all modes (copy mode, fax mode, network scanner mode, and printer mode) in the key operator programs. (See the "Key operator's guide".)
- To print in printer mode when auditing mode is enabled, enter your account number in the printer driver setup screen on your computer.

COPYING WHEN AUDITING MODE IS ENABLED

When auditing mode is enabled, the following account number entry screen appears.

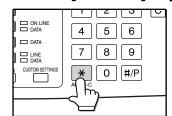


Enter your account number (5 digits) with the numeric keys.

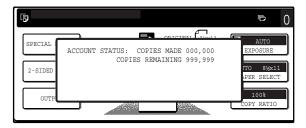


Each digit is indicated by an asterisk "X".

When the copy job is finished, press the [ACC.#-C] key (*).



The screen reverts to the account number entry screen.



- When a valid account number is entered, the number of copies already made by that account appears for several seconds on the initial screen.
- If a limit has been set in the key operator programs for the number of copies that can be made by the account, the remaining number that can be made is displayed in the message display together with the number of copies already made. (See the "Key operator's guide".)



- To perform an interrupt job when auditing mode is enabled, press the [INTERRUPT] key (♥). The account number entry screen will appear. Enter your account number. When the interrupt job is finished, be sure to press the [INTERRUPT] key (♥) or the [CLEAR ALL] key (♥) to end interrupt mode.
- If an invalid account number is entered in step 1, the account number entry screen reappears.
- When ACCOUNT NUMBER SECURITY in the key operator programs is enabled (See the "Key operator's guide".), the following message will appear and operation will not be permitted for 1 minute if an invalid account number is entered 3 times in a row.

PLEASE SEE YOUR KEY OPERATOR FOR ASSISTANCE.

5 Chapter 5 TROUBLESHOOTING AND MAINTENANCE

This chapter describes troubleshooting and maintenance such as misfeed removal, replacing the toner cartridge and cleaning the machine.

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Wrong paper size is displayed for paper in the bypass tray.	60
A copy job stops before it is finished.	
The contrast of the touch panel is too high or too low.	
Image cannot be rotated.	
Original size is not selected automatically, or copying does not take place on paper that matches the original size.	
Paper size for a paper tray cannot be set.	
Order of copies is incorrect.	
The job is canceled after the originals were being scanned.	61
Not all pages are copied.	
The RSPF cannot be used.	
Lighting fixture flickers.	
Paper feeding problems	
When using paper fed from the bypass tray, the copied image is skewed.	62
Paper from the bypass tray misfeeds.	02
Paper misfeeds.	
Image quality problems	
Copies are too dark or too light.	
Text is not clear in a copy.	
Part of the copied image is cut off.	63
Blank copies.	00
Paper is wrinkled or the copied image comes off when the paper surface is rubbed.	Ī
Copies are smudged or dirty.	
White or black lines appear copies.	<u> </u>
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THE BYPASS TRAY PAPER FEED ROLLER	. 75

DISPLAY MESSAGES

If one of the following messages appears in the display, take prompt action as instructed by the message.

Message	Cause and solution	Page
ENTER YOUR ACCOUNT NUMBER.	Auditing mode is enabled. Enter your account number.	56
A MISFEED HAS OCCURRED.	Remove the misfeed as explained in "MISFEED REMOVAL".	64
2-SIDED COPIES CANNOT BE MADE ON THIS PAPER TYPE.	This appears when you attempt to make two-sided copies on special paper that cannot be used for two-sided copying. Cancel two-sided copying or change the paper.	15, 27
REMOVE PAPER FROM THE <*>TRAY.	The indicated output tray is full. Remove the output from the tray. (<*> indicates the tray that is full.)	-
CLOSE THE <**> COVER.	The indicated cover is open. Close the cover. (<**> indicates the cover that is open.)	-
PLEASE EXTEND BYPASS-TRAY.	When copying from the bypass tray, be sure to pull out the bypass tray extension.	18
COVER SHEETS MUST BE THE SAME SIZE AS THE COPY PAPER USED.	When adding a cover, load paper in the bypass tray that is the same size as the paper in the tray selected for copying.	48
TONER SUPPLY IS LOW.	The toner cartridge must be replaced soon.	72
CHANGE THE TONER CARTRIDGE.	The toner cartridge is out of toner. Replace the toner cartridge.	72
CHECK THE TONER CARTRIDGE.	Make sure that the toner cartridge is installed correctly.	72
THE DOCUMENT FEEDER IS DISABLED.	The RSPF has been disabled in the key operator programs. Use the document glass.	22
SELECTED PAPER TRAY IS PROHIBITED. PLEASE SELECT ANOTHER PAPER TRAY.	This appears when a tray is selected that has been prohibited in "TRAY SETTINGS" in the custom settings.	53
PLEASE CHECK THE PAPER SIZE OF TRAY <***>.	The tray's paper size setting is different from the actual paper size. Load the correct size of paper. The tray is indicated in <***>.	15
ADD STAPLES.	The finisher is out of staples. Replace the staple cartridge as explained in "STAPLE CARTRIDGE REPLACEMENT".	73
PLEASE REMOVE PAPER FROM THE STAPLER COMPILER.	Paper remains in the stapler compiler. Remove the paper.	70
MEMORY IS FULL. PRESS [START] TO BEGIN COPYING OR [CA] TO CANCEL.	The memory becomes full while scanning originals. Press the [START] key (③) to copy only the originals that have been scanned, or press the [CLEAR ALL] key (△) to cancel the job.	-

Message	Cause and solution	Page
SELECTED PAPER TRAY IS OUT OF SERVICE.	Contact your SHARP service center.	-
CHECK STAPLER POSITION OR STAPLE JAM.	Staples are jammed in the finisher or the staple case is not attached correctly. Check the staple case. If the message still appears after removing the jammed staples, disable the stapler using "DISABLING OF STAPLER" in the key operator programs (See the "Key operator's guide.), and contact your SHARP service center.	74
(CALL FOR SERVICE SOON.)	It will soon be time for regular maintenance. Contact your SHARP service center.	-
(MAINTENANCE REQUIRED.)	It is time for regular maintenance. Contact your SHARP service center.	-
CALL FOR SERVICE. CODE: **-**	Turn off the power and then turn it back on. If this does not clear the message, write down the 2-digit main code and 2-digit sub-code and promptly contact your SHARP service center.	-
PLEASE CHECK THE ORIGINAL SIZE. JOB IS CANCELED.	The original in the RSPF is longer than the size that was detected. Reinsert the original, make sure that the size indicated in the touch panel is the same as the actual size, and begin copying. You can also select mixed feeding to copy onto paper that matches each original size after all originals have been scanned.	-

TROUBLESHOOTING

If you experience difficulty using the machine, check the following troubleshooting guide before calling for service. Many problems can be easily resolved by the user. If you are unable to solve the problem using the troubleshooting guide, turn off the power switch, unplug the machine, and contact your SHARP service center. The following problems are related to the general operation of the machine and copying.

For problems related the to printer, fax, and network scanner functions, see the corresponding operation manuals.

Problems related to machine operation

Problem	Cause and solution	Page
	Power switch OFF. → Turn the power switch ON.	13
The machine does not operate.	The machine is warming up. → The machine requires about 23 seconds to warm up after the power switch is turned on. While the machine is warming up, copy settings can be selected but copying is not possible. Wait until "READY TO COPY." appears.	13
·	Out of paper. → Load paper.	17
	Out of toner. → Replace the toner cartridge.	72
	Misfeed occurs. → Remove the misfed paper.	64
The power is on but copying is not possible.	The machine is in auto power shut-off mode. → If only the [START] key (③) blinks, auto power shut-off mode has activated. Press the [START] key (③) to return the machine to normal operation.	14
	Copy mode is not selected. → Press the [COPY] key to select copy mode.	10
Two sided convince is not need by	Automatic two-sided copying was attempted on paper that is not suitable for automatic two-sided copying. → Two-sided copying is not possible on special paper. Use paper that is suitable for automatic two-sided copying.	27
Two-sided copying is not possible.	Two-sided copying is prohibited in the key operator programs. → Change the setting in the key operator programs to permit two-sided copying.	Key operator's guide
Wrong paper size is displayed for paper in the bypass tray.	The bypass tray extension is not pulled out. → To detect the paper size correctly, the bypass tray extension must be pulled out when the paper is loaded.	18
A copy job stops before it is finished.	Too many pages have accumulated in the output tray, causing the tray full sensor to activate. Further copying is not possible until the pages are removed. → Remove the pages from the output tray.	-
The contrast of the touch panel is too high or too low.	The display contrast has not been adjusted. → Adjust the contrast using "DISPLAY CONTRAST" in the custom settings.	53
Image cannot be rotated	Neither auto paper selection nor auto image mode are selected. → Rotation copy functions only if auto paper select mode or auto image mode is selected.	25, 30
Image cannot be rotated.	Rotation copy is prohibited in the key operator programs. → Change the setting in the key operator programs to permit rotation copying.	Key operator's guide

Problem	Cause and solution	Page
Original size is not selected automatically, or copying does not	The RSPF was not opened completely when the original was placed on the document glass. → Open the RSPF completely, place the original on the document glass, and close the RSPF.	-
	The original contains large black solid areas. → If the original contains any large black solid areas, the original size may not be detected automatically. Use the [SPECIAL MODES] key to select the original size.	47
take place on paper that matches the original size.	The original is smaller than 5-1/2" x 8-1/2" size. → When the original is smaller than 5-1/2" x 8-1/2" size, the size cannot be detected. Use the [PAPER SELECT] key to select the desired paper size.	22
	The original is not a standard size. → When the original is not a standard size, the size cannot be detected. Manually select the closest standard original size, or use the [PAPER SELECT] key to select the desired paper size.	22, 47
	A copy, print job, or received fax is being printed. → Set the correct paper size after printing is finished.	-
	Operation has temporarily stopped because the tray is out of paper or a misfeed occurred. → Load paper or remove the misfeed, finish the copy job, and then set the paper size.	19, 64
Paper size for a paper tray cannot be set.	During an interrupt copy job. → Set the correct paper size after the interrupt copy job is finished.	34
	Misfeed occurs. → Remove the misfed paper.	64
	Paper tray settings are prohibited in the key operator programs. → Change the setting in the key operator programs to permit paper tray settings.	Key operator's guide
Order of copies is incorrect.	The originals were placed in the wrong order. → When using the document glass, scan the originals one sheet at a time beginning from the first page. When using the RSPF, insert the originals with the first page on top and facing up.	23
The job is canceled after the originals were being scanned.	The memory become full while the originals were being scanned. → When using a function such as pamphlet copy or multi shot copy where all original pages are scanned into memory before copying begins, scanning will stop and copying will not take place if the memory becomes full. The number of pages that can be scanned into memory can be increased by installing more memory.	76
Not all pages are copied.	The memory become full while the originals were being scanned. → When the memory becomes full while the originals are being scanned, you can select whether you want to continue the job and print only those originals that were scanned, or cancel the job. If you continue the job, copies will only be made of the originals that were scanned, and thus all originals cannot be copied at once.	-
The RSPF cannot be used.	Use of the RSPF has been prohibited in the key operator programs. → Enable use of the RSPF in the key operator programs.	Key operator's guide
Lighting fixture flickers.	The same power outlet is used for the lighting fixture and the machine. → Connect the machine to a power outlet which is not used for other electric appliances.	4

Paper feeding problems

Problem	Cause and solution	Page
When using paper fed from the bypass tray, the copied image is skewed.	The number of sheets placed on the bypass tray exceeds the maximum number. → Do not place more than the maximum number of sheets.	15
	The bypass guide is not adjusted to the size of the loaded paper. → Adjust the bypass guide to the size of the loaded paper.	18
	The paper type setting is not correct. → When using a special paper, be sure to set the correct paper type.	20
Paper from the bypass tray misfeeds.	The number of sheets placed on the bypass tray exceeds the maximum number. → Do not place more than the maximum number of sheets.	15
	The bypass guide is not adjusted to the size of the loaded paper. → Adjust the bypass guide to the size of the loaded paper.	18
	The paper is outside of the specified size and weight range. → Use copy paper within the specified range.	15
Paper misfeeds.	Paper is curled or damp. → Do not use curled or crimped paper. Replace with dry copy paper. During periods when the machine is not used for a long time, remove the paper from the tray and store it in a dark place in a bag to prevent moisture absorption.	79
	Paper is not loaded properly. → Make sure the paper is properly loaded.	17
	Pieces of paper remain inside machine. → Remove all pieces of misfed paper.	64
	Sheets of paper stick together. → Fan the paper well before loading it.	17

Image quality problems

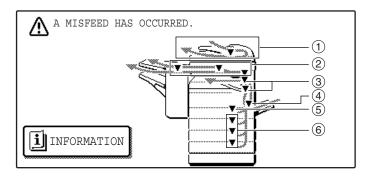
Problem	Cause and solution	Page
Copies are too dark or too light.	The image of the original is too light or too dark. → Select the correct original image type in the exposure setting and adjust the copying exposure.	29
	The copying exposure is set to "AUTO". → The "EXPOSURE ADJUSTMENT" key operator program can be used to adjust the exposure level used for "AUTO" exposure. Consult the administrator of the machine.	Key operator's guide
	The original type that is most suitable for the original has not been selected in the copy exposure setting screen. → Change the original type selection to "AUTO", or manually select the most suitable original type setting.	29
Text is not clear in a copy.	The correct original type has not been selected in the copy exposure setting screen. → Change the original type setting to "TEXT".	29
	The original was placed in the wrong position. → Place the original in the correct position. When using the document glass, place the original against the far left side.	22, 23
	A suitable ratio for the original size and paper size has not been selected. → Use auto ratio selection to obtain the correct ratio for the copy.	30
Part of the copied image is cut off.	The tray's paper size setting was not changed when a different size of paper was loaded in the tray. → Be sure to change the tray's paper size setting when loading a different size of paper in the tray.	19
	An AB paper size is being used. → When using copy paper that is an AB size, set the original size manually.	47
Blank copies.	The original is not placed face up in the RSPF or face down on the document glass. → Place the original face up in the RSPF or face down on the document glass.	22, 23
	The paper is outside of the specified size and weight range. → Use copy paper within the specified range.	15
Paper is wrinkled or the copied image comes off when the paper surface is rubbed.	The paper type setting is not correct. → Set the correct paper type. To set the paper type for a tray, see "CHANGING A TRAY'S PAPER TYPE AND PAPER SIZE SETTINGS".	19, 20
	Paper is curled or damp. → Do not use curled or wrinkled paper. Replace with dry copy paper. During periods when the machine is not used for a long time, remove the paper from the tray and store it in a dark place in a bag to prevent moisture absorption.	79
Copies are smudged or dirty.	The document glass or the underside of the RSPF is dirty. → Clean regularly.	75
	The original is smudged or blotchy. → Use a clean original.	-
White or black lines appear copies.	The scanner glass for the RSPF is dirty. → Clean the long, narrow scanning glass.	75

MISFEED REMOVAL

When a misfeed occurs during copying, the message "MISFEED HAS OCCURRED." will appear in the touch panel and printing will stop.

• If the misfed paper tears during removal, remove the torn pieces. Take care not to touch the photoconductive drum while removing the pieces. Nicks and scratches on the drum will cause dirty copies.

First, locate the misfeed



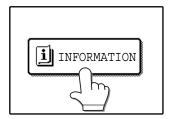
- ① Misfeed in the RSPF (p.65)
- ② Misfeed in the finisher (p.70)
- ③ Misfeed in the machine (p.66)
- 4 Misfeed in the bypass tray (p.66)
- ⑤ Misfeed in the upper paper tray (p.68)
- 6 Misfeed in the lower paper tray (p.69)



If the fax option is installed, all received faxes are stored in memory. The faxes are automatically printed after the misfeed is removed.

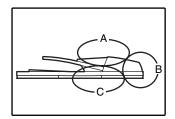
MISFEED REMOVAL GUIDANCE

Misfeed removal guidance can be displayed by touching the [INFORMATION] key on the touch panel after a misfeed has occurred.



MISFEED IN THE RSPF

1 Remove the misfed original.



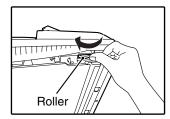
Check sections A, B, and C in the illustration at left and remove the misfed original.

Section A



Open the document feeder cover and carefully remove the misfed original from the document feeder tray. Close the document feeder cover.

Section B

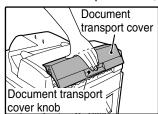


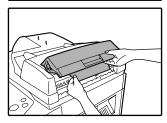
Open the RSPF and rotate the release roller in the direction of the arrow to feed the original out. Close the RSPF and then carefully remove the original.



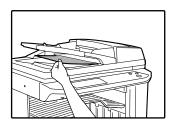
If the misfed original cannot be removed, open the document transport cover (below), and rotate the release roller again.

If a small original (5-1/2" x 8-1/2", etc.) is misfed, or if an original misfeed occurs in the reversing tray of the RSPF, lift the document transport cover knob, open the document transport cover, and remove the original.



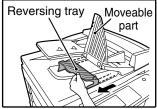


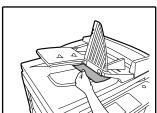
Section C



Carefully remove the misfed original from the exit area.

If the misfed original cannot be easily removed from the exit area, open the moveable part of the document feeder tray and remove the reversing tray, and then remove the original.

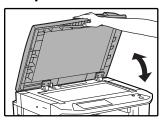




Mote

After removing a misfed original from the exit area, be sure to attach the reversing tray securely to the exit area (When the RSPF is installed.).

Open and close the RSPF to clear the misfeed message from the touch panel.



The message can also be cleared by opening and closing the document feeder cover or the document transport cover.

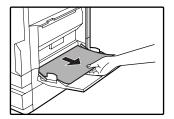
After the misfeed is removed and the misfeed message is cleared, a message will appear indicating the number of originals that must be reinserted in the RSPF.

Reinsert the originals that still must be scanned (Including the original that was being scanned when the misfeed occurred.), and press the [START] key(③).

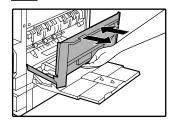
Copying of the remaining originals will resume.

MISFEED IN THE BYPASS TRAY

1 Carefully pull the misfed paper out.



2 Open and close the side cover.



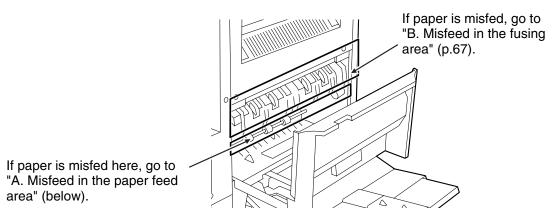
Make sure that the misfeed message is cleared.

The message can also be cleared by opening and closing the front cover.

If the message is not cleared, see "A. Misfeed in the paper feed area".

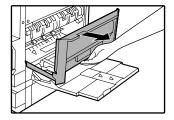
MISFEED IN THE MACHINE

Determine the location of the misfeed and remove it appropriately as indicated below.

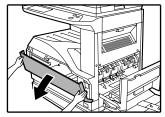


A. Misfeed in the paper feed area

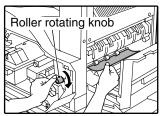
1 Open the bypass tray and the side cover.



Press gently on both sides of the front cover and pull it open.



Carefully remove the misfed paper. Turn the roller rotating knob in the direction of the arrow to assist in removing it.



Be careful not to tear the misfed paper during removal.

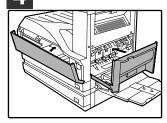


The fusing unit is hot. Do not touch the fusing unit when removing misfed paper. Doing so may cause a burn or injury.



Do not touch the photoconductive drum (green portion) when removing the misfed paper. Doing so may damage the drum and cause smudges on copies.

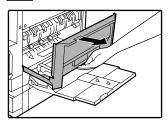
1 Close the front cover and side cover.



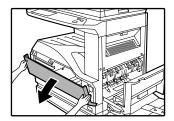
Make sure that the misfeed message is cleared.

B: Misfeed in the fusing area

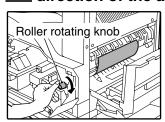
1 Open the bypass tray and the side cover.



Press and pull it open gently on both sides of the front cover.



Turn the roller rotating knob in the direction of the arrow.

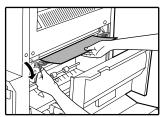


4. Lift the fusing unit release levers and carefully remove the misfed paper.



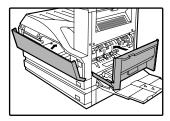
▲Warning

The fusing unit is hot. Do not touch the fusing unit when removing misfed paper. Doing so may cause a burn or injury. If you were unable to remove the misfeed in step 4, press down on the fusing unit paper guide knob to open the paper guide, and carefully remove the misfed paper.



! Caution

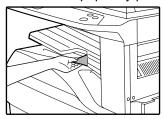
- Do not touch the photoconductive drum (green portion) when removing the misfed paper. Doing so may damage the drum and cause smudges on copies.
- Take care not to let unfixed toner on the misfed paper soil your hands or clothes.
- 6 Close the fusing unit paper guide and press down on the fusing unit release levers.
- 7 Close the front cover and side cover.



Make sure that the misfeed message is cleared.

MISFEED IN THE CENTER TRAY

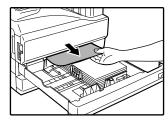
Remove the paper by pulling it into the center tray.



MISFEED IN THE UPPER PAPER TRAY

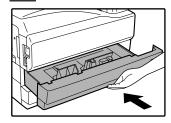
Make sure that there is no misfed paper in the machine before pulling the tray out. (p.66)

Lift and pull out the upper paper tray and then remove the misfed paper.



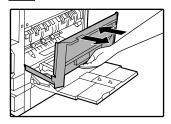
Be careful not to tear the misfed paper during removal.

2 Replace the upper paper tray.



Push the upper paper tray in completely.

3 Open and close the side cover.

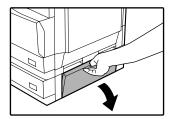


Make sure that the misfeed message is cleared. The message can also be cleared by opening and closing the front cover.

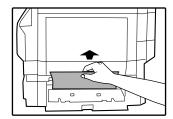
MISFEED IN THE LOWER PAPER TRAY

- Make sure that there is no misfed paper in the machine before pulling the tray out. (p.66)
- Use the following procedure to remove misfeeds that occur in the 500-sheet paper feed unit or 2 x 500-sheet paper feed unit.

1 Open the lower side cover.

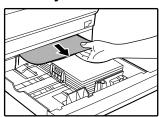


2 Remove the misfed paper.



Be careful not to tear the misfed paper during removal.

If the misfed paper is not visible in step 2, lift and pull out the lower paper tray and remove the misfed paper.

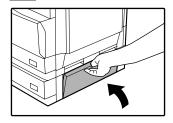


Be careful not to tear the misfed paper during removal.

4 Replace the lower paper tray.

Push the lower paper tray in completely.

5 Close the lower side cover.



Make sure that the misfeed message is cleared.

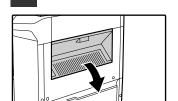
MISFEED IN THE UPPER EXIT AREA (when a job separator tray kit or finisher (AR-FN5N) is installed)

If a job separator tray kit or a finisher is installed, a misfeed may occur in the upper exit area.

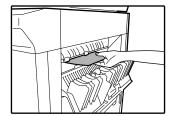
1 Open the upper right side cover.



Make sure that the misfeed message is cleared.

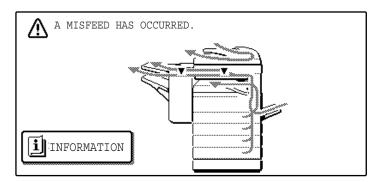


2 Gently pull the misfed paper out.

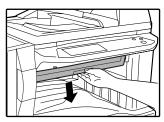


Be careful not to tear the misfed paper during removal.

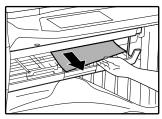
MISFEED IN AN OUTPUT TRAY (when a finisher (AR-FN5N) is installed)



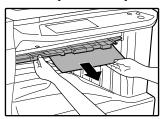
Grasp the handle of the stapler compiler cover and pull to open the cover.



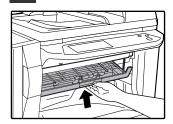
Remove any misfed paper from the transport area.



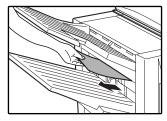
If staple sort copying is being performed, open the paper guide and remove any misfed paper from the stapler compiler.



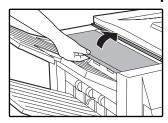
4. Close the stapler compiler cover.



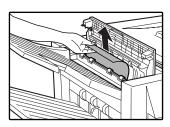
If the offset tray is being used, remove any misfed paper from the offset tray.



If the top tray is being used, open the top cover, remove any misfed paper, and close the top cover.



Make sure that the misfeed message is cleared.



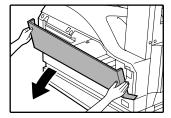
REPLACING THE TONER CARTRIDGE

To check how much toner remains in the toner cartridge (p.74), hold down the [COPY] key. The amount of toner remaining will appear in the display. When less than 25% of the toner remains, obtain a new toner cartridge as soon as possible. When "TONER SUPPLY IS LOW." appears in the display, be sure to have a new cartridge on hand for replacement at any time as little toner remains. When "CHANGE THE TONER CARTRIDGE." appears in the touch panel, the toner cartridge must be replaced. Follow these steps to replace the cartridge.

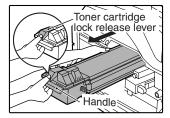


When running long copy jobs or copying originals with many areas of solid black, "TONER REPLENISHMENT IN PROGRESS." may appear in the touch panel and copying may stop even though the cartridge still has toner. When this occurs, the toner is being replenished. Replenishment will last about two minutes. When the [START] key $(\textcircled{\bullet})$ illuminates, press the [START] key $(\textcircled{\bullet})$ to resume copying.

Press gently on both sides of the front cover and pull it open.



Pull the toner cartridge out while pressing the lock release lever.

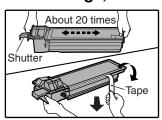


When pulling out the toner cartridge, place your other hand on the green part of the cartridge.



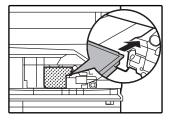
- After removing the toner cartridge, do not shake it or tap it. Doing so may cause toner to leak from the cartridge. Put the old cartridge immediately in the bag provided with the new cartridge.
- Dispose of the old toner cartridge in accordance with local regulations.

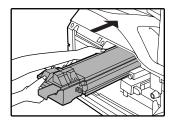
Remove the new toner cartridge from the bag. Grasp both ends of the cartridge and shake it horizontally about 20 times. After shaking the cartridge, remove the tape.



Grasp the hand grip to hold the cartridge. Do not hold the cartridge by the shutter. Be sure to only shake the cartridge before the tape is removed.

While pushing the lock release lever, gently insert the toner cartridge along the guides until it clicks into place.

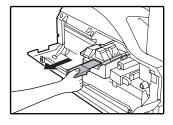




Mote

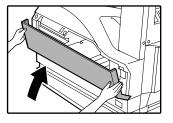
If dirt or dust adheres to the toner cartridge, remove it before installing the cartridge.

Remove the tape from the shutter. Pull the shutter out of the toner cartridge as shown in the illustration.



Discard the shutter.

6 Close the front cover.

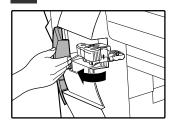


STAPLE CARTRIDGE REPLACEMENT

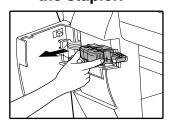
(when the finisher (AR-FN5N) is installed)

When the message "ADD STAPLES." appears, replace the staple cartridge as follows:

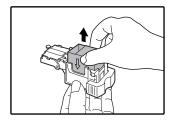
1 Open the stapler cover.



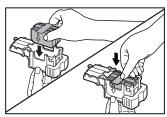
2 Grasp the green portion of the staple box and remove the staple box from the stapler.



Remove the staple cartridge from inside the staple box.



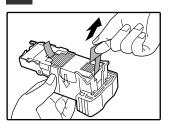
4 Insert the new staple cartridge into the box until it clicks into place.



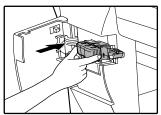
Insert the new cartridge by aligning the arrows on the cartridge with those on the box.

Check that the cartridge has locked into place by pulling it slightly.

5 Remove the tape from the cartridge.



Insert the staple box into the stapler unit until it clicks into place.

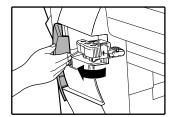


7 Close the stapler cover.

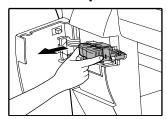
STAPLE JAM REMOVAL

If staples become jammed in the stapler, the message "CHECK STAPLER POSITION OR STAPLE JAM." will appear. Follow these steps to remove the jammed staples.

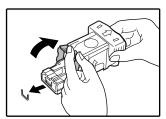
1 Open the stapler cover.



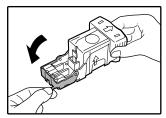
2 Grasp the green portion of the staple box and remove the staple box from the stapler.



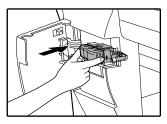
Raise the lever at the end of the staple box and remove the jammed staples.



4 Return the lever to its original position.



Insert the staple box into the stapler unit until it clicks into place.



6 Close the stapler cover.

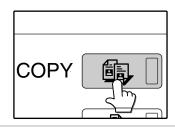
CHECKING THE TONER QUANTITY AND TOTAL OUTPUT COUNT

The approximate quantity of toner remaining and the total output count can be displayed as explained below.

• The output count shows the combined output total of the copy, fax, and printer functions.

Checking the total output count and toner quantity

Hold down the [COPY] key. The total output count and toner quantity appear while the key is held down.







- Each 11" x 17" (A3) page is counted as two pages. Two sided pages are also counted as two pages.
- The amount of toner consumed will vary depending on conditions of usage and the type of originals copied. The toner quantity display should only be used as an approximate guide.

CLEANING THE MACHINE

DOCUMENT GLASS AND RSPF

If the document glass, RSPF, or scanning glass for originals fed from the RSPF (the long narrow glass surface on the right side of the document glass) become dirty, the dirt may appear on copies. Always keep these parts clean. Stains or dirt on the document glass/RSPF will also be copied. Wipe the document glass, the RSPF and the scanning window on the document glass with a soft, clean cloth.

If necessary, dampen the cloth with water. Do not use thinner, benzene, or similar volatile cleaning agents.



Do not spray flammable cleaner gas. Gas from the spray may come in contact with the internal electrical components or high-temperature parts of the fusing unit, creating a risk of fire or electrical shock.



Surface of document glass



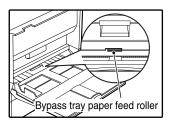
Underside of RSPF



Scanning glass

THE BYPASS TRAY PAPER FEED ROLLER

If misfeeds occur frequently when feeding envelopes or other thick paper from the bypass tray, wipe the paper feed roller at the feed slot of the bypass tray with a soft, clean cloth moistened with alcohol or water.



6 PERIPHERAL DEVICES AND SUPPLIES

Optional equipments and supplies are explained in this chapter. To purchase optional equipment and supplies contact your SHARP service center.

PERIPHERAL DEVICES

FINISHER (AR-FN5N) See page 77.

500-SHEET PAPER FEED UNIT (AR-D21) See page 78.

2 x 500-SHEET PAPER FEED UNIT (AR-D22) See page 78.

JOB SEPARATOR TRAY KIT (AR-TR3)

This enables separation of output locations by mode (copy, printer, etc.).

PRINTER EXPANSION KIT (AR-P17)

This allows the machine to be used as a network printer.

PRINT SERVER CARD (AR-NC5J)*1

This optional expansion kit adds the network printer function (10/100 BASE-TX).

PS3 EXPANSION KIT (AR-PK1)*1

This kit offers PostScript 3 compatibility.

BARCODE FONT KIT (AR-PF1)*1

This font set adds barcode printing capability.

NETWORK SCANNER EXPANSION KIT (AR-NS2)*2

This allows the machine to be used as a network scanner.

FACSIMILE EXPANSION KIT (AR-FX7)

This allows the machine can be used as a facsimile machine.

8MB FAX MEMORY (AR-MM9)

Image memory can be expanded by installing the optional fax expansion memory.

256MB EXPANSION MEMORY BOARD (AR-SM5)

512MB EXPANSION MEMORY BOARD (AR-SM6)

Additional memory can be installed in the machine. There are two DIMM slots in this machine, and the memory can be expanded to a maximum of 1056 MB.

^{*2}Requires installation of the PRINTER EXPANSION KIT (AR-P17), and 128MB or more of memory must be extended.



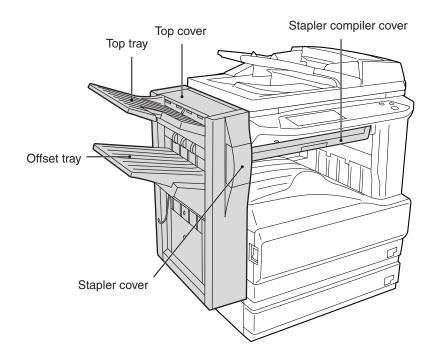
A commercial 64/128/256/512MB (the 168 pin SDRAM DIMM) memory module can be used to expand memory in this unit. For more information, consult your SHARP service center.

^{*1}Requires installation of the PRINTER EXPANSION KIT (AR-P17).

FINISHER (AR-FN5N)

When an optional finisher (AR-FN5N) is installed, the machine can automatically staple the sorted copies. Each collated set of copies or group of copies can be stacked offset from the previous set. (Offset function p.35)

Part names



Specifications

	AR-FN5N			
Trov conceity	Top tray	100 sheets		
Tray capacity	Offset tray	1,000 sheets (500 sheets for sizes larger than 8-1/2" x 11" (A4))		
	Size	Top tray: 5-1/2" x 8-1/2" to 11" x 17" (A5 to A3)		
Paper size	Size	Offset tray: 8-1/2" x 11" to 11" x 17" (B5 to A3)		
	Weight	14 lbs. to 34 lbs. (52 g/m ² to 128 g/m ²)		
Offset	Approx. 1" (27 mm	n)		
Paper sizes that can be stapled	8-1/2" x 11", 8-1/2" x 11"R, 8-1/2" x 13", 8-1/2" x 14", 11" x 17" (B5, A4, A4R, B4, A3)			
Stapling capacity	30 sheets (21 lbs. (80 g/m ²))			
Power supply	Drawn from the ma	achine		
Weight	Approx. 42 lbs. (19	9 kg)		
Dimensions	Exit area 18-33/64" (W) x 20-1/8" (D) x 21-17/64" (H) (470 mm (W) x 511 mm (D) x 540 mm (H))			
	Stapler compiler 22-9/64" (W) x 17-31/64" (D) x 4-19/64" (H) (562 mm (W) x 444 mm (D) x 109 mm (H))			



As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units and there may be some deviations from these values in individual units.

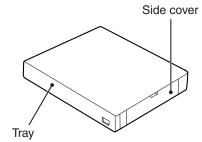
500-SHEET PAPER FEED UNIT/ 2 x 500-SHEET PAPER FEED UNIT

These paper feed units provide the convenience of increased paper capacity for the machine and a greater choice of paper sizes readily available for copying.

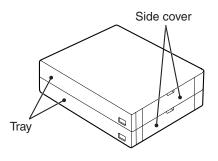
The AR-D21 contains one 500-sheet paper tray and the AR-D22 contains two 500-sheet paper trays.

Part names

500-SHEET PAPER FEED UNIT (AR-D21)



2x500-SHEET PAPER FEED UNIT (AR-D22)



Specifications

		AR-D21 AR-D22		
Paper Size Weight		8-1/2" x 11" to 11" x 17" (B5 to A3)		
		15 lbs. to 28 lbs. (56 g/m ² to 105 g/m ²)		
Paper	Upper tray	500 sheets	500 sheets	
capacity Lov	Lower tray	_	500 sheets	
Weight		Approx. 13.5 lbs. (6.1kg)	Approx. 26.1 lbs. (11.8kg)	
Dimensions		23-15/32" (W) x 19-39/64" (D) x 3-53/64" (H) 23-15/32" (W) x 19-39/64" (D) x 7-53/64" (596 mm (W) x 498 mm (D) x 97 mm (H)) (596 mm (W) x 498 mm (D) x 194 mm (H))		
Power supply		Drawn from the machine		



As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units and there may be some deviations from these values in individual units.

STORAGE OF SUPPLIES

Standard supplies for this product that are to be replaced by the user are paper and the toner cartridge.

SHARP.



For best copying results, be sure to use only SHARP Genuine Supplies which are designed, engineered and tested to maximize the life and performance of SHARP copiers. Look for the Genuine Supplies label on the toner package.

GENUINE SUPPLIES

PROPER STORAGE

Store the supplies in a location that is:

- · clean and dry,
- · at a stable temperature,
- not exposed to direct sunlight.

Store paper in the wrapper and lying flat.

Paper stored out of the wrapper or in packages standing on end may curl or get damp, resulting in paper misfeeds.

SPECIFICATIONS

Model	AR-M237	AR-M277		
Туре	Digital Multifunction System, Desktop			
Photoconductive type	OPC drum			
Document glass type	Fixed			
Copy system	Dry, electrostatic transfer			
Originals	Sheets, bound documents			
Originals size	Max. 11" x 17" (A3)			
Copy size	Max. 11" x 17" (A3) Min. 5-1/2" x 8-1/2" (A6) Image loss: Max. 5/32" (4 mm) (leading a Max. 11/64" (6 mm) (along of			
Copying speed (one-sided copying at 100% copy ratio)	600 dpi: 12 copies/min. (11" x 17") 13 copies/min. (8-1/2" x 14") 16 copies/min. (8-1/2" x 11"R) 23 copies/min. (8-1/2" x 11") 23 copies/min. (5-1/2" x 8-1/2")	600 dpi: 14 copies/min. (11" x 17") 16 copies/min. (8-1/2" x 14") 18 copies/min. (8-1/2" x 11"R) 27 copies/min. (8-1/2" x 11") 27 copies/min. (5-1/2" x 8-1/2")		
	1200 dpi: 7.5 copies/min. (11" x 17") 8 copies/min. (8-1/2" x 14") 9 copies/min. (8-1/2" x 11"R) 13.5 copies/min. (8-1/2" x 11") 13.5 copies/min. (5-1/2" x 8-1/2")	1200 dpi: 7.5 copies/min. (11" x 17") 8 copies/min. (8-1/2" x 14") 9 copies/min. (8-1/2" x 11"R) 13.5 copies/min. (8-1/2" x 11") 13.5 copies/min. (5-1/2" x 8-1/2")		
Continuous copy	Max. 999 copies; subtractive counter			
First-copy time*	Approx. 4.8 sec.			
Warm-up time*	Approx. 23 sec.			
Copy ratio	600 dpi: Variable: 25% to 400%, in 1% increments (total 376 steps) Fixed preset: 25%, 50%, 64%, 77%, 100%, 121%, 129%, 200%, 400%			
	1200 dpi: Variable: 50% to 200%, in 1% increments (total 151 steps) Fixed preset: 50%, 64%, 77%, 100%, 121%, 129%, 200%			
Exposure system	Document glass: Moving optical source, s automatic exposure fund RSPF: Moving original			
Paper feed	Two automatic feeding paper trays (500 s	heets x 2) + bypass tray (100 sheets)		
Fusing system	Heat rollers			
Developer system	Magnetic brush development			
Light source	Xenon lamp			
Resolution	Scan: 400 dpi Scan: 400 dpi Output: 600 dpi Output: 1200 dpi	(AUTO/TEXT/PHOTO mode) (SUPER PHOTO mode)		

Gradation	Scanning: 256 Printing: 2 value
Power supply	AC 120V, 60 Hz, 12A
Power consumption	Max. 1.4 kW
Overall dimensions (with bypass tray folded)	24-17/32" (W) x 24" (D) (623 mm (W) x 609.5 mm (D))
Weight	Approx. 103.7 lbs. (47 kg) (Not includes toner cartridge)
Dimensions	24-17/32" (W) x 24" (D) x 30-15/16" (H) (623mm (W) x 609.5mm (D) x 785.5mm (H))
Operating conditions	Temperature: 59°F to 86°F (15°C to 30°C), Humidity: 20% to 85%
Noise level	Sound Power Level LwA(1B=10dB) Copying: 6.3[B] Standby: 3.6[B] Sound Pressure Level LpA (bystander positions) Copying: 50[dB(A)] Standby: 25[dB(A)] Sound Pressure Level LpA (operator position) Copying: 51[dB(A)] Standby: 20[dB(A)] Noise emission measurement in accordance with ISO 7779.
Emission concentration (measured according to RAL-UZ62)	Ozone: 0.02 mg/m ³ or less Dust: 0.075 mg/m ³ or less Styrene: 0.07 mg/m ³ or less

^{*} The first-copy time and warm-up time may vary depending on the power-supply voltage, ambient temperature, and other operating conditions.

