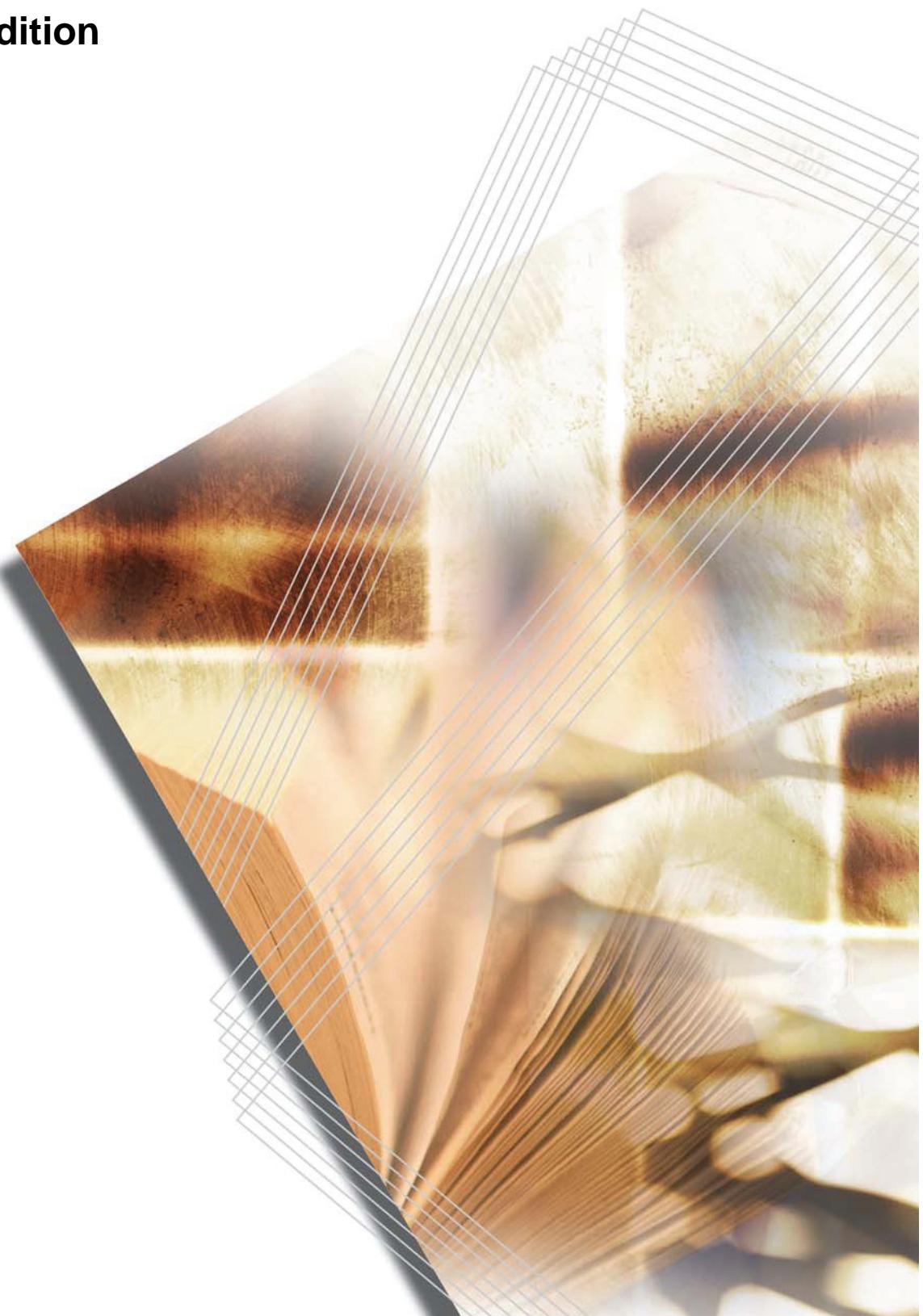




Printing System(Y)

Operation Guide

Function Edition



Guides Included

The following guides are included with this machine. Refer to the guide that corresponds to your particular objective.

Operation Guide Printer Setup Edition

This guide contains instructions for assembling and installing the machine.

Operation Guide Printer Function Edition (this guide)

This guide contains explanations on printer functions as well as default settings and troubleshooting.

Trademark Information

- PRESCRIBE and ECOSYS are registered trademarks of Kyocera Corporation. KPDL and KIR are trademarks of Kyocera Corporation.
- Microsoft, Windows, and Windows NT are registered trademarks of Microsoft Corporation. Microsoft Windows Server is a trademark of Microsoft Corporation.
- Macintosh, AppleTalk, and TrueType is a registered trademark of Apple Computer, Inc.
- PostScript is a registered trademark of Adobe Systems Incorporated.
- PCL is registered trademarks of Hewlett-Packard Company.
- Novell and NetWare are registered trademarks of Novell, Inc.
- Ethernet is a registered trademark of Xerox Corporation.
- PowerPC is a trademark of International Business Machines Corporation.
- CompactFlash is a trademarks of SanDisk Corporation.
- This product was developed using Tornado, the real-time operating system (ROTS) general development environment from Wind River Systems, Inc.
- The Kyocera product uses PeerlessPrintXL to provide the HP LaserJet compatible PCL6 language emulation. PeerlessPrintXL is a trademark of Peerless Systems Corporation, 2381 Rosecrans Ave. El Segundo, CA 90245, U.S.A.
- This product contains UFST™ and MicroType® from Monotype Imaging Inc.

All other company and product names contained in this Operation Guide are trademarks or registered trademarks of their respective companies. The designations ™ and ® will not be used in this Operation Guide.

All rights reserved. No part of this material may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from the Publisher.

Legal Restriction On Copying

- It may be prohibited to copy copyrighted material without permission of the copyright owner.
- It is prohibited under any circumstances to copy domestic or foreign currencies.
- Copying other items may be prohibited.

IBM Program License Agreement

THE DEVICE YOU HAVE PURCHASED CONTAINS ONE OR MORE SOFTWARE PROGRAMS ("PROGRAMS") WHICH BELONG TO INTERNATIONAL BUSINESS MACHINES CORPORATION ("IBM"). THIS DOCUMENT DEFINES THE TERMS AND CONDITIONS UNDER WHICH THE SOFTWARE IS BEING LICENSED TO YOU BY IBM. IF YOU DO NOT AGREE WITH THE TERMS AND CONDITIONS OF THIS LICENSE, THEN WITHIN 14 DAYS AFTER YOUR ACQUISITION OF THE DEVICE YOU MAY RETURN THE DEVICE FOR A FULL REFUND. IF YOU DO NOT SO RETURN THE DEVICE WITHIN THE 14 DAYS, THEN YOU WILL BE ASSUMED TO HAVE AGREED TO THESE TERMS AND CONDITIONS.

The Programs are licensed not sold. IBM, or the applicable IBM country organization, grants you a license for the Programs only in the country where you acquired the Programs. You obtain no rights other than those granted you under this license.

The term "Programs" means the original and all whole or partial copies of it, including modified copies or portions merged into other programs. IBM retains title to the Programs. IBM owns, or has licensed from the owner, copyrights in the Programs.

1. License

Under this license, you may use the Programs only with the device on which they are installed and transfer possession of the Programs and the device to another party. If you transfer the Programs, you must transfer a copy of this license and any other documentation to the other party. Your license is then terminated. The other party agrees to these terms and conditions by its first use of the Program.

You may not:

- 1) use, copy, modify, merge, or transfer copies of the Program except as provided in this license;
- 2) reverse assemble or reverse compile the Program; or
- 3) sublicense, rent, lease, or assign the Program.

2. Limited Warranty

The Programs are provided "AS IS."

THERE ARE NO OTHER WARRANTIES COVERING THE PROGRAMS (OR CONDITIONS), EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Some jurisdictions do not allow the exclusion of implied warranties, so the above exclusion may not apply to you.

SUPPLEMENT TO AGREEMENT FOR SOFTWARE BUNDLING AND DISTRIBUTION FOR ALDC

3. Limitation of Remedies

IBM's entire liability under this license is the following:

- 1) For any claim (including fundamental breach), in any form, related in any way to this license, IBM's liability will be for actual damages only and will be limited to the greater of:
 - a) the equivalent of U.S.\$25,000 in your local currency; or
 - b) IBM's then generally available license fee for the Program

This limitation will not apply to claims for bodily injury or damages to real or tangible personal property for which IBM is legally liable. IBM will not be liable for any lost profits, lost savings, or any incidental damages or other economic consequential damages, even if IBM, or its authorized supplier, has been advised of the possibility of such damages. IBM will not be liable for any damages claimed by you based on any third party claim. This limitation of remedies also applies to any developer of Programs supplied to IBM. IBM's and the developer's limitations of remedies are not cumulative. Such developer is an intended beneficiary of this Section. Some jurisdictions do not allow these limitations or exclusions, so they may not apply to you.

4. General

You may terminate your license at any time. IBM may terminate your license if you fail to comply with the terms and conditions of this license. In either event, you must destroy all your copies of the Program. You are responsible for payment of any taxes, including personal property taxes, resulting from this license. Neither party may bring an action, regardless of form, more than two years after the cause of action arose. If you acquired the Program in the United States, this license is governed by the laws of the State of New York. If you acquired the Program in Canada, this license is governed by the laws of the Province of Ontario. Otherwise, this license is governed by the laws of the country in which you acquired the Program.

Typeface Trademark Acknowledgement

All resident fonts in this printer are licensed from Monotype Imaging Inc.

Helvetica, Palatino and Times are registered trademarks of Linotype-Hell AG.

ITC Avant Garde Gothic, ITC Bookman, ITC ZapfChancery and ITC Zapf Dingbats are registered trademarks of International Typeface Corporation.

Monotype Imaging License Agreement

- 1** "Software" shall mean the digitally encoded, machine readable, scalable outline data as encoded in a special format as well as the UFST Software.
- 2** You agree to accept a non-exclusive license to use the Software to reproduce and display weights, styles and versions of letters, numerals, characters and symbols ("Typefaces") solely for your own customary business or personal purposes at the address stated on the registration card you return to Monotype Imaging. Under the terms of this License Agreement, you have the right to use the Fonts on up to three printers. If you need to have access to the fonts on more than three printers, you need to acquire a multi-user license agreement which can be obtained from Monotype Imaging. Monotype Imaging retains all rights, title and interest to the Software and Typefaces and no rights are granted to you other than a License to use the Software on the terms expressly set forth in this Agreement.
- 3** To protect proprietary rights of Monotype Imaging, you agree to maintain the Software and other proprietary information concerning the Typefaces in strict confidence and to establish reasonable procedures regulating access to and use of the Software and Typefaces.
- 4** You agree not to duplicate or copy the Software or Typefaces, except that you may make one backup copy. You agree that any such copy shall contain the same proprietary notices as those appearing on the original.
- 5** This License shall continue until the last use of the Software and Typefaces, unless sooner terminated. This License may be terminated by Monotype Imaging if you fail to comply with the terms of this License and such failure is not remedied within thirty (30) days after notice from Monotype Imaging. When this License expires or is terminated, you shall either return to Monotype Imaging or destroy all copies of the Software and Typefaces and documentation as requested.
- 6** You agree that you will not modify, alter, disassemble, decrypt, reverse engineer or decompile the Software.

-
- 7** Monotype Imaging warrants that for ninety (90) days after delivery, the Software will perform in accordance with Monotype Imaging-published specifications, and the diskette will be free from defects in material and workmanship. Monotype Imaging does not warrant that the Software is free from all bugs, errors and omissions. The parties agree that all other warranties, expressed or implied, including warranties of fitness for a particular purpose and merchantability, are excluded.
 - 8** Your exclusive remedy and the sole liability of Monotype Imaging in connection with the Software and Typefaces is repair or replacement of defective parts, upon their return to Monotype Imaging. In no event will Monotype Imaging be liable for lost profits, lost data, or any other incidental or consequential damages, or any damages caused by abuse or misapplication of the Software and Typefaces.
 - 9** Massachusetts U.S.A. law governs this Agreement.
 - 10** You shall not sublicense, sell, lease, or otherwise transfer the Software and/or Typefaces without the prior written consent of Monotype Imaging.
 - 11** Use, duplication or disclosure by the Government is subject to restrictions as set forth in the Rights in Technical Data and Computer Software clause at FAR 252-227-7013, subdivision (b)(3)(ii) or subparagraph (c)(1)(ii), as appropriate. Further use, duplication or disclosure is subject to restrictions applicable to restricted rights software as set forth in FAR 52.227-19 (c)(2).
 - 12** YOU ACKNOWLEDGE THAT YOU HAVE READ THIS AGREEMENT, UNDERSTAND IT, AND AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS. NEITHER PARTY SHALL BE BOUND BY ANY STATEMENT OR REPRESENTATION NOT CONTAINED IN THIS AGREEMENT. NO CHANGE IN THIS AGREEMENT IS EFFECTIVE UNLESS WRITTEN AND SIGNED BY PROPERLY AUTHORIZED REPRESENTATIVES OF EACH PARTY.

