Be sure to become thoroughly familiar with this manual to gain the maximum benefit from the product.

Before installing this product, be sure to read the cautions and installation requirements sections.

Be sure to keep all operation manuals handy for reference including this manual, the “Operation manual (for general information and copier)” and operation manuals for any optional equipment which has been installed.
**Caution:**
For complete electrical disconnection, pull out the main plug.
The socket-outlet should be installed near the equipment and should be easily accessible.

**FOR YOUR RECORDS ...**
To protect against loss or theft, record and retain for reference the machine's serial number located on the back of the unit.

<table>
<thead>
<tr>
<th>Description</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Number</td>
<td></td>
</tr>
<tr>
<td>Serial Number</td>
<td></td>
</tr>
<tr>
<td>Date of Purchase</td>
<td></td>
</tr>
<tr>
<td>Place of Purchase</td>
<td></td>
</tr>
<tr>
<td>Authorized Sharp Copier</td>
<td></td>
</tr>
<tr>
<td>Service Department Number</td>
<td></td>
</tr>
</tbody>
</table>

**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.

This operation manual is also used for the AR-M162 J / AR-M207 J.
Part 1: General Information
Notes
• Considerable care has been taken in preparing this manual. If you have any comments or concerns about the manual, please contact your nearest SHARP Service Department.
• This product has undergone strict quality control and inspection procedures. In the unlikely event that a defect or other problem is discovered, please contact your dealer or nearest SHARP Service Department.
• Aside from instances provided for by law, SHARP is not responsible for failures occurring during use of the product or its options, or failures due to incorrect operation of the product and its options, or other failures, or for any damage that occurs due to use of the product.

PRODUCT CONFIGURATIONS

This product series consists of the models indicated below. The product configuration varies by model. The explanations and illustrations in this manual generally use the AR-M207 (with the optional RSPF installed).

<table>
<thead>
<tr>
<th>Model</th>
<th>Appearance</th>
<th>Copying speed</th>
<th>Paper trays</th>
<th>Optional trays</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR-M162</td>
<td></td>
<td>16 copies/min.</td>
<td>One (250 x 1)</td>
<td>250-sheet paper feed unit (AR-D24)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 x 250-sheet paper feed unit (AR-D25)</td>
</tr>
<tr>
<td>AR-M207</td>
<td>With the RSPF installed</td>
<td>20 copies/min.</td>
<td>Two (250 x 2)</td>
<td></td>
</tr>
</tbody>
</table>

(As of the end of October, 2004)
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CAUTIONS

Follow the cautions below when using this machine.

CAUTIONS ON USING

⚠️ 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.

ℹ️ 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.
- Place the machine on a firm, level surface.
- 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.
- Do not make any modifications to this machine. Doing so may result in personal injury or damage to the machine.
- Do not make copies of anything which is prohibited from copying by law. The following items are normally prohibited from printing by national law. Other items may be prohibited by local law.
  • Money  • Stamps  • Bonds  • Stocks
  • Bank drafts  • Checks  • Passports  • Driver’s licenses
- Do not touch the photoconductive drum. Scratches or smudges on the drum will cause dirty prints.
- 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.

"BATTERY DISPOSAL"

THIS PRODUCT CONTAINS A LITHIUM PRIMARY MEMORY BACK-UP BATTERY THAT MUST BE DISPOSED OF PROPERLY. PLEASE CONTACT YOUR LOCAL SHARP DEALER OR AUTHORIZED SERVICE REPRESENTATIVE FOR ASSISTANCE IN DISPOSING OF THIS BATTERY.

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
LASER INFORMATION

<table>
<thead>
<tr>
<th>Wave length</th>
<th>785 nm ±10 nm -15 nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse times</td>
<td>North America: (3.1 µs ± 3.1 ns)/7 mm</td>
</tr>
<tr>
<td></td>
<td>Europe: (3.7 µs ± 3.7 ns)/7 mm</td>
</tr>
<tr>
<td>Output power</td>
<td>Max 0.8 mW</td>
</tr>
</tbody>
</table>

At the production line, the output power of the scanner unit is adjusted to 0.8 MILLIWATT PLUS 10 % and is maintained constant by the operation of the Automatic Power Control (APC).

Caution
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

For North America:

SAFETY PRECAUTIONS
This Digital Equipment is rated Class 1 and complies with 21 CFR 1040.10 and 1040.11 of the CDRH standards. This means that the equipment 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 equipment's exterior covers contain several safety interlock switches. Do not bypass any safety interlock by inserting wedges or other items into switch slots.

For Europe:

CLASS 1 LASER PRODUCT
LASER KLASSE 1
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

CAUTION
INVISIBLE LASER RADIATION WHEN OPEN INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.

VORSICHT
UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET UND SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.

ADVARSEL
USYNLIG LASERSTRÅLNING VED ÅBNING, NÅR SIKKERHEDSBRYDERER ER UDE AF FUNKTION. UDGA UDSÆTTELSE FOR STRÅLNING.

VAROITUS!
LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITUilla TAValla SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

WARNING
OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVISNING SPECIFICERATS, KAN ANVÄNDAren utsättas för OSYNLIG LASERSTRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.
INSTALLATION REQUIREMENTS

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

1. The machine should be installed near an accessible power outlet for easy connection.
2. 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.
   • For the power supply requirements, see the name plate on the back of the main unit.

   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.

3. 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.
4. Be sure to allow the required space around the machine for servicing and proper ventilation.

A small amount of ozone is produced within the printer 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 copier in a ventilated area.

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.

USB 2.0 compatible (dual function board (AR-EB9))
When connecting the machine by USB 2.0 (Hi-Speed mode), be sure to read “System requirements for USB 2.0 (Hi-Speed mode)” (see the “Key operator's guide”) to verify that your system and the machine settings are configured appropriately.
MANUALS PROVIDED WITH THE PRODUCT

Multiple manuals are provided for use of the machine. Please read each manual as appropriate for the functions that you wish to use.

Operation manual (for general information and copier) (this manual):
The first half of this manual contains general information on the machine, including safety precautions and the procedures for loading paper, removing misfeeds, and performing regular maintenance.
The second half of the manual contains explanations of how to use the copy function of the machine.

Key operator’s guide
This explains key operator programs for machine management and copier related functions.
Explanations of key operator programs related to the fax, printer, and network scanner functions can be found in the respective manuals for those functions.
The key operator programs are used by the administrator of the machine to enable or disable functions to suit the needs of your workplace.

Software setup guide
This explains how to install and configure the printer driver.

Operation manual (for facsimile)*1:
This explains how to use the fax function of the machine. To use the fax function, the optional facsimile expansion kit (AR-FR11) must be installed.

Operation manual (for printer and scanner)*2:
This explains how to use the machine as a printer and a scanner when it is connected to a computer.

Operation manual (for network printer)*2:
This explains how to use the machine as a network printer.
To use the machine as a network printer, the optional network expansion kit (AR-NB3) must be installed.

Operation manual (for network scanner)*2:
This explains how to use the machine as a network scanner when it is connected to a computer. To use the machine as a network scanner, the optional network expansion kit must be installed.

*1 The “Operation manual (for facsimile)” is contained in the optional facsimile expansion kit.
*2 The “Operation manual (for printer and scanner)” is contained in the accompanying CD-ROM in PDF format. The “Operation manual (for network printer)” and the “Operation manual (for network scanner)” are contained in PDF format in the CD-ROM that accompanies the network expansion kit. (These manuals are not provided in printed form.)

The meaning of "R" in original and paper size indications
An "R" appearing at the end of an original or paper size (8-1/2" x 11"R, 5-1/2" x 8-1/2"R (A4R, B5R), etc.) indicates that the original or paper is oriented horizontally as shown below.
Sizes that can be placed only in the horizontal (landscape) orientation (11" x 17", 8-1/2" x 14" (A3, B4)) do not contain the "R" in their size indication.

Conventions used in this manual

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

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

>Note
Notes provide information relevant to the machine regarding specifications, functions, performance, operation and such, that may be useful to the user.

This manual refers to the Reversing single pass feeder as the “RSPF” and the single pass feeder as the “SPF.”
Unless specific mention is made, both the RSPF and the SPF are referred to simply as “SPF.”
MAIN FEATURES

High-speed laser copying
• First-copy time*1 at 300 dpi*2 is only 7.2 seconds.
• Copying speed is 20 (AR-M207) or 16 (AR-M162) copies per minute. This provides a big boost to workplace productivity.
*1 Measured after the machine has warmed up following power-on, copying using the document glass (8-1/2" x 11" (A4) paper fed from machine tray 1). The first-copy time may vary depending on machine operating conditions and ambient conditions such as temperature and power voltage.
*2 "dpi" ("dots per inch") is a 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 is performed.
• In addition to automatic exposure adjustment, two exposure modes can be selected: "TEXT" for text-only originals, and "PHOTO" for photographs. The exposure can be adjusted to five levels in each mode.
• Photo mode allows clear copying of originals with delicate halftones such as monochrome photos and color photos.

Enhanced copying features
• The zoom function can be used to reduce or enlarge copies from 25% to 400% in increments of 1%. (When the SPF is used, the zoom copy ratio range is 50% to 200%.)
• Up to 999 copies can be made of an original scanned just once. (This can be changed to a maximum of 99 copies in the key operator programs.)
• The key operator programs allow functions to be selected and managed to meet your specific needs. For example, access to the machine can be controlled by enabling audit mode.
• The optional dual function board can be installed to enable use of rotation copy and other convenient functions.

Sort function (when the dual function board is installed)
Copies of multiple original pages can sorted into sets.

Laser printer function / color scanner function
• The machine is equipped standard with a USB 1.1 port and a parallel port. A computer can be connected to these ports to use the machine as a printer or a scanner.
• To use the machine as a printer or scanner, the printer driver or scanner driver must first be installed as explained in the "Software setup guide".
• The scanning feature is only available when the computer is connected to the USB port and is running Windows 98/Me/2000/XP. If the computer is running Windows 95/NT 4.0 or is connected to the parallel port, only printing is available.
Fax function (option)
Installation of the optional facsimile expansion kit enables the plain-paper, Super G3 laser fax function to be used.

Network connection (option)
The optional network expansion kit (AR-NB3) can be installed to enable the machine to be used as a network printer and network scanner.

Environment and people friendly design
• Preheat and auto power shut-off modes are provided to reduce power consumption when the machine is not in active 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 usable by as many people as possible.
Part Names and Functions

1. USB 2.0 port (USB-2) (when the dual function board is installed)
   - Connect to your computer to this port to use the printer and scanner functions.

2. USB 1.1 port (USB-1)
   - Connect to your computer to this port to use the printer and scanner functions.

3. Parallel port
   - Connect to your computer to this port to use the printer function.

4. Charger cleaner
   - Use to clean the transfer charger.

5. Glass cleaner
   - Use to clean the original scanning glass.

6. Document glass
   - Place an original that you wish to scan face down here. (Page 45)

7. Handles
   - Use to move the machine.

8. Power switch
   - Press to turn the machine power on and off.

9. Center tray
   - Copies and printed pages are output to this tray.

10. Top tray (when the job separator tray kit is installed)
    - Received faxes (when the fax option is installed) and print jobs are delivered to this tray.

11. Operation panel
    - Contains operation keys and indicator lights.

12. Front cover
    - Open to remove paper misfeeds or replace the toner cartridge.

13. Tray 1
    - Tray 1 can hold approximately 250 sheets of copy paper (20 lbs. (80 g/m²)).
    - For restrictions on paper types and weights, see "PAPER" (page 18).

14. Tray 2
    - Tray 2 can hold approximately 250 sheets of copy paper (20 lbs. (80 g/m²)).
    - For restrictions on paper types and weights, see "PAPER" (page 18).
(15) Document cover (when installed)  
Open to make a copy from the document glass.

(16) Side cover  
Open to remove misfed paper.

(17) Side cover handle  
Pull to open the side cover.

(18) Bypass tray guides  
Adjust to the width of the paper when using the bypass tray.

(19) Bypass tray  
Special paper (heavy paper or transparency film) can be fed from the bypass tray.

(20) Bypass tray extension  
Pull out when feeding large paper such as 11" x 17" and 8-1/2" x 14" (A3 and B4).

(21) Toner cartridge lock release lever  
To replace the toner cartridge, pull out the toner cartridge while pushing on this lever.

(22) Toner cartridge  
Contains toner.

(23) Document feeder tray (when the SPF is installed)  
Place the original(s) that you wish to scan face up here. Up to 40 sheets can be placed.

(24) Original guides (when the SPF is installed)  
Adjust to the size of the originals.

(25) Feeding roller cover (when the SPF is installed)  
Open to remove misfed originals.

(26) Right side cover (when the SPF is installed)  
Open to remove misfed originals.

(27) Fusing unit release levers  
To remove the paper misfed in the fusing unit, push down on these levers and remove the 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.

(28) Roller rotating knob  
Rotate to remove misfed paper.

(29) Exit area (when the SPF is installed)  
Originals exit the machine here after copying/scanning when the SPF is used.

(30) Reversing tray (when the RSPF is installed)  
Pull out to remove misfed originals.

(31) Photoconductive drum  
Images are formed on the photoconductive drum.

⚠️ **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.

(32) Fusing unit paper guide  
Open to remove misfed paper.

⚠️ **Note**  
The model name is on the front cover of the machine.
BEFORE USING THE PRODUCT

OPERATION PANEL

(1) Keys for fax function (when the fax option is installed)
These are used in fax mode. For more information, see the "Operation manual (for facsimile)*" that accompanies the optional facsimile expansion kit.

(2) [COPY] key / indicator
Press to select copy mode. If pressed when "Ready to copy." appears or during warm-up, the total number of sheets used (page 36) appears while the key is pressed.

(3) [PRINT] key / indicator
Press to select print mode.
• ONLINE indicator
  Print jobs can be received when this indicator is lit.
• DATA indicator
  This lights steadily when there is a print job in memory that has not been printed, and blinks during printing.

(4) [SCAN] key / indicator
Press to select scan mode. (To connect a computer to the USB port on the machine and use the scanner function, see the "Operation manual (for printer and scanner)". To use the machine as a network scanner, see the "Operation manual (for network scanner)" that accompanies the optional network expansion kit.)

(5) Display
Shows various messages. For more information see page 16.

(6) [BACK] key
Press to return the display to the previous screen.

(7) [FAX STATUS] key (when the fax option is installed)
This key is used in fax mode. For more information, see the "Operation manual (for facsimile)*" that accompanies the optional facsimile expansion kit.

(8) [OK] key
Press to enter the selected setting.

(9) Copy number display
The selected number of copies appears. During copying, this shows the remaining number of copies.

(10) Numeric keys
Use to select the number of copies.

(11) [INTERRUPT] key ( ) / INTERRUPT indicator
Interupts a copy run to allow an interrupt copy job to be performed. (Page 63)

(12) [C] key
Press to clear the set number of copies or stop a copy run.
BEFORE USING THE PRODUCT

(13) LINE STATUS indicator (when the fax option is installed)

This key is used in fax mode. For more information, see the "Operation manual (for facsimile)" that accompanies the optional facsimile expansion kit.

(14) [FAX] key / indicator (when the fax option is installed)

LINE indicator, DATA indicator

This key is used in fax mode. For more information, see the "Operation manual (for facsimile)" that accompanies the optional facsimile expansion kit.

(15) [EXPOSURE] key

Use to select the exposure mode. "AUTO", "TEXT", or "PHOTO" can be selected. (Page 48)

(16) [PAPER] key

Use to manually select a paper tray. (Page 49)

(17) [ZOOM] key

Press to select a reduction or enlargement copy ratio. (Page 52)

(18) [AUTO%] key

Press to have the copy ratio selected automatically. (Page 52)

(19) [OUTPUT] key (Only effective when the dual function board is installed)

Use to select the sort function. (Page 64)

(20) [DUPLEX] key (only on models that support two-sided printing)

Select the two-sided copying mode. (Page 56)

(21) Arrow keys

Press to move the highlighting (which indicates that an item is selected) in the display.

(22) [SPECIAL FUNCTION] key

Press to select special functions.

(23) [ACC.#-C] key ( )

Press to end the use of an account and return the display to the account number entry screen. (Page 23)

(24) [0] key

Press during a continuous copy run to display the number of copies completed.

(25) [READ-END] key ( )

When copying in sort mode from the document glass, press this key when you have finished scanning the original pages and are ready to start copying. (Page 64)

(26) [START] key ( ) / indicator

Copying is possible when this indicator is on. Press the key to start copying.

(27) [CA] key

Clears all selected settings and returns the machine to the default settings. (Page 18)
Display (base screen)

Example: Copy mode

(1) Exposure display
   Indicates the selected exposure mode.

(2) Special function icon display
   Icons of enabled special functions will appear.

(3) Message display
   Messages are displayed regarding machine status and operation.

(4) Original size display
   The size of the placed original and the icon of the original scanning mode will appear.
   □ : One-sided scanning in the SPF.
   ■ : Scanning on the document glass
   ¥ : Two-sided scanning in the RSPF.

Icons appearing in the special function icon display

(5) Copy ratio display
   Displays the copy ratio for reduction or enlargement.

(6) Paper size display
   Displays the selected paper size. When *AUTO* appears, the most suitable size of paper is automatically selected.

(7) Paper tray display
   The selected paper tray is highlighted.

OPERATION IN COPY, PRINT, SCAN, AND FAX MODES

Some operations in the various modes of the machine cannot take place simultaneously.

<table>
<thead>
<tr>
<th>Interrupting operation</th>
<th>Copy output</th>
<th>Printing</th>
<th>Scanning</th>
<th>Faxing Scanning originals</th>
<th>Printing faxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copying</td>
<td>Yes*1</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Printing</td>
<td>Yes*2</td>
<td>No</td>
<td>Yes*4</td>
<td>Yes*5</td>
<td>No</td>
</tr>
<tr>
<td>Scanning</td>
<td>No</td>
<td>No</td>
<td>Yes*3</td>
<td>Yes*2</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*1 Can be used after pressing the [INTERRUPT] key (√).
*2 After the page that is currently being printed is output, the job is interrupted.
*3 Only possible when the computer is connected to the USB-2 port.
*4 Only possible when the computer is connected to the parallel port or USB-1 port; the job is interrupted after the page that is currently being printed is output.
*5 After output of the page that is currently being printed via the parallel port or USB-1 port, the job is interrupted.

* Printing is not possible when the front or side cover is opened for machine maintenance, or when a misfeed occurs or the machine runs out of paper or toner, or when the drum cartridge reaches its replacement time.
* If an original misfeed occurs in the SPF, printing will not be possible until the misfed original is removed and the SPF is ready for use.
TURNING THE POWER ON AND OFF

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

POWER ON

Turn the power switch to the "ON" position

• It will take about 45 seconds for the machine to warm up.
• When the power switch is turned to the "ON" position, the message "System check." will appear in the message display and warm-up will start.

Once the copier has finished warming up, the message display will change to "Ready to copy." and copying is possible. Copy settings can be selected during warm-up.
• If auditing mode has been enabled (see the "Key operator's guide"), the message "Enter your account number." will appear after warming up. Once a valid account number has been entered, the message display will change to "Ready to copy." and copying will be possible.

POWER 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.

Power save modes

The machine has two power save modes to reduce power consumption, thereby helping to reduce environmental pollution and conserve resources.

Preheat mode

This function automatically switches the machine to a low power consumption state if the duration of time set in the key operator programs elapses without the machine being used when the power is on. In preheat mode the display turns off. Normal operation automatically resumes when a key on the operation panel is pressed, an original is placed, or a print job or fax is received.

Auto power shut-off mode

This function automatically switches the machine to a state that consumes even less power than preheat mode if the duration of time set in the key operator programs elapses without the machine being used when the power is on. During auto power shut-off, only the mode key indicators are lit. To restore the machine to normal operation, press any one of the mode keys. Normal operation also resumes automatically when a print job or fax is received or scanning is begun from a computer. While auto power shut-off is in effect, pressing a key other than a mode key will have no effect.

Note

• If the fax option is installed, be sure to keep the power turned on. Faxes cannot be received when the power is turned off.
• The machine is set at the factory to return all settings to the default settings one minute after a copy job is finished (auto clear function). When the settings return to the default settings, any functions that were selected are canceled. The auto clear time can be changed in the key operator programs. (See the "Key operator's guide".)

The preheat mode activation time and the "Auto power shut-off timer" can be changed in the key operator programs. (See the "Key operator's guide".)
**Default settings**

The machine is set at the factory to return all settings to the default settings one minute after a copy job is finished (auto clear function) or when the [CA] key is pressed. When the settings return to the default settings, any functions that were selected are canceled.

The auto clear time can be changed in the key operator programs. (See the "Key operator's guide").

In the default state the display shown below appears. The default state of the display may vary depending on settings in the key operator programs.

* The screen is that of the AR-M207 (when the RSPF is installed).

---

**LOADING PAPER**

The message "TRAY<*>:Add paper." will be displayed when there is no copy paper in the selected paper tray. (<*> is the tray number.) Load paper in the indicated paper tray.

**PAPER**

The specifications for the types and sizes of paper that can be loaded in the paper trays are shown below.

<table>
<thead>
<tr>
<th>Paper tray</th>
<th>Tray No.*4</th>
<th>Paper type</th>
<th>Paper size</th>
<th>Weight</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tray 1</td>
<td>1</td>
<td>Standard paper</td>
<td>5-1/2&quot; x 8-1/2&quot;<em>1 (Invoice), 8-1/2&quot; x 11&quot; (Letter), 8-1/2&quot; x 11&quot;R, 8-1/2&quot; x 13&quot; (Foolscap), 8-1/2&quot; x 14&quot; (Legal), 11&quot; x 17&quot; (Ledger) (A5</em>1-B5, B5R, A4, A4R, B4, A3)</td>
<td>15 lbs. to 24 lbs.*2 (56 g/m² to 90 g/m²)*2</td>
<td>250 sheets (20 lbs. (80 g/m²))*3 (Load paper lower than the line on the tray)</td>
</tr>
<tr>
<td>Tray 2</td>
<td>2</td>
<td>Recycled paper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tray of 250-sheet paper feed unit</td>
<td>2 or 3</td>
<td>Standard paper</td>
<td>5-1/2&quot; x 8-1/2&quot; (Invoice) to 11&quot; x 17&quot; (Ledger) (A6R to A3)</td>
<td>15 lbs. to 20 lbs. (56 g/m² to 80 g/m²)</td>
<td>100 sheets*3</td>
</tr>
<tr>
<td>Tray of 2 x 250-sheet paper feed unit</td>
<td>2 or 3</td>
<td>Recycled paper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bypass tray</td>
<td></td>
<td>Standard paper</td>
<td>5-1/2&quot; x 8-1/2&quot; (Invoice) to 11&quot; x 17&quot; (Ledger) (A6R to A3)</td>
<td>15 lbs. to 20 lbs. (56 g/m² to 80 g/m²)</td>
<td>100 sheets*3</td>
</tr>
<tr>
<td>Transparency film</td>
<td></td>
<td>Recycled paper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labels</td>
<td></td>
<td>Envelopes</td>
<td>Commercial 9 (3-7/8&quot; x 8-7/8&quot;), Commercial 10 (4-1/8&quot; x 9-1/2&quot;) International DL (110 mm x 220 mm), International C5 (162 mm x 229 mm)</td>
<td>15 lbs. to 20 lbs. (56 g/m² to 80 g/m²)</td>
<td>100 sheets*3</td>
</tr>
</tbody>
</table>

*1 5-1/2" x 8-1/2" (A5) can be used in tray 1 but cannot be used in other trays (including trays in optional paper feeding unit).

*2 When making a large number of copies or prints using 24 lbs. (90 g/m²) paper, remove the output from the paper output tray when about 100 pages have been printed. The output may not stack correctly if more than 100 pages are allowed to accumulate.

*3 The number of sheets of the paper which can be set changes with the weight of a paper. (The indicated numbers are for 20 lbs. (80 g/m²) paper.)

*4 The trays are numbered 1, 2, 3, and 4 from the top.

---

**Paper that can be used for automatic 2-sided printing**

Paper used for automatic two-sided printing must meet the following conditions:

- **Paper type**: Plain paper (special paper cannot be used.)
- **Paper size**: Standard sizes (11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11", 8-1/2" x 11"R, A3, B4, A4, A4R, B5, B5R, A5)
- **Paper weight**: 15 lbs. to 24 lbs. (56 g/m² to 90 g/m²)
**Special paper**

Follow these guidelines when using special paper.

- Use SHARP recommended transparency film and label sheets. Using other than SHARP recommended paper may result in misfeeds or smudges on the output.
- 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 or printing, and then follow these steps to load paper.

**Loading paper in a tray**

1. **Gently lift and pull out the paper tray.**
   
   If you are adding the same size of paper, go to step 3. If you are loading a different size of paper, go to the next step.

2. **Adjust the plates in the tray to the length and width of the paper.**
   
   - The plate A is a slide-type guide. Grasp the locking knob on the guide and slide the guide to the indicator line of the paper to be loaded.
   - The plate B is an insert-type guide. Remove it and then insert it at the indicator line of the paper to be loaded.
   - When using 11” x 17” sized paper store the plate B in the slot at the left front of the paper tray.

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

4. **Fan the paper.**
   
   Fan the paper well before loading it. If the paper is not fanned, double-feeds or misfeeds may occur.

5. **Place the paper in the tray.**

6. **Push the paper tray back in.**
   
   Push the upper paper tray in completely.

**Note**

- Do not load paper higher than the line on the tray (up to 250 sheets).
- Make sure that the paper fits under the tab on the right side of the tray.
- Make sure the stack of paper is straight before loading it. When adding paper, take the remaining paper out and combine it into a single stack with the new paper.

**Note**

If the size of the loaded paper is different from the size shown in the display, be sure to follow the procedure in "CHANGING THE PAPER SIZE SETTING OF A TRAY" (page 21) to change the paper size setting of the tray.
Loading paper in the bypass tray

1 Open the bypass tray.

Pull out the bypass tray extension to load 8-1/2" x 14" and 11" x 17" (B4 and A3) size paper.

2 Set the bypass tray guides to the paper width.

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

Make sure that the print side of the paper is face down. To prevent a misfeed, verify once more that the bypass tray guides are adjusted to the width of the paper.

If you loaded paper in the bypass tray, press the [PAPER] key to select the bypass tray.

Important points when inserting paper in the bypass tray

- Up to 100 sheets of standard copy paper can be set in the bypass tray.
- Be sure to place 5-1/2" x 8-1/2" (A6 and B6) size paper and envelopes horizontally as shown in the following diagram.

- When loading envelopes, make sure that they are straight and flat and do not have loosely glued construction flaps (not the closure flap).
- Special papers except SHARP recommended transparency film, labels, and envelopes must be fed one sheet at a time through the bypass tray.
- 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. The paper to be added must be the same size and type as the paper already in the tray.
- Do not use paper that is smaller than the original. 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.

Envelopes

Do not use the following envelopes, as 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.
CHANGING THE PAPER SIZE SETTING OF A TRAY

If the size of the loaded paper is different from the size shown in the display, follow the steps below to change the paper size setting of the tray.

The paper size setting cannot be changed during copying, printing, fax printing (when the fax option is installed), or interrupt copying, or when a misfeed has occurred. However, if the machine is out of paper or out of toner, the paper size setting can be changed during copying, printing, and fax printing.

See “PAPER” (page 18) for information on the specifications for the types and sizes of paper that can be loaded in the paper trays.

The paper size cannot be set for the bypass tray.

1 Press the [SPECIAL FUNCTION] key.

The special function screen will appear.

The screen shown above is the copy mode screen.

2 Press the [▼] or [▲] key to select "PAPER SIZE SET".

3 Press the [OK] key.

The paper size setting screen will appear.

Note

[1]: Shows tray “1”.
[2]: Shows tray “2”.
For the paper trays and tray numbers, see “PAPER” on page 18.

4 Press the [▼] or [▲] key to select the paper tray for which the paper size is being changed.

Example: Tray 2

5 Press the [▼] key.

The cursor moves to the paper size selection position on the right.

6 Press the [▼] or [▲] key to select the paper size.

Example: Selecting 8-1/2” x 14” size

7 Press the [OK] key.

A message asking you to confirm the new paper size setting will appear.

8 Press the [OK] key.

The selected paper size will be stored and the display will return to the base screen.

Note

Affix the paper size label for the paper size selected in step 6 to the label position on the right end of the tray.

DUPLEX

SPECIAL FUNCTION

ACC.

DUPLEX SCAN

SPECIAL FUNCTION

SPECIAL MODES

ORIG. SIZE ENTER

PAPER SIZE SET

DISPLAY CONTRAST

GH

PQR

DUPLEX

SPECIAL FUNCTION

DUPLEX SCAN

SPECIAL FUNCTION

SPECIAL MODES

ORIG. SIZE ENTER

PAPER SIZE SET

DISPLAY CONTRAST

GH

PQR

OKBACK

PAPER SIZE SET

8 x11R     11x17

11x17     8 x14             8 x13             8 x11

12

12

12

12

Note
DISABLING (ENABLING) AUTO TRAY SWITCHING

When auto tray switching is enabled and paper runs out during copying or printing, the job will continue using paper from a different tray if that tray has the same size of paper in the same orientation. (This function does not operate when using the bypass tray or when a fax is being printed.) This function has been enabled at the factory. If you prefer to disable the function, follow the steps below.

1. Press the [SPECIAL FUNCTION] key.

   ![Special Function Screen]

   The special function screen will appear.

   The above screen appears in copy mode.

2. Select "PAPER SIZE SET" with the [▼] or [▲] key.

   ![Special Function Screen]

   The paper size setting screen will appear.

3. Press the [OK] key.

   ![Paper Size Setting Screen]

4. Press the [▼] key repeatedly until "AUTO TRAY SWITCHING" appears.

   ![Paper Size Setting Screen]

   Move the cursor to the lowest tray and then press the [▼] key again. The above screen will appear.

5. Press the [OK] key.

   ![Paper Size Setting Screen]

   When a checkmark does not appear in the checkbox, the auto tray switching function will not operate.

6. Press the [▲] key.

   ![Paper Size Setting Screen]

   You will return to the paper size setting screen.

   To re-enable auto tray switching, press the [OK] key in the screen of step 5 so that a checkmark appears.
AUDITING MODE

When auditing mode is enabled, a count is kept of the pages printed by each account. The page counts can be viewed in the display.

This function is enabled in the key operator programs. (For the counts in copy, print, and scan modes, see the "Key operator's guide". For the counts in fax mode, see the "Operation manual (for facsimile)" that accompanies the optional facsimile expansion kit.)

NUMBER OF ACCOUNTS IN AUDITING MODE

<table>
<thead>
<tr>
<th>Mode</th>
<th>Number of accounts</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>Same for copy, print, and scan modes</td>
<td>50 maximum</td>
</tr>
<tr>
<td>(2)</td>
<td>Fax</td>
<td>50 maximum</td>
</tr>
</tbody>
</table>

Note: The same account number can be assigned to (1) and (2).

USING AUDITING MODE

When auditing mode is turned on, the account number entry screen is displayed. Enter your account number (five-digit identification number) as explained below before performing a copy, fax, or scan operation.

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

   - As the account number is entered, the hyphens (-) change to asterisks (*). If you enter an incorrect digit, press [C] key and re-enter the correct digit.
   - When a valid account number is entered, the current count of the account will appear in the message display of the base screen. After 6 seconds (factory default setting), the base screen appears. (Page 18)
   - * In copy mode and print mode, the number of sheets remaining until the limit is reached is also shown if "ACCOUNT LIMIT" (see the "Key operator's guide") is enabled in the key operator programs.

Example: Copy mode

   Enter your account number.
   ACCOUNT #:----

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

   • If you enter a account number for copy mode that has also been programmed for fax mode, you can change to fax mode after completing the copy operation and continue with the fax operation without re-entering your account number.
   • If you enter an account number for copy mode that has not been programmed for fax mode, enter your account number for fax mode after you press the [FAX] key to change to fax mode.
   • If an invalid account number is entered in step 1, the account number entry screen reappears.
   • When "ACC. # SECURITY" (see the "Key operator's guide") in the key operator programs is enabled, a warning message will appear and operation will not be permitted for 1 minute if an invalid account number is entered 3 times in a row.

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

   If you are performing an interrupt copy job (page 63) when auditing mode is enabled, be sure to press the [INTERRUPT] key ( ), [CA] key, or [ACC.#-C] key ( ) when finished to exit interrupt mode.
This chapter explains general troubleshooting and maintenance procedures such as removing misfeeds, replacing the toner cartridge, and cleaning the machine, as well as troubleshooting for the copy function. For troubleshooting for the fax function, printer function, and scanner function, see the respective manuals for each function.

**TROUBLESHOOTING**

**MACHINE/COPYING PROBLEMS**

- The machine does not operate. .......................................................... 25
- Power is on but copying is not possible. ............................................... 25
- Copies are too dark or too light. ....................................................... 25
- Text is not clear in a copy. ............................................................. 25
- Blank copies.................................................................................. 25
- The paper size used for the copy is different from the selected paper size (part of the image is cut off or too much of the page is blank). ............................................................... 26
- Wrinkles appear in the paper or the image disappears in places. .......... 26
- Paper misfeed. ............................................................................ 26
- The original size is not automatically selected or the copy is not made on paper that matches the size of the original. .................................................................................. 27
- Copies are smudged or dirty. .......................................................... 27
- White or black lines appear on copies. .......................................... 27
- A tray's paper size setting cannot be set. ......................................... 27
- A copy job stops before it is finished. ............................................ 27
- Scanning of the original stops before it is completed. ...................... 27
- A light in the room flickers............................................................ 27

**INDICATORS AND DISPLAY MESSAGES** ...................................... 28

**REMOVING MISFEEDS** ........................................................ 29

**REPLACING THE TONER CARTRIDGE** ..................................... 35

**CHECKING THE TOTAL OUTPUT COUNT** ............................... 36

**CLEANING THE MACHINE** .................................................. 37

**ADJUSTING THE DISPLAY CONTRAST** .................................. 39
TROUBLESHOOTING

MACHINE/COPYING PROBLEMS

Check the following troubleshooting list before requesting service as many problems can be fixed by the user. If you are unable to solve the problem by checking the list, turn off the power switch, unplug the power cord.

Problems related to general use of the machine and copying are described below.

If a problem occurs in printer or scanner mode, see the "Operation manual (for printer and scanner)". If a problem occurs in fax mode, see the "Operation manual (for facsimile)" that accompanies the optional facsimile expansion kit.

If the message "Call for service. **-**" appears in the display, turn off the power switch, wait about 10 seconds, and then turn the power switch back on. If the message still appears after switching the power on and off several times, a failure may have occurred. In this case, promptly unplug the power cord and contact your dealer.

Note: Letters and numbers appear in **-** above. When you contact your Sharp dealer, please tell your dealer what numbers appear.

The following problems are related to the general operation of the machine and copying.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause and solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The machine does not operate.</td>
<td>The power cord is not plugged into a power outlet.</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>→ Plug the power cord into a grounded outlet.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The power switch is turned off.</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>→ Turn the power switch on.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The machine is warming up.</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>→ The machine requires about 45 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 &quot;Ready to copy.&quot; appears.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The front cover or the side cover is not completely closed.</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>→ Close the front cover or the side cover.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The machine is in auto power shut-off mode.</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>→ When auto power shut-off mode has activated, only mode key indicators are lit; all other indicators and the display are off. The machine returns to normal operation when any of the mode keys are pressed, a print job is received, a fax is received, or when scanning from a computer is started. * Except when print hold for the fax function is enabled.</td>
<td></td>
</tr>
<tr>
<td>Power is on but copying is not possible.</td>
<td>The COPY indicator is off.</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>→ Press the [COPY] key to set the machine to copy mode.</td>
<td></td>
</tr>
<tr>
<td>Copies are too dark or too light.</td>
<td>An appropriate exposure for the original has not been selected.</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>→ Select a suitable exposure mode with the [EXPOSURE] key. If &quot;TEXT&quot; or &quot;PHOTO&quot; is selected, set an appropriate exposure level with the [ ] or [ ] key.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>→ If the copy is too light or too dark even though &quot;AUTO&quot; was selected with the [EXPOSURE] key, adjust the automatic exposure level. The automatic exposure level is adjusted in &quot;EXPOSURE ADJUST&quot; (see the &quot;Key operator's guide&quot;) in the key operator programs.</td>
<td></td>
</tr>
<tr>
<td>Text is not clear in a copy.</td>
<td>The correct original type has not been selected in the copy exposure setting screen.</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>→ Change the exposure setting to &quot;TEXT&quot; with the [EXPOSURE] key.</td>
<td></td>
</tr>
<tr>
<td>Blank copies</td>
<td>The original is not placed face up in the SPF or face down on the document glass.</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>→ Place the original face up in the SPF or face down on the document glass.</td>
<td></td>
</tr>
<tr>
<td>Problem</td>
<td>Cause and solution</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
</tbody>
</table>
| The paper size used for the copy is different from the selected paper size (part of the image is cut off or too much of the page is blank). | The original was placed in the wrong position.  
→ Place the original correctly.  
An appropriate ratio was not used for the size of the original and the size of the paper.  
→ Press the [AUTO%] key to select the appropriate copy ratio based on the original and copy sizes.  
The size of paper loaded in the tray was changed without changing the tray’s paper size setting.  
→ The size of the paper loaded in the tray is different from the tray’s paper size setting. Set the tray’s paper size setting to the same orientation/size as the paper loaded in the tray. | 45   |
| Wrinkles appear in the paper or the image disappears in places.        | The size or weight of the paper being used is not within the specified range.  
→ Use copy paper within the specified range.  
The paper is curled or damp.  
→ Replace it 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. | 21   |
| Paper misfeed.                                                         | A paper misfeed has occurred.  
→ See "REMOVING MISFEEDS" to remove the paper misfeed.  
The size or weight of the paper being used is not within the specified range.  
→ Use copy paper within the specified range.  
The paper is curled or damp.  
→ Replace it 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.  
Paper is not loaded properly.  
→ Make sure the paper is properly loaded.  
A piece of paper remains in the machine (after a paper misfeed was removed)  
→ Remove all pieces of misfed paper.  
Too much paper is loaded in the tray.  
→ If the stack of paper is higher than the indicator line on the tray, remove some of the paper and reload so that the stack does not exceed the line.  
Several sheets of paper stick together.  
→ Fan the paper well before loading it.  
The guides on the bypass tray do not match the width of the paper.  
→ Adjust the bypass guides to the size of the loaded paper.  
The bypass tray extension is not pulled out.  
→ When loading a large size of paper, pull out the bypass tray extension.  
The bypass paper feed roller is dirty.  
→ Clean the roller.  
5-1/2” x 8-1/2” (A5) paper is loaded in tray 2 or in the 250-sheet or 2 x 250-sheet paper feed unit.  
→ 5-1/2” x 8-1/2” (A5) size paper must be loaded in tray 1 or the bypass tray. | 29   |

26
<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause and solution</th>
<th>Page</th>
</tr>
</thead>
</table>
| The original size is not automatically selected or the copy is not made on paper that matches the size of the original. | Was the SPF (or document cover) opened completely when the original was placed on the document glass?  
  → Open the SPF completely and then place the original on the document glass. Close the SPF (or document cover). | 45   |
| The original is curled or folded.                                      | The original size cannot be correctly detected if the original is curled or folded. Straighten the original.                                                                                                         | –    |
| The original has many solid black areas.                               | If the original includes solid black areas, the original size may not be detected automatically. Press the [SPECIAL FUNCTION] key and select "ORIG. SIZE ENTER" to specify the original size. | –    |
| The machine is directly exposed to sunlight.                           | Install in a location that is not exposed to sunlight.                                                                                                                                                    | –    |
| The original is smaller than 5-1/2" x 8-1/2" (A5) size.               | If the original is smaller than 5-1/2" x 8-1/2" (A5), the size cannot be detected. Follow the procedure in "USING THE BYPASS TRAY TO COPY A SPECIAL SIZE ORIGINAL" to make the copy. | 51   |
| The original is not a standard size.                                   | If the original is a small non-standard size, the size cannot be detected. Manually select a size close to the original size, or follow the procedure in "USING THE BYPASS TRAY TO COPY A SPECIAL SIZE ORIGINAL" to make the copy. | 51   |
| Copies are smudged or dirty.                                           | The document glass or the underside of the document cover/SPF is dirty.  
  → Clean these regularly.                                                                                                                | 37   |
| The original is smudged or blotchy.                                    | Use a clean original.                                                                                                                                   | –    |
| White or black lines appear on copies.                                 | The scanner glass for the SPF is dirty.  
  → Clean the long, narrow scanning glass.                                                                                                  | 37   |
| The transfer charger is dirty.                                         | Clean the transfer charger.                                                                                                                          | 38   |
| A tray's paper size setting cannot be set.                             | The COPY indicator is off.  
  → Press the [COPY] key to select copy mode.                                                                                                           | 14   |
| A copy job stops before it is finished.                                | A copy, print job, or received fax is being printed.  
  → Set the paper size after copying or printing is complete.                                                                                   | 16   |
| The machine has stopped temporarily due to a paper misfeed.            | Remove the misfeed and then set the paper size.                                                                                                     | 29   |
| An interrupt copy job is in progress.                                  | Set the paper size after the interrupt copy job is finished.                                                                                            | 63   |
| A copy job stops before it is finished.                                | The paper output tray is full.  
  → Copying stops temporarily during a copy each time 250 sheets (150 sheets when a job separator tray kit is installed) are output. Remove the copies from the tray and press the [OK] key to resume copying. | –    |
| The tray is out of paper.                                              | Load paper.                                                                                                                                              | 18   |
| Scanning of the original stops before it is completed.                | The display shows "Memory is full.".  
  → See "INDICATORS AND DISPLAY MESSAGES".                                                                                                         | 28   |
| A light in the room flickers.                                          | The same outlet is being used for the light and the machine.  
  → Connect the machine to a dedicated power outlet which is not shared with other electric appliances.                                              | –    |
## INDICATORS AND DISPLAY MESSAGES

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

<table>
<thead>
<tr>
<th>Message</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>🧑 (Maintenance icon)</td>
<td>It is time for regular maintenance. Contact your SHARP service center.</td>
</tr>
<tr>
<td>☢ (Developer replacement required icon)</td>
<td>Developer is required. Contact your SHARP service center as soon as possible.</td>
</tr>
<tr>
<td>⚠ Maintenance required. Call for service.</td>
<td>Maintenance required soon. Contact your SHARP service center.</td>
</tr>
<tr>
<td>⚠ Call for service. ⋆⋆⋆</td>
<td>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 (&quot;⋆⋆⋆⋆&quot;), turn off the power, and promptly contact your SHARP service center.</td>
</tr>
<tr>
<td>⚠ Check the toner cartridge.</td>
<td>Check to see if the toner cartridge has been installed properly.</td>
</tr>
<tr>
<td>Remove paper from the output tray and press [OK].</td>
<td>The number of sheets in the output tray (center tray or top tray) has reached the limit. Remove the paper.</td>
</tr>
<tr>
<td>⚠ Load ⋆⋆⋆ paper into tray ⋆.</td>
<td>The paper size specified for the tray is different from the actual size. (Page 21)</td>
</tr>
<tr>
<td>Memory is full.</td>
<td>The memory became full while scanning the originals. Press the [START] key (_oriented) to copy only the originals that have been scanned, or press the [CA] key to cancel the job.</td>
</tr>
</tbody>
</table>

<⋆>: Tray number  
<⋆⋆>: Size of paper that should be loaded
REMOVING MISFEEDS

When a misfeed occurs during copying, the message "⚠ Clear paper path." and the location of the misfeed will appear. Check the location and remove the misfeed.

The paper may tear when you remove a misfeed. In this event, be sure to remove all torn pieces of paper from the machine, taking care not to touch the photoconductive drum (the green part). Any scratches or damage to the surface of the drum will cause dirty copies.

First check the misfeed location.

1. Removing original misfeeds from each location.
   - **Check location A**
     Open the feeding roller cover and gently remove the misfed original from the document feeder tray. Close the feeding roller cover.
   - **Check location B**
     Open the SPF and rotate the two release rollers in the direction of the arrow to feed the original out.
   - **Check location C**
     Carefully remove the misfed original from the exit area.

   - **Check location C**
     [When using the RSPF:] If the misfed original cannot be easily removed from the exit area, open the moveable part of the document feeder tray, remove the reversing tray, and then remove the original.

   - **Check location C**
     After removing a misfed original from the exit area, be sure to replace the reversing tray and moveable part of the document feeder tray.

* The illustration shows misfeed locations in the AR-M207 (when the RSPF is installed).

ORIGINAL MISFEED IN THE SPF

If an original misfeeds in the SPF, follow the steps below to remove the misfed original.

Check locations A, B, and C in the diagram at left to remove the original.
2 Open and close the SPF.

Opening and closing the cover clears the misfeed display. Copying cannot be resumed until this step is performed.

A message may appear indicating the number of originals which must be returned to the document feeder tray. Return the originals to the document feeder tray and press the [START] key ( ).

MISFEED IN THE BYPASS TRAY

1 Carefully remove the misfed paper from the bypass tray.

2 Grasp the side cover handle and gently open and close the side cover.

The message " △ Clear paper path." will be cleared and copying will be possible.

If the message does not clear, check again to make sure that no pieces of paper remain.
MISFEED IN THE MACHINE

To remove a paper misfeed from the machine, the bypass tray and then the side cover must be opened. Check whether the misfeed occurred in A, B, or C below and then follow the misfeed removal procedure for that location.

1 Open the bypass tray and then the side cover.

2 Determine where the misfeed occurred.

Location C
If paper is misfed here, go to “Misfeed in C” (page 33).

Location A
If paper is misfed here, go to "Misfeed in A" (below).

Misfeed in A

1 Open the front cover.

Push gently on both ends of the front cover to open it.

2 Turn the roller rotating knob in the direction of the arrow to remove the misfed paper.

Be careful not to tear the misfed paper during removal.

Roller rotating knob

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

Warning

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.

Note

• When closing the front cover, gently hold both ends.
• When closing the side cover, hold the handle.
• If the message does not clear, check again to make sure that no pieces of paper remain.

3 Close the front cover and the side cover.

The message " ▲ Clear paper path." will be cleared and copying will be possible.

Location B
If paper is misfed here, go to “Misfeed in B” (page 32).
Misfeed in B

1. Open the front cover.
   - Push gently on both ends of the front cover.

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

3. Lower the right and left fusing unit release levers and remove the misfed paper.
   - Be careful not to tear the misfed paper during removal.

4. Lift the fusing unit release levers.

5. Close the front cover and the side cover.
   - The message "Clear paper path." will be cleared and copying will be possible.

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

**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 allow unfixed toner on the misfed paper to soil your hands or clothes.

**Note**
- When closing the front cover, gently hold both ends.
- When closing the side cover, hold the handle.
- If the message does not clear, check again to make sure that no pieces of paper remain.
TROUBLESHOOTING AND MAINTENANCE

Misfeed in C

1 Lower (1) in the illustration, open the fusing unit paper guide, and remove the misfed paper. Be careful not to tear the misfed paper during removal.

2 If the misfed paper cannot be removed by the previous step, remove it from the paper output area. Be careful not to tear the misfed paper during removal.

3 Close the side cover. The message “Clear paper path.” will be cleared and copying will be possible.

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

Note
• When closing the side cover, hold the handle.
• If the paper was torn, make sure that no torn pieces remain in the machine.
• If the message does not clear, check again to make sure that no pieces of paper remain.

MISFEED IN TRAY 1

Note
Make sure that there is no misfed paper in the tray before pulling it out. (Page 31)

1 Pull out tray 1 and remove the misfed paper. Be careful not to tear the misfed paper during removal.

2 Open and close the side cover. The message “Clear paper path.” will be cleared and copying will be possible.

3 Gently push tray 1 into the machine. Push the tray in completely.

Note
• When closing the side cover, hold the handle.
• If the message does not clear, check again to make sure that no pieces of paper remain.
**MISFEED IN TRAY 2**

- Make sure that there is no misfed paper in the tray before pulling it out. (Page 31)
- Also use the following procedure to remove misfeeds that occur in the 250-sheet paper feed unit and the 2 x 500-sheet paper feed unit.

**1 Open the side cover.**

Grasp the handle to open the side cover.

**2 Remove the misfed paper.**

Be careful not to tear the misfed paper during removal.

**3 If there was no misfed paper in step 2, pull out tray 2 and remove the misfed paper.**

Be careful not to tear the misfed paper during removal.

**4 Gently close the side cover.**

The message " ▲ Clear paper path." will be cleared and copying will be possible.

**5 Gently push tray 2 into the machine.**

Push the tray in completely.

---

**Note**

If the message does not clear, check again to make sure that no pieces of paper remain.

---

2 x 250-sheet paper feed unit (AR-D25)
REPLACING THE TONER CARTRIDGE

When the toner replacement icon ( ) appears, little toner remains. Obtain a replacement cartridge as soon as possible. When the message " Add toner. Can not copy or print." appears in the display, the toner cartridge must be replaced before copying can be resumed. Follow the steps below to replace the toner cartridge.

1 Open the front cover.
   Push gently on both ends of the front cover to open it.

2 Pull the toner cartridge out while pressing on the toner cartridge lock release lever.
   When pulling out the toner cartridge, place one hand on the green part of the cartridge.

3 Remove the new toner cartridge from the bag. Grasp the cartridge on both sides and shake it horizontally four or five times. After shaking the cartridge, remove the tape.

4 While pressing down on the toner cartridge lock release lever, insert the toner cartridge along the guides all the way in.

5 Remove the tape and then pull the shutter out of the toner cartridge. Discard the shutter.

6 Close the front cover.
   The toner cartridge replacement required icon ( ) will no longer appear and copying will be possible.

Note
- During a long copy run or when copying originals with many dark areas, the message "Toner replenishment in progress." may appear and copying will stop even though toner remains. The machine will feed toner for about 2 minutes. When the START indicator lights up, press the [START] key ( ) to resume copying.
- When the toner cartridge replacement required icon ( ) appears in the display, little toner remains and thus copies may be faint.

Caution
- 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 contained in the box of the new cartridge.
- Do not throw the toner cartridge into a fire. Toner may fly and cause burns.
- Store toner cartridges out of the reach of small children.

Warning
- Even after a new toner cartridge is installed, the toner cartridge replacement required indicator ( ) may still appear, indicating that copying cannot be resumed (toner is not fed sufficiently). In this case, open and close the front cover. The machine will feed toner again for about two minutes and then copying can be resumed.
- Before closing the front cover, make sure that the toner cartridge is correctly installed.
- When closing the front cover, gently hold both ends.
CHECKING THE TOTAL OUTPUT COUNT

To check the total number of pages output in copy, print, and fax modes and the total scan count in scanner mode, hold down the [COPY] key when the machine is in the standby state. The counts will appear while the key is held down. The total output count and the total scan count can be used as a guideline for cleaning. When the total output count and the total scan count exceed “999,999”, the counts return to “0”.

- An 11” x 17” or A3 page is counted as two pages.
- Each two-sided sheet that is output is counted as two pages. (An 11” x 17” or A3 sheet is counted as four pages.)
- Blank copies and blank prints are included in the count.
- If the last page of a two-sided printing job is blank, it is not included in the count.
CLEANING THE MACHINE

CLEANING THE DOCUMENT GLASS AND SPF/DOCUMENT COVER

If the document glass, SPF, underside of the document cover, or the scanner for originals coming from SPF (A) (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.

Wipe with a clean, soft cloth. If necessary, moisten the cloth with water or a small amount of neutral detergent. When finished, wipe dry with a clean cloth. Do not use thinner, benzene, or similar volatile cleaning agents.

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

Cleaning the original scanning glass (only when a SPF is installed)

If white or black lines appear in copies made with using the SPF, use the provided glass cleaner to clean the original scanning glass. (If white or black lines appear in copies, printed pages, or printed fax pages when the SPF is not used, see "CLEANING THE TRANSFER CHARGER" on page 38.

1 Open the SPF and take out the glass cleaner.

2 Clean the original scanning glass with the glass cleaner.

3 Return the glass cleaner to its original position.

CLEANING THE BYPASS TRAY PAPER FEED ROLLER

If misfeeds occur frequently when feeding postcards, envelopes, or heavy paper through the bypass tray, wipe the surface of the paper feed roller with a soft, clean cloth dampened with alcohol or water.
CLEANING THE TRANSFER CHARGER

If white or black lines appear in copies or the image is blotchy, the transfer charger may be dirty. Follow the steps below to clean the charger.

1. Turn the power switch off.

2. Open the bypass tray and the side cover.

3. While lifting the handle, gently pull out tray 1.

4. Take out the charger cleaner.

5. Place the charger cleaner on the transfer charger and gently slide the cleaner in the direction indicated by the arrow two or three times.

6. Return the charger cleaner to its original position.

7. Close the tray and side cover.

8. Turn the power switch to the "ON" position.

Note: If the sheet metal on the transfer charger is smudged with toner, wipe it with a soft, clean cloth.

Slide the charger cleaner from one end to the other end along the groove of the transfer charger. If the cleaner is stopped it reaches the other end or if the direction of movement is reversed, smudges may appear on copies.
ADJUSTING THE DISPLAY CONTRAST

The contrast of the display can be adjusted as explained below.

1 Press the [SPECIAL FUNCTION] key.

The special function screen will appear.

2 Select "DISPLAY CONTRAST" with the [▼] or [▲] key.

3 Press the [OK] key.

The display contrast adjustment screen will appear.

4 Adjust the contrast with the [◄] or [►] key.

To reset the contrast to the default setting, press the [C] key.

5 Press the [SPECIAL FUNCTION] key.

You will return to the base screen.
Optional equipment and supplies are explained in this chapter. To purchase optional equipment and supplies, contact your dealer or SHARP service.

## OPTIONAL EQUIPMENT

Convenient optional equipment can be installed on the machine as needed.

### Note
- 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.
- Peripheral devices are normally optional, but are incorporated in some models as standard equipment.

<table>
<thead>
<tr>
<th>Optional Equipment</th>
<th>AR-M162</th>
<th>AR-M207</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reversing single pass feeder (AR-RP6N)</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Single pass feeder (AR-SP6N)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Document cover (AR-VR5)</td>
<td>Standard</td>
<td>Yes</td>
</tr>
<tr>
<td>250-sheet paper feed unit (AR-D24)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2 x 250-sheet paper feed unit (AR-D25)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Job separator tray kit (AR-TR4)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Dual function board (AR-EB9)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>256MB expansion memory board (AR-SM5)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Facsimile expansion kit (AR-FX11)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>8MB fax memory (AR-MM9)</td>
<td>Yes*2</td>
<td>Yes*2</td>
</tr>
<tr>
<td>Network expansion kit (AR-NB3)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>PS3 expansion kit (AR-PK1/N)</td>
<td>Yes*1</td>
<td>Yes*1</td>
</tr>
<tr>
<td>Barcode font kit (AR-PF1)</td>
<td>Yes*1</td>
<td>Yes*1</td>
</tr>
<tr>
<td>Flash memory kit (AR-PF2)</td>
<td>Yes*1</td>
<td>Yes*1</td>
</tr>
</tbody>
</table>

Yes: Can be installed.   No: Cannot be installed.

*1 The network expansion kit (AR-NB3) must be installed.
*2 The facsimile expansion kit (AR-FX11) must be installed.
REVERSING SINGLE PASS FEEDER / SINGLE PASS FEEDER

For the names of the parts of the RSPF / SPF, see "PART NAMES AND FUNCTIONS" (page 12).

Specifications

<table>
<thead>
<tr>
<th>Acceptable originals</th>
<th>Weight</th>
<th>AR-SP6N</th>
<th>AR-RP6N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original sizes</td>
<td>15 lbs. to 24 lbs. (56 g/m² to 90 g/m²)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity</td>
<td>5-1/2&quot; x 8-1/2&quot; x 11&quot; x 17&quot; (A5 to A3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detectable original sizes</td>
<td>5-1/2&quot; x 8-1/2&quot; x 11&quot;, 8-1/2&quot; x 11&quot;R, 8-1/2&quot; x 14&quot;, 11&quot; x 17&quot; (A5, B5, B5R, A4, A4R, B4, A3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>11.1 lbs. (5.0 kg)</td>
<td>12.0 lbs. (5.4 kg)</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>22-61/64&quot; (W) x 17-9/64&quot; (D) x 5-1/4&quot; (H) (583 mm (W) x 435 mm (D) x 133 mm (H))</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*1 Two-sided scanning is not possible.
*2 During one-sided copying

250-SHEET PAPER FEED UNIT / 2 X 250-SHEET PAPER FEED UNIT

- The 250-sheet paper feed unit provides a tray that can hold 250 sheets (20 lbs. (80 g/m²)) of plain paper.
- The 2 x 250-sheet paper feed unit provides two trays that can each hold 250 sheets (20 lbs. (80 g/m²)) of plain paper.

Loading paper in the 250-sheet paper feed unit / 2 x 250-sheet paper feed unit

The method of loading paper is the same as for the paper trays on the machine (see the explanation on page 18).

Note: If you change the size of paper loaded in the tray, you must change the tray’s paper size setting. Change the setting as explained in "CHANGING THE PAPER SIZE SETTING OF A TRAY" on page 21.

Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>AR-D24</th>
<th>AR-D25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper size</td>
<td>8-1/2&quot; x 11&quot;R, 8-1/2&quot; x 11&quot;R, 8-1/2&quot; x 13&quot;, 8-1/2&quot; x 14&quot;, 11&quot; x 17&quot;, B5, B5R, A4, A4R, B4, A3</td>
<td>Approximately 250 sheets (20 lbs. (80 g/m²)) x 1 tray</td>
</tr>
<tr>
<td>Paper capacity</td>
<td>Approximately 250 sheets (20 lbs. (80 g/m²)) x 1 tray</td>
<td>Approximately 250 sheets (20 lbs. (80 g/m²)) x 2 trays</td>
</tr>
<tr>
<td>Paper weight</td>
<td>15 lbs. to 24 lbs. (56 g/m² to 90 g/m²)</td>
<td>Supplied from the machine</td>
</tr>
<tr>
<td>Power supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>23-15/64&quot; (W) x 16-27/64&quot; (D) x 3-15/32&quot; (H) (590 mm (W) x 471 mm (D) x 88 mm (H))</td>
<td>23-15/64&quot; (W) x 16-27/64&quot; (D) x 6-27/32&quot; (H) (590 mm (W) x 471 mm (D) x 173.5 mm (H))</td>
</tr>
<tr>
<td>Weight</td>
<td>11.0 lbs. (5.0 kg)</td>
<td>22.0 lbs. (10.0 kg)</td>
</tr>
</tbody>
</table>
DUAL FUNCTION BOARD

A dual function board can be installed to add a variety of copy functions and enable use of the printer driver for the dual function board, which is a more advanced printer driver than the standard printer driver. For copy functions that can be used, see “CONVENIENT COPY FUNCTIONS” (page 64).

Specification

<table>
<thead>
<tr>
<th>Model</th>
<th>AR-EB9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Added functions</td>
<td>Sort copy, 2 in 1 / 4 in 1 copying, rotation copy, border erase copying, margin copying, card shot, USB 2.0 port (Hi-speed) printer function for the dual function board, ROPM function, High-speed data transfer</td>
</tr>
<tr>
<td>Electronic sort compression method</td>
<td>JBIG</td>
</tr>
<tr>
<td>Electronic sort memory</td>
<td>16 MB</td>
</tr>
<tr>
<td>Electronic sort scannable pages</td>
<td>100 standard 8-1/2&quot; x 11&quot; (A4) originals</td>
</tr>
</tbody>
</table>

STORAGE OF SUPPLIES

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

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.

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.

Supply and Consumables

The supply of spare parts for a repair of the appliance is guaranteed for at least 7 years following the termination of production. Spare parts are those parts of the apparatus which may break down within the scope of the ordinary use of the product - whereas those parts which normally exceed the life of the product are not to be considered as spare parts. Consumables too, are available for 7 years following the termination of production.
Part 2: Copier Operation
This chapter explains the basic procedures for making copies, including selection of the copy ratio and other copy settings.

NORMAL COPYING

This section explains how to make a regular copy. If "Auditing mode" has been enabled (page 23), enter your 5-digit account number.

Copying from the document glass

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

Align the upper left-hand corner of the original with the tip of the ◆ mark. The original size is automatically detected.

An original up to 11” x 17” (A3) can be placed on the document glass.

2 Close the SPF.

If the original is a non-standard size or the size was not detected correctly, see "SELECTING THE ORIGINAL SIZE" (page 50).

3 Make sure that the desired paper tray is selected.

Ready to copy.

8 x 11

100%

8 x 11 AUTO

To load paper, see "LOADING PAPER" (page 18).

Note

• If the auto paper select function has been disabled in the key operator programs (see the "Key operator's guide"), use the [PAPER] key to select the desired paper size.
• If you wish to use a size of paper different from the size automatically selected by the machine, use the [PAPER] key to select the desired paper size.
• 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.
• To make a copy of a small original such as a card, follow the procedure in "USING THE BYPASS TRAY TO COPY A SPECIAL SIZE ORIGINAL" (page 51).
• To use the bypass tray, select it manually.

4 Set the number of copies.

If you are making two or more copies each of multiple original pages, you can select the sort function to collate the copies into sets. (Page 64)
COPY FUNCTIONS

5 Press the [START] key (③) to begin copying.

The copy will be delivered to the center tray.

Copying from the SPF

1 Open the SPF and make sure that an original has not been left on the document glass. Gently close the SPF.

2 Adjust the original guides to the size of the original(s).

3 Place the original(s) face up in the document feeder tray.

The original size appears in the display and the most suitable paper size is automatically selected.

Insert the stack into the document feeder tray until it stops.

• If the original is a non-standard size or the size was not detected correctly, see "SELECTING THE ORIGINAL SIZE" (page 50).
• If the auto paper select function has been disabled in the key operator programs (see the "Key operator's guide"), use the [PAPER] key to select the desired paper size.
• To copy onto paper of a different size, press the [PAPER] key and select the desired paper size.
• Paper in a different orientation from the original may 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.
• To use the bypass tray, select it manually.
• Do not place originals of different sizes together in the document feeder tray. This may cause misfeeds.

4 Set the number of copies.

5 Press the [START] key (③) to begin copying.

The copies are delivered to the center tray.

The default output mode for copying from the SPF is sort mode. (Page 64)

The output mode can be changed using the automatic sort selection setting in the key operator programs. (See the "Key operator's guide").

Note

• The center tray can hold a maximum of 250 sheets (150 sheets when the job separator tray kit is installed).
• About one minute after copying ends, “Auto clear” (page 18) activates and restores the copy settings to the default settings. The setting for “Auto clear” can be changed in the key operator programs. (See the "Key operator's guide").
• To cancel a copy job in progress, press the [C] key.
• Differences in copy conditions may cause the position of the printed copy image to vary even when the copies are of the same original on the same paper. For more information, see "Points concerning the position of the printed copy image" on page 47.

Note

• The center tray can hold a maximum of 250 sheets (150 sheets when the job separator tray kit is installed).
• About one minute after copying ends, “Auto clear” (page 18) activates and restores the copy settings to the initial settings. The duration of time after which “Auto clear” clears the copy settings can be changed in the key operator programs. (See the "Key operator's guide").
• To stop copying in the middle of a run, press the [C] key. If you find it difficult to remove the original from the document feeder tray, open the feeding roller cover before removing the original. If you pull out the original without opening the feeding roller cover, the original may become dirty.

Stream feeding mode

If stream feeding mode has been enabled in the key operator programs (see the "Key operator's guide"), the message “Set originals for stream feeding.” will appear in the display for 5 seconds after all originals have been fed from the SPF. Any new originals placed in the SPF while this message appears will be fed and copied automatically.
Auto paper select mode

When auto paper select mode is enabled, "AUTO" appears in the paper size display. This function automatically selects paper that is the same size as the original (5-1/2" x 8-1/2", 8-1/2" x 11", 8-1/2" x 11"R, 8-1/2" x 13", 8-1/2" x 14", 11" x 17", A5, B5, B5R, A4, A4R, B4, A3 paper).

- If a zoom setting is selected after placing the original, the paper size that is appropriate for the zoom setting will be automatically selected.
- Auto paper select mode is canceled if the auto zoom select function (page 52) is enabled or if a paper tray is selected with the [PAPER] key. Auto paper select resumes operation when the [CA] key is pressed or when "Auto clear" activates. Auto paper select mode can be disabled in the key operator programs. (See the "Key operator's guide".)

Removing the document cover

To copy large originals like newspapers, remove the document cover. To remove the cover, lift it straight up as shown. To replace the cover, do the reverse. The SPF cannot be removed.

Copying books or originals with folds or creases

Press down on the SPF (or document cover) while copying as shown. If the SPF (or document cover) is not completely closed, shadows may appear on the copy or it may be fuzzy. Straighten originals with folds or creases well before placing.

Originals that can be used in the SPF

Originals from 5-1/2" x 8-1/2" to 11" x 17" (A5 to A3) in size and 15 lbs. to 24 lbs. (56 g/m² to 90 g/m²) in weight can be used. A maximum of 40 pages can be placed at once. For originals that are 8-1/2" x 14" or larger (B4 or larger), a maximum of 30 pages can be placed at once.

- Make sure that there are no paper clips or staples on the original.
- Straighten curled originals before placing them in the document feeder tray. Curled originals may cause misfeeds.
- If the margin shift function is being used, the margin shift settings may need to be changed. (Page 68)

Originals that cannot be used in the SPF

The following originals cannot be used: These may cause misfeeds or smudging and unclear images.

- Transparencies, tracing paper, other transparent or translucent paper, and photographs.
- Carbon paper, thermal paper.
- Originales 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 on thermal transfer paper.

Points concerning the position of the printed copy image

Even if the same original is copied onto the same type of paper, differences in the original size, scanning location (document glass or document feeder tray), selected paper tray, enlargement/reduction ratio, and other conditions may cause the position of the printed copy image on the paper to vary.