Reversing single pass feeder (RSPF)

Acceptable original	Weight	9 lbs. to 34 lbs. (35 $\rm g/m^2$ to 128 $\rm g/m^2$) (14 lbs. to 28 lbs. (52 $\rm g/m^2$ to 105 $\rm g/m^2$) for two-sided original)
	Size	5-1/2" x 8-1/2" to 11" x 17"
	Capacity	Up to 100 sheets (Thickness 33/64" (13 mm) and below)
Detectable original sizes		5-1/2" x 8-1/2", 5-1/2" x 8-1/2"R, 8-1/2" x 11", 8-1/2" x 11"R, 8-1/2" x 14", 11" x 17" (A4, A3)
Weight		16.6 lbs. (7.5 kg)
Dimensions		22-61/64" (W) x 17-9/64" (D) x 5-1/4" (H) (586 mm (W) x 457 mm (D) x 145 mm (H))



As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.



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Data Revised: Jul. 31. 2002 Data Issued: Apr. 2. 2001

MSDS No. F-00981

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : AR-270NT / AR-270T / AR-270ST / AR-270FT / AR-270NT-J /

AR-270ST-C/ AR-270FT-T (Black Toner)

Supplier Identification: Sharp Corporation

22-22 Nagaike-cho, Abeno-ku, Osaka, Japan

Local suppliers are listed below. Please contact the nearest supplier for additional information.

Area	(Country)	(Name and Telephone	Number)
North America	U.S.A.	Sharp Electronics Corporation Sharp Plaza, Mahwah, NJ Telephone number for information Emergency telephone number	: 1-800-237-4277 : 1-800-255-3924
Can	Canada	Sharp Electronics of Canada Ltd. Telephone number for information Emergency telephone number	: 905-890-2100 : 1-800-255-3924
Oceania	Australia	Sharp Corporation of Australia PTY. Ltd. No1 Huntingwood Drive Huntingwood E Telephone number for information	Blacktown N.S.W. : 1300-13-50-22
	Germany	Sharp Electronics (Europe) GMBH Sonninstrasse 3, 20097 Hamburg Telephone number to access MSDS For more information	: 040-2376-2185 : 040-2376-2613
	United Kingdom	Sharp Electronics (U. K.) Ltd. Telephone number for information	: 08705-274-277
	France	Sharp Electronics France S.A. Telephone number for information	: 01-49-90-34-00
Europe	Austria	Sharp Electronics GMBH Telephone number for information	: 01-727-19-0
	Italy	Sharp Electronics (Italy) S.P.A. Telephone number for information	: 02895951
	Spain	Sharp Electronics (Espana) S.A. Telephone number for information	: 93-581-97-00
	Netherlands	Sharp Electronics Benelux B.V. Telephone number for information	: 30-6359500
	Sweden	Sharp Electronics Nordic AB Telephone number for information	: 08-634-36-00
	Switzerland	Sharp Electronics (Schweiz) AG Telephone number for information	: 01-846-6111
Middle East	U.A.E.	Sharp Middle East FZE P.O.Box 17115 Jebel Ali, Dubai Telephone number for information	: 04-815311

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance[] P	reparation[X]					
<u>Ingredient</u>	CAS No.	Proportion	OSHA PEL	ACGIH TLV	MAK-TWA	NOHSC-TWA
Styrene-Acrylate copolymer	29497-14-1	85-95%	Not listed	Not listed	Not listed	Not listed
Carbon black	1333-86-4	5-10%	3.5mg/m ³	3.5mg/m ³	Not listed	3mg/m ³
Iron oxide	1309-38-2	1-5%	Not listed	Not listed	Not listed	Not listed
Metal Complex dye	* 109125-51-1 84179-66-8	< 2%	0.5mg/m ³	0.5mg/m ³	Not listed	Not listed

* EC No.: 400-110-2, Symbol letter: F, R Phrase: R11



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Data Revised: Jul. 31. 2002 Data Issued: Apr. 2. 2001

MSDS No. F-00981

3. HAZARDS IDENTIFICATION

Most Important Hazards and Effects of the Products

Human Health Effects: There are no anticipated carcinogenic effects from exposure based on animal tests

performed using toner. When used as intended according to instructions, studies do

not indicate any symptoms of fibrosis will occur.

Environmental Effects: No data are available.

Specific Hazards : Dust explosion (like most finely divided organic powders)

Directive 1999/45/EC(Europe): Not classified as dangerous

4. FIRST-AID MEASURES

Route(s) of Entry: Inhalation? Skin? Ingestion?

Yes No Possible but very unusual.

Inhalation: Remove to fresh air. If symptoms occur, consult medical personnel. **Skin Contact:** Wash with soap and water for 15 minutes or until particle is removed.

If irritation does occur, consult medical personnel.

Eye Contact: Flush eyes immediately with water for 15 minutes. If irritation does occur, consult medical

personnel.

Ingestion: Rinse with water and drink several glasses of water. If irritation or discomfort does occur, consult

medical personnel.

5. FIRE -FIGHTING MEASURES

Extinguishing Media : Water, CO₂, foam and dry chemicals

Special Fire fighting Procedures: None

Fire and Explosion Hazards : Toner material, like most finely divided organic powders, may form an

explosive mixture.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions : None Environmental Precautions : None

Methods for Cleaning Up : Wipe off with paper or cloth. Do not use vacuum cleaner when a large

amount is released. It, like most finely divided organic powders, is capable of

creating a dust explosion.

7. HANDLING AND STORAGE

Handling

Technical Measures : None Precautions : None

Safe Handling Advice: Use of a dust mask is recommended when handling a large quantity of toner or during

long term exposure, as with any non-toxic dust. Try not to disperse the particles.

Storage

Technical Measures: None

Storage Conditions : Keep container closed and Store in a cool and dry place.

Keep out of the reach of children.

Incompatible Products: None

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures

Ventilation : Not required under intended use.



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Data Revised: Jul. 31. 2002 Data Issued: Apr. 2. 2001

MSDS No. F-00981

Exposure limit values

OSHA-PEL (USA) : 15mg/m³ (Total Dust), 5mg/m³ (Respirable Dust) ACGIH-TLV (USA) : 10mg/m³ (Total Dust), 3mg/m³ (Respirable Dust)

Personal Protective Equipment

Respiratory Protection : Not required under intended use. Hand Protection : Not required under intended use. Eye Protection : Not required under intended use. Skin Protection : Not required under intended use.

Other Protective Equipment : Use of a dust mask and goggles are recommended when handling a large

quantity of toner or during long term exposure, as with any non-toxic dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State:Solid Form: Powder Color:Black Odor:odorless

Ph : Not applicable **Boiling/Melting Point** : Not applicable Softening Point (°C) : 100 - 130 Flash Point (°C) : Not applicable

Ignition Point (°C) **:** > 350 **Explosion Properties** : No data

Density (g/cm³) : 1.1 (bulk density: 0.35)

Solubility in water : Negligible

10. STABILITY AND REACTIVITY

Stability : Stable

Hazardous Reactions : Dust explosion, like most finely divided organic powders.

Conditions to Avoid : Electric discharge, throwing into fire.

Materials to Avoid : Oxidizing Materials Hazardous Decomposition Products: CO, CO₂ and NO_X

Further Information : None

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Ingestion (oral) : $LD_{50} > 2000 mg/kg$ (Rats)

Inhalation : $LC_{50} > 4.97 mg/L$

Eye irritation : Not an irritant (Rabbits) Skin irritation : Not an irritant (Rabbits)

Skin sensitizer : No sensitization Mutagenicity : Negative (Ames Test)

Carcinogenicity : In 1996 the IARC reevaluated carbon black as a Group 2B carcinogen (possible human

> carcinogen). This classification is given to chemicals for which there is inadequate human evidence, but sufficient animal evidence on which to base an opinion of carcinogenicity. The classification is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung. Studies performed in animal models other than rats did not show any association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no

association between toner exposure and tumor development in rats.



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Data Revised: Jul. 31. 2002 Data Issued: Apr. 2. 2001

MSDS No. F-00981

Chronic Effect

: In a study in rats of chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4mg/m³) exposure group, but no pulmonary change was reported in the lowest (1mg/m³) exposure group, the most relevant level to potential human exposures.

12. ECOLOGICAL INFORMATION

No data are available.

13. DISPOSAL CONSIDERATIONS

Waste from Residues : Waste material may be dumped or incinerated under conditions which meet all

federal, state and local environmental regulations.

Contaminated Packaging: Waste may be disposed or incinerated under conditions which meet all federal,

state and local environmental regulations.

14. TRANSPORT INFORMATION

UN Classification : None Not classified as hazardous for transport.

15. REGULATORY INFORMATION

US Information

TSCA (Toxic Substances Control Act):

All chemical substances in this product comply with all applicable rules or order under TSCA.

SARA (Superfund Amendments and Reauthorization Act) Title III

302 Extreme Hazardous Substance: None 311/312 Hazard Classification: None

EU Information

1999/45/EC and 67/548/EEC

Symbol & Indication : Not required R-Phrase : Not required

76/769/EEC : All chemical substances in this product comply with all applicable rules

or order under 76/769/EEC.

16. OTHER INFORMATION

NFPA Rating (USA) : Health=1 Flammability=1 Reactivity=0 WHMIS Legislation (Canada) : This product is not a controlled product.

List of R phrases : R11 : Highly flammable

References

IARC (1996): IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol.

65, Printing Process And Printing Inks, Carbon Black and Some Nitro Compounds, Lyon,

pp.149-261

H.Muhle, B.Bellmann, O.Creutzenberg, C.Dasenbrock, H.Ernst, R.Kilpper, J.C.MacKenzie, P.Morrow, U.Mohr, S.Takenaka, and R.Mermelstein (1991) Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats.

Fundamental and Applied Toxicology 17, pp.280-299.

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. However, all materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we do not guarantee that these are the only hazards which exist.



Page: 1/4

Data Issued: Aug. 1. 2003 MSDS No. F-31201

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : AR-271ND / AR-271DV / AR-271SD / AR-271SD-C (Black Developer)

Supplier Identification: Sharp Corporation

22-22 Nagaike-cho, Abeno-ku, Osaka, Japan

Local suppliers are listed below. Please contact the nearest supplier for additional information.

Area	(Country)	(Name and Telephone	Number)
North America	U.S.A.	Sharp Electronics Corporation Sharp Plaza, Mahwah, NJ Telephone number for information Emergency telephone number	: 1-800-237-4277 : 1-800-255-3924
America	Canada	Sharp Electronics of Canada Ltd. Telephone number for information Emergency telephone number	: 905-890-2100 : 1-800-255-3924
Oceania	Australia	Sharp Corporation of Australia PTY. Ltd. No1 Huntingwood Drive Huntingwood I Telephone number for information	Blacktown N.S.W. : 1300-13-50-22
	Germany	Sharp Electronics (Europe) GMBH Sonninstrasse 3, 20097 Hamburg Telephone number to access MSDS For more information	: 040-2376-2185 : 040-2376-2613
	United Kingdom	Sharp Electronics (U. K.) Ltd. Telephone number for information	: 08705-274-277
	France	Sharp Electronics France S.A. Telephone number for information	: 01-49-90-34-00
Furono	Austria	Sharp Electronics GMBH Telephone number for information	: 01-727-19-0
Europe	Italy	Sharp Electronics (Italy) S.P.A. Telephone number for information	: 02895951
	Spain	Sharp Electronics (Espana) S.A. Telephone number for information	: 93-581-97-00
	Netherlands	Sharp Electronics Benelux B.V. Telephone number for information	: 30-6359500
	Sweden	Sharp Electronics Nordic AB Telephone number for information	: 08-634-36-00
	Switzerland	Sharp Electronics (Schweiz) AG Telephone number for information	: 01-846-6111
Middle East	U.A.E.	Sharp Middle East FZE P.O.Box 17115 Jebel Ali, Dubai Telephone number for information	: 04-815311

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance[] Preparation[X]

<u>Ingredient</u>	CAS No.	Proportion	OSHA PEL	ACGIH TLV	MAK-TWA	NOHSC-TWA
Iron powder	7439-89-6	> 90%	Not listed	Not listed	Not listed	Not listed
Styrene-Acrylate copolymer	29497-14-1	5-10%	Not listed	Not listed	Not listed	Not listed
Carbon black	1333-86-4	< 1%	3.5mg/m ³	3.5mg/m ³	Not listed	3mg/m ³



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Data Issued: Aug. 1. 2003

MSDS No. F-31201

3. HAZARDS IDENTIFICATION

Most Important Hazards and Effects of the Products

Human Health Effects: There are no anticipated carcinogenic effects from exposure based on animal tests

performed using toner. When used as intended according to instructions, studies do

not indicate any symptoms of fibrosis will occur.

Environmental Effects: No data are available.

Specific Hazards : Dust explosion (like most finely divided organic powders)

Directive 1999/45/EC(Europe): Not classified as dangerous

4. FIRST-AID MEASURES

Route(s) of Entry: Inhalation? Skin? Ingestion?

No No Possible but very unusual.

Inhalation: Remove to fresh air. If symptoms occur, consult medical personnel. **Skin Contact:** Wash with soap and water for 15 minutes or until particle is removed.

If irritation does occur, consult medical personnel.

Eye Contact: Flush eyes immediately with water for 15 minutes. If irritation does occur, consult medical

personnel.

Ingestion: Rinse with water and drink several glasses of water. If irritation or discomfort does occur, consult

medical personnel.

5. FIRE -FIGHTING MEASURES

Extinguishing Media : Water, CO₂, foam and dry chemicals

Special Fire fighting Procedures: None

Fire and Explosion Hazards : Toner material, like most finely divided organic powders, may form an

explosive mixture.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions : None Environmental Precautions : None

Methods for Cleaning Up: Wipe off with paper or cloth. Do not use vacuum cleaner when a large

amount is released. It, like most finely divided organic powders, is capable of

creating a dust explosion.

7. HANDLING AND STORAGE

Handling

Technical Measures : None Precautions : None

Safe Handling Advice: Use of a dust mask is recommended when handling a large quantity of toner or during

long term exposure, as with any non-toxic dust. Try not to disperse the particles.

Storage

Technical Measures: None

Storage Conditions : Keep container closed and Store in a cool and dry place.

Keep out of the reach of children.

Incompatible Products: None

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures

Ventilation : Not required under intended use.



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Exposure limit values

OSHA-PEL (USA) : 15mg/m³ (Total Dust) , 5mg/m³ (Respirable Dust)
ACGIH-TLV (USA) : 10mg/m³ (Total Dust) , 3mg/m³ (Respirable Dust)

Personal Protective Equipment

Respiratory Protection : Not required under intended use.
Hand Protection : Not required under intended use.
Eye Protection : Not required under intended use.
Skin Protection : Not required under intended use.

Other Protective Equipment : Use of a dust mask and goggles are recommended when handling a large

quantity of toner or during long term exposure, as with any non-toxic dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State:Solid Form: Powder Color:Black Odor:odorless

Ph : Not applicable
Boiling/Melting Point : Not applicable
Flash Point (°C) : Not applicable
Ignition Point (°C) : No data
Explosion Properties : No data

Density (g/cm³) : 7.3 (bulk density : 2.0)

Solubility in water : Negligible

10. STABILITY AND REACTIVITY

Stability : Stable

Hazardous Reactions: Dust explosion, like most finely divided organic powders.

Conditions to Avoid : Electric discharge, throwing into fire.

Materials to Avoid : Oxidizing Materials Hazardous Decomposition Products : CO, CO₂ and NO_X

Further Information : None

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Ingestion (oral) : $LD_{50} > 2500 \text{mg/kg}$ (Rats)

Inhalation : No data Eye irritation : No data

Skin irritation : Not an irritant (Rabbits)

Skin sensitizer : No sensitization

Mutagenicity : Negative (Ames Test)

Carcinogenicity : In 1996 the IARC reevaluated carbon black as a Group 2B carcinogen (possible human

carcinogen). This classification is given to chemicals for which there is inadequate human evidence, but sufficient animal evidence on which to base an opinion of carcinogenicity. The classification is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung. Studies performed in animal models other than rats did not show

any association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no

association between toner exposure and tumor development in rats.

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Chronic Effect

: In a study in rats of chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4mg/m³) exposure group, but no pulmonary change was reported in the lowest (1mg/m³) exposure group, the most relevant level to potential human exposures.

12. ECOLOGICAL INFORMATION

No data are available.

13. DISPOSAL CONSIDERATIONS

Waste from Residues : Waste material may be dumped or incinerated under conditions which meet all

federal, state and local environmental regulations.

Contaminated Packaging: Waste may be disposed or incinerated under conditions which meet all federal,

state and local environmental regulations.

14. TRANSPORT INFORMATION

UN Classification : None Not classified as hazardous for transport.

15. REGULATORY INFORMATION

US Information

TSCA (Toxic Substances Control Act):

All chemical substances in this product comply with all applicable rules or order under TSCA.

SARA (Superfund Amendments and Reauthorization Act) Title III

302 Extreme Hazardous Substance: None 311/312 Hazard Classification: None

EU Information

1999/45/EC and 67/548/EEC

Symbol & Indication : Not required R-Phrase : Not required

76/769/EEC : All chemical substances in this product comply with all applicable rules

or order under 76/769/EEC.

16. OTHER INFORMATION

NFPA Rating (USA) : Health=1 Flammability=1 Reactivity=0 WHMIS Legislation (Canada) : This product is not a controlled product.

References

IARC (1996): IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol. 65, Printing Process And Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp.149-261

H.Muhle, B.Bellmann, O.Creutzenberg, C.Dasenbrock, H.Ernst, R.Kilpper, J.C.MacKenzie, P.Morrow, U.Mohr, S.Takenaka, and R.Mermelstein (1991) Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats.

Fundamental and Applied Toxicology 17, pp.280-299.

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. However, all materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we do not guarantee that these are the only hazards which exist.

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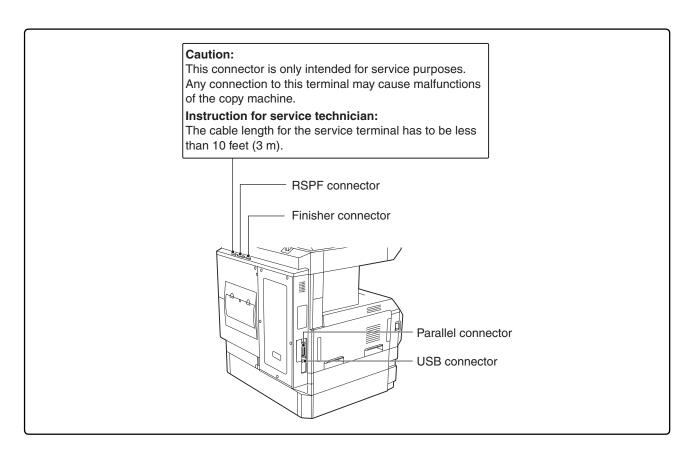
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subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the

For users in the USA

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING:

FCC Regulations state that any unauthorized changes or modifications this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Note:

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

Shielded cables must be used with this equipment to maintain compliance with standard.

NOTICE for users in the USA

BE SURE TO ASK YOUR AUTHORIZED SHARP DEALER ABOUT THE WAR-RANTY THAT YOUR SELLING DEALER EXTENDS TO YOU. In order to assure you, the end-user, of warranty protection, Sharp extends a limited warranty to each of its authorized dealers and, in turn, requires each of its authorized dealers to extend its own warranty to you on terms that are no less favorable than those given to the dealer by Sharp. You should be aware, however, that Sharp does not itself extend any warranties, either express or implied, directly to you, the end-user, and no one is authorized to make any representations or warranties on behalf of Sharp. Specifically, SHARP DOES NOT EXTEND TO YOU, THE END-USER, ANY EX-PRESS WARRANTY OR ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR USE OR FITNESS FOR ANY PARTICULAR PURPOSE IN CON-NECTION WITH THE HARDWARE, SOFTWARE OR FIRMWARE EMBODIED IN, OR USED IN CONJUNCTION WITH THIS PRODUCT. Sharp is not responsible for any damages or loss, either direct, incidental or consequential, which you, the end-user, may experience as a result of your purchase or use of the hardware, software or firmware embodied in or used in conjunction with this Product. Your sole remedy, in the event that you encounter any difficulties with this Product, is against the authorized dealer from which you purchased the Product.

AR-M237 Digital Multifunctional System AR-M277 Digital Multifunctional System

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DIGITAL MULTIFUNCTIONAL SYSTEM

SOFTWARE SETUP GUIDE

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INTRODUCTION

This manual explains how to install and configure the software that is required for the printer function of the machine. The procedure for viewing the online manual is also explained.



- The screen images in this manual are mainly for Windows[®] XP. With other versions of Windows[®], some screen images may be different from those in this manual.
- The explanations in this manual are based on the North American version of the software. Versions for other countries and regions may vary slightly from the North American version.
- Where "AR-XXXX" appears in this manual, please substitute the name of your model for "XXXX".
 For the name of your model, see "PART NAMES AND FUNCTIONS" in the operation manual for copier.
- This manual refers to the "SHARP Digital Multifunctional System AR-M230/M270 Series Software CD-ROM" simply as "CD-ROM".

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SOFTWARE FOR THE SHARP AR-M230/M270 SERIES

The CD-ROM that accompanies the machine contains the following software:

Printer driver

The printer driver enables you to use the printer function of the machine.

PC-FAX driver

The PC-FAX driver lets you easily send faxes from your computer through the machine to another fax machine (when the facsimile expansion kit is installed).

* To use the PC-FAX driver, Internet Explorer 4.0 or later must be installed in your computer.

Acrobat Reader 5.0

Software that allows you to view the online printer manual on your computer.

BEFORE INSTALLATION

HARDWARE AND SOFTWARE REQUIREMENTS

Check the following hardware and software requirements before installing the software.

1	IBM PC/AT or compatible computer equipped with a USB 2.0/1.1*1 or bi-directional parallel interface (IEEE 1284)
	Windows 95*2, Windows 98, Windows Me, Windows NT Workstation 4.0 (Service Pack 5 or later)*3, Windows 2000 Professional*3, Windows XP Professional*3, Windows XP Home Edition*3
Other hardware requirements	An environment that allows any of the above operating systems to fully operate

^{*1} Compatible with Windows 98, Windows Me, Windows 2000 Professional, Windows XP Professional or Windows XP Home Edition preinstalled models equipped with a USB interface as standard.

INSTALLATION ENVIRONMENT AND INSTALLATION PROCEDURE

Follow the appropriate installation procedure for your operating system and type of cable as indicated below.

Operating system	Cable	Procedure to follow
Windows XP	USB/Parallel	INSTALLATION IN WINDOWS XP (USB/PARALLEL CABLE) (p. 3)
Windows 98/Me/2000	USB	INSTALLATION IN WINDOWS 98/ME/2000 (USB CABLE) (p. 6)
Windows 98/Me/2000		INSTALLATION IN WINDOWS 95/98/ME/NT4.0/2000 (PARALLEL CABLE) (p. 8)
Windows 95/NT 4.0		INSTALLATION IN WINDOWS 95/98/ME/NT4.0/2000 (PARALLEL CABLE) (p. 8)

^{*2} If you are installing the PC-FAX driver, a system file must be updated before the driver can be installed. For more information, click the "Display README" button in the select packages window of the installer. (p. 8)

^{*3} Administrator's rights are required to install the software using the installer.

INSTALLING THE SOFTWARE



If an error message appears, follow the on-screen instructions to solve the problem. After the problem is solved, the installation procedure will continue. Depending on the problem, you may have to click the "Cancel" button to exit the installer. In this case, reinstall the software from the beginning after solving the problem.

INSTALLATION IN WINDOWS XP (USB/PARALLEL CABLE)

The USB or parallel cable must not be connected to the machine. Make sure that the cable is not connected before proceeding.

If the cable is connected, a Plug and Play window will appear. If this happens, click the "Cancel" button to close the window and disconnect the cable.



The cable will be connected in step

- 2 Insert the CD-ROM into your computer's CD-ROM drive.
- Click the "start" button, click "My Computer" (), and then double-click the CD-ROM icon ().
- 4. Double-click the "setup" icon (🔊).



If the language selection screen appears after you double click the "setup" icon, select the language that you wish to use and click the "Next" button. (Normally the correct language is selected automatically.)

- The License Agreement window will appear. Make sure that you understand the contents of the license agreement, and then click the "Yes" button.
- Read the message in the "Welcome" window and then click the "Next" button.

Select the checkboxes of the software packages to be installed and then click the "Next" button.

Click the "Display README" button to show information on packages that are selected.





The PC-FAX driver can only be used if the facsimile expansion kit is installed.

Check the packages on the screen, and then click the "Start" button.

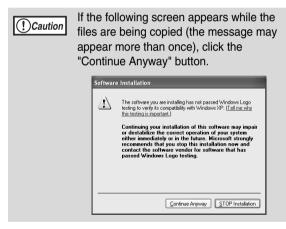
The software packages to be installed will be displayed on the screen. If an incorrect package is displayed, click the "Back" button and select the correct packages.

The files required for installation of the printer driver are copied (if "Printer Driver" was selected in Step 7).

Follow the on-screen instructions.

When you are asked how the printer is connected, select "Connected to this computer" and click the "Next" button.



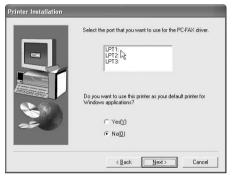


When "The installation of the SHARP software is complete" appears, click the "OK" button.

Begin the installation of the PC-FAX driver (if "PC-FAX Driver" was selected in Step 7).

Follow the on-screen instructions.

- When the model selection window appears, select model name of your machine.
- During installation of the PC-FAX driver, you will be asked to select the port. If you are using the USB port, select any port (such as LPT1) and continue the installation. The port settings are configured in the PC-FAX driver properties after installation. (p. 12)



Click the "Finish" button when the message informs you that setup is successful.

11

When the "Finish" screen appears, click the "Close" button.

When "After Windows system restarts, connect the interface cable to the PC" appears, click the "OK" button.



After the installation, a message prompting you to restart your computer may appear. In this case, click the "Yes" button to restart your computer.

Connect the interface cable to the machine and your computer (p. 10).

- If you are using a USB cable, make sure the machine's power is turned on and then connect the cable.
- If you are using a parallel cable, turn off the power of the machine and your computer, connect the cable, turn on the power of the machine, and then turn on your computer.

Windows will detect the machine and the Plug and Play screen will appear.



Begin installation of the printer driver.

"SHARP AR-XXXX" will appear in the "Found New Hardware Wizard" dialog box. Select "Install the software automatically (Recommended)" and click the "Next" button. Follow the on-screen instructions.



If a warning window appears regarding the "Windows logo test", be sure to click the "Continue Anyway" button.

This completes the installation of the software.

- If you installed the printer driver, configure the printer driver settings as explained in "CONFIGURING THE PRINTER DRIVER" (p. 11).
- If you installed the PC-FAX driver and are using a USB connection, configure the PC-FAX driver settings as explained in "CONFIGURING THE PC-FAX DRIVER WHEN USING A USB CABLE (if the PC-FAX driver is installed)" (p. 12).

INSTALLATION IN WINDOWS 98/ME/2000 (USB CABLE)

The USB cable must not be connected to the machine. Make sure that the cable is not connected before proceeding.

If the cable is connected, a Plug and Play window will appear. If this happens, click the "Cancel" button to close the window and disconnect the cable.

MNote

The cable will be connected in step 12.

- 2 Insert the CD-ROM into your computer's CD-ROM drive.
- Double-click "My Computer" (♠), and then double-click the CD-ROM icon (♠).
- 4. Double-click the "setup" icon (🔊).



If the language selection screen appears after you double click the "setup" icon, select the language that you wish to use and click the "Next" button. (Normally the correct language is selected automatically.)

- The License Agreement window will appear. Make sure that you understand the contents of the license agreement, and then click the "Yes" button.
- Read the message in the "Welcome" window and then click the "Next" button.
- Select the checkboxes of the software packages to be installed and then click the "Next" button.

Click the "Display README" button to show information on packages that are selected.





The PC-FAX driver can only be used if the facsimile expansion kit is installed.

Check the packages on the screen, and then click the "Start" button.

The software packages to be installed will be displayed on the screen. If an incorrect package is displayed, click the "Back" button and select the correct packages.

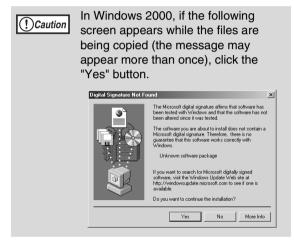
The files required for installation of the printer driver are copied (if "Printer Driver" was selected in Step 7).
Follow the on-screen instructions.

When you are asked how the printer is connected, select "Connected to this computer" and click the "Next" button.



When the interface selection screen appears, select "USB" and click the "Next" button.



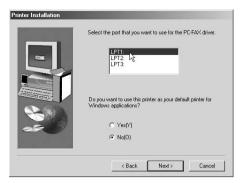


When "The installation of the SHARP software is complete" appears, click the "OK" button.

Begin the installation of the PC-FAX driver (if "PC-FAX Driver" was selected in Step 7).

Follow the on-screen instructions.

- When the model selection window appears, select model name of your machine.
- During installation of the PC-FAX driver, you will be asked to select the port. If you are using the USB port, select any port (such as LPT1) and continue the installation. The port settings are configured in the PC-FAX driver properties after installation. (p. 12)



Click the "Finish" button when the message informs you that setup is successful.

When the "Finish" screen appears, click the "Close" button.

When "After Windows system restarts, connect the interface cable to the PC" appears, click the "OK" button.



After the installation, a message prompting you to restart your computer may appear. In this case, click the "Yes" button to restart your computer.

Make sure that the power of the machine is turned on, and then connect the USB cable. (p. 10)
Windows will detect the machine and the Plug and Play screen will appear.

Follow the instructions in the Plug and Play screen that appears in your version of Windows to begin the installation.

This completes the installation of the software.

- If you installed the printer driver, configure the printer driver settings as explained in "CONFIGURING THE PRINTER DRIVER" (p. 11).
- If you installed the PC-FAX driver, configure the PC-FAX driver settings as explained in "CONFIGURING THE PC-FAX DRIVER WHEN USING A USB CABLE (if the PC-FAX driver is installed)" (p. 12).

INSTALLATION IN WINDOWS 95/98/ME/NT4.0/2000 (PARALLEL CABLE)

The USB or parallel cable must not be connected to the machine. Make sure that the cable is not connected before proceeding.

If the cable is connected, a Plug and Play window will appear. If this happens, click the "Cancel" button to close the window and disconnect the cable.



The cable will be connected in step 18.

- 2 Insert the CD-ROM into your computer's CD-ROM drive.
- Double-click "My Computer" (♠), and then double-click the CD-ROM icon (♠).
- 4 Double-click the "setup" icon (🔊).



If the language selection screen appears after you double click the "setup" icon, select the language that you wish to use and click the "Next" button. (Normally the correct language is selected automatically.)

- The License Agreement window will appear. Make sure that you understand the contents of the license agreement, and then click the "Yes" button.
- Read the message in the "Welcome" window and then click the "Next" button.
- 7 Select the checkboxes of the software packages to be installed and then click the "Next" button.

Click the "Display README" button to show information on packages that are selected.





- The PC-FAX driver can only be used if the facsimile expansion kit is installed.
- If you are installing the PC-FAX driver, a system file must be updated before the driver can be installed. For more information, click the "Display README" button.
- Check the packages on the screen, and then click the "Start" button.

The software packages to be installed will be displayed on the screen. If an incorrect package is displayed, click the "Back" button and select the correct packages.

- **9** Begin installation of the printer driver (if "Printer Driver" was selected in Step 7). Follow the on-screen instructions. If you are using Windows 95/NT 4.0, go to step 12.
- When you are asked how the printer is connected, select "Connected to this computer" and click the "Next" button.



When the interface selection screen appears, select "Parallel" and click the "Next" button.



Select the printer port and click the "Next" button.

Select "LPT1" for the printer port.



//Note

If "LPT1" does not appear, another printer or peripheral device is using LPT1. In this case continue the installation, and after the installation is finished, change the port setting so that the machine can use LPT1. This procedure is explained in "Another printer is using the parallel port (when using a parallel cable)" on page 14.

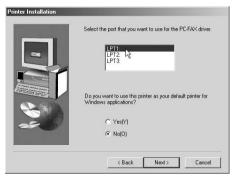
When the model selection window appears, select model name of your machine and click the "Next" button.

For the model name of your machine, see "PART NAMES AND FUNCTIONS" in the operation manual for copier.

14 Click the "Yes" button.



- When "The installation of the SHARP software is complete" appears, click the "OK" button.
- Begin the installation of the PC-FAX driver (if "PC-FAX Driver" was selected in Step 7).
 Follow the on-screen instructions.
 - When the model selection window appears, select model name of your machine.
 - During installation of the PC-FAX driver, you will be asked to select the port. If you are using the parallel port, select "LPT1" and continue the installation.



Click the "Finish" button when the message informs you that setup is successful.

When the "Finish" screen appears, click the "Close" button.

When "After Windows system restarts, connect the interface cable to the PC" appears, click the "OK" button.



After the installation, a message prompting you to restart your computer may appear. In this case, click the "Yes" button to restart your computer.

Turn off the power of the machine and your computer, and connect the machine to your computer with the parallel cable. (p. 10)

After connecting the machine to your

After connecting the machine to your computer, turn on the power of the machine and then start up your computer.

This completes the installation of the software.

 If you installed the printer driver, configure the printer driver settings as explained in "CONFIGURING THE PRINTER DRIVER" (p. 11).

CONNECTING TO A COMPUTER

Follow the procedure below to connect the machine to your computer.

Interface cables for connecting the machine to your computer are not included with the machine. Please purchase the appropriate cable for your computer.

Interface cable

USB cable

Shielded twisted pair cable, high-speed transmission equivalent (9 feet (3 m) max.) If the machine will be connected using a USB 2.0 interface, please purchase a USB cable that supports USB 2.0.

Parallel cable

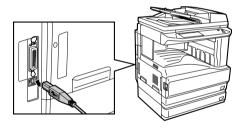
IEEE 1284-Shielded type bi-directional parallel interface cable (9 feet (3 m) max.)



- USB is available on a PC/AT compatible computer that was originally equipped with USB and had Windows 98, Windows Me, Windows 2000 Professional, Windows XP Professional or Windows XP Home Edition preinstalled.
- Do not connect the interface cable before installing the printer driver. The interface cable must be connected during installation of the printer driver.

CONNECTING A USB CABLE

Insert the cable into the USB port on the machine.



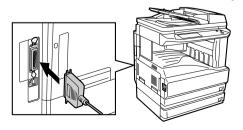
2 Insert the other end of the cable into your computer's USB port.



The cable can also be inserted into a USB 1.1 port. However, performance will be the same as USB 1.1.

CONNECTING A PARALLEL CABLE

- Ensure that your computer and the machine are turned off.
- 2 Insert the cable into the parallel port on the machine and fasten with the clasps.



Insert the other end of the cable into your computer's parallel port.

CONFIGURING THE PRINTER DRIVER

After installing the printer driver, you must configure the printer driver settings appropriately for the number of paper travs on the machine and the size of paper loaded in each trav.

Click the "start" button, click "Control Panel", click "Printers and Other Hardware", and then click "Printers and Faxes".

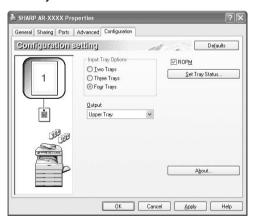
In operating systems other than Windows XP, click the "Start" button, select "Settings", and then click "Printers".

Click the "SHARP AR-XXXX" printer driver icon and select "Properties" from the "File" menu.

If you are using Windows NT 4.0/2000/XP, go to step 4.

- In Windows 95/98/Me, click the "Setup" tab.
- 4. Click the "Configuration" tab and set the printer configuration based on the options that have been installed.

 Set the printer configuration properly. Otherwise, printing may not take place correctly.



Click the "Set Tray Status" button and select the size of paper that is loaded in each tray.

Select a tray in the "Paper source" menu, and select the size of paper loaded in that tray from the "Setting Paper Size" menu. Repeat for each tray.



- 6 Click the "OK" button in the "Set Tray Status" window.
- Click the "OK" button in the printer properties window.

CONFIGURING THE PC-FAX DRIVER WHEN USING A USB CABLE (if the PC-FAX driver is installed)

When the PC-FAX function is used with a USB cable, the port used by the PC-FAX driver must be configured. The PC-FAX driver uses the USB port that was created when the printer driver was installed. Configure the port after installing the printer driver (pages 3 to 9).

Click the "start" button, click "Control Panel", click "Printers and Other Hardware", and then click "Printers and Faxes".

In operating systems other than Windows XP, click the "Start" button, select "Settings", and then click "Printers".

Click the PC-FAX driver icon and select "Properties" from the "File" menu.

Click the "Ports" tab and select a USB port (for example, USB001) in the list.
In Windows 98/Me, click the "Details" tab and select USB port in the "Print to the following port" list box.





- The USB port name will vary depending on the number of USB ports created on your computer. If the port created during installation of the printer driver is your first USB port, the name will be "USB001".
- Select the USB port being used by the AR-M230/M270 series printer driver.
 The port used by the printer driver is indicated by a checkmark in the "Ports" tab of the printer driver properties window. (In Windows 98/Me, the port is selected in "Print to the following port" in the "Details" tab.)
- 4 Click the "OK" button.

HOW TO USE THE ONLINE MANUAL

The online manual provides detailed instructions for operating the machine as a printer. View the online manual when you use the printer function after the initial setup is completed.

Contents of the online manual

The contents of the online manual are as follows.

How to use the online manual: Explains how to use the online manual.

Print: Provides information on how to print a document.

Printer sharing: Explains how to configure the machine for use as a shared printer.

Troubleshooting: Provides instructions on how to solve driver or software problems.



To view the online manual, your computer must have Acrobat Reader 5.0 or later. If you do not have Acrobat Reader, follow the instructions in "Installing Acrobat Reader" to install it.

- Insert the CD-ROM into your computer's CD-ROM drive.
- Click the "start" button, click "My Computer" (), and then double-click the CD-ROM icon ().
 In Windows 95/98/Me/NT 4.0/2000, double-click "My Computer" and then

double-click the CD-ROM icon.

Double-click the "Manual" folder, double-click the "EnglishA" folder (for regions other than the U.S., double-click the "English" folder), and then double-click the "AR_M230_M270.pdf" icon.
The online manual will appear.



- If you will be viewing the online manual repeatedly, you may find it convenient to copy this online manual file to your computer.
- The online manual can be printed out using Acrobat Reader. SHARP recommends printing out the sections which you refer to regularly.
- Refer to "Help" of Acrobat Reader for more details on how to use Acrobat Reader.

Installing Acrobat Reader

- Insert the CD-ROM into your computer's CD-ROM drive.
- Click the "start" button, click "My Computer" (), and then double-click the CD-ROM icon ().

 In Windows 95/98/Me/NT4.0/2000, double-click "My Computer" and then double-click the CD-ROM icon.
- Double-click the "Acrobat" folder, and then double-click the "ar500enu.exe" icon.

Follow the on-screen instructions to install Acrobat Reader.

TROUBLESHOOTING

If the software does not install correctly, check the following items on your computer.