Conventions

This manual uses the following conventions:

Convention	Description	Example
Bracket Bold Text Typeface	Used to emphasize the selection of the operation panel key.	Press the [Print] key.
Bracket Text Typeface	Used to emphasize the selection of the touch panel key.	Press [Interface] .
Italic Typeface	Used to denote messages or names displayed on the operation panel, names of machine parts and for references to additional information and other publications.	<i>Processing message is displayed.</i>
Notes	Used to provide additional or useful information about a function or feature. Can also contain references to other publications.	NOTE: You can set the emulation for each interface. _____
Important	Use to provide important information.	IMPORTANT: Formatting of the memory card must be executed from the printer. _____

Contents

1	Procedure for Making Settings	
Procedure	1-1	
Menu Hierarchical Diagram	1-2	
e-MPS	1-2	
Print Menu	1-3	
2	Selecting the Printer Settings	
Status Pages	2-2	
Understanding the Status Page	2-3	
Changing the Interface Parameters	2-5	
Changing Network Interface Parameters	2-5	
Emulation Mode	2-10	
Emulation Mode Selection	2-10	
KPDL (AUTO) Alternative Emulation Selection	2-10	
KPDL Error Printing	2-11	
KC-GL Pen and Page	2-11	
Default Font	2-13	
Selecting the Default Font	2-13	
Changing the Default Font Size	2-14	
Character Pitch for Courier/Letter Gothic	2-15	
Selecting Regular or Dark Courier/Letter Gothic	2-15	
Setting the Code Set	2-16	
Printing Lists of Fonts	2-16	
Print Configuration	2-18	
Number of Copies	2-18	
Print Orientation	2-19	
Zoom	2-19	
Page Protect Mode	2-20	
Line Feed (LF) Action	2-20	
Carriage-Return (CR) Action	2-21	
Setting Print Quality	2-23	
KIR Mode	2-23	
Eco Print	2-24	
Print Density Adjustment	2-24	
Paper Handling	2-26	
MP Tray Mode	2-26	
Selecting the Paper Feed Source	2-27	
Duplex Print Mode	2-28	
Output Destination	2-28	
Overriding Difference between A4 and Letter	2-29	
Operating the Storage Device	2-30	
Using the Memory Card	2-30	
Using the RAM Disk	2-34	
Using the Optional Hard Disk	2-36	

e-MPS Function	2-38
Printing a Quick Copy	2-38
Using Proof-and-Hold	2-39
Printing a Private Print/Job Storage	2-40
Retrieving Jobs from Virtual Mailbox (VMB)	2-41
Printing a List of Virtual Mailbox (VMB)	2-42
Printing a List of Code Jobs	2-42
Changing e-MPS Configuration	2-43
Other Modes	2-46
Automatic Form Feed Timeout Setting	2-46
Resource Protect Mode	2-47
Auto Error Clear Setting	2-47
Finishing Error Detection	2-48
Printing the Service Status Page	2-49
Restart	2-50
Received Data Dump	2-50
3 Troubleshooting	
Basic troubleshooting chart	3-1
Display message	3-2
Storage Error Codes	3-4
RAM Disk Errors	3-4
Memory Card Errors	3-4
Hard Disk Errors	3-5
Pausing Printing	3-6
Canceling Printing	3-7
Restart	3-8
4 Options	
5 Specifications	

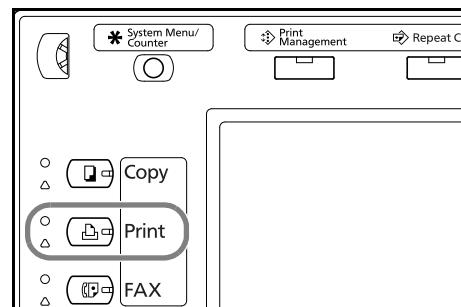
1 Procedure for Making Settings

This chapter explains how to use the operator panel to configure the printer function and shows the hierarchy diagram of the menu selection.

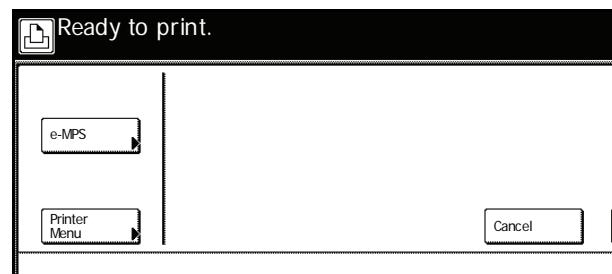
Procedure

To enter the printing function, perform the following procedure.

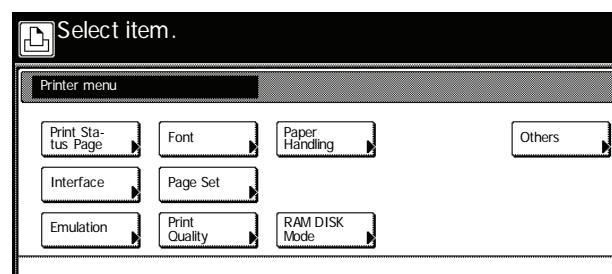
- 1 Press the [Print] key. The machine enters the printer mode.



- 2 Press [Printer Menu] or [e-MPS]. The *Printer Menu* or *e-MPS* screen will appear.



- 3 Select the desired settings that you want to make. For details, refer to *Selecting the Printer Settings on page 2-1*.



- 4 When the setting is completed, press [Close]. The setting is decided, returns to the before screen.

NOTE: To cancel the setting, press [Back]. The setting value is cleared and the previous value is set again.

Menu Hierarchical Diagram

The following is the hierarchy diagram of the menu selection system of the printer.

 These items will not appear unless the printer is installed with the applicable option unit.

e-MPS

Quick Copy	User	► Job	1 to 999 (Set)	►	Printing		
			Delete				
Private/Stored	► User	► Job	1 to 999 (Set)	► ID-code	► Printing		
			Delete				
Print VMB Data Tray	Job	► Printing					
List of VMB	►	Printing					
List of Code JOB	►	Printing					
Configuration	► Quick Copy	► 0 to 50 (Job)					
	Temporary Code JOB Size	► 0 to 9999 (MB)					
	Permanent Code JOB Size	► 0 to 9999 (MB)					
	VMB Size	► 0 to 9999 (MB)					

Print Menu

Print Status Page ▶		Printing		
Interface	Network	Netware	On, Off	
			Auto, 802.3, Ethernet II, 802.2, 802.3SNAP	
		TCP/IP	On, Off	
			DHCP ▶	On, Off
			BOOTP ▶	On, Off
			IP Address ▶	###.###.###.###
		AppleTalk	Subnet Mask ▶	###.###.###.###
			Gateway ▶	###.###.###.###
		Network Status Page ▶		On, Off
		USB		
Option	Netware	TCP/IP	On, Off	
			Auto, 802.3, Ethernet II, 802.2, 802.3SNAP	
		TCP/IP	On, Off	
			DHCP ▶	On, Off
			BOOTP ▶	On, Off
			IP Address ▶	###.###.###.###
		AppleTalk	Subnet Mask ▶	###.###.###.###
			Gateway ▶	###.###.###.###
		Opt. Status Page ▶		On, Off
Emulation	PCL6	PCL6		
		KPDL ▶	Print KPDL errors ▶	On, Off
		KPDL (AUTO)	Alt Emulation ▶	PCL6, KC-GL, Line Printer, IBM Proprinter, Diabro 630, EPSON LQ-850
			Print KPDL errors ▶	On, Off
		KC-GL	Pen Adjust ▶	Pen (1) to (8) ▶ 1 to 99 (dots)
			Page Set ▶	A2, A1, A0, B3, B2, B1, B0, SPSZ
		Line Printer		
		IBM Proprinter		
		Diabro 630		
		EPSON LQ-850		
Font	Font selection	Font ID	####	
			Detail ▶	
			4.00 to 999.75 (Point)	
			0.44 to 99.99 (CPI)	
		Courier	Internal, Dark	
		Letter Gothic	Internal, Dark	
		Code Set ▶	# #####	
		Internal ▶	Printing	
		Option font ▶	Printing	

Page Set	▶ Copies	▶ 1 to 999 (Set)	
	Orientation	▶ Portrait, Landscape	
	Zoom(Reduce)	▶ Page Size	▶ #####
		▶ Print Size	▶ #####
	Page Protect	▶ Auto, On	
	LF Action	▶ LF only, CR and LF, Ignore LF	
	CR Action	▶ CR only, CR and LF, Ignore CR	
Print Quality	▶ KIR Mode	▶ On, Off	
	Eco Print	▶ On, Off	
	Resolution	▶ Fast1200 Mode, 600 dpi, 300 dpi	
	Print Density	▶ 1 to 5	
Paper Handling	▶ MP Tray Mode	▶ Cassette, First	
	Feed Select	▶ 1st , 2nd paper, MP tray	3rd ,4th paper
	Duplex Mode	▶ None, Short edge bind, Long edge bind	
	Paper Output	▶ Top tray	Finisher Tray
		▶ Face down, Face up	
RAM Disk Mode	Override A4/Letter	▶ On, Off	
	▶ On, Off		
	Write Data		
	List of Partitions	▶ Printing	
	RAM Disk Size	▶ 1 to 28 (MB)	
	Read Data	▶ #####	▶ Enter
	Read Program	▶ #####	▶ Enter
	Delete Data	▶ #####	▶ Delete
	Delete Program	▶ #####	▶ Delete
	Delete Font	▶ #####	▶ Delete
Hard Disk	Delete Macro	▶ #####	▶ Delete
	▶ Write Data		
	List of Partitions	▶ Printing	
	Format	▶ Yes, No	
	Read Data	▶ #####	▶ Enter
	Read Program	▶ #####	▶ Enter
	Delete Data	▶ #####	▶ Delete
	Delete Program	▶ #####	▶ Delete
	Delete Font	▶ #####	▶ Delete
	Delete Macro	▶ #####	▶ Delete

Memory Card	▶ Write Data		
	List of Partitions	▶	Printing
	Format	▶	Yes, No
	Read Data	▶ #####	▶ Enter
	Read Program	▶ #####	▶ Enter
	Read Font	▶ #####	▶ Enter
	Read Macro	▶ #####	▶ Enter
	Delete Data	▶ #####	▶ Delete
	Delete Program	▶ #####	▶ Delete
	Delete Font	▶ #####	▶ Delete
	Delete Macro	▶ #####	▶ Delete
	Delete Language	▶ #####	▶ Delete
Others	▶ Form Feed Time Out	0 to 495 (Seconds)	
	▶ Resource Protect	Off, Permanent, Permanent/Temporary	
	Auto Continue	▶ On, Off	
		0 to 495 (Seconds)	
	▶ Finishing Error	▶ Proces. Duplex print	▶ On, Off
		▶ Staple Mode	▶ On, Off
	Service	▶ Print Status page	▶ Printing
	Printer Reset	▶ Yes, No	
	Print HEX-DUMP	▶ Yes, No	

2 Selecting the Printer Settings

This chapter provides the information you need to configure this machine. In general you need to use the operator panel only to make default settings. You can make most changes to the printer settings using the printer driver through the application software.

NOTE: Changes to printer settings made using a software application override changes made using the operator panel.

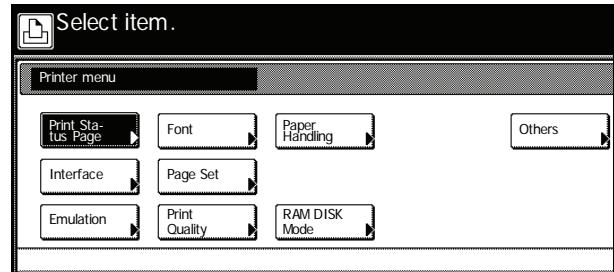
This chapter contains explanations on the following topics:

- ***Status Pages***
- ***Changing the Interface Parameters***
- ***Emulation Mode***
- ***Default Font***
- ***Print Configuration***
- ***Setting Print Quality***
- ***Paper Handling***
- ***Operating the Storage Device***
- ***e-MPS Function***
- ***Other Modes***

Status Pages

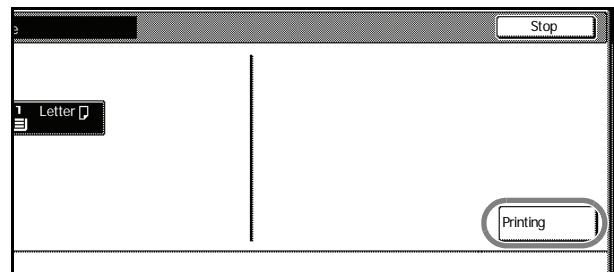
This section explains the procedure for printing the status pages. The status page is a list of parameters and settings for most basic machine configurations. You may be required to produce a status page when requesting service to the machine.