As shown in the following example, when an original smaller than the paper size (for example, 5-1/2" x 8-1/2" original and 11" x 17" paper) is copied from the document glass, the position of the printed copy image on the paper is different when paper from tray 1 is used (1) and paper from the bypass tray is used (2).
MAKING A COPY DARKER OR LIGHTER

The copy exposure can be adjusted as needed to the original. Three exposure modes are available: "AUTO", "TEXT" and "PHOTO". When "TEXT" or "PHOTO" is selected, the exposure can be manually adjusted to 5 levels.

Auto

This is the default exposure mode. In this mode, the characteristics of an original being copied are "read" by the exposure system and exposure adjustments are made automatically. The exposure level is lowered for colored areas and background shadows.

Text/photo

TEXT: This mode enhances low density areas of an original and suppresses high-density background areas to make text more legible.

PHOTO: This mode provides clearer reproduction of halftones in photos.

1 Press the [EXPOSURE] key.

The copy exposure screen will appear.

2 Select the exposure mode that best suits the original with the [▼] or [▲] key.

The [EXPOSURE] key can also be pressed to select the exposure mode.

3 Adjust the exposure level as needed with the [▼] or [▲] key.

- The exposure level cannot be adjusted when "AUTO" is selected.
- For a darker image, press the [▲] key. For a lighter image, press the [▼] key.
- The default exposure levels for "TEXT" and "PHOTO" can be set in the key operator programs.

4 Press the [OK] key.

To return to AUTO mode, press the [EXPOSURE] key, select "AUTO" with the [▲] key, and press the [OK] key.

Note

Exposure level guidelines
1 to 2: Dark originals such as newspapers
3: Normal density originals
4 to 5: Text written in pencil or light color text

Note

When "PHOTO" is selected, "PHOTO MODE DEFAULT" in the key operator programs can be used to select the method for expressing halftones. (See the "Key operator's guide".)
SELECTING THE TRAY

By default the auto paper select function (page 47) operates, and thus the appropriate tray is automatically selected when the original is placed on the document glass or in the document feeder tray, or when the original size is specified. If you wish to use a tray other than the automatically selected tray (for example you wish to enlarge or reduce the copy or use the bypass tray), press the [PAPER] key to select the desired tray.

Auto tray switching

If the tray runs out of paper during copying and there is another tray with the same size of paper and the same feeding orientation (horizontal or vertical), the other tray is automatically selected and copying continues. Auto tray switching can be disabled if needed. (Page 22)

SETTING THE NUMBER OF COPIES

Press the numeric keys to set the number of copies.

• The set number of copies appears in the display. A maximum of 999 copies (factory default setting) can be set.
• A single copy can be made even if "0" is displayed.

Important note when making a large number of copies

If the number of sheets output to the center tray exceed its maximum capacity (250 sheets when a job separator tray kit is not installed, 150 sheets when a job separator tray kit is installed) during a copy job, the copy job will stop temporarily. If this happens, promptly remove the copies and press the [OK] key to resume copying. The copy job will step each time the number of sheets in the center tray reach its maximum capacity.

Before starting a long copy run, remove any sheets that remain in the center tray. During output of the copy job, exercise care as the job may stop frequently due to the center tray becoming full.
SELECTING THE ORIGINAL SIZE

If you loaded a non-standard size* original or the original size was not correctly detected, set the original size manually. Perform the following steps after placing the document in the document feeder tray or on the document glass.

1. Press the [SPECIAL FUNCTION] key.

   The special function screen will appear.

2. Select "ORIG. SIZE ENTER" from the menu with the [▼] or [▲] key.

   The original size selection screen will appear.

3. Press the [OK] key.

   The original size selection screen will appear.

4. Select the original size with the [▼] or [▲] key.

   The selected original size is highlighted.

   • To select an AB original size, press the [▼] key and go to step 6.
   • If you selected "SIZE INPUT", follow steps 4 through 6 of the procedure in "USING THE BYPASS TRAY TO COPY A SPECIAL SIZE ORIGINAL" (page 51) to set the horizontal and vertical dimensions of the original.

5. Press the [OK] key.

   You will return to the base screen and the selected original size will appear in the original size display.

Note

• Standard sizes:
The following sizes can be detected correctly: 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” (A3, B4, A4, A4R, A5). If a non-standard size original is placed (including special sizes), the closest standard size may be displayed, or the original size may not appear.

Selecting an AB original size

6. Select the original size with the [▼] or [▲] key.

   The selected original size is highlighted.

   To return to selection of inch original sizes, press the [▼] key to return to step 4.

7. Press the [OK] key.

   You will return to the base screen and the selected original size will appear in the original size display.

   To cancel an original size selection, press the [CA] key.
USING THE BYPASS TRAY TO COPY A SPECIAL SIZE ORIGINAL

When the bypass tray is being used for copying and an original that is placed on the document glass is detected as being a special size, the display will prompt the user to set the original size. To make a copy in this type of situation, follow the steps below.

1 Load paper in the bypass tray and place the original on the document glass.

2 Touch the [PAPER] key and then select the bypass tray.

A message will appear asking you whether you wish to set the original size or make the copy without setting it. To make a copy without setting the original size, press the [START] key (③). To set the original size, go to step 3.

3 Press the [OK] key.

The original size selection screen appears with "SIZE INPUT" selected.

4 Select inches or AB with the [▼] or [▲] key, and then select the original size with the [▼] or [▲] key.

5 Press the [OK] key.

If "SIZE INPUT" was selected in step 4:

The size entry screen appears and is ready for entry of the width of the original.

- Any number from 2-1/2" to 17" (64 mm to 432 mm) can be entered for the width, and any number from 2-1/2" to 11-5/8" (64 mm to 297 mm) can be entered for the length.
- The entered size is retained until the power is turned off, even if "SIZE INPUT" is selected again and the entry screen of step 5 is displayed.

If other than "SIZE INPUT" was selected in step 4:

You will return to the base screen. Go to step 8.

6 Select "X" (width) with the [▼] or [▲] key and enter the width with the [▼] or [▲] key, and then do the same for the length (Y).

7 Press the [OK] key.

You will return to the base screen.

8 Press the [START] key (③).

Copying begins.
REducing or eNLArGING A COpy

There are three ways to enlarge and reduce copies:
• Automatic selection of a ratio according to the paper size: Auto ratio selection
• Specifying a ratio from 25% to 400%: Preset ratios/zoom
• Selecting the vertical and horizontal ratios separately: XY zoom

When the SPF is being used, the zoom copy ratio range is 50% to 200%.

AUTOMATIC RATIO SELECTION

1 Place the original in the document feeder tray or on the document glass.

The original size will appear in the display. If the correct size does not appear, see "SELECTING THE ORIGINAL SIZE" (page 50).

2 Press the [PAPER] key to select the desired tray.

If the bypass tray is selected, automatic ratio selection cannot be used.

3 Press the [AUTO%] key.

The copy ratio will be automatically set.
• If the original and paper are in different orientations, the image is automatically rotated to match the paper orientation (rotation copy). However, if enlargement is selected for copying onto a paper size larger than 8-1/2" x 11" (A4), the image will not be rotated.
• Rotation of the image can be disabled in the key operator programs when reducing or enlarging an original. (See the "Key operator's guide").
• If the message "Image edge loss." is displayed, part of the original image may be cut off.

4 Set the number of copies and press the [START] key ( ).

• To cancel automatic ratio selection, press the [AUTO%] key again.
• When copying from the SPF, automatic ratio selection mode will automatically disable after the [START] key is pressed and the original is scanned.

MANUAL RATIO SELECTION (PRESET COPY RATIOS/ZOOM)

1 Place the original in the document feeder tray or on the document glass.

2 Press the [ZOOM] key.

Copy ratios that can be selected will appear.
3 Select a preset ratio with the [▼] or [▲] key, or set the ratio (zoom) with the [◄] or [►] key.

- [▲] key: Select a larger preset ratio
- [▼] key: Select a smaller preset ratio
- [◄] key: Decrease the ratio in increments of 1%
- [►] key: Increase the ratio in increments of 1%

- Preset reduction ratios are: 95%, 77%, 64%, 50% and 25% (86%, 81%, 70%, 50% and 25%). 25% can only be selected when the original is placed on the document glass.
- Preset enlargement ratios are: 121%, 129%, 141%, 200% and 400% (115%, 122%, 141%, 200% and 400%). 400% can only be selected when the original is placed on the document glass.
- Zoom ratios: Any ratio from 25% to 400% (50% to 200% when the original is placed in the document feeder tray) can be set in increments of 1%. You can use the [▼] or [▲] key to set the approximate ratio and then press the [◄] key to decrease the ratio or the [►] key to increase the ratio.
- To decrease or increase the zoom ratio rapidly, hold down the [◄] or [►] key. However, the value will stop at the preset reduction or enlargement ratios. To move beyond these ratios, release the key and then hold it down again. (Note that if the key auto repeat function has been disabled in the key operator programs, the ratio will not change when the key is held down. (See "DISABLE AUTO KEY REPEAT" in the "Key operator's guide").)
- To cancel a ratio setting, return the ratio to 100% with the [▼] or [▲] key.
- The [ZOOM] key can be pressed to return the ratio to 100%.

4 Press the [OK] key.

5 Make sure that the desired paper tray is selected.

If the auto paper select function has been enabled, the appropriate copy paper size will have been automatically selected based on the original size and the selected copy ratio. If the auto paper select function has been canceled or if you are copying onto a different size paper, use the [PAPER] key to select the paper tray with the desired paper size.

6 Set the number of copies and press the [START] key ( ).
SELECTING THE VERTICAL AND HORIZONTAL COPY RATIOS SEPARATELY

(XY zoom copying)

Separate ratio settings can be selected for the length and width of a copy.

Example: Reduction only in the horizontal direction

• This feature cannot be used with the 2 in 1 / 4 in 1 feature or card shot feature (when the dual function board is installed).
• To use the XY zoom feature and the dual page copy feature simultaneously, set the dual page copy feature first and then the XY zoom feature. (Enlargement cannot be set.)
• If automatic ratio selection has been selected, the XY zoom feature cannot be selected. If the XY zoom feature is selected, automatic ratio selection cannot be selected.
• Ratios that can be selected are 25% to 400% (50% to 200% when the SPF is used).

1 Place the original in the document feeder tray or on the document glass.

2 Press the [SPECIAL FUNCTION] key.

3 Press the [OK] key.

4 Select "XY ZOOM" with the [▼] or [▲] key.

5 Press the [OK] key.

6 Set the horizontal ratio with the [▼], [▲], [◄], or [►] keys.

A preset ratio can be selected with the [▼] or [▲] keys. The ratio can be adjusted in increments of 1% with the [◄] or [►] keys.
7 Press the * key.

The vertical ratio can now be selected.

8 Set the vertical ratio with the [▼], [▲], [◄], or [►] keys.
   A preset ratio can be selected with the [▼] or [▲] keys. The ratio can be adjusted in increments of 1% with the [◄] or [►] keys.
   To change the copy ratio in the horizontal direction again, press the * key.

9 Press the [OK] key.

You will return to the base screen.

10 Make sure that the desired paper tray is selected.
   If the auto paper select function has been enabled, the appropriate copy paper size will be automatically selected based on the original size and the selected copy ratios. Image rotation will take place if necessary.

11 Select any other copy settings as needed and press the [START] key ( ).

   If the [ZOOM] key is pressed when XY zoom ratios are set, the following screen appears.
   To cancel the XY zoom ratio settings, select "OFF" and press the [OK] key.
   To adjust the XY zoom copy ratios, select "ADJUST" and press the [OK] key.
TWO-SIDED COPYING

The machine is capable of the following types of automatic two-sided copying. The copy paper is turned over automatically, allowing two-sided copying to be accomplished with ease.

<table>
<thead>
<tr>
<th>Two-sided copy type</th>
<th>Model</th>
<th>AR-M162</th>
<th>AR-M207</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-sided originals to two-sided copies (using the SPF)</td>
<td></td>
<td>No</td>
<td>Yes*1</td>
<td>57</td>
</tr>
<tr>
<td>One-sided originals to two-sided copies (using the document glass)</td>
<td></td>
<td>No</td>
<td>Yes</td>
<td>58</td>
</tr>
<tr>
<td>Two-sided originals to two-sided copies (using the RSPF)</td>
<td></td>
<td>No</td>
<td>Yes*2</td>
<td>59</td>
</tr>
<tr>
<td>Two-sided originals to one-sided copies (using the RSPF)</td>
<td></td>
<td>No</td>
<td>Yes*2</td>
<td>60</td>
</tr>
</tbody>
</table>

*1 The optional single pass feeder (AR-SP6N) or reversing single pass feeder (AR-RP6N) is required.
*2 The optional reversing single pass feeder (AR-RP6N) is required.

• If you are using the AR-M162, see "TWO-SIDED COPIES USING THE BYPASS TRAY" on page 61.
• There are restrictions on the paper that can be used for automatic two-sided copying. See "Paper that can be used for automatic 2-sided printing" on page 18.
• Automatic two-sided copying is not possible when the bypass tray is used.
TWO-SIDED COPYING OF ONE-SIDED ORIGINALS

• Paper sizes that can be used are 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11", 8-1/2" x 11"R, A3, B4, A4, A4R, B5, B5R and A5.
• Automatic two-sided copying is not possible when the bypass tray is used.

Copying from the SPF

1 Make sure that an original does not remain on the document glass, and then adjust the original guides to the width of your originals and place the originals face up in the document feeder tray. If you placed an odd number of originals, the last copy will be one-sided.

2 Press the [DUPLEX] key.

3 Select "1 to 2" with the [▼] or [▲] key, or with the [DUPLEX] key.

4 If you wish to have the orientation of the image on the back of the copy paper be opposite the orientation of the image on the front, set "BINDING CHANGE" to "ON" with the [▼] or [▲] key.

5 Press the [OK] key.

6 Set the number of copies and press the [START] key ( ). To stop copying in the middle of a run, press the [C] key.
Copying from the document glass

1. Place the original for the front side of the copy on the document glass, and close the SPF.

2. Press the [DUPLEX] key.

3. Select "1 to 2" with the [▼] or [▲] key, or with the [DUPLEX] key.

4. If you wish to have the orientation of the image on the back of the copy paper be opposite the orientation of the image on the front, set "BINDING CHANGE" to "ON" with the [◄] or [►] key.

5. Press the [OK] key.

6. Make sure that the desired paper tray is selected.

7. Set the number of copies and press the [START] key ( ).

8. Remove the first original and then place the original for the back side of the copy on the document glass. Close the SPF and press the [START] key ( ).

- The copy will be delivered to the center tray.
- To cancel two-sided copying, press the [C] key.
- To cancel two-sided (duplex) copy mode, press the [DUPLEX] key to select "1 to 1" and then press the [OK] key.
- When making two-sided copies of an odd number of originals, touch the [READ-END] key ( ) after scanning the last original.
TWO-SIDED COPIES OF TWO-SIDED ORIGINALS (ONLY WHEN USING THE RSPF)

- Paper sizes that can be used are 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11", 8-1/2" x 11"R, A3, B4, A4, A4R, B5, B5R and A5.
- Automatic two-sided copying is not possible when the bypass tray is used.
- This copy function cannot be used in combination with dual page copy.

1. Make sure that an original does not remain on the document glass, and then adjust the original guides to the width of your originals and place the originals face up in the document feeder tray.


3. Select "2 to 2" with the [▼] or [▲] key, or with the [DUPLEX] key.

4. Press the [OK] key. You will return to the base screen.

5. Set the number of copies and press the [START] key ( ). To stop copying in the middle of a run, press the [C] key.

Note: Do not touch an original (A) that is on the reversing tray. Doing so may cause a misfeed.
ONE-SIDED COPIES OF TWO-SIDED ORIGINALS
(ONLY WHEN USING THE RSPF)

- Paper sizes that can be used are 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11", 8-1/2" x 11"R, A3, B4, A4, A4R, B5, B5R and A5.
- Automatic two-sided copying is not possible when the bypass tray is used.
- This copy function cannot be used in combination with dual page copy.

1 Make sure that an original does not remain on the document glass, and then adjust the original guides to the width of your originals and place the originals face up in the document feeder tray.

2 Press the [DUPLEX] key.

3 Select "2 to 1" with the [▼] or [▲] key, or with the [DUPLEX] key.

4 If you wish to have the orientation of the back image be opposite the orientation of the front image, set "BINDING CHANGE" to "ON" with the [▼] or [▲] key.

5 Press the [OK] key.

6 Set the number of copies and press the [START] key (③).

If the copies are to be bound at the top, reversing the orientations of the front and back images will result in a uniform orientation when the bound copies are viewed (note that this may depend on the orientation of the originals).

If you wish to have the orientation of the back image be opposite the orientation of the front image, set "BINDING CHANGE" to "ON" with the [▼] or [▲] key.

Do not touch an original (A) that is on the reversing tray. Doing so may cause a misfeed.
TWO-SIDED COPIES USING THE BYPASS TRAY

Follow the steps below to perform two-sided copying manually.

Example: Copying original A and original B onto both sides of the paper

1. Copy original A.

2. Place original B as shown below.

   Vertically-oriented original:
   If the original is oriented vertically, place it in the same orientation as original A.

   Horizontally-oriented original:
   Place in the opposite orientation (rotated 180 degrees) to that of original A.

3. Turn the copy of original A over, and without changing the position of the edge closest to you, insert it in the bypass tray.

4. Select the bypass tray with the [PAPER] key and then press the [START] key ( ).

The copies are delivered to the center tray.

If you are using the AR-M207

The AR-M207 is equipped standard with an automatic two-sided copying function that automatically turns over the paper. If paper in "Paper that can be used for automatic 2-sided printing" on page 18 is used, this enables easier two-sided copying than using the bypass tray. See "TWO-SIDED COPYING" on page 56.

Note

- Copies made on the back side of paper should always be made one sheet at a time using the bypass tray.
- Straighten curled or wavy paper before using it. Curled paper may cause misfeeds, creases, or a poor-quality image.
DUAL PAGE COPY

(Dual page copy)

The dual page copy function produces separate copies of open bound original pages. This function is convenient when you wish to make a separate copy of each page of a book or other bound document.

1. Place the original on the document glass, aligning the division between the pages with the size marker (see below). Close the SPF.

   - Copying will begin from the page to the right of the size marker.

   - To keep the copies in the correct page order when performing dual page copying over multiple pages, make sure that the original is always placed on the document glass with the smaller page number to the right.

2. Press the [SPECIAL FUNCTION] key.

   - The special function screen will appear.

3. Press the [OK] key.

   - The special modes screen will appear.

4. Select "DUAL PAGE COPY" with the [▼] or [▲] key.

   - A checkmark appears in the "DUAL PAGE COPY" checkbox in the special modes screen and you return to the base screen.

5. Press the [OK] key.

   - A checkmark appears in the "DUAL PAGE COPY" checkbox in the special modes screen and you return to the base screen.

6. Make sure that the paper tray with 8-1/2" x 11" (A4) paper is selected. 8-1/2" x 11"R (A4R) paper can also be used if rotation copying is possible in auto paper select mode.

7. Select any other copy settings as needed and press the [START] key (③).

   - To cancel dual page copy, select "DUAL PAGE COPY" (which has a checkmark) in the special modes screen once again and press the [OK] key.

- 8-1/2" x 11" (A4) paper can be used for dual page copying.
- When rotation copy is enabled, 8-1/2" x 11"R (A4R) paper can also be used.
- When used in combination with XY zoom copying, enlargement is not possible.
- Dual page copying cannot be used in combination with the following functions:
  - 2 in 1 / 4 in 1 copying
  - Center erase / Edge + Center erase
  - Enlargement
  - Automatic ratio selection
  - Card shot
  - 2-sided to 2-sided copy, 2-sided to 1-sided copy
  - Dual page copying cannot be selected when an original is placed in the SPF.
INTERRUPTING A COPY RUN

(Interrupt copying)

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

- Interrupt copying is not possible when the document glass is being used for a copy job and "NO SORT" is selected.
- When 2 in 1 or 4 in 1 is selected, interrupt copying is not possible.
- Sort copying, 2 in 1, and 4 in 1 (when the dual function board is installed) and automatic two-sided copying cannot be used for an interrupt copy job.

Configuring settings in the key operator programs, use as a scanner, and fax transmission are also not possible.

1 Press the [INTERRUPT] key ( ).

If the [INTERRUPT] key ( ) is pressed, copying will stop and the settings will temporarily return to the default settings after the copy in progress has been completed.

The INTERRUPT indicator will blink until the current copy run stops.

Note

If you press the [INTERRUPT] key ( ) when auditing mode is enabled, "Enter your account number." will appear in the display. Enter your account number using the numeric keys. The pages copied during interrupt copying will be added to the count of the entered account number. (See the "Key operator’s guide").

2 When the copy run stops, remove the previous original(s) and place the original(s) of the interrupt copy job.

3 Select copy settings as needed.

4 Set the number of copies and then press the [START] key ( ).

5 When the copy job is finished, press the [INTERRUPT] key ( ) to end interrupt mode and remove the original(s).

The INTERRUPT indicator will turn off, indicating that the interrupt function is no longer operating. The copy settings will automatically revert to the settings selected for the copy run before the run was interrupted.

6 Replace the previous original(s) and press the [START] key ( ).

The interrupted copy run will resume.

Note

The interrupt copies will be offset from the previous copies. (Offset function)
The offset function can be disabled in the key operator programs. (See the "Key operator’s guide").

(A): Copies made before the interrupt copy job
(B): Interrupt copies
(C): Copies made after the interrupt copy job
This chapter explains convenient copy functions that can be used when the dual function board (AR-EB9) is installed. Select convenient copy functions after pressing the [COPY] key to select copy mode.

# ROTATING THE IMAGE 90 DEGREES
(Rotation copy)

When "Auto paper select mode" or "automatic ratio selection" are in operation and the original is placed in a different orientation (vertical or horizontal) from the paper, the original image will be automatically rotated 90 degrees to enable correct copying onto the paper. This function is convenient for copying 8-1/2” x 14” or 11” x 17” (B4 or A3) originals, which can only be placed horizontally, onto paper that is loaded vertically. The rotation copy function is initially enabled. It can be disabled in the key operator programs. (See the "Key operator's guide").

- The rotation copy function cannot be used in combination with the margin shift function.
- Rotation copy will not operate when a copy is enlarged to a paper size greater than 8-1/2” x 11” (A4). In this case, place the original in the same orientation as the paper.
- Even if rotation copy is disabled in the key operator programs, rotation copy will function when the 2 in 1 or 4 in 1 function is selected (page 66).

![Rotation copy example](image)

**Note**

# SORT MODE

Copies of multiple original pages can collated into sets.

The dual function board can scan approximately 100 standard originals (8-1/2” x 11” (A4)), however, the number will vary for photos and other types of originals.

![Sort example](image)
1 Place the originals in the document feeder tray or the first original on the document glass.

If the originals are placed in the document feeder tray, sort mode will be automatically selected. This can be changed to no sort in the key operator programs. (See the “Key operator’s guide”.)

If the first original is placed on the document glass, no sort mode will be automatically selected.

2 Press the [OUTPUT] key.

The output mode selection screen will appear.

3 Select “NO SORT” or “SORT” with the [▼] or [▲] key, or with the [OUTPUT] key.

4 Press the [OK] key.

You will return to the base screen.

5 Select other copy settings as needed and press the [START] key (○).

If you placed the originals in the document feeder tray in step 1, copying will start. If you selected “SORT” in step 3 and placed the first original on the document glass, follow steps 6 and 7. Note that if you selected “NO SORT” in step 3, copying will begin.

6 When the START indicator lights, replace the original with the next original and press the [START] key (○).

Repeat step 6 until all originals have been scanned.

7 When all originals have been scanned, press the [READ-END] key (■).

• Copying will start.
• If the memory becomes full while the originals are being scanned, “Memory is full.” will appear in the display. To start copying the originals that have been scanned to that point, press the [START] key (○). To cancel the copy job, press the [CA] key.
• The optional memory board (AR-SM5) can be installed to increase the number of originals that can be scanned. The memory can be expanded up to a maximum of 272 MB (the amount expanded is 256 MB).

Offset function

This function offsets each set of copies from the previous set in center tray, making it easy to separate sets of copies. The offset function can be disabled in the key operator programs. (See the “Key operator’s guide”.)

Offset function enabled  Offset function disabled
COPYING MULTIPLE ORIGINALS ONTO A SINGLE SHEET OF PAPER (2 in 1 / 4 in 1 copy)

Multiple originals can be copied onto a single sheet of paper in a selected layout. This function is convenient when you wish to present multiple pages in a compact format, or show a view of all pages in a document.

One of two layouts can be selected for 2 in 1 copy, and one of four layouts can be selected for 4 in 1 copy. Border line selections are solid line, broken line, or none.

2 in 1 copy layouts

4 in 1 copy layouts

- 2 in 1 / 4 in 1 copy cannot be used in combination with the following functions. The function selected first will take precedence. However, 2 in 1 / 4 in 1 copy will take precedence over XY zoom.
  - Dual page copy, XY zoom, edge erase, margin shift, card shot
- A special paper size cannot be used for 2 in 1 / 4 in 1 copy.
- 2 in 1 / 4 in 1 copy cannot be selected for an interrupt copy job. Interrupt copying is not possible during a 2 in 1 / 4 in 1 copy job.
- An appropriate ratio setting will be automatically selected based on the original size, the paper size, and the selected number of images. When using the document glass, reduction is possible to 25%. When using the SPF, reduction is possible to 50%. Certain combinations of original size, paper size, and number of images may result in images being cut off.
- Even if "Rotation copy" is disabled in the key operator programs, the images may be rotated if needed depending on the orientation of the originals and the orientation of the paper.

1 Place the originals in the document feeder tray or the first original on the document glass.

2 Press the [PAPER] key to select the desired paper tray.
   The bypass tray cannot be selected.

3 Press the [SPECIAL FUNCTION] key.
   The special function screen will appear.

4 Press the [OK] key.
   The special modes screen will appear.
5 Select "2in1/4in1" with the [▼] or [▲] key.

6 Press the [OK] key.

The 2 in 1 / 4 in 1 selection screen will appear.

7 Select "2in1" or "4in1" with the [▼] or [▲] key.

8 Press the [OK] key.

The settings for 2 in 1 or 4 in 1 will appear.

9 Select the layout with the [▼] or [▲] key.

For the layouts that can be selected, see "2 in 1 copy layouts" or "4 in 1 copy layouts" on page 66.

10 Select the borderline setting with the [◄] or [►] key.

Select solid line, broken line, or none.

11 Press the [OK] key.

You will return to the base screen.

12 Select other copy settings as needed and then press the [START] key (⑥).

- The copy ratio will be set automatically.
- If you placed the originals in the document feeder tray, copying will start after all originals are scanned.
- If you placed the first original on the document glass, go to the next step.

13 When the START indicator lights, replace the original with the next original and then press the [START] key (⑥).

Repeat step 13 until all originals have been scanned.

- Copies will be output each time two originals for 2 in 1 copy or four originals for 4 in 1 copy have been scanned.
- To start copying before all originals have been scanned (after only one original has been scanned for 2 in 1 or after three originals or less have been scanned for 4 in 1), press the [READ-END] key (⑮).
- To cancel the 2 in 1 or 4 in 1 settings, select "OFF" in step 7.
CREATING MARGINS WHEN COPYING (Margin shift)

The margin shift function shifts the image to create a margin at the edge of the paper. By default the function creates a 1/2” (10 mm) margin at the left edge of the paper.

- You can select whether to create a margin at the top edge or at the left edge of the paper.
- Five selections are available for the margin width: 0", 1/4", 1/2", 3/4", 1" (0 mm, 5 mm, 10 mm, 15 mm, 20 mm).
  (The default setting is 1/2” (10 mm).)
- When making two-sided copies, a margin is created at the selected edge on the front side of the paper, and a margin is created on the back side of the paper.
- Margin shift cannot be used in combination with 2 in 1 / 4 in 1 copy (page 66).
- Margin shift cannot be used in combination with card shot (page 71).
- When margin shift is selected, rotating copying will not operate even if the condition for rotate copying is met.
- The default margin shift setting can be changed in the key operator programs. (See the “Key operator’s guide”.)

1 Place the original in the document feeder tray or on the document glass.
   • When a left-edge margin is selected and you are copying from the document feeder tray, place the original face up so that the margin edge is to the left.
   When a left-edge margin is selected and you are copying from the document glass, set the original face down so that the margin edge is to the right.
   • When a top-edge margin is selected, place the original with the margin edge toward the rear of the document feeder tray or the document glass.

2 Press the [SPECIAL FUNCTION] key.
   The function screen appears with “SPECIAL MODES” selected.

3 Press the [OK] key.
   The special modes screen will appear with "MARGIN SHIFT" selected.

4 Press the [OK] key.
   The settings for margin shift will appear.

5 Select the margin location with the [▼] or [▲] key and select the width with the [◄] or [►] key.
   • Select “DOWN” or “RIGHT” for the margin location.
   • If you select 0” (0 mm), the printed result is the same as when “OFF” is selected.

6 Press the [OK] key.
   You will return to the base screen.

7 Select other copy settings as needed and press the [START] key (⑤).
   To turn off the margin shift function, select the margin shift feature again and select “OFF”.
ERASING SHADOWS AROUND THE EDGES OF A COPY

This feature is used to erase shadows that appear around the edges of copies of books and other thick originals. (Edge erase)
The feature can also erase the shadow that appears down the center of books and other originals that open up. (Center erase)
Both the shadow lines around the edges of copies and the shadow at the center can be erased. (Edge + Center erase)

• Five selections are available for the erasure width: 0", 1/4", 1/2", 3/4", 1" (0 mm, 5 mm, 10 mm, 15 mm, 20 mm).
  (The default setting is 1/2" (10 mm).)
• Center erase / Edge + Center erase cannot be used in combination with dual page copy (page 62).
• Edge erase cannot be used in combination with 2 in 1 / 4 in 1 copy (page 66).
• Edge erase cannot be used when paper is fed from the bypass tray.
• Edge erase cannot be used in combination with card shot (page 71).
• Edge erase cannot be used when copying a special size original.
• Note that if the width of the erasure is too large, the edge of the image may be partially erased.
• The default setting for the erasure width can be changed. (See the "Key operator's guide").

1 Place the original in the document feeder tray or on the document glass.

2 Press the [SPECIAL FUNCTION] key.

3 Press the [OK] key.

4 Select "ERASE" with the [▼] or [▲] key.

5 Press the [OK] key.

6 Select the desired erase mode with the [▼] or [▲] key.

"EDGE", "CENTER" or "EDGE+CENTER" can be selected.
7 Select the erasure width with the [◄] or [►] key.
   If you select 0" (0 mm), the printed result is the same as when "OFF" is selected.

8 Press the [OK] key.
   You will return to the base screen.

9 Select other copy settings as needed and press the [START] key (③).
   To cancel an edge erase setting, return to the edge erase settings screen and select "OFF".
When copying a card, this function allows you to print the front and back sides of the card next to each other on a single sheet of paper. This function creates 2 in 1 images of the front and back side of the card and centers them on the paper.

- Paper cannot be fed from the bypass tray.
- The card shot function cannot be used in combination with margin shift, edge erase, dual page copy, 2 in 1 / 4 in 1 copy, and XY zoom copy.
- When card shot is used, the rotation copy function does not operate.

1. Place the original on the document glass.
2. Press the [SPECIAL FUNCTION] key. The special function screen will appear.
4. Select "CARD SHOT" with the [▼] or [▲] key.
5. Press the [OK] key. The card shot screen appears.
6. Select "X" (width) with the [▼] or [▲] key and enter the width with the [◄] or [►] key, and then do the same for the length (Y).
7. Press the [OK] key. You will return to the base screen.

The default values for the length and width that initially appear when this screen is displayed can be set in the key operator programs "CARD SHOT DEFAULT" in the "Key operator's guide".

Any number from 1" to 8-1/2" (25 mm to 210 mm) can be entered for the width, and any number from 1" to 8-1/2" (25 mm to 210 mm) can be entered for the length.
8 Press the [START] key ( ).

The front side of the card is scanned.

9 Turn the original over on the document glass.

10 Press the [START] key ( ).

Copying will start after both sides of the original have been scanned.
<table>
<thead>
<tr>
<th>Name</th>
<th>Digital Multifunctional System</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AR-M162</td>
</tr>
<tr>
<td></td>
<td>AR-M207</td>
</tr>
<tr>
<td>Type</td>
<td>Desktop</td>
</tr>
<tr>
<td>Photoconductive type</td>
<td>OPC drum</td>
</tr>
<tr>
<td>Document glass type</td>
<td>Fixed</td>
</tr>
<tr>
<td>Copy system</td>
<td>Laser electrostatic method</td>
</tr>
<tr>
<td>Originals</td>
<td>Sheets, bound documents, max. original size 11&quot; x 17&quot; (A3)</td>
</tr>
<tr>
<td>Copy sizes</td>
<td>Max. 11&quot; x 17&quot; (A3), min. 5-1/2&quot; x 8-1/2&quot; (A5) (5-1/2&quot; x 8-1/2&quot; (A5) can only be fed from tray 1 and the bypass tray)</td>
</tr>
<tr>
<td>Image loss:</td>
<td>Max. 5/32&quot; (4 mm) at top edge and bottom edge, combined maximum of approximately 11/64&quot; (6 mm)</td>
</tr>
<tr>
<td>Copying speed</td>
<td>9 copies/min. 11&quot; x 17&quot; (A3)</td>
</tr>
<tr>
<td></td>
<td>10 copies/min. 8-1/2&quot; x 14&quot; (B4)</td>
</tr>
<tr>
<td></td>
<td>11 copies/min. 8-1/2&quot; x 13&quot;</td>
</tr>
<tr>
<td></td>
<td>12 copies/min. 8-1/2&quot; x 11&quot;R (A4R)</td>
</tr>
<tr>
<td></td>
<td>14 copies/min. B5R</td>
</tr>
<tr>
<td></td>
<td>16 copies/min. 8-1/2&quot; x 11&quot;, 5-1/2&quot; x 8-1/2&quot; (A4, B5, A5)</td>
</tr>
<tr>
<td></td>
<td>10 copies/min. 11&quot; x 17&quot;</td>
</tr>
<tr>
<td></td>
<td>11 copies/min. A3</td>
</tr>
<tr>
<td></td>
<td>12 copies/min. 8-1/2&quot; x 14&quot;, 8-1/2&quot; x 13&quot; (B4)</td>
</tr>
<tr>
<td></td>
<td>14 copies/min. A4R</td>
</tr>
<tr>
<td></td>
<td>15 copies/min. 8-1/2&quot; x 11&quot;R</td>
</tr>
<tr>
<td></td>
<td>16 copies/min. B5R</td>
</tr>
<tr>
<td></td>
<td>20 copies/min. 8-1/2&quot; x 11&quot;, 5-1/2&quot; x 8-1/2&quot; (A4, B5, A5)</td>
</tr>
<tr>
<td>Continuous copying</td>
<td>1-999 copies (decrement type) (can be changed to 1-99 in the key operator programs)</td>
</tr>
<tr>
<td>First-copy time*1, *2</td>
<td>Approx. 7.2 s</td>
</tr>
<tr>
<td>Warm-up time*2</td>
<td>Approx. 45 sec.</td>
</tr>
<tr>
<td>Copy ratios</td>
<td>Variable: 25% to 400%, in 1% increments (total 376 steps) (50% to 200% when the SPF is used)</td>
</tr>
<tr>
<td></td>
<td>Fixed preset: 25%, 50%, 64%, 77%, 95%, 100%, 121%, 129%, 141%, 200%, 400% (25%, 50%, 70%, 81%, 86%, 100%, 115%, 122%, 141%, 200%, 400%) (25% and 400% only when the SPF is used)</td>
</tr>
<tr>
<td>Paper feeding</td>
<td>One automatic feeding paper tray (250 sheets) + bypass tray (100 sheets)</td>
</tr>
<tr>
<td></td>
<td>Two automatic feeding paper trays (250 sheets each) + bypass tray (100 sheets)</td>
</tr>
<tr>
<td>Fusing system</td>
<td>Heat rollers</td>
</tr>
<tr>
<td>Developer system</td>
<td>Dry development</td>
</tr>
<tr>
<td>Resolution</td>
<td>Scanning: 600 x 300 dpi, output: 600 x 600 dpi (AUTO/TEXT mode)</td>
</tr>
<tr>
<td></td>
<td>Scanning: 600 x 600 dpi, output: 600 x 600 dpi (PHOTO mode)</td>
</tr>
<tr>
<td>Gradation</td>
<td>Scanning: 256 halftones, printing: 2 halftones</td>
</tr>
<tr>
<td>Power supply</td>
<td>AC 120V, 60 Hz, 10A</td>
</tr>
<tr>
<td>Power consumption</td>
<td>Max. 1.2 kW</td>
</tr>
</tbody>
</table>

*1 Measured when copying is started after warm-up following power on, using the document glass. (Exposure set to “AUTO”.
“RESOLUTION IN AUTO/TEXT MODE” set to 300 dpi and “WAITING COPY LAMP SETTING” set to “ON” in the key operator programs. Paper fed from tray 1 on machine, 8-1/2" x 11" (A4) original and paper oriented horizontally, no reduction or enlargement.)

*2 May vary depending on machine operating conditions and ambient conditions such as power voltage and humidity.
Output tray specifications

<table>
<thead>
<tr>
<th>Output method</th>
<th>Face-down output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output tray capacity</td>
<td>250 sheets*</td>
</tr>
</tbody>
</table>

* When the job separator tray kit is installed, 150 sheets in center tray, 100 sheets in top tray.
  The maximum number of pages that can be held varies depending on ambient conditions in the installation location, the type of paper, and the storage conditions of the paper.

Printer function / scanner function / fax function specifications

See the "Operation manual (for printer and scanner)" and the "Operation manual (for facsimile)".

Some discrepancies may exist in the illustrations and content due to improvements to the machine.
1. PRODUCT AND COMPANY IDENTIFICATION


**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.

<table>
<thead>
<tr>
<th>Area</th>
<th>(Country)</th>
<th>(Name and Telephone Number)</th>
</tr>
</thead>
</table>
| North America | U.S.A.     | Sharp Electronics Corporation  
Sharp Plaza, Mahwah, NJ  
Telephone number for information : 1-800-237-4277  
Emergency telephone number : 1-800-255-3924 |
|               | Canada     | Sharp Electronics of Canada Ltd.  
Telephone number for information : 905-890-2100  
Emergency telephone number : 1-800-255-3924 |
| Oceania       | Australia  | Sharp Corporation of Australia PTY. Ltd.  
No1 Huntingwood Drive Huntingwood Blacktown N.S.W.  
Telephone number for information : 1300-13-50-22 |
| Europe        | Germany    | Sharp Electronics (Europe) GMBH  
Sonninstrasse 3, 20097 Hamburg  
Telephone number to access MSDS : 040-2376-2185  
For more information : 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 |
|               | 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

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS No.</th>
<th>Proportion</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>MAK-TWA</th>
<th>NOHSC-TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene-Acrylate copolymer</td>
<td>29497-14-1</td>
<td>85-95 %</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>5-10 %</td>
<td>3.5mg/m³</td>
<td>3.5mg/m³</td>
<td>Not listed</td>
<td>3mg/m³</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1309-38-2</td>
<td>1-5 %</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Metal Complex dye*</td>
<td>109125-51-1/84179-66-8</td>
<td>&lt; 2 %</td>
<td>0.5mg/m³</td>
<td>0.5mg/m³</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

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 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.
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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Physical State : Solid</td>
</tr>
<tr>
<td></td>
<td>Form : Powder</td>
</tr>
<tr>
<td></td>
<td>Color : Black</td>
</tr>
<tr>
<td></td>
<td>Odor : odorless</td>
</tr>
<tr>
<td>Ph</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling / Melting Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Softening Point(°C)</td>
<td>100 - 130</td>
</tr>
<tr>
<td>Flash Point(°C)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Ignition Point(°C)</td>
<td>&gt; 350</td>
</tr>
<tr>
<td>Explosion Properties</td>
<td>No data</td>
</tr>
<tr>
<td>Density(g/cm³)</td>
<td>1.1 (bulk density : 0.35)</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Negligible</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Hazardous Reactions</td>
<td>Dust explosion, like most finely divided organic powders.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Electric discharge, throwing into fire.</td>
</tr>
<tr>
<td>Materials to Avoid</td>
<td>Oxidizing Materials</td>
</tr>
<tr>
<td>Hazardous Decomposition</td>
<td>CO, CO₂ and NOₓ</td>
</tr>
<tr>
<td>Products</td>
<td>None</td>
</tr>
</tbody>
</table>

11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity</td>
<td>LD₅₀ &gt; 2500mg/kg (Rats)</td>
</tr>
<tr>
<td>Ingestion(oral)</td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td>No Data</td>
</tr>
<tr>
<td>Eye irritation</td>
<td>Not an irritant (Rabbits)</td>
</tr>
<tr>
<td>Skin irritation</td>
<td>Not an irritant (Rabbits)</td>
</tr>
<tr>
<td>Skin sensitizer</td>
<td>No sensitization</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>Negative (Ames Test)</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>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.</td>
</tr>
</tbody>
</table>
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

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.
1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: AR-202ND / AR-202DV / AR-202SD / AR-202SD-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.

<table>
<thead>
<tr>
<th>Area</th>
<th>(Country)</th>
<th>(Name and Telephone Number)</th>
</tr>
</thead>
</table>
| North America     | U.S.A.              | Sharp Electronics Corporation
|                   |                     | Sharp Plaza, Mahwah, NJ
|                   |                     | Telephone number for information: 1-800-237-4277
|                   |                     | Emergency telephone number: 1-800-255-3924                       |
|                   | Canada              | Sharp Electronics of Canada Ltd.
|                   |                     | Telephone number for information: 905-890-2100
|                   |                     | Emergency telephone number: 1-800-255-3924                       |
| Oceania           | Australia           | Sharp Corporation of Australia PTY. Ltd.
|                   |                     | No1 Huntingwood Drive Huntingwood Blacktown N.S.W.
|                   |                     | Telephone number for information: 1300-13-50-22                 |
| Europe            | Germany             | Sharp Electronics (Europe) GMBH
|                   |                     | Sonninstrasse 3, 20097 Hamburg
|                   |                     | Telephone number to access MSDS: 040-2376-2185
|                   |                     | For more information: 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                |
|                   | 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

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS No.</th>
<th>Proportion</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>MAK-TWA</th>
<th>NOHSC-TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron powder</td>
<td>7439-89-6</td>
<td>&gt; 90 %</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Styrene-Acrylate copolymer</td>
<td>29497-14-1</td>
<td>5-10 %</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>&lt; 1 %</td>
<td>3.5mg/m³</td>
<td>3.5mg/m³</td>
<td>Not listed</td>
<td>3mg/m³</td>
</tr>
</tbody>
</table>
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.
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 NOₓ
Further Information : None

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Ingestion(oral) : LD₅₀ > 2500mg/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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No data are available.

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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

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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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 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 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 WARRANTY 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 EXPRESS WARRANTY OR ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR USE OR FITNESS FOR ANY PARTICULAR PURPOSE IN CONNECTION 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-M162 Digital Multifunctional System
AR-M207 Digital Multifunctional System

In the event that this authorized dealer does not honor its warranty commitments, please contact the General Manager, Business Products Group, Sharp Electronics Corporation, Sharp Plaza, Mahwah, NJ 07430-1163, so that Sharp can try to help assure complete satisfaction of all the warranty rights to which you are entitled from the authorized dealer.
This manual has been printed using a vegetable-based soy oil ink to help protect the environment. Printed on 100% post-consumer recycled paper.
DIGITAL MULTIFUNCTIONAL SYSTEM

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• SCAN ..................................... 15
• KEY OPERATOR PROGRAMS ... 26
• TROUBLESHOOTING ............ 28
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INTRODUCTION

This manual describes the printer and scanner functions of the digital multifunctional system.

Note
• For information on loading paper, replacing toner cartridges, clearing paper misfeeds, handling peripheral devices, and other copier-related information, please refer to "Operation manual (for general information and copier)" that accompanies the machine.
• For information on installing the drivers and software cited in this manual, please refer to the separate "Software setup guide".
• For information on the operating system, please refer to your operating system manual or the online Help function.
• 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.
• The explanations in this manual are based on American English and the North American version of the software. Software for other countries and regions may vary slightly from the North American version.
• This manual refers to the Reversing single pass feeder as the "RSPF" and the Single pass feeder as the "SPF". Unless specific mention is made, both the RSPF and the SPF are referred to simply as "SPF".
• Where "AR-XXXX" appears in this manual, please substitute the name of your model for "XXXX".

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• Sharpdesk is a trademark of Sharp Corporation.
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• IBM, PC/AT, and PowerPC are trademarks of International Business Machines Corporation.
• Acrobat® Reader Copyright © 1987-2002 Adobe Systems Incorporated. All rights reserved. Adobe, the Adobe logo, Acrobat, and the Acrobat logo are trademarks of Adobe Systems Incorporated.
• All other trademarks and copyrights are the property of their respective owners.

The display screens, messages, and key names shown in the manual may differ from those on the actual machine due to product improvements and modifications.
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6 SPECIFICATIONS
This chapter explains the basic procedure for printing and how to select printer driver settings for various purposes.

- Paper that can be used and the procedures for loading paper are the same as for copying. See the "Operation manual (for general information and copier)".

When the dual function board is installed
- Before using the machine in USB 2.0 High-speed mode, be sure to read "USB2.0 MODE" and "System requirements for USB 2.0 (Hi-Speed mode)" in the "Key operator's guide".

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.

1 Make sure that the ONLINE indicator on the operation panel is lit.
If the ONLINE indicator is not on, press the [PRINT] key to switch to printer mode and then use the [△] key to select "ONLINE".

2 Start WordPad and open the document that you wish to print.

3 Select [Print] from the application's [File] menu.
The "Print" dialog box will appear.

4 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).
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 (page 6),
TWO-SIDED PRINTING (ONLY FOR MODELS THAT SUPPORT TWO-SIDED PRINTING) (page 7),
PRINTING MULTIPLE PAGES ON ONE PAGE (page 7),
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PRINTING A WATERMARK (page 9)
Click the [Print] button ([OK] button in Windows 95/98/Me/NT 4.0).

Printing begins. When printing begins, the Print Status Window automatically opens.

The print job is delivered to the output tray, with the position of the paper offset slightly from the previous job (offset function).

IF THE TRAY RUNS OUT OF PAPER DURING PRINTING

Add paper to the tray that ran out or to the bypass tray. If you add paper to the bypass tray, press the [PRINT] key on the machine to switch to printer mode and select "BYPASS-TRAY". Printing will resume. Note that if the "AUTO TRAY SWITCHING" setting is selected in the "PAPER SIZE SET" (accessed by pressing the [SPECIAL FUNCTION] key) and there is the same size of paper in another tray, the machine will automatically switch to the other tray and continue printing.

PAUSING A PRINT JOB

To pause a print job, press the [PRINT] key on the machine to switch to printer mode and then select "OFFLINE" with the [▼] key. The machine pauses the print job and then goes offline.

- To cancel a print job, press the [C] key ( ).
- To resume printing, select "ONLINE" with the [▲] key.

WHEN "PAPER SOURCE" IS SET TO [AUTO SELECT]

If "Paper Source" 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 (page 26) in the key operator programs.

When "FORCED OUTPUT OF PRINT" is disabled

Add paper to the bypass tray, press the [PRINT] key on the machine to switch to printer mode, and select "BYPASS-TRAY". Printing will resume.

When "FORCED OUTPUT OF PRINT" is enabled

The closest size of paper in a tray other than the bypass tray will be used for printing.

Note

When the job separator tray is installed

The output tray can be selected when selecting 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.

Note

When the dual function board is installed

- If the print image is in a different orientation than the paper, the print image will be automatically rotated 90 degrees to enable correct printing on the paper. (Other than the bypass tray)

When the dual function board is not installed

- Be sure to set each tray's paper size in "Set Tray Status" in the "Configuration" tab of the printer driver setup screen. See "CONFIGURING THE PRINTER DRIVER" in "3. TROUBLESHOOTING AND USEFUL INFORMATION" in the "Software setup guide".

When printing, be sure to specify a tray other than "Auto Select" in "Paper Source" in the "Paper" tab of the printer driver setup screen.

HOW [BYPASS TRAY] AND [BYPASS MANUAL] DIFFER IN THE "PAPER SOURCE" SETTINGS

There are two bypass tray settings in "Paper Source" in the [Paper] tab of the printer driver setup screen:

- When [Bypass Tray] is selected, the print job is automatically printed on the paper in the bypass tray.
- When [Bypass Manual] is selected, the print job is not printed until paper is inserted into the bypass tray. If paper is already in the bypass tray, remove the paper and then re-insert it to begin printing.
OPENING THE PRINTER DRIVER FROM THE [START] BUTTON

To change the printer driver settings, follow the steps below. 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**

1. Click the [start] button, and then click [Control Panel].
   In Windows 2000, click the [Start] button and select [Settings].

2. Click [Printers and Other Hardware], and click [Printers and Faxes].
   In Windows 2000, click [Printers].


   The printer driver setup screen will appear.
   ☞ PRINTER DRIVER SETTINGS (page 6)

**Windows 95/98/Me/NT 4.0**

1. Click the [Start] button, select [Settings] and then click [Printers].


   ![Properties](Note)

   In Windows NT 4.0, select [Document Defaults] to open the printer driver setup screen.

3. In Windows 95/98/Me, click the [Setup] tab.

   ![Setup Tab](Note)

   The printer driver setup screen will appear.
   ☞ PRINTER DRIVER SETTINGS (page 6)
PRINTER DRIVER SETTINGS

To view Help for a setting, click the 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) Checkbox
Click on a checkbox to activate or deactivate a function.

(3) Print image
This shows the effect of the selected print settings.

(4) Drop-down list
Allows you to make a selection from a list of choices.

(5) Check button
Allows you to select one item from a list of options.

(6) Image of paper trays
The tray selected in "Paper Source" in the [Paper] tab appears in blue. You can also click on a tray to select it.

(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.

(10) [Help] button
Click this button to display the help file for the printer driver.

Note
The settings and the image of the machine will vary depending on the model. If a tray or job separator tray option is installed, see "CONFIGURING THE PRINTER DRIVER" in "3. TROUBLESHOOTING AND USEFUL INFORMATION" in the "Software setup guide" to configure the settings for the option.
TWO-SIDED PRINTING (ONLY FOR MODELS THAT SUPPORT TWO-SIDED PRINTING)

On models that have the two-sided printing function, both sides of the paper can be printed on.
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.
To open the printer driver, see "BASIC PRINTING" (page 3).

- Paper sizes that can be used for two-sided printing are Ledger, Letter, Legal, Foolscap, A3, A4, A5, B4 and B5.
- The bypass tray cannot be used for two-sided printing.

The following example shows the result when portrait data is printed on both sides of the paper.

<table>
<thead>
<tr>
<th>Print data</th>
<th>Printing result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

Note

The "N-Up Printing" setting is not available when [Fit to Page] is selected. See "FITTING THE PRINT IMAGE TO THE PAPER" (page 8).

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.
To open the printer driver, see "BASIC PRINTING" (page 3).

If you select the [Border] checkbox, borderlines will be printed around each page.

<table>
<thead>
<tr>
<th>N-Up</th>
<th>Border</th>
<th>Border</th>
</tr>
</thead>
<tbody>
<tr>
<td>[2-Up]</td>
<td>![2-Up Diagram]</td>
<td>![2-Up Diagram]</td>
</tr>
<tr>
<td>[4-Up]</td>
<td>![4-Up Diagram]</td>
<td>![4-Up Diagram]</td>
</tr>
</tbody>
</table>
FITTING THE PRINT IMAGE TO THE PAPER

The printer driver can adjust the size of the print 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 or A3 size document on letter or A4 size paper.

To open the printer driver, see "BASIC PRINTING" (page 3).

1 Click the [Paper] tab in the printer driver setup screen.

2 Select the original size (Ledger or A3) of the print image in "Paper Size".

3 Click on the [Fit to Page] checkbox.

4 Select the size of the paper (Letter or A4) that is loaded in the machine from "Fit to Paper Size". The size of the print image will be automatically adjusted to match the paper loaded in the machine.

Note: The "Fit To Paper Size" setting is not available when "N-Up Printing" is selected. See PRINTING MULTIPLE PAGES ON ONE PAGE (page 7).

Paper Size: Ledger or A3
Fit To Paper Size: Letter or A4

Ledger or A3 size document (Paper Size)  
Letter or A4 size paper (Fit To Paper Size)
ROTATING THE PRINT IMAGE 180 DEGREES

The print image can be rotated 180 degrees. This feature rotates the print image 180 degrees to enable correct printing on paper that can only be loaded in one orientation. To use this function, select the image orientation in "Image Orientation" on the [Paper] tab, and then click on the [Rotate 180 degrees] checkbox. To open the printer driver, see "BASIC PRINTING" (page 3).

<table>
<thead>
<tr>
<th>Printing result</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Landscape" /> Rotate 180 degrees</td>
</tr>
</tbody>
</table>

The procedure for loading paper is explained in the "Operation manual (for general information and copier)".

PRINTING A WATERMARK

You can print a watermark such as "CONFIDENTIAL" on your document. To print a watermark, open the printer driver setup screen, click the [Watermarks] tab, and follow the steps below. To open the printer driver, see "BASIC PRINTING" (page 3).

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.

Watermark:

- (None)
- TOP SECRET
- CONFIDENTIAL
- DRAFT
- ORIGINAL
- COPY

Print sample

You can enter text to create your own custom watermark. For details on watermark settings, view printer driver Help. ☞ PRINTER DRIVER SETTINGS (page 6)
OUTLINE OF THE PRINT STATUS WINDOW

When printing begins, the Print Status Window automatically opens. The Print Status Window is a utility that monitors the machine and informs you of the name of the document being printed and any errors that occur.

(1) Status window
Provides information on the current status of the printer.

(2) Status icons
The status icons appear to alert you to printer errors. Nothing appears when printing is taking place normally. The icons are explained below. Follow the instructions in the status window to solve the problem.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Print Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>❌</td>
<td>An error has occurred that requires immediate attention.</td>
</tr>
<tr>
<td>⚠</td>
<td>An error has occurred that requires attention soon.</td>
</tr>
</tbody>
</table>

(3) Tab
Click a tab to bring it to the front. The [Options] tab allows you to select display options for the Print Status Window.

(4) Document Name
Shows the name of the document currently being printed.

(5) [Cancel Job] button
Printing can be canceled by clicking this button before the machine receives the job.

(6) [Help] button
Click this button to display the help file for the Print Status Window.

(7) [Close] button
Click this button to close the Print Status Window.
This chapter explains how to configure the machine as a shared printer in a Windows network environment. Configuring the machine as a shared printer enables computers that are not directly connected to the machine to print to the machine.

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.
SHARED PRINTER SETTINGS

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.

1. Click the [Start] button, point to [Settings] and then click [Control Panel].
3. Click the [File and Print Sharing] button.
4. 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.
5. Click the [OK] button in the [Network] dialog box.
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 [Printers] icon.
7. Click the [SHARP AR-XXXX] printer driver icon and select [Sharing] from the [File] menu.
8. Configure the settings for sharing and then click the [OK] button.

Note: For information on the settings, refer to your operating manual or to the help files for your operating system.

Note: If the [Network] icon does not appear in Windows Me, click [view all Control Panel options].

Note: If a message appears asking you to restart the computer, click the [Yes] button and restart the computer. After restarting the computer, open the printer folder and continue the setup procedure from Step 6.

Note: For information on a setting, click the button at the top-right of the dialog box and then click the setting to display Help.

Note: CLIENT SETTINGS (page 13)
CLIENT SETTINGS

Follow the procedure below to install the printer driver on the client.

1. Click the [start] button and then click [Control Panel].
   In Windows 95/98/Me/2000, click the [Start] button and select [Settings].

2. Click [Printers and Other Hardware] and then [Printers and Faxes].
   In Windows 95/98/Me/2000, click [Printers].

3. 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.

4. Click the [Next] button.

5. Select [A network printer, or a printer attached to another computer] and then click the [Next] button.
   In Windows 95/98/Me/2000, select [Network printer] and then click the [Next] button.

6. Select [Browse for a printer] and click the [Next] button.
   - In Windows 95/98/Me, click the [Browse] button.
   - If you are using Windows 2000, select [Type the printer name, or click Next to browse for a printer] and then click the [Next] button.

7. Select the printer to be shared in the network and then click the [Next] button.
   If you are using Windows 95/98/Me, select the printer to be shared, click the [OK] button, and then click the [Next] button.

8. Select settings in the [Default Printer] screen and then click the [Next] button.

9. Click the [Finish] button.

Note: If your operating system is Windows NT 4.0, refer to "Settings in Windows NT 4.0" (page 14).
Settings in Windows NT 4.0
If your operating system is Windows NT 4.0, configure settings as follows in the printer properties after installing the printer driver. For the procedure for installing the printer driver, see "1. INSTALLING THE SOFTWARE (THAT ACCOMPANIES THE MACHINE)" in the "Software setup guide".

1. Click the [Start] button, select [Settings] and then click [Printers].

   The printer properties will appear.

3. Click the [Ports] tab and then click the [Add Port] button.
   The [Printer Ports] dialog box will appear.

   The "Port Name" dialog box will appear.

5. Enter "\(name of server connected to machine)(name of shared printer)", and click the [OK] button.

6. Click the [Close] button in the [Printer Ports] dialog box.

7. Click the [OK] button in the printer properties window.
This chapter explains how to scan from a computer connected to the machine by a USB cable, and how to scan using the machine's operation panel.

**When the dual function board is installed**
Before using the machine in USB 2.0 High-speed mode, be sure to read "USB2.0 MODE" and "System requirements for USB 2.0 (Hi-Speed mode)" in the "Key operator's guide".

### SCANNING OVERVIEW

The flow chart shown below provides an overview of scanning.

*1 TWAIN is an international interface standard for scanners and other image acquisition devices. By installing a TWAIN driver on your computer, you can scan and work with images using a variety of TWAIN-compliant applications.

*2 WIA (Windows Imaging Acquisition) is a Windows function that allows a scanner, digital camera or other imaging device to communicate with an image processing application. The WIA driver for this machine can only be used in Windows XP.

*3 To begin scanning using the machine's operation panel, settings must be configured in the Control Panel after Button Manager is installed. For more information, see "SETTING UP BUTTON MANAGER" in "1. INSTALLING THE SOFTWARE (THAT ACCOMPANIES THE MACHINE)" in the "Software setup guide".

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**CAUTION**
The environment in which the machine's scanning function can be used is subject to certain limitations. For more information, see "1. INSTALLING THE SOFTWARE (THAT ACCOMPANIES THE MACHINE)" in the "Software setup guide".

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* Scanning from a TWAIN*-compliant or WIA*-compliant application
* Scanning from the "Scanner and Camera Wizard" (Windows XP)
* Using the machine to begin scanning*3

1. **Place the original in the scanning position**
   - For more information, see "4. COPY FUNCTIONS" in the "Operation manual (for general information and copier)".

2. **Start up a Twain-compliant or WIA-compliant application, and select the machine's scanner driver.**

3. **Start up the "Scanner and Camera Wizard" from "Control Panel" in your computer.**

4. **Press the [SCAN] key on the machine to switch to scanner mode and select the destination (SC1: to SC6:).**

---

**SCANNING FROM A TWAIN-COMPLIANT APPLICATION**
- [(page 16)]

**SCANNING FROM A WIA-COMPLIANT APPLICATION**
- (Windows XP): [(page 20)]

**SCANNING FROM THE "SCANNER AND CAMERA WIZARD" (WINDOWS XP)**
- [(page 21)]

**SCANNING USING THE KEYS ON THE MACHINE**
- [(page 23)]

**BUTTON MANAGER**
- (page 24)
SCANNING FROM A TWAIN-COMPLIANT APPLICATION

The SHARP scanner driver is compatible with the TWAIN standard, allowing it to be used with a variety of TWAIN-compliant applications. The procedure for scanning from some applications may differ in places from the procedure below. For more information, refer to the manual or the help file of your application.

1. **Place the original(s) that you wish to scan on the document glass or in the SPF.**
   - For information on placing an original for scanning, see "4. COPY FUNCTIONS" in the "Operation manual (for general information and copier)".

2. **Start up a Twain-compliant application and select [Select Scanner] from the [File] menu.**

3. **Select [SHARP MFP TWAIN G] and then click the [Select] button.**

   ![Select Source](image)

   - If you are using Windows XP, you can also select [WIA-SHARP AR-XXXX] to scan using the WIA driver.
   - **SCANNING FROM A WIA-COMPLIANT APPLICATION (WINDOWS XP) (page 20)**
   - Depending on your system, [SHARP MFP TWAIN G 1.0 (32-32)] or [WIA-SHARP AR-XXXX 1.0 (32-32)] may appear in the above select source screen.

4. **Select [Acquire Image] from the [File] menu.**
   - The scanner driver setup screen will appear.
   - **SCANNER DRIVER SETTINGS (page 18)**

5. **In the "Scanning Position" menu, select the location where you placed the original in Step 1.**
   - If you placed a one-sided original in the SPF, select [SPF (Simplex)].
   - If you placed a two-sided original in the RSPF, select [SPF (Duplex-Book)] or [SPF (Duplex-Tablet)].
   - **Note**
     - If you selected [SPF (Duplex-Book)] or [SPF (Duplex-Tablet)] from the "Scan Position" menu, select [Right Edge Fed First] or [Leading Edge Fed First] for the orientation of the original.
     - For original sizes for which two-sided scanning is possible, see "REVERSING SINGLE PASS FEEDER / SINGLE PASS FEEDER" in "3. PERIPHERAL DEVICES AND SUPPLIES" in the "Operation manual (for general information and copier)".

6. **Click the [Preview] button.**
   - The preview image will appear.
   - **Note**
     - If the angle of the image is not correct, reset the original and click the [Preview] button again.
     - If the preview image is not oriented correctly, click the [Rotate] button in the preview screen. This rotates the preview image 90 degrees clockwise, allowing you to correct the orientation without resetting the original.
     - **Preview screen (page 19)**
     - If you inserted multiple pages in the SPF, the machine previews only the top page of the originals and then sends it to the original exit area. Return the previewed original to the SPF before starting the scanning job.
7 Specify the scanning area and select the scan preferences.
For information on specifying the scan area and selecting the scan preferences, see scanner driver Help.
☞ SCANNER DRIVER SETTINGS (page 18)

- Scanning a large area at high resolution results in a large quantity of data and a prolonged scanning time. When selecting the scan preferences, lower the resolution or specify a suitable scanning area.
- The scan resolution will vary depending on the scanning area and how much memory in the machine is free. For example, if a letter or A4 original is scanned in full color at 300 dpi with only the standard memory installed, the machine will scan the original in full color at 150 dpi and the scanner driver will enhance the resolution to 300 dpi.
To scan a ledger or A3 original in full color at 600 dpi without using enhancement, the dual function board and the 256 MB memory option are required.

8 When you are ready to begin scanning, click the [Scan] button.
Scanning begins and the image is acquired into the application that you are using.
In the application, assign a file name and save the file.

☞ Note To cancel a scanning job after the [Scan] button has been clicked, press the [Esc] key on your keyboard or the [C] key ( ) or [CA] key ( ) on the operation panel.
SCANNER DRIVER SETTINGS

The scanner driver setup screen consists of the "Set-up screen", which lets you select scan settings, and the "Preview screen", which shows the scanned image. For details on the scan settings, click the [Help] button in the preview screen to display Help.

Set-up Screen

(1) "Scanning Position" menu
("Scanning Source" in some regions)
Select the location where the original is placed. Selections are [Platen] (document glass), [SPF (Simplex)], [SPF (Duplex-Book)] or [SPF (Duplex-Tablet)].

On machines without an SPF, this setting is fixed at [Platen].

(2) "Scanning Mode" menu
Select "Preset" or "Custom Settings" ("Standard" or "Professional" in some regions) for the scanning mode.
The "Preset (or Standard)" screen lets you select the original type as well as monitor, photo, fax, or OCR according to the purpose of scanning.
If you wish to change the default settings for these four buttons, or select custom settings such as the image type and resolution before scanning, switch to the "Custom Settings (or Professional)" screen.
For details on the settings, click the [Help] button in the preview screen to display Help.

(3) "Image Area" menu
Set the scanning area. To scan the original size detected by the machine, select [Auto]. The scanning area can also be specified as desired in the preview window.

(4) [Zoom Preview] checkbox
When this is selected, the selected part of the preview image will be enlarged when the [Preview] button is clicked.
To return to the regular view, remove the checkmark.

[Zoom Preview] cannot be used when [SPF] is selected in the "Scanning Position" menu.

(5) [Preview] button
Previews the document.

If [Preview] is canceled by immediately pressing the [Esc] key on your keyboard, or the [C] key ( ) or [CA] key ( ) on the machine, nothing will appear in the preview screen.

(6) [Scan] button
([Scanning] in some regions)
Click to scan an original using the selected settings. Before clicking the [Scan] button, make sure the settings are correct.

To cancel a scanning job after the [Scan] button is clicked, press the [Esc] key on your keyboard or the [C] key ( ) or [CA] key ( ) on the machine.

(7) [Close] button
Click to close the scanner driver setup screen.
Preview screen

(1) **Preview window**
Click the [Preview] button in the Set-up screen to display the scanned image. You can specify the scanning area by dragging the mouse inside the window. The inside of the frame that appears when you drag the mouse will be the scanning area. To cancel a specified scanning area and clear the frame, click anywhere outside the frame.

(2) **[Rotate] button**
Click to rotate the preview image 90 degrees clockwise. This allows the orientation to be corrected without resetting the original. Upon scanning, the image file is created in the orientation shown in the preview window.

(3) **[Image Size] button**
Click this button to open a dialog box that allows you to specify the scanning area by entering numbers. Pixels, mm, or inches can be selected for the units of the numbers. By initially specifying a scanning area, numbers can be entered to change that area relative to the top left corner as a fixed origin.

(4) **[Auto Scan Area Adjustment] button**
Click this button when the preview screen is displayed to automatically set the scanning area to the entire preview image.

(5) **[Help] button**
Click to display the help file for the scanner driver.
If you are using Windows XP, you can use the WIA driver to scan from Paint and other WIA-compliant applications. The procedure for scanning using Paint is explained in the following.