To remove the software, see "Uninstalling the printer driver" in the online manual.

Troubleshooting information can also be found in the README files for each of the software programs. To view a README file, click the "Display README" button in the "Select Packages" screen. (p.3, 6, 8)

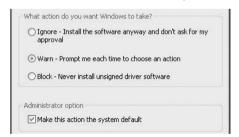
Printer driver cannot be installed (Windows 2000/XP)

If the printer driver cannot be installed in Windows 2000/XP, follow these steps to check your computer's settings.

Click the "start" button and then click "Control Panel".

In Windows 2000, click the "Start" button, select "Settings", and then click "Control Panel".

- 2 Click "Performance and Maintenance", and then click "System".
 - In Windows 2000, double-click the "System" icon.
- Click the "Hardware" tab and then click the "Driver Signing" button.
- 4 Check "What action do you want Windows to take?" ("File signature verification" in Windows 2000).



If the option "Block" has been selected, it will not be possible to install the printer driver. Select the option "Warn" and then install the printer driver as explained in "INSTALLING THE SOFTWARE".

Another printer is using the parallel port (when using a parallel cable)

If another printer is using the parallel port and printing is not possible using the machine, follow the steps below to change the port setting of the other printer driver, and make sure that the port of the printer driver for the machine is set to LPT1.

Click the "start" button, click "Control Panel", click "Printers and Other Hardware", and then click "Printers and Faxes".

In Windows 95/98/Me/NT 4.0/2000, click the "Start" button, select "Settings", and then click "Control Panel".

- Click the icon of the printer driver for which you wish to change the port setting, and select "Properties" from the "File" menu.
- Click the "Ports" tab.
 In Windows 95/98/Me, click the "Details" tab.
- 4 Select "FILE:" in the "Print to the following port" list box, and click the "OK" button.
- Click the "SHARP AR-XXXX" printer driver icon and select "Properties" from the "File" menu.
- Click the "Ports" tab.
 In Windows 95/98/Me, click the "Details" tab.
- 7 Select "LPT1" in the "Print to the following port" list box, and click the "OK" button.



In the event that you need to use the other printer, repeat the above steps to set the port of the machine to "FILE:", and change the port setting of the other printer back to "LPT1".

The printer driver cannot be correctly installed by Plug and Play (Windows 2000/XP)

In Windows 2000/XP, if the printer driver cannot be correctly installed by Plug and Play (for example, Plug and Play takes place without copying the required files for the printer driver installation), follow these steps to remove unneeded devices and then install the printer driver as explained in "INSTALLING THE SOFTWARE" (p. 3).

Click the "start" button, click "Control Panel", and then click "Performance and Maintenance".

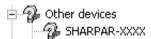
In Windows 2000, click the "Start" button, select "Settings", and then click "Control Panel".

Click "System", click the "Hardware" tab, and click the "Device Manager" button.



In Windows 2000, double-click the "System" icon, click the "Hardware" tab, and click the "Device Manager" button.

Click the \pm icon beside "Other devices".



If "SHARP AR-XXXX" appears, select and delete it.



If "Other devices" does not appear, close the "Device Manager" window.

Install the software as explained in "INSTALLING THE SOFTWARE".

Plug and play screen does not appear (when using a USB cable)

If the Plug and Play screen does not appear after you connect the machine to your computer with a USB cable and turn on the machine, follow the steps below to verify that the USB port is available.

Click the "start" button, click "Control Panel", and then click "Performance and Maintenance".

In Windows 98/Me/2000, click the "Start" button, select "Settings", and then click "Control Panel".

Click "System", click the "Hardware" tab, and click the "Device Manager" button.

"Universal Serial Bus controllers" will appear in the list of devices.

//Note

- In Windows 98/Me, double-click the "System" icon and click the "Device Manager" tab.
- In Windows 2000, double-click the "System" icon, click the "Hardware" tab, and click the "Device Manager" button.
- If the "System" icon does not appear in Windows Me, click "view all Control Panel options".

Click the \pm icon beside "Universal Serial Bus controllers".



Two items should appear: your controller chipset type and Root Hub. If these items appear, you can use the USB port. If the "Universal Serial Bus controllers" shows a yellow exclamation point or does not appear, you must check your computer manual for USB troubleshooting or contact your computer manufacturer.

Once you have verified that the USB port is enabled, install the software as explained in "INSTALLING THE SOFTWARE".





FACSIMILE EXPANSION KIT

OPERATION MANUAL

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This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING:

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Note:

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

Caution

- Use only the line cable that was provided with the machine.
- To reduce the risk of fire, use only UL-Listed No.26 AWG or larger telecommunication line cord.

Note

- This manual (fax function) describes the AR-M237/AR-M277 model with optional job separator tray kit (AR-TR3), and optional facsimile expansion kit (AR-FX7) installed. Depending on the model you have and on the options installed, some of the illustrations in this manual may be different, however, the basic operations are the same.
- This manual (fax function) refers to the Reversing Single Pass Feeder as the "RSPF".

INTRODUCTION

TYPE OF SERVICE

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs. Contact your state's public utility commission, public service commission, or corporation commission for more information.

ABOUT THE TELEPHONE CONSUMER PROTECTION ACT OF 1991

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including FAX machines, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual.

(The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.)

In order to program this information into your FAX machine, you should complete the following steps: See page 97 of this Operation manual.

Important safety information

- If any of your telephone equipment is not operating properly, you should immediately remove it from your telephone line, as it may cause harm to the telephone network.
- The AC power outlet shall be installed near the equipment and shall be easily accessible.
- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use a telephone to report a gas leak in the vicinity of the leak.
- Do not install or use the machine near water, or when you are wet. Take care not to spill any liquids on the machine.

FCC Notice to users:

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX.

If requested, this number must be provided to the telephone company.

The REN is used to determine the number of devices that may be connected to a telephone line.

Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0).

To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company.

For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX.

The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3).

For earlier products, the REN is separately shown on the label.

If this equipment causes harm to the telephone network, your telephone company may disconnect your service temporarily. If possible, They will notify you in advance. If advance notice is not practical, you will be notified as soon as possible. You will also be advised of your right to file a compliant with the FCC.

Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of your equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service. If the equipment is causing harm to the telephone network, your telephone company may ask you to disconnect the equipment until the problem is resolved.

If you have any questions or problems which cannot be solved by reading this manual, please contact

Sharp Electronics Corporation

P.O. Box 650 Mahwah, NJ 07430-2135 Telephone: 1-800-BE-SHARP

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA.

A compliant telephone cord and modular plug is provided with this product.

It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

This equipment connects to the telephone network through a standard USOC RJ-11C network interface jack.

If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable your alarm equipment.

If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

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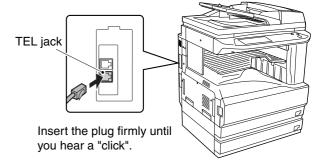
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TO USE THIS PRODUCT CORRECTLY AS A FACSIMILE

Several points must be kept in mind when using this product as a facsimile. Please note the following:

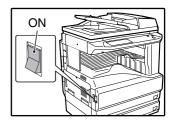
Connecting the telephone line cord

Use only the provided telephone line cord to connect the machine to the wall telephone jack. As shown in the illustration, connect the end of the cord that has the core to the LINE jack on the side of the machine. Connect the other end (without the core) to the wall jack.



Power switch

Keep the machine's power switch turned on at all times. Faxes cannot be received if the power is turned off.



Lithium battery

A lithium battery inside the unit keeps settings and programmed information in memory.

- When the battery dies, settings and programmed information will be lost. Be sure to keep a written record of the settings and programmed information. ("PRINTING PROGRAMMED INFORMATION" (p.79))
- Battery power is consumed when the machine's power switch is turned off. (Power is consumed even if no settings or information are stored in the machine.) When the machine's power switch is turned on, almost no battery power is consumed.
- The life of the lithium battery is approximately 5 years if the power switch are kept continually off.
- In the unlikely event that the battery expires, a message will appear in the display and the unit will not operate correctly. If this should occurr please contact your Authorized Sharp Dealer or Service Center.

Other information

• If a thunderstorm occurs, we recommend that you unplug the power cord from the power outlet. Information will be retained in memory even if the power cord is unplugged.

Chapter 1 BEFORE USING THE FAX FEATURE

This chapter contains basic information about using the fax function of this product. Please read this chapter before using the unit as a fax machine.

SETTINGS REQUIRED FOR THE FAX FUNCTION

Before using the unit as a fax machine, make sure that the following information has been programmed correctly.

Make sure the correct date and time have been set

Make sure the correct date and time have been programmed in the unit (refer to "CUSTOM SETTINGS" of operation manual for copier). If the date and time are wrong, please correct.

It is important to set the correct date and time because they are used for such features as Timer Transmission (p.30).

Daylight Saving Time Setting

Enable this setting to have the internal clock automatically move forward and backward at the beginning and end of Daylight Saving Time. The clock will move forward and backward as follows:

The first Sunday in April: 2:00 A.M. → 3:00 A.M.

The last Sunday in October: 2:00 A.M. → 1:00 A.M.

Follow these steps to enable Daylight Saving Time.

- 1 Press the [CUSTOM SETTINGS] key.
- 2 Touch the [CLOCK] key.
- 3 Select the [DAYLIGHT SAVING TIME SETTING] checkbox.
- 4 Touch the [OK] key.

Program the sender's name and sender's number

Refer to "OWN NUMBER AND NAME SET" (p.97) to program the name and fax number of the user of this product using the key operator programs. The programmed name and number are printed at the top of each transmitted fax page. The sender's number is also used as an identification number when you use the Polling function to request transmission from another fax machine ("USING THE POLLING FUNCTION" (p.33)).



You can check your programmed name and number by printing out the Sender List. ("PRINTING REPORTS" (p.85))

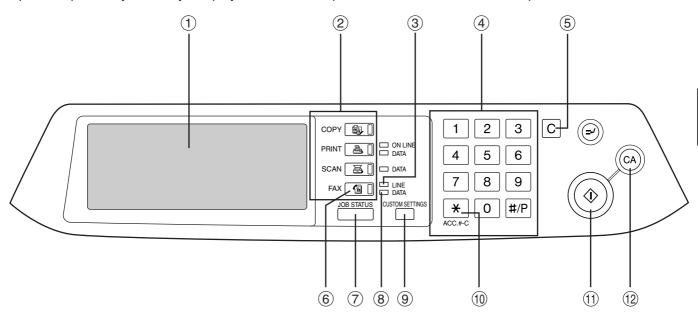
Important

FCC regulations require that your name, telephone/fax number, and the date and time appear on each fax message you send. Enter your name and fax number here and set the date and time as explained in the following section to have the fax machine include this information automatically at the top of your fax messages.

PART NAMES AND FUNCTIONS

OPERATION PANEL

Operation panel keys and keys displayed on the touch panel that are used for fax are explained here.



1 Touch panel (p.7)

- Messages and keys appears in the touch panel.
 A key can be touched to select or enter a setting.
- When you touch a key, a beep sounds and the key is highlighted to indicate that it has been selected.
- Keys that cannot be selected in a screen are grayed out. If a grayed out key is touched, a double beep will sound to indicate that the key cannot be selected.

2 Mode select keys

Use to select the basic modes of the machine.

3 LINE light

This lights while a fax is being sent or received.

(4) Numeric keys

Use for settings that require the entry of numbers.

⑤ [CLEAR] key (C)

This is used to clear a mistake when entering a number. One digit is cleared each time the key is pressed. The key is also used to cancel scanning of an original.

6 [FAX] key (p.7)

Press to switch to fax mode. The initial screen of fax mode will appear in the touch panel display.

⑦ [JOB STATUS] key (p.23)

Use to check the status of a job.

® DATA light

This light blinks when a fax has been received to memory.

The light stays on constantly when a fax is waiting in memory for transmission.

9 [CUSTOM SETTINGS] key

Use to customize the machine settings to better suit your needs. See "CUSTOM SETTINGS" in the operation manual for copier. When using the fax function, destinations can be stored (p.65) and settings for fax reception (p.62) and fax forwarding (p.29) can be selected.

(1) [ACC.#-C] key (★)

Press to use the fax function when auditing mode is enabled. (See "AUDITING MODE" in operation manual for copier.) This key can also be used to issue tone signals when the machine is connected to a pulse dial line.

(1) [START] key (((a)) (p.13)

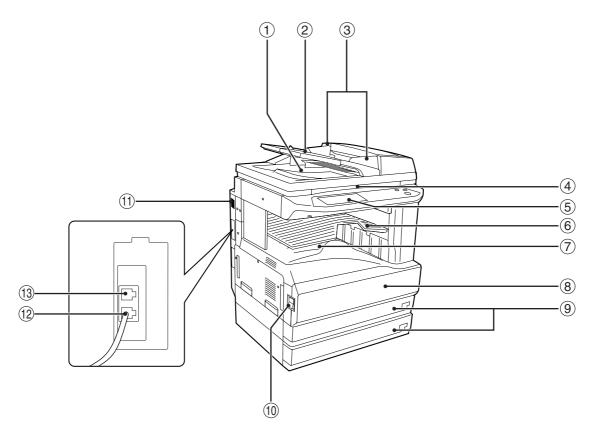
Press to begin scanning an original for fax transmission.

(2) [CLEAR ALL] key (((a))

Use to cancel a transmission or programming operation. When the key is pressed, the operation is canceled and you return to the initial screen (p.7).

When sending a fax, this key is also used to cancel an image setting, paper size setting, or special function.

PARTS OF THE MACHINE



1 Exit area

The original exits here after transmission or scanning into memory.

② Document feeder tray

Place the original face-up in this tray for transmission.(p.10)

③ Original guides

Adjust these guides to match the width of the original.(p.10)

4 Document glass

Books and other originals that cannot be inserted into the RSPF can be placed here.(p.10)

⑤ Operation panel (p.5)

6 Job separator tray

Received faxes are delivered to this tray. Fax function lists are also delivered here after printing. *The job separator tray cannot be used when a finisher is installed. Also, the output tray can be changed using a key operator program for the copy function. See "OUTPUT TRAYS" in the key operator's guide.

⑦ Center tray

The output tray for received faxes can be changed to the center tray using the key operator programs for the copy function.

8 Front cover

Open this cover to remove a misfeed. (See the operation manual for copier.)

9 Paper trays

These hold the paper that is used for fax reception and copying. Each tray holds approximately 500 sheets of paper. (See the operation manual for copier.)

10 Power switch

Turns the power on and off.(p.3)

Speaker

The line can be heard through the speaker during on-hook dialing, as well as the beep that signals the completion of a fax transmission.

12 LINE jack

Insert the telephone line cord here.(p.3)

(13) TEL jack

Connect an extension telephone here.(p.61)



For parts of the machine that are related to both faxing and copying (parts related to removing misfeeds, loading paper, etc.), see "PART NAMES AND FUNCTIONS" in the operation manual for copier.

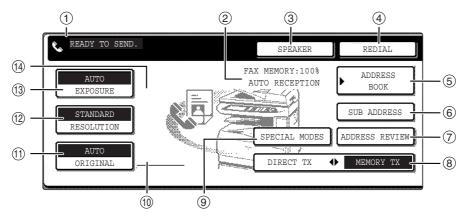
FAX MODE (CONDITION SETTING SCREEN)

The condition setting screen of fax mode is displayed by pressing the [FAX] key while the print mode, copy mode, or job status screen appears in the touch panel. In the explanations that follow, it is assumed that the initial screen that appears after pressing the [FAX] key is the condition setting screen (shown below). If you have set the display to show the address directory (p.8) when the [FAX] key is pressed, touch the [CONDITION SETTINGS] key in the address directory to display the condition setting screen.

A key operator program can be used to set the display to show either the condition setting screen (shown below) or the address directory screen (p.8) when the [FAX] key is pressed ("DEFAULT DISPLAY SETTINGS" (p.96)).

Condition setting screen

The display is initially set (factory setting) to show the following screen when the [FAX] key is pressed.



Message display

Messages appear here to indicate the current status of the machine. When the machine is ready to send, an icon appears to the left.

② Memory and reception mode display

This shows the amount of fax memory that is free and the currently selected reception mode.

③ [SPEAKER] key (p.11)

This key is used for dialing with the speaker. During dialing it changes into the [PAUSE] key, and after pressing the [SUB ADDRESS] key it changes into the [SPACE] key.

4 [REDIAL] key (p.11)

Touch this key to redial the most recently dialed number. After dialing, this key changes into the [NEXT ADDRESS] key.

⑤ [ADDRESS BOOK] key (p.16)

This displays the Address Directory screen (p.8). Touch this key when you want to use an auto-dial number (rapid dialing or group dialing).

(6) [SUB ADDRESS] key (p.53)

Touch this key to enter a sub-address or passcode.

⑦ [ADDRESS REVIEW] key (p.27)

When performing a broadcast transmission, touch this key to check your selected destinations. A list of your selected destinations will appear, and destinations can be deleted from the list.

Touch this key to switch from memory transmission mode to direct transmission mode. The selected mode is highlighted.

[SPECIAL MODES] key

Touch this key to select one of the following special functions:

- Timer transmission (p.30) Polling (p.33)
- Slow scan mode (p.39) Dual page scan (p.40)
- Program (p.41)
 Memory box (p.48)
- Cover sheet (p.42)
 TX message (p.43)
- Sending options (p.47 and p.50)
- Own passcode select (p.45)

(10) Original settings icon display

When two-sided scanning (p.17) or job build mode (p.18) is selected (touch the [ORIGINAL] key to select these functions), an icon will appear in this display.

The icon can be touched to open the original settings screen.

(1) [ORIGINAL] key (p.20)

Touch this key to manually set the original size or select two-sided scanning.

(2) [RESOLUTION] key (p.21)

Touch this key to change the resolution setting when scanning an original. The selected resolution setting will be highlighted above the key. The initial factory setting is [STANDARD].

(3) [EXPOSURE] key (p.22)

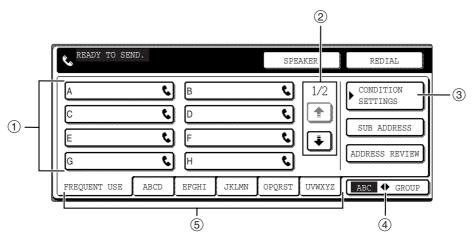
Touch this key to change the scanning exposure. The selected exposure is highlighted above the key. The initial factory setting is [AUTO].

(4) Special function icon display

When a special function such as polling or dual page scan is selected, the special function icon appears here.

Address directory screen (alphabetically ordered)

If "DEFAULT DISPLAY SETTINGS" (p.96) is set to address directory, the following screen will be the initial screen that appears when the [FAX] key is pressed.



1 Rapid key display

This shows the rapid keys that have been stored on the selected "index card". The display is initially set to show 8 keys. This can be changed to 6 or 12 using a key operator program. ("THE NUMBER OF DIRECT ADDRESS KEYS DISPLAYED SETTING" (p.96))

② Display switching keys

In cases where the rapid keys cannot all be displayed on one screen, this shows how many screens are left. Touch the 🛨 keys to move through the screens.

③ [CONDITION SETTINGS] key

This displays the condition setting screen (p.7), which is used to set various conditions.

④ [ABC ◆ GROUP] key

Touch this key to switch between the alphabetical index and the group index.

5 Index keys (p.78)

Destinations programmed in auto-dialing are stored in indexes. In the alphabetical index, the destinations appear in alphabetical order. In the group indexes, the destinations appear in the order of their control numbers. Touch the [ABC
GROUP] key to switch between indexes.

The group indexes can be used as follows:

- For storing destinations in groups. (p.67)
- A name can be assigned to each index. (p.78)



The screen showed above is the alphabetical address book. If desired, the initial screen can be set to the group address book. ("DEFAULT DISPLAY SETTINGS" (p.96))

ORIGINALS

ORIGINALS THAT CAN BE FAXED

Original sizes

	Minimum original size	Maximum original size
Using the RSPF	(210 mm (width) x 148 mm (length)) 5-1/2" (width) x 8-1/2" (length) (148 mm (width) x 210 mm (length))	11" (width) x 39.3"* (length) (297 mm (width) x 1000 mm (length)) * Long originals can be loaded.
Using the document glass		11" (width) x 17" (length) (297 mm (width) x 420 mm (length))



- Originals that are not a standard size (5-1/2" x 8-1/2", 5-1/2" x 8-1/2"R, 8-1/2" x 11", 8-1/2" x 11"R, 8-1/2" x 14", 11" x 17") can also be faxed.
- There are restrictions on originals that can be scanned using the RSPF. See "POINTS TO NOTE WHEN MAKING COPIES" in the operation manual for copier.

*Long originals

Depending on the resolution setting and the width of the original, there may not be sufficient space in memory to hold a long original. In this case, refer to the following table and select a lower resolution setting and/or shorten the original.

	11" wide	8-1/2" wide
Standard	39.3" (1000 mm)	39.3" (1000 mm)
Fine	39.3" (1000 mm)	39.3" (1000 mm)
Super fine	39.3" (1000 mm)	39.3" (1000 mm)
Ultra fine	34.6" (880 mm)	39.3" (1000 mm)

(unit: inch)

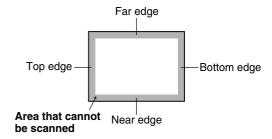
Scanning area of original

Note that the edges of an original cannot be scanned.

Area that cannot be scanned: 0.2" (5 mm) or less at top edge

and 0.2" (5 mm) or less at bottom edge : Near edge + far edge = 0.24" (6 mm) or

اودد



Automatic reduction of faxed document

If the width of the faxed document is greater than the receiving machine's maximum receivable width, the document will be automatically reduced.

Faxed document width	Receiving machine's paper width	Reduced size	Ratio
11" x 17"	8-1/2" x 14"	8-1/2" x 14"	1 : 0.70 (Area ratio)
11" x 17"	8-1/2" x 11"	8-1/2" x 11"R	1 : 0.5 (Area ratio)
8-1/2" x 14"	8-1/2" x 11"	8-1/2" x 11"R	1 : 0.64 (Area ratio)

A document can also be faxed without reducing its size. In this case, the left and right edges will not be transmitted. ("AUTO RECEIVE REDUCE SETTING" (p.101))

LOADING AN ORIGINAL

An original can be loaded in the RSPF or placed on the document glass. Load multi-page sheet originals in the RSPF. Place books and other originals that cannot be loaded in the RSPF on the document glass.

USING THE RSPF

1 Lift the RSPF and make sure an original is not placed on the document glass. Gently close the RSPF.





If originals are placed both in the RSPF and on the document glass, only the original in the RSPF will be scanned.

2 Adjust the original guides on the RSPF to the width of the original.



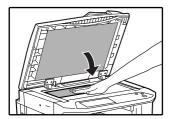
Align the edges of the original pages and then insert the pages face up in the document feeder tray.



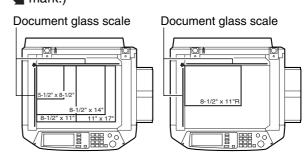
Insert the stack into the document feeder tray until it stops. The stack should not be higher than the indicator line (maximum 100 pages).

USING THE DOCUMENT GLASS

Open the RSPF, place the original face down on the document glass, and close the RSPF.



Regardless of the size of the original, place the original in the far left corner of the document glass. (Align the upper left-hand corner of the original with the tip of the mark.)



CONVENIENT DIALING METHODS

AUTO-DIALING

This product includes an auto-dialing feature to make dialing easier. By programming frequently dialed numbers, you can call and send documents to these locations by means of a simple dialing operation (p.16). There are two types of auto-dialing: rapid dialing and group dialing. To program auto-dial numbers, refer to pages p.67, p.71.

Rapid dialing

Simply press a rapid key and then press the [START] key (③) to dial the programmed location. When using F-code transmission, a sub-address and passcode can also be programmed (p.52).

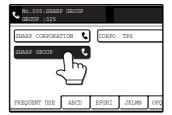


Touch the [ADDRESS BOOK] key in the initial screen to display the above screen.

Group dialing

Multiple destinations can be programmed into a single rapid key. This is convenient for successively sending a document to multiple locations.

 The destinations can be stored by specifying rapid keys, or by directly entering full fax numbers with the numeric keys (the destinations do not need to be previously stored in rapid keys).



Touch the [ADDRESS BOOK] key in the initial screen to display the above screen.



- A total of 500 rapid dial and group dial keys can be programmed. (p.65)
- Programmed rapid keys and group dial keys are stored on "index cards". A key can be accessed by touching its card. (p.8)



To prevent calling or sending a fax to a wrong number, look carefully at the touch panel and make sure that you enter the correct number when programming an auto-dial number. You can also check programmed numbers by printing out an address list or group list after programming (p.79).

REDIALING

The last number dialed can be redialled by simply pressing the [REDIAL] key. The machine keeps the last number dialed with a rapid key or the numeric keys in memory. However, when an F-code transmission is performed, the machine only retains the fax number; it does not retain the sub-address or passcode.

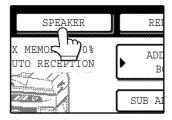
- If numeric keys were pressed during a phone conversation, the [REDIAL] key may not dial the correct number.
- The number is not retained when the following special operations are performed (the last number that was dialed before the special operation is retained):
 - Broadcast transmission
 - Serial polling
 - Timer transmission
 - Group dialing

LOO% ADD S BOOK SUB ADDRESS

ON-HOOK DIALING

This feature allows you to dial without lifting an extension phone connected to the machine. Touch the [SPEAKER] key, listen for the dial tone through the speaker, and then dial.

- Faxes must be sent manually when using on-hook dialing. (p.61)
- A number that includes a sub-address or passcode cannot be dialed by on-hook dialing.



2 Chapter 2 BASIC OPERATIONS

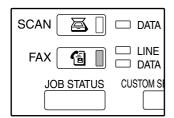
This chapter explains the basic procedures for sending and receiving faxes.

SENDING A FAX

BASIC PROCEDURE FOR SENDING FAXES

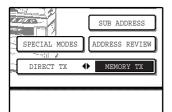
The procedure for sending a fax in memory transmission mode (p.14) is explained in the following.

Make sure that the machine is in fax mode.



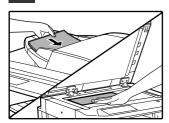
When the [FAX] key light is on, the machine is in fax mode. If the light is not on, press the [FAX] key.

2 Make sure that memory transmission mode is selected.



Memory transmission mode is selected when "MEMORY TX" is highlighted in the [DIRECT TX. MEMORY TX] key. If "DIRECT TX" is highlighted, touch the [DIRECT TX. MEMORY TX] key.

3 Place the original.

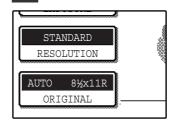


For originals that can be sent, see "ORIGINALS" on page 9. If you are sending multiple pages, scan the pages in order beginning from the first page.



You cannot place originals in both the RSPF and on the document glass and send them in a single fax transmission.

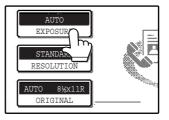
4 Check the original size.



If the address directory screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (p.7). If you loaded a non-standard size

original or the original size was not correctly detected, touch the [ORIGINAL] key and set the original size. ("MANUALLY SETTING THE SCANNING SIZE" (p.20))

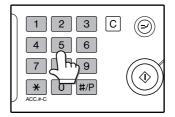
If needed, adjust the resolution and exposure settings.



Resolution: Page 21 Exposure: Page 22

If needed, select the sender's name. (p.45)

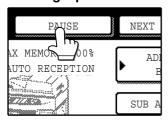
6 Enter the fax number.



The number that you entered appears in the message display ("Condition Setting screen" (p.7 ①)). If it is not correct, press the [CLEAR] key (C) and re-enter the number. You can also use the

REDIAL key (p.11) or an auto-dial number (p.11).

Entering a pause.



If you need to insert a pause between digits to access an outside line or dial an international number, touch the [PAUSE] key in the upper right-hand corner of the

Each time you touch the [PAUSE] key, a hyphen ("-") appears and a 2-second pause* is inserted.

After entering a number, you can also touch the [PAUSE] key to enter a hyphen, and then enter another number using the numeric keys or a rapid key. This connects the numbers together (Chain dialing).

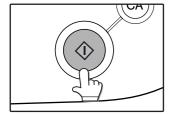
*The duration of each pause can be changed with the key operator program. ("PAUSE TIME SETTING" (p.97))



Group keys cannot be used for chain dialing.

Using the RSPF

7 Press the [START] key (③).



Scanning begins.

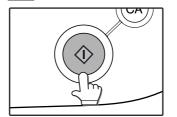
If a job is not in progress and the telephone line is not being used, the destination is dialed while the original is being scanned. (This is called "Quick on-line"; see page 14). If there is a

previously stored job or a job is in progress, or if the line is being used, all pages of the document are scanned into memory and stored as a transmission job. (This is called memory transmission: the destination is automatically called and the document transmitted after previously stored jobs are completed.)

If scanning is completed normally, a beep sounds to inform you that the transmission job is stored and "JOB STORED." appears in the message display.

Using the document glass

7 Press the [START] key (\odot).



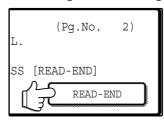
The original is scanned and the [READ-END] key appears.

If you have another page to scan, change pages and then press the [START] key (③).

Repeat this sequence until all pages have been scanned. You can change the original size, resolution, and exposure settings as needed for each page.

If no action is taken for one minute (the [START] key (③) is not pressed), scanning automatically ends and the transmission job is stored.

9 After the final page is scanned, touch the [READ-END] key.



A beep sounds to inform you that the transmission job is stored and "JOB STORED." appears in the message display. (The destination is automatically called and the document transmitted

after previously stored jobs are completed.) Open the RSPFand remove the document.



Canceling transmission

To cancel transmission while "SCANNING ORIGINAL" appears in the display or before the [READ-END] key is pressed, press the [CLEAR] key (C) or the [CLEAR ALL] key (A). To cancel a transmission job that is already stored, press the [JOB STATUS] key and cancel the job as explained on page 24.



- If the machine sounds two beeps during or at the end of transmission and an error message appears in the touch panel, refer to "WHEN AN ALARM SOUNDS AND A WARNING MESSAGE IS DISPLAYED" (p.86) to fix the problem.
- If the power is turned off or there is an interruption in the power supply while an original is being scanned using the RSPF, scanning will stop and a misfeed will occur. After the power is restored, remove the misfed original as explained in "MISFEED REMOVAL" in the operation manual for copier.

Memory transmission mode

When memory transmission mode is selected, the original is scanned into memory and then sent to the destination. When the RSPF is used for transmission, transmission of the first scanned page begins while the remaining pages are scanned. (See "Quick On-line transmission" below.)

If Quick On-line transmission is not enabled, or if the document glass is used for scanning, all pages of the original are scanned into memory before the destination is dialed and transmission begins.

The number of pages that can be held in memory varies depending on the content of the pages, the transmission settings, and the amount of memory installed (p.107).



When On-hook dialing is used, direct transmission mode is automatically selected (memory transmission mode cannot be used).

Quick On-line

When the RSPF is used for memory transmission and there are no previously stored jobs waiting or in progress (and the line is not being used), the machine dials the destination and begins transmitting scanned pages while the remaining pages are scanned. This transmission method is called Quick On-line. The messages "SCANNING ORIGINAL." and "CONNECTING." both appear until scanning of the final page is completed.

If the receiving party is busy when a Quick On-line transmission is attempted, the transmission will be automatically reattempted at a later time. (See "If the receiving party is busy" on page 15.)



- The machine is initially set (factory setting) to perform Quick On-line transmission. If desired, you can turn off this function in the key operator programs (see "QUICK ON LINE SENDING" (p.100)).
- When an original is transmitted using the following methods, the job will be stored in memory (Quick On-line transmission will not be performed):
 - Sending from the document glass Broadcast transmission (p.26) Timer transmission (p.30)
 - F-code transmission (Chapter 4)

Direct transmission mode

When direct transmission mode is selected, the document is directly transmitted after the destination is dialed. Direct transmission mode does not use memory, and thus transmission is possible even when the memory is full.



- A subsequent transmission cannot be stored when direct transmission mode is selected.
- When the document glass is used, only one page can be faxed in direct transmission mode.
- The following funtions cannot be used when direct transmission mode is selected: image rotation (p.15), Broadcasting (p.26) and other functions for transmission to multiple destinations, timer transmission (p.30), two-sided original scanning (p.17), divided page transmission (p.40), and job build (p.18).

Storing transmission jobs (memory transmission)

If a transmission is performed in memory transmission mode while the machine is already sending or receiving a fax, the document will be scanned into memory and then automatically transmitted after the previous job is completed (this is called storing a transmission). Up to 50 jobs can be stored in memory at once, not including the job currently being executed. After transmission, the scanned document data is cleared from memory.



- You can check transmission jobs stored in memory in the job status screen. (See "PART NAMES AND FUNCTIONS" in the operation manual for copier.)
- If the memory becomes full while a document is being scanned, a message will appear in the display. You can
 cancel the scanning by touching the [CANCEL] key, or send only the pages already scanned by touching the
 [SEND] key. The page that was being scanned when the memory became full will be cleared from memory. If
 the memory becomes full while scanning the first page of a document, the transmission job is automatically
 canceled.
- The number of jobs that can be stored will depend on the number of pages in each job and the transmission conditions. The number of storable jobs will increase if the optional expansion memory (8 MB) is installed.

If the receiving party is busy

If the receiving party is busy, the transmission is temporarily canceled and then automatically re-attempted after a brief interval (two attempts are made at an interval of 3 minutes*). If you do not want the machine to re-attempt the transmission, touch the [JOB STATUS] key and cancel the transmission. (p.24)

*This setting can be changed in the key operator programs ("RECALL IN CASE OF LINE BUSY" (p.100)).

If a transmission error occurs

The machine will automatically re-attempt transmission (once at an interval of one minute*1) if transmission does not end normally due to a line error or other reason, or if the other machine does not begin reception within 60 seconds*2 after the connection is established. To cancel automatic retransmission, touch the [JOB STATUS] key and cancel the transmission.(p.24)

- *1 This setting can be changed in the key operator programs. ("RECALL IN CASE OF COMMUNICATION ERROR" (p.100))
- *2 This setting can be changed in the key operator programs. ("CALL TIMER AT MEMORY SENDING" (p.100))

Image rotation

The machine is initially set to rotate a vertically-placed ([]) document 90 degrees so that it is oriented horizontally ([]) before transmission (8-1/2" x 11" originals are rotated to 8-1/2" x 11"R and A4 originals are rotated to A4R). (8-1/2" x 11"R originals and A4R originals are not rotated.) If desired, you can turn this function off with the key operator program as explained on page 100.



When a 5-1/2" x 8-1/2" or 5-1/2" x 8-1/2"R original is faxed from the RSPF, the original size will be automatically detected. However, when the document glass is used, the size of a 5-1/2" x 8-1/2"R original will not automatically be detected. When faxing a 5-1/2" x 8-1/2"R original from the document glass, you must manually set the original size. ("MANUALLY SETTING THE SCANNING SIZE" (p.20))

Error Correction Mode (ECM)

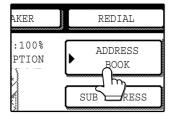
Noise on the line can sometimes cause distortions in a transmitted fax image. When this happens, the ECM function automatically resends the part of the image that was distorted.

- When this function is turned on, transmission will take slightly longer than normal.
- In order for ECM to operate, the other machine must also have the ECM function.

TRANSMISSION BY AUTO-DIALING (RAPID DIALING AND GROUP DIALING)

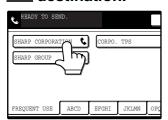
To send a document by auto-dialing (rapid dialing or group dialing), follow the steps below. To use an auto-dial destination, you must first program the full fax number and name of the destination. Refer to page 11 for information on auto-dialing and pages 67 and 71 for information on programming auto-dial destinations.

- Perform steps 1 through 6 of "BASIC PROCEDURE FOR SENDING FAXES" (p.12).
- 2 Touch the [ADDRESS BOOK] key.



The address directory screen appears. This step is not necessary if the address directory screen already appears (go directly to step 3).

Touch the rapid key for the desired destination.



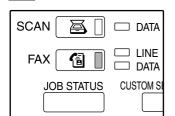
See page 8 for information on using the address directory screen. The key you touched is highlighted. If you touch the wrong key, touch the key again to cancel the selection.

4 Continue from step 7 of "BASIC PROCEDURE FOR SENDING FAXES" (p.13).

TRANSMITTING A TWO-SIDED DOCUMENT

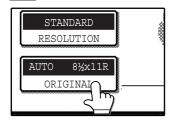
The RSPF can be used to automatically fax both sides of two-sided document by memory transmission.

Make sure that the machine is in fax mode.



When the [FAX] key light is on, the machine is in fax mode. If the light is not on, press the [FAX] key.

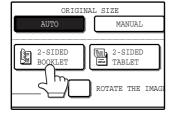
- 2 Place the original. (p.10)
- 3 Touch the [ORIGINAL] key.



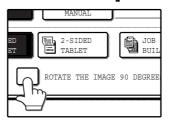
If the address directory screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (p.7). After touching the [ORIGINAL] key, check

the original size displayed in the key. If the original size was not correctly detected, set the correct original size. ("MANUALLY SETTING THE SCANNING SIZE" (p.20))

Touch the [2-SIDED BOOKLET] key or the [2-SIDED TABLET] key as appropriate for the original you loaded.

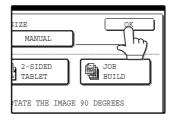


5 Select the [ROTATE THE IMAGE 90 DEGREES] checkbox.



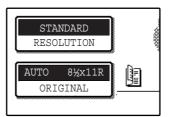
This step is only necessary if you placed the original so that it is oriented horizontally (the top of the original is on the right or left side). Otherwise, go directly to step 6.

6 Touch the [OK] key.



You will return to the initial screen.

A two-sided original icon appears next to the [ORIGINAL] kev.



Example: The icon that appears when the [2-SIDED BOOKLET] key is touched.

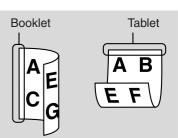
7 Continue from step 5 of "BASIC PROCEDURE FOR SENDING FAXES" (p.12).



Booklets and tablets

Two-sided originals that are bound at the side are booklets, and two-sided originals that are bound at the top are tablets.

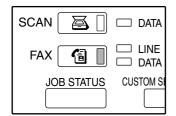
Two-sided scanning turns off after the document is stored in memory. Two-sided scanning can be canceled by pressing the [CLEAR ALL] key ((A)).



FAXING A LARGE NUMBER OF PAGES

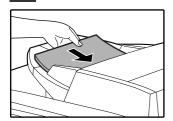
When you have a large number of pages to fax, scan the pages in batches using the RSPF. A maximum of 100 pages can be placed in the RSPF at once; however, placing pages in batches allows you to scan in more than 100 pages and send them in a single transmission. Note that the number of pages that can be scanned may vary depending on the content of the pages and how much memory is being used.

Make sure that the machine is in fax mode



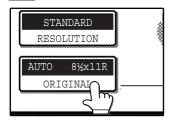
When the [FAX] key light is on, the machine is in fax mode. If the light is not on, press the [FAX] key.

Place the original. (p.10)



Place the first pages that you wish to scan.

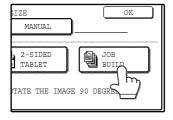
Touch the [ORIGINAL] key.



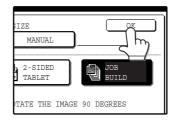
If the address directory screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (p.7). After touching the [ORIGINAL] key, check

the original size displayed in the key. If the original size was not correctly detected, set the correct original size. ("MANUALLY SETTING THE SCANNING SIZE" (p.20))

4 Touch the [JOB BUILD] key.

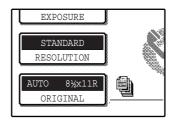


5 Touch the [OK] key.



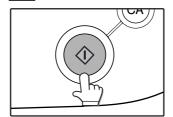
You will return to the initial screen.

The many originals icon appears next to the [ORIGINAL] key.



Perform steps 4 to 6 of "BASIC PROCEDURE FOR SENDING FAXES" (p.12).