- 1 Press the [Print] key. The machine enters the printer mode.
- 2 Press [Printer Menu].
- 3 Press [Print Status Page].



- 4 Press [Printing].

The message *Processing data* appears and the machine prints a status page.

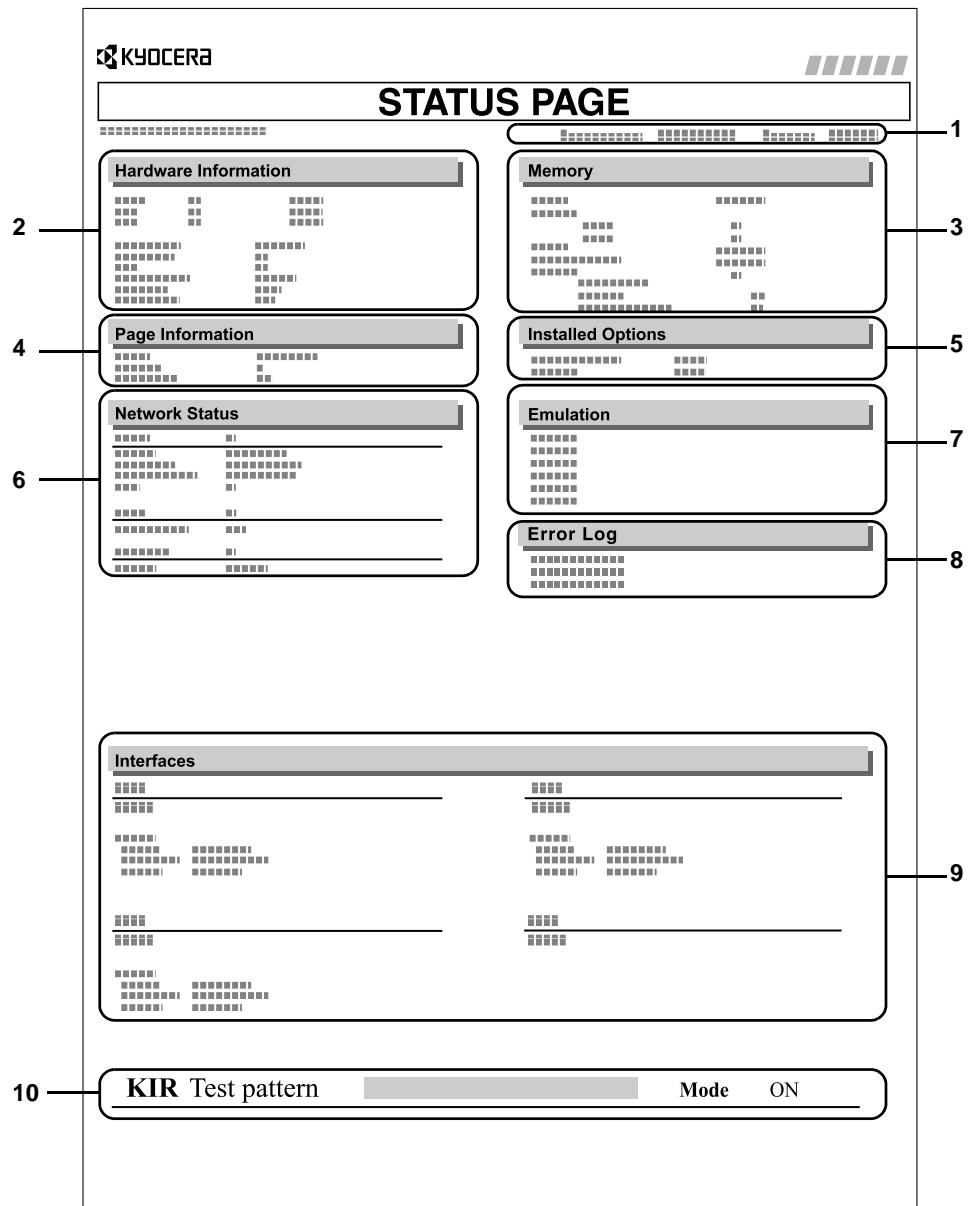


- 5 After the status page is printed, the display returns to the *Printer menu* screen.

Understanding the Status Page

The numbers in the following diagram refer to the items explained below the diagram.

NOTE: The items and values on the status page may vary depending on the machine's firmware version.



1 Firmware Version

This item shows the version and release date of the machine firmware.

2 Hardware Information

This item shows various machine settings for hardware-related items.

3 Memory

This shows the amount of total memory installed in the machine, the amount of currently available memory, and the current status of the RAM disk.

4 Page Information

This shows the print resolution, number of copies, and the total page count.

5 Installed Options

This item shows the options installed in the machine.

6 Network Status

This item shows the IP address, subnet mask address, and gateway address for the network interface card in the machine.

7 Emulation

This item shows all available emulations of the machine. The PCL6 emulation is set as default when the machine is shipped from the factory.

8 Error Log

This item shows the last three instances of the following types of errors, listing them in the order of occurrence:

- KPDL (PostScript) errors
- Memory overflow
- Print overrun
- File-not-found

The most recent error is displayed on the top line of the Error Log. For error remedies, refer to *Display message on page 3-2*. Error information is cleared when the printer's power is turned off.

9 Interface Information

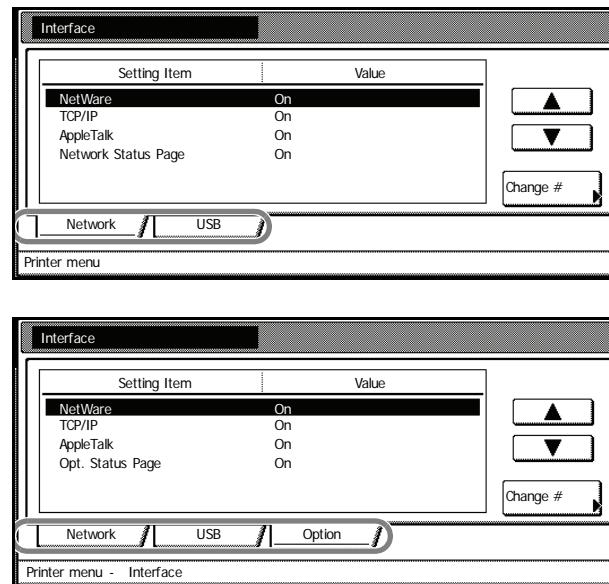
This information shows the emulation and the default font for all interfaces installed in the machine.

10 Test pattern

KIR is the original smoothing function. This test pattern shows the effect of the KIR (Kyocera Image Refinement) system.

Changing the Interface Parameters

The machine is equipped with both parallel and USB interfaces. Optional network interface card can also be installed. Various printing environment parameters such as the default emulation can be changed independently on different interfaces by using the machine's menu selection system. Select the interface to apply the changes in the procedure described below.



NOTE: This interface selection described below does not select the interface from which data will be received. The machine automatically selects the interface.

Changing Network Interface Parameters

This machine supports TCP/IP, IPX/SPX, NetBEUI, and Appletalk protocols. In addition, you can install the optional network interface card in the option interface slot.

Using the operator panel, you can:

- Activate or deactivate TCP/IP, NetWare, and AppleTalk
- Activate or deactivate DHCP
- Enter IP address, subnet mask address, and default gateway address
- Determine whether to print a network status page when the machine is turned on

NOTE: The operations of the optional network interface are the same as those of the network interface.

TCP/IP

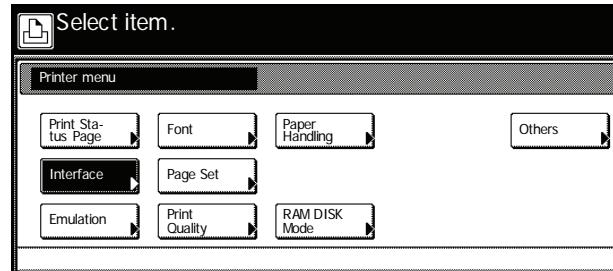
Turn this setting *On* when this machine is connected to a Windows network, etc., using TCP/IP.

NOTE: Before setting the IP Address, ask your Network Administrator to obtain the address and prepare it. If you use the following procedure to manually register the IP address, be sure to turn the DHCP setting *Off* and the TCP/IP setting *On*.

1 Press the [**Print**] key. The machine enters the printer mode.

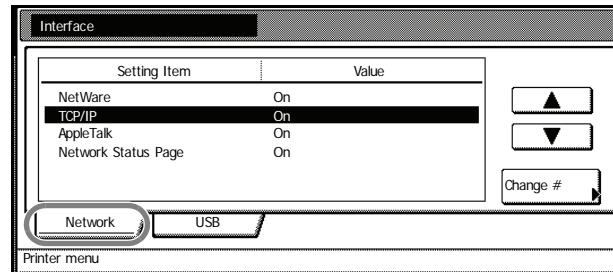
2 Press [**Printer Menu**].

3 Press [**Interface**].



4 Press [**Network**] tab.

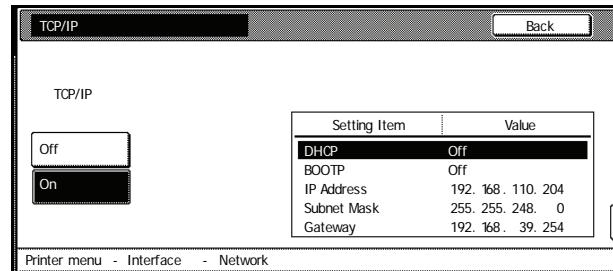
When option network interface sets, press [**Option**] tab.



5 Press **▲** or **▼** to select *TCP/IP* and press [**Change #**].

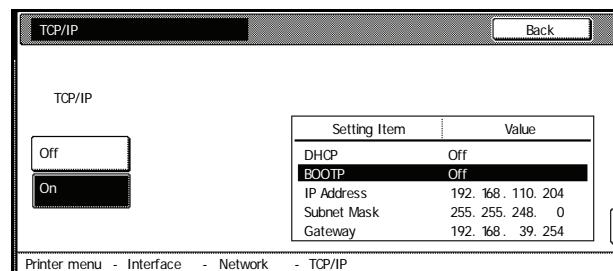
6 Press [**On**].

7 Press **▲** or **▼** to select *DHCP* and press [**Change #**].



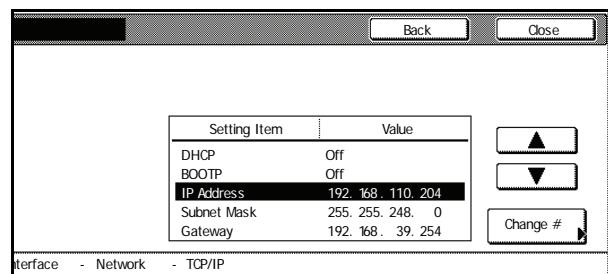
8 Press [**Off**] and press [**Close**].

9 Press **▲** or **▼** to select *BOOTP* and press [**Change #**].

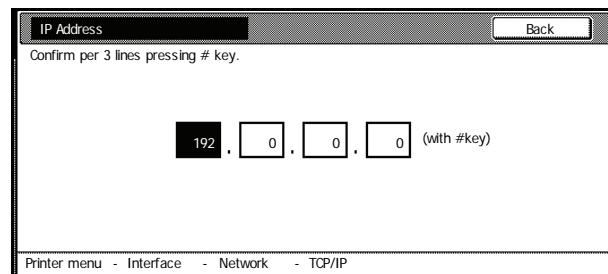


10 Press [Off] and press [Close].

11 Press ▲ or ▼ to select *IP Address* and press [Change #].

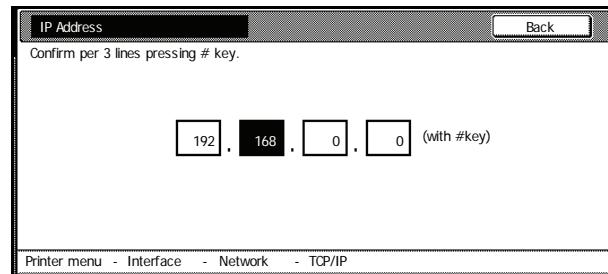


12 Use the numeric keys to enter the address. Enter the 3-digit address in the highlighted area and press the [#] key.



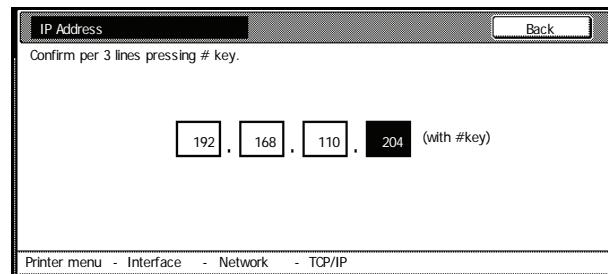
13 Enter the next 3-digit address and press the [#] key.