1. Place the original(s) that you wish to scan on the document glass or in the SPF.
   For information on placing an original for scanning, see "4. COPY FUNCTIONS" in the "Operation manual (for general information and copier)".

2. Start Paint and then select [From Scanner or Camera] from the [File] menu.
   The scan screen of the WIA driver will appear.

3. Select the paper source and picture type, and click the [Preview] button.
   - The preview image will appear.
   - If you placed the original on the document glass, select [Flatbed] for the "Paper source".
   - If you placed the original in the SPF, select [Document Feeder] for the "Paper source" and specify the original size in "Page size".

   ![Preview Screen](image)

   • If an SPF is not installed on your machine, the "Paper source" menu will not appear.
   • If you select [Document Feeder] for the "Paper source" and click the [Preview] button, the top original in the SPF is previewed. The previewed original is sent to the original exit area, so you will need to return it to the SPF before starting the scanning job.
   • To view Help for a setting, click the button in the upper right-hand corner of the window and then click the setting.

4. Click the [Scan] button.
   - Scanning begins and the image is acquired into Paint.
   - Use [Save] in your application to select a file name and folder for the scanned image, and save the image.
   - To cancel scanning after the [Scan] button has been clicked, click the [Cancel] button or press the [C] key (◼) or [CA] key (◼) on the machine operation panel.
SCANNING FROM THE "SCANNER AND CAMERA WIZARD" (WINDOWS XP)

The procedure for scanning with the "Scanner and Camera Wizard" in Windows XP is explained here. The "Scanner and Camera Wizard" lets you scan an image without using a TWAIN-compliant or WIA-compliant application.

1 Place the original(s) that you wish to scan on the document glass or in the SPF.
   For information on placing an original for scanning, see "4. COPY FUNCTIONS" in the "Operation manual (for general information and copier)".

2 Click the [start] button, the [Control Panel], [Printers and Other Hardware], and then [Scanners and Cameras].

3 Click the [SHARP AR-XXXX] icon and then click [Get pictures] in [Imaging Tasks].
   The "Scanner and Camera Wizard" will appear.

4 Click the [Next] button.

5 Select the "Picture type" and "Paper source", and click the [Next] button.
   • If you placed the original on the document glass, select [Flatbed] for the "Paper source".
   • If you placed the original in the SPF, select [Document Feeder] for the "Paper source" and specify the original size in "Page size".
   • You can click the [Preview] button to display the preview image.

   • If an SPF is not installed on your machine, the "Paper source" menu will not appear.
   • If you select [Document Feeder] for the "Paper source" and click the [Preview] button, the top original in the SPF is previewed. The previewed original is sent to the original exit area, so you will need to return it to the SPF before starting the scanning job.
   • To adjust the resolution, picture type, brightness and contrast settings, click the [Custom settings] button.
Specify a group name, format and folder for saving the image, and then click the [Next] button.

JPG, BMP, TIF or PNG can be selected for the format. To begin scanning, click the [Next] button.

When scanning ends, the following screen will appear. Select the next task you wish to perform and then click the [Next] button.

If you are ready to end the session, click [Nothing. I'm finished working with these pictures].

Click the [Finish] button.

The "Scanner and Camera Wizard" closes and the scanned image is saved in the specified folder.
The procedure for scanning using the [SCAN] key is explained in the following. When scanning is performed by this method, the previously specified application will automatically start and the scanned image will be acquired into the application.

1. **Place the original(s) that you wish to scan on the document glass or in the SPF.**
   For information on how to place the original, see "4. COPY FUNCTIONS" in the "Operation manual (for general information and copier)".

2. **Press the [SCAN] key.**
   The [SCAN] key indicator lights up to indicate that the machine is in scanner mode and the destination selection screen appears in the display. A name can be entered in Button Manager for each of the destinations "SC1:" to "SC6:“, which will appear in the format "SC1:XXXXX".

3. **Use the [▼] or [▲] key to select the desired scan destination.**

   The following applications have been set at the factory for each of the scan destinations 1 to 6.
   If you wish to change a setting, see "BUTTON MANAGER SETTINGS" (page 25).

<table>
<thead>
<tr>
<th>Scan Destination</th>
<th>Application that starts</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC1:</td>
<td>Sharpdesk</td>
</tr>
<tr>
<td>SC2:</td>
<td>Email</td>
</tr>
<tr>
<td>SC3:</td>
<td>FAX</td>
</tr>
<tr>
<td>SC4:</td>
<td>OCR</td>
</tr>
<tr>
<td>SC5:</td>
<td>Microsoft Word</td>
</tr>
<tr>
<td>SC6:</td>
<td>Filing</td>
</tr>
</tbody>
</table>

4. **Press the [OK] key.**
   The selected destination appears.

5. **Press the [START] key.**
   Scanning begins.

   • The [COPY] key, [PRINT] key, or [FAX] key can be pressed in scanner mode to switch to the corresponding mode.
   • For restrictions on using copy, printer, or fax mode while in scanner mode, or using scanner mode while in copy, printer, or fax mode, see "OPERATION IN COPY, PRINT, SCAN, AND FAX MODES" in "1. BEFORE USING THE PRODUCT" in the "Operation manual (for general information and copier)".

---

**Note**

Scanning using the keys on the machine

Scanner mode cannot be used in the following situations:
- A problem has occurred in the machine such as a paper misfeed or an open cover.
- The key operator programs are being used.
- The tray paper size is being set.
- During copying or printing
- During scanning of an original for a fax transmission (when the fax option is installed)
- If the machine is in copy mode, press the [SCAN] key to switch to scanner mode and clear the previously set copy settings.

---

**Note**

When the dual function board is installed

If computers are connected to both of the USB ports on the machine, the following screen will appear in the display. In this case, use the [▼] or [▲] key to select the USB port that you wish to use and press the [OK] key. For the location of the ports, see "1. BEFORE USING THE PRODUCT" in the "Operation manual (for general information and copier)".

**Note**

INTERFACE SELECT
- USB-1
- USB-2

---

**Note**

If computers are connected to both of the USB ports on the machine, the following screen will appear in the display. In this case, use the [▼] or [▲] key to select the USB port that you wish to use and press the [OK] key. For the location of the ports, see "1. BEFORE USING THE PRODUCT" in the "Operation manual (for general information and copier)".
**BUTTON MANAGER**

Button Manager is a software utility that allows the scanner function to be used by means of the [SCAN] key on the machine. The Button Manager software allows you to assign a destination application and scan settings to each of the six destinations on the machine.

To scan using the machine’s operation panel, settings must be configured in the Control Panel after Button Manager is installed. To install Button Manager and configure settings, see “SETTING UP BUTTON MANAGER” in “1. INSTALLING THE SOFTWARE (THAT ACCOMPANIES THE MACHINE)” in the “Software setup guide”.

**Setup window**

To view Help for a setting, click the button in the upper right-hand corner of the Button Manager setup window (Scan Button Destination Settings screen) and then click the setting.

---

1. **Tab**
   - Select the desired destination. The tabs contain scan settings for each of the scan destinations (SC1 through SC6) on the machine.

2. **"Application Selection" area**
   - Select the application that starts up here.

3. **[Show TWAIN setting screen when scanning] checkbox**
   - Select whether or not the TWAIN screen is shown when scanning. When the checkbox is selected, the TWAIN screen appears when scanning is executed to let you adjust the scanning conditions.

4. **"Scan Setup" area**
   - Set the scan conditions.

5. **[OK] button**
   - Click to save your settings and close the dialog box.

6. **[Cancel] button**
   - Click this button to close the dialog box without making any changes to the settings.

7. **[Apply] button**
   - Click to save your settings without closing the dialog box.

8. **[Help] button**
   - Click this button to display the help file for Button Manager.

The scan settings for each of the six destinations can be changed in Button Manager. To change the settings, see "BUTTON MANAGER SETTINGS" (page 25).

---

**Note**

When the dual function board is installed

If computers are connected to both of the two USB ports on the machine, separate Button Manager settings can be configured on each computer.

---

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If you need to configure Button Manager settings, follow the steps below. For details on Button Manager settings, see Button Manager Help. (page 24)

1. Right-click the Button Manager icon ( ) on the task bar and select [Settings] from the pop-up menu.
   The Button Manager settings will open.

2. Click the tab that you wish to configure.

3. Set up the start-up application in the "Application Selection" area.
   - If the [Show TWAIN setting screen when scanning] checkbox is selected, the setting screen will appear when scanning is executed to let you adjust the scanning conditions.
   - If an application other than [FAX] is selected, you can select the "File format" of the scanned image. If [PDF] is selected for the file format, the image quality may be slightly degraded.

4. Select scanning conditions such as "Color Mode" and "Scanning Side" in the "Scan Setup" area.
   - If you placed a two-sided original in the RSPF, select [Duplex-Book] or [Duplex-Tablet] as appropriate for the position of the binding on the original.
   - The name of the tab can be changed. Click the [Menu Name] button and enter a new name. After entering a name, click the [Apply] button or [OK] button. This also changes the scan destination name that appears on the machine. (Example: SC1: XXXXX)

   • If you selected [Duplex-Book] or [Duplex-Tablet] from the "Scanning Side" menu, select "Right Edge Fed First" or "Leading Edge Fed First" for the orientation of the original.
   • For original sizes for which two-sided scanning is possible, see "REVERSING SINGLE PASS FEEDER / SINGLE PASS FEEDER" in "3. PERIPHERAL DEVICES AND SUPPLIES" in the "Operation manual (for general information and copier)".
   • Some settings cannot be selected in some applications.
   • When [Show TWAIN settings when scanning] is selected, only [Menu name] can be selected.

5. Click the [OK] button.
   This completes the settings.
The key operator programs allow the administrator of the machine (key operator) to enable and disable functions to suit the needs of the workplace. This chapter explains key operator programs for the printer and scanner functions. For key operator programs that are common to all modes, see the "Key operator's guide".

For the initial key operator code set at the factory, see "PROGRAMMING A KEY OPERATOR CODE" in the "Key operator's guide".

**KEY OPERATOR PROGRAM LIST**

The key operator programs for the printer and scanner functions are shown in the following table. Factory default settings are indicated in bold. When "ENABLE, DISABLE" appears in the "Settings" column of a program, the program is enabled by pressing the [OK] key so that a checkmark appears in the checkbox. A checkmark in the checkbox (✓) indicates that "ENABLE" is selected. No checkmark (□) indicates that "DISABLE" is selected.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Program</th>
<th>Settings</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printer</td>
<td>NOTICE PAGE</td>
<td>ENABLE, DISABLE</td>
<td>Select whether or not a Notice Page (page 30) is printed when printing is not successful due to a memory full (or other) error.</td>
</tr>
<tr>
<td></td>
<td>FORCED OUTPUT OF PRINT</td>
<td>ENABLE, DISABLE</td>
<td>When no tray has the specified size of paper, this setting is used to select whether or not the print job will be printed on the closest size of paper.</td>
</tr>
<tr>
<td>Scanner</td>
<td>DISABLE USB SCAN</td>
<td>YES, NO</td>
<td>Select whether or not scanning from a computer and scanning from the machine are disabled when a USB connection is used. When &quot;YES&quot; is selected, USB scanning is disabled.</td>
</tr>
</tbody>
</table>
USING THE KEY OPERATOR PROGRAMS

Follow the steps below to access the key operator settings for the printer and scanner functions.

1. Press the [SPECIAL FUNCTION] key.
   The special function screen appears.

2. Select “KEY OPERATOR PRG.” with the [▼] or [▲] key.

3. Press the [OK] key.
   The key operator code entry screen will appear.

4. Use the numeric keys to enter the key operator code.
   • "*" will appear for each digit entered.
   • The mode selection screen will appear.

5. Select the desired mode with the [▼] or [▲] key.

6. Press the [OK] key.
   The settings of the selected mode will appear.
   Example: The above screen shows the settings when printer mode is selected.

7. Select the desired program with the [▼] or [▲] key.
   • A checkbox appears to the left of several of the programs. To enable a function (make a checkmark appear), press the [OK] key. To cancel a selection, press the [OK] key once again to remove the checkmark and disable the function. Go to step 9.
   • When the [OK] key is pressed for a program that does not have a checkbox, the settings for the program appear.

8. Press the [OK] key and follow the instructions in the program screen.

9. To use another program for the same mode, select the desired program with the [▼] or [▲] key.
   To use a program for a different mode, press the [BACK] key and select the desired mode. To exit the key operator programs, press the [CA] key ().
This chapter explains what to do if you encounter a problem while printing or scanning. For problems related to the machine such as running out of paper or paper misfeeds, see the "Operation manual (for general information and copier)".

Troubleshooting information can also be found in the README files for each of the software programs. To view a README file, see "1. INSTALLING THE SOFTWARE (THAT ACCOMPANIES THE MACHINE)" in the "Software setup guide".

## PRINTING PROBLEMS

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause and solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The machine is set to off-line mode.</td>
<td>Press the [PRINT] key to select printer mode and then select &quot;ON LINE&quot; with the [▲] key.</td>
<td>3</td>
</tr>
<tr>
<td>The machine is not selected correctly in the application from which you are printing.</td>
<td>→ In the dialog box that appears after you select [Print] from the [File] menu in the application, make sure you have selected the machine as the printer.</td>
<td>3</td>
</tr>
<tr>
<td>Copying or scanning is in progress, or a fax is being printed (when the fax option is installed).</td>
<td>→ Wait until copying, scanning, or fax printing is finished.</td>
<td>–</td>
</tr>
<tr>
<td>Has the printer driver been installed correctly?</td>
<td>→ Follow these steps to check and see if the printer driver is installed.</td>
<td>5</td>
</tr>
<tr>
<td>1 Click the [start] button, the [Control Panel], [Printers and Other Hardware], and then [Printers and Faxes].</td>
<td>If you are using Windows 95/98/Me/2000, click the [Start] button, point to [Settings], and select [Printers].</td>
<td></td>
</tr>
<tr>
<td>2 Make sure that the machine’s printer icon appears.</td>
<td>→ If the icon is shown but you still cannot print, the printer driver may not have been installed correctly. In this case, delete the software and then reinstall it. In Windows 2000/XP, make sure that the machine’s printer icon is selected.</td>
<td></td>
</tr>
<tr>
<td>The machine is not correctly connected with your computer.</td>
<td>→ Check both ends of the printer cable and make sure you have a solid connection. For information on cables, see &quot;SPECIFICATIONS&quot; (page 32).</td>
<td>32</td>
</tr>
<tr>
<td>The port setting is not correct.</td>
<td>→ Printing is not possible if the printer driver port setting is not correct. Set the port correctly.</td>
<td></td>
</tr>
<tr>
<td>Printing is disabled.</td>
<td>→ If &quot;CANCEL JOBS OF INVALID ACCOUNTS&quot; is enabled in the key operator programs, printing will not be possible. Consult the key operator.</td>
<td></td>
</tr>
<tr>
<td>Problem</td>
<td>Cause and solution</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Printing does not take place (DATA indicator is blinking.)</td>
<td>There is no paper in the specified tray. → Load paper in the tray.</td>
<td>Operation manual</td>
</tr>
<tr>
<td></td>
<td>&quot;FORCED OUTPUT OF PRINT&quot; is disabled. → Add paper to the bypass tray, press the [PRINT] key on the machine to switch to printer mode, and then select &quot;BYPASS-TRAY&quot;. Printing will resume.</td>
<td>(for general information and copier)</td>
</tr>
<tr>
<td>Printing is slow.</td>
<td>Simultaneous use of two or more application software programs. → Start printing after quitting all unused application software programs.</td>
<td>–</td>
</tr>
<tr>
<td>The printed image is light and uneven.</td>
<td>The paper is loaded so that printing takes place on the back side of the paper. → 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 a good image will not be obtained.</td>
<td>–</td>
</tr>
<tr>
<td>The printed image is dirty.</td>
<td>You are using paper that is outside the specified size and weight range. → Use paper within the specified range.</td>
<td>Operation manual</td>
</tr>
<tr>
<td></td>
<td>The paper is curled or damp. → Replace the 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.</td>
<td>(for general information and copier)</td>
</tr>
<tr>
<td></td>
<td>You did not set sufficient margins in the paper settings of your application. → The top and bottom of the paper may be dirty if the margins are set outside of the specified print quality area. → Set the margins within the specified print quality area.</td>
<td>–</td>
</tr>
<tr>
<td>The printed image is skewed or it runs off the paper.</td>
<td>The paper size set in the printer driver is not the same as the paper size loaded in the tray. → Make sure that the paper size setting matches the size of the paper loaded in the tray. If the [Fit to Page] setting is selected, make sure that the paper size selected in the &quot;Fit To Paper Size&quot; drop-down list is the same as the size of the paper loaded in the tray.</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>The image orientation setting in the printer driver is not correct. → Click the [Paper] tab in the printer driver setup screen and make sure the &quot;Image Orientation&quot; setting is correct.</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Paper is not loaded properly. → Make sure the paper is properly loaded.</td>
<td>Operation manual</td>
</tr>
<tr>
<td></td>
<td>The margins are not set correctly in the application. → Check the paper size and margin settings in the application. Also make sure that the print settings are correct for the paper size.</td>
<td>–</td>
</tr>
</tbody>
</table>
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.

What to do when a notice page is printed

The above notice page is printed when a print job containing more data than can be held in the memory of the dual function board is sent. Deactivate the ROPM function by removing the checkmark from [ROPM] in the [Configuration] tab of the printer driver setup screen. If you need to use the ROPM function, set the “Print quality” in the printer driver to [Draft], or increase the amount of memory in the machine.

SCANNING PROBLEMS

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause and solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor scanning quality.</td>
<td>The document glass or the underside of the document cover/SPF is dirty.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>→ Clean regularly.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The original is smudged or blotchy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>→ Use a clean original.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>You have not specified a suitable resolution.</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>→ Make sure that the resolution setting in the scanner driver is appropriate for the original.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>You are scanning a large area (for example an entire 11&quot; x 17&quot; or A3 document) at high resolution.</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>→ If you attempt to scan a large area at high resolution and there is insufficient memory in the machine to hold the scanned data, scanning will take place at a lower resolution and the scanner driver will enhance the data to make up for the lower resolution. However, the quality of the enhanced image will not be as high as if scanning took place at the higher resolution. To scan a ledger or A3 original in full color at 600 dpi without using enhancement, the dual function board and 256 MB memory option are required.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>You have not specified a suitable value for the &quot;B/W Threshold” setting.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>→ If you are using a TWAIN-compliant application and are using [White], [Red], [Green], or [Blue] for “Light Source” in the TWAIN driver, make sure that the “B/W Threshold” setting is appropriate. A larger threshold value makes your output darker, while a small threshold value makes it lighter. To adjust the threshold automatically, click the [Auto Threshold] button on the [Image] tab of the “Custom Settings (or Professional)” screen.</td>
<td></td>
</tr>
</tbody>
</table>
### Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause and solution</th>
<th>Page</th>
</tr>
</thead>
</table>
| Poor scanning quality.                      | **The brightness and contrast settings are not suitable.**  
   → If you are scanning with a TWAIN-compliant application and the resulting image has unsuitable brightness or contrast (for example it is too bright), click the [Auto Brightness/Contrast Adjustment] button on the [Color] tab of the “Custom Settings (or Professional)” screen. You can also click the [Brightness/Contrast] button to adjust the brightness and the contrast while viewing the scanned output image on the screen. If you are scanning with a WIA-compliant application or the "Scanner and Camera Wizard", click [Adjust the quality of the scanned picture] or the [Custom settings] button and adjust the brightness and contrast.                                                                 |      |
| [Quick Scan] has been selected. (With the dual function board installed) | → If scanning is performed when [Quick Scan] has been selected in the [Preference] tab of the "Custom Settings (or Professional)" of the TWAIN driver, image quality may be degraded. This is because the scanned data is transferred using JPEG compression. If image quality is poor, then perform scanning again without selecting the [Quick Scan] option. (By default [Quick Scan] is not selected.)                                                                 | 18   |
| The original is not placed face up in the SPF or face down on the document glass. | → Place the original face up in the SPF or face down on the document glass.                                                                                                                                               |      |
| The original was not placed in the correct position. | → Place the original correctly.                                                                                                                                                                                     |      |
| Unable to scan the image.                   | **If scanning is not possible, shut down your computer, turn off the machine’s power switch, and unplug the machine’s power cord. Next, start your computer, restore power to the machine, and try scanning again. If scanning is still not possible, check the following items.**                                                                 |      |
| Your application is not TWAIN/WIA compliant. | → If your application is not TWAIN/WIA compliant, scanning will not be possible. Make sure your application is TWAIN/WIA compliant.                                                                                                                                             |      |
| You have not selected the scanner driver of the machine in your application. | → Make sure that the machine's scanner driver is selected in your TWAIN/WIA-compliant application.                                                                                                                                                                       | 16   |
| You have not specified all scanning preferences appropriately. | → Scanning a large area at high resolution results in a large quantity of data and a prolonged scanning time. When selecting the scan preferences, lower the resolution or specify a suitable scanning area.                                                                                           | 17   |
| "DISABLE USB SCAN" has been enabled in the key operator programs. | → Consult the key operator.                                                                                                                                                                                          | 26   |
| Scanner transfer speed is slow when the dual function board is installed. | **Make sure that your computer meets the system requirements for the USB 2.0 interface (Hi-Speed mode).**  
   → Make sure that your computer meets the system requirements described in "System requirements for USB 2.0 (Hi-Speed mode)" in the "Key operator's guide", and then set "USB2.0 MODE" to "HI-SPEED" in the key operator programs. |      |
## 6 SPECIFICATIONS

### Printer specifications

| **Printing speed**<sup>*</sup>¹ | When the dual function board is installed:  
When the dual function board is not installed:  
12 pages/min |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resolution</strong></td>
<td>600 dpi</td>
</tr>
</tbody>
</table>
| **Memory**                    | **Page memory**  
**IMC Memory**<sup>*</sup>² | 16 MB |
| **Emulation**                 | SHARP GDI / SPLC (Sharp Printer Language with Compression)<sup>*</sup>² |
| **Memory expansion**          | 256 MB expansion memory board (AR-SM5) can be installed in one DIMM expansion slot<sup>*</sup>² |
| **Interface port**            | IEEE1284 parallel port  
USB 1.1 port (USB-1)  
USB 2.0 port (USB-2)<sup>*</sup>² |
| **Interface cables**          | **[Parallel cable]**  
Shielded bi-directional (IEEE1284) cable (max. length 10 feet (3 m))  
Please purchase a commercially available parallel cable.  
**[USB cable]**  
Shielded twisted pair cable (max. length 10 feet (3 m))  
Please purchase a commercially available USB cable. (For connection to the USB 2.0 port, the cable must support USB 2.0.) |

<sup>¹</sup> Print speed during printing of the second sheet and following sheets when using 8-1/2" x 11" (A4) plain paper and performing continuous one-sided printing of the same page; excluding use of offset output.

<sup>²</sup> When the dual function board is installed.
### Scanner specifications

<table>
<thead>
<tr>
<th><strong>Type</strong></th>
<th>Flatbed color scanner</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scanning method</strong></td>
<td>Document glass / SPF / RSPF</td>
</tr>
<tr>
<td><strong>Light source</strong></td>
<td>Cold cathode fluorescent lamp</td>
</tr>
</tbody>
</table>
| **Resolution** | Basic: 600 dpi x 600 dpi  
Setting range: 50 dpi - 9600 dpi |
| **Original types** | Sheet media, books |
| **Effective scanning area** | 11-45/64" (297 mm) (Lengthwise) x 17" (431 mm) (Width) |
| **Scanning speed** | Color / Black and White (light source color selected): 2.88 msec/line  
Grayscale / Black and White: 0.96 msec/line |
| **Scanning colors** | Black and white 2 value  
Grayscale  
Full Color |
| **Protocol** | TWAIN / WIA (Windows XP only) / STI |
| **Interface port** | USB 1.1 port (USB-1)  
USB 2.0 port (USB-2) (When the dual function board is installed.) |
| **Drop out color** | Yes |
| **Supported operating systems** | Windows 98/Windows Me  
(For more information, see "1. INSTALLING THE SOFTWARE (THAT ACCOMPANIES THE MACHINE)" in the "Software setup guide"). |
| **Void area** | Top and bottom edges 7/64" (2.5 mm), right and left edges 1/8" (3.0 mm) (at the periphery of the machine's maximum scanning area) |
| **Interface cables** | [USB cable]  
Shielded twisted pair cable (max. length 10 feet (3 m))  
Please purchase a commercially available USB cable. (For connection to the USB 2.0 port, the cable must support USB 2.0.) |

* The resolution may be enhanced by the scanner driver depending on the scanned area and resolution.

---

**Note**
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.
Be sure to become thoroughly familiar with this manual to gain the maximum benefit from the product.

Before installing this product, be sure to read the installation requirements and cautions sections of the "Operation manual (for general information and copier)".

Be sure to keep all operation manuals handy for reference including this manual, the "Operation manual (for general information and copier)" and operation manuals for any optional equipment which has been installed.
**FAX interface cable and Line cable:**
These special accessories must be used with the device.

**Notice for Users in Europe**

This equipment complies with the requirements of Directive 1999/5/EC.

Dieses Gerät entspricht den Anforderungen der EU-Richtlinie 1999/5/EG.

Cet appareil est conforme aux exigences de la directive 1999/5/CE.

Este aparato satisface las exigencias de las Directiva 1999/5/CE.

Quest'apparecchio è conforme ai requisiti delle direttiva 1999/5/CE.

Dit apparaat voldoet aan de eisen van de richtlijn 1999/5/EG.

Este equipamiento obedece às exigências da directiva 1999/5/CE.

Denna utrustning uppfyller kraven enligt direktiv 1999/5/EC.

Dette udstyr overholder kravene i direktiv 1999/5/EF.

Dette produktet opfyller kravene i direktiv 1999/5/EC.

Tämä laite täyttää direktiivi 1999/5/EY.

Εξοπλισμός αυτός πληροί τις πρόνοιες της Οδηγίας 1999/5/ΕΕ του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου

Bu cihaz Avrupa Parlamentosu ve Konseyi Direktifi 1999/5/EC 'nin gerekliklerine uyundur.

Toto zařízení je v souladu s požadavky směrnice rady 1999/5/EC.

Seade vastab direktiivi 1999/5/EÜ nõuetele.

Ez a berendezés megfelel az 1999/5/EK Irányelvnek

Ši ierice atbilst tehniskam prasībām pec 1999/5/EC direktivas.

Šis prietaisas atitinka direktyvos 1999/5/EC reikalavimus.

To urządzenie spełnia wymagania dyrektywy 1999/5/EC.

Tento prístroj je v súlade s požiadavkami smernice rady 1999/5/EC

Ta oprema je v skladu z zahtevami Direktive 1999/5/EC.

This equipment works on the British analogue public switched telephone network.

This equipment has been tested according to the pan-European TBR 21 regulation.

It will operate on all analogue telephone networks which comply with the TBR 21.

Please contact your dealer or network operator, if you are not sure whether your network operates according to TBR 21.

**Important Notice for New Zealand Users**

**General**

"The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services. In particular the higher speeds which this modem is capable of, can only be achieved in ideal conditions."

"This equipment shall not be used in any manner which could constitute a nuisance to other Telecom customers."

This equipment shall not be set up to make automatic calls to the Telecom '111' Emergency Service.

To avoid telephone charges for local calls, be sure to store numbers "without" area code in your rapid or speed dial locations.

This equipment may not provide for the effective hand-over of a call to another device connected to the same line.

**WARNING:**

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
INTRODUCTION

Thank you for purchasing this product. This manual only explains the facsimile functions of the product. For safety precautions and general information on using the machine such as loading paper, clearing misfeeds, and handling peripheral units, see the "Operation manual (for general information and copier)".

For other functions, see the following manuals as appropriate:

- **Copier function**: See the "Operation manual (for general information and copier)".
- **Printer function**: See the "Operation manual (for printer and scanner)".
- **Network scanner function**: See the "Operation manual (for network scanner)" (if the network scanner option is installed).

The explanations in this manual assume that certain optional peripheral units are installed.

This manual refers to the Reversing single pass feeder as the "RSPF" and the single pass feeder as the "SPF". Unless specific mention is made, both the RSPF and the SPF are referred to simply as "SPF".

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. Fax reception can also be activated from an extension phone connected to the machine. (remote operation)

- If you connect a combination telephone/answering machine to the machine, you will not be able to use the answering machine function.
- You can place calls from the phone even during a power failure.

CONNECTING AN EXTENSION PHONE

1. **Insert the end of the extension phone cord into the extension phone jack on the left side of the machine.**

   - **Note**: Make sure you hear a "click" sound indicating that the cord is securely connected.

   In New Zealand, not all standard telephones and answering machines will respond to incoming ringing when connected to the extension socket of the equipment.
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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.

Line connection

Be sure to use the provided telephone line cord to connect the machine to a telephone line jack. Insert one end of the telephone line cord into the LINE jack on the left side of the machine as shown. Insert the other end of the telephone line cord into a telephone line jack.

Insert the plug firmly until you hear a "click".

In some countries, an adapter is required to connect the telephone line cable to the wall telephone socket, as shown in the illustration.

Power switch

Keep the machine power switch turned on at all times. Do not turn off the power. If the power is turned off, the fax function cannot be used.

When the power is off, the machine cannot receive faxes. Before turning off the power, make sure the machine is idle. If the power is turned off while the machine is in operation, a paper jam may occur. If settings are being configured, the settings will be cancelled.

Setting the date and time and programming your sender's name and number

Before using the fax function, you must set the date and time and program your sender's name and number in the machine. This procedure is explained in "POINTS TO CHECK AND PROGRAM AFTER INSTALLATION" on page 7 of this manual.
Lithium battery
A lithium battery in the machine is used to retain settings and programmed information such as auto-dial numbers (page 62).
• When the battery dies, settings and programmed information will be lost, so please keep a record of this information. (See "PRINTING LISTS OF PROGRAMMED INFORMATION, SETTINGS, AND COMMUNICATION ACTIVITY" on page 81.)
• The life of the battery is approximately 5 years when the power switch is kept continuously off.
• When the battery dies, please contact your local Sharp dealer or authorised service representative for assistance in disposing of this battery. The machine will not operate once the battery dies.

Please note
In the event of a thunderstorm, remove the power cord from the power outlet to ensure safety. Information will be retained in memory even if the power cord is unplugged.
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.

NOTICE FOR USERS IN AUSTRALIA AND NEW ZEALAND

Your fax machine and the telephone system

WARNING NOTICE:
NO calls can be made to or from this fax during a mains power failure.

• This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

WARNING
Australian Communications Authority (ACA) regulations state that no unauthorized changes or modifications to this equipment are permitted.

Note: Complies with the following standards,
ACA TS001-1997, AS/NZS 60950:2000

These limits are designed to provide reasonable protection against interference in an installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and the receiver.
• Connect the equipment to an outlet on a different circuit to that which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

The Ringer Equivalence Number (REN) for this equipment is written on the A-Tick label.

Important safety information

In Australia, installing or modifying telephone lines should only be done by an ACA licensed serviceman. In New Zealand, installing or modifying telephone lines should be done in accordance with Telecom wiring practices.
This chapter contains basic information about using the fax function of the machine. Please read this chapter before using the fax function.

### POINTS TO CHECK AND PROGRAM AFTER INSTALLATION

After installing the machine and before using it as a fax machine, check the following points and program the required information.

#### Set the date and time

The machine has an internal clock. It is important to set the correct date and time because they are used for such features as Timer Transmission (page 34).

The date and time are set in the key operator programs. (Page 99)

The date and time appear in the display. Make sure the correct date and time appear. If the date and time are wrong, please correct them.

#### Program the sender's name and sender's number

The name and fax number of the user of the machine is programmed in "OWN PASSCODE SET" (page 96) in the key operator programs. (Only one name and number can be programmed.)

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 (see "USING THE POLLING FUNCTION" on page 37).

You can check your programmed name and number by printing out the "Key Operator List" in the key operator programs. (See "LIST PRINT" on page 95.)

#### Paper sizes that can be used for fax mode

The machine can use A3, B4, A4, A4R, B5, B5R, A5, 11” x 17”, 8-1/2” x 14”, 8-1/2” x 11”, 8-1/2” x 11”R, and 5-1/2” x 8-1/2” size paper; however, 11” x 17”, 8-1/2” x 14” and 5-1/2” x 8-1/2” size paper cannot be used in fax mode. (Among INCH sizes, only 8-1/2” x 11” and 8-1/2” x 11”R can be used.) (If your machine uses inch-based paper sizes, A3, B4, B5, B5R, and A5 size paper cannot be used in fax mode. (Among AB sizes, only A4 and A4R can be used.) For this reason, if only paper sizes that can be used in other modes but not in fax mode are loaded in the machine, received faxes cannot be printed. (For other points regarding fax reception, see "RECEIVING FAXES" page 28.)

* A5 (5-1/2” x 8-1/2”) size paper can only be loaded in tray 1, regardless of the mode. A5 (5-1/2” x 8-1/2”) paper cannot be loaded in tray 2 or in the optional 250-sheet paper feed unit or 2 x 250-sheet paper feed unit.

For the procedures for loading paper in the trays, see the "Operation manual (for general information and copier)".
PART NAMES AND FUNCTIONS

OPERATION PANEL

(1) Page pallet (page 82)

(2) Display (page 10)
This key displays the base screen and the function setting screen.

(3) [BACK] key
In a setting or programming screen, this key is used to move back to the previous screen.

(4) [FAX STATUS] key (page 26)
This is used to cancel a fax transmission or a stored fax transmission.

(5) [OK] key
This key is used to enter a setting that has been selected with the arrow or other keys (▼ ▲ < ►).

(6) Numeric keys
These are used to enter fax numbers, sub-addresses, passcodes, and numerical settings. (See "BOXES AND SUB-ADDRESSES/PASSCODES REQUIRED FOR F-CODE TRANSMISSION" on page 48.)

(7) [C] key
This is used to clear a mistake when entering fax numbers, sub-addresses, passcodes, and numerical settings. One digit is cleared each time the key is pressed.
When an original is being scanned, this key can also be used to cancel scanning.

(8) [CA] key
This is used to cancel a transmission or programming operation. When pressed during an operation, the operation is cancelled and the display returns to the base screen described on page 10.
This key is also used to cancel a resolution, paper size, or special function setting that was selected when sending a fax.

(9) [SPEAKER/SHIFT] key (pages 16, 82)
This is used to dial without lifting an extension phone connected to the machine and to shift between upper and lower case when entering characters.

(10) [REDIAL/PAUSE] key (pages 16, 18)
This is used to redial the last number dialled, and enter a pause when entering a fax number.

(11) [SPEED/SYMBOL] key (pages 16, 84)
This is used to dial by Speed dialling and to enter a symbol when entering characters.

(12) [COMM. SETTING/SPACE/-] key (page 23)
This is used to switch between memory transmission and direct transmission, and to switch between automatic reception and manual reception. It is also used to enter a space or "-" when entering characters.

(13) LINE STATUS indicator
This blinks to alert you when a fax is received. *FAX RECEPTION LIGHT* (page 103) in the key operator programs can be used to set the blinking timing to one of two patterns, or to turn blinking off.
BEFORE USING THE FAX FUNCTION

(14) [MODE SELECT] keys (step 1 on page 18)
These are used these keys to change modes.

(15) [FAX] key/FAX indicator/LINE indicator/DATA indicator
Press to switch to fax mode. The base screen of fax mode will appear in the display.
The LINE indicator lights up during transmission or reception of a fax. When a fax has been received, the DATA indicator blinks. (When there is fax transmission data in memory, the DATA indicator lights up.)

(16) [PROGRAM] key (page 45)
Press this key to use a program.

(17) [RESOLUTION] key (page 15)
This key is used to select resolution and exposure settings.

(18) [ADDRESS] key (page 21)
This key is used to search for a fax destination that has been stored as an auto-dial number in the address book.

(19) [BROADCAST] key (page 32)
This is used to perform a broadcast transmission.

(20) [ORIGINAL SIZE] key (page 14)
This is used to set the size of the original to be faxed.

(21) [DUPLEX SCAN] key (page 22)
Press this key to use the duplex scan function. (Only on models with a RSPF installed.)

(22) [SPECIAL FUNCTION] key
This key is used to select a special transmission or reception function, configure function settings, and to store auto-dial numbers.

(23) Arrow keys (▼ ▲ ◀ ▶)
These are used to select items and move through pages.

(24) [START] key (   )
This is used at the following times:
(1) When starting transmission
(2) When scanning an original
(3) When starting manual reception
(4) When configuring and storing settings

Note
- When the auto power shut-off function is activated, all lights except the mode key lights go off. For the information on the auto power shut-off function, see the “Operation manual (for general information and copier).”
- For information on the keys and lights which are used for the copy function and other functions, see “Operation Panel” in the manual for each function.
FAX MODE (BASE SCREEN)

The base screen of fax mode is displayed by pressing the [FAX] key when the print mode, copy mode, or scan mode screen appears.

The base screen of fax mode

(1) Message display
Messages appear here to indicate the current status of the machine. An icon (خصوص) appears to the right side when a confidential fax has been received.

(2) Date and time display
This shows the date and time.

(3) Transmission mode display (page 23)
There are three transmission modes: memory transmission, direct transmission, and manual transmission. This shows the currently selected transmission mode.

(4) Exposure display (page 15)
This shows the exposure for scanning the original that has been selected with the [RESOLUTION] key.

(5) Resolution display (page 15)
This shows the resolution for scanning the original that has been selected with the [RESOLUTION] key.

(6) Free memory display
This shows the percentage of fax memory that is free.

(7) Reception mode display (page 61)
There are two modes for receiving faxes: automatic reception and manual reception. This shows the currently selected reception mode.

(8) Original display (page 14)
This displays an icon to indicate the original scanning mode when an original has been placed.

Note

The following functions operate even when copy mode is selected:
• Automatic reception (including F-code confidential reception)
• Timer Transmission
• Memory polled function
• Transmission of stored memory transmission jobs
• Voice calls (voice calls can be answered but not placed).
• Remote reception
• Manual reception
• Relay station function for F-code relay broadcast transmission
AUDITING MODE

Accounts that can transmit faxes (up to 50) can be established and transmission time and other information can be tracked for each account. The Acc. Usage List (page 95) can be printed out which shows the time used for transmission and pages transmitted by each account.
• This function is enabled using "ACCOUNT CONTROL" and "ACCOUNT # SET" in the key operator programs. (Page 98)

Using auditing mode

When auditing mode is turned on, the account number entry screen is displayed. Enter your account number (five-digit identification number) as explained below before performing a fax operation.

1. Enter your account number (five digits) with the numeric keys.
   - As the account number is entered, the hyphens "-" change to asterisks "*". If you enter an incorrect digit, press the [C] key and re-enter the correct digit.
   - After you enter your account number, the base screen of fax mode appears. (Page 10)

2. When you have completed the fax operation, press the [ACC.#-C] key (15).

• If you enter an account number for copy mode has also been programmed for fax mode, you can change to fax mode after completing the copy operation and continue with the fax operation without re-entering your account number.
• If you enter an account number for copy mode that has not been programmed for fax mode, enter your account number for fax mode after you press the [FAX] key to change to fax mode.
• When "ACC. # SECURITY" in the key operator programs (see the "Key operator's guide" in the "Operation manual (for general information and copier)"") is enabled, the message "Please see your key operator for assistance." will appear for one minute in the event that you enter an incorrect or invalid account number three times in a row. During that time operation of the machine will not be possible.
ORIGINALS

ORIGINALS THAT CAN BE FAXED

Original sizes

<table>
<thead>
<tr>
<th>Using the SPF</th>
<th>Minimum original size</th>
<th>Maximum original size</th>
</tr>
</thead>
<tbody>
<tr>
<td>A5: 210 mm (width) x 148 mm (length)</td>
<td>297 mm (width) x 800 mm* (length)</td>
<td></td>
</tr>
<tr>
<td>(8-1/2&quot; (width) x 5-1/2&quot; (length))</td>
<td>(11&quot; (width) x 31-1/2&quot;* (length))</td>
<td></td>
</tr>
<tr>
<td>A5R: 148 mm (width) x 210 mm (length)</td>
<td>* Long documents can be transmitted</td>
<td></td>
</tr>
<tr>
<td>(5-1/2&quot; (width) x 8-1/2&quot; (length))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using the document glass</td>
<td>297 mm (width) x 432 mm (length)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(11&quot; (width) x 17&quot; (length))</td>
<td></td>
</tr>
</tbody>
</table>

* Note
- Originals that are not a standard size (A5, A4, A4R, B4, A3, 8-1/2" x 11", 8-1/2" x 11"R (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, A4R if the machine uses inch-based paper sizes)) can also be faxed.
- There are restrictions on originals that can be scanned using the SPF. For more information, see "NORMAL COPYING" in the "Operation manual (for general information and 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. When a long original cannot be entirely scanned, select a lower resolution setting and/or shorten the original.

Scanning area of original
When faxing an original, note that the edges of the original cannot be scanned.

Width of edges that cannot be scanned:
5 mm from top and bottom edges, 6 mm (or less) from left and right edges

Automatic reduction of faxed document
If the size (width) of the faxed document is greater than the receiving machine's paper size, the size will be automatically reduced.

<table>
<thead>
<tr>
<th>Faxed document width</th>
<th>Receiving machine's paper width</th>
<th>Size after reduction</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>A3 (11&quot; x 17&quot;)</td>
<td>B4 (8-1/2&quot; x 14&quot;)</td>
<td>B4 (8-1/2&quot; x 14&quot;)</td>
<td>1 : 0.78 (1 : 0.64)</td>
</tr>
<tr>
<td>A3 (11&quot; x 17&quot;)</td>
<td>A4 (8-1/2&quot; x 11&quot;)</td>
<td>A4R (8-1/2&quot; x 11&quot;R)</td>
<td>1 : 0.5 (1 : 0.5)</td>
</tr>
<tr>
<td>B4 (8-1/2&quot; x 14&quot;)</td>
<td>A4 (8-1/2&quot; x 11&quot;)</td>
<td>A4R (8-1/2&quot; x 11&quot;R)</td>
<td>1 : 0.64 (1 : 0.78)</td>
</tr>
</tbody>
</table>

You can turn off automatic reduction. In this case, the left and right edges will not be transmitted. (See "AUTO REDUCE TX" on page 100.)
PLACING THE ORIGINAL

An original can be placed in the SPF or on the document glass. Use the SPF when faxing a large number of sheet originals. Use the document glass to fax originals that cannot be scanned using the SPF such as thick or thin sheet originals, or books or other bound originals.

USING THE SPF

1. Open the SPF, make sure that an original has not been left on the document glass, and then gently close the SPF.

2. Adjust the original guides on the document feeder tray to the width of the document.

3. Align the edges of the document pages and then insert the stack in the document feeder tray so that the first page is face up.

   - Insert the originals all the way into the document feeder tray.
   - Make sure the stack does not exceed the indicator line (maximum of 40 sheets, or 30 sheets of 90 g/m² (24 lbs.) paper, thickness 4 mm (5/32") or less).

   - Do not load originals that are different sizes even if the widths are the same. This may cause misfeeds.
   - Use the SPF for long originals. The document glass cannot be used.
   - When inserting a long original, the original should be in contact with the surface of the document feeder tray. If the original is not in contact with the surface of the document feeder tray, an incorrect original size may be detected.

   Note

   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.) Place the original in the appropriate position for its size as shown below.

   Document glass scale
   A4 A3 B4
   Document glass scale
   A5

   The difference between A4 (8-1/2" x 11") and A4R (8-1/2" x 11"R)

   This manual uses both A4 (8-1/2" x 11") and A4R (8-1/2" x 11"R) to indicate paper and original sizes. The "R" is used to distinguish the orientation of originals and paper. ("R" is used for this purpose for other sizes as well.)

   [Example] Difference between the orientations of A4 (8-1/2" x 11") size and A4R (8-1/2" x 11"R) size

   A4 (8-1/2" x 11") indicates an original placed as follows:

   Vertically oriented

   A4R (8-1/2" x 11"R) indicates an original placed as follows:

   Horizontally oriented
CHECKING THE SIZE OF A PLACED ORIGINAL

When a standard-size* original is placed, the original size is automatically detected (automatic original detection function) and displayed in the original display. Make sure that the size has been detected correctly.

(1) When an original is placed, an icon appears to indicate the original scanning mode.
  : One-sided scanning in the SPF.
  : Scanning on the document glass
  : Two-sided scanning in the RSPF.

(2) Displays the original size.
If a non-standard size original is placed or if you wish to change the scanning size, follow the steps below to manually set the original scanning size.

MANUALLY SETTING THE SCANNING SIZE

If you load an original that is not a standard size (such as a long original), or if the size is not detected correctly, be sure to press the [ORIGINAL SIZE] key and set the original size manually.

Perform the following steps after placing the original in the document feeder tray or on the document glass (page 13).

1 Press the [ORIGINAL SIZE] key.

The original size selection screen appears.

2 Select the original size with the [▼] or [▲] key.

The selected original size is highlighted.

To select an INCH size, press the [▼] key and go to step 4.

When the [▼] key is pressed, the original size selection screen for INCH sizes appears.

3 Press the [OK] key.

You will return to the base screen and the selected original size will appear in the original display.

Selecting an INCH original size

4 Select the original size with the [▼] or [▲] key.

To return to selection of AB original sizes, press the [▼] key and return to step 2.

When the [▼] key is pressed, the original size selection screen for INCH sizes appears.

5 Press the [OK] key.

You will return to the base screen and the selected original size will appear in the original display.

To cancel a manual original scanning size setting, press the [CA] key.
If it is not possible to select the actual original size, select a size that is larger than the actual original size. If a smaller size is selected, part of the original will not be transmitted.
SELECTING RESOLUTION AND EXPOSURE SETTINGS

The resolution and exposure can be adjusted to match the size and darkness of text on the original, or for an original such as a photograph. To change the settings, follow the steps below after selecting fax mode and placing the original. (Page 13)

1. Press the [RESOLUTION] key.

The resolution selection screen will appear.

2. Select the resolution with the [▼] or [▲] key.

The selected resolution is highlighted.

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STANDARD</td>
<td>Use this setting for originals with normal-size text (like the text in this manual).</td>
</tr>
<tr>
<td>FINE</td>
<td>Use this setting for originals with small letters or detailed drawings. The original will be scanned at twice the resolution of Standard.</td>
</tr>
<tr>
<td>SUPER FINE</td>
<td>Use this setting for originals with intricate drawings or diagrams. A higher-quality image will be produced than with the Fine setting.</td>
</tr>
<tr>
<td>ULTRA FINE</td>
<td>Use this setting for originals with intricate drawings or diagrams. This setting gives the best image quality. However, transmission will take longer than with the other settings.</td>
</tr>
</tbody>
</table>

To set the exposure next, press the [▼] or [▲] key and go to step 4.

3. Press the [OK] key.

You will return to the base screen and the selected resolution will appear in the resolution display.

4. Select the desired exposure with the [◄] or [►] key.

• To select a light setting for a dark original such as a newspaper, press the [◄] key to move the setting toward ( ).
• To select a dark setting for a light original such as writing in pencil or faint colour text, press the [►] key to move the setting toward ( ).
• When the exposure setting reaches the left side or the right side, pressing the [◄] or [►] key changes the exposure display from the 5-step display to "AUTO".

5. Press the [OK] key.

You will return to the base screen and the selected exposure will appear in the exposure display.

- The default resolution setting is "STANDARD" and the default exposure setting is "AUTO". The default settings for the resolution and exposure can be changed in the key operator programs. (See "RES. CON. SET" on page 100.) When using the document glass to scan multiple original pages, the exposure setting can be changed each time you change pages. When using the SPF, the resolution and exposure settings cannot be changed once scanning has begun.
- Even if you send a fax using a high resolution setting such as "FINE", "SUPER FINE", or "ULTRA FINE", some receiving fax machines may print the fax at a lower resolution.
- To cancel a resolution or exposure selection, press the [CA] key.

To set the exposure next, press the [▼] or [▲] key and go to step 4.

When the [▼] or [▲] key is pressed, the exposure display changes from "AUTO" to a 5-step display.
CONVENIENT DIALLING METHODS (AUTO-DIALLING)

The fax function includes a convenient auto dial feature (Rapid dialling, speed dialling and group dialling). By programming frequently dialled numbers, you can call and send faxes to these locations by means of a simple dialling operation (page 20). There are three types of auto-dialling: Rapid dialling, speed dialling, and group dialling. To program auto-dial numbers, see page 62.

- **Rapid dialling**
  A stored destination can be dialled by simply pressing a Rapid key ([01] to [50]). A name up to 36 characters in length can be programmed for the location (a maximum of 12 characters are displayed). When using F-code transmission, a sub-address and passcode (page 48) can also be programmed.

- **Speed dialling (300 stations)**
  A stored destination can be dialled by pressing the [SPEED] key, entering a 3-digit number (000 to 299), and pressing the [START] key (③). A name (maximum 36 characters) can be stored for each destination. When using F-code transmission, a sub-address and passcode (page 48) can also be programmed.

- **Group dialling**
  Multiple Rapid dial and/or Speed dial destinations can be stored in a Rapid key for Group dialling. Destinations can also be stored for Group dialling by entering fax numbers with the numeric keys. This is convenient for communicating with a group of other fax machines.

- **REDIALLING**
  The machine retains the last fax or phone number dialled. This number can be redialed by simply pressing the [REDIAL] key and then the [START] key (⑤).
  - If you pressed a numeric key during the previous call, the [REDIAL] key may not dial the correct number.
  - Redialling is not possible to broadcast transmission (page 32), serial polling (page 38), timer transmission (page 34), group dialling (page 20), or F-code transmission (page 55) destinations.

- **ON-HOOK DIALLING**
  This feature allows you to dial without lifting an extension phone connected to the machine. Press the [SPEAKER] key, listen for the dial tone through the speaker, and then dial.
  - If a person answers, lift the extension phone to answer. (You can only speak to the other party if an extension phone is connected to the machine.)
  - Faxes must be sent manually when using on-hook dialling. (Page 24)
  - On-hook dialling is not possible using a Rapid key that includes a sub-address and passcode, or a group dial key.

- **Note**
  - A combined total of 50 Rapid dial and group dial keys can be stored, and 300 speed dial destinations can be stored.
  - Stored Rapid keys, group keys, and Speed dial destinations can be called up using a search name entered when the key or destination was stored. (Page 21)
  - To prevent dialling a wrong number and sending a fax to an incorrect destination, check the message display carefully when you store the number. You can also check stored numbers by printing out the programmed information after storing the number (page 81).
This chapter explains the basic procedures for sending and receiving faxes. There are three basic methods for fax transmission: memory transmission, direct transmission, and manual transmission. When memory transmission is used, the document is temporarily stored in memory before being transmitted. When direct transmission or manual transmission is used, the document is transmitted without being stored in memory. The default transmission setting can be set to "MEMORY TX" or "DIRECT TX" using "SEND MODE" (page 101) in the key operator programs. To manually switch between "MEMORY TX" and "DIRECT TX", use the [COMM. SETTING] key. (See "Faxing by direct transmission" on page 23.) The following explanations generally assume that memory transmission is being used.
SENDING A FAX
BASIC PROCEDURE FOR SENDING FAXES

1 Make sure that the machine is in fax mode.

The FAX indicator is lit when the machine is in fax mode. If the indicator is not lit, press the [FAX] key. If auditing mode has been enabled for the fax function in the key operator programs, a message will appear prompting you to enter your account number when you switch to fax mode. Enter your account number (5 digits) with the numeric keys. (See "ACCOUNT CONTROL" on page 98.)

2 Place the original(s) in the document feeder tray or on the document glass.

- Using the SPF: page 13
- Using the document glass: page 13
If you are using the document glass to send multiple pages, place the first page first.

3 Check the original size. If the original is not a standard size or the size was not detected correctly, press the [ORIGINAL SIZE] key.

When the [ORIGINAL SIZE] key is pressed, the size selection screen appears. See "MANUALLY SETTING THE SCANNING SIZE" (page 14) to set the original size.

4 If needed, adjust the resolution and exposure settings. (Page 15)

To adjust the resolution and exposure settings, press the [RESOLUTION] key. (See "SELECTING RESOLUTION AND EXPOSURE SETTINGS" on page 15.)

5 Dial the fax number.

- The entered number appears in the message display. Up to 50 digits can be entered. If you make a mistake, press the [C] key and then enter the correct number.
- Redialling and automatic dialling can also be used (pages 16, 20).

Entering a pause

If a pause is necessary when dialling out from a PBX or when dialling an international number, press the [REDIAL] key. (This key functions as a pause key when entering a number.)
If you press the [PAUSE] key once, a hyphen (“-“) appears and a 2-second pause* is inserted. After entering a number, you can also press 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, and is called Chain dialling.)
* The duration of each pause can be changed in the key operator programs. (See "PAUSE TIME" on page 96.)

Note Group keys cannot be used for chain dialling.
6 Press the [START] key ( ).

• Scanning begins.
• If the line is free, the machine will dial the receiving machine and begin transmission as soon as the first page is scanned. (Quick online transmission: page 25)
• If there is a previously stored job or a job is in progress, or if the line is being used, all pages of the original 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, the following screen appears briefly and then the display returns to the base screen.

7 If you have another page to scan, change pages and then press the [START] key ( ).

• Repeat this sequence until all pages have been scanned.
• You can change the resolution and exposure settings as needed for each page.
• If no action is taken for one minute (the [START] key ( ) is not pressed), scanning automatically ends and the transmission job is stored. (This function can be disabled in the key operator programs.)

8 After the last page is scanned, press the [READ-END] key ( ).

Open the SPF and remove the original. When the original is removed or any key operation is performed, the display returns to the base screen. (The destination is automatically called and the document transmitted after any previously stored jobs are completed.)

To cancel transmission
To cancel transmission while "READING" appears or before the [ ] key is pressed, press the [C] or [CA] key.
To cancel a transmission job that is already stored, press the [FAX STATUS] key and cancel the job as explained on page 26.
• A job number (3 digits) appears in the display with "READ END" when memory transmission is performed. If you make a note of this number after performing a broadcast transmission, you can use the number to check the results of the transmission in the transaction report or activity report.
• If the power is turned off or a power failure occurs while an original is being scanned in the SPF, the machine will stop and an original misfeed will occur. After power is restored, remove the original as explained in "ORIGINAL MISFEED IN THE SPF" in the "Operation manual (for general information and copier)".

Note
TRANSMISSION BY AUTO-DIALLING (RAPID DIALLING AND GROUP DIALLING)

Fax numbers can be dialled by automatic dialling (Rapid dialling and group dialling) instead of pressing the numeric keys. Follow the steps below to send a fax using an auto dial number. To use an auto dial number, the name and fax number of the destination must first be stored. See page 16 for information on auto-dialling and page 62 for information on programming auto-dial destinations.

1. Perform steps 1 to 4 of "BASIC PROCEDURE FOR SENDING FAXES" (page 18).

2. Press the Rapid key or group key for the desired destination.

The name programmed for the destination can be displayed by pressing the Rapid key.

3. Continue from step 6 of "BASIC PROCEDURE FOR SENDING FAXES" (page 19).

SENDING A FAX BY SPEED DIALLLING

In addition to Rapid dialling and group dialling, you can also send a fax by pressing the [SPEED] key and entering a 3-digit Speed Dial number. Follow the steps below to send a fax by Speed Dialling. The 3-digit Speed Dial number is entered with the numeric keys when programmed. (See "STORING, EDITING, AND DELETING AUTO DIAL NUMBERS AND PROGRAMS" on page 62.)

1. Perform steps 1 to 4 of "BASIC PROCEDURE FOR SENDING FAXES" (page 18).

2. Press the [SPEED] key.

The Speed Dial number entry screen appears.

3. Enter the 3-digit Speed Dial number with numeric keys.

If you make a mistake, press the [C] key and then enter the correct number. If you enter a 3-digit number that is not programmed in the machine, press the [C] key and then enter the correct number. If you do not know the Speed Dial number, print out the "SPEED # LIST". (See "PRINTING LISTS OF PROGRAMMED INFORMATION, SETTINGS, AND COMMUNICATION ACTIVITY" on page 81.)

4. Continue from step 6 of "BASIC PROCEDURE FOR SENDING FAXES" (page 19).

Note

To cancel transmission while "READING" appears or before the [ ] key is pressed, press the [C] or [CA] key.
To cancel a transmission job that is already stored, press the [FAX STATUS] key and cancel the job as explained on (page 26).
A job number (3 digits) appears in the display with "READ END" when transmission is performed. If you make a note of this number after performing a broadcast transmission, you can use the number to check the results of the transmission in the transaction report or activity report.
SEARCHING FOR A PROGRAMMED DESTINATION
(USING THE [ADDRESS] KEY)

At the time of dialling, you can enter letters to search for a destination stored in a Rapid key, Speed Dial number, or Group key.

1 Perform steps 1 to 4 of "BASIC PROCEDURE FOR SENDING FAXES" (page 18).

2 Press the [ADDRESS] key.

   The search letter entry screen appears.

3 Enter the search letters with the letter entry keys (page palette) (you can also skip entry of search letters and go directly to the next step to display the first destination in the address list).

   Up to 10 of the following types of characters can be entered.
   Upper case letters, lower case letters, numbers, special characters (See "ENTERING CHARACTERS" on page 82.)
   Enter numbers with the numeric keys.

4 Press the [OK] key.

   The selected destination is entered.

5 Select the desired destination with the [▼] or [▲] key.

   • The search results appear in the following order: upper case letters, lower case letters, special characters, and numbers.
   • If not all letters of the destination name appear, press the [▼] key to display the full name. Press the [▼] key once again to return to the original screen.

6 Press the [OK] key.

   The selected destination is entered.

7 Continue from step 6 of "BASIC PROCEDURE FOR SENDING FAXES" (page 19).

   • To cancel transmission
     To cancel transmission while "READING" appears or before the [▼] key is pressed, press the [C] or [CA] key. To cancel a transmission job that is already stored, press the [FAX STATUS] key and cancel the job as explained on page 26.
     A job number (3 digits) appears in the display with "READ END" when transmission is performed. If you make a note of this number after performing a broadcast transmission, you can use the number to check the results of the transmission in the transaction report or activity report.
BASIC OPERATIONS

FAXING A TWO-SIDED ORIGINAL

Follow the steps below to automatically transmit both sides of a two-sided original. (This is only possible on models that have an RSPF installed.)

Do not use an original that is not a standard size (A3, B4, A4, A4R, A5, 8-1/2” x 11”, 8-1/2” x 11”R (11” x 17”, 8-1/2” x 14”, 8-1/2” x 11”, 8-1/2” x 11”R, A4, A4R if the machine uses inch-based paper sizes)). Otherwise a scanning error or cut-off image may result.

1 Make sure that the machine is in fax mode.
   When the machine is in fax mode, the [FAX] key indicator is lit. If the indicator is not on, press the [FAX] key. If auditing mode has been enabled for the fax function in the key operator programs, a message will appear prompting you to enter your account number when you switch to fax mode. Enter your account number (five digits) with the numeric keys. (See "ACCOUNT CONTROL" on page 98.)

2 Place the original(s) in the document feeder tray. (See "USING THE SPF" on page 13.)

3 Check the original size.
   When the [ORIGINAL SIZE] key is pressed, the size selection screen appears. If the original size was not correctly detected, see "MANUALLY SETTING THE SCANNING SIZE" (page 14) and set the correct original size.

4 Press the [DUPLEX] key.
   The duplex mode selection screen appears.

5 Select "2-SIDED" with the [▼] or [▲] key.

6 Press the [OK] key.
   The duplex original type selection screen appears.

7 Select book or tablet for the duplex original type with the [▼] or [▲] key.

8 Press the [OK] key.
   You will return to the base screen and the duplex scanning mode icon will appear.

9 Continue from step 4 of "BASIC PROCEDURE FOR SENDING FAXES" (page 18).

- 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.
- Duplex scanning is cancelled when the transmission is completed, or when the [CA] key is pressed.
- Duplex scanning of two-sided originals is only possible when an RSPF is used. Automatic scanning of both sides of an original is not possible when the document glass is used.
- Automatic scanning of both sides of an original longer than A3 (11” x 17”) is not possible.
- The image of the back side of the original is rotated 180 degrees if needed at the time of transmission, and thus there is no need to change the orientation at the receiving machine.
- To cancel duplex scanning, select "1-SIDED" in step 5 and then press the [OK] key.
- When duplex scanning is enabled, dual page scan (page 43) cannot be enabled.
Transmission settings (memory transmission mode and direct transmission mode)

Transmission modes include memory transmission, where the original is temporarily scanned into memory before transmission, and direct transmission, where the original is transmitted directly without being scanned into memory. There are two types of memory transmission: "Storing a transmission" (page 24), where all pages of the original are scanned into memory before transmission begins, and "Quick online transmission" (page 25), where the destination is dialled after the first page is scanned and the remaining pages are transmitted as they are scanned.

During a memory transmission, it may happen that the memory becomes full while the originals are being scanned. (See "If the memory becomes full during transmission of a stored transmission job" on page 24 and "If the memory becomes full during a quick online transmission" on page 25.) The number of pages that can be stored in memory varies depending on the content of the pages, the transmission settings, and whether memory has been added. If there are too many pages and memory transmission is not possible, you can press the [COMM. SETTING] key to switch from memory transmission to direct transmission. When direct transmission is used, transmission begins after the current job is completed, allowing you to give priority to a transmission job. As such, direct transmission is a convenient means of performing an interrupt transmission when there are a large number of stored transmission jobs.

To switch between memory transmission and direct transmission, see the following "Faxing by direct transmission".

Faxing by direct transmission

1. Perform steps 1 to 4 of "BASIC PROCEDURE FOR SENDING FAXES" (page 18).

2. Press the [COMM. SETTING] key.

3. Select "TX" with the [▼] or [▲] key.

4. Press the [OK] key.

5. Select "DIRECT TX" with the [▼] or [▲] key.

6. Press the [OK] key.

7. Dial the fax number.

When transmission is performed manually using an extension phone connected to the machine or using on-hook dialling, direct transmission is automatically selected. (Memory transmission is not possible.)
8 Press the [START] key.

When using the document glass, multiple original pages cannot be transmitted in a single transmission.

Faxing by manual transmission (using the [SPEAKER] key)

1 Perform steps 1 to 4 of "BASIC PROCEDURE FOR SENDING FAXES" (page 18).

2 Press the [SPEAKER] key

When this key is pressed, a message regarding volume adjustment will appear briefly followed by the dial entry screen. You can adjust the speaker volume (high, middle, or low) by pressing the [▼] or [▲] key. Note that this will not change the volume setting in the key operator programs. Ringing will be heard from the speaker on the left side of the machine (toward the back) when the [SPEAKER] key is used for dialling.

3 Perform steps 7 and 8 of "Faxing by direct transmission" (page 23 to 24).

Storing transmission jobs (memory transmission)

When the line is in use, the transmission job is temporarily stored in memory. When the current job and any previously stored jobs are completed, transmission begins automatically. (This is called memory transmission.) This means that transmission jobs can be stored in memory by performing a transmission operation while the machine is occupied with another transmission/reception operation. Up to 50 jobs can be stored in memory at once. After transmission, the scanned document data is cleared from memory. You can check transmission jobs stored in memory in the fax job status screen. (Page 27) Note that depending on the number of pages stored in memory and the transmission settings, it may not be possible to store 50 jobs in memory.

- The procedure for storing a transmission job is the same as the procedure in "BASIC PROCEDURE FOR SENDING FAXES" on page 18.
- If you have not yet pressed the [START] key, you can cancel a transmission job by pressing the [C] key.
- If you have already pressed the [START] key, see " Cancelling a stored transmission job" (page 27). If the original is still being scanned after the [START] key is pressed, you can press the [C] key to cancel the transmission.
- If you store a transmission job in direct transmission mode, you will not be able to store any further transmission jobs.

After transmission, the scanned document data is cleared from memory. You can check transmission jobs stored in memory in the fax job status screen. (Page 27)

If the memory becomes full during transmission of a stored transmission job

If the memory becomes full while scanning the first page of a document, the transmission job is automatically cancelled. If the memory becomes full while scanning the second page or a following page, scanning stops. In this case, you can either press the [C] key to cancel the transmission, or press the [OK] key to transmit only those pages which were completely scanned.
Quick On-line
When you use the SPF to send a multi-page document and there are no previously stored jobs waiting or in progress (and the line is not being used), the machine dials the destination after the first page is scanned and begins transmitting scanned pages while the remaining pages are being scanned. This transmission method is called Quick On-line. When a quick online transmission is being performed, the message display shows "READING" - "DIALLING" - "COMM." - "SENDING" in that order until scanning of the remaining pages is completed. When all pages have been scanned, "READ END" appears before the above messages appear. If the receiving party is busy, the quick online transmission will change into a stored transmission job (memory transmission). (See "Storing transmission jobs (memory transmission)" on page 24.)

If the memory becomes full during a quick online transmission
If the memory becomes full while scanning the first page of a document, the transmission job is automatically cancelled. If the memory becomes full while scanning the second page or a following page, those pages which were completely scanned will be transmitted.

If the receiving party is busy
If the receiving party is busy, the transmission is temporarily cancelled 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, press the [FAX STATUS] key and cancel the job. (Page 27)
* The settings can be changed in the key operator programs. (See "RECALL SETTING (BUSY)" on page 102.)

If a transmission error occurs
If an error occurs that prevents transmission or the receiving machine does not answer the call within 45 seconds*, the transmission is stopped and then automatically re-attempted later. One attempt is made at an interval of 1 minute.* If you do not want the machine to re-attempt the transmission, press the [FAX STATUS] key and cancel the job. (Page 27) This machine also supports error correction mode (ECM) and is set to automatically resend any part of a fax that is distorted due to noise on the line.
* The settings can be changed in the key operator programs. (See "RING TIMEOUT IN AUTO TX" (page 103) and "RECALL SET (ERR)" (page 102.)