7 Press the [START] key (③).

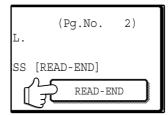


Scanning of the originals begins. When scanning is finished, the [READ-END] key appears in the touch panel.

Place the next set of original pages and press the [START] key (③).

Repeat this step until all pages have been scanned. You can change the original size, resolution, and exposure settings as needed for each page. If you take no action for about 1 minute (you do not press the [START] key (③)), scanning automatically ends and the job is stored for transmission.

9 When the last original page has been scanned, touch the [READ-END] key.



A beep sounds to inform you that the job has been stored for transmission. [JOB STORED.] appears in the message display. (Dialing and transmission begin automatically when any previously stored jobs are completed.)



If you do not touch the [READ-END] key to complete the procedure, the screen will automatically revert to the initial screen after 60 seconds. If desired, you can disable automatic return to the initial screen by changing a setting in the key operator programs. (See "DISABLE DISPLAY TIMEOUT" in the key operator's guide.) When the screen reverts to the initial screen, the scanned originals will be transmitted.



- If the memory becomes full while originals are being scanned, a message will appear and scanning will stop. The page that was being scanned when the memory became full will be cleared. To transmit only the originals that have already been scanned, touch the [SEND] key. To cancel the transmission, touch the [CANCEL] key.
- Depending on the content of the originals, the memory may become full before 100 pages are scanned.
- When using job build mode, the number of originals scanned will appear in the display. When the count reaches 256 pages, it will reset to 0 and further scanned pages will be counted from 1.
- · When using job build mode, the original size can be changed between originals.
- When scanning the first set of originals, the [ROTATE THE IMAGE 90 DEGREES] checkbox can be selected, however, from the second set of originals on, the selection cannot be changed until scanning is finished (the checkbox will be grayed out).
- Direct transmission is not possible when using job build mode. A job build transmission takes place as a memory transmission even if Quick Online is enabled (transmission does not begin until all originals are scanned).

MANUALLY SETTING THE SCANNING SIZE

If you load an original that is not a standard size (such as an AB size), or if the size is not detected correctly, you must touch the [ORIGINAL] key and set the original size manually. Perform the following steps after placing the document in the RSPF or on the document glass.

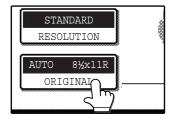


*Standard sizes:

Original sizes that can be correctly detected are $5-1/2" \times 8-1/2", 5-1/2" \times 8-1/2"R, 8-1/2" \times 11", 8-1/2" \times 11"R, 8-1/2" \times 14", and 11" x 17". However, <math>5-1/2" \times 8-1/2"R$ can only be automatically detected when the RSPF is used.

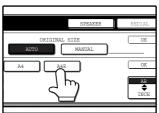
If a non-standard size original is loaded (including special sizes), the closest standard size may be displayed, or the original size may not appear.

1 Touch the [ORIGINAL] key.



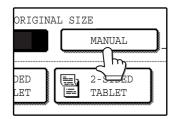
If the address directory screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7)

If you wish to select an AB size, touch the [AB ♣ INCH] key and then touch the desired original size key.



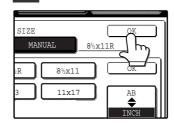
"AB" is highlighted and AB size keys are displayed. To return to the inch palette, touch the [AB ♠ INCH] key once again.

2 Touch the [MANUAL] key.



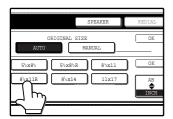
The sizes that can be selected are displayed.

4 Touch the outer [OK] key.



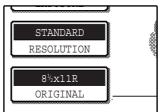
You will return to the initial screen. (Pressing the inner [OK] key in the step above returns you to step 2.)

3 Touch the desired original size key.



The [AUTO] key is no longer highlighted. The [MANUAL] key and the selected original size key are highlighted.

The selected size appears in the top half of the [ORIGINAL] key.



SELECTING RESOLUTION AND EXPOSURE SETTINGS

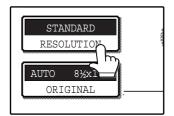
After placing an original, you can adjust the resolution and exposure settings as needed for the original, such as for small or faint characters or for a photo. Place the original with the machine in fax mode (p.12), and then adjust the settings as explained below.

SELECTING THE RESOLUTION

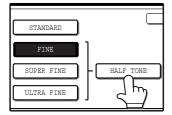
The initial resolution setting is STANDARD. To change the setting, follow these steps:

Changing the resolution

1 Touch the [RESOLUTION] key.

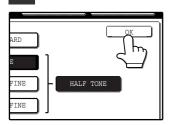


2 Touch the desired resolution key.



The selected key is highlighted. If you selected FINE, SUPER FINE, or ULTRA FINE, you can also touch the [HALF TONE] key to select halftone.

3 Touch the [OK] key.



You will return to the initial screen.

The selected resolution will appear in the top half of the [RESOLUTION] key.

//Note

- The default resolution setting is Standard.
 If desired, you can change the default setting to a different setting in the key operator programs. ("INITIAL RESOLUTION SETTING" (p.97))
- When using the RSPF, the resolution setting cannot be changed once scanning has begun.
- Even if you send a document using Fine, Super fine, or Ultra fine resolution, some receiving fax machines may not be able to print the document at the same resolution.

Resolution settings

Standard	Touch this key if your original consists of normal-sized characters (like those in this manual).
Fine	Touch this key if your original has small characters or diagrams. The original will be scanned at twice the resolution of the Standard setting.
Super fine Touch this key if your original has intricate pictures or diagrams. A higher-quality image will be produced than with the Fine setting	
Ultra fine	Touch this key if 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

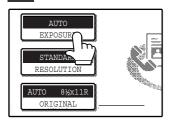
Touch this key if your original is a photograph or has gradations of color (such as a color original). This setting will produce a clearer image than Fine, Super fine, or Ultra fine used alone. Half tone cannot be selected if Standard has been selected.

SELECTING THE EXPOSURE

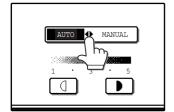
The initial exposure setting is AUTO. To change the setting, follow these steps:

Changing the exposure

1 Touch the [EXPOSURE] key.

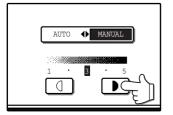


2 Touch the [AUTO ◆ MANUAL] key.



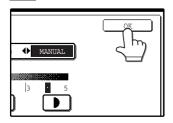
"MANUAL" is highlighted.

Touch the key or the key to select the desired exposure level.



The exposure can be set to 5 levels. For a darker image, touch the key. For a lighter image touch the key.

4 Touch the [OK] key.



You will return to the initial screen.
The selected exposure will appear in the top half of the [EXPOSURE] key.

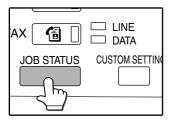


- When using the document glass to scan a multi-page original, the original size, resolution, and exposure settings can be changed each time you change pages.
 When using the RSPF, the exposure setting cannot be changed once scanning has begun.
- The default exposure setting is AUTO. If desired, you can change the default setting to a different setting in the key operator programs. ("INITIAL EXPOSURE SETTING" (p.97))

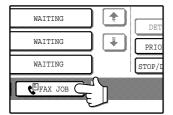
PRIORITY TRANSMISSION OF A STORED JOB

If you have an urgent transmission job and multiple transmission jobs have already been stored, you can give priority to the urgent job so that it will be transmitted immediately after the job currently being transmitted. This is done in the job status screen. For details on using the job status screen, refer to operation manual for copier.

1 Press the [JOB STATUS] key.



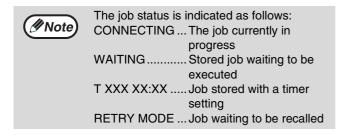
2 Touch the [FAX JOB] key.



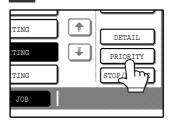
The fax transmission status and stored jobs appear.

Touch the job key of the transmission job to which you wish to give priority.

The selected key is highlighted.



4 Touch the [PRIORITY] key.



The selected job moves to the position immediately following the job currently being transmitted.

Transmission of the priority job will begin when the current job

If a job key for a broadcast-type transmission is selected, the name or number of the destination to which the fax is currently being transmitted appears. If the job has not yet begun, the name or number of the first destination to which the fax will be transmitted appears. To return to the job status screen, touch the [DETAIL] key again or touch the \P or \P key.

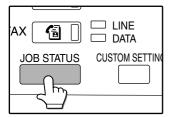


The [PRIORITY] key appears when there are at least two stored jobs in addition to the job in progress.

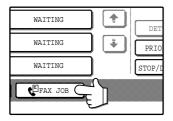
CANCELING A FAX TRANSMISSION

You can cancel a transmission job that is in progress or that has been stored. This is done in the fax job status screen.

1 Press the [JOB STATUS] key.



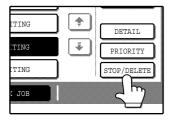
2 Touch the [FAX JOB] key.



Touch the job key of the transmission job that you wish to cancel.

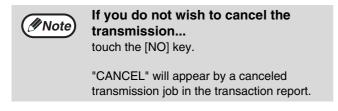
The selected key is highlighted.

4 Touch the [STOP/DELETE] key.



A message appears to confirm the cancellation. Touch the [YES] key to delete the selected job key and cancel the transmission.

If a job key for a broadcast-type transmission is selected, the name or number of the destination to which the fax is currently being transmitted appears. If the job has not yet begun, the name or number of the first destination to which the fax will be transmitted appears. To return to the job status screen, touch the [DETAIL] key again or touch the $\textcircled{\dagger}$ or $\textcircled{\dagger}$ key.



RECEIVING FAXES

When another fax machine sends a fax to your machine, your machine will ring*, automatically receive the fax, and begin printing (automatic reception).



- You can store a transmission job while fax reception is in progress. ("Storing transmission jobs (memory transmission)" (p.15))
- To print received fax pages on both sides of the paper, enable "DUPLEX RECEPTION SETTING" in the key operator programs. (p.101)



To receive faxes, sufficient paper must be loaded in the paper tray. Refer to "LOADING PAPER" in operation manual for copier to load appropriate paper. Incoming 8-½" x 11" and A4 size faxes will be automatically adjusted to the orientation of the printing paper, so there is no need to load each size of paper both horizontally () and vertically (). However, if you receive a fax that is smaller than 8-1/2" x 11" size, the paper size used to print

However, if you receive a fax that is smaller than 8-1/2" x 11" size, the paper size used to print the fax will depend on how the original was oriented (vertically or horizontally) in the sending fax machine.

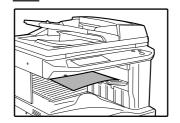
RECEIVING A FAX

The machine will ring* and reception will automatically begin.

*Number of rings

The machine has been set to ring twice before beginning automatic reception. The number of rings can be set to any number from 0 to 9 in the key operator programs. ("NUMBER OF CALLS IN AUTO RECEPTION" (p.101)) If the number of rings is set to 0, the machine will receive faxes without ringing.

2 Reception ends.



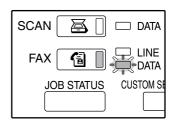
When reception ends, a beep sounds.



If the machine has multiple output trays, the output tray for fax reception can be selected in the key operator programs. See "OUTPUT TRAYS" in the key operator's guide.

If received faxes cannot be printed

If the machine runs out of paper or toner, or a paper jam occurs, or if the machine is printing a print or copy job, received faxes will be held in memory until printing becomes possible. The received fax are automatically printed when printing becomes possible. When received faxes are held in memory, the data light next to the [FAX] key blinks. You can also use the transfer function to have another fax machine print the received faxes. ("FORWARDING RECEIVED FAXES TO ANOTHER MACHINE WHEN PRINTING IS NOT POSSIBLE" (p.28))





If a double beep sounds during reception or at the end of reception and an error message appears in the touch panel, clear the error as explained in "WHEN AN ALARM SOUNDS AND A WARNING MESSAGE IS DISPLAYED" (p.86).

Chapter 3 ADVANCED TRANSMISSION METHODS

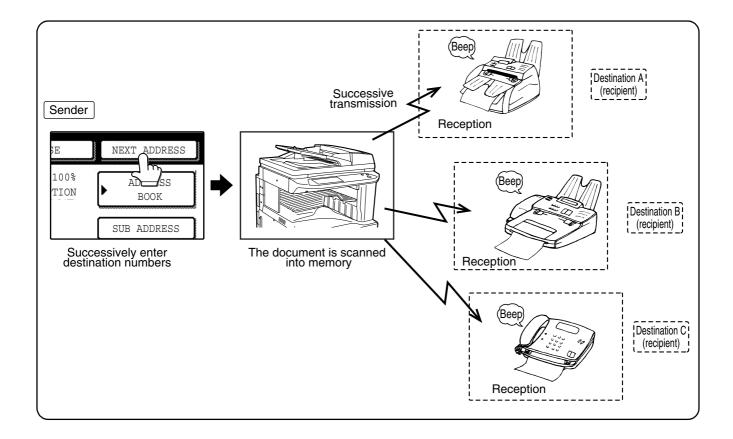
This chapter explains advanced fax features for special situations and purposes.

SENDING THE SAME DOCUMENT TO MULTIPLE DESTINATIONS IN A SINGLE OPERATION (BROADCAST TRANSMISSION)

This feature is used to send a fax to multiple destinations in a single operation. The document to be transmitted is scanned into memory and then successively transmitted to the selected destinations. This feature is convenient for such purposes as distributing a report to company branches in different locations. Up to 200 destinations can be selected. When transmission to all destinations has been completed, the document is automatically cleared from memory.

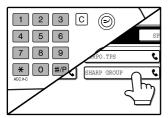


- If you frequently use broadcasting to send faxes to the same group of destinations, it is convenient to program those destinations into a group key. A group key is a rapid key in which multiple destinations are programmed. The procedure for programming group keys is explained on page 71.
- When using a group key to send a fax, the destinations programmed in the group key are counted as broadcasting destinations. For example, if five destinations are programmed in a group key and the key is touched for a broadcast transmission, the broadcast transmission will have five destinations.



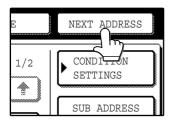
USING BROADCAST TRANSMISSION

- 1 Follow steps 1 through 6 of "BASIC PROCEDURE FOR SENDING FAXES" (p.12).
- 2 Enter the fax number of the first destination or touch an auto-dial key (rapid key or group key) (p.16).



If the Condition Setting screen appears, touch the [ADDRESS BOOK] key to display the address book screen.(p.8)
When selected, an auto-dial key is highlighted.

Touch the [NEXT ADDRESS] key and then enter the fax number of the next destination or touch an auto-dial key.



Repeat this step for each of the remaining destinations.



If you enter an incorrect number

If you make a mistake while entering a number, press the [CLEAR] key (C) and then re-enter the correct digit(s). If you have already completed entry of a fax number, you can delete the number using steps 4 and 5.

If you select an incorrect auto-dial key

Simply touch the incorrect key one more time to cancel the selection.

The [NEXT ADDRESS] key only needs to be pressed when successively entering full fax numbers with the numeric keys.

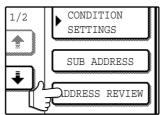
Example:

XXXX NEXT ADDRESS XXXX
Fax number † Fax number
Cannot be omitted.

XXXX \(\bar{NEXT_ADDRESS}\)\(\rapid\)\(\bar{NEXT_ADDRESS}\)\(\rapid\)
Fax number \(\dagger\) \(\dagger

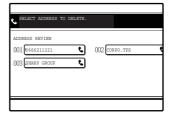
If desired, you can change a key operator progam to require that the [NEXT ADDRESS] key always be pressed. ("MUST INPUT NEXT ADDRESS KEY AT BROADCAST SETTING" (p.96))

Touch the [ADDRESS REVIEW] key to display the destinations.

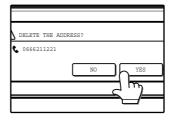


When the [ADDRESS REVIEW] key is pressed, a list of the entered and selected destinations is displayed.

5 Check the destinations.



When you have finished checking the destinations, touch the [OK] key to return to the screen of step 4.



If you wish to delete a destination, touch the displayed key of the destination. A message will appear to confirm the deletion. Touch [YES] key to delete the destination from the destination list. If you wish to cancel the deletion, touch [NO] key.

6 Continue from step 7 of the "BASIC PROCEDURE FOR SENDING FAXES" (p.13).

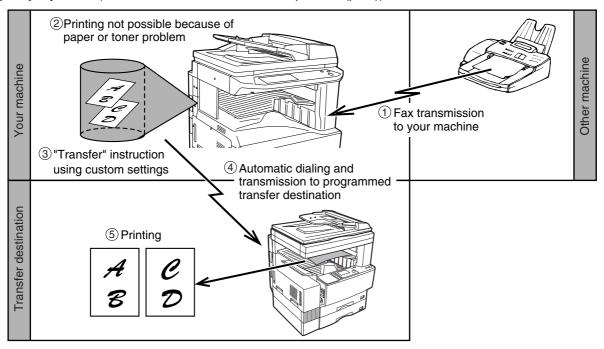


To cancel a broadcast transmission

To cancel a broadcast transmission when selecting destinations, press the [CLEAR ALL] key ((). To cancel transmission after the above procedure has been completed, follow the procedure in "CANCELING A FAX TRANSMISSION" (p.24).

FORWARDING RECEIVED FAXES TO ANOTHER MACHINE WHEN PRINTING IS NOT POSSIBLE

When printing is not possible because of a problem such as no paper or no toner, you can forward received faxes to another fax machine. This function can be conveniently used in an office or other workplace where there is another fax machine connected to a different phone line. When a fax has been received to memory, the data light to the right of the [FAX] key blinks (see "If received faxes cannot be printed" (p.25)).





- When fax forwarding is performed, all faxes that were received in memory to that point are forwarded. The page that was being printed when the problem occurred and all following pages will be forwarded.
- Faxes cannot be selected for forwarding. Faxes received to a confidential box ("SENDING AND RECEIVING CONFIDENTIAL FAXES" (p.46)) or a confidential memory box ("F-CODE CONFIDENTIAL TRANSMISSION" (p.57)) cannot be forwarded.
- The result of forwarding is indicated in an activity report ("VIEWING THE COMMUNICATION ACTIVITY REPORT" (p.85)).

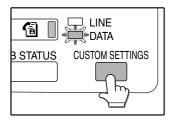
USING THE FAX FORWARD FUNCTION

Program the fax number of the forwarding destination

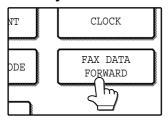
The number of the forwarding destination is programmed in the key operator programs ("SET THE TELEPHONE NUMBER FOR DATA FORWARDING" (p.101)). Only one fax number can be programmed, and a sub-address and passcode can be included in this number. If a forwarding number is not programmed, a fax can still be forwarded by manually entering the forwarding number. However, in this case a sub-address and passcode cannot be included.

Forwarding received data (When a forwarding number is programmed)

1 Press the [CUSTOM SETTINGS] key.

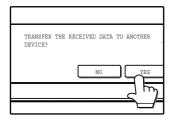


2 Touch the [FAX DATA FORWARD] key.



If there are no received faxes to forward, a message will appear.

3 Touch the [YES] key.



The machine automatically dials the forwarding number programmed in the key operator programs and begins forwarding the fax or faxes.

To cancel fowarding, touch the [NO] key.

MNote

To cancel forwarding after the above procedure is finished

Press the [JOB STATUS] key, and then cancel forwarding in the same way as a regular fax transmission. ("CANCELING A FAX TRANSMISSION" (p.24))

The fax that was going to be forwarded will return to print standby status in your machine.

If forwarding is not possible because the line is busy or a transmission error occurs, the fax returns to print standby status in your machine.

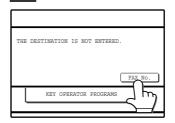
Forwarding received data

(When a forwarding number is not programmed)

- 1 Press the [CUSTOM SETTINGS] key.
- 2 Touch the [FAX DATA FORWARD] key.

When a forwarding number is not programmed, "THE DESTINATION IS NOT ENTERED." will appear.

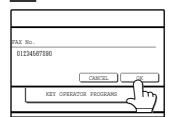
3 Touch the [FAX No.] key.



4 Press the numeric keys to enter the forwarding number.

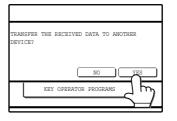
Enter the forwarding number with the numeric keys. Up to 50 digits can be entered. A sub-address and passcode cannot be entered.

5 Touch the [OK] key.



The entered forwarding number is stored.
To cancel, touch the [CANCEL] key.

6 Touch the [YES] key.



The entered number is automatically dialed and forwarding begins.
To cancel, touch the [NO] key.

AUTOMATIC TRANSMISSION AT A SPECIFIED TIME (TIMER TRANSMISSION)

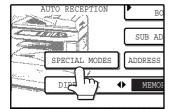
This feature enables you to set up a transmission or polling operation to be performed automatically at a specified time. The time can be specified up to a week in advance. This allows you to take advantage of off-peak phone rates without having to be there when the transmission is performed. A combined total of 50 timer transmission and memory transmission jobs can be stored.



- After a timer transmission is performed, the information (resolution setting, destination, etc.) is automatically cleared from memory.
- To perform a timer transmission, the document must be scanned into memory. It is not possible to place the document in the RSPF or on the document glass and have it scanned at the specified time of transmission.
- To set the date and time in the machine, refer to "CUSTOM SETTINGS" of operation manual for copier. You can check the machine's current time in the screens of steps 3 and 4.
- Only one polling timer operation can be set up at a time. If you wish to set up multiple timer polling operations, combine the machines to be polled into a serial polling operation with a timer setting. (p.32)

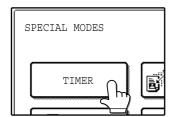
SETTING UP A TIMER TRANSMISSION

In fax mode, touch the [SPECIAL MODES] key.



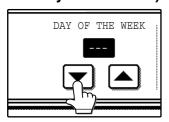
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7)

2 Touch the [TIMER] key.



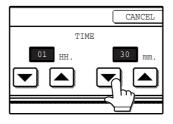
The timer transmission screen appears.

Select the day of the week. (Touch the key or the ▲ key until the desired day is selected.)



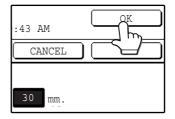
The initial factory setting is "---" (no selection). If you select this setting, the transmission will be performed as soon as the specified time arrives.

4 Select the time. (Touch the ▼ key or the ▲ key until the desired time appears.)



The current time appears at the top of the screen. If the current time is not correct, press the [CLEAR ALL] key (ⓐ) to cancel the operation. Correct the date and time setting as explained in "CUSTOM SETTINGS" in operation manual for copier.

5 Touch the outer [OK] key.



You will return to the screen in step 1. A timer icon will appear in the touch panel.

To cancel the timer transmission, touch the [CANCEL] key.

Perform the desired transmission operation.

The steps that follow will depend on the type of transmission. The following types of transmission can be performed in a timer transmission:

- Normal transmission (p.12)
- Broadcast transmission (p.26)
- Confidential transmission (p.47)
- Relay request transmission (p.50)
- Polling (p.32)
- Serial polling (p.32)
- F-code polling (p.54)
- F-code confidential transmission (p.57)
- F-code relay request transmission (p.59)



- Other operations can be performed after a timer transmission is set up. If another operation is in progress when the specified time arrives, the timer transmission will begin when the job in progress is completed.
- If a timer transmission job is given priority in the fax job status screen ("PRIORITY TRANSMISSION OF A STORED JOB" (p.23)), the timer setting will be canceled and the job will be performed as soon as the current job is completed.

TRANSMISSION AND RECEPTION USING THE POLLING FUNCTION

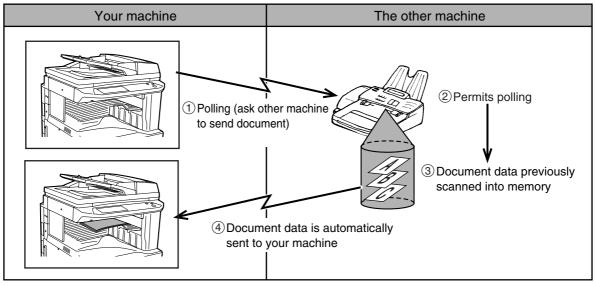
This function can only be used if the other machine is a Super G3 or G3 machine and supports the polling function. The polling function allows your machine to call a fax machine that has a document ready for transmission and initiate reception of the document. You can also perform the reverse operation: scan a document into the memory of your machine so that another machine can call your machine and initiate reception of the document. Calling the sending machine and asking the sending machine to fax a document is called "polling". Scanning a document into memory and automatically sending it when the receiving machine calls and "polls" your machine is called "polling memory".



For information on polling and polling memory using F-codes, refer to "F-CODE POLLING MEMORY" (p.54). This section only explains regular polling and regular polling memory.

Polling

This function allows your machine to call a sending machine and initiate reception of a document in that machine. A timer setting can also be established to have the operation take place at night or at another specified time. (p.30)



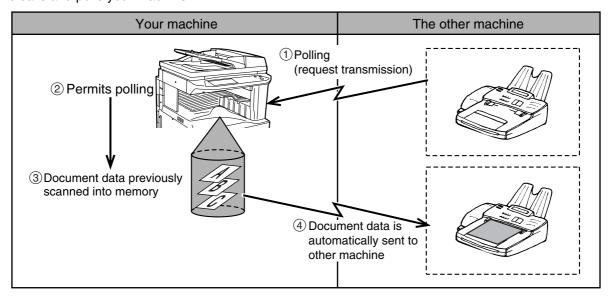
Group keys and the broadcast transmission function (p.26) can be used to successively poll multiple fax machines in a single operation (serial polling). Up to 200 machines can be polled. In this case, the sequence of operations in the above diagram is successively repeated for each sending machine selected.



The receiving machine bears the expense (phone charges) of polling transmission.

Polling memory

This feature allows your machine to automatically send a document previously scanned into memory when another machine calls and polls your machine.



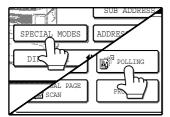
USING THE POLLING FUNCTION

A document should not be loaded in the machine when the following operation is performed. When used in conjunction with the timer transmission function, only one polling job can be stored.



- If the other machine has enabled a polling security function ("Restricting polling access (polling security)" (p.38)), make sure that your own fax number (sender's number) is programmed in the key operator programs ("OWN NUMBER AND NAME SET" (p.97)), and ask the operator of the other machine to program your fax number (the programmed sender's number with the lowest control number) appropriately in that machine.
- If the other fax machine is a Sharp machine (excluding some models), you may also need to program a system number in your machine ("SYSTEM NUMBER MODE" (p.102)) that matches a polling permission ID number programmed in the other machine.

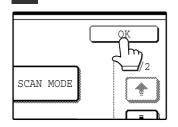
1 Touch the [SPECIAL MODES] key in fax mode, and then touch the [POLLING] key.



If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7) The [POLLING] key is highlighted and the polling icon appears.

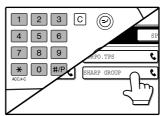
To cancel polling, touch the [POLLING] key once again to cancel the selection.

2 Touch the [OK] key.



You will return to the condition settings screen, and the polling icon will appear in the touch panel.

Enter the number of the other fax machine or touch an auto-dial key (rapid or group key) (p.16).



If the Condition Setting screen appears, touch the [ADDRESS BOOK] key to display the address book screen. (p.8) The selected auto-dial

key is highlighted.

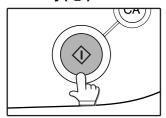
If you are performing

serial polling, touch the [NEXT ADDRESS] key and repeat this step. (p.27)



When performing serial polling, an auto-dial key that includes a sub-address or passcode (p.52) cannot be selected.

When you have finished entering the destination(s), press the [START] key(③).



"JOB STORED." appears in the screen. Your machine prints the document following reception from the sending machine.



To cancel the operation

Press the [JOB STATUS] key and then cancel the operation as explained. ("CANCELING A FAX TRANSMISSION" (p.24))

USING POLLING MEMORY

This function sends a document previously scanned into memory to a receiving machine when the receiving machine calls and polls your machine. The machine has "memory boxes", which are memory used for the regular polling memory function, F-code polling memory, F-code confidential transmission, and F-code relay transmission ("SENDING OPTIONS" (p.102)). The polling memory function explained here uses a memory box called the "PUBLIC BOX". If desired, you can restrict polling to fax machines whose fax number you have programmed in your machine, or use ID numbers to restrict polling ("MEMORY BOXES AND SUB-ADDRESSES/PASSCODES REQUIRED FOR F-CODE TRANSMISSION" (p.52)).

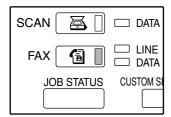
! Caution

When using the polling memory function, do not set the reception mode to MANUAL. (p.62)

Scanning a document into polling memory (the Public Box)

Follow this procedure to scan a document into the Public Box. If other documents have already been stored in the Public Box, the new document will be added to those documents. If the previously stored documents are no longer needed, delete them ("Deleting documents from the Public Box" (p.37)) before scanning in the new document.

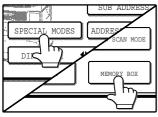
Make sure that the machine is in fax mode.



When the [FAX] key light is on, the machine is in fax mode. If the light is not on, press the [FAX] key.

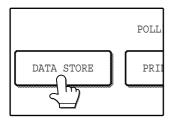
Place the document in the RSPF or on the document glass. (p.10)

- 3 Select the original size, resolution, exposure, and other settings as needed ("MANUALLY SETTING THE SCANNING SIZE" (p.20)).
- Touch the [SPECIAL MODES] key and then the [MEMORY BOX] key.

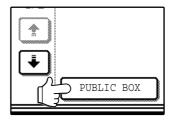


If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7) To cancel the operation, touch the [CLEAR ALL] key ((©A)).

5 Touch the [DATA STORE] key.

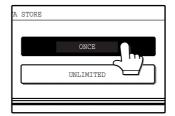


6 Touch the [PUBLIC BOX] key.



This specifies that the document will be scanned into the Public Box.

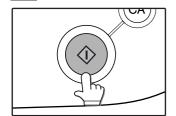
7 Select the number of transmissions.



Touch the [ONCE] key or the [UNLIMITED] key. When you scan the document into the memory box, you can select whether to have the scanned document automatically deleted after polling or left in the box to allow repeated polling.

8 Touch the [OK] key.

9 Press the [START] key (③).



The document is scanned. If other documents have previously been stored, the new document will be added to the previous documents.

If you used the document glass and have another page to scan, change pages and then press the [START] key (③) again. Repeat this procedure until all pages have been scanned, and then press the [READ-END] key in the touch panel. "JOB STORED." will appear briefly in the touch panel and then you will return to the condition settings screen.

MNote

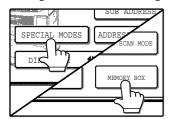
To cancel scanning

To cancel scanning of a document while scanning is in progress, press the [CLEAR] key (C). To erase the documents in the Public Box, see "Deleting documents from the Public Box" on page 37.

Printing documents in the Public Box

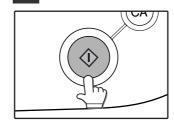
When documents are stored in the Public Box, an [in] icon will appear to the right of the [PUBLIC BOX] key. To check the stored data, you can print it out.

Touch the [SPECIAL MODES] key in fax mode and then touch the [MEMORY BOX] key.



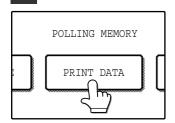
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7)

4 Press the [START] key (⊕).

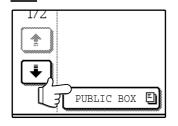


"PRINT JOB IN MEMORY. PLEASE WAIT UNTIL PRINT OUT." will appear and the documents will be printed.

2 Touch the [PRINT DATA] key.



Touch the [PUBLIC BOX] key.

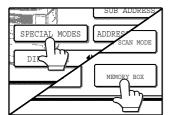


Touching the [CANCEL] key will return you to the screen of step 2.

Deleting documents from the Public Box

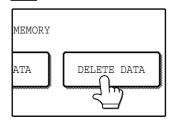
This procedure is used to delete documents from the Public Box when they are no longer needed.

Touch the [SPECIAL MODES] key in fax mode and then touch the [MEMORY BOX] key.

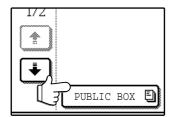


If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7)

2 Touch the [DELETE DATA] key.



3 Touch the [PUBLIC BOX] key.



A message screen appears.

4 Touch the [YES] key.



All documents in the Public Box are deleted and you return to the screen of step 2. If you touch the [NO] key, you will return to the screen of step 3 without deleting the documents.

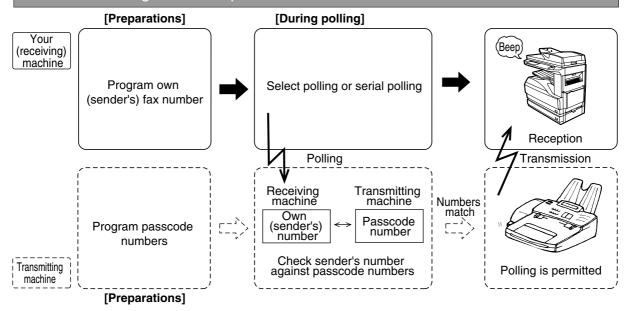
Restricting polling access (polling security)

If you wish to prevent unauthorized fax machines from polling your machine, enable the polling security function. When this function is enabled, polling permission will only be granted if the fax number of the polling machine (as programmed in that machine) matches one of the fax numbers that you have programmed in your machine as passcode numbers. Up to 10 fax numbers can be programmed as passcode numbers.

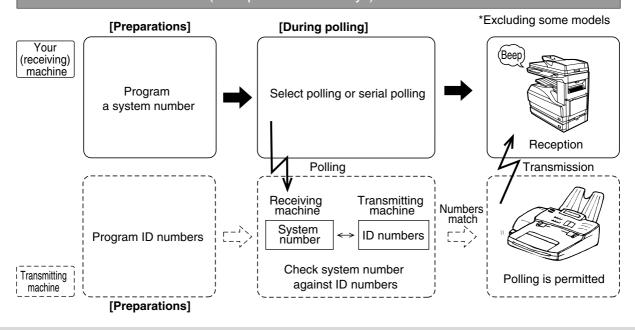
To turn on the polling security function and program passcode numbers, see "PASSCODE NUMBER SETTING" on page 102.

There are two types of polling security functions. Polling is permitted when the numbers of either type match.

1 Checking the receiving machine's programmed sender's number against the transmitting machine's passcode numbers



2 Checking the receiving machine's system number against the transmitting machine's ID numbers (Sharp machines only*)





- If you do not use the polling security function, the document will be sent to any fax machine that polls you.
- When using the polling memory function with polling security enabled, the fax number of the polling machine(s) must be programmed in your machine. The polling machine must also have its sender's number programmed.

FAXING A THIN-SHEET DOCUMENT USING THE RSPF

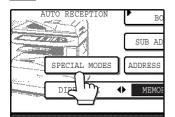
Thin-sheet documents can be faxed using the RSPF.

When the thin-sheet scanning function is used, the RSPF scans the document at a slower speed. Follow these steps to enable or disable the thin-sheet scanning function.

! Caution

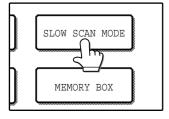
A document that is extremely thin or which has folds or wrinkles may misfeed in the RSPF. In this case, scan the document from the document glass.

1 Touch the [SPECIAL MODES] key in fax mode.



If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7)

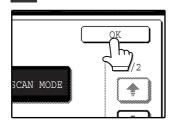
2 Touch the [SLOW SCAN MODE] key.



The [SLOW SCAN MODE] key is highlighted. If the [SLOW SCAN MODE] key is already highlighted, the function has already been enabled.

To disable the function, touch the [SLOW SCAN MODE] key so that the key is no longer highlighted.

3 Touch the [OK] key.



You will return to the condition settings screen.

4 Place the document in the RSPF. (p.10)

5 Fax the document. (p.12)



- The two-sided scanning function cannot be used.
- When using the thin-sheet scanning function, the resolution cannot be set to STANDARD.
- The thin-sheet scanning function can be enabled permanently. ("SLOW SCAN MODE" (p.100))

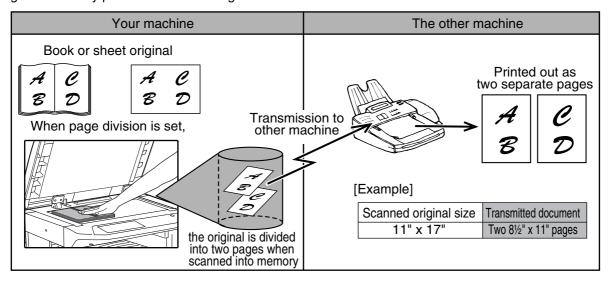
FAXING A DIVIDED ORIGINAL (DUAL PAGE SCAN)

When faxing a book or other bound document, you can use this function to divide the two open pages of the book into two separate fax pages.

This function can only be used when the original is scanned using the document glass.

The original on the right side of the document glass is scanned first as page 1, and then the original on the left side as page 2.

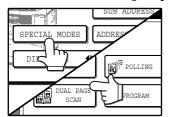
Dual page scan is only possible when the original size is 11" x 17" or 8-1/2" x 11R".



Selecting Dual Page Scan

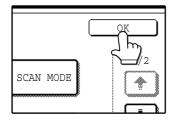
Follow the steps below to select Dual Page Scan and then perform the transmission operation.

Touch the [SPECIAL MODES] key in fax mode and then touch the [DUAL PAGE SCAN] key.



If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7)

2 Touch the [OK] key.



You will return to the main screen and the dual page scan icon will appear.

Place the original on the document glass (p.10), and perform the transmission operation.

If you have more originals to scan after pressing the [START] key (③) and scanning the first original, change originals and repeat scanning until all originals have been scanned. When finished, touch the [READ-END] key in the touch panel. ("Using the document glass" (p.13))



To cancel Dual Page Scan... Press the [CLEAR ALL] key (\bigcirc).

PROGRAMMING FREQUENTLY USED OPERATIONS

This function allows you to store the steps of an operation, including the destination and scanning settings, into a program. When you want to send a document to that destination, you can simply press the appropriate program key and the steps will be performed automatically. This function is convenient when you frequently send documents such as a daily report to the same destination. Up to eight programs can be stored.



- A program differs from a timer transmission (p.30) in that it is not cleared from memory after transmission takes place. A program thus allows you to repeatedly perform the same type of transmission. Note, however, that programs do not allow you to establish a timer setting for transmission.
- With the exception of polling, reception operations cannot be stored in a program.

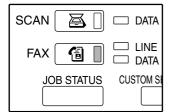
Programs can be stored using the custom settings, and a name up to 36 characters long can be assigned. For information on storing, editing, and deleting programs, see "STORING A PROGRAM" on page 73. The following settings can be stored in a program:

- Destination fax number POLLING SLOW SCAN MODE DUAL PAGE SCAN COVER SHEET
- TX MESSAGE OWN PASSCODE SELECT CONFIDENTIAL TX RELAY BROADCAST
- RESOLUTION and EXPOSURE

Auto-dial keys (rapid or group keys) can be used to store the destination fax number, or a full number can be entered using the numeric keys. When storing a broadcast transmission or serial polling operation in a program, up to 200 destination fax numbers can be stored.

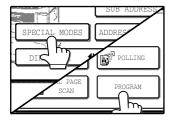
USING A PROGRAM

1 In fax mode, load the document. (p.10)



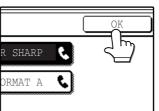
Do not load a document if you are performing a polling operation. If you are going to use Dual Page Scan (p.40), place the document on the document glass.

Touch the [SPECIAL MODES] key and then the [PROGRAM] key.



If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7) The program selection screen appears.

Touch the program key that you wish to execute. Make sure that the key is highlighted and then touch the [OK] key.



The program key you touched is selected and you return to the screen of step 2. The [PROGRAM] key and the keys of the functions stored in the program are highlighted.

4 Touch the [OK] key.

You will return to the condition settings screen.

If needed, select the original size and other settings, and then press the [START] key (③).

Transmission takes place according to the program.