To modify the entered address, press the [#] key to select the 3-digit address to be modified and use the numeric keys to enter the address again.

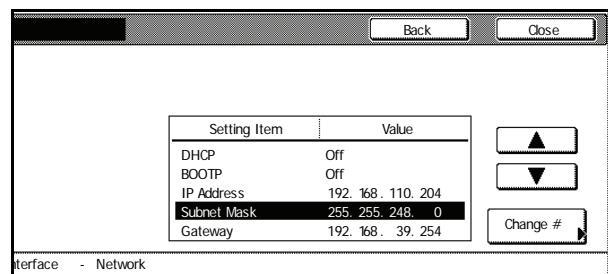


14 Use the same procedure to enter the remaining address and then press [Close]. The display returns to the *TCP/IP* screen.

If you press [Back], the entered address is cleared and the previous address is set again.

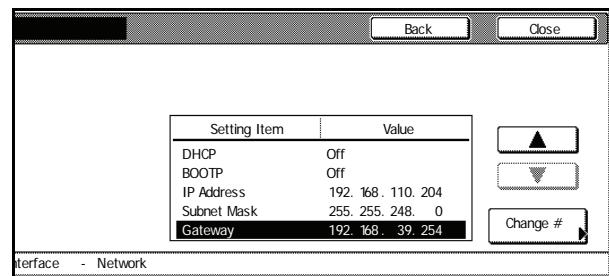


15 Press ▲ or ▼ to select *Subnet Mask* and press [Change #].



16 Enter the Subnet Mask address using the same procedure used for the IP Address in steps 12 through 14 of IP Address Setting.

- 17** Press **▲** or **▼** to select *Gateway* and press [Change #].

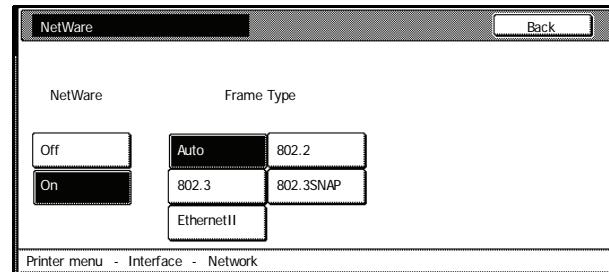


- 18** Enter the Gateway address using the same procedure used for the IP Address in steps 12 through 14 of IP Address Setting.
- 19** Press [Close] and returns to the *Interface* screen.
- 20** Press [Close] and returns to the *Printer menu* screen.

NetWare

Set this item to *On* when you connect to a network using NetWare. Frame mode can be selected from *Auto*, *802.3*, *Ethernet II*, *802.2*, and *802.3SNAP*.

- 1** Access *Interface*, refer to *TCP/IP* on page 2-5.
- 2** Press **▲** or **▼** to select *Netware* and press [Change #].
- 3** Press [On] and select the frame type.



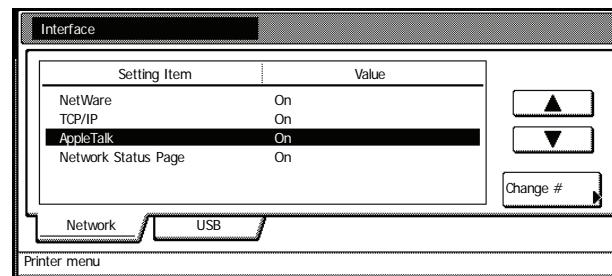
- 4** Press [Close] and returns to the *Interface* screen.
- 5** Press [Close] and returns to the *Printer menu* screen.

AppleTalk

Set this option to *On* if connecting to an Apple Macintosh computer.

- 1** Access *Interface*, refer to *TCP/IP* on page 2-5.

- 2** Press **▲** or **▼** to select *AppleTalk* and press [Change #].



- 3** Select [On].

- 4** Press [Close] and returns to the *Interface* screen.

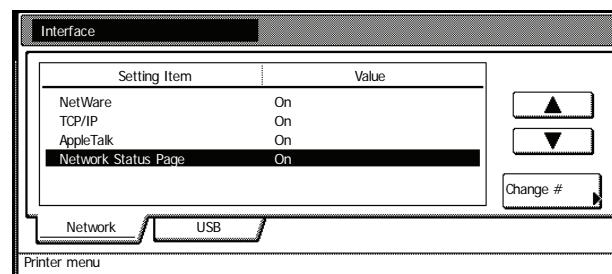
- 5** Press [Close] and returns to the *Printer menu* screen.

Network Status Page Printing

You can have your machine print out a network status page when the machine prints the status page. The network status page shows the network addresses, and other information under various network protocols about the network interface card. The default setting is *Off* (print disable).

- 1** Access *Interface*, refer to *TCP/IP* on page 2-5.

- 2** Press **▲** or **▼** to select *Network Status Page* and press [Change #].



- 3** Select [On].

- 4** Press [Close] and returns to the *Interface* screen.

- 5** Press [Close] and returns to the *Printer menu* screen.

Emulation Mode

This section explains the procedure to select the emulation protocol.

NOTE: You can set the emulation for each interface.

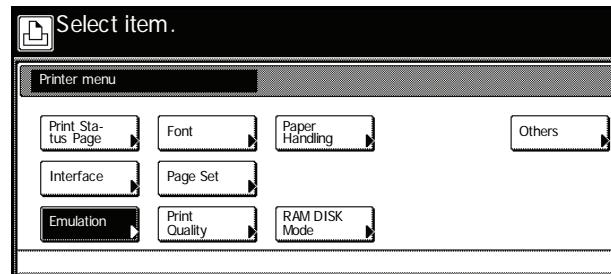
Emulation Mode Selection

Emulation modes that can be used with this machine: *PCL6*, *KPDL*, *KPDL(AUTO)*, *KC-GL*, *Line Printer*, *IBM Proprietary*, *Diabro 630*, and *EPSON LQ-850*

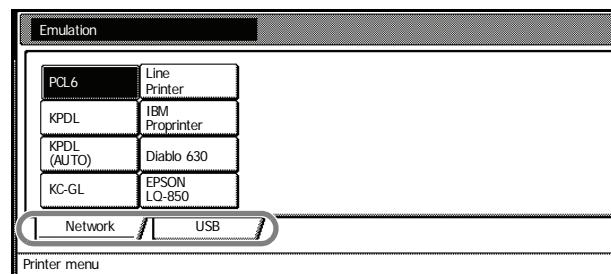
1 Press the [**Print**] key. The machine enters the printer mode.

2 Press [**Printer Menu**].

3 Press [**Emulation**].



4 Select the desired interface tab.



5 Select the desired emulation mode.

IMPORTANT: If you set *KPDL(AUTO)*, switching between *KPDL* and an alternative emulation mode will be automatically performed according to the print data. If you set *KPDL* or *KPDL(AUTO)*, the details of any error that occurs during printing can be printed. If you set *KC-GL*, you can set the thickness of the pen and page size.

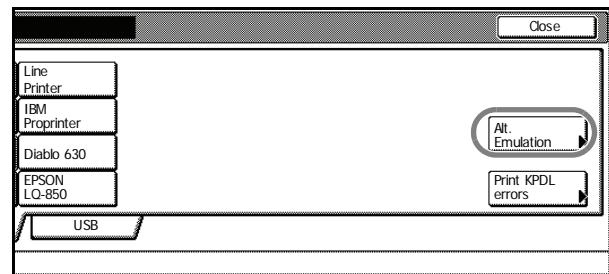
6 On completion, Press [**Close**] and returns to the *Printer menu* screen.

KPDL (AUTO) Alternative Emulation Selection

If you set *KPDL(AUTO)*, switching between *KPDL* and an alternative emulation mode will be automatically performed according to print data.

Available emulation modes: *PCL6*, *KC-GL*, *Line Printer*, *IBM Proprietary*, *Diabro 630*, and *EPSON LQ-850*

- 1** Access *Emulation*, refer to *Emulation Mode Selection on page 2-10*.
- 2** Press [KPDL(AUTO)].
- 3** Press [Alt. Emulation].

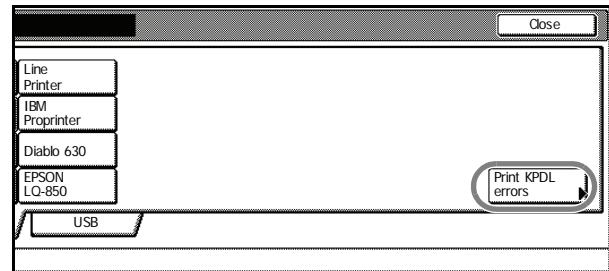


- 4** Select the desired alternative emulation mode.
- 5** Press [Close] and returns to the *Emulation* screen.

KPDL Error Printing

The details of any error that occurs during printing in the *KPDL* emulation mode can be printed.

- 1** Access *Emulation*, refer to *Emulation Mode Selection on page 2-10*.
- 2** Select [KPDL] or [KPDL(AUTO)].
- 3** Press [Print KPDL errors].



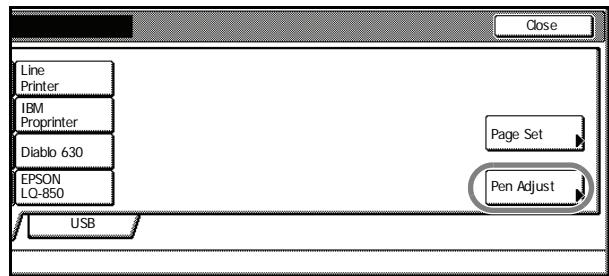
- 4** Select [On].
- 5** Press [Close] and returns to the *Emulation* screen.

KC-GL Pen and Page

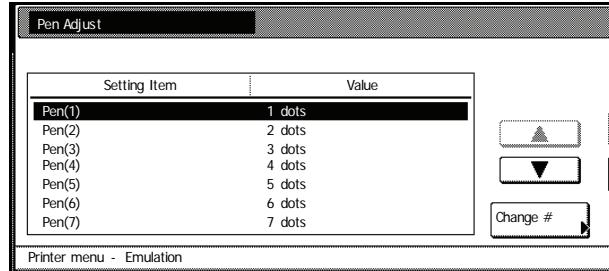
If you have selected KC-GL emulation, you can set the thicknesses, color and the page size.

- 1** Access *Emulation*, refer to *Emulation Mode Selection on page 2-10*.
- 2** Press [KC-GL].

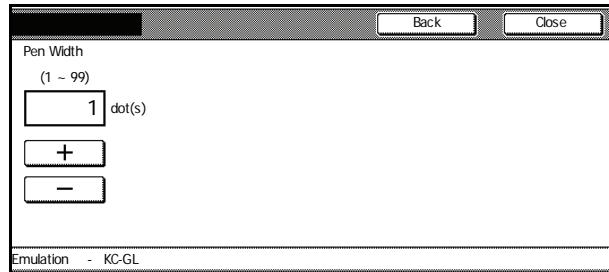
- 3** Press [Pen Adjust].



- 4** Press ▲ or ▼ to select *Pen Adjust* and press [Change #].



- 5** Press [+/-] or use the numeric keys to enter the desired pen width and select the desired pen color.



- 6** Press [Close] twice and returns to the *Emulation* screen.

- 7** Press [Page Set].

- 8** Select the desired page size.

NOTE: SPSZ is the size specified with the PRESCRIBE SPSZ command.

- 9** Press [Close] and returns to the *Emulation* screen.

- 10** Press [Close] and returns to the *Printer menu* screen.

Default Font

You can select the default font for the current interface. The default font can be one of the internal fonts or a font that is downloaded to the machine memory or stored on memory card or hard disk.