Image rotation
The machine is initially set to rotate a vertically-placed ( imread(3) ) document 90° so that it is oriented horizontally ( imread(8) ) before transmission (A4 (8-1/2" x 11") originals are rotated to A4R (8-1/2" x 11"R) and A5R originals are rotated to A5). A4R (8-1/2" x 11"R) originals and A5 originals are not rotated. If desired, you can disable the rotation function in the key operator programs as explained on "ROTATE TX" (page 100).

Note
Place A5 size originals so that they are oriented vertically ( imread(3) ). If oriented horizontally, ( imread(8) A5R orientation), press the [ORIGINAL SIZE] key and specify the correct original size (select "A5R") (See "MANUALLY SETTING THE SCANNING SIZE" on page 14.)
CANCELLING A FAX TRANSMISSION

To cancel a transmission that is in progress or a stored transmission job, follow the steps below. A transmission in progress or a stored transmission job is cancelled from the fax status screen. (Printing of a received fax cannot be cancelled.)

To cancel a transmission while the original is being scanned (*READING* appears in the message display) or before the [READ-END] key ([()] when scanning the original from the document glass), the [C] or [CA] key can be pressed.

Cancelling a fax transmission

1. Press the [FAX STATUS] key.
   - When a transmission is in progress, the job being transmitted is displayed.
   - If the displayed job is not the job that you wish to cancel, it is likely that the job to be cancelled is a stored job waiting for transmission. Press the [BACK] key to display the fax status selection screen and then follow the procedure in "Cancelling a stored transmission job" on page 27 to cancel the job.

2. Press the [C] key.
   - A screen asking you to confirm cancellation of the transmission appears.

3. Press the [OK] key.
   - The transmission is cancelled.

- When a transmission is not in progress, the following fax status selection screen appears.

   ![Fax Status Screen]

   When a transmission is not in progress, the following fax status selection screen appears.

   - If you do not wish to cancel the transmission, press the [▼] key in the screen of step 2, select "NO", and press the [OK] key.
   - You can check cancelled operations in the Activity Report. "CANCEL" will appear in the "TYPE/NOTE" column of the report. Additional information on the display during transmission

   ![Additional Information on Display]

   (A) Destination name
   The name of the destination appears if programmed.

   (B) Transmission method name
   In the case of a timer transmission, the timer icon "T" appears at the beginning of the transmission method name.

   (C) Number of pages currently transmitted
   Appears during sending.

   (D) Document number
   The document number assigned at the time of scanning in memory transmission mode appears.
Cancelling a stored transmission job

If you do not wish to cancel a stored transmission job and only wish to check its status, press the [BACK] key instead of the [C] key in step 4 to exit.

1. Press the [FAX STATUS] key.

   The fax job status screen is displayed.

2. Select "TX/RX RESERVE" with the [▼] or [▲] key.

3. Press the [OK] key.

   The first stored transmission job appears.

   Press the [▼] or [▲] key until the transmission job that you wish to cancel appears.

4. Press the [C] key.

   The transmission cancel confirmation screen appears.

5. Select "YES" with the [▼] or [▲] key.

6. Press the [OK] key.

   The selected transmission job is cancelled.

   If you wish to cancel another transmission job, repeat steps 1 through 6.

When a transmission is in progress, the job being transmitted is displayed. Press the [BACK] key to display the fax status selection screen.

Contents of the stored job screen (screen of step 3)

(A) Current status
   "WAITING" will appear next to stored transmission jobs and timer transmission jobs. "RECALL" will appear next to recall mode jobs.

(B) Destination
   The name of the destination appears if programmed.

(C) Transmission method name
   In the case of a timer transmission, the timer icon "○" appears at the beginning of the transmission method name.

(D) Number of pages stored
   In the case of a stored transmission job, the document number assigned at the time of scanning appears.

(E) In the case of a timer transmission, the timer job number appears.

(F) In the case of a timer transmission, the timer job number appears. "Prepared" will appear for a stored transmission job.

Status of completed jobs

To check the status of completed jobs, select "TX/RX COMPLETED" in step 2 and press the [OK] key in step 3.

You can check cancelled recall mode jobs in the Activity Report. "CANCEL" will appear in the "TYPE/NOTE" column of the report.
RECEIVING FAXES

When another fax machine sends a fax to your machine, your machine will ring*, automatically receive the fax, and begin printing. (This is called automatic reception.)

If you do not wish to have received faxes printed immediately, use the print hold function to hold received faxes in memory for printing at your convenience (all received faxes will be printed at once). To enable this function and print received faxes, see "FAX PRINT HOLD FUNCTION" on page 30.

• You can store a transmission job while fax reception is in progress. (See "Storing transmission jobs (memory transmission)" on page 24.)
• To print received fax pages on both sides of the paper, enable "DUPLEX RECEPTION" (page 105) in the key operator programs.
• If a extension phone is not connected to the machine, use automatic reception.
• In order to receive faxes, paper must be loaded in the paper tray. See "LOADING PAPER" in the "Operation manual (for general information and copier)" to load appropriate paper. Incoming faxes will be automatically adjusted to the orientation of the printing paper, so there is no need to load both horizontally ( ) and vertically ( ) oriented paper. However, when a fax smaller than A4 (8-1/2" x 11") is received, the size of paper used to print the fax will differ depending on the orientation (horizontal or vertical) of the original in the sending machine.

RECEIVING A FAX

1 The machine will ring* and reception will automatically begin. The LINE indicator lights up.

**Number of rings**
The machine has been set to ring twice before beginning automatic reception. You can change the number of rings to any number from 0 to 9 in the key operator programs. (See "#OF RINGS AT. RX" on page 104.)
If the number of rings is set to 0, the machine will receive faxes without ringing.

2 Reception ends.

• When reception ends, the machine sounds a beep.
• When the optional job separator tray kit is installed, received faxes are output to the job separator.

Note

Earlier output of received data

If a fax cannot be printed because the machine is out of the appropriate paper and another fax is subsequently received that can be printed, the subsequently received fax will be printed before the fax that cannot be printed. This also happens when there are several faxes in memory that cannot be printed.

This function can be disabled in the key operator programs. (See "EARLIER OUTPUT" on page 106.)

LINE STATUS indicator

After a received fax is printed, the LINE STATUS indicator will blink while the printed fax remains on the job separator tray. When the fax is removed from the tray, the indicator stops blinking. If the job separator tray kit is not installed, the LINE STATUS indicator will turn off when printing of the received fax is finished. The conditions under which the indicator blinks and stops blinking vary depending on the settings in the key operator programs. (See "FAX RECEPTION LIGHT" on page 103.)

Note

If a removed fax is returned to the job separator tray, the LINE STATUS indicator will not resume blinking.
F-code confidential fax reception

When a fax has been received by F-code confidential fax reception, an icon (atican) will appear in the base screen of fax mode (message display (1) on page 10). The icon also appears in front of the box in the F-code confidential box name screen in the display. (Step 6 on page 57) Print the received fax as explained in "PRINTING A DOCUMENT RECEIVED TO AN F-CODE CONFIDENTIAL MEMORY BOX" (page 57).

If received data cannot be printed

If the machine runs out of paper or toner, or a paper misfeed 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 faxes are automatically printed when printing is possible. When received faxes are held in memory, the DATA indicator at the upper right of the [FAX] key blinks. You can also use the forwarding function to have another fax machine print the received faxes. (See "FORWARDING FUNCTION" on page 46.)

In order to receive faxes, paper must be loaded in the paper tray. Load appropriate paper as explained in "LOADING PAPER" in the "Operation manual (for general information and copier)". The difference between vertically and horizontally oriented A4 and A4R paper (8-1/2” x 11” and 8-1/2” x 11”R paper), is automatically adjusted at the time of reception, so there is no need to load paper in both orientations. However, when a fax smaller than A4 (8-1/2” x 11”) is received, the size of paper used to print the fax will differ depending on the orientation (horizontal or vertical) of the original in the sending machine.

• If you wish to use A5 (5-1/2” x 8-1/2”) paper to receive faxes, load A5 (5-1/2” x 8-1/2”) paper in tray 1 of the machine and set the paper size to A5 (5-1/2” x 8-1/2”). Only tray 1 can be set to A5 (5-1/2” x 8-1/2”) size.
• If you receive a fax that is larger than the loaded paper, the fax will be automatically reduced before printing, or it will be divided and printed on two sheets of paper. (See "RECEIVED DATA PRINT CONDITION" on page 104.) Note that if the loaded paper is B5 or smaller, the width and length of the image may not allow the fax to be printed.
• In fax mode, printing is not possible on 11” x 17”, 8-1/2” x 14”, 5-1/2” x 8-1/2” sizes. (Among INCH sizes, only 8-1/2” x 11” and 8-1/2” x 11”R can be used for printing.) (If your machine uses inch-based paper sizes, A3, B4, B5, B5R, and A5 size paper cannot be used in fax mode. (Among AB sizes, only A4 and A4R can be used for printing.))
• If the paper runs out while a fax is being printed, printing will automatically continue using the closest size of paper in another tray.
• If you change the size of paper loaded in a tray, change the tray’s paper size setting.
• Faxes cannot be printed correctly if the actual paper size is different from the paper size setting. Be sure to set the tray's paper size setting to the same paper size as the paper loaded in the tray. For example, if you receive an A3 (11” x 17”) size fax when B4 (8-1/2” x 14”) paper is loaded in the tray and the tray's paper size setting is A3 (11” x 17”), the fax will be printed on B4 (8-1/2” x 14”) paper and part of the image may be cut off. If the paper loaded in the tray is larger than the paper size setting, paper larger than the recognized fax size will be used. (A message prompting you to check the tray's paper size setting will appear.)
• Received faxes cannot be printed on paper inserted in the bypass tray.
FAX PRINT HOLD FUNCTION

Faxes are normally printed as soon as they are received. This function is used to hold received faxes in memory rather than printing them as they are received. Faxes held in memory are printed manually all at once.

Settings required for fax print hold

If a fax is received when auto power shut-off mode has activated (“TURNING THE POWER ON AND OFF” in the “Operation manual (for general information and copier)”), the machine returns to normal operation in order to print the fax. For this reason, if faxes are received at regular intervals, auto power shut-off will repeatedly activate and deactivate and less power will be conserved.

If you wish to maximize the benefit of auto power shut-off at night and other times when printing of received faxes is not immediately necessary, enable fax print hold. When fax print hold is enabled, receiving faxes when auto power shut-off has activated will not cause auto power shut-off to deactivate.

Settings required for fax print hold

1. In Fax mode, press the [SPECIAL FUNCTION] key.
   Begin the following procedure from the base screen of Fax mode.
   Press the [SPECIAL FUNCTION] key to display the special function menu.
   (To select fax mode, see step 1 on page 18.)

2. Select "FAX PRINT HOLD" with the [▼] or [▲] key.

3. Press the [OK] key.

4. Select "SETTING" with the [▼] or [▲] key.

5. Press the [OK] key.

It is recommended that you enable and disable fax print hold as needed for your conditions of use; for example, enable fax print hold during the night and disable it during the day.

- When fax print hold is enabled and received faxes are held in memory, the DATA indicator above the [FAX] key on the operation panel blinks and a message appears in the display. (When the received faxes are printed, the indicator stops blinking and the message no longer appears.)
- If the remaining free memory reaches 0%, fax reception will no longer be possible. For this reason, it is important to constantly make sure that sufficient free memory remains and frequently print received faxes. The percentage of free memory remaining appears in the base screen of fax mode. (Page 10)

If fax print hold is prohibited using "DISABLE FAX PRINT HOLD" (page 100) in the key operator programs, it will not be possible to enable it.

Note
6 Select "ON" with the [▼] or [▲] key.

7 Press the [OK] key.

To disable fax print hold, select "OFF".

Printing received faxes held in memory
To print received faxes that are held in memory when fax print hold is enabled, follow the steps below.

1 In Fax mode, press the [SPECIAL FUNCTION] key.

Begin the following procedure from the base screen of Fax mode.

Press the [SPECIAL FUNCTION] key to display the special function menu. (To select fax mode, see step 1 on page 18.)

2 Select "FAX PRINT HOLD" with the [▼] or [▲] key.

Press the [OK] key.

3 Press the [OK] key.

4 Select "PRINT HOLD DATA" with the [▼] or [▲] key.

Press the [OK] key.

5 Press the [OK] key.

6 Select "PRINT" with the [▼] or [▲] key.

Press the [OK] key.

7 Press the [OK] key.
This chapter explains advanced features that are designed for specific purposes and circumstances. Please read those sections that are of interest to you.

**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 original 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. 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. Group key dialling is an automatic dialling function whereby multiple destinations (Rapid keys, Speed Dial numbers, and full fax numbers entered with the numeric keys) are programmed into a Rapid key. The procedure for programming group keys is explained on page 62.
- When a group key is used to send a fax, the fax is broadcast (transmitted) to the destinations programmed in the group key. For example, if five destinations are programmed in a group key and the key is pressed for a broadcast transmission, the broadcast transmission will have five destinations.

Select the broadcast transmission function.

The document is scanned into memory

Successive transmission

Reception

Beep

Destination A
(recipient)

Sender

PAPER SELECT COPY RATIO IMAGE OUTPUT 2-SIDED COPY RESOLUTION ADDRESS BROADCAST

Reception

Beep

Destination B
(recipient)

Reception

Beep

Destination C
(recipient)
USING BROADCAST TRANSMISSION

1 Perform steps 1 to 4 of "BASIC PROCEDURE FOR SENDING FAXES" (page 18).

2 Press the [BROADCAST] key.

The destination selection screen appears.

3 Enter a full fax number with the numeric keys or press an auto-dial key (Rapid key, Speed Dial number, or group key) to select the first destination. (Page 20)

To clear a mistake when entering a full number with the numeric keys, press the [C] key to clear one digit at a time.

A destination selected with a Rapid key, Speed Dial number, or group key is indicated by an icon and a number. To clear an entry, press the [C] key.

4 Press the [OK] key and then select the next destination by entering a full fax number or pressing an auto-dial key.

After entering a full number with the numeric keys, press the [OK] key to complete the entry. If you pressed an auto-dial key in step 3, it is not necessary to press the [OK] key. You can immediately press another auto-dial key for the next destination. Repeat steps 3 and 4 to select the remaining destinations.

- If you need to delete a number for which entry has already been completed by pressing the [OK] key, use the [<] or [>] key to select the number and then press the [C] key.
- If the selected destinations exceed the display range of the message screen, press the [<] or [>] key to scroll through and check the destinations.
- Destinations can also be selected using the address directory and the [REDIAL] key. Note, however, that the [REDIAL] key can only be used to select the first destination (it must be used before any other destinations are selected).
- If you use two group keys that have 50 stations each, the total number of destinations entered will be 100.

5 Continue from step 6 of "BASIC PROCEDURE FOR SENDING FAXES" on page 19.

To cancel a broadcast transmission
To cancel a broadcast transmission when selecting destinations, press the [CA] key.
To cancel transmission after the transmission procedure has been completed, follow the procedure in "CANCELLING A FAX TRANSMISSION" (page 26).
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 up to a week in advance. This is convenient when you will be out of the office or for transmission at off-peak nighttime rates. A combined total of 50 timer transmission and memory transmission jobs can be stored.

Note
- After a timer transmission is performed, the information (image, destination, etc.) is automatically cleared from memory.
- To perform a timer transmission, the original must be scanned into memory. It is not possible to leave the original in the SPF or on the document glass and have it scanned at the specified time of transmission.
- The date and time is set in the machine using the key operator programs. (See "DATE & TIME SET" on page 99.)
- 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 one serial polling operation with a timer setting (see "Serial polling" on page 38).

SETTING UP A TIMER TRANSMISSION

1 In Fax mode, press the [SPECIAL FUNCTION] key.

2 Select "TIMER MODE" with the [▼] or [▲] key.

3 Press the [OK] key.

4 Use the numeric keys to select the time at which you want the operation to take place.

5 Press the [OK] key.

6 Select "AM" or "PM" with the [▼] or [▲] key and then press the [OK] key.

7 Select the day of the week with the [▼] or [▲] key.

The selected day is highlighted. If you select "NO SELECT DAYS", the transmission will be performed as soon as the specified time arrives. To return to the [TIME SETTING] display, press the [BACK] key.
Press the [OK] key.

The selected day is set.

Perform the desired fax operation.

The steps that follow will depend on the type of operation. The following operations can be performed as a timer operation:
- Normal transmission (page 18)
- Broadcast transmission (page 32)
- Polling (page 36)
- Serial polling (page 38)
- F-code polling (page 53)
- F-code confidential transmission (page 55)
- F-code relay request transmission (page 59)

To cancel a timer operation after the above procedure has been completed, follow the procedure in "CANCELLING A FAX TRANSMISSION" (page 26).
- A timer job number is automatically assigned to the operation. This number can be used to cancel a stored job. (See the note "Contents of the stored job screen (screen of step 3)" on page 27.)
- Other operations can be performed after a timer operation 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.
TRANSMISSION AND RECEPTION USING 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". This function can only be used if the other machine is a Super G3 or G3 machine and supports the polling function.

Polling

This function allows your machine to call another fax machine and initiate reception of a document in that machine. A timer setting can also be specified to have the operation take place at night or at another specified time. (See "TIMER TRANSMISSION" on page 34.)

Group keys and the broadcast transmission function (page 32) can be used to successively poll multiple fax machines in a single operation (this is called "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.

Polling memory

This feature allows your machine to automatically send a document previously scanned into memory when another machine calls and polls your machine.

Note: The receiving machine bears the expense (phone charges) of polling transmission.

The machine that requests transmission bears the expense (phone charges) of the call.
USING THE POLLING FUNCTION

When used in conjunction with the timer transmission function (page 34), only one polling job can be stored.

Note
If the other machine is using polling security (see "Restricting polling access (polling security)" on page 41), your fax number (sender’s number) must be programmed in the key operator programs (see "OWN PASSCODE SET" on page 96) and your number must also be programmed in the other machine.

1 In Fax mode, press the [SPECIAL FUNCTION] key.
   When the [SPECIAL FUNCTION] key is pressed, the special function menu appears. (To select fax mode, see step 1 on page 18.)

2 Select "SENDING OPTIONS" with the [▼] or [▲] key.
   SPECIAL FUNCTION
   ▼ FAX PRINT HOLD
   TIMER MODE
   ▼ SENDING OPTIONS

3 Press the [OK] key.

4 Select "POLLLING" with the [▼] or [▲] key.
   SENDING OPTIONS
   ▼ POLLING
   SERIAL POLLING
   ▼ SUB ADDRESS TX

5 Press the [OK] key.

6 Enter the fax number of the other machine with the numeric keys, press a Rapid key, or specify a Speed Dial number (a group key cannot be used).
   To clear a mistake when entering a full number with the numeric keys, press the [C] key to clear one digit at a time.
   A destination selected with a Rapid key or Speed Dial number is indicated by an icon and a number. To clear an entry, press the [C] key.

7 Press the [OK] key.

8 Press the [START] key.
   “Polling reservation has been set.” appears in the screen. After communicating with the other machine, your machine prints the received fax.

Note
To cancel the operation
During communication: Cancel as explained in "Cancelling a fax transmission" on page 26.
While the job is stored: Cancel as explained in "Cancelling a stored transmission job" on page 27.
Serial polling
When performing serial polling, an auto-dial key that includes a sub-address or passcode (page 48) cannot be selected.

1 Perform steps 1 to 3 of the polling procedure (page 37).

2 Select "SERIAL POLLING" with the [▼] or [▲] key.

   ![Sender Options Screen]

   Sending Options
   ▲ Polling
   SERIAL POLLING
   ▼ Sub Address TX

About the steps that follow
See steps 5 to 8 of the polling procedure (page 37). Before pressing the [START] key in step 8, repeat steps 6 and 7 for each machine that you wish to poll. When performing serial polling, a group key can also be used in step 6 on page 37.
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. (If desired, you can restrict polling to fax machines whose fax number you have programmed in your machine. See "Restricting polling access (polling security)" on page 41.) 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 (see "BOXES AND SUB-ADDRESSES/PASSCODES REQUIRED FOR F-CODE TRANSMISSION" on page 48) The polling memory function explained here uses a memory box called the "PUBLIC BOX".

**Note**

When using the polling memory function, do not set the reception mode to MANUAL. (See "SETTING THE RECEPTION MODE" on page 61.)

Scanning a document into polling memory (the Public Box)

This section explains how to scan a document into the Public Box. If other documents have already been stored in the Public Box, the new document will be appended to those documents. If the previous documents are no longer needed, they can be replaced.

1. Follow steps 1 to 4 of "BASIC PROCEDURE FOR SENDING FAXES" (page 18) and then follow the steps below.

2. Press the [SPECIAL FUNCTION] key.

3. Select "ORIGINAL STORE" with the [▼] or [▲] key.

4. Press the [OK] key.

5. Select "MEMORY POLLING" with the [▼] or [▲] key.

6. Press the [OK] key.

- If there are no previously stored documents in the Public Box, the above screen appears. If the above screen appears, go to step 7.

- If there are previously stored documents in the Public Box, a screen will appear to let you select what action to take.

(1) If you wish to append the new document, select "ADD" with the [▼] or [▲] key, press the [OK] key, and then go to step 7.

(2) If you wish to replace the previous document with the new document, select "CHANGE" with the [▼] or [▲] key, press the [OK] key, and then go to step 7.

When using the polling memory function, do not set the reception mode to MANUAL. (See "SETTING THE RECEPTION MODE" on page 61.)
10 Press the [START] key ( ).

- Scanning begins.
- If you are scanning from the document glass and have another page to scan, change pages and press the [START] key ( ). Repeat until all pages have been scanned and then press the [ ] key.

4 Press the [OK] key.

8 Press the [OK] key.

7 Select "1 TIME" or "REPEAT" with the [▼] or [▲] key.

- If you select "1 TIME", the document data is automatically cleared from memory after your machine is polled once. If you select "REPEAT", the document data in memory can be used repeatedly.
- If you selected "ADD" or "CHANGE" in step 6, the transmission settings selected when the previous document was scanned into the Public Box will be replaced by the settings that you will select this time.

10 Make sure that the reception mode is set to auto reception.

Transmission begins when the other machine calls and polls your machine.

Note
To cancel scanning
To cancel scanning of a document while scanning is in progress, press the [C] key.
To erase the documents in the Public Box, follow the procedure in "Deleting documents from the Public Box" (page 41).

Printing documents in the Public Box
To check the document that is stored in the public box, follow these steps to print it out.

1 Follow steps 2 to 6 of "Scanning a document into polling memory (the Public Box)" (page 39) and then follow the steps below.

2 Select "PRINT" with the [▼] or [▲] key.

3 Press the [OK] key.

- Printing begins automatically.
Deleting documents from the Public Box

This procedure is used to delete documents from the Public Box when they are no longer needed.

1. Follow steps 2 to 6 of "Scanning a document into polling memory (the Public Box)" (page 39) and then follow the steps below.

2. Select "DELETE" with the [▼] or [▲] key.

3. Press the [OK] key.

4. Select "YES" with the [▼] or [▲] key.

5. Press the [OK] key.

A screen appears asking you to confirm the deletion.

Restricting polling access (polling security)

If you wish to prevent unauthorised 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 (programmed in that machine as the sender's number) matches one of the fax numbers you have programmed in your machine as passcode numbers. Up to 10 fax numbers can be programmed as passcode numbers.

To enable the polling security function and program passcode numbers, see "POLLING PASSCODE # MODE" (page 107) in the key operator programs.

- If you do not use the polling security function, the document will be sent to any fax machine that polls you.
- To use polling memory with polling security enabled, the sender's number of the polling machine must be programmed in that machine and in your machine.
INCLUDING SENDER INFORMATION ON FAXES

This function prints the date, time, your programmed name, your programmed fax number, and the transmitted page number at the top centre of each page that you fax. All pages that you fax include this information.

Example of fax page printed out by the receiving machine

<table>
<thead>
<tr>
<th>OCT-22-2004-FRI 03:00 PM</th>
<th>SHARP PLANNING DIV.</th>
<th>FAX No. 0666211221</th>
<th>P. 001/001</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
</tbody>
</table>

(1) Date and time: Date and time: programmed in the key operator programs (see "DATE & TIME SET" on page 99).
(2) Sender's name: programmed in the key operator programs (see "OWN PASSCODE SET" on page 96).
When Auditing mode (page 11) is being used for the fax function and "ACC. NAME PRINT" (page 101) is enabled, the account name* of the account used to perform the transmission is used for the sender's name.
* The account name entered in step 6 of "ACCOUNT # SET" (page 98) in the key operator programs.
(3) Sender's number: programmed in the key operator programs (see "OWN PASSCODE SET" on page 96).
(4) Transmitted page number: 3-digit number appearing in the format, "page number/total pages". (Only the page number appears if you use manual transmission, direct transmission, or quick on-line transmission.) Printing of the transmitted page number can be disabled in the key operator programs (see "PAGE COUNTER SET" on page 101).

Position of sender information

You can select whether the sender information is added outside the document data or inside the document data in the key operator programs (see "PRINT STATION # IN RCVD DATA" on page 101). The factory default setting is outside the document data.

Outside the 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 the 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.
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 A3, B4, or A4R size (11" x 17" or 8-1/2" x 11"R size if the machine uses inch-based paper sizes) is scanned using the document glass.

<table>
<thead>
<tr>
<th>Your machine</th>
<th>The other machine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book or sheet original</td>
<td></td>
</tr>
<tr>
<td>![Image of dual page scan setup]</td>
<td></td>
</tr>
<tr>
<td>When dual page scan is set, the original is divided into two pages when scanned into memory</td>
<td></td>
</tr>
<tr>
<td>Transmission to other machine</td>
<td>Printed out as two separate pages</td>
</tr>
<tr>
<td>![Image of transmission setup]</td>
<td></td>
</tr>
</tbody>
</table>

**Selecting Dual Page Scan**

Follow the steps below and then send the fax.

1. **Make sure that the machine is in fax mode**
   - When the machine is in fax mode, the FAX indicator is lit. If the light is not on, press the [FAX] key.

2. **Press the [SPECIAL FUNCTION] key.**
   - When the [SPECIAL FUNCTION] key is pressed, the special function menu appears.

3. **Select "DUAL PAGES" with the [▼] or [▲] key.**
   - Selecting Dual Page Scan is selected when a checkmark appears in the "DUAL PAGES" checkbox. To cancel the selection when a checkmark appears, press the [OK] key in the next step so that a checkmark does not appear.

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

5. **Place the original on the document glass (page 13) 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 press the [START] key (③). Repeat until all originals have been scanned. Press the [③] key. (See steps 6 to 8 of "Using the document glass" on page 19.)
ADDING A COVER SHEET/MESSAGE TO A FAX TRANSMISSION

This function automatically attaches an A4 (8-1/2” x 11”) cover sheet to your fax transmissions. The cover sheet shows the date and time, the destination name, the sender's name and fax number, and the number of pages in the transmission. A message can also be added to a transmission. One of the following messages can be selected: "CONFIDENTIAL", "PLEASE DISTRIBUTE", "URGENT", "PLEASE CALL BACK", "IMPORTANT".

Selecting a cover sheet / message

1. In Fax mode, press the [SPECIAL FUNCTION] key.
   - When the [SPECIAL FUNCTION] key is pressed, the special function menu appears. (To select fax mode, see step 1 on page 18.)

2. Select "SENDING MENU" with the [▼] or [▲] key.
   - SPECIAL FUNCTION
     - TIMER MODE
     - SENDING OPTIONS
     - SENDING MENU

3. Press the [OK] key.

4. To add a cover sheet, select "COVER SHEET" with the [◄] or [►] key. To add a message, select the desired message with the [▼] or [▲] key.
   - SENDING MENU
     - NO MESSAGE
     - CONFIDENTIAL
     - PLEASE DISTRIBUTE
     - COVER SHEET
     - IMPORTANT

5. Press the [OK] key.

- Select this function before each transmission. The selection is only effective for one transmission. After one transmission, the function automatically turns off.
- Before adding a cover sheet, make sure that your sender's name and number have been programmed. (See "OWN PASSCODE SET" on page 96.)
- This function cannot be used when performing a manual transmission, or when using memory polling (page 39), F-code memory polling (page 50), F-code confidential transmission (page 55), or F-code relay request transmission (page 59).
- You can also enable a setting in the key operator programs to always add a cover sheet to transmissions (see "AUTO COVER SHEET" on page 103).

Note

To cancel the cover sheet selection, press the [◄] key instead of the [OK] key in step 3.
USING SETTINGS STORED AS A PROGRAM

This function allows you to store the steps of an operation, including the destination and scanning settings, into a program. This function is convenient when you frequently send documents, such as a daily report, to the same destination. Up to nine programs can be stored.

When storing a program, a name (maximum 36 letters) can be assigned to the program. For information on storing, editing, and deleting programs, see "STORING, EDITING AND DELETING PROGRAMS" on page 72.

The following settings can be stored in a program:

1. Transmission method
   - Normal transmission (page 18), broadcast transmission (page 32), polling (page 36), serial polling (page 38), F-code transmission (page 55), F-code polling (page 53)
2. Cover sheet / message (page 44)
3. Resolution and exposure (page 15)
4. Dual page scan (page 43)
5. Transmission settings (page 23)

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, place the original. (Page 13)
   (To select fax mode, see step 1 on page 18.)
   Skip this step if polling, serial polling, or F-code polling is being performed. If you are going to use Dual Page Scan (page 43), place the document on the Document glass.

2. Press the [PROGRAM] key.
   The program selection screen appears.

3. Select the program that you wish to use with the [▼] or [▲] key.
   If not all letters of the program name appear, press the [ ] key to display all letters. Press the [ ] key once again to return to the original screen.

4. Press the [OK] key.

5. If needed, select the original size and other settings, and then press the [START] key ( ).
   Transmission takes place according to the program.

Note
   - A program differs from a timer transmission (page 34) 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.
   - A setting that can be stored in a program cannot be changed at the time that a program is used for a transmission even if the setting is not stored in the program.
   - The only settings that can be selected when using a program are the original size, duplex scanning, and a timer setting.

Select settings that cannot be stored in a program before you press the [START] key ( ). These settings include the original size (see "MANUALLY SETTING THE SCANNING SIZE" on page 14), duplex scanning (see "FAXING A TWO-SIDED ORIGINAL" on page 22), and a timer setting (see "AUTOMATIC TRANSMISSION AT A SPECIFIED TIME (TIMER TRANSMISSION)" on page 34).
FORWARDING RECEIVED FAXES TO ANOTHER MACHINE WHEN PRINTING IS NOT POSSIBLE (FORWARDING FUNCTION)

When printing is not possible because of a paper, toner, or other problem, you can forward received faxes to another fax machine if that machine has been appropriately programmed in your 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 indicator above the [FAX] key (see "If received data cannot be printed" on page 29) to blinks.

USING THE FORWARDING FUNCTION

Programming the fax number of the forwarding destination

The number of the forwarding destination is programmed in the key operator programs (see "RECEIVED DATA FW. STATION SET" on page 105). Only one fax number can be programmed. The forwarding function cannot be used unless a number is programmed.

Forwarding received faxes

1. Make sure that the machine is in fax mode.

   When the machine is in fax mode, the FAX indicator is lit. If the light is not on, press the [FAX] key.

2. Press the [SPECIAL FUNCTION] key.

   Press the [SPECIAL FUNCTION] key to display the special function menu.

   - All received faxes are forwarded; a particular fax cannot be selected for forwarding. A fax received to a confidential box (see "F-CODE CONFIDENTIAL TRANSMISSION" on page 55) cannot be forwarded.
   - Faxes that have been received to memory by the fax print hold function (page 30) are also forwarded.
   - The result of forwarding is indicated in the activity report (see "VIEWING THE COMMUNICATION ACTIVITY REPORT AT REGULAR INTERVALS (Communication activity report)" on page 88).
3 Select "RX DATA TRANSFER" with the [▼] or [▲] key.

4 Press the [OK] key.

5 Select "TRANSFER" with the [◄] or [►] key.

To cancel forwarding, select "NO TRANSFER".

6 Press the [OK] key.

The machine automatically dials the forwarding number programmed in the key operator programs and begins forwarding the fax or faxes.

- To cancel a forwarding operation
  Press the [FAX STATUS] key, and then cancel forwarding in the same way as a regular fax transmission. (See “CANCELLING A FAX TRANSMISSION” on page 26.) The fax(es) that was going to be forwarded will return to print standby status in your machine.
- If forwarding is not possible because the other machine is busy or a transmission error occurs, recall attempts will be made according to the recall times setting. If forwarding is still not successful after the set number of recall attempts are made, the fax(es) will return to print standby status in your machine.
- When forwarding is performed, all faxes that have been 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.
- After a fax is forwarded, the fax data is automatically cleared from memory.
This chapter explains F-code transmission, which gives you a convenient means of performing advanced operations such as relay broadcast transmission and confidential transmission. Please read those sections that are of interest to you.

COMMUNICATION BETWEEN MACHINES SUPPORTING F-CODES

This machine supports the "F-code" standard as established by the ITU-T*. Operations such as relay broadcast transmission and confidential transmission previously could only be performed with another Sharp fax machine; however, F-Code communication makes it possible to perform these operations with fax machines of other manufacturers that support F-Code communication. Before using the functions explained in this chapter, make sure that the other fax machine supports F-Code communication and has the same functions as your machine. (Note that the other machine may use different names for some functions.)

* 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.

BOXES AND SUB-ADDRESSES/PASSCODES REQUIRED FOR F-CODE TRANSMISSION

"Boxes" can be created in the memory of fax machines that support F-Code communication. These boxes are used to store faxes received from other machines and documents to be transmitted when a polling request is received. Up to 30 boxes can be created for a variety of purposes, 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. (A sub-address must be programmed, however, a passcode can be omitted.)

*The public box is used for normal memory polling. (See "USING POLLING MEMORY" on page 39.)
When communication occurs involving a 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 box. Likewise, to send a fax to a box in another machine or use polling to retrieve a document from a box, you must know the sub-address and passcode of that box. (Note that assigning names simply makes it easier to manage boxes; you do not need to inform the other party of a box name.) However, you must inform the other party of the sub-address and passcode for a box.

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.

<table>
<thead>
<tr>
<th>Your machine</th>
<th>ITU-T</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-code polling memory box</td>
<td>F-code confidential box</td>
</tr>
<tr>
<td>F-code relay broadcast function</td>
<td></td>
</tr>
<tr>
<td>Sub-address</td>
<td>SEP</td>
</tr>
<tr>
<td>Passcode</td>
<td>SUB</td>
</tr>
<tr>
<td>PWD</td>
<td>SID</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CREATING A BOX FOR F-CODE TRANSMISSION**

F-code operations that use boxes include F-code polling memory (page 50), F-code confidential transmission (page 55), and F-code relay broadcast transmission (page 58).

A box is created by programming a name for the box, and up to 10 boxes for each operation type can be created.

The information programmed in each box varies slightly depending on the type of operation. For information on programming, editing, and deleting boxes, see "PROGRAMMING, EDITING, AND DELETING F-CODE MEMORY BOXES" on page 74.

After you have programmed a box, inform the other party of the box's sub-address and passcode.

If you attempt to create a box when 10 boxes have already been created for that operation type, a message will appear and you will not be able to create the box. Delete any unused boxes and then create the new box. (See "PROGRAMMING, EDITING, AND DELETING F-CODE MEMORY BOXES" on page 74.)
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 regular polling (page 36); however, it uses an F-code polling memory box and is always protected by means of the sub-address and passcode.

HOW F-CODE POLLING MEMORY WORKS

<table>
<thead>
<tr>
<th>Your machine</th>
<th>The other machine</th>
</tr>
</thead>
<tbody>
<tr>
<td>2) Check sub-address and passcode</td>
<td>1) F-code polling (transmission request) Sub-address and passcode are transmitted to your machine</td>
</tr>
<tr>
<td>Match</td>
<td>Sub-address</td>
</tr>
<tr>
<td>Do not match</td>
<td>Passcode</td>
</tr>
<tr>
<td>3) Polling memory box opens</td>
<td>4) Automatic transmission of document data to other machine</td>
</tr>
</tbody>
</table>

F-code polling (page 53) 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 transmission without using an F-code, see page 36.
- To create an F-code polling memory box, see "PROGRAMMING F-CODE PUBLIC (POLLING MEMORY) BOXES" (page 77) and "Scanning a document into polling memory (the Public Box)" (page 39).
- Unlike regular polling, the other machine's fax number is not used as a passcode for F-code polling memory. The sub-address and passcode of the polling memory box are always used for polling security.
- The receiving machine bears the expense (phone charges) of the transmission.
TRANSMISSION USING F-CODES

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. (See “Checking and clearing document data in a box” on page 52.)

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 (page 77) is in general the same as “Scanning a document into polling memory (the Public Box)” on page 39.

1 Perform steps 1 through 4 of "Scanning a document into polling memory (the Public Box)" (page 39).

2 Select "S.A.M-POLL ORIG" with the [▼] or [▲] key.

3 Press the [OK] key.

4 Select the name of the polling memory box with the [▼] or [▲] key.

If not all letters of the programmed name appear, press the [ ] key to display all letters. Press the [ ] key again to return to the previous display.

About the steps that follow

See steps 6 through 10 in “Scanning a document into polling memory (the Public Box)” (pages 39 to 40). Where "public box" (page 39) appears in the procedure, substitute "F-code polling memory box".
Checking and clearing document data in a box

The procedures for checking document data in an F-code polling memory box by printing the data and for clearing the data are generally the same as in "Printing documents in the Public Box" (page 40) and "Deleting documents from the Public Box" (page 41).

1 Perform steps 2 through 4 of "Scanning a document into polling memory (the Public Box)" on page 39.

2 Select "S.A.M-POLL ORIG" with the [▼] or [▲] key.

3 Press the [OK] key.

4 Select the name of the F-code memory polling box with the [▼] or [▲] key.

5 Press the [OK] key.

6 Select "PRINT" or "DELETE" with the [▼] or [▲] key.

   If you selected "PRINT", press the [OK] key to begin printing.
   If you selected "DELETE", go to step 7.

7 Press the [OK] key.

   A screen appears asking you to confirm the deletion.

8 Select "YES" with the [▼] or [▲] key.

   To cancel the deletion, select "NO".

9 Press the [OK] key.

   The documents are deleted from the F-code polling memory box.

   [Note] Deletion is not possible while the box is being used.
PROCEDURE FOR F-CODE POLLING

Make sure that a document has not been placed in the document feeder tray 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, Rapid keys, and Speed Dial numbers) is not possible when using F-code polling.

1. In Fax mode, press the [SPECIAL FUNCTION] key.

When the [SPECIAL FUNCTION] key is pressed, the special function selection screen appears.
(To select fax mode, see step 1 on page 18.)

2. Select "SENDING OPTIONS" with the [▼] or [▲] key.

3. Press the [OK] key.

4. Select "SUB ADD POLLING" with the [▼] or [▲] key.

5. Press the [OK] key.

6. Enter the fax number of the other machine with the numeric keys, or press a Rapid key, or dial a Speed Dial number (a group key cannot be used).

To clear a mistake when entering a number with the numeric keys, press the [C] key to clear one digit at a time.

A destination selected with a Rapid key or Speed Dial number is indicated by an icon and a number. To clear an entry, press the [C] key.

7. Press the [OK] key.

8. Enter the sub-address (up to 20 digits) with the numeric keys.

• Characters that can be entered are numbers, ",#", and spaces. However, the initial character cannot be a space.
• If you make a mistake, press the [C] key and re-enter the correct digit(s).
• If you specified a Rapid key or Speed Dial number in step 6 that has a sub-address programmed, the sub-address will appear. Go to the next step without entering a sub-address.

**TRANSMISSION USING F-CODES**

10 **Enter a passcode (maximum 20 digits) with the numeric keys.**

- Characters that can be entered are numbers, "#", and spaces. However, the initial character cannot be a space.
- If you make a mistake, press the [C] key and re-enter the correct digit(s).
- If the other machine has not programmed a passcode, omit the passcode and go to the next step.
- If you specified a Rapid key or Speed Dial number in step 6 that has a passcode programmed, the passcode will appear. Go to the next step without entering the passcode.

11 **Press the [OK] key.**

12 **Press the [START] key ( ).**

After communicating with the other machine, your machine will print the received document.

**Note**

- **To cancel the operation**
  - During communication: Cancel as explained in "Cancelling a fax transmission" on page 26.
  - While the job is stored: Cancel as explained in "Cancelling a stored transmission job" on page 27.
  - Only one F-code polling operation with a timer setting (page 34) can be stored.
F-CODE CONFIDENTIAL TRANSMISSION

F-Code confidential transmission provides a secure means of faxing confidential documents. The sub-address and passcode programmed in the box restrict the recipients of the fax, and once received in the box, the fax can only be printed by someone who knows the print passcode. This function is convenient when sending important documents that you only want a specific person to see, or when multiple departments share a single fax machine.

<table>
<thead>
<tr>
<th>The other machine</th>
<th>Your machine</th>
<th>When data is printed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Document data, together with a sub-address and passcode, are sent to your machine.</td>
<td>2) Check sub-address and passcode</td>
<td>Enter print passcode. (4-digit number)</td>
</tr>
<tr>
<td>3) The fax is received to the F-code confidential box (reception is permitted)</td>
<td>Match</td>
<td>4-2) Data is only printed if correct passcode is entered.</td>
</tr>
<tr>
<td>Do not match</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As the above diagram shows, receiving faxes to the machine's F-code confidential memory box is called F-code confidential reception, and sending faxes to another machine's F-code confidential memory box is called F-code confidential transmission.

- This machine does not support Sharp's previous confidential transmission function, which uses the programmed sender's fax number and ID code.
- See pages 74 through 78 for the procedures for creating, editing, and deleting F-code confidential memory boxes.
- Take care not to forget the print passcode that is programmed in the F-code confidential box. If you forget the passcode, consult your Sharp dealer.

F-CODE TRANSMISSION (F-CODE CONFIDENTIAL TRANSMISSION)

To perform F-code confidential transmission, you must enter the sub-address (SUB) and passcode (SID) after the fax number of the receiving machine. (Omit the passcode if the other machine does not use a passcode. To receive a fax sent by F-code confidential transmission (this is called F-code confidential reception), you must inform the sending party of the sub-address (SUB) and passcode (SID) of your confidential 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 (page 32) or the timer transmission function (page 34), and can be stored as a program (page 72).
F-code confidential transmission

1. Follow steps 1 to 4 of "BASIC PROCEDURE FOR SENDING FAXES" (page 18) and then follow the steps below.

2. Press the [SPECIAL FUNCTION] key.
   - When the [SPECIAL FUNCTION] key is pressed, the special function selection screen appears.

3. Select "SENDING OPTIONS" with the [▼] or [▲] key.

4. Press the [OK] key.

5. Select "SUB ADDRESS TX" with the [▼] or [▲] key.

6. Press the [OK] key.

7. Enter the fax number of the other machine with the numeric keys, or press a Rapid key, or dial a Speed Dial number (a group key cannot be used).
   - To clear a mistake when entering a number with the numeric keys, press the [C] key to clear one digit at a time.
   - A destination selected with a Rapid key or Speed Dial number is indicated by an icon and a number. To clear an entry, press the [C] key.

8. Press the [OK] key.

9. Enter the sub-address (maximum 20 digits) with the numeric keys.
   - Characters that can be entered are numbers, ",#", and spaces. However, the initial character cannot be a space.
   - If you make a mistake, press the [C] key and re-enter the correct digit(s).
   - If you specified a Rapid key or Speed Dial number in step 7 that has a sub-address programmed, the sub-address will appear. Go to the next step without entering a sub-address.


11. Enter the passcode (maximum 20 digits) with the numeric keys.
    - Characters that can be entered are numbers, ",#", and spaces. However, the initial character cannot be a space.
    - If you make a mistake, press the [C] key and re-enter the correct digit(s).
    - If you specified a Rapid key or Speed Dial number in step 7 that has a passcode programmed, the passcode will appear. Go to the next step without entering the passcode.


13. Press the [START] key (△)
PRINTING A DOCUMENT RECEIVED TO AN F-CODE CONFIDENTIAL MEMORY BOX

Faxes received in an F-code confidential memory box are printed out by entering the 4-digit print passcode (0000 to 9999) that was programmed when the box was created.

1. In fax mode, press the [SPECIAL FUNCTION] key.
   When the [SPECIAL FUNCTION] key is pressed, the special function selection screen appears.
   (To select fax mode, see step 1 on page 18.)

2. Select "PRINT" with the [▼] or [▲] key.

3. Press the [OK] key.

4. Select "CONF. RX DATA" with the [▼] or [▲] key.

5. Press the [OK] key.

6. Select the name of the F-code confidential box with the [▼] or [▲] key.

An icon ( ) appears next to each box that is holding a received fax.

7. Press the [OK] key.

   If no faxes have been received to the F-code confidential box, "No confidential receiving data." will appear briefly.

8. Enter the 4-digit passcode with the numeric keys.

   * If you make a mistake, press the [C] key and re-enter the correct digit(s).
   * When the 4-digit passcode is correctly entered, printing begins.

If received faxes remain in an F-code confidential memory box, the box cannot be deleted.

Note

- Make sure that a Transaction Report is set to print out in the key operator programs so that you will be informed when a confidential document is received. (See "PRINT SELECTION (CONF. RECEPTION)" in "LIST SETTING" on page 95.)
- Faxes received to an F-code confidential memory box are automatically cleared after printing.
- When a new fax is received to an F-code confidential box while a previously received fax is still stored in the box, the new fax is appended after the previous fax.

Sub Add Conf Box

A Corp. 1
B Corp. 2
C Corp. 3
D Corp. 4

Note

If received faxes remain in an F-code confidential memory box, the box cannot be deleted.
F-CODE RELAY BROADCAST TRANSMISSION

The F-Code relay broadcast function allows the machine to act as a relay machine for a broadcast transmission. The end receiving machines are stored in the machine's F-Code relay memory box, and when the machine receives a relay request from another F-Code machine, it will relay the fax to all of the stored end receiving machines. The relay machine and the originating machine that requests the relay transmission must both support F-codes; however, the end receiving machines programmed in the F-code relay broadcast memory box 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.

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 (page 32). If used together with a timer setting (page 34) to take advantage of off-peak rates, the cost of transmission can be further reduced.

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 "relay request transmission".

<table>
<thead>
<tr>
<th>Relay request machine (sends document)</th>
<th>Relay machine (your machine)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Document is sent from machine requesting relay transmission</td>
<td>Sub-address</td>
</tr>
<tr>
<td></td>
<td>Passcode</td>
</tr>
<tr>
<td></td>
<td>2) Check sub-address and passcode</td>
</tr>
<tr>
<td></td>
<td>Match</td>
</tr>
<tr>
<td></td>
<td>Does not match</td>
</tr>
<tr>
<td></td>
<td>3) Document data is read into relay broadcast memory box (reception is permitted).</td>
</tr>
<tr>
<td></td>
<td>4) Document is automatically transmitted to end receiving machines programmed in the relay broadcast memory box.</td>
</tr>
</tbody>
</table>

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 relay machine also prints the document sent by the relay request 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 (page 32). If used together with a timer setting (page 34) to take advantage of off-peak rates, the cost of transmission can be further reduced.

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 "relay request transmission".

Note

- This machine does not support Sharp's previous relay broadcast function, which uses the programmed sender's number and relay ID code.

- Up to 10 F-code relay groups (boxes) can be programmed. A name (up to 36 characters long) and the end receiving machines are programmed in each box. A combined total of 120 end receiving machines can be programmed in all F-code relay groups (boxes). (If 120 end receiving machines are programmed in one F-code relay group, no end receiving machines can be programmed in other F-code relay groups.)

- End receiving machines can be stored using the numeric keys, rapid keys, speed dial numbers, and group keys. Auto-dial destinations that already have a sub-address and passcode programmed cannot be used.

- Only one relay group can be specified when making a relay request. Multiple relay groups cannot be simultaneously selected.

- To create an F-code relay group (box) and store, edit, and delete end receiving machines, see pages 74, 76 and 79. 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.

To create, edit, or delete an F-code relay group (box), see pages 74, 76 and 79.

A document received from a relay request machine is initially stored in the 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 completed.

Transmission to the end receiving machines cannot be stopped or cancelled.

USING THE F-CODE RELAY REQUEST FUNCTION
(your machine requests a relay broadcast)

Ask the operator of the other F-code machine (the relay machine) to create an F-code relay group (box) that contains the end receiving machines to which you wish to send a fax, and ask for the sub-address (SUB) and passcode (SID) of that box.

When you dial the relay machine to send the fax, enter the sub-address and passcode after the fax number. The fax will be stored in the relay machine’s memory box, and the relay machine will call each of the programmed end receiving machines and relay the fax to those machines. (If a passcode (SID) is not programmed in the box, enter only the sub-address when dialling.)

To dial the relay machine, use the same procedure as in “F-CODE TRANSMISSION (F-CODE CONFIDENTIAL TRANSMISSION)” (page 55).
This chapter explains convenient functions that can be used when sending a fax, connecting an extension phone, and other features that expand the scope of use of the fax machine. Please read those sections that are of interest to you.

## CONNECTING AN EXTENSION PHONE

You can connect a telephone to the machine and use it as an extension phone to make and receive calls like any normal phone. Fax reception can also be activated from an extension phone connected to the machine. (Remote operation)

![Note] If you connect a combination telephone/answering machine to the machine, you will not be able to use the answering machine function.

### USING AN EXTENSION PHONE

#### Using an extension phone for voice calls

An extension phone connected to the machine can be used to place and receive voice calls just like a normal phone.

- If the fax reception mode is set to auto reception, you must lift the phone to answer a call before the machine automatically begins reception. The machine is initially set to answer calls on two rings. The number of rings can be changed to any number from 0 to 9 in the key operator programs. (See "#OF RINGS AT. RX" on page 104.)
- If you cannot hear a dial tone when you pick up the extension phone, the machine is sending or receiving a fax. Replace the phone.

#### Activating fax transmission

Place the original on document glass or in the SPF, adjust the original size, resolution, and exposure settings as needed, and then follow the steps below.

1. Lift the extension phone and call the receiving party.
2. Press the [START] key ( ).
3. Select "TX" with the [▼] or [▲] key and then press the [OK] key.
4. Replace the phone.
CONVENIENT METHODS OF USE

SETTING THE RECEPTION MODE

The machine normally receives faxes automatically after ringing; however, when an extension phone is connected, you can set the reception mode to MANUAL. This will allow you to talk to the other party first and then receive a fax. This is convenient when you only have one telephone line and receive more voice calls than faxes. You must answer all calls on the extension phone, and activate fax reception after you verify that a call is a fax transmission.

1 Press the [COMM. SETTING] key in the initial state of Fax mode.

2 Select "RX" with the [▼] or [▲] key.

3 Press the [OK] key.

4 Select "AUTO" or "MANUAL" with the [▼] or [▲] key.

5 Press the [OK] key.

Activating fax reception from an extension phone (remote reception)

After receiving a call 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. (If you made the call, remote reception will not be possible.)

The following procedure is not possible if you are on a pulse dial line and your extension phone cannot produce tone signals. To find out whether your extension phone can produce tone signals, refer to the manual for your extension phone.

1 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.

2 Press the 5 key once and the * key twice on the extension phone.
   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. (See "REMOTE RECEPTION" on page 98.)
This chapter explains the procedures for programming auto dial keys (Rapid keys, Speed Dial numbers, and group keys), programs, and F-code operations, and how to print out lists of programmed information.

### PROGRAMMING

Auto dial numbers (Rapid keys, Speed Dial numbers, and group keys), programs, and F-code operations are stored and edited at the operation panel of the machine. This chapter explains how to use the operation panel for these procedures.

### STORING, EDITING, AND DELETING AUTO DIAL NUMBERS AND PROGRAMS

This section explains the procedures for storing, editing, and deleting auto-dial numbers (Rapid keys, Speed Dial numbers, and group keys) and programs, which simplify the transmission procedure. To use Rapid keys, Speed Dial numbers, and group keys, see “TRANSMISSION BY AUTO-DIALLING (RAPID DIALLING AND GROUP DIALLING)” on page 20. To use a program, see “USING A PROGRAM” on page 45.

A combined total of 50 Rapid keys and group keys can be stored, 300 Speed Dial numbers, and 9 programs can be stored. If you attempt to store more than this, a warning message will appear. In this case, delete any auto-dial numbers or programs that are no longer needed (see page 69 to delete Rapid keys and Speed Dial numbers, page 71 to delete group keys, and page 73 to delete programs), and then store the new auto-dial number or program.

**Note**

To cancel a storing, editing, or deleting operation, press the [CA] key. You will return to the base screen.

### STORING, EDITING, AND DELETING AUTO-DIAL NUMBERS (RAPID KEYS, SPEED DIAL NUMBERS, AND GROUP KEYS)

Auto dial numbers are stored in the auto dial storing screen. Follow the steps below to display the auto dial storing screen, and then store an auto dial number.

1. **In Fax mode, press the [SPECIAL FUNCTION] key.**
   
   Begin the following procedure from the base screen of Fax mode.
   
   ![Special Function Key Image]

   When the [SPECIAL FUNCTION] key is pressed, the function selection menu appears. (To select fax mode, see step 1 on page 18.)

2. **Select "ENTRY" with the [▼] or [▲] key.**

   ![Entry Selection Menu Image]
3 Press the [OK] key.

4 Select "DIAL" with the [▼] or [▲] key.

5 Press the [OK] key.

6 Select "RAPID/SPEED", "GROUP", or "CHANGE/DELETE" with the [▼] or [▲] key.

- To store a Rapid key or Speed Dial number, select "RAPID/SPEED" and press the [OK] key. Next, follow the steps in "Storing a Rapid key or Speed Dial number" at right.

- To store a group key, select "GROUP" and press the [OK] key. Next, follow the steps in "Storing a group key" on page 67.

- To edit or delete a Rapid key, Speed Dial number, or group key, select "CHANGE/DELETE" and press the [OK] key. Next, follow the steps in "Editing and deleting auto-dial numbers" on page 68.

[Storing Rapid keys and Speed Dial numbers]
To store a Rapid key or Speed Dial number, follow steps 1 through 6 on pages 62 to 63 and then follow the steps below.

7 Press a Rapid key ([01] to [50]) or press the [SPEED] key.

- If you are storing a Rapid key, press the Rapid key that you wish to use ([01] to [50]). If you press a Rapid key that has already been programmed, a warning message will appear.

- If you are storing a Speed Dial number, press the [SPEED] key and then enter the desired Speed Dial number (000 to 299) with the numeric keys.

8 Enter the fax number of the destination with the numeric keys.

- Example of a Rapid key
Up to 50 digits can be entered for the fax number. If you need to insert a pause between any of the digits, press the [REDIAL/PAUSE] key. The pause appears as a hyphen (-). To set the duration of the pause, see "PAUSE TIME" (page 96).

9 Press the [OK] key.

10 Enter the name of the destination (see "ENTERING CHARACTERS" on page 82.

- Example of entering a name
Up to 36 characters can be entered for the name. If you press the [OK] key without entering a name, go directly to step 13. In this case, a destination name will be assigned automatically.
11 Press the [OK] key.

12 Enter search characters (see "ENTERING CHARACTERS" on page 82).

Up to 10 search characters can be entered. Only "Uppercase" characters should be used in "KEY WORD" to arrange the addresses in alphabetical order.
The search characters function as a keyword if you need to search for the destination when sending a fax. (Page 21)

13 To finish the storing procedure, press the [START] key ( ). If you wish to program an option such as an F-code, chain dialling, transmission speed, or international transmission mode, press the [OK] key.
   • If you pressed the [START] key ( ), you will return to step 7. If you wish to store another Rapid key or Speed Dial number, repeat steps 7 to 13. If you have finished storing auto-dial numbers, press the [BACK] key.
   • If you pressed the [OK] key, go to the appropriate page for the option that you wish to program.

To program F-code settings, see "F-code settings" which follows.
To select "CHAIN DIAL", go to "Chain Dialling" on page 65.
To set the "TRANSMISSION SPEED", go to "Transmission speed setting" on page 66.
To set the "INTERNATIONAL TRANSMISSION MODE", go to "International transmission mode setting" on page 66.

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**About the setting options**

When storing and editing Rapid keys and Speed Dial numbers, you can also select the setting options below. Chain dialling cannot be combined with any of the other setting options.

When you select a setting option, a checkmark appears in the setting option screen.

- **F-code**... A sub-address and passcode can be stored for F-code communication. (See below.)
- **Chain Dialling**... You can enable or disable Chain Dialling for a Rapid key or Speed Dial number. (Page 65)
- **Transmission speed**... You can set the transmission speed to 33,600 bps (maximum speed), 14,400 bps (high speed), 9600 bps (middle speed), or 4800 bps (low speed). The initial setting is 33,600 bps (maximum speed). (Page 66)
- **International transmission mode**... The international transmission mode can be set to "OFF" or one of modes 1 to 3. The initial setting is "OFF". (Page 66)

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**F-code settings**

To program F-code settings, complete steps 1 through 13 on pages 62 to 64 and then follow the steps below.

1 Select "SUB ADDRESS" with the [▼] or [▲] key.

2 Press the [OK] key.

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**Note**

When storing and editing Rapid keys and Speed Dial numbers, you can also select the setting options below. Chain dialling cannot be combined with any of the other setting options.

When you select a setting option, a checkmark appears in the setting option screen.

- **F-code**... A sub-address and passcode can be stored for F-code communication.

(See below.)

- **Chain Dialling**... You can enable or disable Chain Dialling for a Rapid key or Speed Dial number. (Page 65)

- **Transmission speed**... You can set the transmission speed to 33,600 bps (maximum speed), 14,400 bps (high speed), 9600 bps (middle speed), or 4800 bps (low speed). The initial setting is 33,600 bps (maximum speed). (Page 66)

- **International transmission mode**... The international transmission mode can be set to "OFF" or one of modes 1 to 3. The initial setting is "OFF". (Page 66)
3. **Enter a sub-address (maximum 20 digits) with the numeric keys.**

Characters that can be entered are numbers, "*", "#", and spaces. If you make a mistake, press [C] key and then re-enter the correct number.

When this step is referred to in the following procedures, "*", "#", and spaces cannot be entered.
- Programming an F-code confidential box (step 11 on page 75)
- Editing an F-code confidential box (step 17 on page 78)
- Programming an F-code relay group (step 11 on page 76)
- Editing an F-code relay group (step 15 on page 79)
- Programming F-code public (polling memory) boxes (step 11 on page 77)
- Editing an F-code public box (step 15 on page 80)

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

5. **Enter a passcode (maximum 20 digits) with the numeric keys.**

Characters that can be entered are numbers, "*", "#", and spaces. If you make a mistake, press [C] key and then re-enter the correct number.
- If desired, you can omit the passcode.

When this step is referred to in the following procedures, spaces cannot be entered.
- Programming an F-code confidential box (step 12 on page 75)
- Editing an F-code confidential box (step 18 on page 78)
- Programming an F-code relay group (step 12 on page 76)
- Editing an F-code relay group (step 15 on page 79)
- Programming F-code public (polling memory) boxes (step 12 on page 77)
- Editing an F-code public box (step 15 on page 80)

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

When you press the [OK] key, you return to the option setting screen and a checkmark appears to the left of "F-CODE".

To cancel the F-code setting, press the [key to remove the checkmark.

7. **Return to step 13 on page 64.**

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### [Chain Dialling]

To set an auto-dial number as a Chain Dial number, complete steps 1 through 13 on pages 62 to 64 and then follow the steps below.

1. **Select "CHAIN DIAL" with the [▼] or [▲] key.**

   - Other settings:
     - SUB ADDRESS
     - CHAIN DIAL
     - TX SPEED
     - [START]: ENTER

   - If checkmark appears to the left of "CHAIN DIAL", it is already selected.
   - To exit, press the [START] key ( ).

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

3. **Select "ON" or "OFF" with the [▼] or [▲] key.**

   - CHAIN DIAL
     - ON
     - OFF

   If chain dialling was already selected in step 7 and you wish to cancel the selection, select "OFF".

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

   After you select "ON" and press the [OK] key, you will return to the option setting screen and a checkmark will appear to the left of "CHAIN DIAL".

   If you pressed the [key, the checkmark will be removed and chain dialling cancelled.

5. **Return to step 13 on page 64.**
[Transmission speed setting]
To set the transmission speed, complete steps 1 through 13 on pages 62 to 64 and then follow the steps below.

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 conditions, do not change this setting.

1 Select "TX SPEED" with the [▼] or [▲] key.

2 Press the [OK] key.

3 Select the desired transmission speed with the [▼] or [▲] key.

4 Press the [OK] key.

If you select a speed other than 33,600 bps (maximum speed), a checkmark will appear next to "TX SPEED" when you return to the option setting screen. This setting is not effective for polling transmission. To remove the checkmark and return the transmission speed setting to "33,600 bps (maximum speed)", press the [x] key.

5 Return to step 13 on page 64.

[International transmission mode setting]
To set the international transmission mode, complete steps 1 through 13 on pages 62 to 64 and then follow the steps below.

Note: When sending a fax to a foreign country, telephone line conditions can sometimes distort the fax or interrupt the transmission. Selecting the right international transmission mode can help alleviate these problems.

1 Select "INTERNATIONAL TX" with the [▼] or [▲] key.

2 Press the [OK] key.

3 Select the desired mode with the [▼] or [▲] key.

4 Press the [OK] key.

If you select a setting other than "OFF", a checkmark will appear next to "INTERNATIONAL TX" when you return to the option setting screen. To remove the checkmark and return the international transmission mode to "OFF", press the [x] key.

5 Return to step 13 on page 64.

Note: When sending a fax to a foreign country, telephone line conditions can sometimes distort the fax or interrupt the transmission. Selecting the right international transmission mode can help alleviate these problems.

Note: 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.

Note: Other transmission modes may not be effective for polling transmission.

Note: If you select a speed other than 33,600 bps (maximum speed), a checkmark will appear next to "TX SPEED" when you return to the option setting screen. To remove the checkmark and return the transmission speed setting to "33,600 bps (maximum speed)", press the [x] key.

Note: If you select a setting other than "OFF", a checkmark will appear next to "INTERNATIONAL TX" when you return to the option setting screen. To remove the checkmark and return the international transmission mode to "OFF", press the [x] key.
[Storing a group key]
To store a group key, follow steps 1 through 6 on pages 62 to 63 and then follow the steps below.

1 Press a Rapid key ([01] to [50]).
Press the Rapid key ([01] to [50]) that you wish to program as a group key.
If you press a Rapid key that has already been programmed, a warning message will appear.

2 Enter a group name (see "ENTERING CHARACTERS" on page 82).
Up to 36 characters can be entered for the name. A group name must be entered.

3 Press the [OK] key.

4 Enter search characters (see "ENTERING CHARACTERS" on page 82).
Up to 10 search characters can be entered. The search characters function as a keyword if you need to search for the destination when sending a fax (page 21).

5 Store the destinations using Rapid keys, Speed Dial numbers, and the numeric keys.
- To store a Rapid key, press the Rapid key that you wish to use ([01] to [50]).

6 Repeat step 5 for all of the destinations that you wish to store in the group key.
Up to 150 destinations can be stored in a group key. (However, note that when multiple group keys are programmed, the total number of destinations that can be stored in all group keys is 200.)

7 Press the [START] key ( ).
The group key is stored.
[Editing and deleting auto-dial numbers]
To edit or delete an auto-dial number, follow steps 1 through 6 on pages 62 and 63 and then follow the steps below.

A Rapid key or Speed Dial number cannot be edited or cleared in the following cases:
- The Rapid key or Speed Dial number is being used in a transmission in progress or in a stored transmission.
- The Rapid key or Speed Dial number is stored in a group key, program, or F-code relay group.

● Editing a Rapid key or Speed Dial number

1 Select "RAPID/SPEED" with the [▼] or [▲] key.

2 Press the [OK] key.

3 Select "CHANGE" with the [▼] or [▲] key.

4 Press the [OK] key.

5 Press a Rapid key ([01] to [50]) or the [SPEED] key.
   - To edit a Rapid key, press the Rapid key that you wish to edit ([01] to [50]).

6 Edit the destination fax number with the numeric keys.

7 Press the [OK] key.

8 Edit the name of the destination (see "ENTERING CHARACTERS" on page 82).

9 Press the [OK] key.

10 Edit the search characters (see "ENTERING CHARACTERS" on page 82).

Characters added in step 8 will appear at the end of the previously stored search characters. (Maximum of 10 characters altogether.)
To finish the storing procedure, press the [START] key (3). If you wish to program an option such as F-code, chain dialling, transmission speed, or international transmission mode, press the [OK] key.

- If you pressed the [START] key (3), go to step 5. If you wish to program another Rapid key or Speed Dial number, repeat steps 5 to 11. To exit, press the [BACK] key. Editing to that point will be completed.
- If you pressed the [OK] key, go to the appropriate page for the option that you wish to edit. To program F-code settings, follow the steps in "F-code settings" on pages 64 and 65. To select "CHAIN DIAL", go to "Chain Dialling" on page 65. To set the "TRANSMISSION SPEED", go to "Transmission speed setting" on page 66. To set the "INTERNATIONAL TRANSMISSION MODE", go to "International transmission mode setting" on page 66.

● Deleting a Rapid key or Speed Dial number

1 In step 3 on page 68, select "DELETE" with the [▼] or [▲] key.

2 Press a Rapid key ([01] to [50]) or the [SPEED] key.
   - To delete a Rapid key, press the Rapid key that you wish to delete ([01] to [50]).

   - To delete a Speed Dial number, press the [SPEED] key and then enter the Speed Dial number (000 to 299) that you wish to delete with the numeric keys.

3 Select "DELETE" with the [▼] or [▲] key.

   - If you select "NO DELETE", you can press the [H] key to check the destination name. If you are deleting the destination, check the destination name and then delete the destination.

4 Press the [OK] key.

   You will return to the screen of step 2. If you wish to delete another Rapid key or Speed Dial number, repeat steps 2 to 4. To exit, press the [BACK] key.

[Editing and deleting group keys]

To edit or delete a group key, follow steps 1 through 6 on pages 62 to 63 and then follow the steps below.