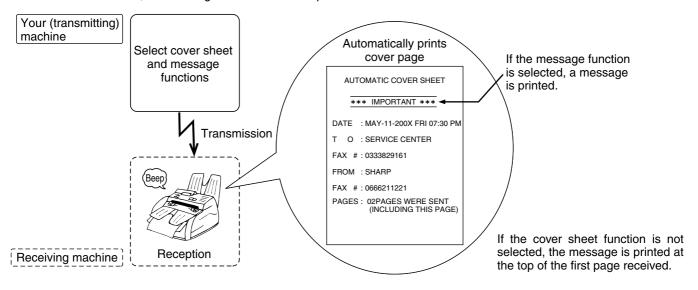
The following settings, which cannot be stored in a program, can be selected before pressing the [START] key (\$) in step 5.

- · Original size setting (p.21)
- Two-sided scanning (p.17)
- Job build mode (p.18)
- Timer setting (p.30)

Note that if the dual page function is stored in the program to be executed, two-sided scanning and the job build mode cannot be selected.

ADDING A COVER SHEET TO A FAX TRANSMISSION

An 8-1/2" x 11" cover sheet can be attached to a fax transmission. The cover sheet is generated automatically and shows the date, time, recipient, fax number, sender, sender's fax number, and number of pages transmitted (cover sheet function). A message can also be added to the top of the first page of a transmitted fax (message function). When used together with the cover sheet function, the message is added to the top of the cover sheet.



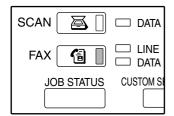
ADDING A COVER SHEET

The cover sheet selection is effective for one transmission. The number of transmitted pages indicated on the cover sheet includes the cover sheet.

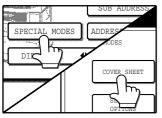


- To appear on the cover sheet, your sender's name and number must be programmed. ("OWN NUMBER AND NAME SET" (p.97))
- A key operator program can be enabled to have a cover sheet added to every fax transmission. ("AUTO COVER SHEET" (p.100))
- The cover sheet function cannot be used with F-code polling memory (p.54), relay request transmission (p.50), or polling memory (p.35).

In fax mode, place the original. (p.10)

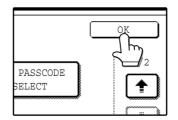


Touch the [SPECIAL MODES] key, the key, and then the [COVER SHEET] key.



If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7) The [COVER SHEET] key is highlighted.

3 Touch the [OK] key.



You will return to the condition settings screen.

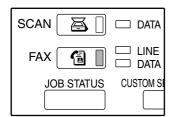
Perform the fax transmission. (p.12)

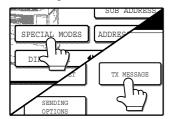
ADDING A MESSAGE

This function adds a message to the top of the first received fax page. Message selection is only effective for one transmission.

One the following messages can be selected: CONFIDENTIAL, URGENT, IMPORTANT, PLEASE DISTRIBUTE, PLEASE CALL BACK

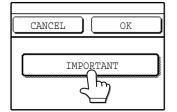
1 In fax mode, place the original. (p.10)





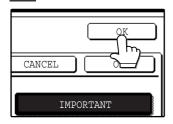
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7)

Touch the key of the message that you wish to add.



The selected key is highlighted.

4 Touch the [OK] key.



You will return to the condition settings screen.

5 Perform the fax transmission. (p.12)

OWN NUMBER SENDING

This function prints the date, time, your programmed sender's name, your programmed sender's fax number, and the page number at the top center of each page that you fax.

You can program multiple senders to enable the use of different sender names (maximum of 20).

To program a sender, see "OWN NUMBER AND NAME SET" on page 97.

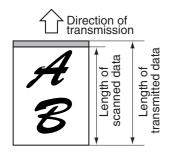
Example of fax page printed out by the receiving machine

MAY-11-200X-FRI 03:00 PM	SHARP PLANNING DIV.	FAX No.0666211221	P.001/001
†	†	†	†
(1)	(2)	(3)	(4)

- (1) Date and time: programmed in the custom settings (See "CUSTOM SETTINGS" in operation manual for copier).
- (2) Sender's name: programmed in the key operator programs. ("OWN NUMBER AND NAME SET" (p.97))
- (3) Sender's fax number: programmed in the key operator programs. ("OWN NUMBER AND NAME SET" (p.97))
- (4) Page number: 3-digit number appearing in the format, "page number/total pages" (only the page number appears if you use manual transmission or Quick On-Line transmission). If desired, you can use a key operator program to have the page number omitted. ("PRINTING PAGE NUMBER AT RECEIVER" (p.99))

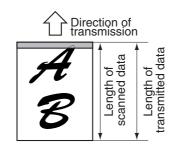
Position of sender's information

You can select whether the sender's information is added outside the printed fax image or inside the image in the key operator programs ("DATE/OWN NUMBER PRINT POSITION SETTING" (p.99)). The initial factory setting is outside the image.



Outside scanned data

None of the transmitted image is cut off; however, the transmitted image is longer than the scanned image, and thus when both the sender and the receiver use the same size of paper, the printed fax may either be reduced or split up and printed on two pages.



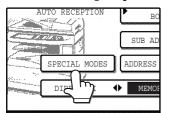
Inside scanned data

The top edge of the scanned image will be cut off by the sender's information; however, when both the sender and the receiver use the same size of paper, the printed fax will neither be reduced nor split up and printed on two pages.

SELECTING THE SENDER INFORMATION THAT APPEARS ON A FAX TRANSMISSION

Follow the steps below to select a sender from among the programmed senders. This function is convenient when you wish to use a different sender's name for different destinations.

In fax mode, touch the [SPECIAL MODES] key.



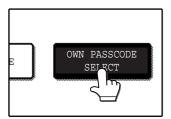
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7)

5 Toch the [OK] key.

You will return to the condition settings screen.

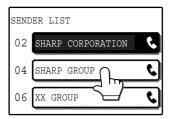
6 Perform the fax transmission. (p.12)

Touch the key and then the [OWN PASSCODE SELECT] key.



The list of programmed senders appears.

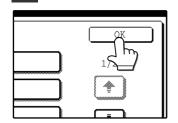
Touch the desired sender key in the list.





If multiple senders have been programmed and a sender is not selected, the sender with the lowest control number is automatically selected.

4 Touch the [OK] key.



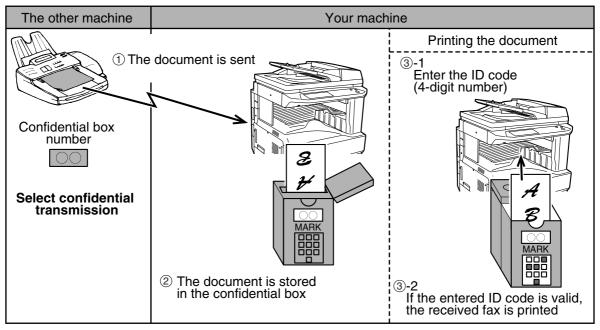
You will return to the screen of step 2.

SENDING AND RECEIVING CONFIDENTIAL FAXES

The confidential function allows you to send and receive confidential faxes. When a fax is sent by confidential transmission, it is held in the memory (confidential box) of the receiving machine instead of being printed out. The fax can only be printed out when the recipient enters a confidential ID code.

This function is convenient when you need to send or receive sensitive documents, or when several departments share the same fax machine.

To receive confidential faxes, a confidential box number and an ID code must be programmed. ("CONFIDENTIAL CODE SET" (p.102))



As shown above, receiving a fax in a confidential box is called confidential reception, and sending a fax to a confidential box in the receiving machine is called confidential transmission.



- The confidential function can only be used when the other fax machine is a Sharp model that has the confidential fax function. For more information, consult your dealer.
- To use the confidential function, the sender's number must be programmed in the sending machine and a confidential box number and an ID code must be programmed in the receiving machine.

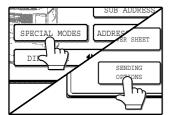


Take care not to forget your confidential ID code. In the event that you forget it, print out the confidential ID list. ("LIST PRINT" (p.105))

CONFIDENTIAL TRANSMISSION

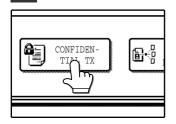
Before sending a confidential fax, make sure that the receiving machine has the confidential reception function and that it is programmed appropriately to receive confidential faxes.

If the receiving machine has more than one box for confidential reception, you will need to contact the receiving party in advance for the appropriate box number.

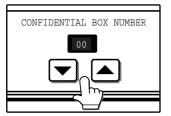


f the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7)

2 Touch the [CONFIDENTIAL TX] key.

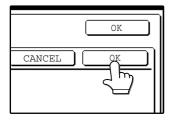


Touch the ▼ or ▲ key to specify the confidential box number of the recipient.



A number from "00" to "99" can be selected.

4 Touch the inner [OK] key.



You will return to the sending options screen. The [CONFIDENTIAL TX] key is highlighted and the confidential transmission icon appears.

5 Touch the outer [OK] key.

You will return to the condition settings screen.

6 Perform the fax transmission. (p.12)

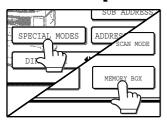
PRINTING A FAX RECEIVED IN A CONFIDENTIAL BOX

To print a fax received in a confidential box, you must enter the ID code (a 4-digit number from 0000 to 9999) that was programmed when the confidential box was created.



- When a fax is received in a confidential box, a transaction report is printed to inform you. To set print
 conditions for transaction reports, see "TRANSACTION REPORT PRINT SELECT SETTING" on page 98.
- Faxes are automatically erased from the confidential box after being printed.
- Multiple faxes can be received in a confidential box.

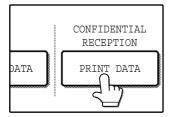
Touch the [SPECIAL MODES] key and then the [MEMORY BOX] key.



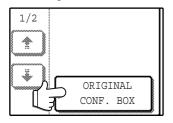
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7) The memory box menu appears.

To cancel, touch the [CANCEL] key.

2 Touch the [PRINT DATA] key.



Touch the [ORIGINAL CONF. BOX] key.



4. Touch the appropriate memory box key.



" [] " appears next to memory boxes that have received faxes.

Press the numeric keys to enter your ID code (4 digits).



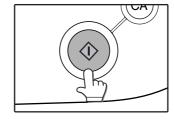
As you enter each digit, the hyphen "-" that marks the digit changes to an asterisk "*".

If the ID code you entered is correct, "PRESS [START] TO PRINT DATA." will appear.

If the ID code is not correct, the message "ID CODE IS NOT VERIFIED." appears and you will return to the screen of step 4.

To return to the screen of step 4, touch the [CANCEL] key .

6 Press the [START] key (⊕).



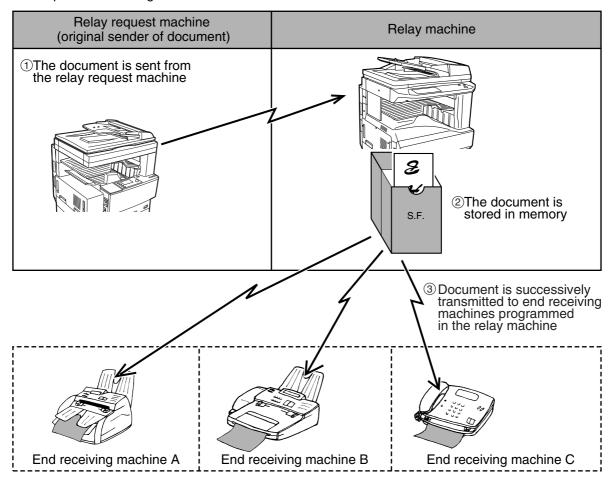
Printing begins. If other jobs are waiting to be printed, the confidential fax(es) will be printed ahead of the other jobs, after the current job is finished.



- · A confidential box cannot be deleted if it is holding a received fax.
- A received confidential fax cannot be forwarded. (p.28)

SENDING FAXES USING THE RELAY REQUEST FUNCTION

The relay request function is used to send a fax to a relay fax machine, and then have the relay fax machine send the fax to mulitple end receiving machines.



The fax machine that originally sends the fax is called the relay request machine, and then relays it to the programmed end machines is called the relay machine.

The fax is printed out by the relay machine as well as by the end receiving machines.

The relay request function is useful when the relay machine is sufficiently close to the end receiving machines that the overall cost of transmission is less than if you sent the fax directly to the end receiving machines using the broadcast function. If used together with a timer setting to take advantage of off-peak rates, the cost of transmission can be reduced even more.

Sending a fax to a relay machine and requesting relay transmission is called the relay request function. Receiving a fax and broadcasting it to a group of end receiving machines is called the relay broadcast function.



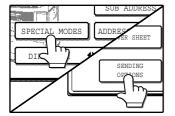
- This function can only be used when the relay machine is a Sharp model that has the relay broadcast function. For more information, consult your SHARP service center.
- To allow a relay request to take place, the fax number of the relay request machine (the programmed sender's number) must be programmed in the relay machine as a relay ID code ("ID NUMBER MODE" (p.102)).
- To make a relay request, the relay group (the number of the relay machine and the numbers of the end receiving machines) must be programmed. ("STORING RELAY GROUPS" (p.75))
- The relay request machine only bears the cost of sending the fax to the relay machine. The relay machine bears the cost of sending the fax to each of the end receiving machines.

USING THE RELAY REQUEST FUNCTION

A relay request transmission is performed by specifying the relay group and then performing a regular fax transmission.

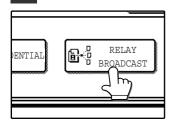
Only one relay group can be specified.

A relay request will be refused if an end receiving machine is specified that is not stored in the relay machine.

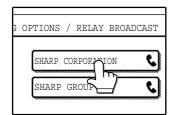


If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7)

2 Touch the [RELAY BROADCAST] key.

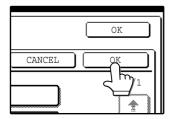


Touch the key of the relay group that you wish to use.



The selected relay group key is highlighted.

4 Touch the inner [OK] key.



You will return to the special transmission screen.

The [RELAY BROADCAST] key is highlighted and a relay request icon appears.

5 Touch the outer [OK] key.

You will return to the condition settings screen.

6 Perform the fax transmission. (p.12)

Chapter 4 TRANSMISSION USING F-CODES

This chapter explains F-code transmission, which gives you a convenient means of performing advanced operations such as relay broadcast transmission and confidential transmission. Normally these functions require that the other fax machine be a similar Sharp machine; however, F-code transmission enables these functions to be performed with any other machine that supports F-code transmission.

TRANSMISSION BETWEEN MACHINES SUPPORTING F-CODES

This machine supports the "F-code" standard as established by the ITU-T*.

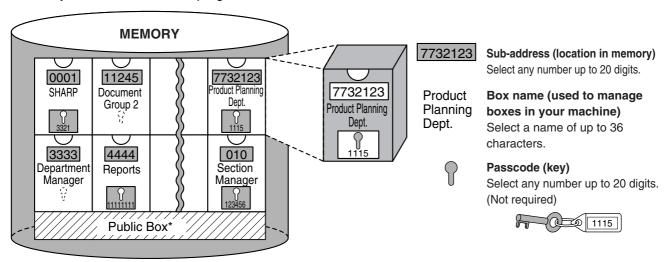
The F-code standard makes it possible to perform special operations such as relay broadcast and confidential transmission, which previously could only be performed with another similar Sharp machine, with any other machine that also supports F-codes.

Before using any of the functions explained in this chapter, verify that the other fax machine supports F-codes and the function that you wish to use (the other machine may use a different name for the function).

* The ITU-T is a United Nations organization that establishes communications standards. It is a department of the International Telecommunication Union (ITU), which coordinates global telecommunications networks and services.

MEMORY BOXES AND SUB-ADDRESSES/PASSCODES REQUIRED FOR F-CODE TRANSMISSION

Fax machines that support F-code transmission enable the creation of a "memory box" in the unit's memory. The memory box is used to store documents received from another fax machine or documents to be sent when another machine polls that machine. Up to 10 memory boxes can be created for each operation type, and a name can be assigned to each box. A "sub-address" that indicates the box's location in memory must be programmed, and if desired, a passcode can also be programmed to control access to the box.



*The Public Box is used for normal serial polling. ("USING POLLING MEMORY" (p.35))

When communication occurs involving a memory box, the communication will only take place if the sub-address and passcode that the other machine sends match the sub-address and passcode programmed in your machine for that box. Therefore, to allow communication, you must inform the other party of the sub-address and passcode of the memory box. Likewise, to send a document to a memory box in another machine or use polling to retrieve a document from that memory box, you must know the sub-address and passcode of that memory box. Memory boxes are managed in this machine not only by sub-addresses and passcodes (which are number sequences), but also by names. For example, for the memory box with the sub-address, "7732123", and the passcode, "1115", you could assign the name "Product Planning". Assigning names makes it easier to manage memory boxes. (Note that you do not need to inform the other party of a memory box name; the other party only needs to know the sub-address and passcode.)

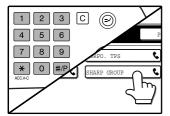
This machine uses the term "sub-address" for the location of the memory box and the term "passcode" for the password that allows communication; however, other fax machines of other manufacturers may use different terms. When asking the other party for a sub-address and passcode, you may find it useful to refer to the 3-character alphabetical terminology used by the ITU-T.

This machine	ITU-T			
	F-code polling memory box	F-code Confidential box	F-code Relay Broadcast Function	
Sub-address	SEP	SUB	SUB	
Passcode	PWD	SID	SID	

ENTERING A SUB-ADDRESS AND PASSCODE FOR A MEMORY BOX IN THE OTHER MACHINE

When transmitting to a memory box in another fax machine, the sub-address and passcode must be entered after the other machine's fax number. Enter the other machine's fax number as explained for a normal transmission (p.12) or for a polling operation (p.33), and then enter the sub-address and passcode as follows:

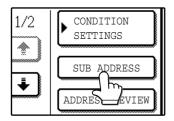
Dial the fax number of the other machine, or touch a rapid key.



If the condition settings screen appears, touch the [ADDRESS BOOK] key to display the address book screen. (p.8) If the sub-address and passcode have been

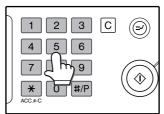
programmed into the rapid key, the following steps are not needed.

2 Touch the [SUB ADDRESS] key.



A slash "/" appears at the end of the fax number. If you make a mistake, press the [CLEAR] key (C) to clear the mistake.

Use the numeric keys to enter the sub-address of the other machine's memory box (max. 20 digits)



If you make a mistake, press the [CLEAR] key (©) and re-enter the correct digit(s).

4 Touch the [SUB ADDRESS] key once again.

A slash "/" appears at the end of the sub-address.

Use the numeric keys to enter the passcode of the other machine's memory box (max. 20 digits)

If a passcode has not been established for the other box, this step is not necessary.



- You can program a sub-address and passcode into a rapid dial key along with the fax number. (p.67)
- Manual transmission (p.61) using a sub-address and passcode is not possible.

CREATING A MEMORY BOX FOR F-CODE TRANSMISSION

F-code operations that use memory boxes include F-code polling memory (p.54), F-code confidential transmission (p.57), and F-code relay broadcast (p.59). Memory boxes must be created to perform any of these operations. A memory box can be created using the key operator programs. Memory boxes are created in the key operator programs. Up to 10 boxes for each operation type can be created. The method of creating up the box varies depending on the operation. To create, edit, or delete a memory box, see "F-CODE MEMORY BOX" on page 103. After you have created a box, be sure to inform the other party of the sub-address and passcode.

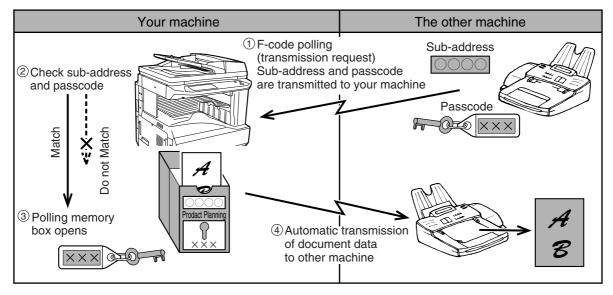


If you attempt to create a memory box when 10 memory boxes have already been created for that operation type, a message will appear to inform you that no more boxes can be created. Delete any unneeded memory boxes and then create the new box.

F-CODE POLLING MEMORY

F-code polling memory allows one fax machine to call another fax machine and initiate reception of a document that has been scanned into the other machine's F-code polling memory box. Calling another machine and initiating reception is called F-code polling, and scanning a document into a memory box for another machine to retrieve by polling is called F-code polling memory. This function is approximately the same as normal polling explained on page 32; however, the use of the F-code polling memory box means that security is provided by means of the sub-address and passcode.

How F-code polling memory works



F-code polling is when your machine calls another machine and retrieves a document that was scanned into the polling memory box of that machine (the reverse of the above diagram).



- To perform polling or polling memory without using an F-code, refer to page 32.
- To create an F-code memory box for polling memory, refer to page 103.
- Unlike normal polling, the other machine's fax number or system number is not programmed as a passcode for F-code polling memory. The sub-address and passcode of the polling memory box are used for polling security.
- The receiving machine bears the expense (phone charges) of the transmission.

USING F-CODE POLLING MEMORY

In order for another machine to retrieve a document from your machine, you must first scan the document into the F-code polling memory box.

You can check the document in the memory polling box by printing it out.

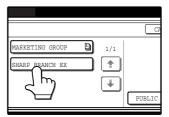
! Caution

When using F-code polling memory, do not set the reception mode to manual reception.

Scanning a document into an F-code polling memory box

The procedure for scanning a document into an F-code polling memory box (p.103) is almost the same as the procedure for scanning a document into the PUBLIC BOX for normal polling memory. Instead of touching the [PUBLIC BOX] key in Step 6 of Scanning a document into polling memory (the Public Box) on page 35, touch the key of the memory box into which you wish to scan the document. If a document has already been stored in that box, the new document will be stored along with the existing document. If you no longer need the existing document, delete it as explained in "Checking and deleting a document in a memory box" below.

When you touch the memory box into which you wish to scan the document, the key is highlighted and selected as the scanning destination.





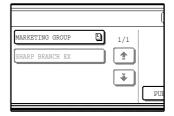
When you scan the document into the memory box, you can select whether to have the scanned document automatically deleted after polling or left in the box to allow repeated polling.

Checking and deleting a document in a memory box

The procedure for checking a document in an F-code polling memory box by printing it and the procedure for deleting a document from a box are almost the same as the procedures for printing and clearing document data from the Public Box. Instead of touching the [PUBLIC BOX] key in Step 3 of "Printing documents in the Public Box" on page 36 or "Deleting documents from the Public Box" on page 37, touch the memory box key that contains the document that you wish to print or clear.

If a document icon (\blacksquare) appears to the right of a memory box key, a document has been stored in that box and you can print it out.

Note that you cannot check or clear the contents of a memory box while it is being used for transmission.



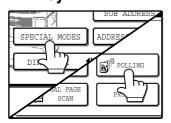
PROCEDURE FOR F-CODE POLLING

Make sure that a document has not been placed in the RSPF or on the document glass, and then follow the steps below.



- You must know the sub-address (SEP) and passcode (PWD) of the other machine's F-code polling memory box.
- Serial polling (selecting multiple fax machines to be polled using a group key or by touching the [NEXT ADDRESS] key) is not possible with F-code polling.

In fax mode, touch the [SPECIAL MODES] key and then the [POLLING] key.

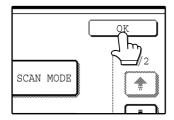


If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7) The [POLLING] key is highlighted and the

polling icon is displayed.

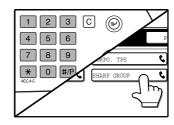
To cancel the polling selection, press the [POLLING] key once again so that it is no longer highlighted.

2 Touch the [OK] key.



You will return to the condition settings screen.

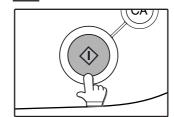
3 Enter the fax number, sub-address, and passcode of the other fax machine.



To use a rapid key, touch the [ADDRESS BOOK] key to display the address book screen. See "ENTERING A SUB-ADDRESS AND PASSCODE FOR A MEMORY BOX IN THE OTHER MACHINE" on

page 53 for the procedure for entering sub-addresses and passcodes.

4 Press the [START] key (⊚).



"JOB STORED." appears on the screen. After communicating with the other machine, your machine prints the received document.



To cancel the operation

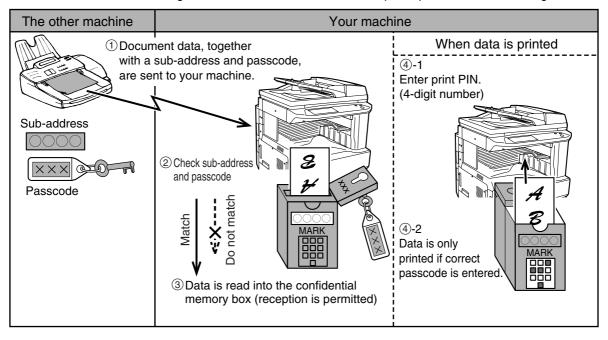
Press the [JOB STATUS] key and then cancel the operation as explained on page 24.

Only one F-code polling operation with a timer setting (p.30) can be stored.

F-CODE CONFIDENTIAL TRANSMISSION

This function is used to fax confidential documents. The sub-address and passcode programmed for a memory box restricts access to the box, and received data can only be printed by someone who knows the print PIN. (Personal Identification Number).

This function is convenient when faxing sensitive documents, or when multiple departments share a single fax machine.



As the above diagram shows, receiving a document to the machine's F-code confidential memory box is called F-code confidential reception, and sending a document to another machine's F-code confidential memory box is called F-code confidential transmission.



- For Sharp's regular confidential transmission function, which uses the programmed sender's fax number and ID code, see "SENDING AND RECEIVING CONFIDENTIAL FAXES" on page 46.
- See "F-CODE MEMORY BOX" on page 103 for the procedures for creating, editing, and deleting F-code confidential memory boxes.



Take care not to forget the print PIN that is programmed in the F-code confidential memory box. If you forget the passcode, print it out in the key operator programs. ("LIST PRINT" (p.105))

F-CODE CONFIDENTIAL TRANSMISSION

F-code confidential transmission is performed in the same way as a normal transmission (see chapter 2); however, you must enter the sub-address (SUB) and passcode (SID) after the fax number of the other machine. (Omit the passcode if the other machine does not use a passcode.)

For the procedure for entering sub-addresses and passcodes, see "ENTERING A SUB-ADDRESS AND PASSCODE FOR A MEMORY BOX IN THE OTHER MACHINE" on page 53.

F-code confidential reception is performed in the same way as normal reception (see chapter 2); however, you must inform the other party of the sub-address (SUB) and passcode (SID) of your confidential memory box. (Omit the passcode if a passcode is not programmed in the box.)



- An F-code confidential transmission can be used in combination with the broadcast transmission function*
 (p.27) or the timer transmission function (p.30), and can be stored as a program (p.73).
 *Only when the destinations are stored in rapid keys.
- F-code confidential transmission is not possible if the other machine does not support F-code transmission or does not have an F-code memory box programmed.
- Before performing an F-code confidential transmission, you will need to ask the operator of the other machine for the sub-address and passcode programmed in that machine. You can omit entry of the passcode if a passcode is not programmed in the other machine.
- A sub-address and passcode can be stored in a rapid key together with a fax number. To store rapid keys, see page 67.

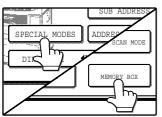
PRINTING A DOCUMENT RECEIVED TO AN F-CODE CONFIDENTIAL MEMORY BOX

A document received to an F-code confidential memory box can be printed by entering the print PIN (0000 to 9999) that was programmed when the memory box was created. Printing of the confidential document will take priority over any other jobs waiting to be printed.



- Make sure that a Transaction Report is set to to print out in the key operator programs so that you will be informed when a confidential document is received. ("TRANSACTION REPORT PRINT SELECT SETTING" (p.98))
- · A document received to an F-code confidential memory box is automatically cleared after printing.
- Multiple faxes can be received to an F-code confidential memory box.

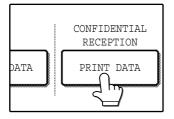
In fax mode, touch the [SPECIAL MODES] key and then touch the [MEMORY BOX] key.



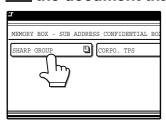
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen. (p.7) The memory box menu appears.

To cancel the operation, touch the [CANCEL] key.

2 Touch the [PRINT DATA] key.



Touch the memory box key containing the document that you wish to print.



A ([]) mark appears to the right of memory boxes that have received documents.

A memory box cannot be selected while it is being used for transmission.

4 Press the numeric keys to enter the 4-digit print PIN.

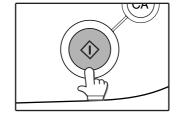


As each digit is entered, "-" changes to "*". If the print PIN you entered is correct, the message "PRESS [START] TO PRINT DATA" appears.

If the passcode is not correct, the message "PIN IS NOT VERIFIED." appears and you will return to the screen of step 3.

To return to the screen of step 3, touch the [CANCEL] key.

5 Press the [START] key (③).



Printing begins. If another print job is already is progress, the confidential document is printed after that job is completed.

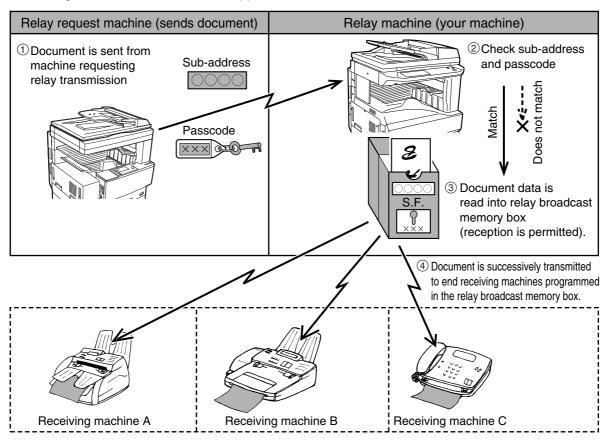


If a received document remains in an F-code confidential memory box, the memory box cannot be deleted.

F-CODE RELAY BROADCAST TRANSMISSION

The F-code relay broadcast function is used to have a relay request fax machine send a fax to a relay fax machine, and then have the relay fax machine send the fax to mulitple end receiving machines. To use this function, the fax numbers of the end receiving machines must be stored in the relay machine.

The relay machine and the relay request machine (original sender of the fax) must both support F-codes; however, the end receiving machines do not need to support F-codes.



The machine that originally sends the document is called the relay request machine, and the machine that has a memory box containing the end receiving machines and which relays the received document to those machines is called the relay machine.

The document sent by the relay request machine is also printed by the relay machine.

For example, corporate headquarters in Seattle wants to send the same document to branch offices in San Francisco, Oakland, Berkeley, and San Jose. If the San Francisco office creates a relay broadcast memory box and programs the Oakland, Berkeley, and San Jose offices as end receiving destinations, the overall phone charges will be lower than if the Seattle office uses the regular broadcast transmission function (p.26). This function can also be combined with a timer setting (p.30) to take advantage of off-peak rates, allowing a further reduction in phone charges.

Transmission by the relay machine is called "F-code relay broadcast transmission", and transmission from the relay request machine to the relay machine is called "F-code relay request transmission".



- For information on Sharp's regular relay broadcast function, which uses the programmed sender's number and relay ID code, see "SENDING FAXES USING THE RELAY REQUEST FUNCTION" on page 49.
- To create an F-code relay broadcast memory box and program, edit, and delete end receiving machines, see "F-CODE MEMORY BOX" on page 103. When creating a box, a passcode (SID) can be omitted.
- The relay request machine only bears the expense of sending the document to the relay machine. The relay machine bears the expense of sending the document to each of the end receiving machines.

USING THE F-CODE RELAY BROADCAST FUNCTION

(your machine is the relay machine)

When a document is received from a relay request machine, the F-code relay broadcast function transmits the document to the end receiving machines using a memory box only if the sub-address and passcode sent by the relay request machine are correct.

Refer to "F-CODE MEMORY BOX" on page 103 for the procedures for creating, editing, and deleting memory boxes.

Up to 120 end receiving machines (rapid keys or group keys, and full fax numbers entered with the numeric keys) can be programmed in an F-code relay broadcast memory box.

A document received from a relay request machine is initially stored in the memory box of your machine. Your machine (the relay machine) also prints the document, thus the document is first stored as a print job and then as transmission jobs to each of the programmed end receiving machines. The document data is automatically cleared after transmission to all end receiving machines is finished.

USING THE F-CODE RELAY REQUEST FUNCTION

(your machine requests a relay broadcast)

First ask the operator of the other F-code machine to create an F-code relay broadcast memory box and program the end receiving machines in that box. Ask the operator of the other machine for the sub-address (SUB) and passcode (SID) of the memory box.

When you send the document to the relay machine, enter the sub-address and passcode after the fax number. The document will be stored in the memory box of the relay machine, and then transmitted from the relay machine to each of the programmed end receiving machines. A passcode (SID) need not be entered when dialing if a passcode was not programmed for the memory box.

Aside from the method of dialing the relay machine, the transmission procedure is the same as for a normal transmission (see chapter 2).

See "ENTERING A SUB-ADDRESS AND PASSCODE FOR A MEMORY BOX IN THE OTHER MACHINE" on page 53 for the procedure for entering a sub-address and passcode after the fax number of the other machine.

Chapter 5 CONVENIENT METHODS OF USE

This chapter explains convenient features that can be used to send a document, as well as features that expand the range of use of the fax machine such as connecting an extension phone.

CONNECTING AN EXTENSION PHONE

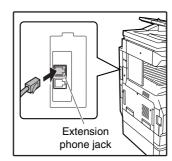
You can connect a telephone to the machine and use it as an extension phone to place and receive calls like any normal phone. You can also activate fax reception from the phone (remote operation).



- If you connect a combination telephone/answering machine to the machine, you will not be able to use the answering machine function.
- The extension phone must be directly connected to the machine's extension phone jack as explained below.

CONNECTING AN EXTENSION PHONE

Insert the end of the extension phone cord into the extension phone jack on the rear of the machine.



Make sure you hear a "click" sound indicating that the cord is securely connected.

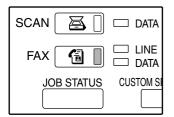
SENDING A FAX AFTER TALKING ON THE PHONE (MANUAL TRANSMISSION)

If the other fax machine is set to manual reception, you can talk to the other party and then send a fax without breaking the connection. This procedure is called manual transmission.



Automatic redialing ("If the receiving party is busy" (p.15)) will not take place if the line is busy.

Make sure that the machine is in fax



When the [FAX] key light is on, the machine is in fax mode. If the light is not on, press the [FAX] key.

Place the original. (p.10)

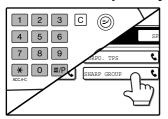


If you have loaded the original on the document glass, you can only send one page by manual transmission.

- 3 Select the original size, resolution, exposure, and other settings as needed.
 - Manually setting the original size (p.20)
 - Selecting the resolution (p.21)
 - Selecting the exposure (p.22)
- 4. Lift the extension phone.

Or, you can press the [SPEAKER] key. ("ON-HOOK DIALING" (p.11))

Dial the number of the other party or touch a rapid key.



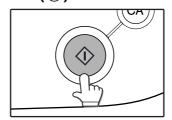
You can also dial using the keypad on the extension phone.

You cannot use a group key or a rapid key that includes a sub-address and passcode.

Speak to the other party when they answer.

If you used the [SPEAKER] key to dial, lift the extension phone to talk.

After the other party switches to fax reception, press your [START] key (③).



Transmission begins.

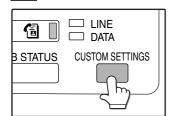
8 Replace the extension phone.

RECEIVING A FAX AFTER TALKING (MANUAL RECEPTION)

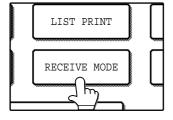
When an extension phone is connected to the machine and you have set the reception mode to MANUAL, you can talk to a person who wishes to send a fax manually and then begin fax reception without breaking the connection.

Changing the reception mode to MANUAL.

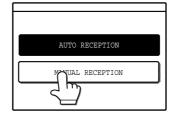
1 Press the [CUSTOM SETTINGS] key.



2 Touch the [RECEIVE MODE] key.

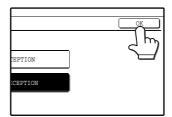


Touch the [MANUAL RECEPTION] key.



The [MANUAL RECEPTION] key is highlighted.

4 Touch the [OK] key.



The reception mode is set to MANUAL.



To return the reception mode to AUTO, touch the [AUTO RECEPTION] key in step 3 above.

Activating fax reception from an extension phone (remote reception)

After speaking on the extension phone, you can activate fax reception from the extension phone. This is called "remote reception". After speaking, or when you hear a fax tone through the extension phone, perform the following procedure with the extension phone still lifted.



This function cannot be used if you are on a pulse dial line and the extension phone cannot issue tone signals. To find out whether or not the extension telephone can issue tone signals, see the phone's manual.

If you are on a pulse dial line, set your phone to issue tone signals.

Refer to your phone's manual to set the phone to issue tone signals.

If your phone is already set to issue tone signals, proceed to the next step.

Press the "5" key on the extension phone's keypad, and then press the " * " key twice.

Fax reception is activated.

3 Replace the extension phone.



The one-digit number that is used to activate fax reception from an extension phone (initially set to "5") is called the "remote reception number". You can change this number to any number from 0 to 9 in the key operator programs. ("REMOTE RECEPTION NUMBER SETTING" (p.99))

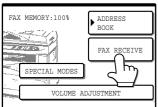
When the machine is in Fax mode

A fax can be received manually even when transmission is in progress.

When the machine rings, lift the extension phone and speak.

If you hear a fax tone through the extension phone, do not speak and proceed to the next step.

With the extension phone still lifted, touch the [FAX RECEIVE] key.



Reception begins when the other party begins transmission. To adjust the receiver volume, touch the

[VOLUME ADJUSTMENT] key. You will switch through 3

levels (low, medium, and high).

3 Replace the extension phone.

When reception is finished, you will hear a "beep' sound and the fax will be printed.



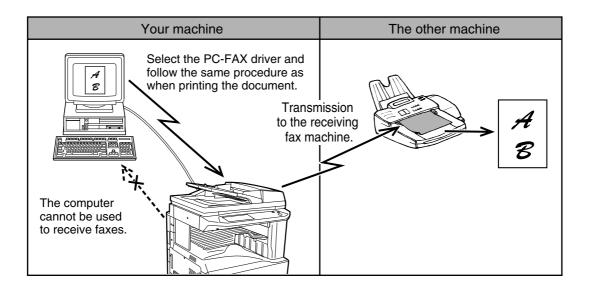
- If there are previously stored print jobs, the received fax will be printed after the previously stored jobs are finished.
- You can talk on the extension phone and manually receive a fax while the machine is copying.
- If the machine rings during copying, lift the extension phone and speak. To receive a fax, press the [FAX] key with the extension phone still lifted. When you hear a fax tone through the extension phone, touch the [FAX RECEIVE] key.

FAXING A DOCUMENT FROM A COMPUTER (PC-FAX)

If a computer is connected to the machine and the PC-FAX driver installed in the computer, a document created on the computer can be sent directly to a fax machine. There is no need to print the document and then scan it on the machine.



- This function can only be used for transmission. Faxes sent to the machine cannot be received by the computer.
- After sending a fax from your computer, check with the recipient to see if the fax was received. You can also check the result of transmission on a Activity report. (p.85)
- Regardless of the fax settings, this function only rotates 8-1/2" x 11" (A4) length (11" x 17" (A3) width) originals before transmission.
- Originals less than 8-1/2" x 11" (A4) width are transmitted as 8-1/2" x 11" (A4) width documents.
- This function can only be used in a Windows environment.



USING PC-FAX TRANSMISSION

To fax a document using the PC-FAX function, use the same procedure as when you print the document from the application. First switch to the installed PC-FAX driver and then execute printing. Image data for fax transmission will be generated and the image sent as a fax.