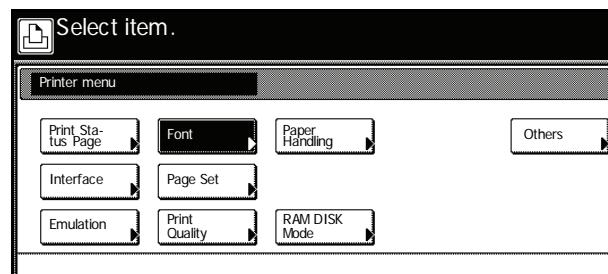
The following settings are available:

- **Selecting the Default Font**
- **Changing the Default Font Size**
- **Character Pitch for Courier/Letter Gothic**
- **Selecting Regular or Dark Courier/Letter Gothic**
- **Setting the Code Set**
- **Printing Lists of Fonts**

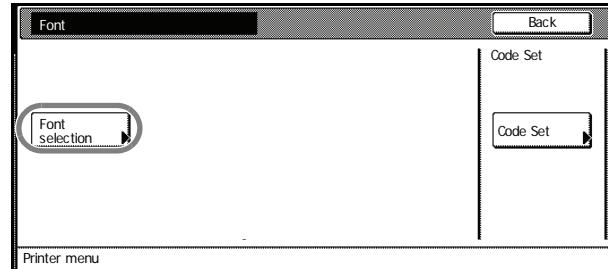
NOTE: You can set the font for each interface.

Selecting the Default Font

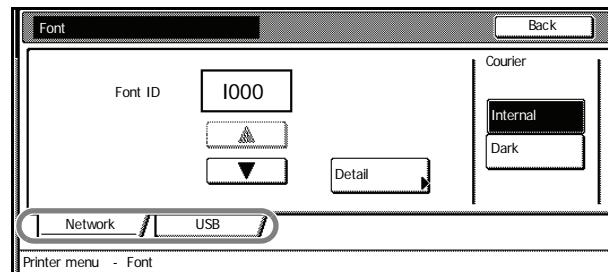
- 1 Press the [Print] key. The machine enters the printer mode.
- 2 Press [Printer Menu].
- 3 Press [Font].



- 4 Press [Font selection].



- 5 Select the desired interface tab.



- 6** Press ▲ or ▼ to select font ID.

Characters displayed before font numbers indicate the following items. For internal font numbers, refer to *Printing Lists of Fonts on page 2-16*.

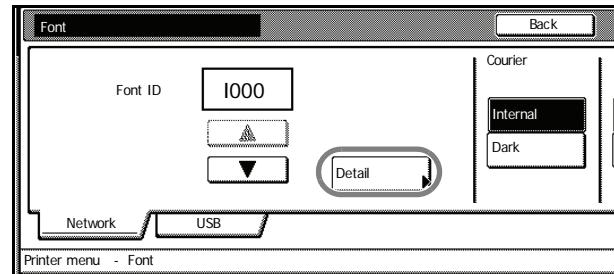
Display	Description
I	Internal font
S	Downloaded fonts
M	Fonts in memory card
H	Fonts in RAM disk or hard disk
O	Fonts in optional ROM

- 7** Press [Close] and returns to the *Font* screen.
8 Press [Close] and returns to the *Printer menu* screen.

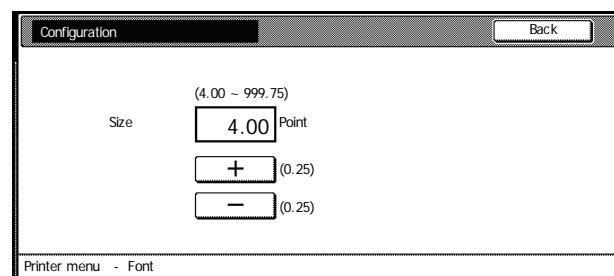
Changing the Default Font Size

If you have selected a proportional font as the default font, you can set the font size. If you have selected the Courier font or the Letter Gothic font as the default font, only the Character Pitch setting displays.

- 1** Access *Font*, refer to *Selecting the Default Font on page 2-13*.
2 Press [Font selection].
3 Press [Detail].



- 4** Press [+] or [-] or use the numeric keys to enter the character size. The character size can be set between 4 and 999.75 points, in 0.25-point increments.



- 5** Press [Close] and returns to the *Font* screen.

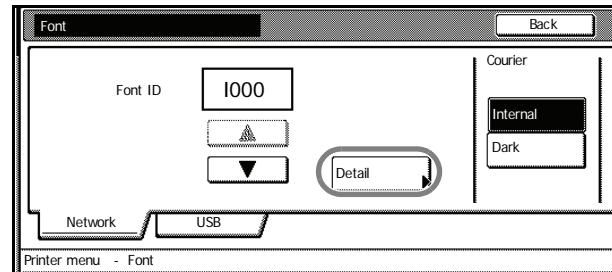
Character Pitch for Courier/Letter Gothic

You can set the character pitch for fixed fonts when the default font is Courier or Letter Gothic.

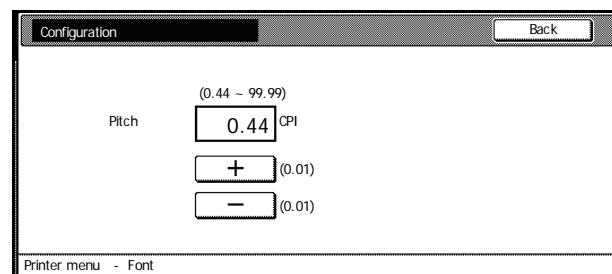
1 Access *Font*, refer to *Selecting the Default Font on page 2-13*.

2 Press [Font selection].

3 Press [Detail].



4 Press [+] or [-] or use the numeric keys to enter the character pitch. The character pitch can be set between 0.44 and 99.99 characters per inch, in 0.01 character-per-inch increments.



5 Press [Close] and returns to the *Font* screen.

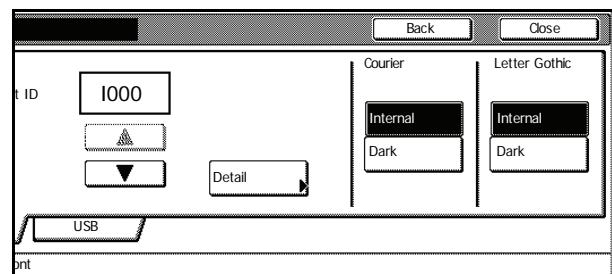
Selecting Regular or Dark Courier/Letter Gothic

Courier or Letter Gothic font thickness can be selected as *Internal* or *Dark*.

1 Access *Font*, refer to *Selecting the Default Font on page 2-13*.

2 Press [Font selection].

3 Press [Internal] or [Dark] under *Courier* and *Letter Gothic* area.



4 Press [Internal] or [Dark] under *Letter Gothic* area.

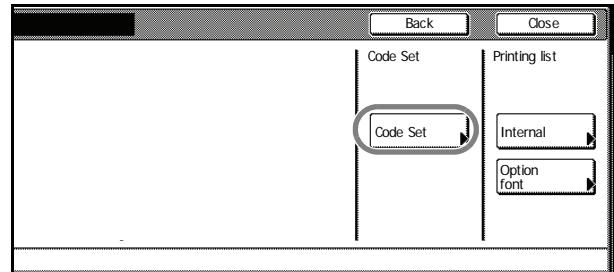
5 Press [Close] and returns to the *Font* screen.

Setting the Code Set

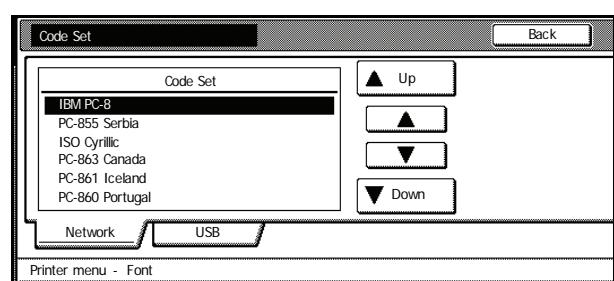
You can change the character code set. Available character code sets vary depending on the current font. (The default is *IBM PC-8*.)

1 Access *Font*, refer to *Selecting the Default Font on page 2-13*.

2 Press [Code Set].



3 Select the desired interface tab.



4 Press ▲ or ▼ to select the desired code set.

5 Press [Close] and returns to the *Font* screen.

6 Press [Close] and returns to the *Printer menu* screen.

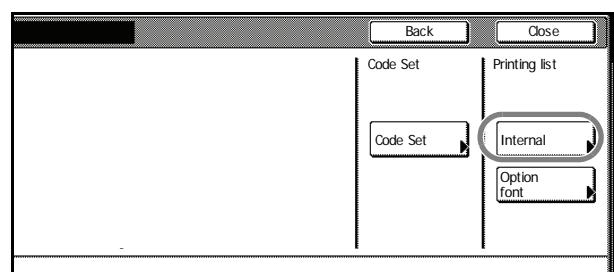
Printing Lists of Fonts

To help you decide in selecting a font, you can printout lists of the internal fonts or the optional fonts including downloaded fonts.

1 Access *Font*, refer to *Selecting the Default Font on page 2-13*.

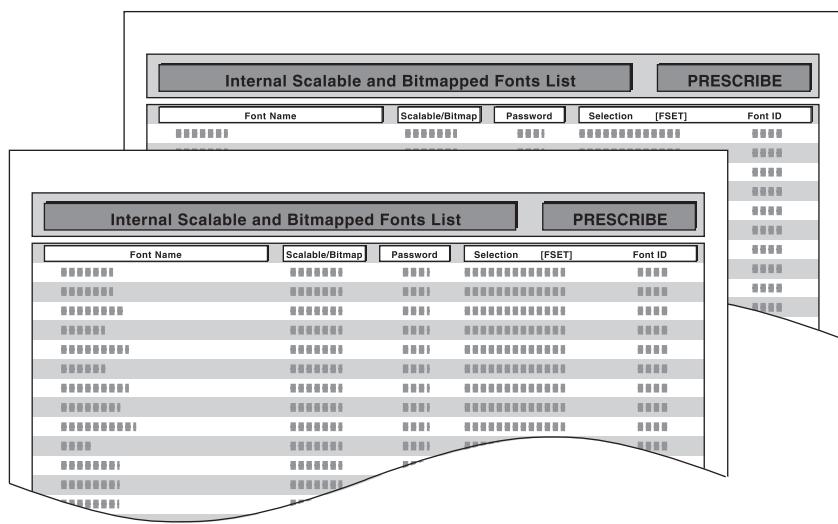
2 Press [Internal] or [Option font] under *Printing list* area.

Option font is displayed only when there are optional fonts available, such as those contained in the optional Memory Card.



3 Press [Printing].

The message *Processing data* appears and the machine prints a list of fonts. Sample lists of fonts are shown in the following illustration.



After the list is printed, and returns to the *Printer menu* screen.

Print Configuration

The following settings are available:

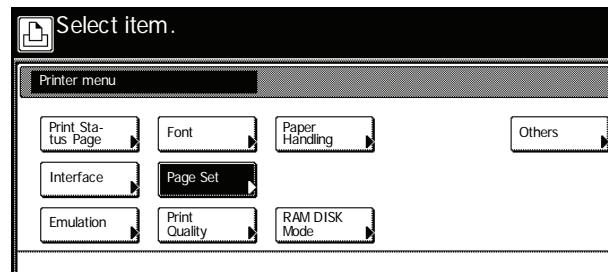
- **Number of Copies**
- **Print Orientation**
- **Zoom**
- **Page Protect Mode**
- **Line Feed (LF) Action**
- **Carriage-Return (CR) Action**

NOTE: You can set the print configuration for each interface.

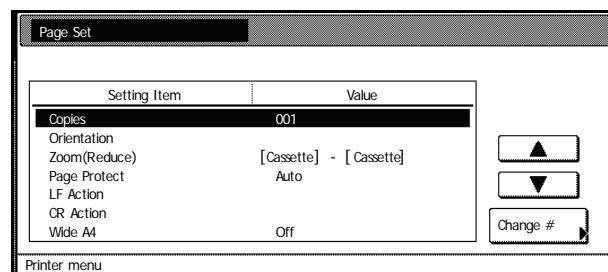
Number of Copies

You can set the number of copies of each page to be printed for the current interface. The number of copies can be set between 1 and 999.

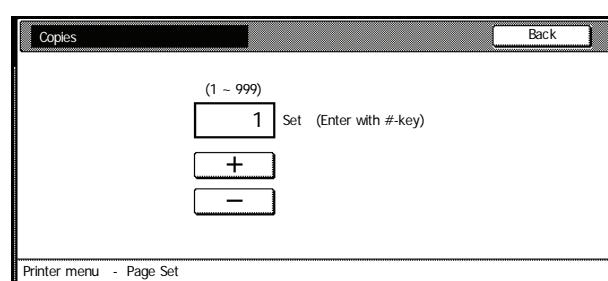
- 1 Press the [Print] key. The machine enters the printer mode.
- 2 Press [Printer Menu].
- 3 Press [Page Set].