● Editing a group key

1 Select "GROUP" with the [▼] or [▲] key.

2 Press the [OK] key.
3 Select "CHANGE" with the [▼] or [▲] key.

4 Press the [OK] key.

5 Press the group key (one of Rapid keys [01] to [50]) that you wish to edit.

6 Edit the group name (see "ENTERING CHARACTERS" on page 82).

7 Press the [OK] key.

8 Edit the search characters (see "ENTERING CHARACTERS" on page 82).

9 Edit the stored information.

A key or number that is already in the group cannot be added.

- To delete a Rapid key or Speed Dial number, select it with the [◀] or [▶] key and press the [C] key.

- To delete a number entered with the numeric keys, select a digit of the number with the [◀] or [▶] key and press the [C] key. The entire number including the selected digit will be deleted. To add a number, select the place where you wish to add the number with the [◀] or [▶] key, and then enter the number. When you have finished adding or deleting the number, press the [OK] key.

10 When you have finished editing the destinations, press the [START] key ( ).

This completes the editing procedure.
Deleting a group key

1 In step 3 on page 70, select "DELETE" with the [▼] or [▲] key.

2 Press the [OK] key.

3 Press the group key (one of Rapid keys [01] to [50]) that you wish to edit.

4 Select "DELETE" with the [▼] or [▲] key.

5 Press the [OK] key.

Return to step 3. If you wish to delete another group key, repeat steps 3 through 5. To exit, press the [BACK] key.
STORING, EDITING AND DELETING PROGRAMS

You can store a transmission method*, cover sheet/message, transmission settings, dual pages, and/or resolution/exposure settings in a program. This will allow you to use the settings for a transmission by means of a simple operation (see “USING A PROGRAM” on page 45).

* Transmission methods: normal transmission, broadcast transmission, polling, serial polling, F-code transmission, F-code polling

An original size setting, screen setting, and timer transmission setting cannot be stored in a program.

To store a program, follow steps 1 through 6 on pages 62 to 63 and then follow the steps below.

1 Select "ENTRY" with the [▼] or [▲] key.

2 Press the [OK] key.

3 Select "PROGRAM" with the [▼] or [▲] key.

4 Press the [OK] key.

5 Select "ENTER", "CHANGE", or "DELETE" with the [▼] or [▲] key.

6 Select the program that you wish to store with the [▼] or [▲] key.

7 Press the [OK] key.

8 Enter a program name (see "ENTERING CHARACTERS" on page 82).

9 Press the [OK] key.

- To store a program, select "ENTER" and press the [OK] key. Continue from step 6 of "STORING A PROGRAM".

- To edit a program, select "CHANGE" and press the [OK] key. Next, follow the steps in "EDITING PROGRAMS" on page 73.

- To delete a program, select "DELETE" and press the [OK] key. Next, follow the steps in "DELETING PROGRAMS" on page 73.
10 Select the program that you wish to store with the [▼] or [▲] key.

- A transmission method, cover sheet/message, resolution/exposure settings, dual pages, sender's name, and transmission settings can be stored. A transmission method must be stored. The storing procedure cannot be completed unless a transmission method is stored.
- For the procedures for selecting each of the settings, refer to the explanations of the settings.
- To cancel a setting selection, select the setting that you wish to cancel and then press the [▼] key.
- Some settings cannot be used in combination with others. If you select a prohibited combination of settings, a message will appear in the display.

11 To continue selecting another setting, press the [OK] key.

When you have finished selecting settings, press the [START] key ( ). You will return to step 8. If you wish to store another program, repeat steps 8 to 11. To exit, press the [BACK] key in step 8.

8 Edit the program name (see "ENTERING CHARACTERS" on page 82).
- See step 8 of "STORING A PROGRAM".
- If you do not wish to edit the program name, go to the next step.

9 Press the [OK] key.

10 Select the stored setting that you wish to edit with the [▼] or [▲] key.
- See steps 10 and 11 of "STORING A PROGRAM".
- If you do not wish to edit the stored settings, press the [START] key ( ) and then press the [BACK] key to exit.

[DELETING PROGRAMS]
Before deleting a program, print the "PROGRAM LIST" to check the contents. (Page 81) To delete a previously stored program, follow these steps:

6 Select the program that you wish to delete with the [▼] or [▲] key.

If not all letters of the program name appear, press the [▲] key to display all letters. Press the [▼] key once again to return to the original screen.

7 Press the [OK] key.

8 Select "DELETE" with the [▼] or [▲] key.

9 Press the [OK] key.

You can check the contents of a program (transmission type, destination) by printing the "PROGRAM LIST" (page 81).
PROGRAMMING, EDITING, AND DELETING F-CODE MEMORY BOXES

The procedure for programming a box for F-code transmission is explained here. There are three types of F-code boxes: F-code public boxes (page 77), F-code confidential boxes (page 75), and F-code relay group boxes (page 76). F-code boxes are programmed, edited, and deleted as explained below.

PROGRAMMING AN F-CODE MEMORY BOX

A box name, sub-address, passcode, and the appropriate functions are programmed in an F-code box.

1 In Fax mode, press the [SPECIAL FUNCTION] key.

   Begin the following procedure from the base screen of Fax mode.

   When the [SPECIAL FUNCTION] key is pressed, the function menu screen appears. (To select fax mode, see step 1 on page 18.)

2 Select "ENTRY" with the [▼] or [▲] key.

   SPECIAL FUNCTION
   • ORIGINAL STORE
   • PRINT
   • ENTRY

3 Press the [OK] key.

4 Select "SUB ADD SETTING" with the [▼] or [▲] key.

5 Press the [OK] key.

6 Select "S.A. CONF. BOX", "S.A. RELAY GRP", "S.A. MEM POLLING", or "CHANGE/DELETE" with the [▼] or [▲] key.

   • To program an F-code confidential box, select "S.A. CONF. BOX" and press the [OK] key. Next, follow the steps in "PROGRAMMING AN F-CODE CONFIDENTIAL BOX" on page 75.

   • To program an F-code relay group (box), select "S.A. RELAY GRP" and press the [OK] key. Next, follow the steps in "PROGRAMMING AN F-CODE RELAY GROUP" on page 76.

   • To program an F-code public (polling memory) box, select "S.A. MEM POLLING" and press the [OK] key. Next, follow the steps in "PROGRAMMING F-CODE PUBLIC (POLLING MEMORY) BOXES" on page 77.

   • To edit or delete an F-code confidential box, F-code relay group, or F-code public box, select "CHANGE/DELETE" and then press the [OK] key. Next, follow the steps in "EDITING AND DELETING F-CODE MEMORY BOXES" on page 77.

   • When programming a new F-code box, a sub-address that is already programmed in another box cannot be used. However, the passcode can be the same as a passcode used in another box.

   • A passcode can be omitted.

   • Up to 10 F-code boxes of each type can be programmed. If 10 F-code boxes of one type have already been programmed, a warning message will appear and you will not be able to program a new box. Delete any unused F-code boxes (page 77) and then program the new box.
[PROGRAMMING AN F-CODE CONFIDENTIAL BOX]

Follow the steps below to program an F-code confidential reception box. An F-code (sub-address and passcode) for F-code confidential reception and a print passcode to print out received faxes are programmed in each box. Up to 10 boxes can be programmed. To check the contents of a programmed box, print the following list: "PRINT - REPORT - SUB ADD SET LIST". (Page 81)

To program an F-code confidential box, follow steps 1 through 6 on page 74 and then follow the steps below.

7 Select an unused box ("- - - - - -") with the [▼] or [▲] key.

8 Press the [OK] key.

9 Enter a name for the F-code confidential box (see "ENTERING CHARACTERS" on page 82).

10 Press the [OK] key.

11 Enter a sub-address (maximum 20 digits) with the numeric keys.

12 Enter a passcode (maximum 20 digits) with the numeric keys.

13 Enter the print passcode (4 digits) with the numeric keys.

The characters "¥" and "#" cannot be used. The print passcode cannot be omitted. Take care not to forget the programmed print passcode. If you forget the passcode, consult your Sharp dealer.

14 Press the [OK] key.
[PROGRAMMING AN F-CODE RELAY GROUP] This procedure is used to program an F-code relay group box for relay broadcast of a received fax upon receipt of an F-code relay request. Up to 10 boxes can be programmed. An F-code (sub-address and passcode) for reception of an F-code relay request and the destinations to which the fax is to be relayed are programmed in each box. To check the contents of a programmed box, print the following list: "PRINT - REPORT - SUB ADD SET LIST" (page 81). To program an F-code relay group box, follow steps 1 through 6 on page 74 and then follow the steps below.

7 Select an unused box ("- - - - - -") with the [▼] or [▲] key.

8 Press the [OK] key.

9 Enter a name for the F-code relay group box (see "ENTERING CHARACTERS" on page 82).

10 Press the [OK] key.

11 Enter a sub-address (maximum 20 digits) with the numeric keys.

12 Enter a passcode (maximum 20 digits) with the numeric keys.

13 Enter the relay destinations. Enter full fax numbers with the numeric keys and/or press auto-dial keys (Rapid keys, Speed Dial numbers, and group keys) to select the destinations (page 20).

14 Press the [OK] key and then dial the fax number of the next destination or press an auto-dial key.

15 Press the [START] key (③) to end the procedure.
[PROGRAMMING F-CODE PUBLIC (POLLING MEMORY) BOXES]

This setting is used to program a box to store document data for remote transmission when polled by a machine that supports F-Code communication. Up to 10 boxes can be programmed.

To check the contents of a programmed box, print the following list: "PRINT - REPORT - SUB ADD SET LIST" (page 81).

To program an F-code public box, follow steps 1 through 6 on page 74 and then follow the steps below.

7 Select an unused box ("- - - - - -") with the [▼] or [▲] key.

8 Press the [OK] key.

9 Enter a name for the F-code public box (see "ENTERING CHARACTERS" on page 82).

Up to 36 characters can be entered for the name. A box name must be entered.

10 Press the [OK] key.

11 Enter a sub-address (maximum 20 digits) with the numeric keys.

See steps 3 and 4 on page 65.

12 Enter a passcode (maximum 20 digits) with the numeric keys.

See steps 5 and 6 on page 65.

[EDITING AND DELETING F-CODE MEMORY BOXES]

To edit or delete an F-code box (F-code confidential box, F-code relay group box, or F-code public box), follow steps 1 through 6 on page 74 and then follow the steps below.

Note that an F-code confidential box or F-code public box cannot be edited or deleted if it contains document data.

7 Select "S.A. CONF. BOX", "S.A. RELAY GRP", or "S.A. MEM POLLING" with the [▼] or [▲] key.

8 Press the [OK] key.

• If you selected "S.A. CONF. BOX" in step 7, follow the steps in "EDITING/DELETING AN F-CODE CONFIDENTIAL BOX" below.
• If you selected "S.A. RELAY GRP" in step 7, follow the steps in "EDITING AND DELETING F-CODE RELAY GROUPS" on page 79.
• If you selected "S.A. MEM POLLING" in step 7, follow the steps in "EDITING/DELETING F-CODE PUBLIC BOXES" on page 80.

[EDITING/DELETING AN F-CODE CONFIDENTIAL BOX]

9 Select "CHANGE" or "DELETE" with the [▼] or [▲] key.

10 Press the [OK] key.

• If you selected "CHANGE" in step 9, follow the steps in "Editing an F-code confidential box" on page 78.
• If you selected "DELETE" in step 9, follow the steps in "Deleting an F-code confidential box" on page 78.
● Editing an F-code confidential box

11 Select the name of the F-code confidential box that you wish to edit with the [▼] or [▲] key.

If not all letters of the box name appear, press the [▼] key to display all letters. Press the [▼] key once again to return to the original screen.

12 Press the [OK] key.

13 Enter the print passcode (4 digits) with the numeric keys.

Enter the correct print passcode that was programmed when the confidential box was programmed.

14 Press the [OK] key.

15 Edit the name of the F-code confidential box (see "ENTERING CHARACTERS" on page 82).

- See step 9 on page 75.
- If you do not wish to edit the name, go to the next step.

16 Press the [OK] key.

17 Edit the sub-address (maximum 20 digits) with the numeric keys.

- See steps 3 and 4 on page 65.
- If you do not need to edit the sub-address, press the [OK] key and go to the next step.

18 Edit the passcode (maximum 20 digits) with the numeric keys.

- See steps 5 and 6 on page 65.
- If you do not need to edit the passcode, press the [OK] key and go to the next step.

19 Edit the print passcode (4 digits) with the numeric keys.

- See steps 13 and 14 on page 75.
- If you do not need to edit the print passcode, press the [OK] key.

● Deleting an F-code confidential box

11 Select the name of the F-code confidential box that you wish to delete with the [▼] or [▲] key.

If not all letters of the box name appear, press the [▼] key to display all letters. Press the [▼] key once again to return to the original screen.

12 Press the [OK] key.

13 Enter the print passcode (4 digits) with the numeric keys.

Enter the correct print passcode that was programmed when the confidential box was programmed.

14 Press the [OK] key.

15 Select "DELETE" with the [▼] or [▲] key.

16 Press the [OK] key.

You will return to the screen of step 11. If you wish to delete another box, repeat steps 11 through 14. To exit, press the [BACK] key.
[EDITING AND DELETING F-CODE RELAY GROUPS]

9 Select "CHANGE" or "DELETE" with the [▼] or [▲] key.

10 Press the [OK] key.

• If you selected "CHANGE" in step 9, follow the steps in "Editing an F-code relay group" which follows.
• If you selected "DELETE" in step 9, follow the steps in "Deleting an F-code relay group" which follows.

● Editing an F-code relay group

11 Select the name of the F-code relay group (box) that you wish to edit with the [▼] or [▲] key.

If not all letters of the box name appear, press the [▲] key to display all letters. Press the [▼] key once again to return to the original screen.

12 Press the [OK] key.

13 Edit the name of the F-code relay group (box) (see "ENTERING CHARACTERS" on page 82).
• See step 9 on page 76.
• If you do not wish to edit the name, go to the next step.

14 Press the [OK] key.

15 Edit the sub-address and passcode (maximum 20 digits) with the numeric keys.
• See steps 3 to 6 on page 65.
• If you do not need to edit the sub-address and passcode, press the [OK] key and go to the next step.

16 Edit the relay destinations.

See steps 13 to 15 on page 76.

● Deleting an F-code relay group

11 Select the name of the F-code relay group (box) that you wish to delete with the [▼] or [▲] key.

If not all letters of the box name appear, press the [▲] key to display all letters. Press the [▼] key once again to return to the original screen.

12 Press the [OK] key.

13 Select "DELETE" with the [▼] or [▲] key.

14 Press the [OK] key.

You will return to step 11. If you wish to delete another relay group, repeat steps 11 through 14. To exit, press the [BACK] key.
[EDITING/DELETING F-CODE PUBLIC BOXES]

9 Select "CHANGE" or "DELETE" with the [▼] or [▲] key.

   | S.A. MEM POLLING |
   | Change          |
   | Delete          |

10 Press the [OK] key.

   | BACK | OK   |
   | 1    | 4    |

- If you selected "CHANGE" in step 9, follow the steps in "Editing an F-code public box" which follows.
- If you selected "DELETE" in step 9, follow the steps in "Deleting an F-code public box" which follows.

● Editing an F-code public box

11 Select the name of the F-code public box that you wish to edit with the [▼] or [▲] key.

   | S.A. MEM POLLING |
   | SBC CO.         |
   | 1               |
   | 2               |
   | 3               |
   | [#]:LIST        |

If not all letters of the box name appear, press the [▼] key to display all letters. Press the [▼] key once again to return to the original screen.

12 Press the [OK] key.

13 Edit the name of the F-code public box (see "ENTERING CHARACTERS" on page 82).
   - See step 9 of "PROGRAMMING F-CODE PUBLIC (POLLING MEMORY) BOXES" (page 77).
   - If you do not wish to edit the name, go to the next step.

14 Press the [OK] key.

15 Edit the sub-address and passcode (maximum 20 digits) with the numeric keys.
   - See steps 3 to 6 on page 65.
   - If you do not need to edit the sub-address and passcode, press the [OK] key and go to the next step.

16 Press the [OK] key and then press the [BACK] key to exit.

● Deleting an F-code public box

11 Select the name of the F-code public box that you wish to delete with the [▼] or [▲] keys.

   | S.A. MEM POLLING |
   | SBC CO.         |
   | 1               |
   | 2               |
   | 3               |
   | [#]:LIST        |

If not all letters of the box name appear, press the [▼] key to display all letters. Press the [▼] key once again to return to the original screen.

12 Press the [OK] key.

13 Select "DELETE" with the [▼] or [▲] key.

14 Press the [OK] key.

You will return to step 11. If you wish to delete another public box, repeat steps 11 through 14. To exit, press the [BACK] key.
PRINTING LISTS OF PROGRAMMED INFORMATION, SETTINGS, AND COMMUNICATION ACTIVITY

You can print lists showing programmed information, settings, and communication activity. The following lists can be printed.

- **ACTIVITY REPORT**: This report shows information on your most recent transmissions and receptions, including communication time and the other party.
- **TIMER LIST**: This list shows timer transmissions and recall mode jobs.
- **MEM. POLLING LIST**: This list shows information on the documents and settings stored for memory polling and F-code memory polling.
- **RAPID # LIST**: This list shows the information stored in each Rapid key that has been programmed.
- **SPEED # LIST**: This list shows the information stored in each Speed Dial number that has been programmed.
- **GROUP LIST**: This list shows the information stored in each group key that has been programmed.
- **TELEPHONE # LIST**: This list shows the destinations that have been stored in auto dial numbers in the order of their search characters.
- **PROGRAM LIST**: This list shows the contents of each program that has been stored.
- **SUB ADD SET LIST**: This list shows the sub-addresses and passcodes that have been programmed for F-code communication. (Note that print passcodes are not shown in the list.)
- **CONF. RX LIST**: This list shows the confidential box numbers that have received confidential faxes and the number of pages received.

1. In Fax mode, press the [SPECIAL FUNCTION] key.

   Begin the following procedure from the base screen of Fax mode.

   When the [SPECIAL FUNCTION] key is pressed, the function selection menu appears. (To select fax mode, see step 1 on page 18).

2. Select "PRINT" with the [▼] or [▲] key.

3. Press the [OK] key.

4. Select "REPORT" with the [▼] or [▲] key.

5. Press the [OK] key.

6. Select the list that you wish to print with the [▼] or [▲] key.

7. Press the [OK] key.

   - The list is printed (or is stored).
   - If the list does not contain any data, it will not be printed.
ENTERING CHARACTERS

This section explains how to enter and edit characters for names of rapid dial numbers, Speed Dial numbers, and group keys, as well as account names, program names, and search characters for the address list.

CHARACTERS THAT CAN BE ENTERED

Characters that can be entered for names

The following characters can be entered:
• Up to 36 characters can be entered for a name.
  However, up to 18 characters can be entered for a account name or sender's name.
• Upper case alphabet, lower case alphabet, numbers, special characters, symbols

Characters that can be used for search characters

The following characters can be used:
• Up to 10 characters can be entered for search characters.
• Upper case alphabet, lower case alphabet, numbers, special characters

Note
• Search characters are normally the first 10 characters of the name entered for a destination.
• Search characters are used when storing and using auto dial keys and numbers.
• When a destination name includes a symbol, the symbol cannot be stored as a search character.
• Search characters can be edited.

CHANGING TO ENTRY MODE

Open the Rapid key overlay to enter alphabetical characters.

When the Rapid key overlay is open

When the Rapid key overlay is open, characters can be entered. To toggle between upper case and lower case letters, press the [SHIFT] key.

When the Rapid key overlay is closed

Closing the Rapid key overlay stores characters that have been entered to that point.
CHARACTER ENTRY KEYS

To enter characters, use the character entry keys on the operation panel. The characters entered by each key and key functions are as follows.

<table>
<thead>
<tr>
<th>Character entry key</th>
<th>Characters and function</th>
<th>Character entry key</th>
<th>Characters and function</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A</td>
<td>[SP]</td>
<td>Use to enter special characters.</td>
</tr>
<tr>
<td>B</td>
<td>B</td>
<td>[SHIFT]</td>
<td>Use to toggle between upper case and lower case letters.</td>
</tr>
<tr>
<td>C</td>
<td>C</td>
<td>[SYMBOL]</td>
<td>Use to enter symbols.</td>
</tr>
<tr>
<td>D</td>
<td>D</td>
<td>[SPACE/-]</td>
<td>Use to enter a space or a hyphen (-). The display toggles between a space and a hyphen each time you press the key.</td>
</tr>
<tr>
<td>E</td>
<td>E</td>
<td>Numeric</td>
<td>Use to enter numbers 1 through 0.</td>
</tr>
<tr>
<td>F</td>
<td>F</td>
<td>[C] (CLEAR)</td>
<td>Clears the character selected with the cursor.</td>
</tr>
<tr>
<td>G</td>
<td>G</td>
<td>[▲] [▼] [◄] [►]</td>
<td>Use to move the cursor vertically and horizontally. Also used to move through screen pages. If you press the [►] key when a character is not entered, a space will be entered.</td>
</tr>
<tr>
<td>H</td>
<td>H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>J</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>K</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q</td>
<td>Q</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>T</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ</td>
<td>XYZ</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:
When you wish to enter characters assigned to the same key in succession, press the [►] key after entering the first character to move the cursor and then enter the next character.

Example: Entering XY
Press the [XYZ] key once, press the [►] key once to move the cursor, and then press the [XYZ] key twice.
INITIAL PROCEDURE FOR ENTERING CHARACTERS

Entering alphabetical characters (example: TPS)

1 Open the Rapid key overlay.

To switch between upper case letters and lower case letters, press the [SHIFT] key.

2 Enter "T", "P" and "S" with the letter keys.

The letters are stored and the cursor moves to the space after the letters.

To change a character, press the [C] key. The character directly to the left of the cursor is cleared. If the cursor is over a character, that character is cleared.

Entering symbols

1 Press the [SYMBOL] key.

2 Select the symbol that you wish to enter with the [▼][▲][◄][►] keys.

To move to the next page, move the cursor to the bottom line and press the [▼] key. To move back to the previous page, move the cursor to the top line and press the [▲] key. You can also change pages by pressing the [►] key when the cursor is at the right end of the bottom line, or the [◄] key when the cursor is at the left end of the top line.

3 Press the [OK] key.

The symbol selected with the cursor is entered and you return to the character entry screen.

Entering numbers (example: 123)

1 Enter "1", "2", and "3" with the numeric keys.

The symbol selected with the cursor is entered and you return to the character entry screen.

If the Rapid key overlay is opened or closed while a symbol is being selected, the symbol currently selected with the cursor is entered and you return to entry mode.

Note: If the Rapid key overlay is opened or closed while a symbol is being selected, the symbol currently selected with the cursor is entered and you return to entry mode.
Entering special characters

Special characters are entered with the Rapid key overlay opened.

1 Press the [SP] key.

2 Select the special character that you wish to enter with the [▼][▲][◄][►] keys.

To move to the next page, move the cursor to the bottom line and press the [▼] key. To move back to the previous page, move the cursor to the top line and press the [▲] key. You can also change pages by pressing the [►] key when the cursor is at the right end of the bottom line, or the [◄] key when the cursor is at the left end of the top line.

3 Press the [OK] key.

The special character selected with the cursor is entered and you return to the character entry screen.

Note

If the Rapid key overlay is closed while a special character is being selected, the special character currently selected with the cursor is entered.
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 to notify you of the result when a transmission is not successful or when the Broadcast transmission function is used. When transmission is not successful and a transaction report similar to the following is printed, "FOLLOWING DATA CANNOT BE SENT. PLEASE HAND THIS REPORT TO XXX.", read the report and take appropriate action.

The transaction report is set at the factory to print at the times indicated in grey below, however, the times at which the report is printed can be changed in the key operator programs. (See "LIST SETTING - PRINT SELECTION" on page 95.)

- **Normal transmission**: ALWAYS PRINTS / ERROR ONLY / NEVER PRINTS
- **Broadcast transmission**: ALWAYS PRINTS / ERROR ONLY / NEVER PRINTS
- **Original image print setting**: ALWAYS PRINTS / ERROR ONLY / NEVER PRINTS
- **Reception**: ALWAYS PRINTS / ERROR ONLY / NEVER PRINTS
- **Confidential reception**: ALWAYS PRINTS / NEVER PRINTS

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, the type of transmission, the result, the department, and other information.

* You can select whether or not part of the transmitted original is printed with transaction reports that are printed for normal transmissions and broadcast transmissions.

![Note]

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.)

**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 or Activity Report (page 88). The following notes may appear.

<table>
<thead>
<tr>
<th>Sending result</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>OK</td>
<td>Transmission was completed successfully.</td>
</tr>
<tr>
<td>BUSY</td>
<td>Transmission was not successful because the line was busy.</td>
</tr>
<tr>
<td>CANCEL</td>
<td>A transmission was cancelled while in progress or a stored transmission job was cancelled.</td>
</tr>
<tr>
<td>P. FAIL</td>
<td>The power was turned off or a power failure occurred.</td>
</tr>
<tr>
<td>NO RX POLL</td>
<td>A polling request was denied because the polling machine did not have its own fax number programmed.</td>
</tr>
<tr>
<td>PASS CODE # ERR</td>
<td>A polling request was denied because the other machine's fax number had not been stored as a polling passcode in your machine.</td>
</tr>
<tr>
<td>ORIG ERROR</td>
<td>When you attempted to send a fax from the SPF in direct transmission mode, a misfeed occurred.</td>
</tr>
<tr>
<td>ERRORXXXXXXX</td>
<td>Line conditions prevented the transmission from taking place normally. First two digits of transmission error number: Indicates an error code from 00 to 31. Last four digits of transmission error number: A code for use by service technicians.</td>
</tr>
<tr>
<td>Sending result</td>
<td>Explanation</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>XX-XX OK</td>
<td>When group dialling, broadcast transmission, or F-code relay request transmission was performed, xxx- : Indicates total number of transmissions. xxx OK : Indicates completed transmissions.</td>
</tr>
<tr>
<td>NO S ADD FUNC</td>
<td>When an F-code transmission was attempted,</td>
</tr>
<tr>
<td></td>
<td>(1) The other machine did not have the F-code function.</td>
</tr>
<tr>
<td></td>
<td>(2) An F-code was not programmed in the other machine.</td>
</tr>
<tr>
<td>S ADD TX FAIL</td>
<td>When an F-code transmission was attempted,</td>
</tr>
<tr>
<td></td>
<td>(1) The sub-addresses did not match.</td>
</tr>
<tr>
<td></td>
<td>(2) The passcodes did not match.</td>
</tr>
<tr>
<td></td>
<td>(3) An F-code public box was set.</td>
</tr>
<tr>
<td>SA POLL ERR</td>
<td>When F-code public box transmission was attempted,</td>
</tr>
<tr>
<td></td>
<td>(1) The F-code public box specified by the sub-address did not exist.</td>
</tr>
<tr>
<td></td>
<td>(2) The sub-address specified a box other than an F-code public box.</td>
</tr>
<tr>
<td>PASSCODE# ERR</td>
<td>When F-code public box transmission was attempted,</td>
</tr>
<tr>
<td></td>
<td>(1) The passcodes did not match.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reception result</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>OK</td>
<td>Reception was completed successfully.</td>
</tr>
<tr>
<td>P. FAIL</td>
<td>The power was turned off or a power failure occurred.</td>
</tr>
<tr>
<td>MEMORY FULL</td>
<td>The image memory became full during substitute reception to memory.</td>
</tr>
<tr>
<td>LENGTH OVER</td>
<td>The transmitted document was over 1500 mm long and therefore could not be received.</td>
</tr>
<tr>
<td>NO RX ROLL</td>
<td>When polling was attempted,</td>
</tr>
<tr>
<td></td>
<td>(1) Your fax number (sender's number) was not programmed in your machine.</td>
</tr>
<tr>
<td></td>
<td>(2) Your fax number was not programmed as a polling passcode number in the other machine.</td>
</tr>
<tr>
<td>RX NO POLL</td>
<td>When polling was attempted,</td>
</tr>
<tr>
<td></td>
<td>(1) The other machine did not have a polling function.</td>
</tr>
<tr>
<td></td>
<td>(2) The other machine did not have a document stored in polling memory.</td>
</tr>
<tr>
<td>ERRORxx xxxx</td>
<td>Line conditions prevented the reception from taking place normally.</td>
</tr>
<tr>
<td></td>
<td>First 2 digits of line error code: Error code from 00 to 31.</td>
</tr>
<tr>
<td></td>
<td>Last 4 digits of line error code: Code for use by service technicians.</td>
</tr>
<tr>
<td>XX-XX OK</td>
<td>When serial polling ended normally,</td>
</tr>
<tr>
<td></td>
<td>xxx- : Indicates total number of transmissions. xxx OK : Indicates completed transmissions.</td>
</tr>
<tr>
<td>NO SA POLLING</td>
<td>When F-code polling was attempted,</td>
</tr>
<tr>
<td></td>
<td>(1) The other machine did not have an F-code polling memory function.</td>
</tr>
<tr>
<td></td>
<td>(2) An F-code was not programmed in the other machine.</td>
</tr>
<tr>
<td></td>
<td>(3) The other machine did not have a document stored in polling memory.</td>
</tr>
<tr>
<td>SA POL TX ERR</td>
<td>When F-code polling was attempted,</td>
</tr>
<tr>
<td></td>
<td>(1) The sub-addresses did not match.</td>
</tr>
<tr>
<td></td>
<td>(2) The passcodes did not match.</td>
</tr>
<tr>
<td></td>
<td>(3) The other machine's F-code memory boxes were for F-code relay request transmission or for F-code confidential transmission.</td>
</tr>
<tr>
<td>S ADD RX FAIL</td>
<td>When F-code reception was attempted,</td>
</tr>
<tr>
<td></td>
<td>(1) The sub-addresses did not match or were not programmed.</td>
</tr>
<tr>
<td></td>
<td>(2) The passcodes did not match or were not programmed.</td>
</tr>
<tr>
<td></td>
<td>(3) An F-code polling memory box was programmed.</td>
</tr>
<tr>
<td>JUNK FAX ERR</td>
<td>Fax reception was denied by the reception denial function.</td>
</tr>
</tbody>
</table>
VIEWING THE COMMUNICATION ACTIVITY REPORT AT REGULAR INTERVALS

(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 default setting) to not print the report. To have the report printed, change the setting in the key operator programs. (See "LIST SETTING - AUTO LISTING" on page 95.)

Note

- Refer to the table on "WHEN A TRANSACTION REPORT IS PRINTED" (page 86) for the notes that appear in the TYPE/NOTE column.
- The activity report can also be printed out on demand. (See "PRINTING LISTS OF PROGRAMMED INFORMATION, SETTINGS, AND COMMUNICATION ACTIVITY" on page 81.)

WHEN AN ALARM SOUNDS AND A WARNING MESSAGE IS DISPLAYED

When an error occurs during a transaction, an alarm will sound and a message will appear in the display. If one of the following messages appears, follow the instructions in the table.

<table>
<thead>
<tr>
<th>Message (alarm sounds)</th>
<th>Meaning of message</th>
<th>Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXXXXXX Line error.</td>
<td>An error prevented completion of the transaction.</td>
<td>Try the transaction again.</td>
<td>–</td>
</tr>
<tr>
<td>Maintenance required.</td>
<td>It is time for maintenance and inspection.</td>
<td>Contact your dealer.</td>
<td>–</td>
</tr>
<tr>
<td>Call for service.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[OK]:RETURN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Please return X original(s).</td>
<td>A misfeed occurred in the SPF.</td>
<td>Reload the indicated number of originals.</td>
<td>13</td>
</tr>
<tr>
<td>[START]:CONTINUE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open TRAY xx and add xxxx paper.</td>
<td>A fax has been received but the paper tray does not have suitable paper.</td>
<td>Add paper.</td>
<td>“LOADING PAPER” in the &quot;Operation manual (for general information and copier)”</td>
</tr>
<tr>
<td>[OK]:RETURN</td>
<td>The paper tray is open.</td>
<td>Close the paper tray.</td>
<td>–</td>
</tr>
<tr>
<td>Remove paper from the output tray and press [OK].</td>
<td>The upper part of the job separator is full of paper.</td>
<td>Remove the paper.</td>
<td>–</td>
</tr>
<tr>
<td>A job separator error occurred.</td>
<td>Press the [CA] key to clear the error.</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>Clear paper path.</td>
<td>A paper misfeed occurred in the output section.</td>
<td>Remove the misfed paper.</td>
<td>“REMOVING MISFEEDS” in the &quot;Operation manual (for general information and copier)”</td>
</tr>
<tr>
<td>Close the cover.</td>
<td>A machine cover is open.</td>
<td>Close the cover.</td>
<td>–</td>
</tr>
</tbody>
</table>
### SELF-DIAGNOSTIC FUNCTION

The machine has a self-diagnostic function that automatically stops operation if a problem occurs in the machine. If a problem occurs in fax mode, the following display appears.

<table>
<thead>
<tr>
<th>Message display</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚠ Call for service. code:xx xx.</td>
<td>Turn off the power and then turn it back on. If the error is not cleared, note the 2-digit main code and the 2-digit sub-code and then contact your dealer.</td>
</tr>
</tbody>
</table>

### MESSAGES DURING NORMAL OPERATION

<table>
<thead>
<tr>
<th>Message</th>
<th>Meaning of message</th>
</tr>
</thead>
<tbody>
<tr>
<td>SENT No.001 xx% P-xxx</td>
<td>This appears when a direct transmission ends (&quot;xx&quot; indicates the number of pages).</td>
</tr>
<tr>
<td>READING No.001 xx% P-xxx</td>
<td>The original is being scanned into memory (during memory transmission).</td>
</tr>
<tr>
<td>Stand-by. AUG 22 FRI 10:25 AM 100%</td>
<td>The machine is in the standby state.</td>
</tr>
<tr>
<td>ENTER DIAL #</td>
<td>This appears when the [SPEAKER] key has been pressed.</td>
</tr>
</tbody>
</table>
# PROBLEMS AND SOLUTIONS

If you experience a problem with the fax function, first check the following table. This section describes problems related to the fax function. For problems related to general operation of the machine, see "TROUBLESHOOTING" in the "Operation manual (for general information and copier)".

<table>
<thead>
<tr>
<th>Problem</th>
<th>Check</th>
<th>Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The machine does not operate.</td>
<td>Is the machine power switch turned on?</td>
<td>Turn the power switch ON.</td>
<td>“Power switch” on page 4</td>
</tr>
<tr>
<td></td>
<td>Does the display show an error message?</td>
<td>Clear the error as instructed by the message.</td>
<td>“WHEN AN ALARM SOUNDS AND A WARNING MESSAGE IS DISPLAYED” on page 88</td>
</tr>
<tr>
<td>Dialling is not possible.</td>
<td>Is the telephone line properly connected?</td>
<td>Check the connections.</td>
<td>“Line connection” on page 4</td>
</tr>
<tr>
<td></td>
<td>Is the machine power switch turned on?</td>
<td>Turn the power switch ON.</td>
<td>“Power switch” on page 4</td>
</tr>
<tr>
<td></td>
<td>Is the machine in fax mode?</td>
<td>Press the [FAX] key to set the machine to fax mode.</td>
<td>“BASIC PROCEDURE FOR SENDING FAXES” on page 18</td>
</tr>
<tr>
<td>Cannot send a fax.</td>
<td>Does the receiving fax machine have paper?</td>
<td>Check with the operator of the receiving machine.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Does the receiving machine support G3 transmission?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Are the sub-address and passcode correct? (When using F-code transmission)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Is the receiving machine ready to receive?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Are you using a transmittable original size?</td>
<td>Check the transmittable sizes.</td>
<td>“ORIGINALS THAT CAN BE FAXED” on page 12</td>
</tr>
<tr>
<td></td>
<td>Was the original size detected correctly?</td>
<td>Check size of the original.</td>
<td>“CHECKING THE SIZE OF A PLACED ORIGINAL” on page 14</td>
</tr>
<tr>
<td></td>
<td>The message &quot;Reading cancelled. Please retry sending operation.&quot; appears.</td>
<td>If you attempt transmission while the message &quot;Warming-up,&quot; appears, the transmission may not take place correctly. Repeat the transmission.</td>
<td></td>
</tr>
<tr>
<td>The transmitted image prints out blank at the receiving side.</td>
<td>Was the original placed so that the correct side is scanned?</td>
<td>Make sure the original is placed so that the correct side is scanned.</td>
<td>“PLACING THE ORIGINAL” on page 13</td>
</tr>
<tr>
<td></td>
<td>If the receiving machine is using thermal paper, was the thermal paper loaded with the wrong side out?</td>
<td>Check with the operator of the receiving machine.</td>
<td></td>
</tr>
<tr>
<td>Problem</td>
<td>Check</td>
<td>Solution</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>The transmitted image is distorted.</td>
<td>Were line conditions poor due to thunder or another reason?</td>
<td>Try the transmission again.</td>
<td>–</td>
</tr>
<tr>
<td>White or black lines appear in the transmitted image.</td>
<td>Is the document glass or the scanning glass for the SPF (the long, narrow glass) dirty?</td>
<td>Clean the document glass or the scanning glass for the SPF.</td>
<td>&quot;CLEANING THE MACHINE&quot; in the &quot;Operation manual (for general information and copier)&quot;</td>
</tr>
<tr>
<td>Transmission does not take place at the specified time.</td>
<td>Is the machine's clock set to the correct time?</td>
<td>Set the clock to the correct time.</td>
<td>&quot;DATE &amp; TIME SET&quot; on page 99</td>
</tr>
<tr>
<td>Printing does not take place after reception.</td>
<td>Does an error message appear regarding adding paper, replenishing toner, or a misfeed? (This means that printing is not possible.)</td>
<td>Restore printing capability as instructed by the display message. Printing will begin.</td>
<td>&quot;WHEN AN ALARM SOUNDS AND A WARNING MESSAGE IS DISPLAYED&quot; on page 88</td>
</tr>
<tr>
<td>A received fax prints out blank.</td>
<td>Was the wrong side of the original scanned in the transmitting machine?</td>
<td>Check with the operator of the transmitting machine.</td>
<td>–</td>
</tr>
<tr>
<td>The received image is faint.</td>
<td>Is the original faint?</td>
<td>Ask the other party to re-send the fax using a suitable exposure setting.</td>
<td>–</td>
</tr>
<tr>
<td>The received image is distorted.</td>
<td>Were line conditions poor due to thunder or another reason?</td>
<td>Ask the other party to send the fax again.</td>
<td>–</td>
</tr>
<tr>
<td>A dial tone is not heard through the speaker.</td>
<td>Is the volume set to &quot;low&quot;?</td>
<td>Set the speaker volume to &quot;middle&quot; or &quot;high&quot;.</td>
<td>&quot;SPEAKER VOLUME&quot; on page 97</td>
</tr>
<tr>
<td>The machine does not ring.</td>
<td>Has the ringer volume been turned off?</td>
<td>Set the ringer volume to &quot;low&quot;, &quot;middle&quot;, or &quot;high&quot;.</td>
<td>&quot;SPEAKER VOLUME&quot; on page 97</td>
</tr>
<tr>
<td>Dialling is not possible.</td>
<td>Is the telephone line properly connected?</td>
<td>Check the connections.</td>
<td>&quot;Line connection&quot; on page 4</td>
</tr>
</tbody>
</table>

"SELECTING RESOLUTION AND EXPOSURE SETTINGS" on page 15

"EXTENSION TEL" on page 97
The key operator programs are used by the key operator (administrator of the machine) to customize certain features of the machine to better meet the needs of users. This section explains key operator programs for the fax features of the machine. For key operator programs that are for the copy function, print function, and network scanner function, see the respective manuals for those functions. For key operator programs for general use of the machine, see the "Key operator's guide" in the "Operation manual (for general information and copier)". To use the key operator programs, the key operator code must be entered.

For the initial key operator code set at the factory, see "KEY OPERATOR CODE NUMBER: FACTORY SETTING" in the "Operation manual (for general information and copier)."

The key operator programs that can be used depend on what peripheral devices have been installed.

### KEY OPERATOR PROGRAM LIST

#### KEY OPERATOR PROGRAMS FOR THE FAX FUNCTION

<table>
<thead>
<tr>
<th>Program name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST PRINT/SET</td>
<td></td>
</tr>
<tr>
<td>LIST PRINT</td>
<td>95</td>
</tr>
<tr>
<td>LIST SETTING</td>
<td>95</td>
</tr>
<tr>
<td>INITIAL SETTING</td>
<td></td>
</tr>
<tr>
<td>PAUSE TIME</td>
<td>96</td>
</tr>
<tr>
<td>OWN PASSCODE SET</td>
<td>96</td>
</tr>
<tr>
<td>SPEAKER VOLUME</td>
<td>97</td>
</tr>
<tr>
<td>TX/RX END SOUND</td>
<td>97</td>
</tr>
<tr>
<td>TX/RX END SOUND LENGTH</td>
<td>97</td>
</tr>
<tr>
<td>EXTENSION TEL</td>
<td>97</td>
</tr>
<tr>
<td>DISTINCTIVE RING</td>
<td>98</td>
</tr>
<tr>
<td>REMOTE RECEPTION</td>
<td>98</td>
</tr>
<tr>
<td>ACCOUNT CONTROL</td>
<td>98</td>
</tr>
<tr>
<td>ACCOUNT # SET</td>
<td>98</td>
</tr>
<tr>
<td>DATE &amp; TIME SET</td>
<td>99</td>
</tr>
<tr>
<td>AUTO SUMMER TIME SETTING</td>
<td>99</td>
</tr>
<tr>
<td>DISABLE FAX PRINT HOLD</td>
<td>100</td>
</tr>
<tr>
<td>SENDING FUNCTION</td>
<td></td>
</tr>
<tr>
<td>RES. CON. SET</td>
<td>100</td>
</tr>
<tr>
<td>AUTO REDUCE TX</td>
<td>100</td>
</tr>
<tr>
<td>ROTATE TX</td>
<td>100</td>
</tr>
<tr>
<td>PAGE COUNTER SET</td>
<td>101</td>
</tr>
<tr>
<td>SEND MODE</td>
<td>101</td>
</tr>
<tr>
<td>QUICK ON LINE TX</td>
<td>101</td>
</tr>
<tr>
<td>PRINT STATION # IN RCVD DATA</td>
<td>101</td>
</tr>
<tr>
<td>ACC. NAME PRINT</td>
<td>101</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECALL SETTING (BUSY)</td>
<td>102</td>
</tr>
<tr>
<td>RECALL SET (ERR)</td>
<td>102</td>
</tr>
<tr>
<td>RING TIMEOUT IN AUTO TX</td>
<td>103</td>
</tr>
<tr>
<td>AUTO COVER SHEET</td>
<td>103</td>
</tr>
<tr>
<td>FAX RECEPTION LIGHT</td>
<td>103</td>
</tr>
<tr>
<td>#OF RINGS AT. RX</td>
<td>104</td>
</tr>
<tr>
<td>TRAY SELECTION</td>
<td>104</td>
</tr>
<tr>
<td>RECEIVED DATA PRINT CONDITION</td>
<td>104</td>
</tr>
<tr>
<td>AUTO RCV REDUCE TO REGULAR SIZE</td>
<td>104</td>
</tr>
<tr>
<td>DUPLEX RECEPTION</td>
<td>105</td>
</tr>
<tr>
<td>8 1/2x11 RX REDUCE</td>
<td>105</td>
</tr>
<tr>
<td>FW. RX DATA</td>
<td>105</td>
</tr>
<tr>
<td>RECEIVED DATA FW. STATION SET</td>
<td>105</td>
</tr>
<tr>
<td>INDEX PRINT</td>
<td>106</td>
</tr>
<tr>
<td>EARLIER OUTPUT</td>
<td>106</td>
</tr>
<tr>
<td>ANTI JUNK FAX</td>
<td>106</td>
</tr>
<tr>
<td>ENTER JUNK FAX #</td>
<td>106</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLLING SECURITY</td>
<td>107</td>
</tr>
<tr>
<td>POLLING PASSCODE # MODE</td>
<td>107</td>
</tr>
</tbody>
</table>
### KEY OPERATOR PROGRAM MENU

The key operator programs are accessed via the following menu structure. Refer to this menu when enabling or disabling the settings that are explained beginning on page 95. Some programs contain an additional level of settings (a settings screen).

<table>
<thead>
<tr>
<th>Key Operator Code</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>FAX SETTINGS</td>
<td>LIST PRINT/SET</td>
<td>LIST PRINT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LIST SETTING</td>
</tr>
<tr>
<td></td>
<td>INITIAL SETTING</td>
<td></td>
<td>PAUSE TIME</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>OWN PASSCODE SET</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SPEAKER VOLUME</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TX/RX END SOUND</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>TX/RX END SOUND LENGTH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EXTENSION TEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DISTINCTIVE RING</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>REMOTE RECEPTION</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ACCOUNT CONTROL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ACCOUNT # SET</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DATE &amp; TIME SET</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AUTO SUMMER TIME SETTING</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DISABLE FAX PRINT HOLD</td>
</tr>
<tr>
<td></td>
<td>SENDING FUNCTION</td>
<td></td>
<td>RES. CON. SET</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>AUTO REDUCE TX</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ROTATE TX</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PAGE COUNTER SET</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>SEND MODE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QUICK ON LINE TX</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PRINT STATION # IN RCVD DATA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ACC. NAME PRINT</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>RECALL SETTING (BUSY)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RECALL SET (ERR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RING TIMEOUT IN AUTO TX</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AUTO COVER SHEET</td>
</tr>
<tr>
<td></td>
<td>RCV. FUNCTION</td>
<td></td>
<td>FAX RECEPTION LIGHT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>#OF RINGS AT. RX</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TRAY SELECTION</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RECEIVED DATA PRINT CONDITION</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>AUTO RCV REDUCE TO REGULAR SIZE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DUPLEX RECEPTION</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 1/2x11 RX REDUCE</td>
</tr>
<tr>
<td></td>
<td>POLLING SECURITY</td>
<td>POLLING SECURITY</td>
<td>FW. RX DATA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RECEIVED DATA FW. STATION SET</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>INDEX PRINT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EARLIER OUTPUT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ANTI JUNK FAX</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ENTER JUNK FAX #</td>
</tr>
</tbody>
</table>
PROCEDURE FOR USING THE KEY OPERATOR PROGRAMS

The key operator programs can be accessed from any mode (copy, fax, print, and scan mode). When the setting is completed, you will return to the previous mode.

• Faxes cannot be sent or received while a key operator program is being used.
• A key operator program cannot be used while a fax is being sent or received, while a voice call is being made, or while a received fax is being printed.

INITIAL PROCEDURE

1 Press the [SPECIAL FUNCTION] key.

2 Select "KEY OPE. PRG." with the [▼] or [▲] key.

3 Press the [OK] key.

4 Enter the five-digit key operator code with the numeric keys.

5 Select "FAX" with the [▼] or [▲] key.

6 Press the [OK] key.

7 Select a setting for the desired program as explained on the following pages.

   Programs for the following functions are available:
   LIST PRINT/SET (page 95)
   INITIAL SETTING (page 96)
   SENDING FUNCTION (page 100)
   RCV. FUNCTION (page 103)
   POLLING SECURITY (page 107)

8 Press the [CA] key to exit the programs.

Note

• As you enter each digit, "-" changes to "*".
• If make a mistake, press the [C] key and re-enter the number.
• If this is the first time you are programming the key operator code, enter the factory default code. (See "KEY OPERATOR CODE NUMBER: FACTORY SETTING" in the "Operation manual (for general information and copier)").
KEY OPERATOR PROGRAMS FOR THE FAX FUNCTION

LIST PRINT/SET
This program is used to print lists showing current key operator program settings and other programmed information.

LIST PRINT
1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).
2 Select "LIST PRINT/SET" with the [▼] or [▲] key and then press the [OK] key.
3 Select "LIST PRINT" with the [▼] or [▲] key and then press the [OK] key.
4 Select the desired list with the [▼] or [▲] key and then press the [OK] key.
   • "KEY OPE. LIST", "JUNK FAX # LIST" or "ACC. USAGE LIST" can be selected.
   • Printing begins when you end the key operator program.

LIST SETTING
PRINT SELECTION
This setting is used to select the conditions for printing out transaction reports for normal transmission, broadcast transmission, original print, reception, and confidential reception.

 Normally the settings indicated by shading above are selected.

AUTO LISTING
This program is used to have the activity report that is stored in the machine’s memory printed out at regular intervals. You can choose to have the report automatically printed each time the number of stored transactions exceeds 50, or have the report printed at a specified time every day (only once per day). You can also enable both print methods.

Note
"ORIGINAL IMAGE PRINT SETTING" is used to have part of the first page of the transmitted document printed on the transaction report. This program is not effective when the transaction report is set to not print out.
2 Select "LIST PRINT/SET" with the [▼] or [▲] key and then press the [OK] key.

3 Select "LIST SETTING" with the [▼] or [▲] key and then press the [OK] key.

4 Select "AUTO LISTING" with the [▼] or [▲] key and then press the [OK] key.

5 Select "AUTO PRINT REPT AT LIMIT (50)" with the [▼] or [▲] key and then press the [OK] key.
- The setting is enabled and a checkmark appears in the checkbox.
- If this procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.

6 If you wish to have the activity report printed at regular intervals, go to step 7. If you have finished selecting settings for this program, press the [BACK] key.

7 Select "PRINT DAILY AT DESIGNATED TIME" with the [▼] or [▲] key and then press the [OK] key.

8 Select "SETTING" with the [▼] or [▲] key and then press the [OK] key.

9 Enter the printout time with the numeric keys and press the [OK] key.
- If you make a mistake, move the cursor to the incorrect digit with the [◄] or [►] key (the cursor should be over the digit), and then enter the correct digit.

10 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

11 Select "INITIAL SETTING" with the [▼] or [▲] key and then press the [OK] key.

12 Select "PAUSE TIME" with the [▼] or [▲] key and then press the [OK] key.

13 Enter the pause time in seconds ("01" to "15") with the numeric keys and then press the [OK] key.
- If you make a mistake, move the cursor to the incorrect digit with the [◄] or [►] key (the cursor should be over the digit), and then enter the correct digit.

14 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

15 Select "INITIAL SETTING" with the [▼] or [▲] key and then press the [OK] key.

16 Select "OWN PASSCODE SET" with the [▼] or [▲] key and then press the [OK] key.

17 Select "STORE" with the [▼] or [▲] key and then press the [OK] key.
- After step 9 you will return to step 8. If you need to change the set time, follow steps 8 and 9 to enter the new time.
- To cancel a "PRINT DAILY AT DESIGNATED TIME" setting, follow these steps:
  (1) Select "CANCEL" in step 8 and then press the [OK] key.
  (2) Select "CANCEL" with the [▼] or [▲] key and then press the [OK] key.
- If "AUTO PRINT REPT AT LIMIT (50)" is not enabled and the number of recorded transactions exceeds 50, each new transaction will delete the oldest transaction.
- The activity report can also be printed out on demand. (See "PRINTING LISTS OF PROGRAMMED INFORMATION, SETTINGS, AND COMMUNICATION ACTIVITY" on page 81.)

18 Use this setting to program the fax number of the machine and the name of the user. The programmed name and number are printed at the top of each fax page you send. The number is also used as a passcode when performing polling reception "USING THE POLLING FUNCTION" (page 37).

19 You can check your programmed name and number by printing out the "KEY OPE. LIST". (Page 95)
- A maximum of 20 digits can be stored for the fax number.
- A maximum of 18 letters can be stored for the name.

20 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

21 Select "INITIAL SETTING" with the [▼] or [▲] key and then press the [OK] key.

22 Select "OWN PASSCODE SET" with the [▼] or [▲] key and then press the [OK] key.

23 Select "STORE" with the [▼] or [▲] key and then press the [OK] key.
5 Enter your fax number with the numeric keys and then press the [OK] key.
   • If you make a mistake, press the [C] key and re-enter the number.
   • To enter "+", press the ➤ key.

6 Enter your name and then press the [START] key ( ).
   See "ENTERING CHARACTERS" (page 82) for the procedure for entering letters.

   To clear the programmed fax number and name, follow these steps:
   (1) Select "DELETE" in step 4 and then press the [OK] key.
   (2) Select "DELETE" with the [▼] or [▲] key and then press the [OK] key.

**SPEAKER VOLUME**
This setting is used to adjust the on-hook volume, the ringing volume, the line monitor volume, the TX/RX end sound volume, the original scanning end sound volume, and the tone output volume. All volume settings are initially set to "MIDDLE".

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "INITIAL SETTING" with the [▼] or [▲] key and then press the [OK] key.

3 Select "SPEAKER VOLUME" with the [▼] or [▲] key and then press the [OK] key.

4 Select name of the volume that you wish to adjust with the [▼] or [▲] key and then press the [OK] key.

5 Select the desired volume level with the [▼] or [▲] key and then press the [OK] key.
   • "HIGH", "MIDDLE" or "LOW" can be selected for the on hook volume.
   • "HIGH", "MIDDLE", "LOW" or "OFF" can be selected for volumes other than the on hook volume.

**TX/RX END SOUND**
This program is used to select the beep pattern that signals the end of transmission or reception. "PATTERN 1", "PATTERN 2" or "PATTERN 3" can be selected.

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "INITIAL SETTING" with the [▼] or [▲] key and then press the [OK] key.

3 Select "TX/RX END SOUND" with the [▼] or [▲] key and then press the [OK] key.

4 Select "SEND" or "RECEIVE" with the [▼] or [▲] key and then press the [OK] key.

5 Select "PATTERN 1", "PATTERN 2", or "PATTERN 3" with the [▼] or [▲] key and then press the [OK] key.

   Before pressing the [OK] key to store your selection, you can press the ➤ key to listen to the selected pattern.

**TX/RX END SOUND LENGTH**
This setting is used to select the length of the end sound in seconds. Selections are "2.0 sec", "2.5 sec", "3.0 sec", "3.5 sec", and "4.0 sec". "3.0 sec" is normally selected.

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "INITIAL SETTING" with the [▼] or [▲] key and then press the [OK] key.

3 Select "TX/RX END SOUND LENGTH" with the [▼] or [▲] key and then press the [OK] key.

4 Select the number of seconds with the [▼] or [▲] key and then press the [OK] key.

**EXTENSION TEL**
Enable this setting when an extension telephone is connected to the machine. An extension telephone connected to the machine cannot be used until this setting is enabled. The initial setting is enabled.

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "INITIAL SETTING" with the [▼] or [▲] key and then press the [OK] key.

3 Select "EXTENSION TEL" with the [▼] or [▲] key and then press the [OK] key.
   • The setting is enabled and a checkmark appears in the checkbox.
   • If this procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.
DISTINCTIVE RING
This program can only be activated in Australia, and New Zealand. 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. Normally "OFF" is selected.

1. Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).
2. Select "INITIAL SETTING" with the [▼] or [▲] key and then press the [OK] key.
3. Select "DISTINCTIVE RING" with the [▼] or [▲] key and then press the [OK] key.
4. Select "STANDARD" or one of "PATTERN 1" to "PATTERN 5" with the [▼] or [▲] key, and then press the [OK] key.

ACCOUNT CONTROL
This setting is used to enable (or disable) auditing mode. Auditing mode is initially disabled. When this program is enabled, the operator must enter a valid 5-digit account number in order to use the fax function of the machine. This function also tracks fax communication time and fax pages for each account. To enable auditing mode, program an account number as explained in "ACCOUNT # SET".

1. Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).
2. Select "INITIAL SETTING" with the [▼] or [▲] key and then press the [OK] key.
3. Select "ACCOUNT CONTROL" with the [▼] or [▲] key and then press the [OK] key.
   - The setting (auditing mode) is enabled and a checkmark appears in the checkbox.
   - If this procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.

ACCOUNT # SET
This program is used to program, delete, and change account numbers for fax mode. Up to 50 account numbers can be programmed.
- Each account number has five digits. When you have finished programming one account number, you can continue programming other account numbers.
- Two methods are available for deleting account numbers: deleting an individual account number and deleting all account numbers.
- To change an account number, enter the account number to be changed and then enter a new account number. After an account number is changed, another account number can be changed.

Programming a new account number

1. Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).
2. Select "INITIAL SETTING" with the [▼] or [▲] key and then press the [OK] key.
3. Select "ACCOUNT # SET" with the [▼] or [▲] key and then press the [OK] key.
4. Select "ENTER" with the [▼] or [▲] key and then press the [OK] key.
5. Enter the new account number (00001 to 99999) with the numeric keys and then press the [OK] key.
   - If the number is not correct, press the [C] key and re-enter the number.

REMOTE RECEPTION
(Only when an extension phone is connected)
When a call is received on an extension phone connected to the machine, fax reception can be activated by entering a 1-digit number and pressing [▲] twice on the phone's keypad. This 1-digit number is called the remote reception number, and you can set it to any number from "0" to "9". Normally the remote reception number is set to "5".

1. Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).
2. Select "INITIAL SETTING" with the [▼] or [▲] key and then press the [OK] key.
3. Select "REMOTE RECEPTION" with the [▼] or [▲] key and then press the [OK] key.
4. Enter a new remote number with the numeric keys (0 to 9) and then press the [OK] key.
   - If a remote number has been previously stored, the newly entered remote number overwrites the old number.
6 Enter an account name (up to 18 characters) and then press the [OK] key.
   • See "ENTERING CHARACTERS" (page 82) for the procedure for entering letters.
   • Press the [OK] key to return to the screen of step 3.
   To program another account number, repeat steps 5 and 6. To exit, press the [BACK] key in step 5.

Deleting a single account number

1 In step 4 of "Programming a new account number", select "DELETE" and then press the [OK] key.

2 Select "DELETE 1 ACC." with the [▼] or [▲] key and then press the [OK] key.

3 Enter the account number (5 digits) with the numeric keys and then press the [OK] key.
   • If the number is not correct, press the [C] key and re-enter the number.
   • Enter a programmed account number. If you enter an account number that has not been programmed, you will not advance to step 4 when the [OK] key is pressed. To cancel the deletion, press the [BACK] key.

4 Select "YES" with the [▼] or [▲] key and then press the [OK] key.
   • Check the account number that appears in the display before deleting it.
   • Press the [OK] key to return to the screen of step 3. To delete another number, repeat steps 3 through 4. To exit, press the [BACK] key in step 3.

Deleting all account numbers

1 In step 4 of "Programming a new account number", select "DELETE" and then press the [OK] key.

2 Select "DELETE ALL ACC." with the [▼] or [▲] key and then press the [OK] key.

3 Select "YES" with the [▼] or [▲] key and then press the [OK] key.
   To cancel the deletion, select "NO" and press the [OK] key.

Changing an account number

1 In step 4 of "Programming a new account number", select "CHANGE" and press the [OK] key.

2 Enter the account number that you wish to change and then the new account number, and press the [OK] key.
   • If you make a mistake, press the [C] key and then enter the correct number.
   • If you enter an account number that has not been programmed, re-enter the correct account number.

DATE & TIME SET

This setting is used to set the machine's internal clock to the current date and time.

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "INITIAL SETTING" with the [▼] or [▲] key and then press the [OK] key.

3 Select "DATE & TIME SET" with the [▼] or [▲] key and then press the [OK] key.

4 Enter the year (2004 to 2062), month (01 to 12), and day (01 to 31) with the numeric keys, and then press the [OK] key.
   • For the year, enter the last two digits of the year.
   • The range of days that can be entered for the selected month is displayed.

5 Enter the time in 12-hour format with the numeric keys and press the [OK] key.
   Enter a number from 01 to 12 for the hour and a number from 00 to 59 for the minute.

6 Select "AM" or "PM" with the [▼] or [▲] key and then press the [OK] key.

AUTO SUMMER TIME SETTING

Turn on this setting to have the internal clock automatically move forward and backward at the beginning and end of Auto Summer 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.

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "INITIAL SETTING" with the [▼] or [▲] key and then press the [OK] key.
3 Select “AUTO SUMMER TIME SETTING” with the [▼] or [▲] key and then press the [OK] key.
   • The setting is turned on and a checkmark appears in the checkbox.
   • If this procedure is performed when the setting is turned on, the checkmark is cleared and the setting turned off.

DISABLE FAX PRINT HOLD
This program is used to disable the fax print hold function, which holds received faxes in memory instead of printing them as they are received. (Page 30)

Normally the fax print hold function is disabled.

1 Follow steps 1 through 6 of “INITIAL PROCEDURE” (page 94).

2 Select “INITIAL SETTING” with the [▼] or [▲] key and press the [OK] key.

3 Select “DISABLE FAX PRINT HOLD” with the [▼] or [▲] key and press the [OK] key.
   • The setting (which disables fax print hold) is enabled and a checkmark appears in the checkbox.
   • If this procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled (fax print hold is enabled).

SENDING FUNCTION
These programs are used to change the default settings (initially set at the factory) for the various fax transmission functions to settings that better meet your needs.

RES. CON. SET
This program is used to adjust the exposure level when scanning an original to be faxed. The initial setting is standard resolution and auto exposure mode.

1 Follow steps 1 through 6 of “INITIAL PROCEDURE” (page 94).

2 Select “SENDING FUNCTION” with the [▼] or [▲] key and then press the [OK] key.

3 Select “RES. CON. SET” with the [▼] or [▲] key and press the [OK] key.

4 Select the resolution setting with the [▼] or [▲] key and the exposure mode with the [◄] or [►] key, and then press the [OK] key.
   See page 15 for information on selecting the resolution and contrast settings.

AUTO REDUCE TX
This setting is used to have transmitted faxes reduced to match the size of the other machine's printing paper. “AUTO REDUCE TX” is normally enabled. If the setting is disabled, documents are faxed in their original size. Because the size is not adjusted to match the size of the printing paper, part of the received fax may be cut off.

1 Follow steps 1 through 6 of “INITIAL PROCEDURE” (page 94).

2 Select “SENDING FUNCTION” with the [▼] or [▲] key and then press the [OK] key.

3 Select “AUTO REDUCE TX” with the [▼] or [▲] key and then press the [OK] key.
   • “AUTO REDUCE TX” is enabled and a checkmark appears in the checkbox.
   • If this procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.

ROTATE TX
This setting is used to select whether or not an A4, A5R or 8-1/2” x 11” size original that is oriented vertically will be rotated to a horizontal orientation before transmission. Rotation is normally enabled, and vertically oriented originals are rotated counterclockwise. (A4, A5R and 8-1/2" x 11" size originals that are oriented horizontally are not rotated.)

Rotation transmission can be selected separately for different original sizes. To disable a rotation setting, clear the checkbox from the appropriate setting.

1 Follow steps 1 through 6 of “INITIAL PROCEDURE” (page 94).

2 Select “SENDING FUNCTION” with the [▼] or [▲] key and then press the [OK] key.

3 Select “ROTATE TX” with the [▼] or [▲] key and then press the [OK] key.

4 Select the desired original size and press the [OK] key.
   • Size selections are A4, A5R and 8-1/2" x 11".
   • When a checkmark appears in the checkbox of the selected original size, rotation transmission is enabled for that size.
   • If the procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.

5 To change the setting for another original size, repeat step 4.
PAGE COUNTER SET
This setting lets you select whether page numbers are printed at the top of fax pages by the receiving machine. The normal setting is to have page numbers printed.

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "SENDING FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select "PAGE COUNTER SET" with the [▼] or [▲] key and then press the [OK] key.
   • The setting is enabled (page numbers will be printed) and a checkmark appears in the checkbox.
   • If the procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.

PRINT STATION # IN RCVD DATA
This setting lets you select the position (inside or outside the original image) of the date and sender's information that are printed at the top of each fax page you send. Normally outside the original image is selected. To have your name and number printed inside the original image, select "IN DATA". For more detailed information on the position of each setting, see "Position of sender information" (page 42).

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "SENDING FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select "QUICK ON LINE TX" with the [▼] or [▲] key and then press the [OK] key.
   • Quick on-line is enabled and a checkmark appears in the checkbox.
   • If this procedure is performed when quick on-line is enabled, the checkmark will be cleared and quick on-line disabled.

SEND MODE
This setting is used to select whether the default mode for sending faxes is memory transmission or direct transmission. The initial setting is "MEMORY TX".

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "SENDING FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select "SEND MODE" with the [▼] or [▲] key and then press the [OK] key.

4 Select "MEMORY TX" or "DIRECT TX" with the [▼] or [▲] key and then press the [OK] key.

QUICK ON LINE TX
This program is used to select whether or not quick on-line transmission (transmission while original pages are being scanned into memory) takes place when a memory transmission is performed. If quick on-line transmission is disabled, transmission will not begin until all original pages have been scanned into memory. Normally quick on-line transmission is enabled. When this function is disabled, transmission will not begin until all pages of the document have been scanned. Note that this setting does not apply to manual transmission. (See "Storing transmission jobs (memory transmission)" on page 24.)

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "SENDING FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select "QUICK ON LINE TX" with the [▼] or [▲] key and then press the [OK] key.
   • Quick on-line is enabled and a checkmark appears in the checkbox.
   • If this procedure is performed when quick on-line is enabled, the checkmark will be cleared and quick on-line disabled.

ACC. NAME PRINT
When using auditing mode, this setting determines whether or not the recipient is notified of the sender’s account name when a fax is sent. This setting is initially disabled (the recipient is not notified).

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "SENDING FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select "ACC. NAME PRINT" with the [▼] or [▲] key and then press the [OK] key.
   • The setting is enabled and a checkmark appears in the checkbox.
   • This setting is only effective if auditing mode is enabled.
   • If this procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.

PRINT STATION # IN RCVD DATA
This setting lets you select the position (inside or outside the original image) of the date and sender's information that are printed at the top of each fax page you send. Normally outside the original image is selected. To have your name and number printed inside the original image, select "IN DATA". For more detailed information on the position of each setting, see "Position of sender information" (page 42).

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "SENDING FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select "PRINT STATION # IN RCVD DATA" with the [▼] or [▲] key and then press the [OK] key.

4 Press the [▼] or [▲] key to select "OUT" or "IN DATA", and then press the [OK] key.

ACC. NAME PRINT
When using auditing mode, this setting determines whether or not the recipient is notified of the sender’s account name when a fax is sent. This setting is initially disabled (the recipient is not notified).