For more information on using the PC-FAX function, see the "Operation manual" that is installed along with the PC-FAX driver. To open the manual, click the Windows Start button, select "All Programs" ("Programs" in operating systems other than Windows XP), "SHARP PC-FAX Driver", and then "Operation manual".

This chapter explains how to program auto dial keys (rapid and group keys), programs, relay groups, and user indexes. It also explains how to print out lists of stored settings.

PROGRAMMING

Auto dial keys (rapid and group keys), programs, relay groups, and user indexes are stored and edited using the operation panel of the machine.

STORING, EDITING, AND DELETING AUTO DIAL KEYS, PROGRAMS, AND RELAY GROUPS

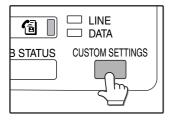
This section explains the procedures for storing, editing, and deleting auto-dial keys (rapid keys and group keys), programs, and relay groups. (The procedure for using rapid keys and group keys is explained in "TRANSMISSION BY AUTO-DIALING (RAPID DIALING AND GROUP DIALING)" on page 16, the procedure for using programs is explained "PROGRAMMING FREQUENTLY USED OPERATIONS" on page 41, and the procedure for using relay groups is explained in "SENDING FAXES USING THE RELAY REQUEST FUNCTION" on page 49.) A combined total of 500 rapid keys and group keys can be stored. Eight programs and ten relay groups can also be stored. If you attempt to store more than these, a warning message will appear. In this case, delete any auto-dial keys, programs, or relay groups that are no longer needed (rapid keys: page 70, group keys: page 72, programs: page 74, relay groups: page 77), and then store the new auto-dial key, program, or relay group.



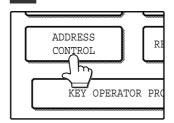
To cancel a storing, editing, or deleting procedure, press the [CLEAR ALL] key ((). You will return to the condition settings screen.

To store, edit, or delete an auto-dial key, program, or group, first follow steps 1 through 4 below.

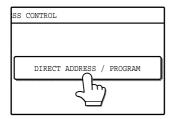
1 Press the [CUSTOM SETTINGS] key.



2 Touch the [ADDRESS CONTROL] key.



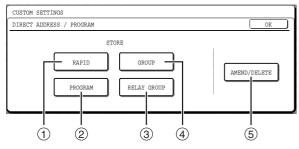
Touch the [DIRECT ADDRESS / PROGRAM] key.



The DIRECT ADDRESS / PROGRAM menu appears.

Touch the desired key and perform the programming operation.

See the pages indicated below for the operation you wish to perform.



- ① [RAPID] key
 Storing a rapid dial key (p.67)
- ② [PROGRAM] key Storing a program key (p.73)
- ③ [RELAY GROUP] key Storing a relay group (p.75)
- (4) [GROUP] key Storing a group key (p.71)
- **⑤** [AMEND/DELETE] key
 - Rapid key (p.70)
 - Group key (p.72)
 - Program (p.74)
 - Relay group (p.77)

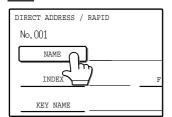


If no auto dial numbers (rapid keys or group keys), programs, or relay groups are stored, the [AMEND/DELETE] key will be grayed out.

STORING RAPID DIAL KEYS

To store a rapid key, follow steps 1 to 4 on pages 65 to 66 (touch the [RAPID] key in step 4), and then follow the steps below.

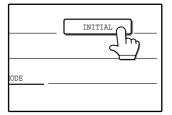
1 Touch the [NAME] key.



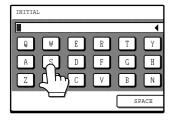
The "No." that automatically appears is the lowest number from 001 to 500 that has not yet been programmed. When the key is touched, the letter-entry screen appears. Enter up to 36 characters for the name.

Refer to page 80 for the procedure for entering letters.

2 Touch the [INITIAL] key.



3 Touch the desired letter key.



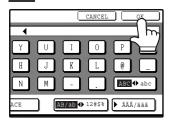
If the name entered in step 1 is in alphabetical letters, the first letter will be highlighted.

The selected letter key is highlighted. If you select the wrong key, touch the correct key.

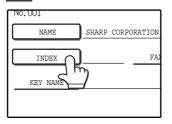


The initial you enter here determines the position of the rapid key in the ABC index. For information on the ABC index, see page 8.

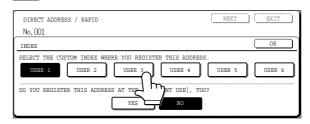
4 Touch the [OK] key.



5 Touch the [INDEX] key.



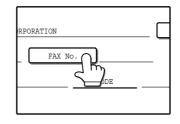
6 Touch the desired index key.



- Select one of the upper row of keys (USER 1 through USER 6) to determine the location of the rapid key when the GROUP index is displayed instead of the ABC index (p.78).
- The lower keys are for selecting whether or not to include the rapid key in the [FREQUENT USE] index.
- If you touch the wrong key, simply touch the correct key.

7 Touch the [OK] key.

8 Touch the [FAX No.] key.



The fax number entry screen appears.

9 Use the numeric keys to enter the fax number.



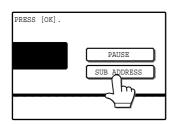
- To insert a pause between digits of the number, touch the [PAUSE] key. The pause appears as a hyphen "-".
 See page 97 to set the duration of the pause.
- If you make a mistake, press the [CLEAR] key (C) to clear one digit at a time, and then enter the correct digit(s).
- If you are not going to enter a sub-address and password after the fax number, go to step 12.



- For information on sub-addresses and passwords, see "TRANSMISSION BETWEEN MACHINES SUPPORTING F-CODES" on page 51.
- The maximum number of digits that can be entered is as follows:
 When the destination does not include a sub-address and passcode, 50 digits including the fax number and any pauses (hyphens).

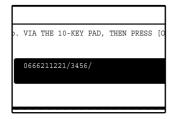
When the destination includes a sub-address and passcode, 92 digits including the fax number, any pauses (hyphens), and slashes "/" (to separate the sub-address and passcode).

If you need to enter a sub-address, touch the [SUB ADDRESS] key and then enter the sub-address with the numeric keys.



When you touch the [SUB ADDRESS] key, a slash is entered after the fax number. Enter the sub-address after the slash (max. 20 digits). If you do not wish to enter a passcode, go to step 12.

If you wish to enter a passcode, touch the [SUB ADDRESS] key once again and enter the passcode with the numeric keys.



When you touch the [SUB ADDRESS] key, a slash is entered after the sub-address. Enter the passcode after the slash (max. 20 digits).

12 Touch the [OK] key.

You will return to the rapid key programming screen.

"REGISTRATION IS COMPLETED." will appear highlighted to the right of "No.".



The "FAX No." line only shows 32 digits, regardless of the number of digits stored in the number.

Check the key name.

The characters appearing next to the [KEY NAME] key will be displayed in the key. Only the first 18 characters of the name entered in step 1 will be displayed.

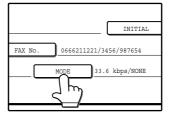
If you need to change the name that will be displayed in the key, touch the [KEY NAME] key



(If you do not wish to change the name, this step is not necessary). See page 80 for the procedure for entering characters.

14 Check the transmission settings

The initial transmission settings are "TRANSMISSION SPEED: 33.6 kbps" and "INTERNATIONAL CORRESPONDENCE MODE: NONE". To change either of the settings, touch the [MODE] key.



If you do not wish to change the settings, this step is not necessary. After touching the [MODE] key, you can change either of the two settings. When finished, touch the [OK] key.

Transmission speed

Speed selections are 33.6 kbps, 14.4 kbps, 9.6 kbps, and 4.8 bps. The higher the number, the faster the transmission speed.



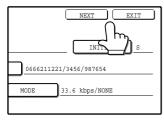
Set the transmission speed only when you know what speed is most suitable, such as when you are sending a fax to a foreign country and telephone line conditions are bad. If you do not know the line condition, do not change this setting.

International correspondence mode

Selections are NONE, MODE 1, MODE 2, and MODE 3.



- When sending a fax to a foreign country, telephone line conditions can sometimes distort the fax or interrupt the transmission. Selecting the right international correspondence mode can help alleviate these problems.
- If errors frequently occur when sending a fax to a foreign country, try each of modes 1 to 3 and select the mode that enables the best transmission.
- If you have finished programming rapid keys, touch the [EXIT] key.
 If you wish to program another rapid key, touch the [NEXT] key.



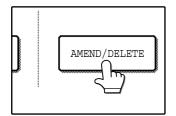
If you touch the [EXIT] key, you will return to the screen of step 4 on page 66.

If you touch the [NEXT] key, you will return to the screen of step 1 on page 67.

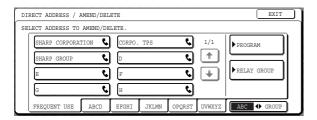
EDITING AND DELETING RAPID KEYS

If you wish to delete a rapid key or change the fax number, name, or other information programmed in a rapid key, follow steps 1 through 3 on pages 65 to 66 and then perform the following procedure.

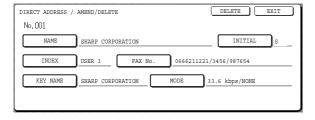
1 Touch the [AMEND/DELETE] key.



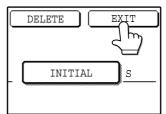
2 Touch the rapid key you wish to edit or delete.



- To edit a rapid key, follow steps 3 and 4.
- To delete a rapid key, follow steps 5 and 6.
- When you have finished editing or deleting, touch the [EXIT] key.
- Touch the key of the item that you wish to change (change the information in the same way as you stored the information on pages 67 to 69).

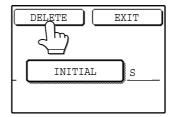


Make sure that your changes are correct, and then touch the [EXIT] key.

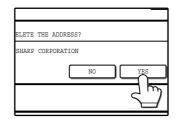


You will return to the screen of step 2. If you wish to change another rapid key, repeat steps 2 through 4.

5 Touch the [DELETE] key.



6 Touch the [YES] key.



You will return to the screen of step 2. If you wish to delete another rapid key, repeat steps 2, 5, and 6.



If you cannot edit or delete a rapid key

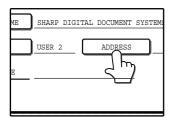
If you attempt to edit or delete a rapid key in the following situations, a warning message will appear and editing/deletion will not be possible.

- The rapid key you wish to edit or delete is currently being used for transmission or is used in a currently stored transmission job (including a timer transmission). ("CANCELING A FAX TRANSMISSION" (p.24))
- The rapid key is included in a group key. ("EDITING AND DELETING GROUP KEYS" (p.72))
- The rapid key is included in a group of end receiving machines for an F-code relay broadcast operation. ("Editing or deleting a memory box" (p.105))
- The rapid key is included in a program. ("EDITING AND DELETING PROGRAMS" (p.74)) If the key is being used for a current transmission or currently stored transmission, cancel the transmission or wait until it is completed and then change or delete the key. If the key is included in one of the above groups, delete the key from the group and then change or delete the key.

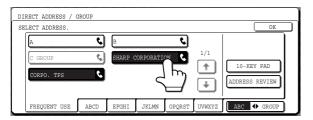
PROGRAMMING A GROUP KEY

Up to 200 destinations can be stored in a group key. To program a group key, follow steps 1 through 4 on pages 65 and 66 (touch the [GROUP] key in step 4), and then perform the following procedure.

- Follow steps 1 through 7 of "STORING RAPID DIAL KEYS" (p.67) to enter a GROUP NAME, INITIAL, and INDEX.
- 2 Touch the [ADDRESS] key.



Touch index keys and the keys as needed, and touch rapid keys of the destinations that you wish to store in the group.

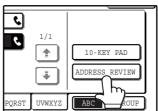


- Rapid keys that have been touched are highlighted.
- If you touch the wrong key, simply touch it again to cancel the highlighting and remove the destination from the group.
- You can also touch the [10-KEY PAD] key and enter a full fax number with the numeric keys. See steps 9 to 12 of "STORING RAPID DIAL KEYS" (p.68).



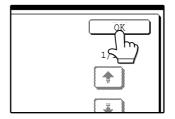
One group key cannot be stored in another group key. Group keys are grayed out and cannot be selected.

To check the destinations that you have stored in the group, touch the [ADDRESS REVIEW] key.



A list of your selected destinations is displayed. You can delete a destination by touching it. When a message appears asking if you want to delete the destination, touch the [YES] key.

5 Touch the outer [OK] key.



The number of destinations in the group appears to the right of the [ADDRESS] key.

Check the name of the key (see step 13 on page 68).

The characters appearing next to the [KEY NAME] key will be displayed in the group key. To change these characters, touch the [KEY NAME] key (this step is not necessary if you do not wish to change the characters).

The procedure for entering characters is explained on page 80.

If you have finished programming group keys, touch the [EXIT] key.
If you wish to program another group key, touch the [NEXT] key.

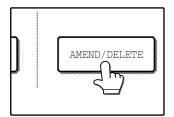
If you touch the [EXIT] key, you will return to the screen of step 4 on page 66.

If you touch the [NEXT] key, the screen for programming a new group key will appear.

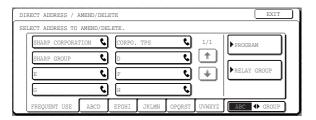
EDITING AND DELETING GROUP KEYS

If you need to edit or delete a group key, follow steps 1 through 3 on pages 65 and 66 and then perform the following procedure.

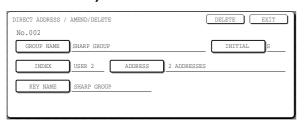
1 Touch the [AMEND/DELETE] key.



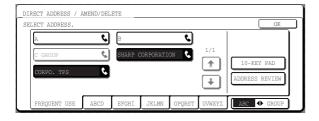
2 Touch the group key that you wish to edit or delete.



- To edit a group key, follow steps 3 and 4.
- To delete a group key, follow steps 5 and 6.
- When you have finished editing or deleting, touch the [EXIT] key.
- Touch the key of the item you wish to change (to edit the item, follow the same steps as for rapid keys on pages 67 to 69).

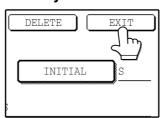


• To edit a destination stored in a group key, touch the [ADDRESS] key. The following screen appears.



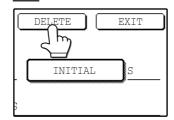
- The rapid keys stored in the group are highlighted. To add another rapid key to the group, touch the key to highlight it.
- To delete a rapid key from the group, touch the key so that it is no longer highlighted.
- To delete a destination that was entered with the numeric keys after touching the [10-KEY PAD] key, delete the destination from the list that appears when the [ADDRESS REVIEW] key is touched. See step 4 on page 71. Rapid dial keys can also be deleted from the broadcast list.
- When finished, touch the [OK] key.

Make sure that the edited information is correct, and then touch the [EXIT] key.

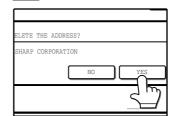


If you wish to edit another group key, repeat steps 2 through 4.

5 Touch the [DELETE] key.



6 Touch the [YES] key.



If you wish to delete another group key, repeat steps 2 and 5 through 6.



If you cannot edit or delete a group key

If you attempt to edit or delete a group key in the following situations, a warning message will appear and editing/deletion will not be possible.

- The rapid key you wish to change or delete is currently being used for transmission or is used in a currently stored transmission job (including a timer transmission). ("CANCELING A FAX TRANSMISSION" (p.24))
- The group key is included in the end receiving machines for an F-code relay broadcast operation. ("Editing or deleting a memory box" (p.105))
- The group key is included in a program. ("EDITING AND DELETING PROGRAMS" (p.74))

If the key is being used for a current transmission or currently stored transmission, cancel the transmission or wait until it is completed and then edit or delete the key. If the key is included in a program or in the end receiving machines for an F-code relay broadcast operation, delete the key from the program or operation and then edit or delete the key.

STORING A PROGRAM

You can store the following numbers and functions in a program to enable easy transmission by simply executing the program.

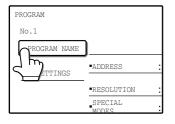
- Destination fax number
 RESOLUTION and EXPOSURE settings
 POLLING
 SLOW SCAN MODE
- DUAL PAGE SCAN* COVER SHEET TX MESSAGE OWN PASSCODE SELECT
- SENDING OPTIONS (CONFIDENTIAL TX, RELAY BROADCAST)
- *The only settings that can be selected at the time of execution of a program that includes dual page scanning are an original size setting and a timer transmission setting.

To store a program, follow steps 1 through 4 on pages 65 to 66 (touch the [PROGRAM] key in step 4), and then perform the following procedure.



Timer transmission, original size, two-sided copying, and job build mode settings cannot be stored in a program. However, these settings can be selected when a program is used for transmission.

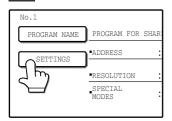
1 Touch the [PROGRAM NAME] key.



The "No." that automatically appears is the lowest number from 1 to 8 that has not yet been programmed. When the PROGRAM NAME key is touched, the letter-entry screen appears. Enter up to 36 characters for the name.

See page 80 for the procedure for entering letters.

2 Touch the [SETTINGS] key.



Touch the keys for the settings that you wish to store.



- The [10-KEY PAD] key can be touched to enter a number with the numeric keys.
- For more information on selecting the settings, see the following pages:

Exposure (p.22), Resolution (p.21),

Address Book (p.16),

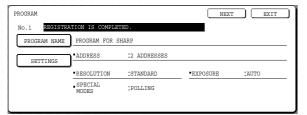
Direct TX (p.7), Memory TX (p.7)

Special modes

- Polling (p.33)
 Thin-page scanning (p.39)
- Dual page scanning (p.40) Cover sheet (p.42)
- Transmission message (p.43)
- Sender (p.45)
- Confidential transmission (p.47)
- Relay request transmission (p.50)

4 Touch the [OK] key.

Your settings are displayed. Make sure that they are correct.



- If you are finished storing programs, touch the [EXIT] key.
 - If you wish to store another program, touch the [NEXT] key.

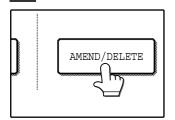
If you touch the [EXIT] key, you will return to the screen of step 4 on page 66.

If you touch the [NEXT] key, you will return to the screen of step 1.

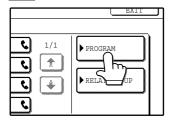
EDITING AND DELETING PROGRAMS

If you need to edit or delete a previously stored program, perform steps 1 through 3 on pages 65 and 66 and then perform the following procedure:

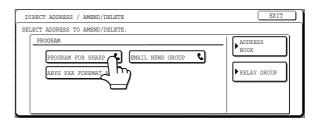
1 Touch the [AMEND/DELETE] key.



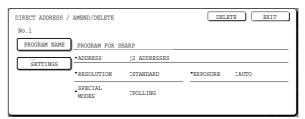
2 Touch the [PROGRAM] key.



Touch the program that you wish to edit or delete.



- When you touch the program name, the edit/delete screen for the selected program appears.
- Touching the [ADDRESS BOOK] key returns you to the screen of step 2.



To edit the program, follow the same procedure as for storing the program. To delete the program, touch the [DELETE] key and then touch the [YES] key in the confirmation screen that appears.

STORING RELAY GROUPS

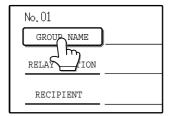
Use this procedure to store a relay group (relay machine and end receiving machines) for a relay request transmission (p.50). Up to 10 relay groups can be stored.

One relay machine is stored per group. The relay machine is specified by entering the fax number with the numeric keys.

Each end receiving machine is specified by entering the full fax number with the numeric keys, or by specifying a rapid number, speed dial number, or group number stored in the relay machine.

To store a relay group, follow steps 1 to 4 on pages 65 to 66 (touch the [RELAY GROUP] key in step 4), and then follow the steps below.

1 Touch the [GROUP NAME] key.



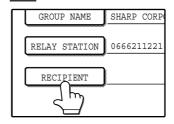
The "No." that automatically appears is the lowest number from 01 to 10 that has not yet been programmed. When the [GROUP NAME] key is touched, the letter-entry screen appears. Enter up to 36 characters for the name.

See page 80 for the procedure for entering letters.

4. Touch the [OK] key.

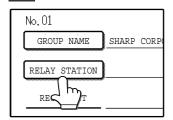
You will return to the relay group storing screen.

5 Touch the [RECIPIENT] key.



The screen for entering the numbers of the end receiving machines appears.

Touch the [RELAY STATION] key.



The number entry screen for the relay machine appears.

Press the numeric keys to enter the fax number of the relay machine.

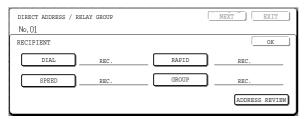


- To insert a pause between digits of the number, touch the [PAUSE] key. The pause appears as a hyphen "-". See page 97 to set the duration of the pause.
- If you make a mistake, press the [CLEAR] key (C) to clear one digit at a time, and then enter the correct digit(s).

6 Enter the numbers of the end receiving machines.

Touch a key and then enter the number of an end receiving machine as explained below.

After entering a number, touch the [NEXT ADDRESS] key to enter the number of the next end receiving machine.



[DIAL] key

Enter the fax number of the receiving machine with the numeric keys.

[RAPID] key

Touch this key to enter a rapid number from 01 to 99 that is stored in the relay machine. You can also enter a 3-digit rapid number from 001 to 099 (enter the lower two digits of the number).*

Touch the ▲ or ▼ key to enter the number. Continuing to touch the key makes the number change quickly.

[SPEED] key

Touch this key to enter a speed dial number from 00 to 99 that is stored in the relay machine. You can also enter a 3-digit rapid number from 100 to 199 (enter the lower two digits of the number).*

Touch the ▲ or ▼ key to enter the number. Continuing to touch the key makes the number change quickly.

[GROUP] key

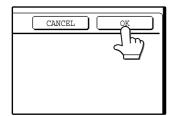
Touch this key to enter a group key number from 01 to 99 that is stored in the relay machine.

You can also enter a 3-digit rapid number from 201 to 299 (enter the lower two digits of the number).*

Touch the ▲ or ▼ key to enter the number. Continuing to touch the key makes the number change quickly.

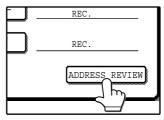
* The numbers entered will vary depending on the model used for the relay machine. For more information, consult your SHARP service center. (Also see the operation manual for copier.)

7 Touch the [OK] key.



The screen for entering the numbers of the end receiving machines appears. Repeat steps 6 and 7 until all end receiving machines are entered.

To check the entered numbers of the end receiving machines, touch the [ADDRESS REVIEW] key.



A list of the entered end receiving machines is displayed.

You can delete a machine by touching it. When a message appears asking if you want to delete the destination, touch the [YES] key.

Touch each tab at the bottom of the list to show the numbers on that tab.

10 Touch the [OK] key.

The destination/relay group storing screen appears.

If you are finished storing relay groups, touch the [EXIT] key.
If you wish to store another relay group, touch the [NEXT] key.

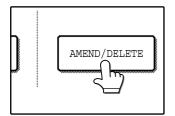
If you touch the [EXIT] key, you will return to the screen of step 4 on page 66.

If you touch the [NEXT] key, the screen for storing a new relay group appears.

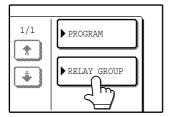
EDITING AND DELETING A RELAY GROUP

If you need to edit or delete a previously stored relay group, perform steps 1 through 3 on pages 65 and 66 and then perform the following procedure:

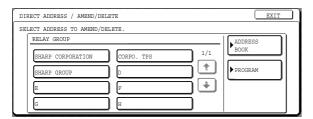
1 Touch the [AMEND/DELETE] key.



2 Touch the [RELAY GROUP] key.



Touch the relay group that you wish to edit or delete.

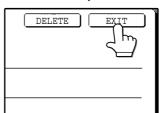


- If you need to return to the screen of step 2, touch the [ADDRESS BOOK] key.
- When the relay group is touched, the edit/delete screen for the group appears.
- To edit the relay group, follow steps 4 and 5.
- To delete the relay group, follow steps 6 and 7.



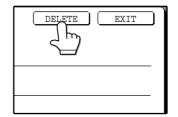
- Touch the key of the item that you wish to edit (follow the same procedure (p.75) as for storing the relay group).
 - To change the relay machine, first delete the current relay machine and then enter the new relay machine.

Make sure that your changes are correct, and then touch the [EXIT] key.



If you need to edit another relay group, repeat steps 3 through 5.

6 Touch the [DELETE] key.



7 Touch the [YES] key.



To delete another relay group, repeat steps 3, 6, and 7.



If you cannot edit or delete a relay group

If you attempt to edit or delete a relay group in the following situations, a warning message will appear and you will not be able to edit or delete the group.

The relay group is being used in a current transmission or currently stored transmission. Cancel the transmission or wait until it is completed and then edit or delete the relay group ("CANCELING A FAX TRANSMISSION" (p.24)).

The relay group is included in a program.

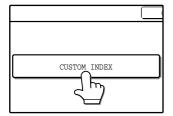
Delete the relay group from the program and then edit or delete the relay group ("EDITING AND DELETING PROGRAMS" (p.74)).

STORING A GROUP INDEX

Auto dial keys (rapid keys and group keys) are normally stored in the ABC index. To make auto dial keys more convenient to use, you can store a group of auto dial keys in a group index and assign a name to that index. When you switch to the group indexes, USER 1, USER 2, USER 3, USER 4, USER 5, and USER 6 appear. You can assign any name up to 6 characters long to each of the USER indexes.

The procedure for storing auto dial numbers in a group index is explained on page 67, and the procedure for switching between the ABC index and the group indexes is explained on page 8.

- 1 Press the [CUSTOM SETTINGS] key, and then touch the [ADDRESS CONTROL] key (see steps 1 and 2 on page 65).
- 2 Touch the [CUSTOM INDEX] key.



Touch an index key ([USER 1] to [USER 6]).

You can enter a name for the selected index.



When the index key is touched, the letter entry screen appears.



4 Enter a maximum of 6 characters for the index name.

Use the key to clear the displayed name and then enter the desired name. See page 80 for the procedure for entering characters.

When finished, touch the IOKI key. The new

When finished, touch the [OK] key. The new name appears in the screen of step 3.

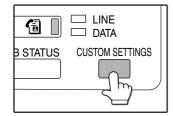
If you wish to program another index name, repeat steps 3 and 4.
When finished, touch the [OK] key.

To change a user index name, re-enter the name as explained in steps 3 and 4.

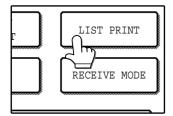
PRINTING PROGRAMMED INFORMATION

You can print out lists of the rapid keys, group keys, programs, and relay groups that have been stored in the machine.

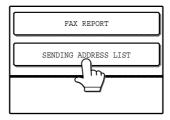
1 Press the [CUSTOM SETTINGS] key.



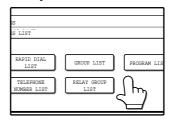
2 Touch the [LIST PRINT] key.



Touch the SENDING ADDRESS LIST key.



Touch the key of the list you wish to print.



"PRINT JOB IN MEMORY. PLEASE WAIT UNTIL PRINT OUT." appears in the message display and printing begins.



- The list is printed before other print jobs are printed.
- If you attempt to print a list when no data exists, a warning message will appear.

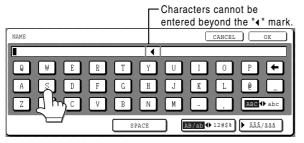
ENTERING CHARACTERS

To enter or edit characters in setting screens such as auto dial key programming screens, follow the steps below. Characters that can be entered are alphabetical characters, special characters, numbers, and symbols.

Entering alphabetical characters

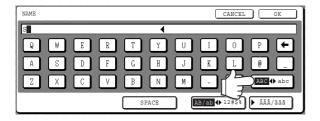
(Example: Sharp äÄ)

1 Touch the [S] key.

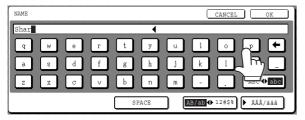


To switch between upper case and lower case, touch the [ABC ◆ abc] key. When ABC is highlighted, upper case letters are entered.

2 Touch the [ABC ◆ abc] key.

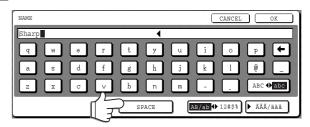


Touch the [h] key, [a] key, [r] key, and [p] key.



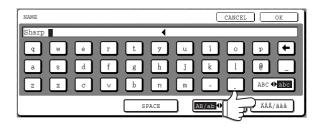
If you make a mistake, touch the ♠ key to move the cursor (♠) back one space and then enter the correct character. You can also press the [AB/ab ♠ 12#\$%] key during entry to enter a number or symbol.

4 Touch the [SPACE] key.

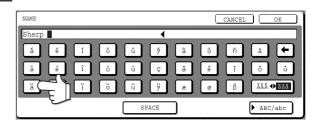


The cursor (\blacksquare) moves forward and a space is entered.

5 Touch the [▶ ÃÄÂ/ãäâ] key.

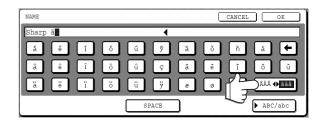


6 Touch the [ä] key.

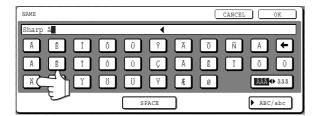


To switch between upper case and lower case, touch the [ÃÄÂ ♣ ãäâ] key. When ãäâ is highlighted, lower case letters are entered.

7 Touch the [ÃÄÂ **♣** ãäâ] key.

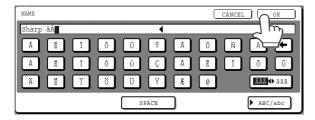


8 Touch the [Ä] key.



You can press the [ABC/abc] key during entry to return to alphabetical character entry. You can also enter numbers and symbols.

When finished, touch the [OK] key.



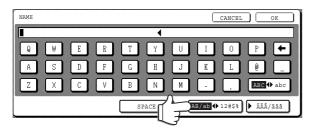
You will exit the character entry screen and return to the programming screen. If you touch the [CANCEL] key, you will return to the programming screen without storing the entered characters.



The layout of the letter keys can be changed in the custom settings. See "Keyboard select" in the operation manual for copier. (The above explanation assumes that "KEYBOARD 1" is selected.)

Entering numbers and symbols

1 Touch the [AB/ab ◆ 12#\$%] key.

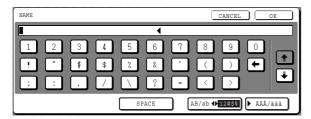


When the characters "12#\$%" are highlighted, number/symbol entry mode is selected.

2 Enter the desired number or symbol.

Numbers and symbols that can be entered are as follows:

Screen 1/2



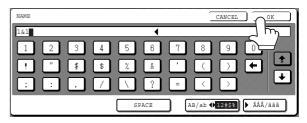
Screen 2/2



* Change screens by touching the key or key displayed in the screen. If you make a mistake, touch the key to move the cursor (back one space and then enter the correct character.

You can continue touching keys to enter characters. You can also touch another character type selection key ([▶ ÃÄÂ/ãäâ] key or [AB/ab ♣ 12#\$%] key) to enter characters other than numbers and symbols.

When you have finished entering characters, touch the [OK] key.



You will exit the character entry screen and return to the programming screen. If you touch the [CANCEL] key, you will return to the programming screen without storing the entered characters.



If you are going to use the Web page to edit or delete the stored name at a later time, do not use the characters ", <, or >. These characters cannot be displayed in the Web page.

This chapter contains information to help you make efficient use of the fax features of the machine, including solutions to common problems.

WHEN A TRANSACTION REPORT IS PRINTED

The machine has been set to automatically print a Transaction Report when a transmission is not successful or when the Broadcast transmission function is used. The Transaction Report informs you of the result of the operation. When the machine prints a Transaction Report, be sure to check the contents.

The initial settings (factory settings) for printing Transaction Reports are indicated by shading below. The settings can be changed in the key operator programs. ("TRANSACTION REPORT PRINT SELECT SETTING" (p.98))

- Single sending: 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
- Broadcasting: PRINT OUT ALL REPORT /PRINT OUT ERROR REPORT ONLY /NO PRINTED REPORT
- Confidential reception: PRINT OUT NOTICE PAGE / NO PRINTED REPORT

The Transaction Report shows the date of transmission, the time transmission began, the other party's name, the duration of the operation, the number of pages, and the result.



- The list count appears in the "#" column of the Transaction Report and a serial number appears in the FILE column. (These numbers are not related to the transaction.)
- When a Transaction Report is printed for a regular transmission or broadcast transmission, a portion of the
 original document is printed along with the Transaction Report. You can set the machine to not print the
 original in the key operator programs. ("IMAGE MEMORY PRINT SELECT SETTING" (p.99))

Information appearing in the TYPE/NOTE column

Information such as the type of transmission and type of error appears in the TYPE/NOTE column of the Transaction Report. The following notes may appear.

Note	Explanation	
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.	
FW.	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.	
CANCEL	A transmission was canceled while in progress, or a stored transmission job was canceled.	
P. FAIL	A power failure occurred during the transaction.	
MEMORY. FULL	The memory became full during reception.	
LENGTH OVER	The transmitted document was over 59" long and therefore could not be received.	
ORIG ERROR	Manual transmission was not successful because a jam occurred.	
PASSCODE# E	The connection was broken because the polling passcode was not correct.	
RX NO POLL	The machine that was polled does not have a polling function.	
NO RX POLL	The other machine refused the polling operation, or your machine broke the connection when polled because no data was in polling memory.	
SA POL TX ERR	The other machine refused an F-code polling operation.	
SA POLL ERR	Your machine broke the connection because the other machine specified an F-code polling sub-address that does not exist in your machine.	
NO SA POLLING	F-code polling was attempted, however, the other machine did not have an F-code polling memory box.	
NO S ADD FUNC	F-code transmission was attempted, however, the other machine does not support F-code communication.	
S ADD TX FAIL	An F-code transmission was refused by the other machine because of an incorrect sub-address or other reason.	
ERROR xx xxxx	The communication handshake signals or image signals were distorted due to line conditions or other reasons, and communication was not successful. Codes for use by service technicians. For more infomation, consult your SHARP service center.	

VIEWING THE COMMUNICATION ACTIVITY REPORT

Your machine keeps a record of the most recent 50 transactions (both transmissions and receptions) that were performed. The record includes the date of the transaction, the other party's name, the duration, and result. You can have the report automatically printed when the number of transactions exceeds 50, or at a specified time. This allows you to check the machine's activity at regular intervals.

The machine is initially set (factory setting) to never print the report. If you wish to print the report every 50 transactions or have it printed at a specified time, change the setting in the key operator programs. ("ACTIVITY REPORT PRINT SELECT SETTING" (p.98))



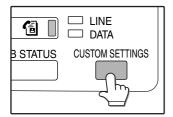
- The report can be printed repeatedly.
- Refer to the table in "When a Transaction Report is printed" on page 84 for the notes that appear in the TYPE/NOTE column.

PRINTING REPORTS

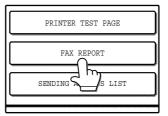
Communication reports and settings can be printed as lists.

The following reports can be printed:

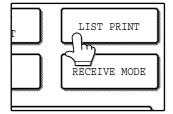
- ACTIVITY REPORT PRINT...... Communication times and sending/receiving parties.
- TIMER LIST...... Timer settings, stored transmission jobs, and recall jobs.
- MEM.POLLING LIST Documents scanned into polling memory and F-code polling memory.
- PASSCODE LIST.......Programmed sender information, relay request settings, and polling settings.
- CONFIDENTIAL RECEPTION LIST..... Confidential box numbers (Sharp mode and F-code boxes) that have received faxes and the number of pages.
- 1 Press the [CUSTOM SETTINGS] key.



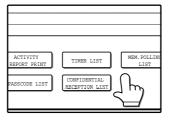
Touch the [FAX REPORT] key.



2 Touch the [LIST PRINT] key.



4. Touch the key of the report that you wish to print.



"PRINT JOB IN MEMORY.PLEASE WAIT UNTIL PRINT OUT." appears and printing begins.



• The report is printed before other print jobs are printed.

WHEN AN ALARM SOUNDS AND A WARNING MESSAGE IS DISPLAYED

Alarms and display messages alert you to the condition of the machine during operation. If one of the following messages appears, respond as indicated in the table.

Message screen (Alarm)	Cause and solution	Page	
(MAINTENANCE REQUIRED.)	Maintenance is required. → Contact your dealer.	-	
PLEASE RETURN XX ORIGINALS TO THE DOCUMENT FEEDER, THEN PRESS [START].	A misfeed occurred in the RSPF while the original was being scanned. → Reload the indicated original pages.	-	
OPEN TRAY X AND ADD XXX PAPER. (TYPE: XXXXX)	Printing cannot take place because the machine is out of suitable paper. → Add the indicated paper.	operation manual for copier	
REMOVE PAPER FROM THE UPPER TRAY.	The job separator tray is full. → Remove the printed pages.	-	
REMOVE PAPER FROM THE TOP TRAY.	The top tray is full (when a finisher is installed). → Remove the printed pages.	-	
(TONER SUPPLY IS LOW.)	Little toner remains in the toner cartridge. → Replace the toner cartridge.	operation manual for copier	
CHANGE THE TONER CARTRIDGE.	The toner cartridge is out of toner and the received document cannot be printed. → Replace the toner cartridge.		
THE MEMORY BECOMES FULL. (Pg.No.XX) SEND SCANNED DATA? OR CANCEL THE JOB?	The memory became full while the original was being scanned. → Send only the pages that were already scanned, or cancel the entire transmission.	15	
POLLING IS NOT POSSIBLE WITH THE AVAILABLE MEMORY.	Polling is not possible because there is not enough space in memory. → Try polling again after currently stored jobs are completed.	33	
MANUAL RECEIVE IS DISABLED. DUE TO OUT OF MEMORY.	Manual reception was not possible because there was not enough free space in memory. → Try manual reception again after currently stored jobs have been completed.	-	
CLOSE THE XXXXX COVER.	The indicated cover is open. → Close the indicated cover.	-	
CLOSE THE DOCUMENT FEEDER.			
CALL FOR SERVICE. CODE:XX XX.	The self-diagnosis function has activated and automatically stopped operation. An error code appears in xx-xx. → Turn off the power and then turn it back on. If the same message still appears, contact your SHARP service center.	-	

TROUBLESHOOTING

If the fax features do not operate normally, please check the following. If you are unable to solve the problem, see "TROUBLESHOOTING AND MAINTENANCE" in the operation manual for copier.

Fax problems

Trouble	Page
The machine does not operate correctly	88
The machine does not operate.	00
Transmission problems	
Dialing is not possible.	
Transmission is not possible.	
The transmitted image prints out blank at the receiving side.	88
The transmitted image is distorted.	
Transmission does not take place at the specified time.	
White or black lines appear in the transmitted image.	
Reception problems	
Reception does not take place at the specified time.	
Printing does not take place after reception.	
A received image prints out blank.	89
The received image is faint.	
The received image is distorted.	
A ringing sound is not made.	

FAX PROBLEMS

Problems that are related to the fax function are explained in the following.

For paper misfeeds, see "MISFEED REMOVAL" in the operation manual for copier. For general machine problems, copier problems, printer problems, and network scanner problems, see the corresponding manual for the function.

The machine does not operate correctly

Problem	Cause and solution	Page
The machine does not	The power switch is turned off.	3
operate.	→ Turn on the power switch.	