- 4 Press ▲ or ▼ to select *Copies* and press [Change #].



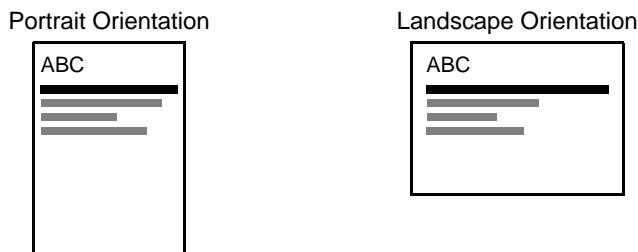
- 5 Press [+/-] or use the numeric keys to enter the number of copies.



- 6** Press [Close] and returns to the *Page Set* screen.
- 7** Press [Close] and returns to the *Printer menu* screen.

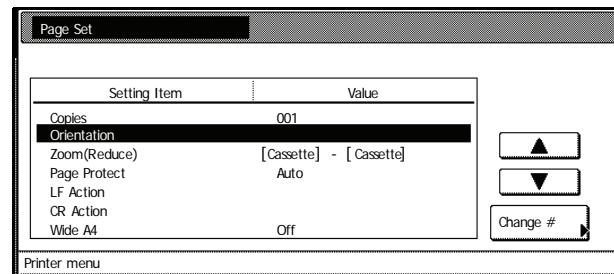
Print Orientation

You can select portrait (upright) or landscape (sideways) page orientation.

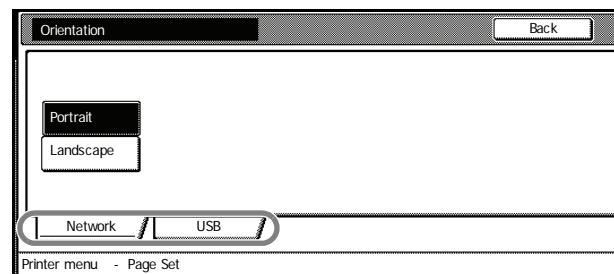


1 Access *Page Set*, refer to *Number of Copies* on page 2-18.

2 Press ▲ or ▼ to select *Orientation* and press [Change #].



3 Select the desired interface tab.



4 Press [Portrait] or [Landscape].

5 Press [Close] and returns to the *Page Set* screen.

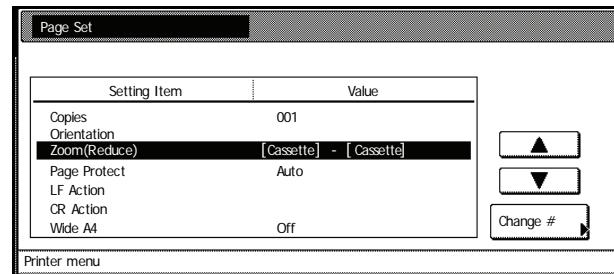
6 Press [Close] and returns to the *Printer menu* screen.

Zoom

If you specify the Paper Size (original size) and the Output Size, the machine reduces the image at a preset magnification ratio to print onto the specified Output Size paper.

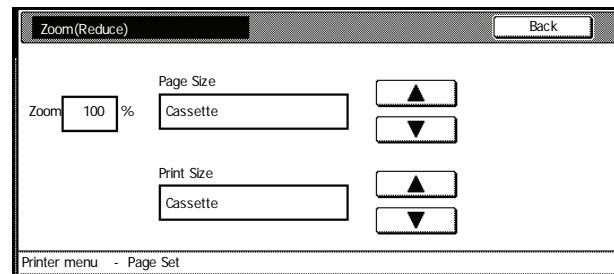
1 Access *Page Set*, refer to *Number of Copies* on page 2-18.

- 2** Press **▲** or **▼** to select **Zoom(Reduce)** and press [Change #].



- 3** Press **▲** or **▼** to select the desired page size and print size.

The reduction ratio will automatically be set and displayed.



- 4** Press [Close] and returns to the *Page Set* screen.

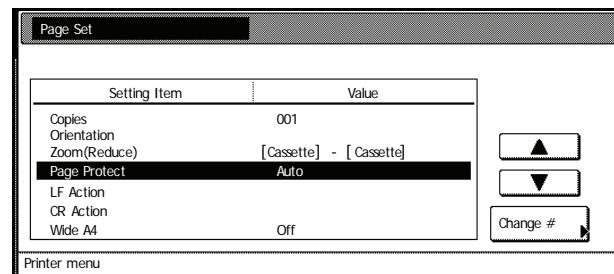
- 5** Press [Close] and returns to the *Printer menu* screen.

Page Protect Mode

The Page Protect Menu does not normally appear, however, *Page Protect* will be forcibly set to *On* if a print overrun error occurs because the print job is too complex. When this has happened, be sure to reset *Page Protect* to *Auto* (default) in order to maintain the optimum use of machine memory.

- 1** Access *Page Set*, refer to *Number of Copies* on page 2-18.

- 2** Press **▲** or **▼** to select *Page Protect* and press [Change #].



- 3** Press [Auto].

- 4** Press [Close] and returns to the *Page Set* screen.

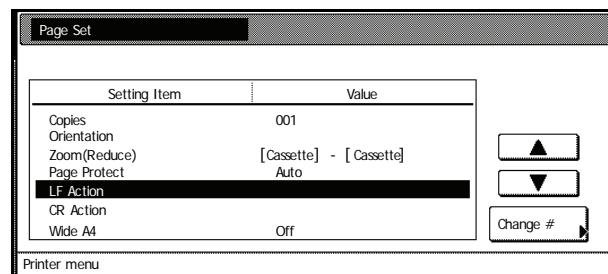
- 5** Press [Close] and returns to the *Printer menu* screen.

Line Feed (LF) Action

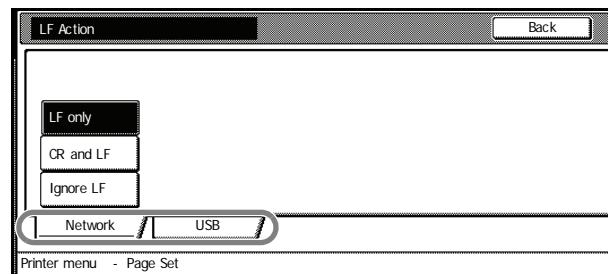
This procedure instructs the machine what to do when it receives a linefeed code (*0AH*).

1 Access *Page Set*, refer to *Number of Copies* on page 2-18.

2 Press ▲ or ▼ to select *LF Action* and press [Change #].



3 Select the desired interface tab.



4 Press the desired linefeed action.

LF only Linefeed is performed (Default).

CR and LF A linefeed and carriage return are performed.

Ignore LF The linefeed is ignored.

5 Press [Close] and returns to the *Page Set* screen.

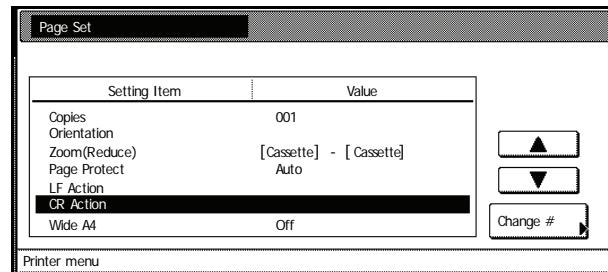
6 Press [Close] and returns to the *Printer menu* screen.

Carriage-Return (CR) Action

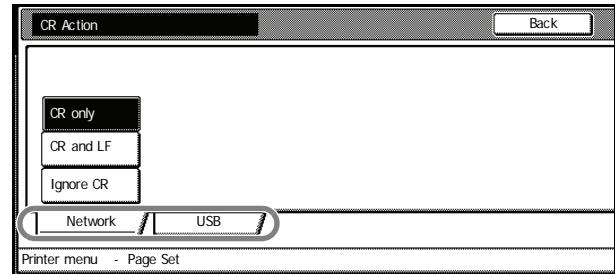
This procedure instructs the machine what to do when it receives a carriage-return code (0DH).

1 Access *Page Set*, refer to *Number of Copies* on page 2-18.

2 Press ▲ or ▼ to select *CR Action* and press [Change #].



- 3** Select the desired interface tab.



- 4** Press the desired carriage-return action.

CF only	A carriage-return is performed (Default).
CR and LF	A linefeed and carriage return are performed.
Ignore CF	The carriage-return is ignored.

- 5** Press [Close] and returns to the *Page Set* screen.

- 6** Press [Close] and returns to the *Printer menu* screen.

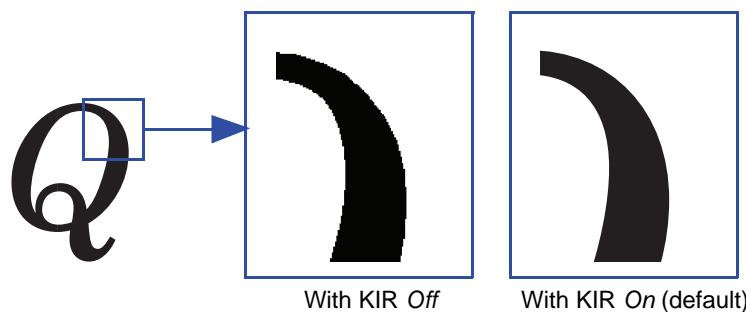
Setting Print Quality

The following settings are available:

- **KIR Mode**
- **Eco Print**
- **Print Density Adjustment**
- **Print Density Adjustment**

KIR Mode

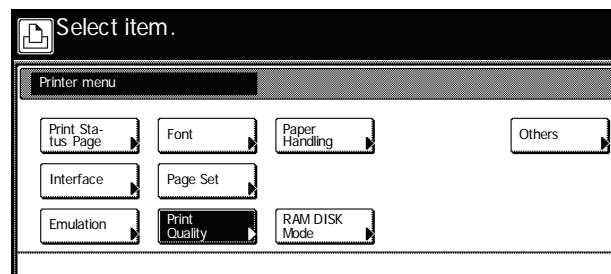
Smoothing changes the print quality to 2400 dpi equivalent x 600 dpi.



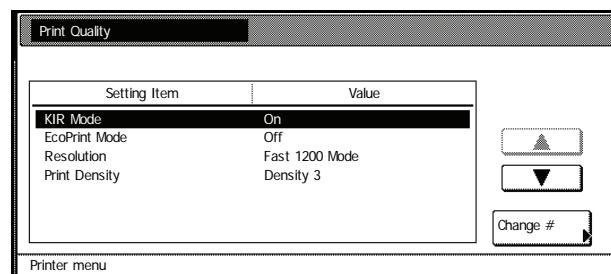
1 Press the [**Print**] key. The machine enters the printer mode.

2 Press [**Printer Menu**].

3 Press [**Print Quality**].



4 Press ▲ or ▼ to select *KIR Mode* and press [**Change #**].



5 Press [**On**] or [**Off**].

- 6 Press [Close] and returns to the *Print Quality* screen.
- 7 Press [Close] and returns to the *Printer menu* screen.

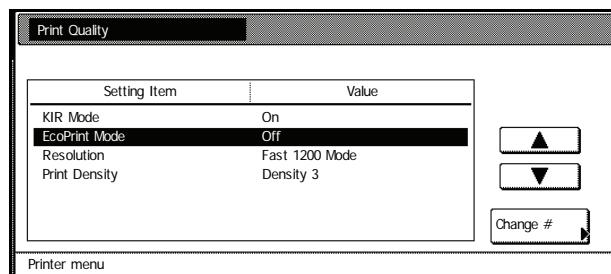
Eco Print

EcoPrint mode allows printing with less toner consumption. Use this mode when high quality printing is not necessary, for example, for draft printing.



- 1 Access *Print Quality*, refer to *KIR Mode* on page 2-23.

- 2 Press ▲ or ▼ to select *EcoPrint* and press [Change #].

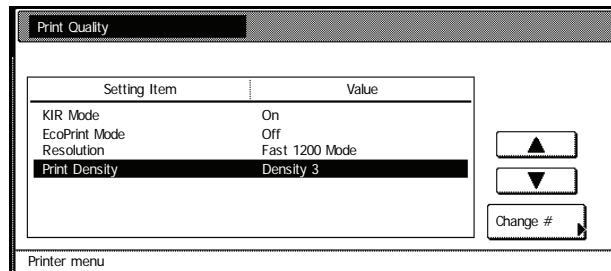


- 3 Press [On] or [Off].
- 4 Press [Close] and returns to the *Print Quality* screen.
- 5 Press [Close] and returns to the *Printer menu* screen.