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "SENDING FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select "ACC. NAME PRINT" with the [▼] or [▲] key and then press the [OK] key.
   • The setting is enabled and a checkmark appears in the checkbox.
   • This setting is only effective if auditing mode is enabled.
   • If this procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.
RECALL SETTING (BUSY)
This program is used to set the number of recall attempts and the interval between recall attempts when a transmission is not successful due to the line being busy or other reason. Normally the machine is set to make 2 recall attempts at intervals of 3 minutes.
If you do not wish to have recalling take place, set the number of attempts to "0" (steps 6 and 7).

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "SENDING FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select "RECALL SETTING (BUSY)" with the [▼] or [▲] key and then press the [OK] key.
   If you do not wish to change the recall interval setting, go to step 6.

4 Select "RECALL INTERVAL" with the [▼] or [▲] key and then press the [OK] key.

5 Enter the recall interval (01 to 15) with the numeric keys and then press the [OK] key.
   • The recall interval can be set from 1 to 15 minutes.
   • After finishing step 5, if you do not wish to change the number of recall attempts, press the [BACK] key to exit.

6 Select "RECALL TIMES" with the [▼] or [▲] key and then press the [OK] key.

7 Enter the number of recall attempts with the numeric keys and then press the [OK] key.
   • The number of recall attempts can be set in each country are shown in the following table.

<table>
<thead>
<tr>
<th>Country Differentiation Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
</tr>
<tr>
<td>The number of recall attempts</td>
</tr>
</tbody>
</table>

   • If you do not wish to have recalling take place, set the number of attempts to "0".

   • If you made a mistake in step 5 or step 7, move the cursor to the mistake with the [◄] or [►] key and enter the correct number.
   • Even if this setting is enabled, the machine will not re-attempt the call when a fax is sent by manual transmission.

RECALL SET (ERR)
When sending a fax, this setting is used to select whether or not the machine will automatically re-attempt the call if the transmission fails due to a line error. Normally the machine is set to make 1 recall attempt at intervals of 1 minute.
If you do not wish to have recalling take place, set the number of attempts to "0" (steps 6 and 7).

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "SENDING FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select "RECALL SET(Err)" with the [▼] or [▲] key and then press the [OK] key.
   If you do not wish to change the recall interval setting, go to step 6.

4 Select "RECALL INTERVAL" with the [▼] or [▲] key and then press the [OK] key.

5 Enter the recall interval (00 to 15) with the numeric keys and then press the [OK] key.
   • The recall interval can be set from 0 to 15 minutes.
   • After finishing step 5, if you do not wish to change the number of recall attempts, press the [BACK] key to exit.

6 Select "RECALL TIMES" with the [▼] or [▲] key and then press the [OK] key.

7 Enter the number of recall attempts with the numeric keys and then press the [OK] key.
   • The number of recall attempts can be set in each country are shown in the following table.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>United Kingdom</td>
</tr>
<tr>
<td>The number of recall attempts</td>
</tr>
</tbody>
</table>

   • If you do not wish to have recalling take place, set the number of attempts to "0".

   • If the recall interval is set to "0", the machine will immediately call again after the connection is broken due to the line error.
   • If you made a mistake in step 5, move the cursor to the mistake with the [◄] or [►] keys and enter the correct number.
   • Even if this setting is enabled, the machine will not re-attempt the call when a fax is sent by manual transmission.
RING TIMEOUT IN AUTO TX

When sending a fax by automatic transmission (see “Storing transmission jobs (memory transmission)” on page 24), this setting lets you select the amount of time that the machine waits before breaking the connection when the other machine does not answer your machine’s call. 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.". Normally "45 SEC." is selected.

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "SENDING FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select “RING TIMEOUT IN AUTO TX” with the [▼] or [▲] key and then press the [OK] key.

4 Select the time with the [▼] or [▲] key and then press the [OK] key.

Selections for the call time are "30 SEC.", "45 SEC.", "60 SEC.".

AUTO COVER SHEET

When this setting is enabled, a cover page is automatically generated and added to each fax transmission. The cover page shows the date, time, destination name, 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 the public box or F-code public box (polling memory), or when performing polling, F-code relay broadcast transmission, or manual transmission.

Normally this setting is disabled (a cover sheet is not added).

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "SENDING FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select “AUTO COVER SHEET” with the [▼] or [▲] key and then press the [OK] key.

4 Select “YES” with the [▼] or [▲] key and then press the [OK] key.

If you do not wish cover sheets to be added to transmissions, select “NO” in step 4 and press the [OK] key.

RCV. FUNCTION

These programs are used to change the default settings (initially set at the factory) for the various fax reception functions to settings that better meet your needs.

FAX RECEPTION LIGHT

The LINE STATUS indicator on the operation panel informs you when a fax is received by blinking (page 28). This program lets you select one of the two blinking/off patterns described below, or no blinking. Normally “PATTERN 1” is selected.

Optional job separator tray kit installed (page 28)

<table>
<thead>
<tr>
<th>Blinking start</th>
<th>PATTERN 1</th>
<th>PATTERN 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blinking starts</td>
<td>When fax is received to memory</td>
<td>When printing of received fax starts</td>
</tr>
<tr>
<td>Off</td>
<td>When printed fax is removed (blinking continues until fax is removed)</td>
<td></td>
</tr>
</tbody>
</table>

Job separator tray kit not installed

<table>
<thead>
<tr>
<th>Blinking start</th>
<th>PATTERN 1</th>
<th>PATTERN 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blinking starts</td>
<td>When fax is received to memory</td>
<td>When printing of received fax starts</td>
</tr>
<tr>
<td>Off</td>
<td>Received fax no longer in memory</td>
<td>When printing of received fax is completed</td>
</tr>
</tbody>
</table>

Blinking of the LINE STATUS indicator also applies to the following cases:

• Printing documents in the Public Box (page 40)
• PRINTING LISTS OF PROGRAMMED INFORMATION, SETTINGS, AND COMMUNICATION ACTIVITY (page 81)
• When a list is printed using "LIST PRINT/SET" (page 95) in the key operator programs.

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select “RCV. FUNCTION” with the [▼] or [▲] key and then press the [OK] key.

3 Select “FAX RECEPTION LIGHT” with the [▼] or [▲] key and then press the [OK] key.

4 Select “PATTERN 1”, “PATTERN 2”, or “OFF” with the [▼] or [▲] key and then press the [OK] key.

If you do not wish the LINE STATUS indicator to blink, select “OFF”.

Note
#OF RINGS AT. RX
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. (See "RECEIVING A FAX" on page 28.) Any number of rings from 0 to 9 can be selected. Normally "2" is selected.

1. Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).
2. Select "RCV. FUNCTION" with the [▼] or [▲] key and then press the [OK] key.
3. Select "#OF RINGS AT. RX" with the [▼] or [▲] key and then press the [OK] key.
4. Enter the number of rings (0 to 9) with the numeric keys and then press the [OK] key.
   The number of rings can be set to any number from 0 to 9.

Note: If the number of rings is set to 0, the machine will receive faxes without ringing.

TRAY SELECTION
This setting is used to select which output trays can be used for received faxes. All output trays are initially enabled.

1. Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).
2. Select "RCV. FUNCTION" with the [▼] or [▲] key and then press the [OK] key.
3. Select "TRAY SELECTION" with the [▼] or [▲] key and then press the [OK] key.
4. Select the tray that you wish to enable with the [▼] or [▲] key and then press the [OK] key.
   • The selected tray is enabled and a checkmark appears in the checkbox.
   • If this procedure is performed when the tray is enabled, the checkmark will be cleared and the tray disabled.
5. To enable another tray, repeat step 4. To exit, press the [BACK] key.

Note: The trays that can be enabled will vary depending on the options that are installed. The trays cannot all be disabled.

RECEIVED DATA PRINT CONDITION
This setting determines the selection condition for paper when printing received documents. Select either of the two conditions below. "REDUCTION" is normally selected.

- "REDUCTION"
  Each received image is printed at actual size when possible. When not possible, the image is automatically reduced before printing.
- "DIVISION"
  Each received image is printed at actual size. If necessary, the image is split onto multiple sheets of paper.

1. Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).
2. Select "RCV. FUNCTION" with the [▼] or [▲] key and then press the [OK] key.
3. Select "RECEIVED DATA PRINT CONDITION" with the [▼] or [▲] key and then press the [OK] key.
4. Select "REDUCTION" or "DIVISION" with the [▼] or [▲] key and then press the [OK] key.

AUTO RCV REDUCE TO REGULAR SIZE
When you receive a fax that includes the sender’s name and number, the received image is slightly larger than the standard size*. This setting lets you select whether or not the received image is automatically reduced before printing to fit the standard size. Normally this setting is enabled.

* Standard sizes are sizes such as A4 and B5.

1. Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).
2. Select "RCV. FUNCTION" with the [▼] or [▲] key and then press the [OK] key.
3. Select "AUTO RCV REDUCE TO REGULAR SIZE" with the [▼] or [▲] key and then press the [OK] key.

Note: If this setting is disabled (no reduction) and the received data print condition is set to division, the image may be clipped.
If auto receive reduce is disabled, an image larger than the standard size will be cut off. However, the image will be clearer because it will be printed at the same size as the original.
DUPLEX RECEPTION
(Only on models with the two-sided printing function)
This setting is used to select whether or not received faxes are printed on both sides of the paper. When two-sided printing is enabled and a fax that is two pages or longer is received (the pages must be the same size), the fax will be printed on both sides of the paper.

1 Follow steps 1 through 6 of “INITIAL PROCEDURE” (page 94).

2 Select “RCV. FUNCTION” with the [▼] or [▲] key and then press the [OK] key.

3 Select “DUPLEX RECEPTION” with the [▼] or [▲] key and then press the [OK] key.
   • The setting is enabled (two-sided printing will take place) and a checkmark appears in the checkbox.
   • If the procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.

8 1/2x11 RX REDUCE
This setting is used to select whether received 8-1/2" x 11"R-size faxes are reduced. When an 8-1/2" x 11"R fax is received, part of the document is normally cut off. This setting can be turned on to have 8-1/2" x 11"R faxes reduced to fit on A4R paper. The setting is initially turned off.

1 Follow steps 1 through 6 of “INITIAL PROCEDURE” (page 94).

2 Select “RCV. FUNCTION” with the [▼] or [▲] key and then press the [OK] key.

3 Select “8 1/2x11 RX REDUCE” with the [▼] or [▲] key and then press the [OK] key.
   • The setting is turned on and a checkmark appears in the checkbox.
   • If this procedure is performed when the setting is turned on, the checkmark is cleared and the setting disabled.

FW. RX DATA
This setting is used to select whether or not received faxes are forwarded to a fax machine programmed as explained in “RECEIVED DATA FW. STATION SET” (page 105) in the event that the machine cannot print the faxes. The setting is initially disabled.

1 Follow steps 1 through 6 of “INITIAL PROCEDURE” (page 94).

2 Select “RCV. FUNCTION” with the [▼] or [▲] key and then press the [OK] key.

3 Select “FW. RX DATA” with the [▼] or [▲] key and then press the [OK] key.
   • The setting is enabled and a checkmark appears in the checkbox.
   • If the procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.

RECEIVED DATA FW. STATION SET
When a problem prevents the machine from printing a received fax, the fax forwarding function (page 46) 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). To specify an F-code confidential box in the destination fax machine, enter the sub-address and passcode after the fax number in steps 6 and 7 below.

1 Follow steps 1 through 6 of “INITIAL PROCEDURE” (page 94).

2 Select “RCV. FUNCTION” with the [▼] or [▲] key and then press the [OK] key.

3 Select “RECEIVED DATA FW. STATION SET” with the [▼] or [▲] key and then press the [OK] key.

4 Select “STORE” with the [▼] or [▲] key and then press the [OK] key.

5 Enter the forwarding fax number with the numeric keys and then press the [OK] key.

6 Enter the sub-address with the numeric keys and then press the [OK] key.
   • If you do not need to specify an F-code confidential box in the destination fax machine, press the [OK] key without entering anything.

7 Enter the passcode with the numeric keys and then press the [OK] key.
   • If you do not need to specify an F-code confidential box in the destination fax machine, press the [OK] key without entering anything.

8 To delete the number, follow these steps:
   (1) Select “DELETE” in step 4 and then press the [OK] key.
   (2) Select “DELETE” with the [▼] or [▲] key and then press the [OK] key.
INDEX PRINT

This setting is used to have a black mark (index) printed at the top of each received fax page. The position of the mark is shifted with each fax reception, allowing you to easily distinguish where one fax reception ends and another begins.

- Enable this function before receiving faxes. The function remains enabled until you disable it.
- When this function is used, less space is available on the page to print the fax image, and thus a received fax is sometimes divided onto two pages.
- If the received fax is reduced before printing, the black mark is also reduced.
- When the duplex reception function (page 105) is enabled to print faxes on both sides of the paper, it is not recommended that this function be enabled. If this is done, the black mark will be printed on both sides of the paper in the same relative position as when one-sided printing is used.

The setting is initially disabled (no index mark).

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "RCV. FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select “INDEX PRINT” with the [▼] or [▲] key and then press the [OK] key.
   - The setting is enabled (a black mark will be printed) and a checkmark appears in the checkbox.
   - If the procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.

EARLIER OUTPUT

When a received fax cannot be printed because the machine is out of appropriate paper and a fax is subsequently received that can be printed, this setting determines whether the subsequent fax is printed before the fax that cannot be printed. The setting is initially enabled (the subsequent fax is printed first).

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "RCV. FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select “EARLIER OUTPUT” with the [▼] or [▲] key and then press the [OK] key.
   - The setting is enabled (the subsequent fax is printed first) and a checkmark appears in the checkbox.
   - If the procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.

ANTI JUNK FAX

When this setting is enabled, reception from fax numbers programmed using the "ENTER JUNK FAX #" program will be blocked. This program is normally disabled.

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "RCV. FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select “ANTI JUNK FAX” with the [▼] or [▲] key and then press the [OK] key.
   - The setting is enabled and a checkmark appears in the checkbox.
   - If this procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.

ENTER JUNK FAX #

This program is used to program 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 programmed fax numbers, the "ANTI JUNK FAX" setting must be enabled.

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "RCV. FUNCTION" with the [▼] or [▲] key and then press the [OK] key.

3 Select “ENTER JUNK FAX #” with the [▼] or [▲] key and then press the [OK] key.

4 Select "ENTER" with the [▼] or [▲] key and then press the [OK] key.

5 Enter a 2-digit control number from 01 to 50 with the numeric keys to identify the fax number that will be entered in the next step, and then press the [OK] key.

6 Enter the fax number that you wish to block with the numeric keys, and then press the [OK] key.

To delete a number, follow these steps: Before deleting a number, use the "LIST PRINT" program on (page 95) to check the control number that identifies the fax number (01 to 50) that you wish to delete. The control number must be entered to delete the fax number. (The fax number will not appear in the display. If the wrong control number is accidentally entered, a fax number other than the fax number that you wish to delete will be deleted.)

(1) Select "DELETE" in step 4 and then press the [OK] key.

(2) Select the 2-digit control number (01 to 50) that identifies the fax number that you wish to delete with the [▼] or [▲] key and then press the [OK] key.

(3) Select “DELETE” with the [▼] or [▲] key and then press the [OK] key.
POLLING SECURITY

These settings are used for the public box for regular polling memory. Note that they do not apply to F-code polling memory. (See "USING POLLING MEMORY" page 39.)

POLLING SECURITY

When performing polling memory (see "Polling security" on page 41), this setting is used to select whether any machine will be allowed to poll your machine, or only machines that have been programmed in your machine. Normally this setting is enabled.

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "POLLING SECURITY" with the [▼] or [▲] key and then press the [OK] key.

3 Select "POLLING SECURITY" with the [▼] or [▲] key and then press the [OK] key.
   • The setting is enabled and a checkmark appears in the checkbox.
   • If this procedure is performed when the setting is enabled, the checkmark will be cleared and the setting disabled.

POLLING PASSCODE # MODE

When "POLLING SECURITY" is enabled, use this setting 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. To check the programmed numbers, print the "KEY OPE. LIST" (page 95).

1 Follow steps 1 through 6 of "INITIAL PROCEDURE" (page 94).

2 Select "POLLING SECURITY" with the [▼] or [▲] key and then press the [OK] key.

3 Select "POLLING PASSCODE # MODE" with the [▼] or [▲] key and then press the [OK] key.

4 Select "ENTER" with the [▼] or [▲] key and then press the [OK] key.

5 Enter a 2-digit control number from 01 to 10 with the numeric keys to identify the passcode that will be entered in the next step, and then press the [OK] key.
   If you make a mistake, move the cursor to the mistake with the [◄] or [►] keys and enter the correct number.

6 Enter the passcode number (up to 20 digits) and then press the [OK] key.
   If you make a mistake, press the [C] key and then re-enter the correct number.

Note

To clear a passcode number, follow these steps:
(1) Select "DELETE" in step 4 and then press the [OK] key.
(2) Enter the control number that identifies the number you wish to clear, and then press the [OK] key.
(3) Select "DELETE" with the [▼] or [▲] key and then press the [OK] key.
This chapter contains the specifications of the fax function and the index.

## SPECIFICATIONS

For information on power requirements, power consumption, dimensions, weight, and other specifications that are common to all features of the machine, see "SPECIFICATIONS" in the "Operation manual (for general information and copier)".

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicable telephone line</td>
<td>Public switched telephone network</td>
</tr>
<tr>
<td>Compression method</td>
<td>MH, MR, MMR, JBIG</td>
</tr>
<tr>
<td>Transmission mode</td>
<td>Super G3, G3 (this machine can only communicate with fax machines that support the G3 or Super G3 standard)</td>
</tr>
<tr>
<td>Scanning method</td>
<td>Flatbed CCD</td>
</tr>
<tr>
<td>Scanning resolution (supports ITU-T standards)</td>
<td>8 x 3.85 lines/mm (Standard)&lt;br&gt;8 x 7.7 lines/mm (Fine, Fine-Halftone)&lt;br&gt;8 x 15.4 lines/mm (Super Fine, Super Fine - Halftone)&lt;br&gt;16 x 15.4 lines/mm (Ultra Fine, Ultra Fine - Halftone)</td>
</tr>
<tr>
<td>Printing method</td>
<td>Electrophotography</td>
</tr>
<tr>
<td>Transmission speed</td>
<td>33.6 kbps down to 2.4 kbps Automatic fallback</td>
</tr>
<tr>
<td>Transmission time*1</td>
<td>2 seconds (Super G3 mode / 33.6 kbps, JBIG), 6 seconds (G3 ECM mode / 14.4 kbps, JBIG)</td>
</tr>
<tr>
<td>Paper size</td>
<td>A3 to A5, 8-1/2&quot; x 11&quot; (Inch-based machine: 11&quot; x 17&quot; to 5-1/2&quot; x 8-1/2&quot;, A4)</td>
</tr>
<tr>
<td>Effective recording width</td>
<td>293 mm max. (A3 printing) or 11.5&quot; max. (11&quot; x 17&quot; printing)</td>
</tr>
<tr>
<td>Transmittable original size</td>
<td>A3 to A5 (Inch-based machine: 11&quot; x 17&quot; to 5-1/2&quot; x 8-1/2&quot;)&lt;br&gt;Refer to &quot;Image rotation&quot; (page 25) for transmission of A5 size documents.</td>
</tr>
<tr>
<td>Effective scanning width</td>
<td>Maximum 297 mm (11.7&quot;)</td>
</tr>
<tr>
<td>Halftone transmission</td>
<td>Yes (256 levels)</td>
</tr>
<tr>
<td>Contrast adjustment</td>
<td>Automatic (5 levels by manual adjustment)</td>
</tr>
<tr>
<td>Extension telephone connection</td>
<td>Possible (1 telephone)</td>
</tr>
<tr>
<td>Auto-dialling</td>
<td>A combined total of 50 Rapid dial and group dial keys can be stored; 300 speed dial destinations can be stored.</td>
</tr>
<tr>
<td>Timer Transmission</td>
<td>Yes</td>
</tr>
<tr>
<td>Program function</td>
<td>Yes (9 programs)</td>
</tr>
<tr>
<td>F-code support</td>
<td>Yes (can transmit and receive SUB/SEP (sub-address) and SID/PWD (passcode) signals)</td>
</tr>
<tr>
<td>Auto document feeding</td>
<td>Yes (maximum of 40 sheets, 30 sheets of 90 g/m² (24 lbs.) paper, or total stack thickness of 4 mm (5/32&quot;) or less)</td>
</tr>
<tr>
<td>Image memory</td>
<td>2 MB²</td>
</tr>
<tr>
<td>Error Correction Mode (ECM)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*1 Transmission speed is for an A4 or 8-1/2" x 11" document with approximately 700 characters at standard resolution (8 x 3.85 lines/mm) sent in high speed mode (33.6 kbps (JBIG) or 14.4 kbps (JBIG)). 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 additional fax memory (8 MB).

Some discrepancies may exist in the illustrations and content due to improvements to the machine.
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INTRODUCTION

The optional network expansion kit (AR-NB3) enables the machine to be used as a network scanner.

- To use the network scanner function, the dual function board (AR-EB9) must be installed in the machine.
- Use the machine's [USB-2:] port to connect the machine to the network expansion kit.

The network scanner function cannot be used if the network expansion kit is connected to the [USB-1:] port on the machine.

Note

- This manual only explains the network scanner function that can be used when the optional network expansion kit is installed. For information on copier functions, adding paper and toner, removing misfeeds, using peripheral equipment, and other general information, please refer to the "Operation manual (for general information and copier)" that accompanies the machine. For information on the network printer function, please refer to the "Operation manual (for network printer)" in the network expansion kit (AR-NB3).
- For information on installing the drivers and software cited in this manual, see the separate "Software setup guide".
- For information on the operating system, please refer to your operating system manual or the online Help function.
- The explanations of screens and procedures in this manual are primarily for Windows® XP. The screens may vary in other versions of the operating systems.
- The explanations in this manual are based on American English and the North American version of the software. Software for other countries and regions may vary slightly from the North American version.
- This manual refers to the digital multifunctional system equipped with the network function as "the machine".
- This manual refers to the Reversing single pass feeder as the "RSPF" and the Single pass feeder as the "SPF". Unless specific mention is made, both the RSPF and the SPF are referred to simply as "SPF".
- Wherever "AR-XXXX" appears in this manual, please substitute your model name for "XXXX".

- In some regions the "Key operator's guide" cited in this manual is a separate manual, and in other regions the "Key operator's guide" is included in the "Operation manual (for general information and copier)".
- The "Dual function board" cited in this manual can be installed as an option in some models and is pre-installed standard in other models. For detailed information, please refer to "3. PERIPHERAL DEVICES AND SUPPLIES" in the "Operation manual (for general information and copier)".

Trademark Acknowledgments

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- Netscape Navigator is a trademark of Netscape Communications Corporation.
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The display screens, messages, and key names shown in the manual may differ from those on the actual machine due to product improvements and modifications.
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ABOUT THE NETWORK SCANNER FUNCTION

When the network expansion kit is installed in the machine, a document or photo can be scanned into an image file and sent over a network or the Internet to a file server, e-mail destination, or your own computer. You can select from the following transmission methods as the destination where you wish to send the scanned image, depending on where you wish to send the scanned image data.

1. The scanned image can be sent to a memory storage device on a network (a designated directory on an FTP server). (This is called “Scan to FTP” in this manual.) When sending a scanned image to an FTP server, an e-mail message can also be sent to a preset e-mail address to inform the recipient of the location of the scanned image data. (This is called “Scan to FTP (Hyperlink)” in this manual.)

2. A scanned image can be sent to a computer connected to the same network as the machine. (This is called "Scan to Desktop" in this manual.)

   *Before Scan to Desktop can be performed, the software in the CD-ROM that accompanies the network expansion kit (AR-NB3) must be installed. For the procedure for installing the software, see the "Sharpdesk installation guide".

3. The scanned image can be sent to an e-mail recipient. (This is called "Scan to E-mail" in this manual.)
SETTINGS AND PROGRAMMING REQUIRED FOR THE NETWORK SCANNER FEATURE

To use the Network Scanner feature, settings for the SMTP server, DNS server, and destination addresses must be configured.

To configure the settings, use a computer that is connected to the same network as the machine to access the machine's Web server. The Web page can be viewed with your Web browser (Internet Explorer 5.5 or later (Windows)/5.1 or later (Macintosh), or Netscape Navigator 6.0 or later).

HOW TO ACCESS THE WEB PAGE AND VIEW HELP

Use the following procedure to access the Web pages. [Help] can be clicked at the bottom of the menu frame to view information on the various function settings that can be operated remotely over the network from the machine's Web pages. For the settings of each function, see the explanations in Help.

1. **Open the Web browser on your computer.**
   Supported browsers:
   - Internet Explorer 5.5 or later (Windows)/5.1 or later (Macintosh)
   - Netscape Navigator 6.0 or later

2. **In the "Address" field of your Web browser, enter the IP address of the machine.**
   To check the IP address, see "CHECKING THE IP ADDRESS" (page 37).
   When the connection is complete, the Web page will appear in your Web browser.
   ➤ ABOUT THE WEB PAGE (FOR USERS) (page 5)

3. **Click [Help] under the menu frame.**
   For an explanation of a function or setting in the Web page, click the corresponding item in the Help screen.

4. **Close the Web page.**
   When you have finished using the Web page, click the (close) button in the top right corner of the page.
ABOUT THE WEB PAGE (FOR USERS)

When you successfully connect to the Web server in the machine, the following page will appear in your browser. A menu frame appears on the left side of the page. When you click an item in the menu, a screen appears in the right frame that allows you to establish settings for that item. For detailed explanations of the procedures for configuring settings, click [Help] in the menu frame.

(1) Menu frame
The various settings appear in this frame. Click a menu item to configure the corresponding setting.

(2) System Information
This shows the model name and current status of the machine.
- Device Status
  This shows information on the machine's paper trays and output trays, toner and other supplies, and the total sheet usage count.
  Out of paper and other warnings appear in red.
- Device Configuration
  Shows what options are installed.
- Network Status
  Shows general information as well as the status of TCP/IP, NetWare, AppleTalk, and NetBEUI.

(3) Image Send Management
This is the base screen for storing, editing, and deleting destination information.
- Destination (page 6)
  Store destinations for Scan to FTP, Scan to FTP (Hyperlink), Scan to Desktop, and Scan to E-mail. You can also edit or delete previously stored destination information.
- Network Scanning (changing custom index names)
  This enables to change custom index names. Click the [Submit] button to store the entered information as index names. The custom index consists of six indexes. A 6-character index name can be stored for each index, allowing destinations to be grouped.

(4) Admin Mode
Click here to open the administrator Web page and enter the administrator user name and password.

☞ PROTECTING INFORMATION PROGRAMMED IN THE WEB PAGE ([Passwords]) (page 14)
☞ ABOUT THE WEB PAGE (FOR THE ADMINISTRATOR) (page 11)
BEFORE USING THE NETWORK SCANNER FUNCTION

STORING DESTINATIONS

To store scanning destinations, click [Destination] in the Web page menu frame. This screen can also be used to edit or delete stored destinations. (Page 10)

A total of 200 destinations* can be stored, including E-mail, FTP, Desktop, and Group destinations.*

* Multiple e-mail addresses can be stored as a group (up to 100). Note that this may reduce the maximum number of destinations (normally 200) that can be stored.

---

Storing destinations for Scan to E-mail

1 Click [Destination] in the menu frame of the Web page.

2 Click [E-mail].

3 Enter the destination information.

   For each setting, see the following table.

4 When you have finished entering the information, click [Submit].

   The entries will be stored.

---

E-mail destination information

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name (Required)</td>
<td>Enter the name of the destination (up to 36 characters).</td>
</tr>
<tr>
<td>Initial (Optional)</td>
<td>Enter initial text for the destination (maximum of 10 characters). When the destination list is displayed in the destination control screen, the initial text is used to group the destinations.</td>
</tr>
<tr>
<td>Custom Index</td>
<td>Names can be assigned to the custom indexes as desired (page 5), allowing convenient grouping of destinations. Drop down list: Select a custom index for the destination to be stored. User checkbox: When this is selected, the destination is stored in the user tab of the address book. (Page 22)</td>
</tr>
<tr>
<td>E-mail Address (Required)</td>
<td>Enter the e-mail address of the destination (up to 64 characters). If an LDAP server is being used, you can click the [Global Address Search] button to search for an address on the LDAP server.</td>
</tr>
</tbody>
</table>

---

To perform Scan to E-mail, the SMTP server settings must first be established. (Page 13)
Storing destinations for Scan to FTP

1. Click [Destination] in the menu frame of the Web page.

2. Click [FTP].

3. Enter the destination information.

For the settings, see the following table.

4. When you have completed all the entries, click [Submit].

The entries will be stored.

If you select the "Enable Hyperlink to FTP server to be e-mailed" checkbox and select a previously stored recipient (page 6) from "E-mail Destination", an e-mail will be sent to the recipient informing them of the file format and location of the scanned image data (Scan to FTP (Hyperlink)). A hyperlink to the file server to which the scanned image data was sent appears in the e-mail, and the recipient can click the hyperlink to go directly to the location where the image data is stored.

FTP destination information

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name (Required)</td>
<td>Enter the name of the destination (up to 36 characters).</td>
</tr>
<tr>
<td>Initial (Optional)</td>
<td>Enter initial text for the destination (maximum of 10 characters). When the destination list is displayed in the destination control screen, the initial text is used to group the destinations.</td>
</tr>
<tr>
<td>Custom Index</td>
<td>Names can be assigned to the custom indexes as desired (page 5), allowing convenient grouping of destinations. Drop down list: Select a custom index for the destination to be stored. User checkbox: When this is selected, the destination is stored in the user tab of the address book. (Page 22)</td>
</tr>
<tr>
<td>Hostname or IP Address (required)*1</td>
<td>Enter the IP address or host name of the FTP server (maximum of 127 characters).</td>
</tr>
<tr>
<td>User Name (Optional)</td>
<td>Enter the login user name for the FTP server (maximum of 32 characters).</td>
</tr>
<tr>
<td>Password (Optional)</td>
<td>Enter the login password for the FTP server (maximum of 32 characters).</td>
</tr>
<tr>
<td>Directory (Optional)</td>
<td>If you wish to specify a destination directory on the FTP server, enter the directory (maximum of 200 characters).</td>
</tr>
<tr>
<td>Enable Hyperlink to FTP server to be e-mailed (Checkbox)*2</td>
<td>When you send a scanned file to an FTP server, you can have a transmission notification automatically sent to the file recipient by e-mail. If you have transmission notifications sent, select the checkbox. The FTP server name will appear in the transmission notification as a hyperlink.</td>
</tr>
<tr>
<td>E-mail Destination</td>
<td>Select the recipient that you wish to notify of the file transmission to the FTP server. To select a recipient here, the recipient's e-mail address must have been previously stored. (Page 6)</td>
</tr>
</tbody>
</table>

*1 If you entered a host name in "Hostname or IP Address", you will need to enter the DNS server settings. (Page 13)

*2 To perform Scan to FTP (Hyperlink), you must also enter the settings for the e-mail server.
Storing destinations for Scan to Desktop

The destination for Scan to Desktop is stored by the Sharp Network Scanner Tool Setup Wizard when "Network Scanner Tool" is installed in your computer. For this reason, there is no need to store the Scan to Desktop destination in the Web page. (The Network Scanner Tool is on the "Sharpdesk" CD-ROM that accompanies the Network Expansion Kit.)

For information on Scan to Desktop system requirements, installing the Network Scanner Tool, and storing the destination, see the "Sharpdesk installation guide" that accompanies the network expansion kit. Normally your computer is stored as the destination by the method indicated above.

The following page for storing Scan to Desktop destination information appears when [Destination] is selected in the menu frame, followed by [Desktop]. This page is used mainly by the system administrator in the following circumstance.

• When another machine that also has the network expansion kit is added to your network and you wish to send an image scanned on the new machine to a destination stored on the existing machine

See "Editing and deleting programmed transmission destinations" (page 10) to select the Scan to Desktop destination information that you wish to use on the new machine and enter the displayed information in this screen in the new machine. (When you have completed all entries, click [Submit].)

If there are several destinations that you wish to use on the new machine, repeat this procedure as needed.

If the information entered here differs from the information entered on the host computer, transmission/reception will not be possible.

For the settings, see the following table.

Scan to Desktop destination information

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name (Required)</td>
<td>Enter the name of the destination (up to 36 characters).</td>
</tr>
<tr>
<td>Initial (Optional)</td>
<td>Enter initial text for the destination (maximum of 10 characters). When the destination list is displayed in the destination control screen, the initial text is used to group the destinations.</td>
</tr>
<tr>
<td>Custom Index</td>
<td>Names can be assigned to the custom indexes as desired (page 5), allowing convenient grouping of destinations. Drop down list: Select a custom index for the destination to be stored. User checkbox: When this is selected, the destination is stored in the user tab of the address book. (Page 22)</td>
</tr>
<tr>
<td>Hostname or IP Address (Required)*</td>
<td>Enter the IP address or host name of the FTP server (maximum of 127 characters).</td>
</tr>
<tr>
<td>Port Number (Required)</td>
<td>Enter a port number from 0 to 65535 for the desktop network scanner tool.</td>
</tr>
<tr>
<td>Process Directory (Optional)</td>
<td>Enter the destination directory name for the file (maximum of 200 characters). The file will be processed in this directory after it is received.</td>
</tr>
<tr>
<td>User Name (Optional)</td>
<td>Enter the login user name for the network scanner tool (maximum of 32 characters).</td>
</tr>
<tr>
<td>Password (Optional)</td>
<td>Enter the login password for the network scanner tool (maximum of 32 characters).</td>
</tr>
</tbody>
</table>

* If you entered a host name in "Hostname or IP Address", you will need to enter the DNS server settings. (Page 13)
Storing Groups (Scan to E-mail)

You can send a scanned image to multiple e-mail destinations in a single Scan to E-mail operation. If you frequently transmit to a fixed group of destinations, you can store the destinations as a group.

Note

Up to 100 destinations can be stored in one group.

1 Click [Destination] in the menu frame of the Web page.

2 Click [Group(E-mail)].

3 Enter the destination information.

For the settings, see the following table.

4 When you have completed all of the entries, click [Submit].

The entries will be stored.

Storing a group of destinations

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name (Required)</td>
<td>Enter a name for the group (up to 36 characters).</td>
</tr>
<tr>
<td>Initial (Optional)</td>
<td>Enter initial text for the destinations (maximum of 10 characters). When the destination list is displayed in the destination control screen, the initial text is used to group the destinations.</td>
</tr>
<tr>
<td>Custom Index</td>
<td>Names can be assigned to the custom indexes as desired (page 5), allowing convenient grouping of destinations. Drop down list: Select a custom index for the destination to be stored. User checkbox: When this is selected, the destination is stored in the user tab of the address book. (Page 22)</td>
</tr>
<tr>
<td>Address(es) (Required)</td>
<td>Select the address of each destination from the &quot;E-mail&quot; list box. Programmed e-mail destinations appear in each of the destination lists. To select multiple destinations, click each address while holding down the [Ctrl] key on the keyboard. If you need to cancel an address that has been selected, click the address again while holding down the [Ctrl] key. If an LDAP server is being used, you can click the [Global Address Search] button to search for an address on the LDAP server. Multiple e-mail addresses can be entered. Separate the e-mail addresses with a comma (,), semi-colon (;), space ( ), or colon (:).</td>
</tr>
</tbody>
</table>
BEFORE USING THE NETWORK SCANNER FUNCTION

Editing and deleting programmed transmission destinations
To edit or delete programmed destinations, click [Destination] in the menu frame of the Web page.

1 Click [Destination] in the menu frame of the Web page.

2 In the Destinations List, click the checkbox of the destination that you want to edit or delete.

3 To edit the selected destination, click [Edit] at the bottom of the Destinations List.
   The programming screen of the destination selected in step 2 appears. Edit the information in the same way as you initially stored it. When finished, be sure to click [Submit] to save your changes.

4 To delete the selected destination, click [Delete] at the bottom of the Destinations List.
   A message appears asking you to confirm the deletion. Click [Yes] to delete.

If you attempt to delete a programmed destination in the following situations, a warning message will appear and deletion will not be possible.
• The destination is included in a group.
• If the destination is being used for a current transmission, cancel the transmission or wait until it is completed and then delete the destination. If the destination is included in a group, delete the destination from the group and then delete the destination.

Printing lists of programmed destinations
You can print lists showing the destinations that have been programmed. The following lists can be printed.
• Print individual list: Shows the information programmed in e-mail, FTP, desktop, and group destinations.
• Print group list: Shows only the information programmed in group (e-mail) destinations.

1 Click [Destination] in the menu frame of the Web page.

2 To print the individual list, click [Print Individual List] at the bottom of the destinations list.

3 To print the group list, click [Print Group List] at the bottom of the destinations list.
ABOUT THE WEB PAGE (FOR THE ADMINISTRATOR)

In addition to the menu that appear in the user Web page, the Web page for the administrator also shows menus that can only be established by the administrator. A menu frame appears on the left side of the page. When you click an item in the menu, a screen appears in the right frame that allows you to configure settings for that item. Settings that can only be configured by the administrator are explained here.

(1) **Network Scanning (page 12)**
This lets you select transmission methods for the network scanner function and configure settings for Scan to E-mail.

(2) **Passwords (page 14)**
The administrator can establish passwords to protect the Web site. Enter the password that you wish to establish and click the [Submit] button. A password can be set for the administrator and users.

(3) **Clock Adjust**
This is used to set the time in the machine. Make sure the time is set correctly when performing Scan to E-mail. This setting does not appear on models that have the fax function. If your model has the fax function, see the "Operation manual (for facsimile)" to set the time at the operation panel of the machine.

(4) **Quick Setup (page 13)**
This is used to configure basic settings for the SMTP, DNS, and LDAP servers.

(5) **Security**
Port numbers can be changed or disabled for security purposes.

If "HTTP" is disabled, it will not be possible to open the Web page. To open the Web page in this case, the network expansion kit must be reset.

☞ How to reset the network expansion kit (page 37)

(6) **Services (page 13)**
This is used to configure advanced SMTP and DNS server settings as needed for each transmission method.

(7) **LDAP (page 13)**
This is used to configure advanced settings for global address searches.
BEFORE USING THE NETWORK SCANNER FUNCTION

BASIC SETTINGS FOR NETWORK SCANNING

Click [Network Scanning] in the menu frame and configure the required settings. A password is required to access this screen. (Page 14) These settings should only be configured by the network administrator. For explanations of each of the items, click [Help] in the menu frame.

1 Click [Network Scanning] in the menu frame.

The Network Scanning setup page appears.

2 Select the transmission methods that you wish to use.

Select the scanner delivery methods that you want to use. In the "Enable Scanner Delivery to:" field, click the checkbox next to each method that you want to use so that a checkmark appears in the checkbox.

All transmission methods are initially selected (factory default settings).

3 Configure the Advanced Setup settings.

Select advanced functions that can be used for Scan to E-mail.

If you wish to BCC a copy of a Scan to E-mail transmission to an e-mail address, select the [Bcc] checkbox and enter the e-mail address.

4 Set a limit for the size of image files.

To prevent the transmission of excessively large files by Scan to E-mail, you can set a size limit. If the image file created from the scanned image is larger than the set limit, the image file is discarded. The limit can be set from 1 MB to 10 MB in increments of 1 MB.

The factory default setting is [Unlimited]. If you wish to set a limit, remove the checkmark from the [Unlimited] checkbox and enter the desired limit.

5 Select the method for assigning a file name to a scanned image.

Select the method for assigning a file name to a scanned image. In "File Naming", click the items that you wish to use in the file name. "Destination Name" and "Date & Time" are initially selected.

If you are going to send images to the same recipient more than once, we recommend that you also select "Session Page Counter" or "Unique Identifier" to prevent sending multiple files with the same name, which would result in each successive file overwriting the previous file.

6 Selecting an e-mail subject (only used for Scan to E-mail).

The setting is used to enter the subject that appears in the recipient's e-mail program when you perform Scan to E-mail. (This setting is not necessary if you will not be using Scan to E-mail.) Enter a subject (maximum of 80 characters). If nothing is entered, "Scanned image from <Device Name>" will appear.

* The name that appears in Device Name is the name stored in "Name" in the screen that appears when you click [System Information] in the menu frame. If a name has not been stored, the product name will appear.

7 Click [Submit].

After entering the settings, be sure to click [Submit] to store them.
VARIOUS SERVER SETTINGS

The procedures for using [Quick Setup] are explained here. [Quick Setup] is used to quickly configure only the required settings for "SMTP", "DNS", and "LDAP" servers. These settings are normally configured first.

SMTP server: SMTP is used to transmit e-mail that is sent using Scan to E-mail or Scan to FTP (Hyperlink). To use these transmission methods, your SMTP server settings must be configured.

DNS server: If you entered a host name in "Primary SMTP Server" or "Secondary SMTP Server" of "SMTP", you must also configure your DNS server settings. You will also need to configure your DNS server settings if host names will be entered in "Hostname or IP Address" when storing destinations for Scan to FTP (Scan to FTP (Hyperlink)) or Scan to Desktop.

LDAP server: If mail addresses are managed on your network by an LDAP server, the e-mail addresses stored in the LDAP server can be used for Scan to E-mail. To allow the machine to use the e-mail addresses in the LDAP server, the LDAP server settings must be configured in the Web page.

Configuring SMTP, DNS and LDAP server settings.

1. Click [Quick Setup] in the menu frame.
2. Enter the required information in "SMTP", "DNS" and "LDAP".
   For explanations of each setting, click [Help] in the upper right-hand corner of the window.
3. When you have completed all of the entries, click [Submit].
   The entries will be stored.

If you need to configure advanced settings for the SMTP, DNS, and LDAP servers, follow the procedures below.

- Configuring SMTP and DNS server settings
  Click [Services] in the menu frame to display the services setup screen. Select the desired server and then configure the required parameters for that server.

- Configuring LDAP server settings
  Click [LDAP] in the menu frame to display the LDAP setup screen. Configure the required parameters.
PROTECTING INFORMATION PROGRAMMED IN THE WEB PAGE ([Passwords])

The settings and information programmed in the Web page can be protected by establishing passwords (click [Passwords] in the menu frame). The administrator must change the factory default password to a new password. The administrator should also take care to remember the new password. From now on, the new password must be entered each time you wish to configure settings in the Web pages.

A password can be set for the administrator and users.

1 Click [Passwords] in the menu frame.

2 Enter the current password in "Admin Password".
   When establishing a password for the first time, enter "Sharp" in "Admin Password".

   **Caution** Be sure to enter "S" in upper case and "harp" in lower case (passwords are case sensitive).

3 Enter passwords in "User Password" and "Admin Password".
   - A maximum of 7 characters and/or numbers can be entered for each password (passwords are case sensitive).
   - Be sure to enter the same password in "Confirm Password" as you did in "New Password".

4 When you have completed all entries, click [Submit].
   The entered password is stored.
   After setting the password, turn the machine power off and then back on.

   When prompted to enter the password, a user should enter "user" in "User Name" and an administrator should enter "admin" in "User Name". The appropriate password should be entered in "Password". For more information, click [Help] in the upper right-hand corner of the window.
This chapter explains how to use the network scanner function at the operation panel of the machine after the settings have been configured in the Web page. The network scanner function is used to convert paper-based information such as a photo or document into image data for transmission over a corporate network (intranet) or the Internet to an FTP server or computer. When transmitting an image using the network scanner function, the destination is specified by selecting a previously stored destination at the operation panel.

There are three methods for transmitting images:

1. The scanned image can be sent to a designated directory on an FTP server. (Scan to FTP)
2. The scanned image can be sent to a computer desktop on the network. (Scan to Desktop)
3. The scanned image can be sent to an e-mail recipient. (Scan to E-mail)

Before Scan to Desktop can be performed, the software in the CD-ROM that accompanied the network expansion kit (AR-NB3) must be installed. (For the procedure for installing the software, see the "Sharpdesk installation guide").
A LOOK AT THE MACHINE
OPERATION PANEL

(1) Keys for the fax function
(when the fax option is installed)
These keys are used in fax mode. For more information, see the "Operation manual (for facsimile)".

(2) Display (page 18)
This displays the base screen and the function settings screen.

(3) [BACK] key
In a setting or programming screen, this key is used to move back to the previous screen.

(4) [OK] key
This key is used to enter a setting that has been selected with the arrow (▲▼◄►) or other keys.

(5) Numeric keys
These are used to enter destination addresses, address search characters, and numeric values for various settings.
For more information on entering characters, see "ENTERING CHARACTERS" (page 31).

(6) [C] key
This is used to clear a mistake while entering destination addresses, address search characters, and numeric values for various settings. One digit is cleared each time the key is pressed.
The key is also used to cancel a job.

(7) [CA] key
This is used to cancel a transmission or programming operation. When pressed during a programming operation, the operation is canceled and the display returns to the base screen described on page 18.
This key is also used to cancel a resolution, paper size, or special function setting that was selected at the time of transmission.

(8) [MODE SELECT] keys (step 1 on page 20)
Use these keys to change current operation mode.

(9) [SCAN] key
Press to switch to scan mode. The initial screen of scan mode will appear in the display.

(10) [COLOR MODE] key (page 27)
Use this key to select "COLOR", "GRAY", or "B/W" for the scanning mode.

(11) [RESOLUTION] key (page 27)
Use this key to select the scanning resolution.

(12) [ADDRESS] key (page 22)
Use this key to search for destination addresses such as e-mail address in the address directory.
17

(13) [FORMAT] key (page 28)
When you send an image to one or more recipients using Scan to E-mail or Scan to FTP, the [FORMAT] key enables you to temporarily override the individual file format settings (file type / compression mode) stored for each recipient and send the image to all of the recipients using a single file format setting.

(14) [ORIGINAL SIZE] key (page 26)
This is used to set the size of the original to be transmitted.

(15) [DUPLEX SCAN] key (page 25)
Press this key to use the duplex scan function. (when the RSPF is installed)

(16) [SPECIAL FUNCTION] key
This key is used to select a special transmission function, configure function settings, and access the key operator programs.

(17) Arrow keys (▼ ▲ ◀ ▶)
These are used to select items and move through pages.

(18) [START] key (③)
This is used at the following times:
(1) When starting transmission
(2) When scanning an original
(3) When configuring and storing settings

• When the auto power shut-off function activates, all lights except the mode key indicators go off. For information on auto power shut-off, see the ”Operation manual (for general information and copier)”.
• For information on the keys and indicators which are used for the copy function and other functions, see “OPERATION PANEL” in the manual for each function.
SCAN MODE (BASE SCREEN)

The base screen of scan mode is displayed by pressing the [SCAN] key from the base screen of copy mode, print mode, or fax mode.

If a screen appears asking you what type of connection you are using after you press the [SCAN] key, select "NETWORK" with the [▼] or [▲] key and press the [OK] key.

Base screen of scan mode

(1) Message display
Messages appear here to indicate the current status of the machine.

(2) Destination display
This shows the selected destination. There are four scanner transmission modes: Scan to E-mail, Scan to FTP, Scan to FTP (Hyperlink), and Scan to Desktop. This shows the currently selected destination and transmission mode.

(3) Color mode display
This shows the currently selected color mode for scanning.

(4) File type display
This shows the image data file type to be created.

(5) Original display (page 26)
This displays an icon to indicate the original scanning mode when an original has been placed.

(6) Transmission mode display
When ▼ appears to the right of the icon, the [▼] key can be pressed to show a list of the currently selected destinations. A destination can also be deleted in this screen.

(7) Resolution display
The shows the scanning resolution.

(8) File creation display
This shows the currently selected file creation method.
AUDITING MODE

Auditing mode is used to restrict the use of scan mode to valid accounts (up to 50 accounts can be created) and to keep a count of pages transmitted by each account.

Using audit mode

When auditing mode is enabled, the account number entry screen is displayed. Enter your account number (five-digit identification number) as explained below before performing a scanner operation.

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

• As the account number is entered, the hyphens (-) change to asterisks (•). If you enter an incorrect digit, press [C] key and re-enter the correct digit.
• After you enter your account number, the base screen of scan mode (page 18) appears.

If you enter an account number for copy mode has also been programmed for scan mode, you can change to scan mode after completing the copy operation and continue with the scan operation without re-entering your account number. If you enter an account number for copy mode that has not been programmed for scan mode, enter your account number for scan mode after you press the [SCAN] key to change to scan mode.

When "ACC. # SECURITY" is enabled in the key operator programs (see the "Key operator's guide"), the message "Please see your key operator for assistance" will appear for one minute if an invalid account number is entered three times in a row. During that time operation of the machine will not be possible.

NOTE

2 When you have finished using scan mode, press the [ACC.#-C] key ( ).

Enter your account number.
ACCOUNT #: -----
SENDING AN IMAGE

BASIC TRANSMISSION PROCEDURE

1 Make sure the machine is in scan mode.
When the SCAN indicator is lit, the machine is in scan mode. If the indicator is not lit, press the [SCAN] key. If auditing mode has been enabled for the scan function in the key operator programs, a message will appear prompting you to enter your account number when you switch to scan mode. Enter your account number (five digits) with the numeric keys. (Page 19)

2 Place the original(s) in the document feeder tray or on the document glass.
For detailed information on placing an original, see "4. COPY FUNCTIONS" of the "Operation manual (for general information and copier)". If you are using the document glass to send multiple pages, place the first page first.

3 Check the original size. If the original is a non-standard size or the size was not detected correctly, press the [ORIGINAL SIZE] key.
When the [ORIGINAL SIZE] key is pressed, the size selection screen appears. See "MANUALLY SETTING THE SCANNING SIZE" (page 26) to set the original size.

4 If needed, select the color mode (page 27).
To adjust the color mode, press the [COLOR MODE] key. (See "SELECTING THE COLOR MODE" (page 27).)

5 If needed, select the resolution setting (page 27).
The initial factory setting is [150dpi].

6 If needed, select the format (page 28).
The initial factory setting is [PDF].

7 Press the [ADDRESS] key.

Note
• Information on the destination can be stored in the Web page.
• The sender name is normally set to the name stored in "Reply E-mail Address" in "SMTP Setup" in the Web page.

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- Information on the destination can be stored in the Web page.
- The sender name is normally set to the name stored in "Reply E-mail Address" in "SMTP Setup" in the Web page.
8 Select the destination selection method **(page 22)**.

Select from the following three destination selection methods:

- "ADDRESS BOOK" **(page 22)**
  Select one of the stored destinations directly from the operation panel.

- "ADDRESS ENTRY" **(page 23)**
  Directly enter the e-mail address. (Only for Scan to E-mail.)

- "ADDRESS SEARCH" **(page 24)**
  Access a directory data base on the Internet or your intranet and search for a destination e-mail address. During a global address search, multiple addresses can be entered to perform a broadcast transmission.

When you have finished searching for the destination, you will return to the following base screen.

9 Press the [START] key ( ).

Scanning begins.

If scanning is completed normally, the following screen appears briefly and then the display returns to the base screen.

### Using the SPF

9 Press the [START] key ( ).

Scanning begins.

If scanning is completed normally, the following screen appears briefly and then the display returns to the base screen.

#### Using the document glass

9 Press the [START] key ( ).

Scanning begins.

If scanning is completed normally, the following screen appears briefly and then the display returns to the base screen.

### Note

- **Canceling transmission**
  To cancel the transmission while "Reading" appears or before the [ ] key is pressed, press the [ ] or [ ] key.
  - If the power is turned off or a power failure occurs while a document is being scanned in the SPF, the machine will stop and a document misfeed will occur. After the power is restored, remove the misfed original as explained in "REMOVING MISFEEDS" in "2. TROUBLESHOOTING AND MAINTENANCE" in the "Operation manual (for general information and copier)".
  - When performing a Scan to E-mail transmission, note the following points:
    - Be careful not to send image data files that are too large. Your mail server's system administrator may have placed a limit on the amount of data that can be sent in one e-mail transmission. If this limit is exceeded, the e-mail will not be delivered to the recipient. Even if there is no limit and your e-mail is successfully delivered, a large data file may take a long time to be received and place a heavy burden on the recipient's network, depending on the recipient's network (Internet) environment. If large image data files are repeatedly sent, the resulting burden on the network may slow down the speed of other, unrelated data transmissions and in some cases, may even cause the mail server or network to go down. In cases where you need to send a large file or multiple images, try lowering the resolution or reducing the scanned original size.

21
SELECTING A DESTINATION (USING THE [ADDRESS] KEY)

A destination can be selected using one of three methods: Selecting from "ADDRESS BOOK", using "ADDRESS ENTRY", or "ADDRESS SEARCH".

"ADDRESS BOOK"

1. **Perform steps 1 to 6 of "BASIC TRANSMISSION PROCEDURE" (page 20).**

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

   - The address selection screen appears

3. **Press the [OK] key.**

4. **Change tabs as needed with the [◄] or [►] key and select the desired destination with the [▼] or [▲] key.**

   - The [USER] tab changes as follows each time you press the [►] key:
     - [USER] → [ABCD] → [EFGHI] → [JKLMN] → [OPQRST] → [UVWXYZ] → [USER] → [ABCD] → ...
     - To move backwards through the tabs, press the [◄] key.
   - You can switch between information on the selected destination and the destination list by pressing the [☆] key.

5. **Press the [☆] key.**

   - A checkmark appears by the selected destination. To cancel the selection, press the [☆] key once again to remove the checkmark.
   - To select multiple destinations, repeat steps 4 and 5.

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

   - Multiple destinations can be selected for a Scan to E-mail transmission. (Maximum of 20.)
   - Only one destination can be selected for a Scan to FTP or Scan to Desktop transmission.

7. **Continue from step 9 of "BASIC TRANSMISSION PROCEDURE" (page 21).**

**Note**

- **Canceling transmission**
  - To cancel the transmission while "Reading" appears or before the [☆] key is pressed, press the [C] or [CA] key.
  - If the power is turned off or a power failure occurs while a document is being scanned in the SPF, the machine will stop and a document misfeed will occur. After the power is restored, remove the document as explained in "ORIGINAL MISFEED IN THE SPF" in "Operation manual (for general information and copier)".
"ADDRESS ENTRY"

1 Perform steps 1 to 6 of "BASIC TRANSMISSION PROCEDURE" (page 20).

2 Press the [ADDRESS] key.
   The address selection screen appears.

3 Select "ADDRESS ENTRY" with the [▼] key.
   The base screen appears.

4 Press the [OK] key.
   The e-mail address entry screen appears.

5 Enter the destination address.
   To enter characters, see "ENTERING CHARACTERS" (page 31).
   If you make a mistake, press the [C] key and to clear the mistake.

6 Press the [OK] key.

7 To enter another address, repeat steps 2 through 6.
   Multiple destinations can be selected for a Scan to E-mail transmission. (Maximum of 20.)

8 Continue from step 9 of "BASIC TRANSMISSION PROCEDURE" (page 21).
"ADDRESS SEARCH" search

1 Perform steps 1 to 6 of "BASIC TRANSMISSION PROCEDURE" (page 20).

2 Press the [ADDRESS] key

3 Select "ADDRESS SEARCH" with the [▼] key.

4 Press the [OK] key.

5 Enter the search characters.

To enter characters, see "ENTERING CHARACTERS" (page 31). If you make a mistake, press the [C] key to clear the mistake.

6 Press the [OK] key.

7 Select the desired destination with the [▼] or [▲] key.

8 Press the [OK] key.

9 To perform another search, repeat steps 2 through 8.

Multiple destinations can be selected for a Scan to E-mail transmission. (Maximum of 20.)

10 Continue from step 9 of "BASIC TRANSMISSION PROCEDURE" (page 21).
TRANSMITTING A TWO-SIDED ORIGINAL

Follow these steps to automatically transmit a two-sided original. (This is only possible on models that have an RSPF installed.)

Do not use an original that is not a standard 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”, A3, B4, A4, A4R, B5, B5R, or A5). Otherwise a scanning error or cut-off image may result.

1 Make sure the machine is in scan mode.

When the SCAN indicator is lit, the machine is in scan mode. If the indicator is not on, press the [SCAN] key. If auditing mode has been enabled for the scan function in the key operator programs, a message will appear prompting you to enter your account number when you switch to scan mode. Enter your account number (five digits) with the numeric keys. (Page 19)

2 Place the original(s) in the document feeder tray.

For information on placing an original, see "4. COPY FUNCTIONS" of the "Operation manual (for general information and copier)".

3 Check the original size.

Press the [ORIGINAL SIZE] key to open the original size selection screen. See "MANUALLY SETTING THE SCANNING SIZE" (page 26) to set the original size.

4 Press the [DUPLEX SCAN] key.

The duplex mode selection screen appears.

5 Select "2-SIDED" with the [▼] or [▲] key.

The duplex original type selection screen appears.

6 Press the [OK] key.

7 Select booklet or tablet for the duplex original type with the [▼] or [▲] key.

8 Press the [OK] key.

You will return to the base screen and the duplex scanning mode icon will appear.

9 Continue from step 4 of "BASIC TRANSMISSION PROCEDURE" (page 20).

- Two-sided scanning is not possible when "COLOR MODE" is set to "COLOR" or "GRAY".
- 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 mode turns off after the transmission is finished. Two-sided scanning mode can also be canceled by pressing the [CA] key.
- Two-sided scanning is only possible when an RSPF is used. Automatic scanning of both sides of an original is not possible when the document glass is used.
- Two-sided scanning of originals longer than 11” x 17” (A3) is not possible.
- To cancel two-sided scanning, select "1-SIDED" in step 5 and then press the [OK] key.
CHECKING THE SIZE OF A PLACED ORIGINAL

When a standard-size* original is placed in the document feeder tray or on the document glass, the original size is automatically detected (automatic original detection function) and displayed in the original display. Make sure that the size has been detected correctly.

1. When an original is placed, an icon appears to indicate the original scanning mode.
   - : One-sided scanning from the SPF
   - : Scanning from the document glass
   - : Two-sided scanning from the RSPF

2. The original size is displayed.

   If a non-standard size original is placed or if you wish to change the scanning size, follow the steps below to manually set the original scanning size.

**STORING SCANNING SETTINGS**

Sets of scanning settings (scan size, color mode, resolution, file type, etc.) can be stored for use in various scanning applications.

**MANUALLY SETTING THE SCANNING SIZE**

If you load an original that is not a standard size, or the original size is not correctly detected, be sure to press the [ORIGINAL SIZE] key and set the original size manually. Perform the following steps after loading the document in the document feeder tray or on the document glass.

1. Press the [ORIGINAL SIZE] key.

   To select an AB size, press the [▶] key and go to step 4.

   When the [▶] key is pressed, the original size selection screen for AB sizes appears.

2. Select the original size with the [▼] or [▲] key.

   The selected original size is highlighted.

3. Press the [OK] key.

   You will return to the base screen and the selected original size will appear in the original display.

*Standard sizes:
The following sizes are standard 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" (A3, B4, A4, A4R, B5, B5R, A5). If a non-standard size original (including a special size) is placed, a standard size close to the original size may appear, or the original size may not be displayed.
Selecting an AB original size

4 Select the original size with the [▼] or [▲] key.

To return to the selection of inch original sizes, press the [◀] key and return to step 2.

SELECTING THE COLOR MODE

After placing the original, you can select an appropriate color mode for the original type. Place the original in the document feeder tray or on the document glass (steps 1 to 3 on page 20) and then follow the steps below.

The factory default setting for the color mode is "COLOR". To change the color mode, follow these steps.

1 Press the [COLOR MODE] key.

The color mode selection screen appears.

2 Select the color mode with the [▼] or [▲] key.

The selected mode is highlighted.

COLOR MODE

- COLOR
- GRAY
- B/W

1 Press the [OK] key.

You will return to the base screen and the selected original size will appear in the original display.

Note

To cancel a manual original size setting, press the [CA] key.
If it is not possible to select the actual original size, select a size that is larger than the actual original size. If a smaller size is selected, part of the original will not be transmitted.

SELECTING THE RESOLUTION

The scanning resolution can be selected. After selecting scan mode and placing the original (steps 1 to 3 on page 20), perform the procedure below.

The factory default setting for the resolution is "150dpi" (e-mail/FTP mode). If you need to change the resolution, follow these steps.

1 Press the [RESOLUTION] key.

The resolution selection screen appears.

2 Select the resolution with the [▼] or [▲] key.

The selected resolution is highlighted.

RESOLUTION

- 100dpi
- 150dpi
- 200dpi
- 300dpi
- 400dpi
3 Press the [OK] key.

You will return to the base screen and the selected resolution will appear in the resolution display.

Note
- The default resolution setting is 150 dpi. For typical text documents, a resolution of 200 dpi or 300 dpi produces sufficiently legible image data. (A resolution of 200 dpi corresponds to the generally used "FINE" in fax mode. For this reason, the 600 dpi setting should only be used in cases where high-clarity image reproduction is required, such as an original that includes photographs or illustrations.
- When an original is scanned at the maximum resolution (600 dpi), the amount of memory available, the original size, the color mode, and other setting conditions may cause the resolution to change. For information on the setting conditions, see "MAXIMUM RESOLUTION" (page 35).

SELECTING THE FILE FORMAT

After selecting scan mode and placing the original (steps 1 to 3 on page 20), perform the procedure below.

The factory default settings are "PDF" for the file type and "MULTI" for the file creation method (multiple scanned images are combined into one file). If you need to change the file format, follow these steps.

1 Press the [FORMAT] key.

The format selection screen appears.

2 Select the file type with the [▼] or [▲] key.

The selected file type is highlighted.

To set the file creation method, press the [▼] or [▲] key.

When "SINGLE" is selected, a one-page file is created for the scanned image.

When "MULTI" is selected, all scanned images can be combined into a single file, or one file can be created for each page (pages 2 to 6).

3 Press the [OK] key.

You will return to the base screen and the selected format will appear in the file type and file creation method display.

Note
- When the file type is set to "JPEG", the file creation method can only be set to "SINGLE".
- To open the scanned image without using the software program in the accompanied CD-ROM, the recipient must have a viewer program that can open the image format (file type) that was selected as explained above. If the recipient cannot open the image, try sending the image in a different format.
SETTING THE LIGHT SOURCE COLOR

When scanning in black and white mode, you can set the light source color. For example, if you do not wish to scan the red parts of an original, set the light source color to “RED”. ("WHITE" will cause all colors to be scanned.)

Select scan mode, place the original (steps 1 to 3 on page 20), and then follow the procedure below.

The factory default setting for the light source color is "WHITE". If you need to change the light source color, follow these steps.

1. Press the [SPECIAL FUNCTION] key in scan mode.
2. Select "LIGHT SOURCE" with the [▼] or [▲] key.
3. Press the [OK] key.
4. Select the desired light source color with the [▼] or [▲] key.
5. Press the [OK] key.

The setting is stored and you return to the base screen.

ADJUSTING THE THRESHOLD VALUE

When scanning in black and white mode, you can adjust the threshold value. As the threshold value is increased, black becomes stronger. As the threshold value is decreased, white becomes stronger.

Select scan mode, place the original (steps 1 to 3 on page 20), and then follow the procedure below.

The factory default setting for the threshold value is "128".

To change the threshold value, follow these steps:

1. Press the [SPECIAL FUNCTION] key in scan mode.
2. Select "B/W THRESHOLD" with the [▼] or [▲] key.

The threshold value can only be adjusted when the color mode is set to "B/W". (Page 27)
HOW TO USE THE NETWORK SCANNER FUNCTION

3 Press the [OK] key.

4 Select the desired threshold value with the [◄] or [►] key.

The default setting is "128". White becomes stronger as the displayed value approaches "1". Black becomes stronger when the displayed value approaches "254".

ENABLING SCANNING MARGINS (VOID AREA)

When this function is enabled, margins (void areas that are not scanned) are created around the edges of the machine's maximum scanning area.

Select scan mode, place the original (steps 1 to 3 on page 20), and then follow the procedure below.

The factory default setting for the void area is "ON" (enabled).

If you need to change the void area setting, follow these steps.

Void area: 7/64" (2.5 mm) from the top and bottom edges
1/8" (3.0 mm) from the left and right edges

1 Press the [SPECIAL FUNCTION] key in scan mode.

Perform this operation from the base screen of scan mode.
When the [SPECIAL FUNCTION] key is pressed, the special function menu appears.
(To select scan mode, see step 1 on page 20.)

2 Select "VOID AREA" with the [▼] or [▲] key.

3 Press the [OK] key.

4 Select "ON" or "OFF" with the [▼] or [▲] key.

5 Press the [OK] key.

The setting is stored and you return to the base screen.
IMAGE ORIENTATION AND STANDARD ORIGINAL PLACEMENT ORIENTATION

When using the document glass, the original should be placed face down in the far left corner of the glass with the top edge of the original at the left edge of the glass.

When using the SPF, the original should be placed face up in the middle of the document feeder tray, with the top of the original to the right.

Long horizontal originals of size 11" x 17", 8-1/2" x 14", A3, or B4 can only be placed as shown below. For this reason, the scanned image will be rotated 90° when viewed on a computer.

ENTERING CHARACTERS

Characters are entered by pressing the numeric keys on the operation panel. The letters entered with each numeric key are shown below.

<table>
<thead>
<tr>
<th>Key</th>
<th>ABC</th>
<th>DEF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GHI</td>
<td>JKL</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>PQR</td>
</tr>
<tr>
<td>7</td>
<td>TUV</td>
<td>WXZ</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>*</td>
</tr>
<tr>
<td>0</td>
<td>#</td>
<td>_</td>
</tr>
</tbody>
</table>

To enter two characters in succession that require the same key, press the [ ] key to move the cursor after entering the first character.

Example: Entering "ab" (when directly entering an e-mail address)

Press the [2] key once, press the [ ] key once to move the cursor, and then press the [2] key twice.
The key operator programs allow the administrator of the machine (key operator) to enable and disable functions to suit the needs of the workplace. This chapter explains the key operator programs for the network scanner functions. For key operator programs for general use of the machine, see the "Key operator's guide". To access the key operator programs, the key operator code must be entered.

For the initial key operator code set at the factory, see "PROGRAMMING A KEY OPERATOR CODE" in the "Key operator's guide".