Transmission problems

Problem	Cause and solution	Page
	The correct dial mode is not set for your line. → Check your line and set the correct dial mode. The telephone line is not connected.	3
Dialing is not possible.	 → Check the connections. The power switch is turned off. → Turn on the power switch. The machine is not in fax mode. → Press the [FAX] key to set the machine to fax mode. 	3 12
Transmission is not possible.	The receiving fax machine does not have paper. → Check with the operator of the receiving machine. The sub-address or passcode is not correct. → Check with the operator of the receiving machine. The receiving machine is using the line. → Check with the operator of the receiving machine. The size of the original was not correctly detected. → Check the original size.	-
The transmitted image prints out blank at the receiving side.	The original was placed so that the wrong side was scanned. → Make sure the original is placed so that the correct side is scanned. The receiving machine is using thermal paper and the thermal paper was loaded with the wrong side facing out. → Check with the operator of the other machine.	10 -
The transmitted image is distorted.	The line conditions were poor due to thunder or other reason. → Try the transmission again. The resolution and exposure settings were not suitable. → Check the resolution and exposure settings.	21
Transmission does not take place at the specified time.	The machine's clock is not set to the correct time. → Set the clock to the correct time.	operation manual for copier
White or black lines appear in the transmitted image.	The document glass is dirty. → Clean the document glass.	operation manual for copier

Reception problems

Problem	Cause and solution	Page
Reception does not take place at the specified time.	The machine's clock is not set to the correct time. → Set the clock to the correct time.	operation manual for copier
Printing does not take place	A message appears in the display instructing you to add toner or paper. → Restore printing capability as instructed by the display message. Printing will begin.	86
after reception.	 A paper tray is not selected for fax mode in the paper tray settings. → Select a paper tray for fax mode in the paper tray settings in the user settings. 	operation manual for copier
A received image prints out blank.	The wrong side of the original was scanned in the transmitting machine. → Check with the operator of the transmitting machine.	-
The received image is faint.	The original is faint. → Ask the other party to resend the document using a suitable exposure setting.	-
The received image is distorted.	The line conditions were poor due to thunder or other reason. → Ask the other party to send the document again.	-
A ringing sound is not made.	The ringer volume has been turned off. → Set the ringer volume to low, medium, or high.	98

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Chapter 8 KEY OPERATOR PROGRAMS

The key operator programs are used by the administrator of the machine to enable and disable certain functions of the machine.

This section explains key operator programs for the fax features of the machine. For key operator programs that are related to general operation, the copy function, the printer function, and the network scanner function, see the key operator's guide.

To access the key operator programs, the key operator code must be entered.

The key operator code is initially set to "00000" at the factory.

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KEY OPERATOR PROGRAM LIST



You may not be able to use all of the programs in the key operator program list. Programs that you can use depend on what peripheral devices are installed on the machine.

KEY OPERATOR PROGRAMS FOR THE FAX FUNCTION

Program name	Factory default settings	Page	Program name	Factory default settings
FAX SETTINGS			FAX DEFAULT SETTING	S
FAX DEFAULT SETTING	S		TRANSACTION REPORT PRINT	SINGLE SENDING: PRINT OUT ERROR
DEFAULT DISPLAY SETTINGS	CONDITION SETTINGS	96	SELECT SETTING	REPORT ONLY
MUST INPUT NEXT	Disabled	96		BROADCASTING: PRINT OUT ALL REPORT
ADDRESS KEY AT BROADCAST SETTING				RECEIVING: NO PRINTED
THE NUMBER OF DIRECT ADDRESS KEYS DISPLAYED SETTING	8 (keys)	96		REPORT • CONFIDENTIAL RECEPTION:
INITIAL RESOLUTION SETTING	STANDARD	97		PRINT OUT NOTICE PAGE
INITIAL EXPOSURE SETTING	AUTO	97	IMAGE MEMORY PRINT SELECT SETTING	PRINT OUT ERROR REPORT ONLY
OWN NUMBER AND NAME SET	Un-registering	97	REMOTE RECEPTION NUMBER SETTING	5
DIAL MODE SETTING	TONE	97	EXTERNAL TELEPHONE SETTING	Enabled
PAUSE TIME SETTING	2 (sec.)	97	DISTINCTIVE RING DETECTION	Disabled
SPEAKER VOLUME SETTING	 SPEAKER: Medium RINGER VOLUME: Medium LINE MONITOR: Medium TRANSMISSION COMPLETE SOUND: Medium 	98		
TRANSMISSION COMPLETE SOUND SETTING	PATTERN 2	98		
TRANSMISSION COMPLETE SOUND TIME SETTING	3.0 (sec.)	98		
ACTIVITY REPORT PRINT SELECT SETTING	 AUTO PRINT AT MEMORY FULL: Disabled PRINT DAILY AT 	98		
	DECIONATED TIME			

DESIGNATED TIME:

Disabled

Program name	Factory default settings	Page
FAX SEND SETTINGS		
AUTO REDUCTION SENDING SETTING	Enabled	99
PRINTING PAGE NUMBER AT RECEIVER	Enabled	99
DATE/OWN NUMBER PRINT POSITION SETTING	OUTSIDE THE ORIGINAL IMAGE	99
ROTATION SENDING SETTING	Enabled	100
CALL TIMER AT MEMORY SENDING	45 (sec.)	100
RECALL IN CASE OF LINE BUSY	• NUMBER OF TIMES: 2 (times) • INTERVAL: 3 (min.)	100
RECALL IN CASE OF COMMUNICATION ERROR	• NUMBER OF TIMES: 1 (times) • INTERVAL: 1 (min.)	100
QUICK ON LINE SENDING	Enabled	100
DEFAULT SENDING MODE	MEMORY TX	100
AUTO COVER SHEET	Disabled	100
SLOW SCAN MODE	Disabled	100
FAX RECEIVE SETTINGS	3	
AUTO RECEIVE REDUCE SETTING	Enabled	101
DUPLEX RECEPTION SETTING	Disabled	101
PRINT STYLE SETTING	AUTO SIZE SELECT	101
NUMBER OF CALLS IN AUTO RECEPTION	2 (times)	101
SET THE TELEPHONE NUMBER FOR DATA FORWARDING	Un-registering	101
INDEX PRINT	Disabled	101
RECEIVED DATA PRINT CONDITION	Enabled	101
A3 RX REDUCE	Disabled	101
ENTER JUNK FAX NUMBER	Un-registering	101
ANTI JUNK FAX	Disabled	101

Program name	Factory default settings	Page
SENDING OPTIONS		
PASSCODE NUMBER SETTING	Un-registering	102
POLLING SECURITY SETTING	Enabled	102
ID NUMBER MODE	Un-registering	102
SYSTEM NUMBER MODE	Un-registering	102
RELAY PASSCODE	Un-registering	102
CONFIDENTIAL CODE SET	Un-registering	102
F-CODE MEMORY BOX	<	
 POLLING MEMORY 	Un-registering	103
• CONFIDENTIAL	Un-registering	103
• RELAY BROADCAST	Un-registering	103
LIST PRINT		

KEY OPERATOR PROGRAM MENU

The key operator programs are arranged in the following menu. Use this menu as a guide for accessing each of the programs. *Some programs may contain an additional level (setting screen).

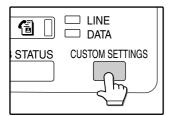
Level 1	Level 2	Level 3
FAX SETTINGS	FAX DEFAULT SETTINGS	DEFAULT DISPLAY SETTINGS
		MUST INPUT NEXT ADDRESS KEY AT BROADCAST SETTING
		THE NUMBER OF DIRECT ADDRESS KEYS DISPLAYED SETTING
		INITIAL RESOLUTION SETTING
		INITIAL EXPOSURE SETTING
		OWN NUMBER AND NAME SET
		DIAL MODE SETTING
		PAUSE TIME SETTING
		SPEAKER VOLUME SETTING
		TRANSMISSION COMPLETE SOUND SETTING
		TRANSMISSION COMPLETE SOUND TIME SETTING
		ACTIVITY REPORT PRINT SELECT SETTING
		TRANSACTION REPORT PRINT SELECT SETTING
		IMAGE MEMORY PRINT SELECT SETTING
		REMOTE RECEPTION NUMBER SETTING
		EXTERNAL TELEPHONE SETTING
		DISTINCTIVE RING DETECTION
	FAX SEND SETTINGS	- AUTO REDUCTION SENDING SETTING
	TAX SEND SETTINGS	PRINTING PAGE NUMBER AT RECEIVER
7		DATE/OWN NUMBER PRINT POSITION SETTING
		ROTATION SENDING SETTING
		CALL TIMER AT MEMORY SENDING
		RECALL IN CASE OF LINE BUSY
		RECALL IN CASE OF COMMUNICATION ERROR
		QUICK ON LINE SENDING
		DEFAULT SENDING MODE
		AUTO COVER SHEET
		SLOW SCAN MODE
	EAV DECEIVE CETTINGS	
	FAX RECEIVE SETTINGS	AUTO RECEIVE REDUCE SETTING
		DUPLEX RECEPTION SETTING
		PRINT STYLE SETTING
		NUMBER OF CALLS IN AUTO RECEPTION
		SET THE TELEPHONE NUMBER FOR DATA FORWARDING
		INDEX PRINT
		RECEIVED DATA PRINT CONDITION
		A3 RX REDUCE
		ENTER JUNK FAX NUMBER
		ANTI JUNK FAX
	SENDING OPTIONS	PASSCODE NUMBER SETTING
		POLLING SECURITY SETTING
		ID NUMBER MODE
		SYSTEM NUMBER MODE
		RELAY PASSCODE
		CONFIDENTIAL CODE SET
		F-CODE MEMORY BOX
LIST PRINT	1	

USING THE KEY OPERATOR PROGRAMS

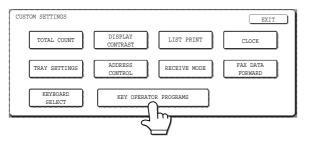


When using the key operator programs for the first time, change the factory default key operator code to a new code. (Step 3 to step 6)

1 Press the [CUSTOM SETTINGS] key.



Touch the [KEY OPERATOR PROGRAMS] key.

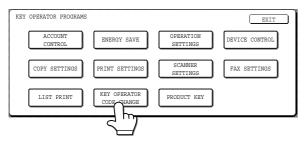


3 Use the numeric keys to enter the five-digit key operater code.



Each time a digit is entered, the dash (-) that indicates the digit will change to an asterisk (**). The factory default setting for the key operator code is 00000.

4 Touch a key to select the desired category of key operator programs.

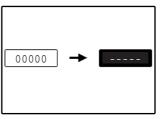


Example:

To change the key operator code, touch the [KEY OPERATOR CODE CHANGE] key.

- Each time you need to configure a program, use this procedure to select the program.
- In the following steps, the setting screen for the selected program appears. Refer to the explanation of the program to select the desired setting (the explanations of the programs begin on page 96).

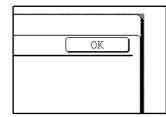
Use the numeric keys to enter the new 5-digit key operator code.



Use a number for the key operator code that has not been programmed as an account number for auditing mode (a number that has been programmed as an account number cannot

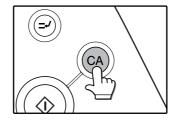
be used). The entered number will be the new key operator code. Be sure to remember this number.

Touch the [OK] key. You will return to the screen of step 4.



This completes the procedure for changing the key operator code. If you wish to configure another program, touch the key of the desired program in the screen of step 4.

7 Press the [CLEAR ALL] key ((a)) to exit the program.

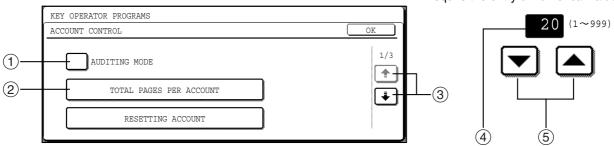


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KEYS USED IN KEY OPERATOR PROGRAMS

Example: Auditing mode

The following keys appear in screens that require the entry of numerical values.



- ① When a checkbox (()) appears in front of a setting, a checkmark (() will appear when the checkbox is touched. This indicates that the setting is enabled. If a checkbox with a checkmark (() is touched, the checkmark is cleared (() and the setting is disabled.
- ② When a key that appears in the form XXX is touched, the setting screen of that key will appear.
- ③ If the settings continue on the following screen(s), touch the ♠ and ♣ keys to move back and forth through the screens. To return to the category selection screen, touch the [OK] key.
- ④ The currently set numerical value is displayed.
- ⑤ Numerical values can be set by touching the ▲ and ▼ keys.

KEY OPERATOR PROGRAMS FOR THE FAX FUNCTION

This section explains key operator programs for the fax function of the machine. For key operator programs that are related to general operation, the copy function, the printer function, and the network scanner function, see the key operator's guide.



You can check key operator program settings for the fax function by printing them out. ("LIST PRINT" (p.105))

FAX SETTINGS



FAX DEFAULT SETTINGS

The default fax settings can be changed as necessary to meet your faxing needs.

The default fax settings are as follows:

- DEFAULT DISPLAY SETTINGS
- MUST INPUT NEXT ADDRESS KEY AT BROADCAST SETTING
- THE NUMBER OF DIRECT ADDRESS KEYS DISPLAYED SETTING
- INITIAL RESOLUTION SETTING
- INITIAL EXPOSURE SETTING
- OWN NUMBER AND NAME SET
- DIAL MODE SETTING
- PAUSE TIME SETTING
- SPEAKER VOLUME SETTING
- TRANSMISSION COMPLETE SOUND SETTING
- TRANSMISSION COMPLETE SOUND TIME SETTING
- ACTIVITY REPORT PRINT SELECT SETTING
- TRANSACTION REPORT PRINT SELECT SETTING
- IMAGE MEMORY PRINT SELECT SETTING
- REMOTE RECEPTION NUMBER SETTING
- EXTERNAL TELEPHONE SETTING
- DISTINCTIVE RING DETECTION

DEFAULT DISPLAY SETTINGS

You can select the initial display that appears when you press the [FAX] key to change to fax mode or when you press the [CLEAR ALL] key ((a)) in fax mode.

The following three selections are available:

- CONDITION SETTINGS
- ADDRESS BOOK (ABC)
- ADDRESS BOOK (GROUP)

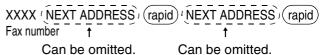
When an address directory (ABC or Group) is selected, the address directory screen of the selected index is set as the initial screen.

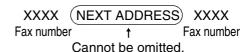
The factory default setting is "CONDITION SETTINGS".

MUST INPUT NEXT ADDRESS KEY AT BROADCAST SETTING

You can select whether or not the [NEXT ADDRESS] key must always be pressed before entering the next destination when performing a broadcast transmission (p.27). If this program is disabled, the [NEXT ADDRESS] key can be omitted except when the numeric keys are used to enter one full fax number after another full fax number.

Example: When invalid (factory setting)





When this program is enabled, it will no longer be possible to omit the [NEXT ADDRESS] key as shown in the above example. Even when the next destination is a rapid key, the [NEXT ADDRESS] key must be touched before the rapid key can be touched. If the operator attempts to enter the next destination without touching the [NEXT ADDRESS] key, a double-beep will sound and the entry will be refused.

This program is initially disabled (factory default setting).

THE NUMBER OF DIRECT ADDRESS KEYS DISPLAYED SETTING

The number of rapid keys displayed in each address directory screen can be changed from 8 (the normal setting) to 6 or 12.

Touch 6, 8, or 12 to select the desired number. The factory default setting is "8" (keys).



For the name that appears in each rapid key, a maximum of 18 characters can appear when the number of rapid keys displayed is set to 6 or 8. A maximum of 10 characters can appear when the number of rapid keys displayed is set to 12.

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INITIAL RESOLUTION SETTING

This setting is used to select the default resolution setting for fax mode. Selections are [STANDARD], [FINE], [SUPER FINE], and [ULTRA FINE]. When the resolution is set to [FINE], [SUPER FINE], or [ULTRA FINE], [HALF TONE] can also be selected. To select HALF TONE for the selected resolution setting, touch the [HALF TONE] key so that it is highlighted. The factory default setting is "STANDARD".



- HALF TONE cannot be selected for STANDARD resolution.
- For information on each of the resolution settings, see page 21.

INITIAL EXPOSURE SETTING

This program is used to set the default exposure for scanning in fax mode.

[AUTO] or [MANUAL] can be selected for the exposure. When [MANUAL] is selected, the exposure can be adjusted to one of five levels. [1] is the lightest level and [5] is the darkest level.

The factory default setting is "AUTO".

OWN NUMBER AND NAME SET

Use this program to enter, edit, or delete the fax number of the machine and the sender's name. The entered name and number are printed at the top of each fax page that is sent. The number is also used as a passcode when performing polling reception. You can check your entries by printing out the Sender List in the custom settings. (p.85)

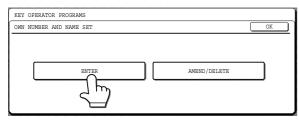


If multiple senders have been programmed and a sender is not selected, the sender with the lowest control number is automatically selected.

Entering the sender's name and number

1 Touch the [ENTER] key.

The new entry screen appears.



2 Touch the [NAME] key and enter the sender's name.

The sender's name entry screen appears. Up to 20 sender's names can be entered. A maximum of 22 characters can be entered for a sender's name.

To enter characters, see "ENTERING CHARACTERS" on page 80.



You can also program only a name or only a number as a sender.

3 Touch the [FAX No.] key and enter the fax number.

Enter up to 20 digits for the number using the numeric keys.

To enter a "+", press the " 💥 " key.

To enter a hyphen, touch the [PAUSE] key. To enter a space, press the [SPACE] key.

If you make a mistake, press the [CLEAR] key (C) and re-enter the correct digit.

- 4 Touch the [OK] key.
- 5 To exit, touch the [EXIT] key.
 - To enter another sender, touch the [NEXT] key.

Editing or deleting a sender

- 1 Touch the [AMEND/DELETE] key.
- 2 Touch the sender key that you wish to edit or delete.
- 3 Touch the keys that wish to edit or delete.
 - To edit sender information, follow the same steps as when storing the sender.
 - To delete a sender, touch the [DELETE] key in the upper right corner of the screen and then touch the [YES] key in the message screen that appears. (To cancel the deletion, touch the [NO] key.)

DIAL MODE SETTING

(Setting your line type)

Select the type of telephone line you are on. Touch [TONE] or [PULSE].
The factory default setting is "TONE".

PAUSE TIME SETTING

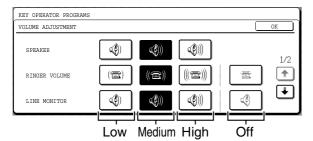
This setting is used to select the duration of the pause that is inserted in a destination fax number when the [PAUSE] key is pressed while dialing or storing the number.

Any number of seconds from 1 to 15 can be selected. The factory default setting is "2" (sec.).

SPEAKER VOLUME SETTING

This setting is used to adjust the volume of the following four types of sounds heard through the speaker.

- SPEAKER LINE MONITOR
- RINGER VOLUME TRANSMISSION COMPLETE SOUND



To change a volume setting, touch the desired volume key.

The factory default setting is "Medium".

TRANSMISSION COMPLETE SOUND SETTING

This program is used to select the beep pattern that signals the end of transmission or reception. Touch [PATTERN 1], [PATTERN 2], or [PATTERN 3]. To listen to beep pattern, touch the [CHECK] key. The factory default setting is "PATTERN 2".

TRANSMISSION COMPLETE SOUND TIME SETTING

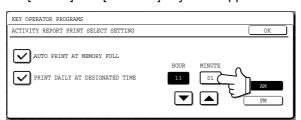
This program is used to select the length of the beep that signals the end of transmission or reception. Selections are [2.0 sec], [2.5 sec], [3.0 sec], [3.5 sec], and [4.0 sec].

The factory default setting is "3.0 sec".

ACTIVITY REPORT PRINT SELECT SETTING

This setting is used to have an activity report automatically printed at regular intervals.

To have the report automatically printed every 50 transactions (transmissions and receptions), select the [AUTO PRINT AT MEMORY FULL] checkbox. To have the report automatically printed at a specified time each day (only once a day), check the [PRINT DAILY AT DESIGNATED TIME] box and then select the time with the [HOUR] and [MINUTE] keys that appear.



Touch the [HOUR] key and then set the hour by touching the

and
keys. Set the minute in the same way.

Touch [AM] or [PM] and then touch the [OK] key.

[AUTO PRINT AT MEMORY FULL] and [PRINT DAILY AT DESIGNATED TIME] can be simultaneously selected.

The factory default settings are as follows:

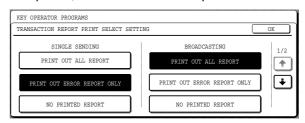
- AUTO PRINT AT MEMORY FULL: Disabled
- PRINT DAILY AT DESIGNATED TIME: Disabled



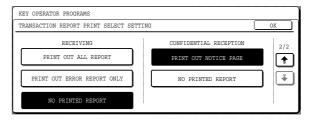
- If you only select the PRINT DAILY AT DESIGNATED TIME setting and the number of recorded transactions exceeds 50 before the specified time, each new transaction will delete the oldest transaction (the oldest transaction will not be printed).
- The activity report can also be printed out on demand. ("PRINTING REPORTS" (p.85))

TRANSACTION REPORT PRINT SELECT SETTING

This setting is used to select the conditions for printing out Transaction Reports. Conditions can be selected for regular transmissions, broadcast transmissions, receptions, and confidential receptions.



Touch the key to display the next setting. Select the print conditions for receptions and confidential receptions.



The factory default settings are as follows:

- SINGLE SENDING: PRINT OUT ERROR REPORT ONLY
- BROADCASTING: PRINT OUT ALL REPORT
- RECEIVING: NO PRINTED REPORT
- CONFIDENTIAL RECEPTION: PRINT OUT NOTICE PAGE

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IMAGE MEMORY PRINT SELECT SETTING

This program is used to select the conditions for including a copy of part of the first page of the transmitted document on transaction reports.

Selections are [PRINT OUT ALL REPORT], [PRINT OUT ERROR REPORT ONLY], and [NO PRINTED REPORT]. This program is used in combination with the "TRANSACTION REPORT PRINT SELECT SETTING", and is not effective if transaction reports are set to never print out.

The factory default setting is "PRINT OUT ERROR REPORT ONLY".

REMOTE RECEPTION NUMBER SETTING

(only when an extension phone is connected)

Fax reception can be activated from an extension phone connected to the machine by entering a 1-digit number and pressing [*\frac{\text{\t

The factory default setting is "5".

EXTERNAL TELEPHONE SETTING

(only when an extension phone is connected)

Enable this setting when an extension phone is connected to the machine. If this setting is not enabled, it will not be possible to use an extension phone connected to the machine to manually receive faxes or place/receive phone calls.

This program is initially enabled (factory default setting).

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. Six selections are available. This program is initially disabled (factory default

This program is initially disabled (factory default setting).

FAX SEND SETTINGS

The fax transmission settings allow you to adjust certain parameters for sending faxes to better suit your needs.

The fax send settings are as follows:

- AUTO REDUCTION SENDING SETTING
- PRINTING PAGE NUMBER AT RECEIVER
- DATE/OWN NUMBER PRINT POSITION SETTING
- ROTATION SENDING SETTING
- CALL TIMER AT MEMORY SENDING
- RECALL IN CASE OF LINE BUSY
- RECALL IN CASE OF COMMUNICATION ERROR
- QUICK ON LINE SENDING
- DEFAULT SENDING MODE
- AUTO COVER SHEET
- SLOW SCAN MODE

AUTO REDUCTION SENDING SETTING

This program is used to have transmitted documents automatically reduced to match the size of the other machine's printing paper. When this program is disabled, documents are sent in their original size, and because the size is not adjusted to match the size of the printing paper, part of the received document may be cut off.

This program is initially enabled (factory default setting).

PRINTING PAGE NUMBER AT RECEIVER

Enable this setting to have page numbers appear at the top of fax pages that you transmit. This program is initially enabled (factory default setting).

DATE/OWN NUMBER PRINT POSITION SETTING

This setting lets you select the position (inside or outside the original image) of the sender's name and number that are printed at the top of each fax page you send. Select [OUTSIDE THE ORIGINAL IMAGE] or [INSIDE THE ORIGINAL IMAGE].

For more information these settings, see page 44. The factory default setting is "OUTSIDE THE ORIGINAL IMAGE".

ROTATION SENDING SETTING

When transmitting a document, this setting allows you to rotate a vertically oriented 8-1/2" x 11" document to a horizontal orientation (8-1/2" x 11"R), or rotate an A4 document to A4R. The document is rotated clockwise. (8-1/2" x 11"R and A4R documents are not rotated.)



Rotation settings can be established separately for different document sizes. To disable a rotation setting, touch the checkbox of the appropriate setting to remove the checkmark.

This program is initially enabled for all paper sizes (factory default settings).

CALL TIMER AT MEMORY SENDING

When sending a fax by automatic transmission ("Storing transmission jobs (memory transmission)" (p.15)), this setting lets you select the amount of time that the machine waits before breaking the connection when the other machine does not respond to your machine's calling tone. If the other machine does not respond within this set time, your machine will automatically break the connection.

Time selections are [30 sec.], [45 sec.], and [60 sec.]. The factory default setting is "45 sec.".

RECALL IN CASE OF LINE BUSY

When sending a document, this setting is used to select whether your machine will automatically re-attempt the call when the other machine fails to answer or the line is busy. The number of recall attempts can be set from 1 to 14, and the interval between attempts can be set from 1 to 15 minutes in increments of 1 minute. To disable automatic recalling, select the [NO RECALL] checkbox.

The factory default settings are as follows:

- NUMBER OF TIMES: 2 (times)
- INTERVAL: 3 (min.)

RECALL IN CASE OF COMMUNICATION ERROR

When sending a document, this setting is used to select whether your machine will automatically re-attempt the call if the transmission fails due to a line error. One recall attempt or no recall attempts can be selected, and the interval until the attempt can be set from 0 to 15 minutes in increments of 1 minute.

The factory default settings are as follows:

- NUMBER OF TIMES: 1 (times)
- INTERVAL: 1 (min.)

QUICK ON LINE SENDING

When this program is enabled and memory transmission is selected, the machine will call the receiving machine while the original pages are being scanned and begin transmission from pages that have finished scanning.

When the program is disabled, transmission will not begin until all pages have been scanned (with the exception of manual transmission and direct transmission). ("Quick On-line" (p.14))
This program is initially enabled (factory default setting).

DEFAULT SENDING MODE

This program is used to select [MEMORY TX] or [DIRECT TX] for the default transmission mode. For more information on these modes, see page 14. The factory default setting is "MEMORY TX".

AUTO COVER SHEET

When this program is enabled, a cover page is automatically generated and added to each fax transmission. The cover page shows the date, time, destination name, destination fax number, sender's name, sender's fax number, number of pages, and a message if the message function is selected. A cover sheet cannot be added when scanning a document into polling memory or F-code polling memory, or when performing polling, direct transmission, relay broadcast transmission, F-code relay broadcast transmission, or manual transmission.

This program is initially disabled (factory default setting).

SLOW SCAN MODE

When this program is enabled, thin-sheet scanning is selected by default when an original is scanned using the RSPF.

Thin-sheet scanning uses a slower scanning speed to prevent thin originals from misfeeding.

This program is initially disabled (factory default setting).

FAX RECEIVE SETTINGS

The fax reception settings allow you to adjust certain parameters for receiving faxes to better suit your needs.

Settings that can be adjusted depend on the peripheral devices installed.

The fax receive settings are as follows:

- AUTO RECEIVE REDUCE SETTING
- DUPLEX RECEPTION SETTING
- PRINT STYLE SETTING
- NUMBER OF CALLS IN AUTO RECEPTION
- SET THE TELEPHONE NUMBER FOR DATA FORWARDING
- INDEX PRINT
- RECEIVED DATA PRINT CONDITION
- A3 RX REDUCE
- ENTER JUNK FAX NUMBER
- ANTI JUNK FAX

AUTO RECEIVE REDUCE SETTING

When you receive a fax that includes the sender's name and number, the received image is slightly larger than the standard sizes*. This setting can be enabled to have the received image automatically reduced before printing to fit the standard paper sizes. This program is initially enabled (factory default setting).



If you turn automatic reduction off, the overall printed image may be larger than the original and the excess portion may be cut off. However, the printed image will be the same size as the original and thus clearer.

* Standard paper sizes are sizes such as 8-1/2" x 11" and 5-1/2" x 8-1/2".

DUPLEX RECEPTION SETTING

When the duplex module is installed, this setting can be enabled to have received documents printed on both sides of the paper. When enabled, received faxes will be printed on both sides of the paper whenever the fax consists of two or more pages of the same size of paper. This program is initially disabled (factory default setting).

PRINT STYLE SETTING

This setting determines the condition for selecting paper when printing received faxes. Select [PRINT ACTUAL SIZE CUT OFF ENABLED] or [AUTO SIZE SELECT].

The factory default setting is "AUTO SIZE SELECT".

- PRINT ACTUAL SIZE CUT OFF ENABLED
 Each received image is printed at actual size. If necessary, the image is split 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.

NUMBER OF CALLS IN AUTO RECEPTION

When the reception mode is set to auto, this program is used to select the number of rings on which the machine automatically receives a call and begins fax reception. ("RECEIVING A FAX" (p.25))
A number of rings from 0 to 9 can be selected.
The factory default setting is "2" (times).



If you select "0" for the number of rings, the machine will immediately answer and begin fax reception without ringing in auto reception mode.

SET THE TELEPHONE NUMBER FOR DATA FORWARDING

When a problem prevents the machine from printing a received fax, the fax forwarding function (p.28) can be used to forward the received fax to another fax machine. Use this setting to program the fax number of the destination fax machine. Only one fax number can be programmed (maximum of 50 digits).

If you wish to specify an F-code confidential memory box or an F-code relay broadcast memory box in the destination machine, touch the [SUB ADDRESS] key after entering the fax number to enter a slash "/", and then enter the sub-address and the passcode. ("STORING RAPID DIAL KEYS" (p.67))

INDEX PRINT

This program is used to have an index (black mark) printed at the top of received fax pages. The mark moves from left to right as pages are printed. This program is initially disabled (factory default setting).

RECEIVED DATA PRINT CONDITION

When this program is enabled and a received fax is held in memory because there is a problem that prevents printing such as no suitable paper, any faxes received after that fax which can be printed will be given priority and printed. This program is initially enabled (factory default setting).

A3 RX REDUCE

When this program is enabled and an A3 size fax is received, the fax is reduced to letter width before printing. When the program is enabled, W letter is considered to be the same size as A3, thus W letter faxes are also reduced before printing.

This program is initially disabled (factory default setting).

ENTER JUNK FAX NUMBER

This program is used to store fax numbers from which you wish to block reception. Up to 50 fax numbers can be stored (maximum of 20 digits each). To block reception from the stored numbers, you must also enable the "ANTI JUNK FAX" program.

ANTI JUNK FAX

Enable this program to block reception of faxes from fax numbers stored in the "ENTER JUNK FAX NUMBER" program.

This program is initially disabled (factory default setting).

SENDING OPTIONS

The following settings are contained in "SENDING OPTIONS":

- PASSCODE NUMBER SETTING
- POLLING SECURITY SETTING
- ID NUMBER MODE
- SYSTEM NUMBER MODE
- RELAY PASSCODE
- CONFIDENTIAL CODE SET
- F-CODE MEMORY BOX

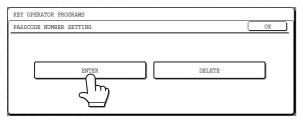
PASSCODE NUMBER SETTING

When polling security is enabled, use this program to program (or delete) the fax numbers of the machines that are allowed to poll your machine. Programmed fax numbers are called passcodes. Up to 10 fax numbers can be programmed.

Programming passcode numbers

1 Touch the [ENTER] key.

The passcode entry screen appears.



2 Press the numeric keys to store the fax number.

Up to 20 digits can be entered.

To enter a hyphen, touch the [PAUSE] key at the top of the screen.

To enter a space, touch the [SPACE] key. To enter a "+", press the " \star " key.

If you make a mistake, press the [CLEAR] key (C) and enter the correct number.

3 Touch the [NEXT] key or the [OK] key.

- To enter another passcode number, touch the [NEXT] key.
- To exit, touch the [OK] key.

Deleting a passcode number

1 Touch the [DELETE] key.

The passcode delete screen appears.

2 Touch the key of the number you wish to delete

Touch the [YES] key in the message that appears to delete the number. If you touch the [NO] key, you will return to the passcode delete screen without deleting the number.

POLLING SECURITY SETTING

When performing polling memory, enable this program to restrict polling to machines that have permission (p.38). To allow any machine to poll your machine, disable the program. This program is initially enabled (factory default setting).



When polling security is enabled, store the fax numbers of machines to be granted polling permission in "PASSCODE NUMBER SETTING".

ID NUMBER MODE

This program is used to store ID numbers. ID numbers provide another means of granting polling permission when polling security is enabled. Polling will be allowed if the system number programmed in the polling machine matches one of your machine's programmed ID numbers. This method can only be used if the other machine is also a Sharp machine (excluding certain models). Up to 10 ID numbers can be programmed. To check the programmed ID numbers, print out the Passcode list in the custom settings. (p.85)

SYSTEM NUMBER MODE

This program is used to store a system number. Your system number provides another means of receiving permission to poll a machine. Polling will take place if your system number matches one of the other machine's ID numbers. This method can only be used if the other machine is also a Sharp machine (excluding certain models). Enter a system number from 0000 to 9999. To check the stored system number, print the passcode list in the user settings (p.85).

To check the programmed system number, print out the Passcode list in the custom settings.

RELAY PASSCODE

This program is used to enter the fax number (the programmed sender's number) of a machine that is to be allowed to perform relay request transmissions using your machine as a relay machine. The entered fax number is called a relay ID code. The other machine must be a Sharp machine (excluding certain models). Up to 10 relay ID codes can be programmed (maximum of 20 digits each).

To check the programmed numbers, print the Passcode list (p.85).

CONFIDENTIAL CODE SET

This program is used to program a confidential box for the reception of confidential faxes. The other machine must be a Sharp machine (excluding certain models). Enter a name for the box (up to 36 characters), a box number (00 to 99), and an ID code (0000 to 9999). Up to 10 boxes can be programmed. To check the programmed boxes, print the Confidential code list (p.105).

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F-CODE MEMORY BOX

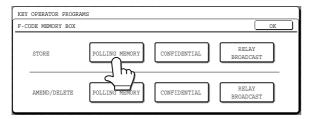
This program is used to program memory boxes for F-code communication. Three types of memory boxes can be programmed: F-code memory polling boxes, F-code confidential boxes, and F-code relay broadcast boxes. Follow the procedure below to program, edit, or delete a memory box.

Programming an F-code memory box

A box name, sub-address, password, and specific functions are programmed in a memory box.



- When programming a memory box, the same sub-address as a previously programmed memory box cannot be used. However, the same passcode can be used.
- · A passcode can be omitted.
- Up to 10 F-code memory boxes can be programmed. If you attempt to program a memory box when 10 boxes have already been programmed, a warning message will appear and programming will not be possible. Delete any unneeded F-code memory boxes (p.105) and then program the new box.
- Touch the desired type of memory box ([POLLING MEMORY], [CONFIDENTIAL], or [RELAY BROADCAST]) in the upper row of keys.



(The following uses [POLLING MEMORY] as an example.) The F-code memory box programming screen appears.

2 Touch the [BOX NAME] key.

- The lowest box number that has not yet been programmed will automatically appear in "No.".
- The character entry screen appears. Enter a name for the box (maximum of 36 characters).
- To enter characters, see "ENTERING CHARACTERS" on page 80.

3 Touch the [OK] key.

4 Touch the [SUB ADDRESS] key.

The sub-address/passcode entry screen appears.

5 Use the numeric keys to enter a sub-address (maximum of 20 digits).

- The characters *\(\frac{\pm}{2} \) and # cannot be used in a sub-address.
- If you make a mistake, press the [CLEAR] key (C) and then enter the correct number.
- If you do not wish to enter a passcode after entering the sub-address, go directly to step 8.

6 To enter a passcode, touch the [PASS CODE] key.

A slash (/) appears after the sub-address. If you make a mistake, press the [CLEAR] key (C) and then enter the correct number.

7 Use the numeric keys to enter a passcode (maximum of 20 digits).

- Numbers and " * and " # can be used in a passcode.
- If you make a mistake, press the [CLEAR] key (C) and then enter the correct number.

8 Touch the [OK] key.

You will return to the memory box programming screen. The entered sub-address and passcode will appear. "REGISTRATION IS COMPLETED." will appear next to the box "No.".

9 Touch the [NEXT] key or the [EXIT] key.

- To program another memory box, touch the [NEXT] key.
- To exit, touch the [EXIT] key.

Next, program specific functions of the memory box as indicated below:

- F-code confidential box (print passcode: page 104)
- F-code relay broadcast box (end receiving machines: page 104)

• F-code confidential box (print passcode)

A print passcode must be programmed to permit printing of faxes received in the F-code confidential box.



- Enter a 4-digit number for the print passcode. The characters " *\frac{\times}{\times} \text{" and "#"} cannot be used.
- · The print passcode cannot be omitted.



Take care not to forget the programmed print passcode. In the event that you forget it, print out the confidential ID list. ("LIST PRINT" (p.105))

- 1 Touch [CONFIDENTIAL] and program a box name and sub-address/passcode as explained in step 1 of "Programming an F-code memory box" (p.103).
- 2 Touch the [PRINT PIN] key.
- 3 Use the numeric keys to enter a 4-digit number.
 - If you make a mistake, press the [CLEAR] key (C) and then enter the correct number.
 - To cancel before completing entry of the number, touch the [CANCEL] key. You will return to the screen of step 2.

4 Touch the [OK] key.

You will return to the programming screen for F-code confidential boxes. The entered print passcode will appear, and "REGISTRATION IS COMPLETED." will appear next to the box number.

5 Touch the [NEXT] key or the [EXIT] key.

- To program another memory box, touch the [NEXT] key.
- To exit, touch the [EXIT] key.

F-code relay broadcast memory box (end receiving machines)

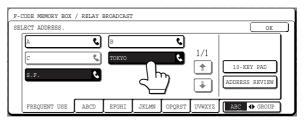
Store the end receiving machines for a relay broadcast transmission when your machine is the relay machine and receives a fax in its F-code relay broadcast memory box.



- A total of 120 end receiving machines can be stored in up to 10 groups. If you attempt to store more that this, a message will appear and storing will not be possible.
- Speed dial numbers and rapid numbers that include a sub-address cannot be stored.
- The same number cannot be stored twice in a group.
- Touch [RELAY BROADCAST] and program a box name and sub-address/passcode as explained in step 1 of "Programming an F-code memory box" (p.103).
- 2 Touch the [RECIPIENT] key.

The address selection screen appears.

3 Select indexes as needed and touch rapid keys to select the end receiving machines. If needed, touch the → or → key to move through screens.



- The selected rapid keys are highlighted and stored as end receiving machines.
- If you touch an incorrect rapid key, touch it again so that it is not highlighted.
- You can also touch the [10-KEY PAD] key to enter full fax numbers with the numeric keys.

4 To check the stored end receiving machines, touch the [ADDRESS REVIEW] key.

A list of the selected destinations appears. If you need to delete a destination from the list, touch it and then touch the [YES] key in the message that appears.

5 Touch the outer [OK] key.

You will return to the programming screen for F-code relay broadcast memory boxes. The number of stored end receiving machines will appear, and "REGISTRATION IS COMPLETED." will appear next to the box number.

6 Touch the [NEXT] key or the [EXIT] key.

- To program another memory box, touch the [NEXT] key.
- To exit, touch the [EXIT] key.

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Editing or deleting a memory box

- 1 Touch the desired type of memory box ([POLLING MEMORY], [CONFIDENTIAL], or [RELAY BROADCAST]) in the Edit/Delete row (lower row). (See step 1 on page 103.)
- 2 Touch the key of the memory box that you wish to edit or delete.



- The memory box edit/delete screen appears.
- 🗐 indicates that a memory box is holding a document.
- A memory box cannot be edited or deleted while it holds a document.

3 Touch the appropriate keys to edit or delete the box.

- Follow the same procedure to edit a box as to store a box.
- To delete a memory box, touch the [DELETE] key in the upper right corner of the screen. (A message will appear to confirm the deletion.)

LIST PRINT



This program is used to print lists of key operator programs related to the fax function.

The following five lists can be printed:

- FAX KEY OPERATOR PROGRAMS LIST
- FAX ACCOUNT USAGE LIST*
- CONFIDENTIAL CODE LIST
- F-CODE MEMORY BOX LIST
- JUNK FAX NUMBER LIST
- * Only appears when AUDITING MODE is enabled in the key operator programs. The factory default setting for AUDITING MODE is disabled. (See the key operator's guide.)