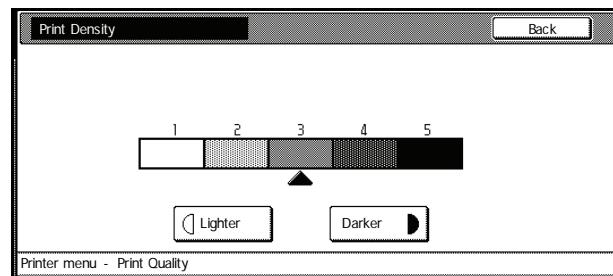
Print Density Adjustment

The print density can be adjusted in five steps from 1 (light) to 5 (dark). Optimizes printing when grayscale is too light.

- 1 Access *Print Quality*, refer to *KIR Mode* on page 2-23.
- 2 Press ▲ or ▼ to select *Print Density* and press [Change #].



-
- 3** Press [Lighter] or [Darker] to select the print density from five steps from 1 (light) to 5 (dark).



IMPORTANT: Adjusting too dark may cause thin lines thickened.

- 4** Press [Close] and returns to the *Print Quality* screen.
- 5** Press [Close] and returns to the *Printer menu* screen.

Paper Handling

The following settings are available:

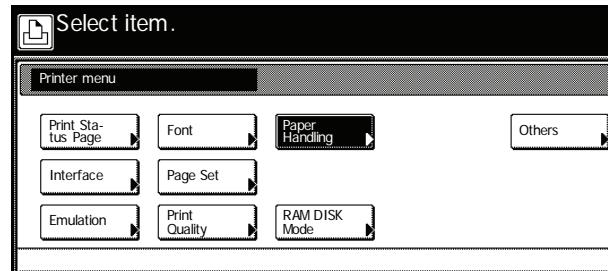
- **MP Tray Mode**
- **Selecting the Paper Feed Source**
- **Duplex Print Mode**
- **Output Destination**
- **Overriding Difference between A4 and Letter**

MP Tray Mode

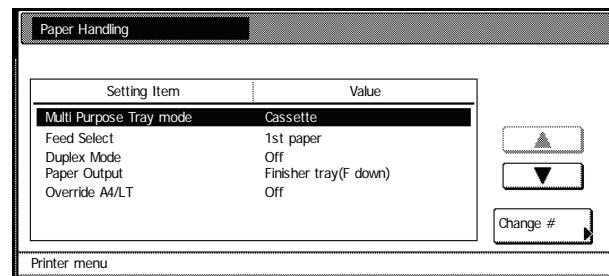
The MP(Multi Purpose) tray can be used in either of two modes — *Cassette* or *First*. The MP tray feed paper differently depending on the mode:

Item	Description
<i>Cassette</i> (default)	The MP tray acts in the same manner as other paper sources. The printer can feed paper from any paper source you command on the printer driver. The cassette mode provides a faster printing speed than the first mode.
<i>First</i>	The MP tray automatically feeds paper placed on the MP tray overriding another paper source that is selected on the printer driver. After all sheets in the MP tray have been used up (approximately 200 sheets), paper will be fed from the paper source originally selected. This mode is convenient to feed paper of special size or type without reloading the current paper source. However, the MP tray must be kept empty if you desire to feed paper from the intended paper source.

- 1 Press the [Print] key. The machine enters the printer mode.
- 2 Press [Printer Menu].
- 3 Press [Paper Handling].



- 4** Press ▲ or ▼ to select *Multi Purpose tray mode* and press [Change #].

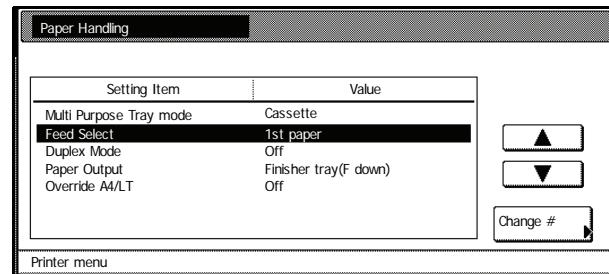


- 5** Select [Cassette] or [First].
- 6** Press [Close] and returns to the *Paper Handling* screen.
- 7** Press [Close] and returns to the *Printer menu* screen.

Selecting the Paper Feed Source

You can select the paper source, from which the machine feeds paper as the default. If an optional paper feeder(s) is installed, it is also available for the default paper source.

- 1** Access *Paper Handling*, refer to *MP Tray Mode on page 2-26*.
- 2** Press ▲ or ▼ to select *Feed Select* and press [Change #].



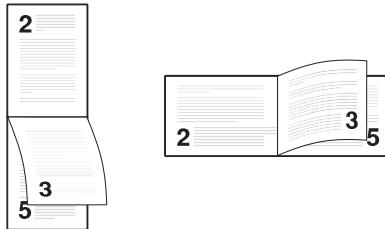
- 3** Select the desired paper feed source.
- 4** Press [Close] and returns to the *Paper Handling* screen.
- 5** Press [Close] and returns to the *Printer menu* screen.

Duplex Print Mode

Use to set the binding position on finished prints for duplex printing.

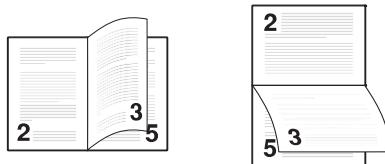
Short Edge Bind

Binding at a short edge



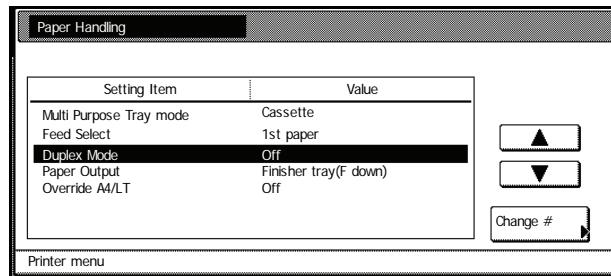
Long Edge Bind

Binding at a long edge



1 Access *Paper Handling*, refer to *MP Tray Mode* on page 2-26.

2 Press ▲ or ▼ to select *Duplex Mode* and press [Change #].



3 Select [None], [Short edge bind], or [Long edge bind].

4 Press [Close] and returns to the *Paper Handling* screen.

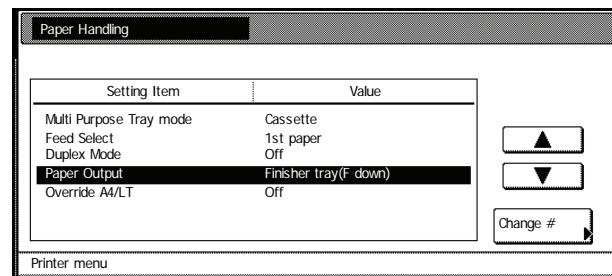
5 Press [Close] and returns to the *Printer menu* screen.

Output Destination

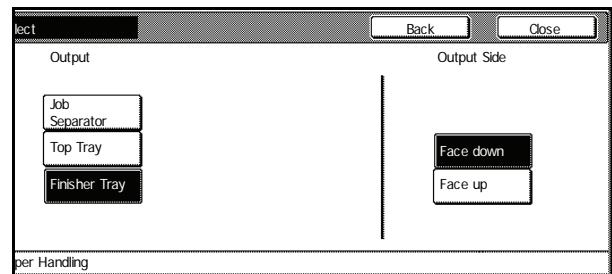
Use to set the paper Output Destination.

1 Access *Paper Handling*, refer to *MP Tray Mode* on page 2-26.

- 2** Press ▲ or ▼ to select *Paper Output* and press [Change #].



- 3** Select the desired output tray and select [Face down] or [Face up].



- 4** Press [Close] and returns to the *Paper Handling* screen.

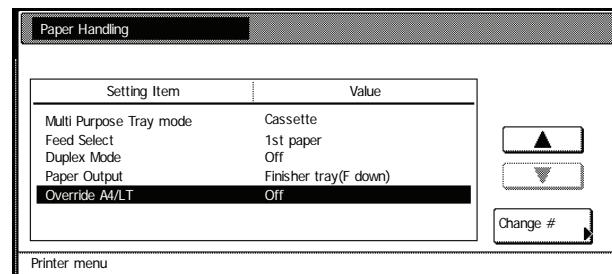
- 5** Press [Close] and returns to the *Printer menu* screen.

Overriding Difference between A4 and Letter

When the *Override A4/LT* is turned *On* using the operator panel, the machine ignores the difference between A4 and Letter paper sizes. Printing is performed without an error message even if the actual paper size in the current cassette differs from the paper size formatting the job. By default, this feature is *Off*.

- 1** Access *Paper Handling*, refer to *MP Tray Mode* on page 2-26.

- 2** Press ▲ or ▼ to select *Override A4/LT* and press [Change #].



- 3** Press [On] or [Off].

- 4** Press [Close] and returns to the *Paper Handling* screen.

- 5** Press [Close] and returns to the *Printer menu* screen.

Operating the Storage Device

The machine supports three types of storage device; optional memory card, optional hard disk, and RAM disk. The optional memory card and optional hard disk are installed into the dedicated slots of the machine. The RAM disk is an allocated part of the printer's memory. If the optional hard disk is installed in the machine, the e-MPS function will be available.

The basic operations of each storage device are the same. This section mainly explains the operation of the memory card.

Using the Memory Card

When the optional Memory Card is installed in this machine, Read, Write and Delete can be performed for different types of data.

The following options are available:

- ***Formatting a Memory Card***
- ***Writing Data***
- ***Reading Data (Data, Program Data, Font Data, and Macro Data)***
- ***Deleting Data (Data, Program Data, Font Data, Macro Data, and Option Language)***
- ***Printing a List of Data Names (Partitions)***

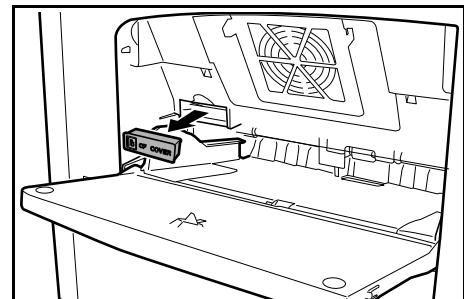
Inserting the Memory Card

- 1 Turn off the main switch.

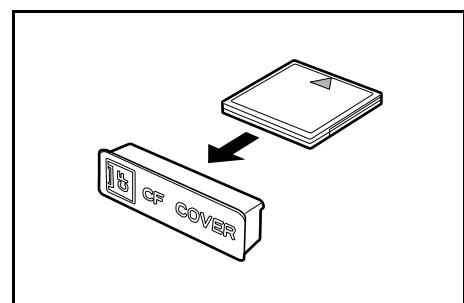
IMPORTANT: Be sure to turn the main switch off before inserting or removing the Memory Card.

- 2 Open the MP (Multi Purpose) Tray.

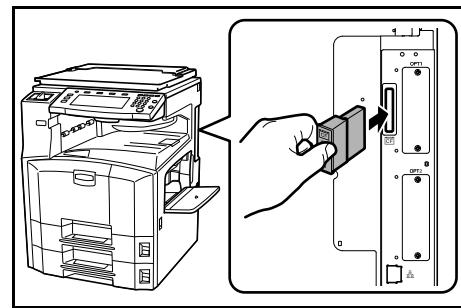
- 3 Remove the Memory Card Cover Holder from the MP tray.



- 4 Attach the Memory Card Cover Holder to the memory card.



- 5** Insert the Memory Card into the slot with the front of the card facing the rear of the machine.



Formatting a Memory Card

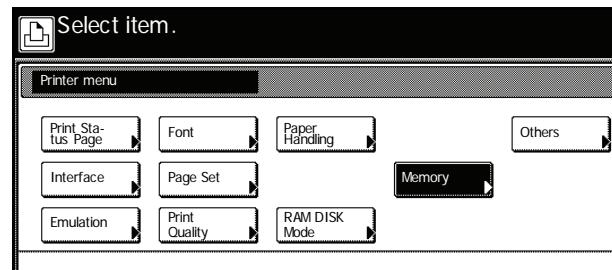
A new memory card must be formatted before it can be used in the machine. Formatting allows data to be written to the memory card.

IMPORTANT: Formatting will destroy any existing data on a storage device including a used memory card. Formatting of the memory card must be executed from this machine.

- 1** Press the [Print] key. The machine enters the printer mode.