### KEY OPERATOR PROGRAM LIST

The key operator programs for the network and printer functions are shown in the following table. Factory default settings are indicated in bold.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Program</th>
<th>Settings</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCANNER</td>
<td>DISABLE USB SCAN</td>
<td>YES, NO</td>
<td>Select whether or not scanning from a computer and scanning from the machine are disabled when a USB connection is used. When “YES” is selected, USB scanning is disabled.</td>
</tr>
<tr>
<td>INITIAL COND.</td>
<td>COLOR MODE</td>
<td></td>
<td>This is used to change the default settings for the color mode, format, and resolution. (For more information, see &quot;STORING SCANNING SETTINGS&quot; (page 26).)</td>
</tr>
<tr>
<td></td>
<td>FORMAT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RESOLUTION</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
USING THE KEY OPERATOR PROGRAMS

1 Press the [SPECIAL FUNCTION] key.

The special function screen will appear.

2 Select "KEY OPERATOR PRG." with the [▼] or [▲] key.

3 Press the [OK] key.

The key operator code entry screen appears.

4 Enter the key operator code with the numeric keys.

"*" will appear for each digit will enter.
• The mode selection screen will appear.

5 Select the desired mode with the [▼] or [▲] key.

6 Press the [OK] key.

The settings of the selected mode will appear.

Example: The screen when "SCANNER" is selected.

7 Select the desired program with the [▼] or [▲] key.

• If a checkbox appears to the left of the program name, the program is enabled by pressing the [OK] key to make a checkmark appear. The program is disabled by pressing the [OK] key once again to clear the checkmark. After making the selection, go to step 9.
• If a checkbox does not appear by a program, press the [OK] key to display the settings screen for the program.

8 Press the [OK] key and follow the instructions in the program screen.

9 To use another program for the same mode, select the desired program with the [▼] or [▲] key.

To use a program for a different mode, press the [BACK] key and select the desired mode. Press the [CA] key to exit the key operator programs.
If a problem or question arises, try to solve the situation using the following information before contacting your authorized SHARP dealer. Image transmission problems are explained here. For image scanning problems, see the "Operation manual (for general information and copier)".

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause and solution</th>
</tr>
</thead>
</table>
| The scanned image is clipped. | The original scan size setting is smaller than the actual original size.  
→ Set the actual original size (page 26).  
If you have intentionally set a smaller size than the actual original size, place the original taking into account the guides for the set original size. For example, if the actual size is 8-1/2" x 11" (A4) and you selected 5-1/2" x 8-1/2" (B5) for the size setting, place the original so that the part that you wish to scan is within the 5-1/2" x 8-1/2" (B5) area indicated by the guides at the far left corner of the document glass. |
| The received image data cannot be opened. | The viewer program used by the recipient does not support the format of the received image data.  
→ Try selecting a different file type (TIFF, JPEG, or PDF) and/or a different compression format (None, G3, or G4) for the image data. Otherwise, have the recipient use Sharpdesk or a viewer program that supports the above combinations of file types and compression formats. |
| When the same file name is used for two successive Scan to FTP transmissions, the second file is not sent. | The first file may still remain in the cache of the file server client. Disable use of the cache in the client software. |
| The recipient does not receive a transmitted data. | There is a mistake in the stored destination information or the wrong destination was selected.  
→ Make sure that the correct destination information is stored. If there is a mistake, correct it. (Page 10)  
* If delivery by e-mail (Scan to E-mail) is unsuccessful, an error message such as "Undelivered Message" may be sent to the designated administrator's e-mail address. This information may help you determine the cause of the problem. |
| The recipient does not receive data sent by e-mail (Scan to E-mail). | Check the Web page to see if a limit has been set for the size of image files sent using Scan to E-mail (the factory default setting is "Unlimited"). A limit can be set from 1 MB to 10 MB. Consult the administrator of the Web page to select a suitable limit. (Page 12)  
The amount of data that can be sent in one e-mail transmission is sometimes limited by the administrator of the mail server. Even if the file size is within the limit explained above, if it exceeds the limit set by the administrator of the mail server, the file will not be delivered to the recipient. Decrease the amount of data sent in the e-mail transmission (reduce the number of pages scanned). (Ask your mail server administrator what the data limit is for one e-mail transmission.) |
| Transmission takes a long time. | When there is a large amount of image information, the data file is also large and transmission takes a long time. |
MAXIMUM RESOLUTION

When scanning takes place with the resolution set to the maximum resolution (600 dpi), the resolution may change depending on the amount of memory available, the original size, the color mode, and other scanning conditions. The table below shows the relation between the possible scanning area and the scanning conditions. (Note that the following examples are for standard memory in the machine and 128 MB or more of memory in the network expansion kit.)

<table>
<thead>
<tr>
<th>(dpi)</th>
<th>11&quot; x 17&quot;</th>
<th>8-1/2&quot; x 14&quot;</th>
<th>8-1/2&quot; x 11&quot;</th>
<th>5-1/2&quot; x 8-1/2&quot;</th>
<th>A3</th>
<th>B4</th>
<th>A4, A4R</th>
<th>B5, B5R</th>
<th>A5, A5R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Gray</td>
<td>B/W</td>
<td>Color</td>
<td>Gray</td>
<td>B/W</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>300</td>
<td></td>
<td>300</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>400</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300</td>
<td>400</td>
<td></td>
<td>300</td>
<td>400</td>
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<td></td>
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<tr>
<td>150</td>
<td>300</td>
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<td>200</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

: Scanning is possible at the maximum resolution (600 dpi).

DISPLAY MESSAGES

If a transmission error occurs when you send a scanned image, a message informing you of the error and an error code will appear in the display on the machine.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE-00</td>
<td>Turn off the power and then turn it back on. Consult with your network administrator to make sure that no problems exist on the network or in the server. If the error is not cleared after turning the power off and on, turn off the power and contact your dealer.</td>
<td>–</td>
</tr>
<tr>
<td>CE-01</td>
<td>The scanned image was not sent because a connection to the server could not be established. Make sure that the SMTP server settings or Scan to FTP destination settings in the Web page are correct. The procedure for configuring the SMTP server is explained in &quot;VARIOUS SERVER SETTINGS&quot;, and the procedure for editing Scan to FTP destination information is explained in &quot;Editing and deleting programmed transmission destinations&quot;. For information on the settings to be entered, see Help in the Web page.</td>
<td>10, 13</td>
</tr>
<tr>
<td>CE-02</td>
<td>The scanned image was not sent because the server was busy or there was too much traffic on line. Wait briefly and then try again.</td>
<td>–</td>
</tr>
<tr>
<td>CE-03</td>
<td>The scanned image was not sent because the directory of the destination FTP server was not correct. Make sure that the correct FTP server information is configured in the Web page.</td>
<td>10</td>
</tr>
<tr>
<td>CE-05</td>
<td>The size of the scanned image file exceeds the limit set in &quot;Maximum Size of E-mail attachments&quot; in the Web page. Reduce the number of original pages scanned into the file, or change the limit set in &quot;Maximum Size of E-mail attachments&quot;.</td>
<td>12</td>
</tr>
<tr>
<td>CE-09</td>
<td>The memory became full during scanning. Scan less pages, lower the resolution, or change the color mode so that the file size is smaller, and try scanning again.</td>
<td>27, 28</td>
</tr>
<tr>
<td>CE-11</td>
<td>The maximum number of destinations of a global address search has been exceeded. Increase the number of search characters to narrow the range of the global address search.</td>
<td>24</td>
</tr>
</tbody>
</table>

IF YOUR E-MAIL IS RETURNED

If a Scan to E-mail transmission is not successful, an e-mail informing you of this fact is sent to the return address configured in the SMTP server. If this happens, read the e-mail and determine the cause of the error, and then repeat the transmission.
IMPORTANT POINTS WHEN USING SCAN TO E-MAIL

Be careful not to send image data files that are too large. Your mail server's system administrator may have placed a limit on the amount of data that can be sent in one e-mail transmission. If this limit is exceeded, the e-mail will not be delivered to the recipient. Even if there is no limit and your e-mail is successfully delivered, a large data file may take a long time to be received and place a heavy burden on the recipient's network, depending on the recipient's network (Internet) connection environment.

If large image data files are repeatedly sent, the resulting burden on the network may slow down the speed of other, unrelated data transmissions and in some cases, may even cause the mail server or network to go down.

The following table shows the approximate file sizes when the 8-1/2" x 11" (A4) size originals (one page each) shown below are scanned.

<table>
<thead>
<tr>
<th>Resolution</th>
<th>File size of text original A when scanned</th>
<th>File size of photo original B when scanned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B/W</td>
<td>Gray</td>
</tr>
<tr>
<td>75 dpi</td>
<td>Approx. 10 KB</td>
<td>Approx. 125 KB</td>
</tr>
<tr>
<td>300 dpi</td>
<td>Approx. 34 KB</td>
<td>Approx. 1430 KB (approx. 1.43 MB)</td>
</tr>
</tbody>
</table>

* All sizes are for image files created in TIFF G4 format.

If multiple images are scanned, the file size will be approximately (Size of each image as indicated above) x (Number of images scanned).

The scan resolution will vary depending on the scanning area and how much memory in the machine is free. During network scanning, the resolution may change automatically because enhancement is not performed. To scan an A3 original in color at 600 dpi without enhancement, the 256 MB optional memory on the dual function board and the 128 MB additional memory on the network expansion kit are required as a minimum.

Although the actual limitation depends on your network environment, a general guideline for the maximum file size for Scan to E-mail is 2000 KB (2 MB). In cases where you need to send multiple images in one transmission, try such measures as lowering the resolution mode.

Original image samples

The original images shown below are samples to help you understand the above explanations. Note that these images are smaller than the actual originals (the actual originals are 8-1/2" x 11" or A4).
CHECKING THE IP ADDRESS

There are several settings where the IP address must be entered or checked. To check the IP address of the machine, hold down the status button on the network expansion kit at least 2 seconds to print out a Printer Setting List.

How to reset the network expansion kit
To reset the network expansion kit, power on the machine while holding down the status button on the network expansion kit. Network scanner destination information and scanning settings will remain after the network expansion kit is reset, however, the network settings and network printer settings will revert to the factory default settings.

Status button
For information on power requirements, power consumption, dimensions, weight, and other specifications that are common to all features of the machine, refer to the "Operation manual (for general information and copier)".

### Type
Color scanner

### Scanning resolution
(Primary scanning x Secondary scanning)
75x75, 100x100, 150x150, 200x200, 300x300, 400x400, 600x600 dpi

### Interface
LAN connection 10Base-T/100Base-TX

### Network protocol
NetWare, NetBEUI, EtherTalk, TCP/IP, SMTP, LDAP, FTP

### Supported client PC operating systems

### File formats
File types: PDF, TIFF, JPEG
Compression modes: None, G3, G4

### Remarks
- **Two-sided originals**: Possible
- **Optical resolution**: 600dpi
- **File creation method**: One file per each 1 to 6 pages/One file for all pages
- **Scan destinations**: Scan to FTP, Scan to Desktop, Scan to E-mail
- **Management system**: Uses built-in Web server
- **Recommended Web browser**: Internet Explorer 5.5 or later (Windows)/5.1 or later (Macintosh), Netscape Navigator 6.0 or later
- **Supported mail system**: Mail server that supports SMTP, mail server that supports POP3
- **Number of destinations**: 200 maximum*
- **Utilities**: Sharpdesk

*A total of 200 destinations can be stored, including E-mail, FTP, Desktop, Fax, and Group destinations. Among these, multiple e-mail addresses (up to 100) can be stored as a group. Note that this may reduce the maximum number of destinations (normally 200) that can be stored.

Some discrepancies may exist in the illustrations and content due to improvements to the machine.
NETWORK EXPANSION KIT
OPERATION MANUAL
(for network printer)

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• CONTENTS ............................. 2
• PRINTING FROM WINDOWS .... 3
• PRINTER UTILITIES (WINDOWS) ... 14
• PRINTING FROM A MACINTOSH.... 17
• WEB FUNCTIONS OF THE MACHINE .... 20
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• TROUBLESHOOTING ............ 34
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INTRODUCTION

The optional network expansion kit (AR-NB3) enables the machine to be used as a network printer.

To use the machine as a PS printer, the PS3 expansion kit (AR-PK1/N) must be purchased and the product key (password) must be entered in "Product Key Setting" in the Web page (for the administrator). Please consult your dealer for the product key to be entered.

Note

• This manual only explains the network printer function that can be used when the optional network expansion kit is installed. For information on copier functions, adding paper and toner, removing misfeeds, using peripheral equipment, and other general information, please refer to "Operation manual (for general information and copier)" that accompanies the machine. For information on the network scanner function, please refer to the "Operation manual (for network scanner)" in the network expansion kit (AR-NB3).
• For information on installing the drivers and software cited in this manual, please refer to the separate "Software setup guide".
• For information on the operating system, please refer to your operating system manual or the online Help function.
• The explanations of screens and procedures in this manual are primarily for Windows® XP in Windows® environments, and Mac OS X v10.2.8 in Macintosh environments. The screens may vary in other versions of the operating systems.
• The explanations in this manual are based on American English and the North American version of the software. Software for other countries and regions may vary slightly from the North American version.
• This manual refers to the digital multifunction device equipped with the network function as "the machine".
• This manual refers to the Reversing single pass feeder as the "RSPF" and the Single pass feeder as the "SPF". Unless specific mention is made, both the RSPF and the SPF are referred to simply as "SPF".
• Wherever "AR-XXXX" appears in this manual, please substitute your model name for "XXXX".

• In some regions the "Key operator's guide" cited in this manual is a separate manual, and in other regions the "Key operator's guide" is included in the "Operation manual (for general information and copier)".
• The "Dual function board" cited in this manual can be installed as an option in some models and is pre-installed standard in other models. For detailed information, please refer to "3. PERIPHERAL DEVICES AND SUPPLIES" in the "Operation manual (for general information and copier)".

Trademark Acknowledgments

• Sharpdesk is a trademark of Sharp Corporation.
• Netscape Navigator is a trademark of Netscape Communications Corporation.
• Macintosh, Power Macintosh, Mac OS, LaserWriter, and AppleTalk are registered trademarks of Apple Computer, Inc.
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• All other trademarks and copyrights are the property of their respective owners.

The display screens, messages, and key names shown in the manual may differ from those on the actual machine due to product improvements and modifications.
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#### PRINTER DRIVER SPECIFICATIONS ................................................................. 39
This chapter explains the basic procedure for printing in Windows and how to select printer driver settings.

## 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.

1. Make sure that the ONLINE indicator on the operation panel is lit.
   If the ONLINE indicator is not on, press the [PRINT] key to switch to printer mode and then use the [ ] key to select "ONLINE".

2. Start WordPad and open the document that you wish to print.

   The "Print" dialog box will appear.

4. 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).
   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** (page 7)
- **TWO-SIDED PRINTING (ONLY FOR MODELS THAT SUPPORT TWO-SIDED PRINTING)** (page 8)
- **PRINTING MULTIPLE PAGES ON ONE PAGE** (page 10)
- **FITTING THE PRINT IMAGE TO THE PAPER** (page 11)
- **ROTATING THE PRINT IMAGE 180 DEGREES** (page 12)
- **PRINTING A WATERMARK** (page 12)
- **PRINTING TEXT AND LINES IN BLACK** (page 13)

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### Note

Paper that can be used and the procedures for loading paper are the same as for copying. See the "Operation manual (for general information and copier)".

<table>
<thead>
<tr>
<th>ONLINE indicator</th>
<th>DATA indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lit</td>
<td>The machine is online. Printing is possible.</td>
</tr>
<tr>
<td>Blinking</td>
<td>A print job is being canceled.</td>
</tr>
<tr>
<td>Off</td>
<td>The machine is offline. Printing is not possible.</td>
</tr>
</tbody>
</table>
5. Click the [Print] button ([OK] button in Windows 95/98/Me/NT 4.0).
   Printing begins.
   The print job is delivered to the output tray, with the position of the paper offset slightly from the previous job (offset function).

When the job separator tray is installed
   The output tray can be selected when selecting 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 TRAY RUNS OUT OF PAPER DURING PRINTING

Add paper to the tray that ran out or to the bypass tray. If you add paper to the bypass tray, press the [PRINT] key on the machine to switch to printer mode and select "BYPASS-TRAY". Printing will resume. Note that if the "AUTO TRAY SWITCHING" setting is selected in the "PAPER SIZE SET" (accessed by pressing the [SPECIAL FUNCTION] key) and there is the same size of paper in another tray, the machine will automatically switch to the other tray and continue printing.

PAUSING A PRINT JOB

To pause a print job, press the [PRINT] key on the machine to switch to printer mode and then select "OFFLINE" with the [▼] key. The machine pauses the print job and then goes offline.
- To cancel a print job, press the [C] key ( ).
- To resume printing, select "ONLINE" with the [▲] key.

WHEN "PAPER SOURCE" IS SET TO [AUTO SELECT]

If "Paper Source" 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 (page 31) in the key operator programs.

When "FORCED OUTPUT OF PRINT" is disabled
Add paper to the bypass tray, press the [PRINT] key on the machine to switch to printer mode, and select "BYPASS-TRAY". Printing will resume.

When "FORCED OUTPUT OF PRINT" is enabled
The closest size of paper in a tray other than the bypass tray will be used for printing.

Note
   If the print image is in a different orientation than the paper, the print image will be automatically rotated 90 degrees to enable correct printing on the paper. (Other than the bypass tray)

HOW [BYPASS TRAY] AND [BYPASS MANUAL] DIFFER IN THE "PAPER SOURCE" SETTINGS

There are two bypass tray settings in "Paper Source" in the [Paper] tab of the printer driver setup screen:
- When [Bypass Tray] is selected, the print job is automatically printed on the paper in the bypass tray.
- When [Bypass Manual] is selected, the print job is not printed until paper is inserted into the bypass tray. If paper is already in the bypass tray, remove the paper and then re-insert it to begin printing.
AUDITING MODE

When "AUDITING MODE" is enabled in the key operator programs, a 5-digit account number must be entered in the printer driver setup screen in order to print. Account numbers are stored in the key operator programs. (See the "Key operator's guide").

To open the account number entry screen, click the [Job Control] button in the [Main] tab of the printer driver setup screen.

Click the checkbox on the left side of "Account Number" so that a checkmark appears, enter your 5-digit account number, and click the [OK] button.

When the [Auto Job Control review] checkbox is clicked, the account number confirmation screen always appears before printing starts.

**Caution**

- If "CANCEL JOBS OF INVALID ACCOUNTS" is enabled in the key operator programs and printing is attempted without entering an account number or an invalid account number is entered, printing will not take place. To allow printing without the entry of a valid account number, disable "CANCEL JOBS OF INVALID ACCOUNTS". In this case, the number of pages printed is added to the "OTHERS" count.
- When the PPD file* is used in Windows, auditing mode cannot be used in the printer function. For this reason, do not enable "CANCEL JOBS OF INVALID ACCOUNTS" in the key operator programs as this will prevent printing. Printed pages will be added to the "OTHERS" count. (See the "Key operator's guide").

* The PPD file enables the machine to print using the standard PS driver of the operating system.
OPENING THE PRINTER DRIVER FROM THE [START] BUTTON

To change the printer driver settings, follow the steps below. 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/Server 2003

1. Click the [start] button, and then click [Control Panel].
   • In Windows 2000, click the [Start] button and select [Settings].
   • In Windows Server 2003, click the [Start] button and then click [Printers and Faxes]. Go to step 3.

2. Click [Printers and Other Hardware], and click [Printers and Faxes].
   In Windows 2000, click [Printers].


   The printer driver setup screen will appear.

Windows 95/98/Me/NT 4.0

1. Click the [Start] button, select [Settings] and then click [Printers].


3. In Windows 95/98/Me, click the [Setup] tab.
   The printer driver setup screen will appear.

Note: In Windows NT 4.0, select [Document Defaults] to open the printer driver setup screen.

* PRINTER DRIVER SETTINGS (page 7)
To view Help for a setting, click the  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) Checkbox
Click on a checkbox to activate or deactivate a function.

(3) Print image
This shows the effect of the selected print settings.

(4) Drop-down list
Allows you to make a selection from a list of choices.

(5) Check button
Allows you to select one item from a list of options.

(6) Image of paper trays
The tray selected in "Paper Source" in the [Paper] tab appears in blue. You can also click on a tray to select it.

(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.

(10) [Help] button
Click this button to display the help file for the printer driver.

- Windows NT 4.0 does not have the [Apply] button.
- The [Apply] button does not appear when you open this window from an application.

- The settings and the image of the machine will vary depending on the model. If a tray or job separator tray option is installed, see "CONFIGURING THE PRINTER DRIVER" in "3. TROUBLESHOOTING AND USEFUL INFORMATION" in the "Software setup guide" to configure the settings for the option.
- For information on the printer function, see "PRINTER DRIVER SPECIFICATIONS" (page 39).
TWO-SIDED PRINTING (ONLY FOR MODELS THAT SUPPORT TWO-SIDED PRINTING)

On models that have the two-sided printing function, both sides of the paper can be printed on.
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.
To open the printer driver, see "BASIC PRINTING" (page 3).

- Paper sizes that can be used for two-sided printing are Ledger, Letter, Legal, Foolscap, A3, A4, A5, B4 and B5.
- The bypass tray cannot be used for two-sided printing.

The following example shows the result when portrait data is printed on both sides of the paper.

<table>
<thead>
<tr>
<th>Print data</th>
<th>Printing result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-Sided (Book)</td>
</tr>
<tr>
<td><img src="image1.png" alt="Diagram" /></td>
<td><img src="image2.png" alt="Diagram" /></td>
</tr>
<tr>
<td>The pages are printed so that they can be bound at the side.</td>
<td>The pages are printed so that they can be bound at the top.</td>
</tr>
</tbody>
</table>
Pamphlet style

Pamphlet style prints two pages each on the front and back of each sheet of paper (four pages total on one sheet) so that the sheets can be folded down the center and bound to create a pamphlet. This function is convenient when you wish to compile printed pages into a pamphlet.

To use this function, open the printer driver setup screen and select [Tiled Pamphlet] or [2-Up Pamphlet] in "Document Style" in the [Main] tab. The direction of opening of the pamphlet can be selected with the "Right Turning Pamphlet" checkbox in the [Advanced] tab.

The following examples show how 8 pages are printed when [Tiled Pamphlet] is selected.

<table>
<thead>
<tr>
<th>Print data</th>
<th>Printing result</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Diagram" /></td>
<td><img src="image" alt="Diagram" /></td>
</tr>
</tbody>
</table>

- Because four pages are printed on each sheet of paper, blank pages are automatically added at the end when the total number of pages is not a multiple of four.
- When [Tiled Pamphlet] is selected, printing will take place on paper that is twice the size of the paper size specified in the application.
- When [2-Up Pamphlet] is selected, each page is reduced in the same way as for 2-Up and printed on the size of paper that is specified in the application.

Note
PRINTING MULTIPLE PAGES ON ONE PAGE

This feature allows you to reduce and print two, four, six, eight, nine or sixteen document pages on a single sheet of paper.
To use this function, open the printer driver setup screen and select the number of pages per sheet (2-Up, 4-Up, 6-Up, 8-Up, 9-Up, or 16-Up) in "N-Up Printing" in the [Main] tab.
The order of the pages can be changed in the "Order" menu.
To open the printer driver, see "BASIC PRINTING" (page 3).

Note: The "N-Up Printing" setting is not available when [Fit to Page] is selected.
☞ FITTING THE PRINT IMAGE TO THE PAPER (page 11)

For example, when [2-Up] or [4-Up] is selected, the result will be as follows depending on the selected order.

If you select the [Border] checkbox, borderlines will be printed around each page.

Note: Examples for 2-Up and 4-Up are shown here. The order of 6-Up, 8-Up, 9-Up, and 16-Up is the same as 4-Up.
The order can be viewed in the print image in the printer driver setup screen.
☞ PRINTER DRIVER SETTINGS (page 7)
FITTING THE PRINT IMAGE TO THE PAPER

The printer driver can adjust the size of the print 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 or A3 size document on letter or A4 size paper.

To open the printer driver, see "BASIC PRINTING" (page 3).

1. Click the [Paper] tab in the printer driver setup screen.
2. Select the original size (Ledger or A3) of the print image in "Paper Size".
3. Click on the [Fit to Page] checkbox.

   When using the PS printer driver, select [Fit To Paper Size] in "Zoom Setting".

4. Select the size of the paper (Letter or A4) that is loaded in the machine from "Fit to Paper Size".

   The size of the print image will be automatically adjusted to match the paper loaded in the machine.

   - Paper Size: Ledger or A3
   - Fit To Paper Size: Letter or A4

When using the PS printer driver, the print image can be enlarged or reduced by means of numerical values. (The vertical and horizontal ratios can be set separately.) Select [XY-Zoom] in step 3, click the [Width/Length] button, and adjust the ratios in the screen that appears.

Note: The "Fit To Paper Size" setting is not available when "N-Up Printing" is selected. For PRINTING MULTIPLE PAGES ON ONE PAGE (page 10)
ROTATING THE PRINT IMAGE 180 DEGREES

The print image can be rotated 180 degrees. This feature rotates the print image 180 degrees to enable correct printing on paper that can only be loaded in one orientation. To use this function, select the image orientation in "Image Orientation" on the [Paper] tab, and then click on the [Rotate 180 degrees] checkbox. To open the printer driver, see "BASIC PRINTING" (page 3).

<table>
<thead>
<tr>
<th>Printing result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape</td>
</tr>
<tr>
<td>Rotate 180 degrees</td>
</tr>
</tbody>
</table>

The procedure for loading paper is explained in the "Operation manual (for general information and copier)".

PRINTING A WATERMARK

You can print a watermark such as "CONFIDENTIAL" on your document. To print a watermark, open the printer driver setup screen, click the [Watermarks] tab, and follow the steps below. To open the printer driver, see "BASIC PRINTING" (page 3).

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.

Watermark:

- (None)
- TOP SECRET
- CONFIDENTIAL
- DRAFT
- ORIGINAL
- COPY

Print sample

You can enter text to create your own custom watermark. For details on watermark settings, view printer driver Help. See "PRINTER DRIVER SETTINGS (page 7)".
PRINTING TEXT AND LINES IN BLACK

Color text and lines that are normally printed in light color can be printed in black. Color text and lines that are faint when printed normally can be printed in black to improve legibility.

Printing text in black

Text that is any color other than white is printed in black.
To use this function, open the printer driver setup screen and click on the [Text To Black] checkbox in the [Advanced] tab.

<table>
<thead>
<tr>
<th>Print data</th>
<th>Printing result</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABCD EFGH</td>
<td>ABCD EFGH</td>
</tr>
<tr>
<td></td>
<td>ABCD EFGH</td>
</tr>
</tbody>
</table>

- When using the PCL6 printer driver, if [Print as graphics] is selected in "TrueType Mode" of [Font] in the [Advanced] tab, this function cannot be used.
- When using the PCL5e printer driver, if [Raster] is selected in "Graphics Mode" in the [Advanced] tab, this function cannot be used.

Printing lines in black

Lines and solids that are any color other than white are printed in black.
To use this function, open the printer driver setup screen and select the [Vector To Black] checkbox in the [Advanced] tab.

<table>
<thead>
<tr>
<th>Print data</th>
<th>Printing result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- When using the PCL6 or PCL5e printer driver, if [Raster] is selected in "Graphics Mode" in the [Advanced] tab, this function cannot be used.
This chapter explains printer utilities that are used to manage and monitor the network printer.

PRINTER UTILITIES

The "Software CD-ROM (1)" included in the network expansion kit contains the following two printer utilities.

**Printer Status Monitor (for general users)**

This allows the user to check on the computer screen whether or not the machine is able to print. It provides information on error states such as paper misfeeds and shows the configuration of the machine (number of trays, etc.) by means of illustrations. Available paper sizes and paper remaining are also indicated.

**Printer Administration Utility (for the administrator)**

This allows the administrator to check information on supplies and error states of the machine and other SHARP printers (compatible with the Printer Administration Utility) that are connected to the network. Settings can also be changed via the utility.

---

**Note**

- In order to use the Printer Status Monitor and Printer Administration Utility, the machine must be connected to a network.
- To install the Printer Status Monitor and Printer Administration Utility, see "2. INSTALLING THE SOFTWARE (FOR OPTIONS)" in the "Software setup guide".
- To use the Printer Administration Utility in Windows 95, a system file must be updated. See "2. INSTALLING THE SOFTWARE (FOR OPTIONS)" in the "Software setup guide" and view the detailed information in the "Software Selection" window of the installer.

---

**BEFORE USING THE PRINTER STATUS MONITOR**

To use the Printer Status Monitor to monitor the status of the machine, the printing environment must be configured as explained below.

**Printing via a server:**

Install the software as explained in "Using the machine as a shared printer via a server" in "2. INSTALLING THE SOFTWARE (FOR OPTIONS)" in the "Software setup guide".

When the first print job is executed after starting up the Printer Status Monitor, the machine's IP address is automatically set in the Printer Status Monitor.

**Direct printing without a server:**

Install and configure the software as explained in "INSTALLING THE PRINTER DRIVER (STANDARD INSTALLATION)" in "2. INSTALLING THE SOFTWARE (FOR OPTIONS)" in the "Software setup guide".

(This is not necessary if the software has already been installed and configured.)
USING THE PRINTER UTILITIES

STARTING UP THE PRINTER UTILITIES

If the Printer Status Monitor or Printer Administration Utility is not running, use the following procedure to start the utility.

**Note**
When the Printer Administration Utility is first started up, the TCP/IP settings window appears. To monitor the machine on a local network, select the [Local Subnet Search] checkbox. Otherwise, enter the machine's IP address. For more information, see the Help file.

**Printer Status Monitor**
Click the [start] button, point to [All Programs] ([Programs] in operating systems other than Windows XP/Server 2003) and then [SHARP Printer Status Monitor]. Select [Printer Status Monitor].

**Printer Administration Utility**
Click the [start] button, point to [All Programs] ([Programs] in operating systems other than Windows XP/Server 2003) and then [SHARP Printer Administration Utility]. Select [Printer Administration Utility].

USING THE PRINTER UTILITIES

For information on using the Printer Status Monitor and Printer Administration Utility, see the Help files for each. The Help files can be viewed as follows:

**Printer Status Monitor**
Click the [start] button, point to [All Programs] ([Programs] in operating systems other than Windows XP/Server 2003) and then [SHARP Printer Status Monitor]. Select [Help].

**Printer Administration Utility**
Click the [start] button, point to [All Programs] ([Programs] in operating systems other than Windows XP/Server 2003) and then [SHARP Printer Administration Utility]. Select [Help].

CHANGING THE PRINTER STATUS MONITOR SETTINGS

Once installed, the Printer Status Monitor normally runs in the background in Windows. If you need to change the Printer Status Monitor settings, follow the steps below.

1. **Right-click the [Printer Status Monitor] icon ( ) on the task bar, and select [Preferences] from the pop-up menu.**

2. **Change the Printer Status Monitor settings as desired.**

For information on the Printer Status Monitor settings, see Printer Status Monitor Help. (Click the [Help] button in the preferences window.)
CHECKING THE PRINTER STATUS

The Printer Status Monitor allows you to check whether or not toner and paper remain in the machine.

1 Right-click the [Printer Status Monitor] icon ( ) on the task bar, and select [SHARP AR-XXXX Status] from the pop-up menu.

2 Check the current status of the printer in the screen that appears. If you wish to know more detailed status information, click the [Detail] button.

The screen will change to the detailed status screen.

To return to the abbreviated status screen, click the [Hide detail] button.

The icon turns red when printing is not possible due to a machine error or other problem.

Note

By default, the abbreviated status screen appears when [SHARP AR-XXXX Status] is selected in Step 1. If desired, you can change the setting to have the detailed status screen initially appear.

☞ CHANGING THE PRINTER STATUS MONITOR SETTINGS (page 15)
This chapter explains the procedures for printing from a Macintosh environment.

**BASIC PRINTING**

To use the machine as a printer for the Macintosh, the PS3 expansion kit (AR-PK1/N) must be installed and the machine must be connected to a network. To install the PPD file and configure the printer driver settings, see "2. INSTALLING THE SOFTWARE (FOR OPTIONS)" in the "Software setup guide". Before printing, make sure that the correct size of paper for your document has been loaded in the machine.

**Note**

Paper that can be used and the procedures for loading paper are the same as for copying. See the "Operation manual (for general information and copier)".

1. Make sure that the ONLINE indicator on the operation panel is lit.
   
   If the ONLINE indicator is not on, press the [PRINT] key to switch to printer mode and then use the [▲] key to select "ONLINE".
   
   The status of the printer function is indicated by the ONLINE and DATA indicators above the [PRINT] key.

<table>
<thead>
<tr>
<th>ONLINE indicator</th>
<th>DATA indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lit</td>
<td>The machine is online. Printing is possible.</td>
</tr>
<tr>
<td>Blinking</td>
<td>A print job is being canceled. Printing is in progress or data is being received.</td>
</tr>
<tr>
<td>Off</td>
<td>The machine is offline. Printing is not possible.</td>
</tr>
<tr>
<td></td>
<td>There is no print data in memory and print data is not being received.</td>
</tr>
</tbody>
</table>

2. Start the application and open the document that you wish to print.


4. Make sure that the correct printer is selected.

   - The machine name that appears in the "Printer" menu is the name that was entered when AppleTalk settings were configured from the "Network Utilities" CD-ROM. Unless the name was changed when configuring the settings, it will be [SCxxxxxx] (where "xxxxxx" is a sequence of characters that varies depending on your machine).
   - The Print window varies depending on the operating system version, the printer driver version, and the application.
5 Select print settings.

Click next to [Copies & Pages] ([General] in Mac OS 8.6 to 9.2.2) and select the settings that you wish to configure from the pull-down menu. The corresponding setting screen will appear.

The settings vary depending on the operating system version, the printer driver version, and the application.

6 Click the [Print] button.

Printing begins.

IF THE TRAY RUNS OUT OF PAPER DURING PRINTING

Add paper to the tray that ran out or to the bypass tray. If you add paper to the bypass tray, press the [PRINT] key on the machine to switch to printer mode and select "BYPASS-TRAY". Printing will resume. Note that if the "AUTO TRAY SWITCHING" setting is selected in the "PAPER SIZE SET" (accessed by pressing the [SPECIAL FUNCTION] key) and there is the same size of paper in another tray, the machine will automatically switch to the other tray and continue printing.

PAUSING A PRINT JOB

To pause a print job, press the [PRINT] key on the machine to switch to printer mode and then select "OFFLINE" with the [▼] key. The machine pauses the print job and then goes offline.

- To cancel a print job, press the [C] key ( gerçekten sağlık).  
- To resume printing, select "ONLINE" with the [▲] key.

When the job separator tray is installed

The output tray can be selected when selecting print settings at the time of printing. Select the output tray in "Output" in the [Advanced] menu of the Print window.

- If you are using Mac OS 8.6 to 9.2.2, select the output tray in "Output" in the [Output and Document Style] menu of the Print window.
- If you are using Mac OS X v10.1.5, select the output tray in the [Output] tab in the [Printer Features] menu of the Print Window.
WHEN [PAPER FEED] IS SET TO [AUTO SELECT]

If [Paper Feed] is set to [Auto Select] in the Print window and the correct size of paper is not loaded in the machine, the printing procedure will vary depending on the "FORCED OUTPUT OF PRINT" setting in the key operator programs.

**When "FORCED OUTPUT OF PRINT" is disabled**
Add paper to the bypass tray, press the [PRINT] key on the machine to switch to printer mode, and select "BYPASS-TRAY". Printing will resume.

**When "FORCED OUTPUT OF PRINT" is enabled**
The closest size of paper in a tray other than the bypass tray will be used for printing.

The print image is automatically rotated 90 degrees in the event that the paper is loaded in an orientation different from the print image (except when the bypass tray is used).


There are two bypass tray settings in [Paper Feed] of the Print window:
- When [Bypass Tray] is selected, the print job is automatically printed on the paper in the bypass tray.
- When [Bypass Manual] is selected, the print job is not printed until paper is inserted into the bypass tray. If paper is already in the bypass tray, remove the paper and then re-insert it to begin printing.

JOB CONTROL FUNCTION (MAC OS 8.6 TO 9.2.2, MAC OS X V10.2 TO 10.3.4)

When "AUDITING MODE" is enabled in the key operator programs, enter your 5-digit account number in "Account Number" in [Job Control] in the Print window.

In Mac OS 8.6 to 9.2.2, select [On] in "Account Number" in [Job Control] in the Print window, and enter your 5-digit account number in the box at right. Account numbers are programmed in the key operator programs. (See the "Key operator's guide").

- When auditing mode is enabled, a print job may not be printed if an account number is not entered or an incorrect account number is entered. This depends on the key operator program settings.
- In Mac OS X v10.1.5, auditing mode cannot be used. For this reason, do not enable "CANCEL JOBS OF INVALID ACCOUNTS" in the key operator programs, as this will prevent printing. Printed pages will be added to the "OTHERS" count. (See the "Key operator's guide").
WEB FUNCTIONS OF THE MACHINE

The network expansion kit includes a built-in Web server. The Web server is accessed using a Web browser on your computer. The Web pages include both pages for users and pages for the administrator. In the user Web pages, users can monitor the machine, directly print a file specified on a computer, and select printer configuration settings. In the administrator Web pages, the administrator can configure the machine's e-mail settings, settings for print by e-mail, and passwords. Only the administrator is allowed to configure these settings.

HOW TO ACCESS THE WEB PAGE AND VIEW HELP

Use the following procedure to access the Web pages. [Help] can be clicked at the bottom of the menu frame to view information on the various function settings that can be configured remotely over the network from the machine's Web pages. For the settings of each function, see the explanations in Help.

1. **Open the Web browser on your computer.**
   Supported browsers:
   - Internet Explorer 5.5 or later (Windows)
   - 5.1 or later (Macintosh)
   - Netscape Navigator 6.0 or later

2. **In the "Address" field of your Web browser, enter the IP address that has been configured in the machine.**
   If you do not know the IP address, see "CHECKING THE IP ADDRESS" (page 37).

When the connection is completed, the Web page will appear in your Web browser.

3. **Click the [Help] button at the bottom of the menu frame.**
   To view information on a function setting, click the corresponding item in the Help screen.

4. **When finished, close the Web pages.**
   When you have finished using the Web pages, click the (close) button in the top right corner of the page.

☞ ABOUT THE WEB PAGES (FOR USERS) (page 21)
ABOUT THE WEB PAGES (FOR USERS)

When you access the user Web pages in the machine, the following page will appear in your browser. A menu frame appears on the left side of the page. When you click an item in the menu, a screen appears in the right frame that allows you to configure settings for that item.

(1) **Menu frame**
Click a setting in the menu to configure it.

(2) **System Information**
Shows the current status of the machine and model name.
  - **Device Status**
    Shows the current status of the machine, paper trays, output trays, toner and other supplies, and page counts.
    Out of paper and other warnings appear in red.
  - **Device Configuration**
    Shows what options are installed.
  - **Network Status**
    Shows the network status. Information on "General", "TCP/IP", "NetWare", "AppleTalk", and "NetBEUI" is shown on the respective pages.

(3) **Submit Print Job**
A file on a computer can be printed out.
☞ **DIRECTLY PRINTING A FILE ON A COMPUTER (page 22)**

(4) **Printer Test Page**
The "Printer Settings List", which shows printer condition settings and key operator settings, and various font lists can be printed.

(5) **Condition Settings**
Configure basic printer settings and printer language settings.
☞ **PRINTER DEFAULT SETTINGS (page 23)**

(6) **Admin Mode**
To open the Web pages for the administrator, click here and then enter the administrator's user name and password.
☞ **ABOUT THE WEB PAGES (FOR THE ADMINISTRATOR) (page 25)**
☞ **PROTECTING INFORMATION PROGRAMMED IN THE WEB PAGE ([PASSWORDS]) (page 26)**
DIRECTLY PRINTING A FILE ON A COMPUTER

A file that can be accessed by your computer can be directly printed without using the printer driver by specifying the file's address.

Any file that can be accessed by your computer can be printed by this method, including not only files on your computer but also files on other computers connected to the same network.

To directly print a file by this method, click [Submit Print Job] in the menu frame of the Web page.

1 Click [Submit Print Job] in the menu frame.
   The "Submit Print Job" screen will appear.

2 Select the print format in "Job Detail".
   The settings are described in the table below.

3 Click [Browse] and select the file that you wish to print.
   You can also directly enter the file name (with the path).

4 Click [Print].
   Printing begins.

Advanced job settings

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Factory default setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copies</td>
<td>Set the number of copies from 1 to 999.</td>
<td>1</td>
</tr>
<tr>
<td>Paper Size</td>
<td>Select the size of paper to be used for printing.</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Orientation</td>
<td>Select the printing orientation. (Portrait / Landscape)</td>
<td>Portrait</td>
</tr>
<tr>
<td>Binding Edge</td>
<td>Select the binding position for two-sided printing. (Left / Top)</td>
<td>Left</td>
</tr>
<tr>
<td>Duplex</td>
<td>To print on both sides of the paper, select this checkbox. (Only for models that support the two-sided printing.)</td>
<td>Not selected</td>
</tr>
<tr>
<td>Account Number</td>
<td>When &quot;AUDITING MODE&quot; is enabled in the key operator programs, enter your 5-digit account number.</td>
<td>–</td>
</tr>
</tbody>
</table>

- PDF and TIFF files can be printed.
- To print PDF files, the optional PS3 expansion kit must be installed. Encrypted PDF files cannot be printed.
PRINTING DEFAULT SETTINGS

Configure basic printer settings and printer language settings. The printer default settings consist of the following three screens.

- **Default settings (page 24)**: Basic settings that are mainly used when the printer driver is not used (for example, when printing from a DOS application).
- **PCL settings (page 24)**: PCL symbol set, font, line feed code, and other settings.
- **PostScript settings (page 24)**: Sets whether or not a PostScript error page is printed when a PostScript error occurs.
  * This setting only appears when the PS3 expansion kit is installed.

Configuring the printer condition settings

1. Click [Condition Settings] in the menu frame.

   The "Default Settings" screen of the [Condition Settings] appears. If you wish to select a setting in the "Default Settings" screen, go to step 3.

2. Click the desired setting.

3. Make a selection for the setting in the screen that appears.

   For detailed descriptions of the condition settings, see "Printer condition settings" (page 24).

4. Click [Submit] to save the entered information.

When the printer driver is used and the same settings are configured both in the printer driver and in the above screens, the settings configured in the printer driver override the settings in the above screens. If a setting is available in the printer driver, use the printer driver to configure the setting.
## Printer condition settings

Factory default settings are indicated in bold.

### Default settings

<table>
<thead>
<tr>
<th>Item</th>
<th>Settings</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copies</td>
<td>1-999</td>
<td>This is used to select the number of copies.</td>
</tr>
<tr>
<td>Orientation</td>
<td>Portrait, Landscape</td>
<td>This sets the orientation of the printed page. Select [Portrait] when the image is longer in the vertical direction, or [Landscape] when the image is longer in the horizontal direction.</td>
</tr>
<tr>
<td>Default Paper Size</td>
<td>A3, B4, A4, A4R, B5, B5R, A5, Ledger, Legal, Foolscap, Letter*, Letter-R, Invoice</td>
<td>This sets the default paper size used for printing. Even if the set size of paper is not in any of the trays, the printed image is formed in accordance with this setting. *Factory default setting is A4 in some regions.</td>
</tr>
<tr>
<td>Default Paper Source</td>
<td>Auto, Tray 1, Tray 2*, Tray 3*, Tray 4*, Bypass (Manual), Bypass (Auto)</td>
<td>Set the default paper tray. *Selections available depend on the trays that are installed.</td>
</tr>
<tr>
<td>Disable Blank Page Print</td>
<td>Enable, Disable</td>
<td>When this is set to “Enable”, blank pages are not printed.</td>
</tr>
<tr>
<td>2-Sided Print</td>
<td>1-Sided, 2-Sided (Book), 2-Sided (Tablet)</td>
<td>When [2-Sided (Book)] is selected, two-sided printing takes place so as to allow binding at the left side. When [2-Sided (Tablet)] is selected, two-sided printing takes place so as to allow binding at the top. (Only for models that support two-sided printing.)</td>
</tr>
<tr>
<td>ROPM*</td>
<td>Enable, Disable</td>
<td>This enables the ROPM function. When enabled, multi-page print jobs are stored in memory before printing, and thus the computer does not need to repeatedly send the print data when multiple copies are printed. *This setting is only effective when the dual function board is installed.</td>
</tr>
</tbody>
</table>

### PCL settings

<table>
<thead>
<tr>
<th>Item</th>
<th>Settings</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbol Set</td>
<td>Select one of 35 sets.</td>
<td>This specifies which country's characters (PCL symbol set) are assigned to certain of the symbols in the character code list. The factory default setting is [PC-8].</td>
</tr>
<tr>
<td>Font</td>
<td>Select one internal or one expansion font.</td>
<td>This specifies which PCL font to use for printing. One font can be specified from among the internal fonts and expansion fonts (when the barcode font kit or the Flash ROM kit is installed). The factory default setting is [0:Courier].</td>
</tr>
<tr>
<td>Line Feed Code</td>
<td>CR=CR; LF=LF; FF=FF, CR=CR+LF; LF=LF; FF=FF, CR=CR; LF=CR+LF; FF=CR+FF, CR=CR+LF; LF=CR+LF; FF=CR+FF</td>
<td>This specifies the line break code by means of a combination of the &quot;CR&quot; (return) code, &quot;LF&quot; (line break) code, and &quot;FF&quot; (page break) code. The factory default setting is printing based on the transmitted code. The setting can be changed by selecting one of four combinations.</td>
</tr>
<tr>
<td>Wide A4</td>
<td>Enable, Disable</td>
<td>This setting can be enabled to print 80 lines on A4 size paper with each line 10CPI font (English characters). When the setting is disabled (a checkmark does not appear), each line is 78 characters long.</td>
</tr>
</tbody>
</table>

### PostScript settings

*PostScript Settings* only appears when the PS3 expansion kit is installed.

<table>
<thead>
<tr>
<th>Item</th>
<th>Settings</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print PS Errors</td>
<td>Enable, Disable</td>
<td>When this setting is enabled, an error description is printed each time a PostScript error occurs.</td>
</tr>
</tbody>
</table>
ABOUT THE WEB PAGES (FOR THE ADMINISTRATOR)

In addition to the menus that appear for users, other menus that can only be used by the administrator appear in the administrator Web pages.

A menu frame appears on the left side of the page. When you click an item in the menu, a screen appears in the right frame that allows you to configure settings for that item. Settings that can only be configured by the administrator are explained here.

1. **Information**
   Configure machine identification information for the status & alert E-mail function.
   ⇒ Information setup (page 29)

2. **Passwords**
   To protect the Web site, the system administrator can establish passwords. Enter a password that you would like to establish and click the [Submit] button. One password can be established for the administrator and one password can be established for users.
   ⇒ PROTECTING INFORMATION PROGRAMMED IN THE WEB PAGE ([PASSWORDS]) (page 26)

3. **Key Operator Programs**
   Setting changes can be prohibited and interface settings can be configured.
   ⇒ KEY OPERATOR PROGRAMS (page 28)

4. **Status Message**
   Configure parameters required for sending status messages, such as destination addresses and time schedules.
   ⇒ Status message setup (page 30)

5. **Alerts Message**
   Store destination addresses for alert messages.
   ⇒ Alerts message setup (page 30)

6. **Security**
   Unused ports can be disabled for greater security and port numbers can be changed.

   If "HTTP" is disabled, it will not be possible to open the Web pages. To open the Web pages, reset the network expansion kit.
   ⇒ "How to reset the network expansion kit" (page 37)

7. **Services**
   Configure information concerning the e-mail system.
   ⇒ SMTP setup (page 29)

8. **Print Port**
   Configure settings for e-mail print.
   ⇒ Setting up the E-mail print function (page 27)
PROTECTING INFORMATION PROGRAMMED IN THE WEB PAGE ([PASSWORDS])

Passwords can be set (click [Passwords] in the menu frame) to restrict Web page access and protect settings. The administrator must change the password from the factory default setting. The administrator must also take care to remember the new password. The next time the Web pages are accessed, the new password must be entered. A password can be set for the administrator and a password can be set for users.

1 Click [Passwords] in the menu frame.

2 Enter the current password in "Admin Password".
When establishing a password for the first time, enter "Sharp" in "Admin Password".

Be sure to enter "S" in upper case and "harp" in lower case (passwords are case sensitive).

3 Enter passwords in "User Password" and "Admin Password".
- A maximum of 7 characters and/or numbers can be entered for each password (passwords are case sensitive).
- Be sure to enter the same password in "Confirm Password" as you did in "New Password".

4 When you have finished entering all items, click [Submit].
The entered password is stored.
After setting the password, turn the machine power off and then back on.

When prompted to enter a password, a user should enter "user" and an administrator should enter "admin" in "User Name". In "Password", the respective password for the entered user name should be entered.
For more information, click [Help] in the upper right-hand corner of the window.
E-MAIL PRINT FUNCTION

An e-mail account can be set up for the machine. When this is done, the machine will periodically check the e-mail server for e-mail and automatically print out any file attachments it receives. This provides a means for printing a file from a computer that does not have the printer driver installed, as the user can simply send the file to the machine as an e-mail attachment.

Setting up the E-mail print function

To use the e-mail print function, the machine must have an e-mail account.

1. Click [Print port] in the menu frame.
   
   The "Print Port Setup" page appears.

2. Click [E-mail print].

3. Enter the information regarding the e-mail environment.
   
   For detailed information, Click [Help] in the upper right-hand corner of the window.

4. Click [Submit] to store the entered information.

Using the E-mail print function

To use the e-mail print function, attach the file that you wish to print to an e-mail message and send the e-mail to the machine's e-mail address.

The machine can print the following file types: PCLXL, PCL5e, PS, PDF, and TIFF, with file extensions pcl, ps, pdf, tiff, and tif.

Control commands can be entered in the message of the e-mail to specify the number of copies and print format. Commands are entered in the format "command name = value".

The following control commands can be entered:

<table>
<thead>
<tr>
<th>Function</th>
<th>Command name</th>
<th>Values</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copies</td>
<td>COPIES</td>
<td>1-999</td>
<td>COPIES=2</td>
</tr>
<tr>
<td>Two-sided print</td>
<td>DUPLEX</td>
<td>OFF, TOP, LEFT</td>
<td>DUPLEX=LEFT</td>
</tr>
<tr>
<td>Account number</td>
<td>ACCOUNTNUMBER</td>
<td>5-digit number</td>
<td>ACCOUNTNUMBER=11111</td>
</tr>
<tr>
<td>File type</td>
<td>LANGUAGE</td>
<td>AUTO, PCL, PCLXL, POSTSCRIPT, PDF, TIFF</td>
<td>PAPER=LETTER</td>
</tr>
<tr>
<td>Paper</td>
<td>PAPER</td>
<td>Name of available paper (LETTER, A4, etc.)</td>
<td></td>
</tr>
</tbody>
</table>

• Enter the commands in Plain Text format. If entered in Rich Text format (HTML), the commands will have no effect.
• To receive a list of the control commands, enter the command "Config" in the e-mail message.
• If an e-mail is sent with nothing entered in the message, printing will take place according to the settings in the condition settings menu in the Web page "Default settings" (page 24).
• To print PS and PDF files, the PS3 expansion kit is required.
• An encrypted PDF file cannot be printed.
• Only enter a "File type" when you are specifying a page-description language. Normally there is no need to enter a file type.
KEY OPERATOR PROGRAMS

The key operator programs are used to prohibit changes to the [Condition Settings] and to configure interface settings.

- **Default settings**: Select the setting for which you wish to prohibit changes.
- **Interface settings**: Enable monitoring of data sent to the network port and set restrictions.

### Configuring a setting in the key operator programs

1. Click [Key operator programs] in the menu frame.

   The "Default Settings" screen of the [Key operator programs] will appear. If you wish to select a setting in the "Default Settings" screen, go to step 3.

2. Click the desired setting.

3. Make a selection for the setting in the screen that appears.

   See "Key operator programs" for descriptions of the settings.

4. Click [Submit] to store the entered information.

### Key operator programs

When "YES, NO" appears in the "Settings" column, "YES" is selected when a checkmark appears in the checkbox of the item, and "NO" is selected when checkmark does not appear.

#### Default settings

<table>
<thead>
<tr>
<th>Item</th>
<th>Settings</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prohibit Test Page Printing</td>
<td>YES, NO</td>
<td>This setting is used to prohibit printing of a printer test page.</td>
</tr>
<tr>
<td>Disable Default Setting</td>
<td>YES, NO</td>
<td>This setting is used to prohibit changes to the default condition settings.</td>
</tr>
<tr>
<td>Changes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disabling of Clock</td>
<td>YES, NO</td>
<td>This setting is used to prohibit changes to the date and time settings.</td>
</tr>
<tr>
<td>Adjustment</td>
<td></td>
<td>This item does not appear when the fax option is installed.</td>
</tr>
</tbody>
</table>

#### Interface settings

<table>
<thead>
<tr>
<th>Item</th>
<th>Settings</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexadecimal Dump Mode</td>
<td>YES, NO</td>
<td>This program is used to print out the print data from the computer in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>hexadecimal and in the corresponding text characters (based on ASCII code).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This allows you to check whether or not print data is being correctly sent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>from the computer.</td>
</tr>
<tr>
<td>I/O Timeout</td>
<td>1 - 60 - 999 (sec)</td>
<td>During reception of a print job, if remaining data is not received after</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the time set here elapses, the port connection is broken and the next print</td>
</tr>
<tr>
<td></td>
<td></td>
<td>job is begun.</td>
</tr>
<tr>
<td>Emulation Switching</td>
<td>Auto*, PostScript*, PCL</td>
<td>Select the printer language. When [Auto] is selected, the language is</td>
</tr>
<tr>
<td></td>
<td></td>
<td>automatically selected from the data sent to the printer. Unless errors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>occur frequently, do not change the setting from [Auto] to another setting.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;Only when the PS3 expansion kit is installed.&quot;</td>
</tr>
<tr>
<td>Port Switching Method</td>
<td>Switch at End of Job, Switch after I/O Timeout</td>
<td>Select the method for switching network ports.</td>
</tr>
</tbody>
</table>
E-MAIL STATUS AND E-MAIL ALERT SETTINGS

These functions send information on machine use (print count, copy count, etc.) and error conditions (paper misfeed, out of paper, out of toner, etc.) via e-mail to the administrator of the machine or the dealer.

Information setup
Machine identification information for the status and alert e-mail functions is configured in the "Information Setup" screen. The entered information will be included in status and alert e-mail messages.

1. Click [Information] in the menu frame.

   The "Information Setup" screen will appear.

2. Enter the machine information.
   For detailed information, click the [Help] button in the upper right-hand corner of the window.

3. Click [Submit] to store the entered information.

SMTP setup
The status and alert e-mail functions use SMTP (Simple Mail Transport Protocol) to send e-mail. The following procedure is used to set up the e-mail environment. This must be done by the system administrator or other person familiar with the network.

1. Click [Services] in the menu frame.

   The "Services Setup" screen will appear.

2. Click [SMTP].

3. Enter the information required to set up the e-mail environment.
   For detailed information, click the [Help] button in the upper right-hand corner of the window.

4. Click [Submit] to store the entered information.
Status message setup

Use the status message function to send the current counter information, including the copy count, print count, and total output count, based on the specified schedule. The destinations can be set for administrators and dealers respectively.

To set up the status message, follow these steps.

1. **Click [Status Message] in the menu frame.**
   
   The "Status Message Setup" screen will appear.

2. **Enter the required information, including the destination addresses and time schedule.**
   
   For detailed information, click the [Help] button in the upper right-hand corner of the window.

3. **Click [Submit] to store the entered information.**

When the E-mail Status settings are completed, printer count information will be sent periodically by e-mail to the specified e-mail addresses.

*Note* If you quit the browser before clicking [Submit], the settings will be canceled. To send printer information immediately to the specified e-mail addresses, click [Send Now].

Alerts message setup

Use the alert message function to send alert information, such as empty toner and paper and trouble including paper misfeeds, to specified destinations when such problems occur. The destinations can be set for administrators and dealers respectively.

To set up the alert message, follow the procedure below.

1. **Click [Alerts Message] in the menu frame.**
   
   The "Alerts Message Setup" screen will appear.

2. **Enter the destination addresses.**
   
   For detailed information, click the [Help] button in the upper right-hand corner of the window.

3. **Click [Submit] to store the entered information.**

If these parameters are set, event information for the printer will be transmitted to the specified addresses via E-mail each time a specified event occurs. The meaning of each event item is shown below.

*(Example)*

- Paper Jam: A paper misfeed has occurred.
- Toner Low: Toner is low.
- Toner Empty: Toner must be added.
- Paper Empty: Paper must be loaded.

*Note* If you quit the browser before clicking [Submit], the settings will be canceled.
The key operator programs allow the administrator of the machine (key operator) to enable and disable functions to suit the needs of the workplace. This chapter explains the key operator programs for the network and printer functions. For key operator programs for general use of the machine, see the "Key operator's guide".

For the initial key operator code set at the factory, see "PROGRAMMING A KEY OPERATOR CODE" in the "Key operator's guide".

KEY OPERATOR PROGRAM LIST

The key operator programs for the network and printer functions are shown in the following table. Factory default settings are indicated in bold. When "YES, NO" appears in the "Settings" column of a program, the program is enabled by pressing the [OK] key so that a checkmark appears in the checkbox. A checkmark in the checkbox (✓) indicates that "YES" is selected. No checkmark (□) indicates that "NO" is selected.

Note: The key operator programs that can be accessed depend on the machine and the options that are installed.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Program</th>
<th>Settings</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NETWORK</td>
<td>ENABLE DHCP</td>
<td>YES, NO</td>
<td>Enable this setting if the machine will use an IP address that is assigned by a DHCP server. If DHCP is used, the IP address assigned to the machine may change automatically on occasion. If this happens, printing will not be possible. Change the port setting of the printer driver to the new IP address.</td>
</tr>
<tr>
<td></td>
<td>IP ADDRESS SETTINGS</td>
<td>YES, NO</td>
<td>If the machine will be assigned a permanent IP address, use these settings to enter the IP address, subnet mask, and default gateway. For SPECIAL SETTINGS (page 33)</td>
</tr>
<tr>
<td></td>
<td>ENABLE TCP/IP</td>
<td>YES, NO</td>
<td>Select whether or not TCP/IP protocol will be used.</td>
</tr>
<tr>
<td></td>
<td>ENABLE NetWare</td>
<td>YES, NO</td>
<td>Select whether or not NetWare protocol will be used.</td>
</tr>
<tr>
<td></td>
<td>ENABLE EtherTalk</td>
<td>YES, NO</td>
<td>Select whether or not EtherTalk protocol will be used.</td>
</tr>
<tr>
<td></td>
<td>ENABLE NetBEUI</td>
<td>YES, NO</td>
<td>Select whether or not NetBEUI protocol will be used.</td>
</tr>
<tr>
<td>PRINTER</td>
<td>NOTICE PAGE</td>
<td>YES, NO</td>
<td>Select whether or not a Notice Page (page 36) is printed when printing is not successful due to a memory full (or other) error.</td>
</tr>
<tr>
<td></td>
<td>FORCED OUTPUT OF PRINT</td>
<td>YES, NO</td>
<td>When no tray has the specified size of paper, this setting is used to select whether or not the print job will be printed on the closest size of paper.</td>
</tr>
<tr>
<td></td>
<td>OUTPUT TRAYS</td>
<td>CENTER TRAY, UPPER TRAY</td>
<td>Specifies the output tray. When the printer driver is used to print, the setting in the printer driver has priority. (This setting is only available if a job separator tray is installed.)</td>
</tr>
</tbody>
</table>
USING THE KEY OPERATOR PROGRAMS

BASIC PROCEDURE FOR CONFIGURING SETTINGS

Follow the steps below to access the key operator settings for the network and printer functions.

1. Press the [SPECIAL FUNCTION] key.
   - The special function screen will appear.

2. Select "KEY OPERATOR PRG." with the [▼] or [▲] key.

3. Press the [OK] key.
   - The key operator code entry screen will appear.

4. Use the numeric keys to enter the key operator code.
   - " " will appear for each digit entered.
   - The mode selection screen will appear.

5. Select the desired mode with the [▼] or [▲] key.

6. Press the [OK] key.
   - The settings of the selected mode will appear.
   - Example: The above screen shows the settings when printer mode is selected.

7. Select the desired program with the [▼] or [▲] key.
   - A checkbox appears to the left of several of the programs. To enable a function (make a checkmark appear), press the [OK] key. To cancel a selection, press the [OK] key once again to remove the checkmark and disable the function. Go to step 9.
   - When the [OK] key is pressed for a program that does not have a checkbox, the settings for the program appear.

8. Press the [OK] key and follow the instructions in the program screen.

9. To use another program for the same mode, select the desired program with the [▼] or [▲] key.
   - To use a program for a different mode, press the [BACK] key and select the desired mode. To exit the key operator programs, press the [CA] key.
SPECIAL SETTINGS

IP address settings
This program is used to set the "IP ADDRESS", "SUBNETMASK", and "DEFAULT GATEWAY". The following screen appears when this program is selected.

1. Enter the IP address, subnet mask, and default gateway.

| [▼][▲] keys | These move the cursor up and down to select "IP ADDRESS", "SUBNETMASK", and "DEFAULT GATEWAY". |
| [◄][►] keys | These move the cursor left and right. |
| Numeric keys | These are used to enter numbers. |
| [C] key (Esc) | Use this to cancel an entry. |
| [BACK] key | This cancels an entry and returns you to the previous screen. |
| [CA] key (C) | This cancels the setting and returns the display to the base screen of the mode that was in effect before the key operator programs were entered. |
| [SPECIAL FUNCTION] key | This cancels the setting and returns the display to the base screen of the mode that was in effect before the key operator programs were entered. |

2. When you have completed all settings, press the [OK] key.
   The settings will be saved.

3. Turn off the machine power, wait for a few seconds, and then turn on the power again.
   The new settings will take effect after the power is turned on.
TROUBLESHOOTING

This chapter explains what to do when the machine does not connect to the network or when problems occur during printing.

For problems related to the machine such as running out of paper or paper misfeeds, see the "Operation manual (for general information and copier)".

Network connection problems

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause and solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The machine does not connect to the network.</td>
<td><strong>The LAN cable is disconnected.</strong>&lt;br&gt; → Make sure that the LAN cable is firmly inserted in the connectors on the machine and your computer. To connect the cable, see the &quot;Software setup guide&quot;.</td>
<td>Software setup guide</td>
</tr>
<tr>
<td></td>
<td><strong>Is the machine configured for use on the same network as the computer?</strong>&lt;br&gt; → The machine cannot be used if it is not connected to the same network as the computer, or if it is not configured for use on the network.&lt;br&gt; For more information, consult your network administrator.</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td><strong>(Points to check on the Macintosh)</strong>&lt;br&gt; <strong>AppleTalk is disabled.</strong>&lt;br&gt; → In Mac OS X, click [Network] in [System Preferences] and select Ethernet in &quot;Show&quot;. Click the [AppleTalk] tab and make sure that [Make AppleTalk Active] is selected.&lt;br&gt; In Mac OS 8.6 to 9.2.2, open [Chooser] from the Apple menu and make sure that [Active] is selected. Printing is not possible if [Active] is not selected.&lt;br&gt; <strong>[Ethernet] is not selected for &quot;Connect via&quot; for AppleTalk? (Mac OS 8.6 to 9.2.2)</strong>&lt;br&gt; → Open [AppleTalk] from the [Control Panels] and make sure that [Ethernet] is selected in the &quot;Connect via&quot; menu. Printing is not possible if [Ethernet] is not selected.</td>
<td>–</td>
</tr>
</tbody>
</table>
## Problems during printing

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause and solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The machine does not receive print data. (The DATA indicator does not blink.)</td>
<td>The machine is set to off-line mode. → Press the [PRINT] key to select printer mode and then select “ONLINE” with the [▲] key.</td>
<td>3, 17</td>
</tr>
<tr>
<td></td>
<td>Your machine is not selected correctly in the application for the print job. → In the dialog box that appears after you select [Print] from the [File] menu in the application, make sure you have selected the machine as the printer.</td>
<td>3, 17</td>
</tr>
<tr>
<td></td>
<td>Copying or scanning is in progress, or a fax is being printed (when the fax option is installed). → Wait until copying, scanning, or fax printing is finished.</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Has the printer driver been installed correctly? → Install the appropriate printer driver. For the procedure for installing the printer driver, see the “Software setup guide”, which accompanies the machine.</td>
<td>Software setup guide</td>
</tr>
<tr>
<td></td>
<td>The port setting is not correct. → Printing is not possible if the printer driver port setting is not correct. Set the port correctly.</td>
<td>Software setup guide</td>
</tr>
<tr>
<td></td>
<td>“CANCEL JOBS OF INVALID ACCOUNTS” is enabled. → Enter a correct account number in the printer driver before printing (consult your key operator).</td>
<td>5, 19</td>
</tr>
<tr>
<td></td>
<td>The printed page limit has been reached. → Consult your key operator. (Depending on the machine status, the DATA indicator may blink.)</td>
<td>Key operator’s guide</td>
</tr>
<tr>
<td>Printing does not take place. (The DATA indicator is blinking.)</td>
<td>There is no paper in the specified tray. → Load paper in the tray.</td>
<td>Operation manual (for general information and copier)</td>
</tr>
<tr>
<td></td>
<td>“FORCED OUTPUT OF PRINT” is disabled. → Add paper to the bypass tray, press the [PRINT] key on the machine to switch to printer mode, and then select “BYPASS-TRAY”. Printing will resume.</td>
<td>4, 19</td>
</tr>
<tr>
<td>Printing is slow.</td>
<td>Simultaneous use of two or more application software programs. → Start printing after quitting all unused application software programs.</td>
<td>–</td>
</tr>
<tr>
<td>The printed image is light and uneven.</td>
<td>The paper is loaded so that printing takes place on the back side of the paper. → 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 a good image will not be obtained.</td>
<td>Operation manual (for general information and copier)</td>
</tr>
<tr>
<td></td>
<td>You are using paper that is outside the specified size and weight range. → Use paper within the specified range.</td>
<td>Operation manual (for general information and copier)</td>
</tr>
<tr>
<td></td>
<td>The paper is curled or damp. → Replace the 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.</td>
<td>Operation manual (for general information and copier)</td>
</tr>
<tr>
<td></td>
<td>You did not set sufficient margins in the paper settings of your application. → The top and bottom of the paper may be dirty if the margins are set outside of the specified print quality area. → Set the margins within the specified print quality area.</td>
<td>–</td>
</tr>
</tbody>
</table>
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.