To print a list or report, touch the key of the list or report that you wish to print and then touch the [CLEAR ALL] key ((\widehat{A})).

G Chapter 9 APPENDIX

This chapter contains reference information regarding the fax features of the machine.

SPECIFICATIONS

For information on power requirements, power consumption, dimensions, weight, and other specifications that are common to all features of the machine, refer to operation manual for copier.

Applicable telephone line Public switched telephone network

Compression method MH, MR, MMR, JBIG (MMR and JBIG during Super G3 transmission)

Transmission modes Super G3, G3 (the machine can only send faxes to and receive faxes from

machines that support G3 or Super G3)

Scanning method CCD flatbed scanning

Scanning resolution 8 x 3.85 lines/mm (Standard)

(Supports ITU-T standards) 8 x 7.7 lines/mm (Fine, Fine + Halftone)

8 x 15.4 lines/mm (Super Fine, Super Fine + Halftone) 16 x 15.4 lines/mm (Ultra Fine, Ultra Fine + Halftone)

Recording method Laser, electrostatic charge method

Transmission speed 33.6 kbps → 2.4 kbps Automatic fallback

Transmission time*1 2 seconds (Super G3 mode / 33.6 kbps, JBIG), 6 seconds (G3 ECM mode

/ 14.4 kbps, MMR)

Paper sizes 11" x 17", 8-1/2" x 14", 8-1/2" x 11", 8-1/2" x 11"R, 5-1/2" x 8-1/2", A4, A4R

Effective print width 11" max. (11" x 17" printing)

Input document size 11" x 17", 8-1/2" x 14", 8-1/2" x 11", 8-1/2" x 11"R, 5-1/2" x 8-1/2", A4, A4R

(5-1/2" x 8-1/2": Vertically-oriented feeding),

Originals up to 39.3" (1000 mm) in length*3 (using the RSPF);

* Refer to pages 15 for transmission of 5-1/2" x 8-1/2" size documents.

Effective scanning width 11.7" maximum Halftone transmission Yes (256 levels)

Contrast adjustment Automatic (manual; five levels)

Extension telephone connection Possible (1 telephone)

Auto dialing Combined total of 500 rapid and group keys, redialing (automatic)

Timer transmission Yes

Program function Yes (8 programs)

F-code support Yes (can transmit and receive SUB/SEP (sub-address) and SID/PWD

(passcode) signals)

Automatic document feeding Yes (100 pages)

Image memory 2 MB*2
Error Correction Mode (ECM) Yes

Some discrepancies may exist in the illustrations and content due to improvements to the machine.

^{*1} Transmission speed is for an 8-1/2" x 11" document with approximately 700 characters at standard resolution (8x3.85 lines/mm) sent in high speed mode (33.6 kbps (JBIG) or 14.4 kbps (MMR)). This is only the time required to transmit the image information; the time required to send protocol signals is not included. Actual transmission times will vary depending on the contents of the document, the receiving machine type, and telephone line conditions.

^{*2} Image memory can be expanded by installing the optional fax expansion memory (8 MB).

^{*3} The length varies depending on the scanning resolution and the width of the original. At "FINE" resolution, the maximum size is 11" (W) x 39.3" (L) (297 mm (W) x 1000 mm (L)). ("ORIGINALS" (p.9))

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NOTICE FOR USERS IN CANADA

"NOTICE: This product meets the applicable Industry Canada technical specifications."

"NOTICE: The Ringer Equivalence Number is an indication of the maximum number of devices allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the RENs of all the devices does not exceed five."

The REN of this equipment is indicated on the copying machine.

The registration number is indicated on the fax printed circuit board and on the copying machine.

This Class A digital apparatus complies with Canadian ICES-003.

AVIS POUR NOS UTILISATEURS AU CANADA

AVIS : Le présent matériel est conforme aux spécifications techniques applicables d'Industrie Canada.

Remarque: L'indice d'équivalence de la sonnerie (IES) sert à indiquer le nombre maximal de terminaux qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5.

L'indice d'équivalence de la sonnerie (IES) de cet équipement est indiqué sur le copieur.

Le numéro d'enregistrement est indiqué sur la carte à circuit imprimé du télécopieur et sur le copieur.

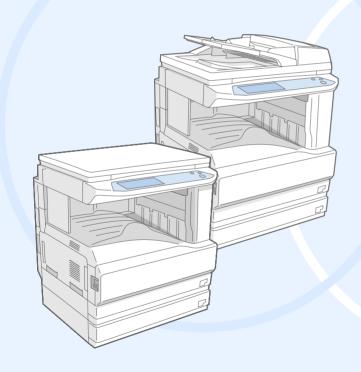
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Sharp Electronics of Canada Ltd.

335 Britannia Road East, Mississauga, Ontario, L4Z 1W9 Canada



AR-M230/M270 Series Online Manual



Start

Click this "Start" button.

Introduction

This manual describes the printer function of the AR-M230/M270 series digital multifunctional system.



- For information on loading paper, replacing toner cartridges, clearing paper misfeeds, handling peripheral devices, and other copier-related information, please refer to your operation manual for copier.
- The machine's default settings and default settings for the printer function can be changed using the key operator programs. For more information, see the key operator's guide.
- Where "AR-XXXX" appears in this manual, please substitute the name of your model for "XXXX". For the name of your model, see "PART NAMES AND FUNCTIONS" in the operation manual for copier.
- This manual refers to the Reversing single pass feeder as the "RSPF".
- The screen images and procedures that appear in this manual are mainly for Windows® XP. With other versions of Windows®, some screen images may be different from those in this manual.
- For information on using your operating system, refer to your operating system's manual or online Help.

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How to use the online manual

This section explains how to view the online manual. Please read this section before using the online manual. For information on using Acrobat Reader, see Acrobat Reader Help.

How to Control the Online Manual

In this manual, the following buttons are displayed at the bottom of each page. Click these buttons to move quickly to pages that you wish to view.

CONTENTS

Displays the Contents of this manual. Click on a topic in the Contents to jump directly to that section.

INDEX

Displays the Index of this manual. Click on a topic in the Index to jump directly to that section.



Takes you forward page by page.



Takes you back page by page.

Following Links

This manual uses a link function that allows you to jump to a related page. If you click green, underlined text, the related page will be displayed. (In the Contents and Index sections, the linked areas are not underlined.)

Example: [™]Contents

To return to the previous page, click the ← button on the menu bar of Acrobat Reader.

Using Bookmarks

Bookmarks have been created on the left side of this manual. You can click on a bookmark to jump directly to that section.

How to Print Out This Manual

To print this manual, select "Print" from the "File" menu of Acrobat Reader. Select the desired printer settings in the "Print" dialog box, and then click the "OK" button.







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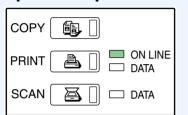


Basic printing

The following example explains how to print a document from WordPad.

Before printing, make sure that the correct size of paper for your document has been loaded in the machine.

Make sure that the ON LINE indicator on the operation panel is lit.



If the ON LINE indicator is not on, press the [PRINT] key to switch to printer mode and then touch the [ONLINE] key.

The status of the printer function is indicated by the ON LINE and DATA indicators next to the [PRINT] key.

ON LINE indicator		DATA indicator	
Lit The machine is online and ready to print.		There is print data in memory that has not been printed yet.	
Blinking	_	The machine is printing.	
Off	The machine is offline and not ready to print.	The machine is not printing.	

2 Start WordPad and open the document that you wish to print.

Select "Print" from the application's "File" menu.

The "Print" dialog box will appear.

Make sure that "SHARP AR-XXXX" is selected as the printer. If you need to change any print settings, click the "Preferences" button ("Properties" button in Windows 95/98/Me/NT 4.0) to open the printer driver setup screen. The printer driver setup screen will appear.



Windows 2000 does not have the "Preferences" button in this dialog box. Select settings as needed on each of the tabs in the setup screen.

Printer driver settings, Two-sided printing,

Printing multiple pages on one page,

Fitting the printed image to the paper,

Rotating the print image 180 degrees,

Printing a watermark,

Stapling printed pages (when a finisher is installed)



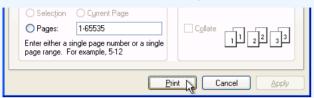




Basic printing

5

Click the "Print" button ("OK" button in Windows 95/98/Me/NT 4.0).



Printing begins. The print job is delivered to one of the following trays (depending on which output devices are installed):

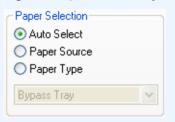
- Job separator tray kit is installed: Job separator tray
- Finisher is installed: Offset tray



- The output tray can be selected in the key operator programs (see "OUTPUT TRAYS" in the key operator's guide).
- The output tray can also be selected in the print settings at the time of printing. To change the tray selection, select the desired tray in "Output" in the "Paper" tab of the printer driver setup screen.
- If the paper type setting in the printer driver is different from the bypass tray's paper type setting in the machine, printing may stop. To resume printing, press the [PRINT] key on the operation panel, touch the [BYPASS TRAY] key in the touch panel, and specify the same paper type as in the printer driver.

When "Paper Selection" is set to "Auto Select"

If "Paper Selection" is set to "Auto Select" in the "Paper" tab of the printer driver setup screen and the correct size of paper for a print job is not loaded in the machine, the printing procedure will vary depending on the "FORCED OUTPUT OF PRINT" setting in the key operator programs (see the key operator's guide).



When "FORCED OUTPUT OF PRINT" is disabled

If the bypass tray can be used, a message prompting you to print from the bypass tray will appear in the touch panel. Press the [PRINT] key on the operation panel, touch the [BYPASS TRAY] key, touch the [BYPASS] key, and then load paper in the bypass tray. Printing will begin automatically.

When "FORCED OUTPUT OF PRINT" is enabled

Printing will take place using a size of paper that is close to the size of the print image.



If the paper is loaded in a different orientation than the print image, the image is automatically rotated to match the paper. This setting can be changed in the key operator programs (see "ROTATED PRINT" in the key operator's guide).



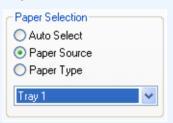




When the "Paper Selection" setting is "Paper Source" or "Paper Type"

When "Paper Selection" in the "Paper" tab of the printer driver setup screen is set to:

- "Paper Source", select the tray that you wish to use for printing from the pull-down menu.
- "Paper Type", select the type of paper that you wish to use for printing from the pull-down menu.





"Paper Source" and "Paper Type" cannot be simultaneously selected.

The size and type of paper loaded in each tray and whether or not the paper loaded in each tray can be used for printing are specified in the "TRAY SETTINGS" of the custom settings. (See "CUSTOM SETTINGS" in the operation manual for copier.

If you wish to select the "Paper Source" or "Paper Type" when printing, be sure to select these settings in the "Configuration" tab of the printer driver setup screen. (See "CONFIGURING THE PRINTER DRIVER" in the software setup guide.)

If you selected the "Paper Source" or "Paper Type" in the printer driver setup screen but there is no paper in the trays that matches your selection, printing will take place as follows:

You selected a tray in "Paper Source", but the size of the paper in the selected tray does not match the printing size.

Even though the paper size is different, printing will take place using the paper in the selected tray.

You selected a "Paper Type", and although the selected type of paper is loaded in the machine, it's size does not match the printing size.

Even though the paper size is different, printing will take place using the selected paper type.

However, if "FORCED OUTPUT OF PRINT" is disabled, printing will not take place.

You selected a "Paper Type", but the selected type of paper is not loaded in the machine.

If the bypass tray can be used, a message prompting you to print from the bypass tray will appear. Press the [PRINT] key on the operation panel, touch the [BYPASS TRAY] key, touch the [BYPASS] key, and then load the correct size and type of paper in the bypass tray. Printing will begin automatically.







Opening the printer driver from the "start" button

Printer driver settings can be configured by opening the printer driver from the Windows "start" button. Settings adjusted in this way will be the initial settings when you print from an application. (If you change the settings in the printer driver setup screen at the time of printing, the settings will revert to the initial settings when you quit the application.)

Windows 2000/XP

Click the "start" button, and then click "Control Panel".

In Windows 2000, click the "Start" button and select "Settings".

- Click "Printers and Other Hardware", and then click "Printers and Faxes".
 In Windows 2000, click "Printers".
- Click the "SHARP AR-XXXX" printer driver icon and select "Properties" from the "File" menu.



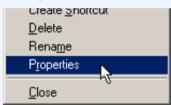
Click the "Printing Preferences" button in the "General" tab.

The printer driver setup screen will appear.

Printer driver settings

Windows 95/98/Me/NT 4.0

- Click the "Start" button, select "Settings" and then click "Printers".
- Click the "SHARP AR-XXXX" printer driver icon and select "Properties" from the "File" menu.



Note

In Windows NT 4.0, select "Document Defaults" to open the printer driver setup screen.

In Windows 95/98/Me, click the "Setup" tab.

General Details Sharing Setup

The printer driver setup screen will appear.

Printer driver settings

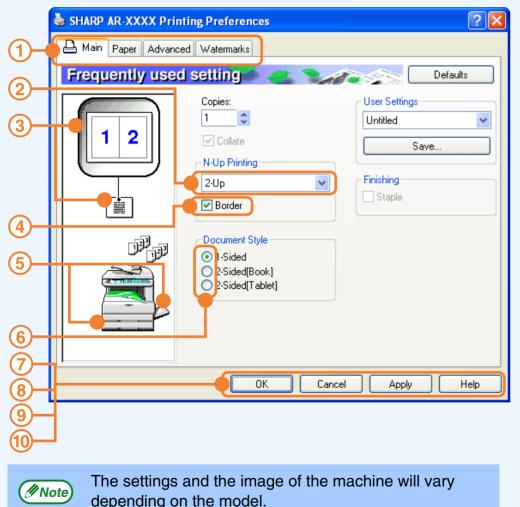






Printer driver settings

To view Help for a setting, click the view button in the upper right-hand corner of the window and then click the setting. Some restrictions exist on the combinations of settings that can be selected in the printer driver setup screen. When a restriction is in effect, an information icon () will appear next to the setting. Click the icon to view an explanation of the restriction.



1 Tab

The settings are grouped on tabs. Click on a tab to bring it to the front.

2 Drop-down list

Allows you to make a selection from a list of choices.

3 Print setting image

This shows the effect of the selected print settings.

4 Checkbox

Click on a checkbox to activate or deactivate a function.

5 Machine image

This shows:

- The paper tray (in blue) selected in "Paper selection" on the "Paper" tab.
- The output tray (in green) selected in "Output" on the "Paper" tab.

You can also click on a tray to select it.

6 Check button

Allows you to select one item from a list of options.

7 "OK" button

Click this button to save your settings and exit the dialog box.

8 "Cancel" button

Click this button to exit the dialog box without making any changes to the settings.

9 "Apply" button

Click to save your settings without closing the dialog box.

- Windows NT 4.0 does not have the "Apply" button.
- The "Apply" button does not appear when you open this window from an application.
- 10 "Help" button

Click this button to display the help file for the printer driver.







1

PRINT

Two-sided printing

This feature allows you to print on both sides of the paper.

To use this function, open the printer driver setup screen and select "2-Sided (Book)" or "2-Sided (Tablet)" from "Document Style" in the "Main" tab.

See Basic printing for details on how to open the printer driver.





- Paper sizes that can be used for two-sided printing are Ledger, Letter, Letter-R, Legal, A3, A4, A4R, A5, B4, B5, B5R, and Foolscap.
- Paper types that can be used for two-sided printing are Plain, Letter Head*, Recycled and Color.
 - *The use of Letter Head paper for two-sided printing can be prohibited in the "TRAY SETTINGS" of the custom settings. (See "CUSTOM SETTINGS" in the operation manual for copier.)
- Two-sided printing is not possible if disabled in the key operator programs (see "DISABLING OF DUPLEX" in the key operator's guide).

The following example shows the result when portrait data is printed on both sides of the paper.

Print data	Printing result		
Fillit uata	2-Sided (Book)	2-Sided (Tablet)	
1234	23	2	
	The pages are printed so that they can be bound at the side.	The pages are printed so that they can be bound at the top.	







Printing multiple pages on one page

This feature allows you to reduce and print two or four document pages on a single sheet of paper.

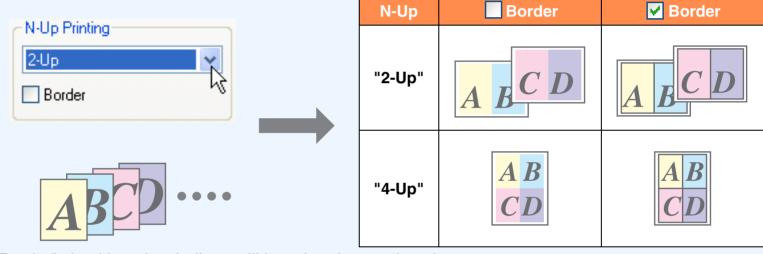
To use this function, open the printer driver setup screen and select "2-Up" or "4-Up" for "N-Up Printing" on the "Main" tab.

See Basic printing for details on how to open the printer driver.



The "N-Up Printing" setting is not available when "Fit To Paper Size" is selected.

Fitting the printed image to the paper



If you select the "Border" checkbox, borderlines will be printed around each page.







Fitting the printed image to the paper

The printer driver can adjust the size of the printed image to match the size of the paper loaded in the machine.

Follow the steps shown below to use this function. The explanation below assumes that you intend to print a Ledger size document on letter size paper.

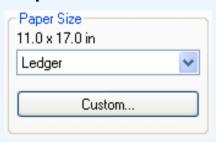
See Basic printing for details on how to open the printer driver.



The "Fit To Paper Size" setting is not available when "N-Up Printing" is selected.

Printing multiple pages on one page

- Click the "Paper" tab in the printer driver setup screen.
- Select the original size (Ledger) of the print image in "Paper Size".



Check the "Fit To Page" box.

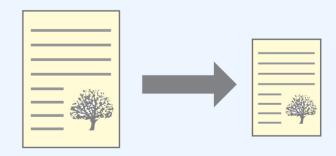


4

Select the actual size of paper to be used for printing (Letter).

The size of the printed image will be automatically adjusted to match the paper loaded in the machine.

Paper Size: Ledger Fit To Paper Size: Letter



Ledger size document (Paper Size)

Letter size paper (Fit To Paper Size)







Rotating the print image 180 degrees

The print image can be rotated 180 degrees.

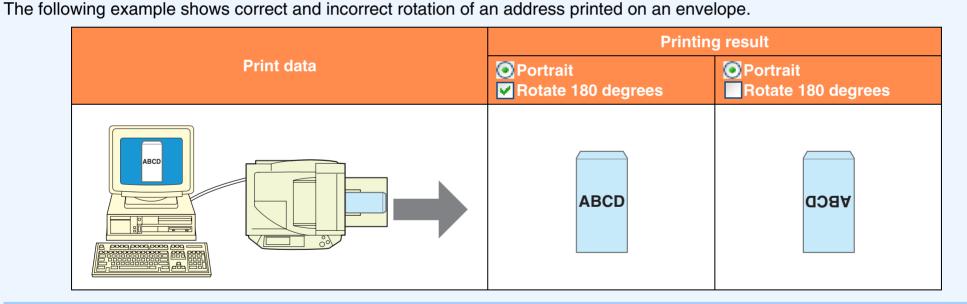
This feature is used to enable correct printing on envelopes and other paper with flaps that can only be loaded in one orientation.

Use this feature when automatic rotation (which takes place when the loaded paper is the same size as the print image and the orientations are different) results in reversal of the top and bottom of the image.

To use the feature, select the image orientation in "Image Orientation" on the "Paper" tab, and then select the "Rotate 180 degrees" checkbox.

See Basic printing for details on how to open the printer driver.

See basic printing for details of flow to open the printer driver.





The procedure for loading paper is explained in operation manual for copier.



Image Orientation

Rotate 180 degrees

Portrait

Landscape





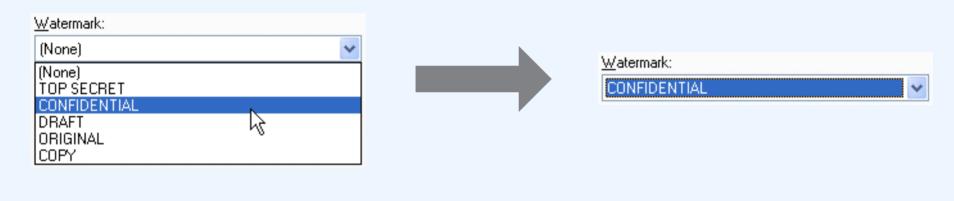
Printing a watermark

You can print a watermark such as "CONFIDENTIAL" on your document. To print a watermark, open the printer driver, click the "Watermarks" tab, and follow the steps below.

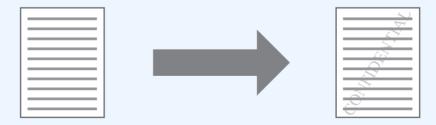
See Basic printing for details on how to open the printer driver.

How to Print a Watermark

From the "Watermark" drop-down list, select the watermark that you wish to print (for example "CONFIDENTIAL"), and start printing.



Print sample



You can enter text to create your own custom watermark. For details on watermark settings, view printer driver Help.

Printer driver settings





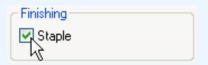


Stapling printed pages (when a finisher is installed)

When a finisher is installed, printed pages can be stapled.

To use this feature, open the printer driver setup screen, and select the "Staple" checkbox in the "Finishing" field of the "Main" tab.

See Basic printing for details on how to open the printer driver.





- The maximum number of sheets that can be stapled is 30.
- Paper sizes that can be used for staple printing are Ledger, Letter, Letter-R, Legal, A3, A4, A4R, B4, B5, and Foolscap.
- Paper types that can be used for staple printing are Plain, Letter Head, Recycled and Color.
- Staple printing is not possible when the ROPM function is disabled. (See "CONFIGURING THE PRINTER DRIVER" in the software setup guide.)
- Stapling is not possible if disabled in the key operator programs (see "DISABLING OF STAPLER" in the key operator's guide).

The following example shows how portrait oriented pages are stapled together.

Print data	Printing result	
	The pages are stapled in the upper left-hand corner.	





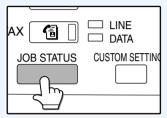


Giving priority to a print job

When a print job is waiting because the machine is copying or printing a received fax, the following procedure can be used to interrupt the current job and immediately print the print job. Use the print job status screen to give priority to the job. For more information on using the job status screen, see operation manual for copier.

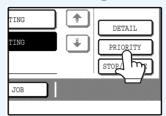
1

Press the [JOB STATUS] key.





Touch the [PRIORITY] key.



A message appears asking you to confirm the priority print job. Touch the [OK] key to interrupt the current job and begin printing the print job selected in Step 3.

Make sure that the [PRINT JOB] key is highlighted.



The print job status screen appears when the [PRINT JOB] key is highlighted. If the [PRINT JOB] key is not highlighted, touch the [PRINT JOB] key.

In the job keys of the jobs waiting to be printed, touch the key of the job that you wish to print immediately.

The touched key is highlighted.



To view information on a print job, select it and then touch the [DETAIL] key.



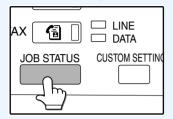


Canceling a print job

A print job in progress or waiting to be printed can be canceled. Use the print job status screen to cancel the job.

1

Press the [JOB STATUS] key.



Make sure that the [PRINT JOB] key is highlighted.



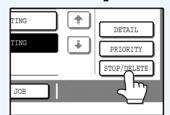
The print job status screen appears when the [PRINT JOB] key is highlighted.
If the [PRINT JOB] key is not highlighted, touch the [PRINT JOB] key.

The job in progress and the jobs waiting to be printed appear. Touch the key of the job that you wish to cancel.

The touched key is highlighted.

4

Touch the [STOP/DELETE] key.



A message appears asking you to confirm the cancellation.

Touch the [YES] key to delete

If you do not wish to cancel the iob. touch the [NO] key.



To pause a print job during printing, press the [PRINT] key on the operation panel and then touch the [OFFLINE] key. ([OFFLINE] is highlighted.)

the job.

- To cancel a print job, press the [CLEAR] key (C).
- To resume printing, touch the [ONLINE] key to switch the machine online.

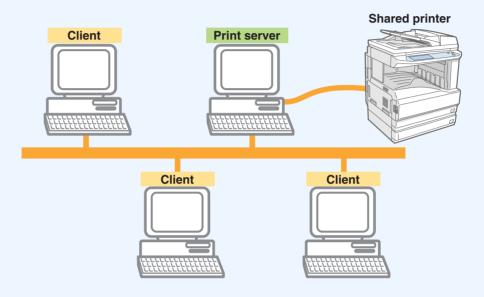




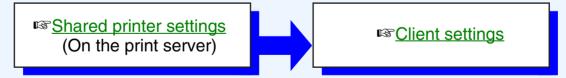


Sharing the printer using windows networking

The machine can be used as a shared printer in a Windows 95/98/Me/NT 4.0/2000/XP network environment. Note that the Windows network environment must already be established.



"Print server" as explained here is a computer that is directly connected to the machine, and a "Client" is any other computer that is connected to the same network.









2

Shared printer settings

On the computer to which the machine is directly connected

Follow the steps below to use the computer directly connected to the machine as a print server. If your operating system is Windows 95/98/Me, start from step 1. If your operating system is Windows NT 4.0, 2000 or XP, open the control panel and then start from step 6.



For detailed setting procedures, refer to the Operation Manual or the help file of your operating system.

- Click the "Start" button, select "Settings", and then click "Control Panel".
- Double-click the "Network" icon (ﷺ).



If the "Network" icon does not appear in Windows Me, click "view all Control Panel options".

- Click the "File and Print Sharing" button.
- Enable "I want to be able to allow others to print to my printer(s)." by clicking the checkbox, and then click the "OK" button.
- Click the "OK" button in the "Network" dialog box.



If a message appears asking you to restart the computer, click the "Yes" button and restart the computer. Then, open the printer folder and continue the setup procedures from Step 6.

- Click "Printers and Other Hardware" in the control panel, and click "Printers and Faxes".

 In operating systems other than Windows XP, double-click the printer icon.
- Click the "SHARP AR-XXXX" printer driver icon and select "Sharing" from the "File" menu.
- Establish the settings for sharing, and click the "OK" button.



For information on a setting, click the button at the top-right of the dialog box and then click the setting to display Help.

Client settings







Client settings

Follow the procedure below to install the printer driver in the client.



If your operating system is Windows NT 4.0, refer to "Settings in Windows NT 4.0".

Click the "start" button, and click "Control Panel".

In Windows 95/98/Me/2000, click the "Start" button and select "Settings".

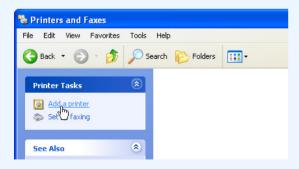
Click "Printers and Other Hardware", and click "Printers and Faxes".

In Windows 95/98/Me/2000, click "Printers".

Click "Add a printer" in "Printer Tasks".

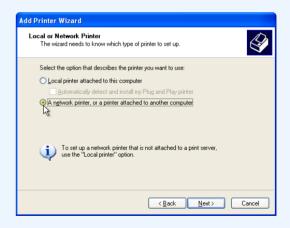
In Windows 95/98/Me/2000, double-click the "Add Printer" icon.

The "Add Printer Wizard" will appear.



- Click the "Next" button.
- Select "A network printer, or a printer attached to another computer", and click the "Next" button.

In Windows 95/98/Me/2000, select "Network printer" and click the "Next" button.







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Client settings

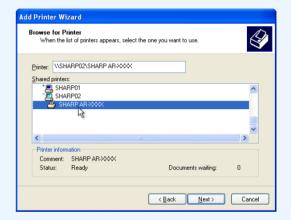
Select "Browse for a printer", and click the "Next" button.

In Windows 95/98/Me, click the "Browse" button. In Windows 2000, select "Type the printer name, or click Next to browse for a printer", and click the "Next" button.



Select the printer to be shared in the network, and click the "Next" button.

In Windows 95/98/Me, select the printer to be shared in the network, click the "OK" button and then click the "Next" button.



The contents of this window will vary depending on your network environment.

- Select settings in the "Default Printer" screen, and click the "Next" button.
- Click the "Finish" button.







Client settings

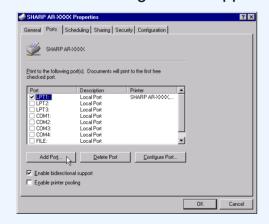
Settings in Windows NT 4.0

If your operating system is Windows NT 4.0, establish settings as follows in the printer properties after installing the printer driver. For the procedure for installing the printer driver, see "INSTALLING THE SOFTWARE" in the Software Setup Guide.

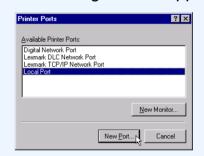
- Click the "Start" button, select "Settings", and then click "Printers".
- Click the "SHARP AR-XXXX" printer driver icon and select "Properties" from the "File" menu.

 The printer properties will appear.
- Click the "Ports" tab, and click the "Add Port" button.

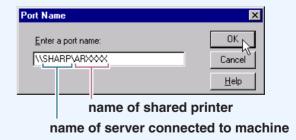
The "Printer Ports" dialog box will appear.



Select "Local Port" in the "Available Printer Ports" list, and click the "New Port" button.
The "Port Name" dialog box will appear.



Enter "\\(name of server connected to machine)\(name of shared printer)", and click the "OK" button.



6 Click the "OK" button in the printer properties window.







3

TROUBLESHOOTING

Troubleshooting

This chapter describes how to solve printer problems. Refer to the relevant section based on the problem. To load paper, remove paper misfeeds, load staples in the finisher, remove jammed staples, or replace the toner cartridge, see "TROUBLESHOOTING" in operation manual for copier.

Printing does not take place

- Check the connections
- Check Your Computer
- Check the machine
- Checking the printer driver

Improper printing operation

- Printing is slow
- Two-sided printing is not possible
- Stapling is not possible (when a finisher is installed)

Print quality is not satisfactory

- Check the paper being used
- The printed image is coarse
- The printed image is distorted
- Part of the printed image is missing

If a Notice Page is printed

Uninstalling the printer driver







Printing does not take place

(part 1)

Check the connections

■ Is the interface cable compatible with the machine and computer?

Interface cables compatible with this machine are USB and parallel cables. Check which type of cable is supported by your computer.

For the specifications of the interface cable, see "CONNECTING TO A COMPUTER" in the software setup guide.

- Is the interface cable connected securely?
 - Check if the interface cable is securely plugged into the connectors of the machine and computer.

 To connect the cable, see "CONNECTING TO A COMPUTER" in the software setup guide.
- Are any other USB peripherals being connected along with the machine?

If your computer is connected to the machine through a USB hub, see if printing is possible when no other USB devices are connected, or if printing is possible when the machine and computer are directly connected.

■ If the interface cable becomes disconnected

If the interface cable becomes disconnected, even only once during the machine's operation, then printing may be disrupted.

If this occurs, check the interface cable and ensure that it is securely connected, then restart the computer.





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Printing does not take place

(part 2)

Check Your Computer

■ Is there enough computer memory or hard disk space?

To use the machine, your computer must have sufficient memory and hard disk space. If there is insufficient hard disk space, delete unnecessary files to increase the free space of the hard disk. If there is insufficient memory, close unnecessary applications to increase memory available for printing.

■ If your computer is connected to the machine through the parallel port, is the parallel port (LPT) mode set to other than EPP mode?

The machine may not operate correctly if the parallel port mode is set to EPP mode. To set the parallel port mode to a mode other than EPP mode, refer to your computer manual or ask the manufacturer of the computer. ECP mode is recommended to obtain the best performance from the machine. Note that some computers may use different names for the modes.



If you are using Windows XP, the "Found New Hardware Wizard" may appear after you change the port setting. In this case, click the "Cancel" button to close the wizard, and then reinstall the printer driver as explained in "INSTALLING THE SOFTWARE" in the software setup guide.





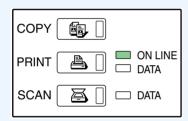
Check the machine

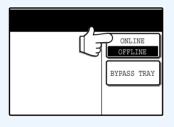
■ Power switch on?

Turn the power switch on. (See "POWER ON AND OFF" in the operation manual for copier)

■ Is the machine online?

When the ON LINE indicator next to the [PRINT] key on the operation panel is lit, the machine is online and ready to print. If the ON LINE indicator is off, press the [PRINT] key and then touch the [ONLINE] key. (When [ONLINE] is highlighted, the machine is online.)





■ Has an error occurred such as a paper misfeed, staple jam in the finisher, out of paper, or out of toner?

When one of the above errors occurs, a message will appear in the touch panel to alert you.

Follow the instructions in the message to clear the error. Printing will automatically resume when the error is cleared. For information on handling errors, see "TROUBLESHOOTING" in the operation manual for copier.

■ Copy job being performed?

Wait until copying is finished. You can also select the key of the job that you wish to print in the job status screen and then touch the [PRIORITY] key. Copying will be interrupted and the selected job printed.

Giving priority to a print job

■ Is the "I/O TIMEOUT" setting too short?

Set a longer time for "I/O TIMEOUT" in the key operator programs.

If a Notice Page is printed, see "If a Notice Page is printed".





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Printing does not take place

(part 4)

Checking the printer driver

■ Has the printer driver been installed properly?

Check if the printer driver has been installed, following the steps listed below.

1 Click the "start" button, click "Control Panel", click "Printers and Other Hardware", and then click "Printers and Faxes".

On Windows 95/98/Me/NT 4.0/2000, click the "Start" button, select "Settings" and then click "Printers".

2 Check if the "SHARP AR-XXXX" printer driver icon is shown.



If the printer icon of the machine does not appear, the printer driver is not installed correctly. Follow the instructions in the software setup guide to correctly install the printer driver.

■ Is your machine selected correctly in the current application for the print job?

Select the printer driver of the machine in the "Print" dialog box of the application.

- If the printer drivers appear as icons, click the icon of the machine.
- If the printer drivers are selected from a pull-down menu, select the printer driver of the machine from the menu.

■ Basic printing

■ Is the port configured correctly?

It is possible that there is a problem with the port configuration, for example another printer driver may be using the port. Open the printer driver properties and correctly configure the port that you are using.

See "TROUBLESHOOTING" in the software setup guide.

If for some reason the printer driver does not operate correctly, delete the printer driver and then reinstall it as explained in the software setup guide.

<u>Uninstalling the printer driver</u>







Improper printing operation

Printing is slow

- Simultaneous use of two or more application software programs?
 - Start printing after quitting all unused application software programs.
- Is an appropriate print quality selected in the printer driver?

When the "Print quality" setting in the "Advanced" tab of the printer driver is "Normal" or "Photo", slow printing may result. Be sure to select a print quality that is suitable for the document or image being printed.

Two-sided printing is not possible

- Is two-sided printing disabled in the key operator programs?
 - Enable two-sided printing as explained in "DISABLING OF DUPLEX" in the key operator's guide.

Stapling is not possible (when a finisher is installed)

- Is stapling disabled in the key operator programs?

 Enable stapling as explained in "DISABLING OF STAPLER" in key operator's guide.
- Did you attempt to print more pages than can be stapled?

The maximum number of sheets that can be stapled is 30.







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Print quality is not satisfactory

(part 1)

Check the paper being used

■ Non-standard paper used?

Check that the paper conforms to the specification. Refer to "LOADING PAPER" in the operation manual for copier.

Are you using paper with a high moisture content? Use paper that is in good condition, with a low moisture content and no curling.

■ Is the paper loaded with the wrong side up?

Some types of paper have a front and a back side. If the paper is loaded so that printing takes place on the back side, toner will not adhere well to the paper and poor print quality will result.

■ Are you printing on paper that has an uneven surface?

It may not be possible to print correctly on paper with seams such as the back of an envelope.







Print quality is not satisfactory

(part 2)

The printed image is coarse

■ Has the printer driver been specified to suit both paper and the print job?

You can select "Draft", "Normal" or "Photo" for the print quality in the "Advanced" tab of the printer driver setup screen. When "Photo" is selected, you can click the "Image Adjustment" button and adjust the brightness and contrast in the dialog box that appears. Adjust these settings appropriately for your print data and try printing again.

The printed image is distorted

■ Is the paper loaded correctly?

If a document is physically damaged when it is output or the image is skewed on the paper, discard the damaged sheet, reinsert the paper supply and print again. Insert the paper so that there is no visible space between the paper and the paper guides.

See the operation manual for copier for more details on inserting paper.

Part of the printed image is missing

■ Did you set sufficient margins in the paper settings of your application?

Printing is not possible at the edges of the paper. The print margins are 5/32" (4 mm) at the top and bottom of the paper and 1/8" (3 mm) at the sides of the paper. When configuring the paper settings in the software application, be sure to establish margins that are at least as large as the print margins.

■ Is the paper size loaded in the tray the same as that specified in the printer driver?

Check if the "Paper Size" options suit the size of the paper loaded in the tray.

If the "Fit To Page" setting is activated, make sure that the paper size selected from the drop-down list of the "Fit To Paper Size" option is the same as the size of the loaded paper.

■ Is the orientation of document setting correct?

Click the "Paper" tab in the printer driver setup screen, and verify if the "Image Orientation" option is set to your requirements.







If a Notice Page is printed

If you find that a notice page has been printed at the end of a print job, the print data received from the computer has not been printed as specified. Fix the problem as explained below and then try printing again.

If a Notice Page is printed

If the following Notice Page is printed, check your settings for the Staple function.

Stapling printed pages (when a finisher is installed)

The IMC memory full error had occurred, a normal output was not able to be executed.

Please refer to the operation manual for the solution method.

When the Staple function is not selected:

Disable the ROPM function by removing the checkmark from "ROPM" in the "Configuration" tab of the printer driver setup screen. (See "CONFIGURING THE PRINTER DRIVER" in the software setup guide.) If you wish to use the ROPM function, set the print quality to "Draft" or increase memory.

When the Staple function is selected:

Select "Draft" for the "Print quality" setting, or increase the value set for "MEMORY FOR PRINTER" in the key operator programs. If this does not solve the problem, add more IMC memory.



The IMC memory is used to store print data when the ROPM function is used. This memory is also used to store original image data in the copy mode. The percentage of IMC memory allocated to the printer function can be adjusted using a key operator program. See "MEMORY FOR PRINTER" in the key operator's guide. The memory can be extended by adding commercially available memory modules. For details, contact your SHARP dealer.

Disabling notice page printing

Notice page printing can be disabled using a key operator program (see "PROHIBIT NOTICE PAGE PRINTING" in the key operator's guide).







3

TROUBLESHOOTING

Uninstalling the printer driver

To delete a printer driver that has been installed using the installer, follow the procedure shown below.

- Click the "start" button, and then click "Control Panel".
 - On Windows 95/98/Me/NT 4.0/2000, click the "Start" button, select "Settings", and then click "Control Panel".
- Click "Add or Remove Programs".
 On Windows 95/98/Me/NT 4.0/2000, double-click the "Add/Remove Programs" icon.
- Delete the "SHARP AR-M230/M270 Series Printer Driver" from the list of applications. For more information, refer to your operating manual or to the help files for your operating system.
- Restart your computer.



When reinstalling the printer driver, install it correctly as explained in software setup guide.







Printer specifications

Printing speed	AR-M236/AR-M237: 23 pages/min. AR-M276/AR-M277: 27 pages/min.
Resolution	600 dpi
IMC Memory	32 MB*
Additional memory slots	2 slots (maximum of 1024 MB of additional memory modules (168-pin SDRAM DIMM) can be installed)
Interface	IEEE 1284-compliant bi-directional parallel interface/USB 2.0 (Full-Speed/Low-Speed) interface

^{*1} The factory default setting for memory used for the printer function is 16 MB. The proportion of IMC memory allocated to the printer function can be changed in the key operator programs. See "MEMORY FOR PRINTER" in the key operator's guide.



As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.





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