What to do when a notice page is printed

The printed image is skewed or it runs off the paper.

The paper size set in the printer driver is not the same as the paper size loaded in the tray.

→ Make sure that the paper size setting matches the size of the paper loaded in the tray. If the [Fit to Page] setting is selected in Windows, make sure that the paper size selected in the "Fit To Paper Size" drop-down list is the same as the size of the paper loaded in the tray.

The image orientation setting in the printer driver is not correct.

→ On a Windows environment, click the [Paper] tab in the printer driver setup screen and make sure that "Image Orientation" is set to the correct orientation. On a Macintosh, make sure that the correct orientation is selected in the application settings.

Paper is not loaded properly.

→ Make sure the paper is correctly loaded.

The margins are not set correctly in the application.

→ Check the paper size and margin settings in the application. Also make sure that the print settings are correct for the paper size.

---

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.

What to do when a notice page is printed

The printed image is skewed or it runs off the paper.

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→ Make sure that the paper size setting matches the size of the paper loaded in the tray. If the [Fit to Page] setting is selected in Windows, make sure that the paper size selected in the "Fit To Paper Size" drop-down list is the same as the size of the paper loaded in the tray.

The image orientation setting in the printer driver is not correct.

→ On a Windows environment, click the [Paper] tab in the printer driver setup screen and make sure that "Image Orientation" is set to the correct orientation. On a Macintosh, make sure that the correct orientation is selected in the application settings.

Paper is not loaded properly.

→ Make sure the paper is correctly loaded.

The margins are not set correctly in the application.

→ Check the paper size and margin settings in the application. Also make sure that the print settings are correct for the paper size.

---

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.

What to do when a notice page is printed

The printed image is skewed or it runs off the paper.

The paper size set in the printer driver is not the same as the paper size loaded in the tray.

→ Make sure that the paper size setting matches the size of the paper loaded in the tray. If the [Fit to Page] setting is selected in Windows, make sure that the paper size selected in the "Fit To Paper Size" drop-down list is the same as the size of the paper loaded in the tray.

The image orientation setting in the printer driver is not correct.

→ On a Windows environment, click the [Paper] tab in the printer driver setup screen and make sure that "Image Orientation" is set to the correct orientation. On a Macintosh, make sure that the correct orientation is selected in the application settings.

Paper is not loaded properly.

→ Make sure the paper is correctly loaded.

The margins are not set correctly in the application.

→ Check the paper size and margin settings in the application. Also make sure that the print settings are correct for the paper size.
CHECKING THE IP ADDRESS

There are several settings where the IP address must be entered or checked. To check the IP address of the machine, hold down the status button on the network expansion kit for at least 2 seconds to print out a Printer Setting List.

---

**How to reset the network expansion kit**

To reset the network expansion kit, power on the machine while holding down the status button on the network expansion kit. Network scanner destination information and scanning settings will remain after the network expansion kit is reset, however, the network settings and network printer settings will revert to the factory default settings.

---

Caution
## PRINTER SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>When the dual function board is installed:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>When the dual function board is not installed:</strong></td>
<td>12 pages/min</td>
</tr>
<tr>
<td><strong>Printing speed</strong>&lt;sup&gt;*&lt;/sup&gt;&lt;sup&gt;1&lt;/sup&gt;</td>
<td><strong>Resolution</strong>&lt;sup&gt;2&lt;/sup&gt; 600 dpi / 300 dpi</td>
</tr>
<tr>
<td></td>
<td><strong>Network expansion kit memory</strong>&lt;sup&gt;*&lt;/sup&gt;&lt;sup&gt;3&lt;/sup&gt; Standard memory: 64 MB Additional memory slot: 1 slot (an additional 128 MB or 256 MB memory module (144-pin SDRAM SODIMM) can be installed)</td>
</tr>
<tr>
<td><strong>Emulation</strong></td>
<td><strong>Installed fonts</strong> PCL6/PCL5e compatible: 80 outline fonts and 1 bitmap font PostScript 3 compatible&lt;sup&gt;*&lt;/sup&gt;&lt;sup&gt;3&lt;/sup&gt;: 136 outline fonts</td>
</tr>
<tr>
<td><strong>Interface</strong></td>
<td>10/100Base-TX network interface</td>
</tr>
</tbody>
</table>

<sup>*</sup>1 Print speed during printing of the second sheet and following sheets when using 8-1/2" x 11" (A4) plain paper and performing continuous one-sided printing of the same page; excluding use of offset output.  
<sup>*</sup>2 300 dpi can only be selected when using the PCL6 or PCL5e printer driver.  
<sup>*</sup>3 For information on machine and dual function board memory, see the "Operation manual (for general information and copier)".  
<sup>*</sup>4 Available only if the PS3 expansion kit (AR-PK1/N) is installed.  

---

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.
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<tr>
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<th>PCL5e</th>
<th>PS</th>
<th>Windows PPD</th>
<th>Macintosh PPD</th>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Number of copies</td>
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<td>1 to 999</td>
<td>1 to 999</td>
<td>1 to 999</td>
<td>1 to 999</td>
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<tr>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>N-up</td>
<td>2, 4, 6, 8, 9, 16</td>
<td>2, 4, 6, 8, 9, 16</td>
<td>2, 4, 6, 8, 9, 16</td>
<td>2, 4*1</td>
<td>2, 4, 6, 9, 16</td>
</tr>
<tr>
<td>Order</td>
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<td>Selectable</td>
<td>Selectable</td>
<td>Fixed</td>
<td>Selectable</td>
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<tr>
<td>Border</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Yes/No*1</td>
<td>Selectable</td>
</tr>
<tr>
<td>Two-sided printing*2</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Binding Style*2</td>
<td>Book/Tablet</td>
<td>Book/Tablet</td>
<td>Book/Tablet</td>
<td>Long Side / Short Side</td>
<td>Long Side / Short Side</td>
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<tr>
<td>Pamphlet Style*2</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No*3</td>
</tr>
<tr>
<td><strong>Source Selection</strong></td>
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<td></td>
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<td></td>
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<tr>
<td>Paper size</td>
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<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Custom Paper Size</td>
<td>1 size</td>
<td>1 size</td>
<td>1 size</td>
<td>3 sizes*4</td>
<td>1 size*5</td>
</tr>
<tr>
<td>Source Selection</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Output tray settings</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cover Settings</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Graphics</strong></td>
<td></td>
<td></td>
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<tr>
<td>Resolution</td>
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<td>Halftone</td>
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<td>Graphics Mode</td>
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<td>Zoom</td>
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<td>Mirror Image</td>
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<td>Negative Image</td>
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<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Fit To Page</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Fonts</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Resident fonts</td>
<td>80 fonts</td>
<td>80 fonts</td>
<td>136 fonts</td>
<td>136 fonts*6</td>
<td>35 fonts</td>
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<tr>
<td>Selectable download fonts</td>
<td>bitmap, TrueType, Graphics</td>
<td>bitmap, TrueType, Graphics</td>
<td>bitmap, Type1, TrueType</td>
<td>bitmap, Type1, TrueType</td>
<td>No*7</td>
</tr>
<tr>
<td><strong>Other functions</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Automatic configuration settings</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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</tr>
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<td>ROPM*9</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Overlay</td>
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<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Job Control</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes*5</td>
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<tr>
<td>Watermark</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Job Compression</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Bitmap Compression</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

*1 N-up printing cannot be used in Windows NT 4.0. In Windows 2000/XP/Server 2003, 2, 4, 6, 9, and 16 N-up printing can be used.

*2 Only for models that support two-sided printing.

*3 Pamphlet style printing is available in Windows 2000/XP/Server 2003.

*4 A custom paper size cannot be set in Windows NT 4.0. In Windows 2000/XP/Server 2003, one custom paper size can be set.

*5 Cannot be used in Mac OS X v10.1.5.

*6 In Windows NT 4.0, 35 resident fonts are available.

*7 Type 1 and TrueType can be selected in some versions of LaserWriter.

*8 Cannot be used in Mac OS X.

*9 Can only be used when the dual function board is installed.
DIGITAL MULTIFUNCTIONAL SYSTEM

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Note
• This manual assumes that the personnel who are installing this product and the users of the product have a working knowledge of Windows and Macintosh computers.
• For information on the operating system, please refer to your operating system manual or the online Help function.
• Some of the windows that appear in this manual may vary depending on your computer type and settings.

• In some regions the "Key operator's guide" cited in this manual is a separate manual, and in other regions the "Key operator's guide" is included in the "Operation manual (for general information and copier)".
• The dual function board mentioned in this manual can be installed as an option on some models and is installed standard on other models. For more information, see "3. PERIPHERAL DEVICES AND SUPPLIES" of the "Operation manual (for general information and copier)".

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

Thank you for purchasing this product. This manual explains how to install the printer driver and utilities that are required for the printer and scanner functions.

The optional network expansion kit (AR-NB3) enables the machine to be used as a network scanner and network printer. The optional PS3 expansion kit (AR-PK1/N) enables the machine to be used as a PostScript compatible printer. When the machine is used as a PostScript printer, printing is possible in both a Windows and a Macintosh environment. Note that printing in a Macintosh environment is only possible via a network connection. (Parallel and USB ports cannot be used in a Macintosh environment.)

Software setup guide (this manual)

Explains the procedures for installing the software in the "Software" CD-ROMs that accompany the machine and the optional network expansion kit (AR-NB3).

To use the machine as a printer or scanner, see this manual and the online manuals.

Using the standard printer function and scanner function

• Operation manual (for printer and scanner)
  This is an online manual that can be found in the "Software CD-ROM (1)" that accompanies the machine. This manual contains information necessary for using the machine as a printer and scanner, including printing by means of the standard printer driver, printing by means of the SPLC printer driver that can be used when the dual function board is installed, scanning using Button Manager, troubleshooting, and key operator programs for the printer and network functions.

Using the network printer function

• Operation manual (for network printer)
  This is an online manual that can be found in the "Software CD-ROM (1)" that accompanies the network expansion kit. This manual contains information necessary for using the machine as a printer, including printing condition settings, printing using the PCL5e and PCL6 printer drivers, and the PS printer driver, troubleshooting, and key operator programs for the printer and network functions.

Using the network scanner function

• Operation manual (for network scanner)
  This is an online manual that can be found in the "Software CD-ROM (1)" that accompanies the network expansion kit. Read this manual for information on using Scan to FTP, Scan to E-mail, and other network scanner functions.

The following help files are installed when the software on the "Software CD-ROM (1)" that accompanies the network expansion kit is installed:

• Printer Status Monitor Help file
• Printer Administration Utility Help file

Online manual contained in the "Network Utilities CD-ROM"

• Print Server Card Online Manual

SOFTWARE LICENSE

The SOFTWARE LICENSE will appear when you install the software from the CD-ROM. By using all or any portion of the software on the CD-ROM or in the machine, you are agreeing to be bound by the terms of the SOFTWARE LICENSE.

The explanations in this manual are based on American English and the North American version of the software. Software for other countries and regions may vary slightly from the North American version.
ABOUT THE CD-ROMS

This product includes CD-ROMs that are provided standard with the machine and CD-ROMs that are provided with the optional network expansion kit (AR-NB3).

For Windows

CD-ROM provided standard with the machine

There are two CD-ROMs that are provided with the machine.

Software CD-ROM (1)

This CD-ROM contains a wizard-type installer for installation of the utilities below and the online manual "Operation Manual (for printer and scanner)".

For the procedure for installing the software, see page 7 of this manual.

MFP Driver
- Printer driver
  The printer driver enables you to use the printer function of the machine.
  There are two types of printer drivers for the machine: a standard printer driver and a printer driver* that is used when the dual function board is installed.
  * When the dual function board is installed, "(EB)" appears in the name of the installed printer driver. Furthermore, the printer driver for the dual function board enables a faster printing speed.
- Scanner driver
  The scanner driver allows you to use the scanning function of the machine with TWAIN-compliant and WIA-compliant applications.

Button Manager

Button Manager is a software utility that allows you to use the [SCAN] key on the machine to scan a document.

Acrobat Reader 5.0

This program is used to view the online manuals on your computer screen.

Sharpdesk

Sharpdesk is an integrated software environment that makes it easy to manage document and image files and launch applications.

Online Manual

This is a manual in PDF format that is viewed using Adobe Acrobat Reader. To view the online manual "Operation Manual (for printer and scanner)" on the CD-ROM, specify the following path. (Note that "R" represents the letter of your CD-ROM drive.)

R:\Manual\EnglishA\AR_161_162_163.pdf

The scanning feature can only be used with computers that are running Windows 98/Me/2000/XP and are connected to the machine by a USB cable. If you are running Windows 95/NT 4.0 or are connected by a parallel cable, only printing is available.

Software CD-ROM (2)

This CD-ROM contains a minimal version of Internet Explorer 6.0 SP1. For the installation procedure, double-click "Readme.txt" in the root folder of the "Software CD-ROM (2)" to view the Readme file.
CD-ROMS in the network expansion kit (AR-NB3)

The optional network expansion kit includes the following four CD-ROMs:

1. "Software CD-ROM (1)" included in the network expansion kit
   This CD-ROM contains a wizard-type installer for installation of the following utilities, and online manuals.
   For the procedure for installing the software, see page 20 of this manual.
   - **Printer driver**
     Contains the PCL5e and PCL6 printer drivers, and the PS printer driver that are needed to use this product.
   - **Printer Status Monitor**
     When using the printer in a network environment, this provides messages and displays that allow you to monitor the status of the printer.
   - **Printer Administration Utility**
     When using the printer in a network environment, this administration utility makes it possible to configure printer settings and monitor the printer from a computer. (This utility is for use by system administrators.)
   - **NICManager**
     Use this program to configure and check the IP address when the machine is connected to a network.
   - **Acrobat Reader 5.0**
     This program is used to view the online manuals on your computer screen.
     To install Acrobat Reader, see page 42 of this manual.
   - **Online Manuals**
     Manuals in PDF format that are viewed using Adobe Acrobat Reader. To view the online manuals on the CD-ROM, specify the following paths. (Note that "R" represents the letter of your CD-ROM drive.)
     - **For network printer:** `R:\Manual\EnglishA\OnlineManual\AR_NB3_Prn.pdf`
     - **For network scanner:** `R:\Manual\EnglishA\OnlineManual\AR_NB3_Scn.pdf`
   *1 In order to use the Printer Status Monitor and Printer Administration Utility, the machine must be connected to a network.

2. "Network Utilities" CD-ROM
   This CD-ROM contains utilities for using the machine as a network printer and an online manual.
   - **Print Server Card Quick Setup**
   - **Print Server Card Standard Setup**
     This installs and launches "NICManager", which enables administration and configuration of advanced print server settings.
   - **Online Manual**
     This manual in PDF format explains how to use the "Network Utilities" CD-ROM.

3. "Sharpdesk" CD-ROM
   - **Sharpdesk (Desktop Document Management Software)**
   - **Network Scanner Tool**
   - **SHARP TWAIN AR/DM (TWAIN driver)**
   - **OmniPage Pro Trial (ScanSoft, inc.)**

4. "Software CD-ROM (2)"
   - **Internet Explorer 6.0 SP1**
3. "Sharpdesk" CD-ROM

Sharpdesk is an integrated software environment that makes it easy to manage document and image files, and launch applications.
For information on the "Sharpdesk" CD-ROM and how to install Sharpdesk, see the "Sharpdesk installation guide" that accompanies the machine.

Sharpdesk (Desktop Document Management Software)
Sharpdesk is used to manage images scanned from the machine and files created in various software programs.

Network Scanner Tool
This is a utility that helps you use Scan to Desktop. The utility allows you to configure settings to receive scanned images from the machine to your computer. You can have Sharpdesk launch automatically when your computer receives a scanned image from the machine.

SHARP TWAIN AR/DM
This is used to acquire black and white images from a TWAIN interface into TWAIN-compliant software applications.

OmniPage Pro Trial (ScanSoft, inc.)
This is used to scan text printed on paper and convert the image data into text data by means of OCR (Optical Character Recognition).

4. "Software CD-ROM (2)"

This CD-ROM contains a minimal version of Internet Explorer 6.0 SP1. For the installation procedure, double-click "Readme.txt" in the root folder of the "Software CD-ROM (2)" to view the Readme file.

Using the machine in a macintosh environment
To use the machine as a printer for the Macintosh, the PS3 expansion kit (AR-PK1/N) must be installed.
Install the PPD file needed to use the machine as a printer from the "Software CD-ROM (1)" that accompanies the network expansion kit (AR-NB3).

1. "Software CD-ROM (1)" that accompanies the network expansion kit

This CD-ROM contains the software that is needed to use the machine in a Macintosh environment and the online manuals "Operation Manual (for network printer)" and "Operation Manual (for network scanner)".
To open the online manual "Operation Manual (for network printer)", double-click the [AR-NB3 Printer Manual] folder, the [EnglishA]+ folder, and then the [Printer Manual] icon.
To open the online manual "Operation Manual (for network scanner)", double-click the [AR-NB3 Scanner Manual] folder, the [EnglishA]+ folder, and then the [Scanner Manual] icon.
For the procedure for installing the software, see page 32 of this manual.

PPD file
This file contains printer information necessary for printing.

Acrobat Reader 4.05
This program is used to view the online manuals on your computer screen.
To install Acrobat Reader, see page 42 of this manual.

![Note]
The PPD file on the "Software CD-ROM (1)" that accompanies the network expansion kit cannot be used when the machine is connected to your computer with a USB or parallel cable.

2. "Network Utilities" CD-ROM that accompanies the network expansion kit

This CD-ROM contains utilities required when using the machine as a printer in a Macintosh environment.

PSC Setup Utility
This is a utility that lets you configure the machine's network settings from a Macintosh.

Online Manual
This manual in PDF format explains how to use the "Network Utilities" CD-ROM.
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INSTALLING THE SOFTWARE (THAT ACCOMPANIES THE MACHINE)

BEFORE INSTALLATION

HARDWARE AND SOFTWARE REQUIREMENTS
Before installing the software, see "HARDWARE AND SOFTWARE REQUIREMENTS" on page 43 to make sure your computer meets the hardware and software requirements.

INSTALLATION ENVIRONMENT AND USEABLE SOFTWARE
The software that can be installed varies depending on your operating system version and type of connection to the machine.

<table>
<thead>
<tr>
<th>Windows version</th>
<th>MFP Driver</th>
<th>Button Manager</th>
<th>Sharpdesk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Printer driver</td>
<td>Scanner driver</td>
<td></td>
</tr>
<tr>
<td>Windows 98/Me/2000/XP</td>
<td>Available*2,3</td>
<td>Available</td>
<td>Available</td>
</tr>
<tr>
<td>USB 2.0 connection*1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows 95/98/Me/NT 4.0</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Available*4</td>
</tr>
<tr>
<td>2000/XP Parallel connection</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*1 Windows 98/Me does not support USB 2.0. A USB 2.0 connection can be used in Windows 98/Me, however, the performance will be the same as USB 1.1. The print speed based on USB 2.0 specifications can only be attained if your computer is running Windows 2000/XP, you are using a cable that supports USB 2.0, and the cable is connected to a USB 2.0 port on your computer. If the connection is made through a hub, the hub must support USB 2.0.
*2 USB 2.0 (Hi-Speed) can be used when the dual function board is installed.
*3 When the machine is connected using a parallel cable, the Print Status Window can only be used when the parallel port is set to ECP mode.
*4 The printer driver that is installed varies depending on the type of connection between the machine and your computer.

INSTALLING THE SOFTWARE

INSTALLATION USING THE INSTALLER
The software programs installed and the steps for installation vary depending on the version of Windows you are running and the type of connection to your computer. Refer to the following table for the appropriate procedure for your environment.

<table>
<thead>
<tr>
<th>Type of connection</th>
<th>Windows version</th>
<th>Windows XP</th>
<th>Windows 2000/98/Me</th>
<th>Windows 95/NT 4.0</th>
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<tbody>
<tr>
<td>USB cable connection* (standard installation)</td>
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<tr>
<td>USB cable connection* (custom installation)</td>
<td>INSTALLATION METHOD 2 (pages 10 to 11)</td>
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<td></td>
</tr>
<tr>
<td>Parallel cable connection (custom installation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Windows 95 and Windows NT 4.0 are not supported.
INSTALLATION METHOD 1

Use this procedure to install the software in the following environments:
1. The printer is connected by USB cable.

The following procedure uses Windows XP as an example. Follow the same steps to install the software on other operating systems.

* To install the software, you must have administrator's rights.

Standard installation (only when using a USB cable)

The procedure for a standard installation of the software is explained below.
The standard installation procedure is normally used when the machine is connected by a USB cable and you wish to install all the software components.

If the machine is used as a shared printer via a server or is connected by a parallel cable and you only wish to install certain components, select "Custom installation". (Pages 10 to 17)

1. Make sure that the USB cable is not connected to the machine.
   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.

2. Insert the "Software CD-ROM (1)" that accompanies the machine into your computer's CD-ROM drive.

3. Click the [start] button, click [My Computer] ( ), and then double-click the [CD-ROM] icon ( ).
   In Windows 98/Me/2000, 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.)

5. The "SOFTWARE LICENSE" window will appear. Make sure that you understand the contents of the license agreement and then click the [Yes] button.

6. Read the message in the "Welcome" window and then click the [Next] button.

7. Click the [Standard] button.

   After the "Integrated Installer is preparing..." message appears, the software components below will be automatically installed. Follow the on-screen instructions.
   • MFP Driver
   • Button Manager
   • Sharpdesk

The cable will be connected in step 9.
When the “Finish” screen appears, click the [Close] button.

When "Now connect the MFP interface cable to the PC." appears, click the [OK] button.

If you are using Windows 2000/XP
If a warning message regarding the Windows logo test or digital signature appears, be sure to click the [Continue Anyway] or [Yes] button.

After the installation, a message prompting you to restart your computer may appear. If this message appears, click the [Yes] button to restart your computer.

Connect the machine to your computer with the USB cable. (Page 44)
Make sure that the machine is powered on. The machine is found and a plug and play window appears. Follow the on-screen instructions.

If the following message appears on your computer screen, close it.

A window regarding "HI-SPEED USB Device" will then appear. Close the window.
This message appears when the machine’s USB 2.0 mode is not set to "Hi-Speed". For information on switching the USB 2.0 mode, see the "Key operator’s guide".

If you are using Windows 2000/XP
If a warning message regarding the Windows logo test or digital signature appears, be sure to click the [Continue Anyway] or [Yes] button.

If the dual function board is installed, the "AR-XXXX (EB)" printer driver and scanner driver will be installed.

This completes the installation.
• After installing the MFP Driver, see "CONFIGURING THE PRINTER DRIVER" (page 42) to configure the printer driver settings.
• After installing Button Manager, see "SETTING UP BUTTON MANAGER" (page 18) to set up Button Manager.
INSTALLATION METHOD 2

Use this procedure to install the software in the following environments:

1. The printer is connected by USB cable or parallel cable.
2. Windows version: Windows XP

Note To install this software, you must have administrator’s rights.

Custom installation

Installation methods 2 through 4 are for custom installations of the software. If the machine is used as a shared printer via a server or is connected by a parallel cable and you only wish to install required software components, select "Custom installation".

1. Make sure that the USB or parallel cable is not connected to the machine and your computer.
   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.

   Note The cable will be connected in step 14.

2. Insert the "Software CD-ROM (1)" that accompanies the machine into your computer’s CD-ROM drive.

3. Click the [start] button, click [My Computer] ( ), and then double-click the [CD-ROM] icon ( ).

4. Double-click the [Setup] icon ( ).

   Note 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.)

5. The "SOFTWARE LICENSE" window will appear. Make sure that you understand the contents of the license agreement and then click the [Yes] button.

6. Read the message in the "Welcome" window and then click the [Next] button.

7. Click the [Custom] button.

8. If you wish to install the MFP driver, click the [MFP Driver (Printer/Scanner)] button.
   To view information on the software, click the [Display Readme] button.

9. Click the [Next] button.
10 The files required for installation of the MFP driver are copied (if "MFP Driver" was selected in Step 8).
Follow the on-screen instructions.
When you are asked how the printer is connected, select [Connected to this computer] and click the [Next] button.

11 If you wish to install Button Manager or Sharpdesk, click the [Utility Software] button in step 8.

12 Click the [Button Manager] or [Sharpdesk] button.
To view information on the software, click the [Display Readme] button.
Follow the on-screen instructions.

• If you are using a parallel cable, do not select "Button Manager". This feature is not supported when a parallel cable is used.
• When a message appears prompting you to connect the USB cable, click the [OK] button. For the software that can be installed, see "INSTALLATION ENVIRONMENT AND USEABLE SOFTWARE" (page 7).

13 Click the [Close] 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.

14 Connect the machine to your computer with the interface cable.  
(Page 44)
• If you are using a USB cable, make sure the machine power is turned on and then connect the cable.
• If you are using a parallel cable, turn off both the machine power and the computer power and then connect the cable. Turn the machine power on first and then turn on your computer. The machine is found and a plug and play window appears. If you are using a parallel cable, go to step 16.

15 Installation of the scanner driver begins. (only when using a USB cable).
"SHARP AR-XXXX" will appear in the "Found New Hardware Wizard" dialog box. Select [Install the software automatically (Recommended)], click the [Next] button, and follow the on-screen instructions.

16 Installation of the printer driver begins.
"SHARP AR-XXXX" will appear in the "Found New Hardware Wizard" dialog box. Select [Install the software automatically (Recommended)], click the [Next] button, and follow the on-screen instructions.

This completes the installation.
• If you installed the MFP Driver, see "CONFIGURING THE PRINTER DRIVER" (page 42) to configure the printer driver settings.
• If you installed Button Manager, see "SETTING UP BUTTON MANAGER" (page 18) to set up Button Manager.
INSTALLATION METHOD 3

Use this procedure to install the software in the following environments:
1. The printer is connected by USB cable.
2. Windows version: Windows 98/Windows Me/Windows 2000*

* To install this software, you must have administrator's rights.

1 Make sure that the USB cable is not connected to the machine.
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.

Note The cable will be connected in step 11.

2 Insert the "Software CD-ROM (1)" that accompanies the machine into your computer's CD-ROM drive.

3 Double-click [My Computer] and then double-click the [CD-ROM] icon.

4 Follow steps 4 through 7 in "INSTALLATION METHOD 2".

5 If you wish to install the MFP driver, click the [MFP Driver (Printer/Scanner)] button.
To view information on the software, click the [Display Readme] button.

6 Click the [Next] button.

7 The files required for installation of the MFP driver are copied (if "MFP Driver" was selected in Step 5).
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].

Caution If you are using Windows 2000
If you are using Windows 2000 and a warning message regarding the digital signature appears while the MFP driver files are being copied (the warning message may appear several times), be sure to click the [Continue Anyway] button.

When "The MFP driver installation is complete." appears, click the [OK] button.
8 If you wish to install Button Manager or Sharpdesk, click the [Utility Software] button in step 5.
If you do not wish to install either, go to step 10.

9 Click the [Button Manager] or [Sharpdesk] button.
• To view information on the software, click the [Display Readme] button.
• Follow the on-screen instructions.

10 Click the [Close] 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.

11 Connect the machine to your computer with the USB cable. (Page 44)
Make sure that the machine is powered on. The machine is found and a plug and play window appears. Follow the on-screen instructions.

If you are using Windows 2000
If a warning message regarding the digital signature appears, be sure to click the [Yes] button.

If the dual function board is installed, the “AR-XXXX (EB)” printer driver and scanner driver will be installed.

This completes the installation.
• If you installed the MFP Driver, see "CONFIGURING THE PRINTER DRIVER" (page 42) to configure the printer driver settings.
• If you installed Button Manager, see "SETTING UP BUTTON MANAGER" (page 18) to set up Button Manager.
INSTALLING THE SOFTWARE (THAT ACCOMPANIES THE MACHINE)

INSTALLATION METHOD 4

Use this procedure to install the software in the following environments:
1. The printer is connected by parallel cable.
2. Windows version: Windows 95/Windows 98/Windows Me/Windows NT 4.0*/Windows 2000*

* To install this software, you must have administrator's rights.

1. Make sure that the parallel cable is not connected to the machine and your computer 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 17.

2. Insert the "Software CD-ROM (1)" that accompanies the machine into your computer's CD-ROM drive.

3. Double-click [My Computer] and then double-click the [CD-ROM] icon.

4. Follow steps 4 through 7 in "INSTALLATION METHOD 2".

5. If you wish to install the MFP driver, click the [MFP Driver (Printer/Scanner)] button.
   To view information on the software, click the [Display Readme] button.

6. Click the [Next] button.

7. Installation of the MFP driver (printer driver) begins (if "MFP Driver" was selected in Step 5).
   Follow the on-screen instructions. If you are using Windows 95/NT 4.0, go to step 10.

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

9. When the interface selection screen appears, select [Parallel] and click the [Next] button.
10 Select the printer port and click the [Next] button.
Select [LPT1] for the printer port.

11 When asked to select the printer driver to install, select the appropriate printer driver based on whether or not the dual function board is installed, and then click the [Next] button.
If the dual function board is not installed, be sure to select [For standard model].

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

13 Click the [Yes] button.

14 When "The MFP driver installation is complete." appears, click the [OK] button.

15 If you wish to install Sharpdesk, click the [Utility Software] button in step 5.
If you do not wish to install Sharpdesk, go to step 18.

16 Click the [Sharpdesk] button.
• To view information on the software, click the [Display Readme] button.
• Follow the on-screen instructions.

17 When the "Finish" screen appears, click the [Close] button.
When "Now connect the MFP interface cable to the PC." appears, click the [OK] button.

18 Turn off the power of the machine and your computer, and connect the machine to your computer with the parallel cable. (Page 44)
After connecting the machine to your computer, turn on the power of the machine and then start up your computer.

This completes the installation.
If you installed the MFP driver, see "CONFIGURING THE PRINTER DRIVER" (page 42) to configure the printer driver settings.
USING THE MACHINE AS A SHARED PRINTER VIA A SERVER

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. Follow these steps to install the printer driver in the client computer.

Ask your network administrator for the server name and printer name of the machine on the network.

---

For the procedure for configuring settings in the printer server, see the "Operation manual (for printer and scanner)".

The "printer server" explained here is a computer that is connected to the machine, and "clients" are other computers connected to the same network as the printer server.

---

1. Insert the "Software CD-ROM (1)" that accompanies the machine into your computer's CD-ROM drive.

2. 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.

3. Follow steps 4 through 7 in "INSTALLATION METHOD 2".

4. Click the [MFP Driver (Printer/Scanner)] button.
   To view information on the software, click the [Display Readme] button.

5. Click the [Next] button.

6. The files required for installation of the MFP driver are copied (if "MFP Driver" was selected in Step 4).
   Follow the on-screen instructions.

   When you are asked how the printer is connected, select [Connected via the network] and click the [Next] button.

7. When you are asked to select the printer port to be used, click the [Add Network Port] button.
Select the network printer that is shared and click the [OK] button.

In the printer port selection window, verify the network printer that is shared and click the [Next] button.

When the model selection window appears, select model name of your machine and click the [Next] button. Follow the on-screen instructions.

If you are using Windows 2000/XP. If a warning message regarding the Windows logo test or digital signature appears, be sure to click the [Continue Anyway] or [Yes] button.

Click the [Close] button.

This completes the installation.

Ask your network administrator for the server name and printer name of the machine on the network.
SETTING UP BUTTON MANAGER

Button Manager is a software program that works with the scanner driver to enable scanning from the operation panel of the machine.

To scan using the operation panel of the machine, Button Manager must be linked with the destination that appears in the display. Follow the steps below to link Button Manager to machine scanner events.

If computers are connected to both of the USB ports on the machine, separate Button Manager settings are required for USB-1 and USB-2. (when the dual function board is installed.)

WINDOWS XP

1. Click the [start] button, click [Control Panel], click [Printers and Other Hardware], and then click [Scanners and Cameras].


3. In the "Properties" screen, click the [Events] tab.

4. Select [SC1:] from the "Select an event" pull-down menu.

5. Select [Start this program] and then select [Sharp Button Manager G] from the pull-down menu.

6. Click the [Apply] button.

7. Repeat Steps 4 through 6 to link Button Manager to [SC2:] through [SC6:].
   - Select [SC2:] from the "Select an event" pull-down menu. Select [Start this program], select [Sharp Button Manager G] from the pull-down menu, and then click the [Apply] button. Do the same for each ScanMenu through [SC6:].
   - When the settings have been completed, click the [OK] button to close the screen.

Button Manager is now linked to the machine scan destinations SC1 to SC6.
- The scan settings for each of scan destinations SC1 through SC6 can be changed in the setting window of Button Manager.
- For the default settings for destinations SC1 to SC6 and the procedures for configuring Button Manager settings, see "Scanning from the Operation Panel of the Machine" and "Button Manager Settings" in "Operation Manual (for printer and scanner)" in the "Software CD-ROM (1)" that accompanies the machine.
**INSTALLING THE SOFTWARE (THAT ACCOMPANIES THE MACHINE)**

**WINDOWS 98/ME/2000**

1. **Click the [Start] button, select [Settings], and then click [Control Panel].**

2. **Double-click the [Scanners and Cameras] icon.**
   - If the [Scanners and Cameras] icon does not appear in Windows Me, click [view all Control Panel options].

3. **Select [SHARP AR-XXXX] and click the [Properties] button.**
   - In Windows Me, right click [SHARP AR-XXXX] and click [Properties] in the menu that appears.

4. **In the "Properties" screen, click the [Events] tab.**

5. **Select [SC1:] from the "Scanner events" pull-down menu.**

6. **Select [Sharp Button Manager G] in "Send to this application".**

```
1 2 3 4 5 6 7 8
```

7. **Click the [Apply] button.**

8. **Repeat Steps 5 through 7 to link Button Manager to [SC2:] through [SC6:].**
   - Select [SC2:] from the "Scanner events" pull-down menu. Select [Sharp Button Manager G] in "Send to this application" and click the [Apply] button. Do the same for each scan destination through [SC6:].
   - When the settings have been completed, click the [OK] button to close the screen.

```
1 2 3 4 5 6 7 8
```

- **Note** In Windows 2000, restart your computer.

**Button Manager is now linked to the machine scan destinations SC1 to SC6.**
- The scan settings for each of scan destinations SC1 through SC6 can be changed in the setting window of Button Manager.
- For the default settings for destinations SC1 to SC6 and the procedures for configuring Button Manager settings, see "Scanning from the Operation Panel of the Machine" and "Button Manager Settings" in "Operation Manual (for printer and scanner)" in the "Software CD-ROM (1)" that accompanies the machine.
INSTALLATION FOR A NETWORK CONNECTION

The procedures for installing the software when the machine is used as a network printer using the optional network expansion kit (AR-NB3) are explained in this chapter. Refer to the following table for the installation procedure to follow depending on whether you are using a Windows environment (TCP/IP network) or a Macintosh environment.

<table>
<thead>
<tr>
<th>Operating system</th>
<th>Procedure to follow</th>
</tr>
</thead>
</table>
| Windows          | (1) SETTING THE IP ADDRESS OF THE MACHINE (page 21)  
                   (2) INSTALLING THE SOFTWARE (page 24) |
| Macintosh        | (1) INSTALLING THE PPD FILE (page 32)  
                   (2) CONFIGURING THE PRINTER DRIVER (page 35) |

About network environments

There are several types of network environments. Typical environments include the following:
- Windows network environment
- NetWare network environment
- UNIX network environment
- Macintosh network environment

This manual explains peer-to-peer and server-client network connections in a Windows environment. If the machine is used in a different network environment, see the online manual ("Print Server Card User's Manual") on the "Network Utilities" CD-ROM.

Network connection examples

**Peer-to-peer**

For the procedure for installing the printer driver, see "INSTALLING THE PRINTER DRIVER (STANDARD INSTALLATION)" and "CUSTOM INSTALLATION" (pages 24 to 27) in this manual.

**Server-client**

Example: Windows Server 2003 environment

For the procedures for configuring server settings when the machine is used on a server-client type network, see "Operation Manual (for printer and scanner)" on the "Software CD-ROM (1)" that accompanies the machine.

For the procedure for installing the printer driver, see "USING THE MACHINE AS A SHARED PRINTER VIA A SERVER" (pages 28 to 29) in this manual.

* TCP/IP protocol
  * Microsoft Printing Protocol
HARDWARE AND SOFTWARE REQUIREMENTS

Before installing the software, see "HARDWARE AND SOFTWARE REQUIREMENTS" on page 43 to make sure your computer meets the hardware and software requirements.

SETTING THE IP ADDRESS OF THE MACHINE

Before installing the printer driver, be sure to set the IP address of the machine. Consult your network administrator for the correct IP address, subnet mask, and default gateway to be entered. If a DHCP server will automatically assign an IP address to the machine, the following procedure is not necessary. (To check the IP address assigned to the machine by DHCP, see "CHECKING THE IP ADDRESS" (page 43).)

Caution

If the machine is used in a DHCP environment, the machine's IP address may change automatically. If this happens, printing will no longer be possible. In this event, use a WINS server or do not use the machine in a DHCP environment.

1. Make sure that the LAN cable is connected to the machine and then power on the machine.
2. Insert the network expansion kit "Software CD-ROM (1)" into your computer's CD-ROM drive.
3. 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.
4. Double-click the [Setup] icon ( ).
   Note
   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.)
5. The "SOFTWARE LICENSE" window will appear. Make sure that you understand the contents of the license agreement and then click the [Yes] button.
6. Read the message in the "Welcome" window and then click the [Next] button.
7 Click the [Administrator Tools] button.

8 Click the [NICManager] button.

9 The printer or printers connected to the network will be detected. Click the printer to be configured (the machine). Select [AR-XXXX] here.

10 Click the [Print Server Card Setup] button.

If the machine is being used in a DHCP environment or the IP address has otherwise already been set, go to step 15.

11 If the IP address has not been set (the IP address is set to "0.0.0.0"), a message will appear prompting you to set the IP address. Click the [Yes] button.

12 Enter the IP address and click the [OK] button.

- The machine's IP address is changed.
- If a password entry screen appears while the IP address is being changed, enter the password and click the [OK] button.
- The password for this machine has been initially set to "Sharp".

13 Restart the machine.

Power off the machine and then power it back on.

14 Select [Search] from the [File] menu, select the machine, and then click the [Print Server Card Setup] button.

15 Enter your password in the password entry screen and click the [OK] button.

- The Print Server Card Setup window will appear.
- The password for the machine has been initially set to "Sharp".
- If the [Guest user] checkbox is selected, the settings can be viewed but not configured.

16 Click the [TCP/IP] tab.

If the machine is not found, make sure that the machine is powered on and that your computer and the machine are connected to the network, and then search again.
17 Configure the settings and then click the [Update] button.

18 Your changes to the settings appear. Make sure that the changes are correct and then click the [OK] button.

19 Restart the machine.

20 Select [Search] from the [File] menu. The IP address that you entered will appear. Make sure that it is correct.

This completes the procedure for setting the IP address.
INSTALLING THE SOFTWARE

INSTALLING THE PRINTER DRIVER (STANDARD INSTALLATION)

1 Insert the network expansion kit "Software CD-ROM (1)" into your computer's CD-ROM drive.

2 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.

3 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.)

4 The "SOFTWARE LICENSE" window will appear. Make sure that you understand the contents of the license agreement and then click the [Yes] button.

5 Read the message in the "Welcome" window and then click the [Next] button.

6 Click the [Printer Driver] button.
   To view information on the software, click the [Display Readme] button.
   • If you wish to install the printer status monitor, click the [Printer Status Monitor] button in this window and follow the on-screen instructions.
   • If you wish to install the printer administration utility, click the [Administrator Tools] button in this window and then click the [Printer Administration Utility] button and follow the on-screen instructions.

7 Click the [Next] button.

8 Click the [Standard installation] button.
Printers connected to the network are detected. Select the machine and click the [Next] button.

A confirmation window will appear. Check the contents and then click the [Next] button.

When the printer driver selection window appears, select the printer driver to be installed and click the [Next] button.

Select whether or not you wish the printer to be your default printer and click the [Next] button.

Check the contents of the window and click the [Next] button.

Installation of the printer driver begins.

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

Click the [Close] button.

This completes the installation of the software. After installation, see "CONFIGURING THE PRINTER DRIVER" (page 42) to check the printer driver settings.

If the machine is not found, make sure that the machine is powered on and that the machine and your computer are connected to the network, and then search again. If the machine is still not found, use the custom installation procedure to directly specify the IP address. (Page 26)

If you are using Windows 2000/XP/Server 2003
If a warning message regarding the Windows logo test or digital signature appears, be sure to click the [Continue Anyway] or [Yes] button.

If you are installing multiple printer drivers, select the printer that you wish to use as your default printer. If you do not wish to set either printer driver as the default printer, select [No].

If you installed the PS printer driver, the PS display font can be installed from the "PRINTER UTILITIES" CD-ROM that accompanies the PS3 expansion kit. (Page 30)

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

If you wish to install the display font or specify the machine's IP address by direct entry when installing the printer driver, select [Custom installation].

1 Insert the network expansion kit "Software CD-ROM (1)" into your computer's CD-ROM drive.

2 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.

3 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.)

4 The "SOFTWARE LICENSE" window will appear. Make sure that you understand the contents of the license agreement and then click the [Yes] button.

5 Read the message in the "Welcome" window and then click the [Next] button.

6 Click the [Printer Driver] button.

   To view information on the software, click the [Display Readme] button.

- If you wish to install the printer status monitor, click the [Printer Status Monitor] button in this window and follow the on-screen instructions.
- If you wish to install the printer administration utility, click the [Administrator Tools] button in this window and then click the [Printer Administration Utility] button and follow the on-screen instructions.

7 Click the [Next] button.

8 Click the [Custom installation] button.

9 Select [LPR Direct Print] and click the [Next] button.

10 Printers connected to the network are detected. Select the machine and click the [Next] button.

   If you wish to directly specify the IP address, click the [Specify Address] button, enter the IP address, and click the [Search] button.
A confirmation window appears. Check the contents and then click the [Next] button.

When the printer driver selection window appears, select the printer driver to be installed and click the [Next] button.
Select the checkboxes of the printer drivers to be installed.

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

Click the [Close] button.

Select whether or not you wish to install the display font and click the [Next] button.

Check the contents of the window and click the [Next] button.
Installation of the printer driver begins.

If you are using Windows 2000/XP/Server 2003
If a warning message regarding the Windows logo test or digital signature appears, be sure to click the [Continue Anyway] or [Yes] button.

Select whether or not you wish to install the printer to be your default printer and click the [Next] button.
If you are installing multiple printer drivers, select the printer that you wish to use as your default printer.
If you do not wish to set either printer driver as the default printer, select [No].

If you installed the PS printer driver, the PS display font can be installed from the "PRINTER UTILITIES" CD-ROM that accompanied the PS3 expansion kit. (Page 30)

When the printer name window appears, click the [Next] button.
If you wish to change the printer name, enter the desired name.

Note
To use the PS printer driver, the PS3 expansion kit must be installed.

Caution
Note

This completes the installation. After the installation, see "CONFIGURING THE PRINTER DRIVER" (page 42) to check the printer driver settings.

Note
After the installation, a message prompting you to restart your computer may appear. In this case, click the [Yes] button to restart your computer.
SETUP IN A WINDOWS ENVIRONMENT

USING THE MACHINE AS A SHARED PRINTER VIA A SERVER

If the printer server in a Windows NT server environment, NetWare server environment, or other environment is configured to share the printer (the machine), follow the steps below to install the printer driver in each client computer.

Ask your network administrator for the server name and printer name of the machine on the network.

For the procedures for configuring settings on the printer server, see "Operation Manual (for printer and scanner)" on the "Software CD-ROM (1)" that accompanies the machine. "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.

1 Insert the network expansion kit "Software CD-ROM (1)" into your computer's CD-ROM drive.

2 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.

3 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.)

4 The "SOFTWARE LICENSE" window will appear. Make sure that you understand the contents of the license agreement and then click the [Yes] button.

5 Read the message in the "Welcome" window and then click the [Next] button.

6 Click the [Printer Driver] button.

   To view information on the software, click the [Display Readme] button.

   • If you wish to install the printer status monitor, click the [Printer Status Monitor] button in this window and follow the on-screen instructions.
   • If you wish to install the printer administration utility, click the [Administrator Tools] button in this window and then click the [Printer Administration Utility] button and follow the on-screen instructions.

7 Click the [Next] button.

8 Click the [Custom installation] button.
9 Select [Shared Printer] and click the [Next] button.

10 For the port to be used, select the machine (configured as a shared printer), and click the [Next] button. You can also click the [Add Network Port] button and select the printer to be shared (the machine) by browsing the network in the window that appears.

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

12 When the printer driver selection window appears, select the printer driver to be installed and click the [Next] button. Be sure to select the same printer driver as that of the shared printer (the machine).

13 Follow the on-screen instructions.

If the shared printer does not appear in the list, check the settings on the printer server.

This completes the installation. After installation, see "CONFIGURING THE PRINTER DRIVER" (page 42) to check the printer driver settings.

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

Note If you installed the PS printer driver, the PS display font can be installed from the "PRINTER UTILITIES" CD-ROM that accompanied the PS3 expansion kit. (Page 30)
INSTALLING THE PS DISPLAY FONTS

The fonts used by the PS printer driver are contained in the "PRINTER UTILITIES" CD-ROM that accompanied the PS3 expansion kit (AR-PK1/N). Install these fonts as needed for the PS printer driver.

1 Insert the PS3 expansion kit (AR-PK1/N) "PRINTER UTILITIES" CD-ROM into your computer's CD-ROM drive.
   If your computer is configured for CD-ROM auto start, the installation window appears. Go to step 4.

2 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.

3 Double-click the [Setup] icon ( ).

   ![Note]
   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.)

4 Select [PS Display Font] and click the [Next] button.

   ![Caution]
   - Do not select [PS Printer Driver].
   - The PS printer driver for the machine is installed from the "Software CD-ROM (1)" that accompanies the network expansion kit (AR-NB3).

5 Follow the on-screen instructions.
USING THE PPD FILE

The PPD file enables the machine to print using the standard PS driver of the operating system. Install the PPD file as needed.

Use the Add Printer Wizard in Windows to install the PPD file.
Be sure to read the Readme file (Readme.txt) before installing the PPD file. The Readme file is in the "EnglishA" or "English" folder. For the location of the folder, see step 4.

1. **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 [Printers].
   - In Windows Server 2003, click the [Start] button and then click [Printers and Faxes].

2. **Insert the network expansion kit "Software CD-ROM (1)" into your computer's CD-ROM drive.**

3. **Click [Add a printer] in [Printer Tasks].**
   - In Windows 95/98/Me/NT 4.0/2000, double-click the [Add Printer] icon.
   - The "Add Printer Wizard" will appear.

4. **Follow the on-screen instructions.**
   When you are asked to specify the path of the PPD file, enter the path as follows.
   (Substitute the letter of your CD-ROM drive for "R" in the following paths.)

<table>
<thead>
<tr>
<th>Operating system</th>
<th>PPD file path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 95/98/Me</td>
<td>R:\Drivers\Printer EnglishA\PPD9XME</td>
</tr>
<tr>
<td>Windows NT 4.0</td>
<td>R:\Drivers\Printer EnglishA\PPDNT40</td>
</tr>
<tr>
<td>Windows 2000/XP/Server 2003</td>
<td>R:\Drivers\Printer EnglishA\PPD\2KXP</td>
</tr>
</tbody>
</table>


Installing the resident font information (only when the PPD file is installed in Windows 95/98/Me)

If you have installed the PPD file in Windows 95/98/Me and will be using the resident fonts, you must install the resident font information. Follow the procedure below to install the resident font information.

- If you are using Windows 2000, Windows XP, Windows Server 2003, the resident font information is automatically installed when the PPD file is installed.
- Before installing the resident font information, be sure to install the PPD file.

1. **Insert the network expansion kit "Software CD-ROM (1)" into your computer's CD-ROM drive.**

2. **Double-click [My Computer] ( ) and then double-click the [CD-ROM] icon ( ).**

3. **Double-click the [Drivers] folder, the [Printer] folder, the [EnglishA] folder (for regions other than the U.S., double-click the [English] folder), the [PPD] folder, the [9XME] folder, and then [PFMSsetup.exe].**

4. **Follow the on-screen instructions.**

5. **After the resident font information has been installed, restart your computer.**

   If printer resident fonts cannot be specified from an application, the resident font information has not been installed or the information has been corrupted. In this case, reinstall the resident font information.
HARDWARE AND SOFTWARE REQUIREMENTS

Before installing the PPD file for Macintosh, see "HARDWARE AND SOFTWARE REQUIREMENTS" on page 43 to make sure your computer meets the hardware and software requirements.

<table>
<thead>
<tr>
<th>Operating system</th>
<th>Mac OS 8.6 to 9.2.2, 10.1.5 and 10.2 to 10.2.8 (excluding 10.2.2), 10.3 to 10.3.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU and RAM</td>
<td>The requirements of the operating system must be satisfied.</td>
</tr>
</tbody>
</table>

APPLETALK SETTINGS

After connecting the machine to the network, configure AppleTalk settings as required for your network environment. To configure the settings, see the online manual on the "Network Utilities" CD-ROM.

INSTALLING THE PPD FILE

In order to print from a Macintosh, the PPD file must be installed. Follow the steps below to install the PPD file.

INSTALLATION IN MAC OS X

1. Insert the network expansion kit "Software CD-ROM (1)" into your computer's CD-ROM drive.
2. Double-click the [CD-ROM] icon ( ) on the desktop.
4. Double-click the folder of the operating system version you are using.
   - In Mac OS X v10.1.5, double-click the [Version 10.1] folder.
   - In Mac OS X v10.2 to 10.2.8 (excluding 10.2.2), double-click the [Version 10.2] folder.
   - In Mac OS X v10.3 to 10.3.4, double-click the [Version 10.3] folder.
5. Double-click the [AR-NB3-1] icon ( ).

Note
- If the "Authenticate" window appears, enter the password and click the [OK] button.
- If you are using Mac OS X v10.1.5, click the lock icon ( ), enter the password, and click the [OK] button.
6 Click the [Continue] button.

7 The License Agreement window will appear. Make sure that you understand the contents of the license agreement and then click the [Continue] button.
A message will appear asking you if you agree to the terms of the license. Click the [Agree] button.

Caution
If a different language appears, switch to English.

8 Select the hard disk in which you wish to install the PPD file and click the [Continue] button.
Be sure to select the hard disk in which your operating system is installed.

9 Click the [Install] button.

Installation of the PPD file begins.

Note
If you are using Mac OS X v10.3 to 10.3.4, the "Authenticate" window will appear. Enter the password and click the [OK] button.

10 When the message "The software was successfully installed" appears in the installation window, click the [Close] button.

This completes the installation of the software.
SETUP IN A MACINTOSH ENVIRONMENT

INSTALLATION IN MAC OS 8.6 TO 9.2.2

1 Insert the network expansion kit "Software CD-ROM (1)" into your computer's CD-ROM drive.

2 Double-click the [CD-ROM] icon ( ) on the desktop.

3 Double-click the [MacOS] folder.

4 Double-click the [Installer] icon ( ).
   The installer window will appear.

5 Click the [Install] button.

6 The License Agreement window will appear. Make sure that you understand the contents of the license agreement and then click the [Yes] button.

7 Read the message in the window that appears and click the [Continue] button.
   Installation of the PPD file begins. After the installation, a message prompting you to restart your computer will appear. Click the [OK] button and restart your computer.

This completes the installation of the software.

INSTALLING THE SCREEN FONTS (MAC OS 8.6 - 9.2.2)

Macintosh screen fonts are contained in the [Font] folder of the "PRINTER UTILITIES" CD-ROM that accompanies the PS3 expansion kit (AR-PK1/N). The screen fonts are installed by copying the required screen font suitcase folders to your Macintosh.

Copy the screen fonts to the following folder:
• Mac OS 8.6 to 9.2.2: [Fonts] folder in the [System Folder]

If you are using Mac OS 8.6 to 9.2.2, make sure that "LaserWriter8" has been installed and that the "LaserWriter8" checkbox is selected ( ) in "Extensions Manager" in "Control Panels". If not, install it from the system CD-ROM supplied with your Macintosh computer.

If you experience problems that may be due to the installed screen fonts, immediately delete the copied font suitcase folder from the system.
CONFIGURING THE PRINTER DRIVER

Follow the steps below to configure the machine's printer driver.

**MAC OS X V10.2 TO 10.3.4**

1. Make sure that the machine is powered on.


4. Double-click the [Print Center] icon.
   - In Mac OS X v10.3 to 10.3.4, double-click the [Printer Setup Utility] icon.
   - The "Printer List" window appears.

5. Click [Add].

6. Select [AppleTalk] in the menu at the top of the window.
   A list of printers connected to the network will appear.

7. Click the machine's model name in the list.

The name of the machine that appears is the name that was entered in the AppleTalk settings when the network settings were configured. Unless the name was changed when configuring the settings, it will be [SCxxxxxx] (where "xxxxxx" is a sequence of characters that varies depending on your machine).

   The PPD file selection window appears.

9. Select the PPD file for your model.

   If multiple AppleTalk zones are displayed, select the zone which includes the printer.

If this is the first time you are installing a printer driver on your computer, a confirmation message will appear. Click the [Add] button.
10 Click the [Add] button.

The machine is added to the list of printers.

11 Click the name of the machine in the "Printer List" window, and select [Show Info] from the [Printers] menu.

The "Printer info" window will appear.

12 Select [Installable Options] from the menu.

13 Set the printer configuration based on the options that have been installed, and then click the [Apply Changes] button.

14 Close the window.

This completes the configuration of the printer driver.
MAC OS X v10.1.5

1. Make sure that the machine is powered on.


4. Double-click the [Print Center] icon.
   The "Printer List" window appears.
   If this is the first time you are installing a printer driver on your computer, a confirmation message will appear. Click the [Add] button.

5. Click the [Add Printer] button.

6. Select [AppleTalk] in the menu at the top of the window.
   A list of printers connected to the network will appear.
   If multiple AppleTalk zones are displayed, select the zone which includes the printer.

7. Click the machine's model name in the list.
   The name of the machine that appears is the name that was entered in the AppleTalk settings when the network settings were configured. Unless the name was changed when configuring the settings, it will be [SCxxxxxx] ("xxxxxx" is a sequence of characters that varies depending on your machine).

8. Click the [Printer Model] menu and select [Other] from the list of PPD files.
   The PPD file selection window will appear.

9. Click the startup disk name and then [Library], [Printers], [PPDs], [Contents], [Resources], [en.lproj], and select the PPD file of your model.

10. Click the [Choose] button.

11. Click the [Add] button.
   This completes the configuration of the printer driver.
SETUP IN A MACINTOSH ENVIRONMENT

MAC OS 8.6 TO 9.2.2

1 Select [Chooser] from the Apple Menu.

2 Click the [LaserWriter 8] icon.
   • The model name of your network-connected machine ([SCxxxxxx]) appears in the “Select a PostScript Printer” list on the right. The name of the machine that appears is the name that was entered in the AppleTalk settings when the network settings were configured. Unless the name was changed when configuring the settings, it will be [SCxxxxxx] (“xxxxxx” is a sequence of characters that varies depending on your machine).
   • If multiple AppleTalk zones are displayed, select the zone which includes the printer.

3 Click the machine’s model name ([SCxxxxxx]) in the “Select a PostScript Printer” list.

4 Click the [Create] button.
   • If the “Select a PostScript Printer Description File” dialog box appears, select the PPD file of your model and then click the [Select] button.
   • If the “Select a PostScript Printer Description File” dialog box does not appear, follow these steps to select the PPD file manually when you return to the “Chooser” dialog box.
     (1) Verify that the machine is selected in the “Select a PostScript Printer” list, and then click the [Setup] button and the [Select PPD] button.
     (2) Select the PPD file of your model, and then click the [Open] (or [Select]) button.
     (3) Click the [OK] button.

5 Verify that the machine is selected in the “Select a PostScript Printer” list, and then click the [Setup] button and the [Configure] button.

6 Configure the printer driver based on the options that have been installed and then click the [OK] button.

7 Click the [OK] button to close the dialog box.

8 Click the Close box (·) to close the "Chooser".

This completes the configuration of the printer driver.
TROUBLESHOOTING

If the software does not install correctly or if you need to remove the software, check the following items on your computer.
Troubleshooting information can also be found in the README files for each of the software programs. To view a README file for a software program, click the [Display Readme] button in the software selection window that appears during installation.

Removing the software
To remove a printer driver or a utility that has been installed using the installer, follow the procedure below.

Windows environment

1. Click the [start] button and then click [Control Panel].
   • In Windows 95/98/Me/NT 4.0/2000, click the [Start] button, select [Settings], and then click [Control Panel].

2. Click [Add or Remove Programs].
   • In Windows 95/98/Me/NT 4.0/2000, double-click the [Add/Remove Programs] icon.

3. Select the driver or utility that you wish to remove from the list, and click the appropriate button to remove it.
   • For more information, see the manual or help files for your operating system.

4. Restart your computer.

MACINTOSH ENVIRONMENT (Mac OS 8.6 to 9.2.2)

1. Insert the "Software CD-ROM (1)" into your CD-ROM drive.

2. Double-click the [CD-ROM] icon ( ) on the desktop and double-click the [Mac OS] folder.

3. Double-click the [Installer] icon ( ).

4. Select [Remove] from the Install menu and then click the [Remove] button.

   There is no remove tool for Mac OS X.
The PPD file for Mac OS X has been copied to the following folder in the startup disk:
Delete the SHARP PPD file in this folder.
MFP driver does not install (Windows 2000/XP)

If the MFP driver does not install in Windows 2000/XP, follow these steps to check your computer's settings.

1. 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.

3. Click the [Hardware] tab and then click the [Driver Signing] button.


   If the [Block] has been selected, it will not be possible to install the MFP driver. To select [Warn] and then install the MFP driver, see "INSTALLING THE SOFTWARE" (page 7).

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.

1. 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].

2. Click [System], click the [Hardware] tab, and click the [Device Manager] button.
   "Universal Serial Bus controllers" will appear in the list of devices.

3. Click the 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 if the above two items do not appear, you must check your computer manual for USB troubleshooting or contact your computer manufacturer.

4. Once you have verified that the USB port is enabled, see "INSTALLING THE SOFTWARE" (page 7) to install the MFP driver.
The MFP driver cannot be correctly installed by Plug and Play (Windows 2000/XP)

In Windows 2000/XP, if the MFP driver cannot be correctly installed by Plug and Play (for example, Plug and Play takes place without copying the required files for the MFP driver installation from the installer), follow these steps to remove unneeded devices. To install the MFP driver, see "INSTALLING THE SOFTWARE" (page 7).

1 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].

2 Click [System], click the [Hardware] tab, and click the [Device Manager] button.
   [Note] In Windows 2000, double-click the [System] icon, click the [Hardware] tab, and click the [Device Manager] button.

3 Click the icon ( ) beside "Other devices".
   If "AR-XXXX Scanner" and "SHARP AR-XXXX" appear, select and delete both these items.
   [Note] If "Other devices" does not appear, close the "Device Manager" window.

4 To install the MFP driver, see "INSTALLING THE SOFTWARE" (page 7).

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".

1 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 [Printers].

2 Click the icon of the printer driver for which you wish to change the port setting, and select [Properties] from the [File] menu.

3 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.

5 Click the [SHARP AR-XXXX] icon and select [Properties] from the [File] menu.

6 Click the [Ports] tab. In Windows 95/98/Me, click the [Details] tab.

7 Select [LPT1] in the "Print to the following port" list and click the [OK] button.

[Note] 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].
CONFIGURING THE PRINTER DRIVER

After installing the MFP driver (printer driver) or the printer driver for an option, make sure that the printer driver is set as the default printer and that the number of trays on the machine and the paper size of each tray are configured in the printer driver.

1. 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 [Printers].
   • In Windows Server 2003, click the [Start] button and then click [Printers and Faxes].

2. Click the "SHARP AR-XXXX" printer driver icon and select [Set as Default Printer].

   If you are using Windows NT 4.0/2000/XP/Server 2003, go to step 5.

4. In Windows 95/98/Me, click the [Setup] tab.

5. Click the [Configuration] tab and configure the printer driver based on the options that have been installed. Be sure to select the correct printer configuration. If not, printing may not take place correctly.

   To automatically configure the settings based on the detected machine status, click the [Auto Configuration] button. Note that for the MFP driver (printer driver), this is only effective when a USB cable is connected.

6. 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 "Set Paper Size" menu.

   If the dual function board is not installed, be sure to configure the above "Set Tray Status" settings, and then when printing specify a tray other than [Auto Select] in "Paper Source" in the [Paper] tab of the printer driver setup screen.

   • Click the [OK] button in the "Set Tray Status" window.
   • Click the [OK] button in the printer properties window.

INSTALLING ACROBAT READER

To view the Online Manual, Acrobat Reader must be installed on your computer. If you do not have Acrobat Reader, follow the steps below to install it.

Windows environment

1. Insert the CD-ROM into the CD-ROM drive.

2. 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.

3. Double-click the [Acrobat] folder and then double-click [ar500enu.exe].
   Follow the on-screen instructions to install Acrobat Reader.

Macintosh environment

1. Insert the network expansion kit "Software CD-ROM (1)" into your computer's CD-ROM drive.

2. Double-click the [CD-ROM] icon ( ) on the desktop.

3. Double-click the [Acrobat Reader] folder and then double-click the [English] folder.

4. Double-click the [Reader Installer] icon.
   Follow the on-screen instructions to install the Acrobat Reader.
CHECKING THE IP ADDRESS

There are several settings where the IP address must be entered or checked. To check the IP address of the machine, hold down the status button on the network expansion kit for at least 2 seconds to print out a Printer Setting List.

HOW TO RESET THE NETWORK EXPANSION KIT

To reset the network expansion kit, power on the machine while holding down the status button on the network expansion kit. After the network expansion kit is reset, network scanner destination information and scan settings will remain, however, the network settings and network printer settings will revert to the factory default settings.

HARDWARE AND SOFTWARE REQUIREMENTS

Before installing the software from the CD-ROM that is provided standard with the machine or the CD-ROM that is provided with the optional network expansion kit (AR-NB3), make sure that your computer satisfies the following requirements.

<table>
<thead>
<tr>
<th>Operating system*1</th>
<th>Windows (standard machine system)</th>
<th>Windows (options)</th>
<th>Macintosh (options)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Windows 95<em>2,3, Windows 98, Windows Me, Windows NT Workstation 4.0 (Service Pack 5 or later)<em>3,4, Windows 2000 Professional</em>4, Windows XP Professional</em>4, Windows XP Home Edition<em>4, Windows 2000 Server</em>5. Windows Server 2003*5.</td>
<td></td>
<td>Mac OS 8.6 to 9.2.2, 10.1.5, 10.2 to 10.2.8 (excluding 10.2.2), 10.3 to 10.3.4</td>
</tr>
<tr>
<td>Computer type</td>
<td>IBM PC/AT compatible computer</td>
<td>Equipped with a USB 2.0<em>6/1.1</em>7 port or a bi-directional parallel port (IEEE1284 compliant).</td>
<td>Equipped with a 10Base-T/100Base-TX LAN board</td>
</tr>
<tr>
<td>Display</td>
<td>800 x 600 dots (SVGA), 256 colors (or higher)</td>
<td>150 MB or more</td>
<td></td>
</tr>
<tr>
<td>Hard disk free space</td>
<td>An environment that allows any of the above operating systems to fully operate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*1 Printing is not available in MS-DOS mode.
*2 If you are installing the Printer Administration Utility in Windows 95, a system file must be updated before the utility can be installed. For more information, click the "Display Readme" button in the Software Selection window of the installer.
*3 USB is not supported.
*4 Administrator’s rights are required to install the software.
*5 The MFP driver, Button Manager, and other software on the "Software CD-ROM (1)" that is provided standard with the machine are not supported.
*6 The machine's USB 2.0 port will transfer data at the speed specified by the USB 2.0 (Hi-Speed) standard only if the Microsoft USB 2.0 driver is preinstalled in the computer, or if the USB 2.0 driver for Windows 2000 Professional/XP that Microsoft provides through "Windows Update" is installed.
CONNECTING TO A COMPUTER

Connecting a USB cable

Please purchase a USB cable (shielded) that complies with the following standard.
The USB interface on the machine complies with the USB 2.0*/1.1 standard.
* when the dual function board is installed.

![USB-2 and USB-1 ports]

- The machine's USB 2.0 port will transfer data at the speed specified by the USB 2.0 only if the Microsoft USB 2.0 driver is preinstalled in the computer, or if the USB 2.0 driver for Windows 2000 Professional/XP that Microsoft provides through "Windows Update" is installed.
- To obtain the full USB 2.0 data transfer speed, "USB 2.0 mode" in the machine's key operator programs must be set to "Hi-Speed". For more information, see the "Key operator's guide".
- Use the machine's "Hi-Speed" mode only when using a computer that is running Windows 2000/XP/Server 2003.
- Even when the Microsoft USB 2.0 driver is used, it may not be possible to obtain full USB 2.0 speed if a PC card supporting USB 2.0 is used. To obtain the latest driver (which may enable a higher speed), contact the manufacturer of your PC card.
- 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

Please purchase a Centronics cable (shielded) that complies with the following standard.
The parallel port on the machine complies with IEEE-STD-1284-1994 ECP.

Connector type (on the machine):
36-pin Amphenol female connector

Connecting to a network connector

If the machine will be used as a network computer, read the online manual on the "Network Utilities" CD-ROM that accompanies the network expansion kit (AR-NB3).
Use a network cable that is shielded.
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