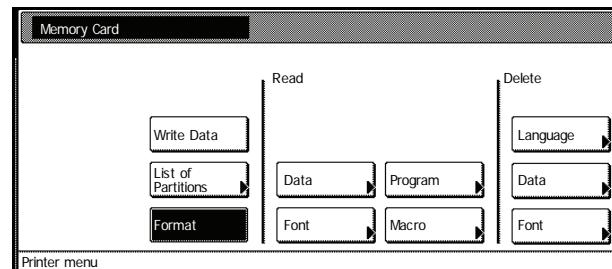
- 2** Press [Printer Menu].

- 3** Press [Memory Card].



- 4** Press [Format].

All data in the memory card will be deleted. Are you sure? is displayed.



- 5** Press [Yes].

Formatting of the memory card starts.

- 6** Formatting is finished, the display returns to the *Printer menu* screen.

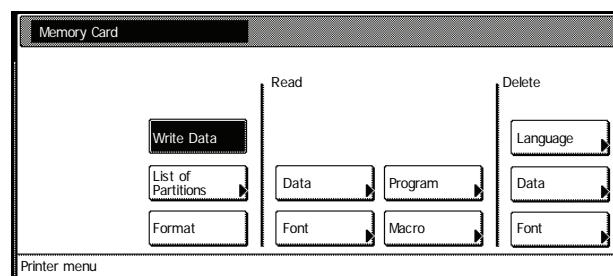
Writing Data

Data can be written to a memory card until the card is full. When writing to a memory card, a name is assigned to the file automatically. You can use the procedure explained in the section *Printing a List of Data Names (Partitions)* on page 2-33 to print a list of data names for confirmation.

1 Access *Memory Card*, refer to *Formatting a Memory Card on page 2-31*.

2 Press [Write Data].

The display will return to the *Printer menu* screen and the machine enter a waiting for data state.



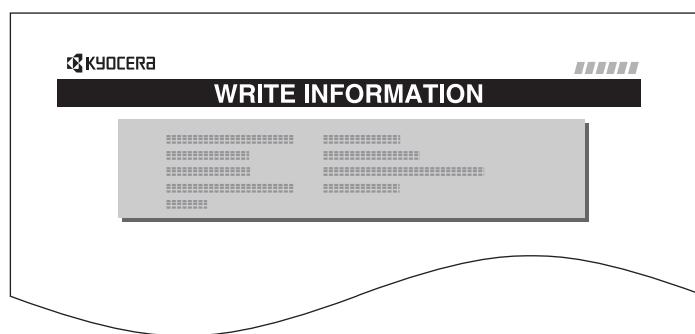
3 Transmit the data from PC.

When data is received from a PC, the message *Processing data* appears. Once the operation is finished, *Waiting* is displayed.

4 Press [GO].

This writes the file to the memory card and instructs the printer to automatically print out a memory card write information page as shown below.

The file is written onto the memory card given a destination name (also referred to as a partition name) which the printer automatically assigns one after another as follows: DataS001 (first data), DataS002 (second data), DataS003 (third data)...



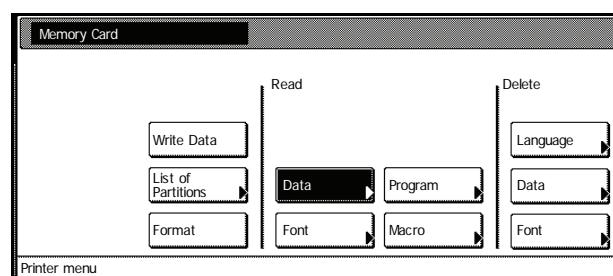
5 After the write information page is printed, the display returns to the *Printer menu* screen.

Reading Data

Reads the selected data, program data, font data, and macro data from the memory card.

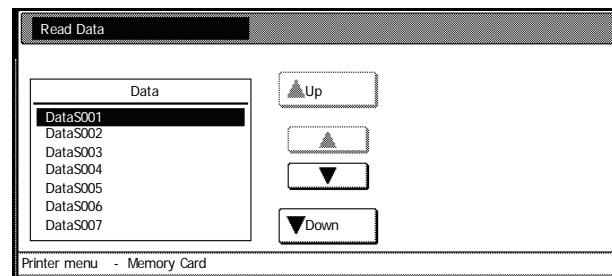
1 Access *Memory Card*, refer to *Formatting a Memory Card on page 2-31*.

2 Select [Data], [Program], [Font], or [Macro] under *Read* area.



- 3** Press ▲ or ▼ to select the data required and press [Enter].

The message *Processing data* appears and the reading of data from the memory card starts.



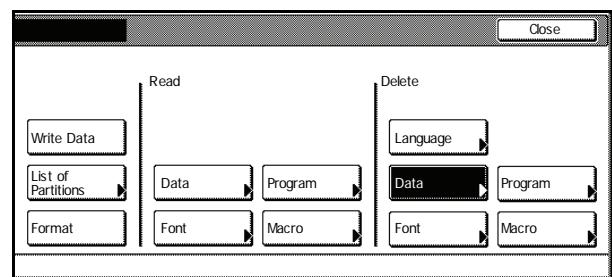
- 4** After reading of data is finished, the display returns to the *Printer menu* screen.

Deleting Data

Deletes the selected data, program data, font data, macro data, and option language from the memory card.

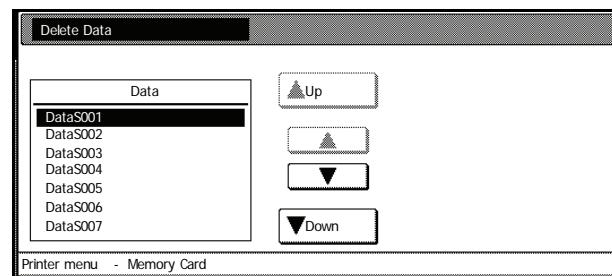
- 1** Access *Memory Card*, refer to *Formatting a Memory Card* on page 2-31.

- 2** Press [Language], [Data], [Program], [Font], or [Macro] under *Delete* area.



- 3** Press ▲ or ▼ to select the data required and press [Delete].

The message *Processing data* appears and the deleting of data from the memory card starts.



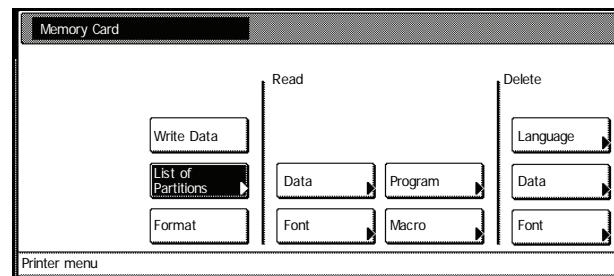
- 4** After the deleting of data is finished, the display returns to the *Printer menu* screen.

Printing a List of Data Names (Partitions)

The machine prints a list of all data names (referred to as partitions) stored in a memory card for reference. (Printing a list is also available for a font card.)

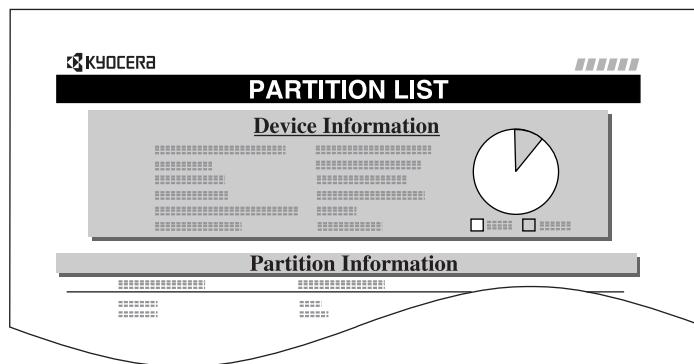
- 1** Access *Memory Card*, refer to *Formatting a Memory Card* on page 2-31.

- 2 Press [List of Partitions].



- 3 Press [Printing].

The message *Processing data* appears and the list of partitions prints.



- 4 After the list of partitions is printed, the display returns to the *Printer menu* screen.

Using the RAM Disk

This machine is equipped with RAM disk functions. The RAM disk is a virtual disk unit that uses a part of the memory. If you assign a certain size of the memory to the RAM disk, you can use it for electronic sorting (for reduction of total print time) and storage and reading of data. Also you can use the e-MPS function.

To activate RAM disk in the printer's memory, first you must set the RAM disk mode to On and set the desired data size for the RAM disk as described in the following section. This allows you to perform the following operations on the RAM disk.

- *Writing Data*
- *Printing a List of Data Names (Partitions)*
- *Reading Data (Data and Program Data)*
- *Deleting Data (Data, Program Data, Font Data, and Macro Data)*

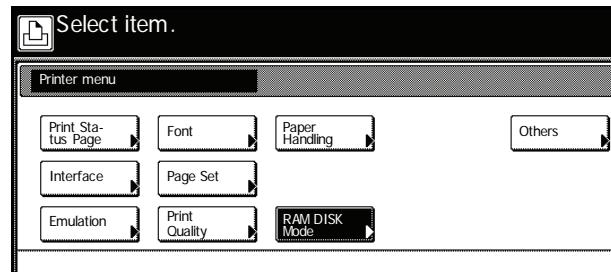
IMPORTANT: The RAM disk can not be used when an optional hard disk is installed. The RAM disk stores data only temporarily. When the machine is reset or turned off, the stored data will be erased. The RAM disk is allocated within the printer's memory available to users. If the size of the RAM disk is set too large, the printing speed may decrease or the memory may become insufficient.

NOTE: The operations of the RAM disk are the same as those of the memory card. Refer to the relevant sections **Using the Memory Card** on page 2-30.

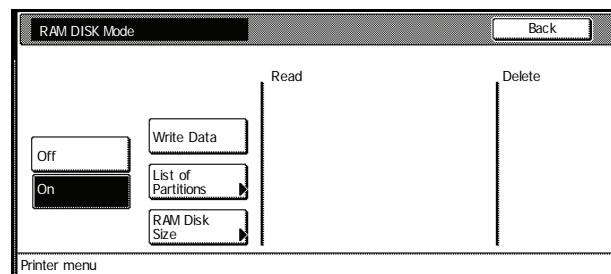
Activating the RAM Disk

By default, the RAM disk is not activated (*Off*). To confirm the RAM disk size or activate the RAM disk, proceed as follows:

- 1 Press the [**Print**] key. The machine enters the printer mode.
- 2 Press [**Printer Menu**].
- 3 Press [**RAM DISK Mode**].



- 4 Press [**On**].



- 5 Press [**Close**].

Do you want to restart immediately? is displayed.

- 6 Press [**Yes**].

The machine restarts and the RAM disk mode is enabled.

Setting the RAM Disk Size

To use the RAM disk, activate and enter the desired size of the RAM disk in the manner described below. The maximum RAM disk size can be calculated as follows:

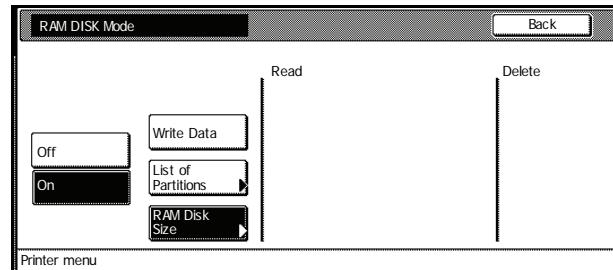
$$\text{maximum RAM disk size} = \text{Total printer memory} - 36\text{MB}$$

For example, if the total memory installed in your printer is 64MB, you can set 28MB of RAM disk. If you attempt to set the RAM disk size beyond this restriction, the printer automatically round it down so that the size is always 36MB less than the total printer memory.

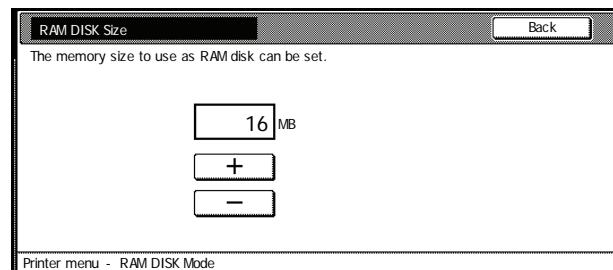
IMPORTANT: To activate RAM disk in the printer's memory, first you must set the RAM disk mode to *On* and set the desired size for the RAM disk.

1 Access *RAM DISK Mode*, refer to **Activating the RAM Disk** on page 2-35.

2 Press [RAM DISK Size].



3 Press [+/-] or use the numeric keys to enter the RAM disk size.



4 Press [Close].

When memory size is changed, *Do you want to restart immediately?* is displayed.

5 Press [Yes].

The machine restarts and the RAM disk size is changed.

Using the Optional Hard Disk

Installing the optional hard disk into the printer allows you to use all of the e-MPS function. To use the e-MPS function, refer to **e-MPS Function** on page 2-38. This allows you to perform the following operations on the hard disk.

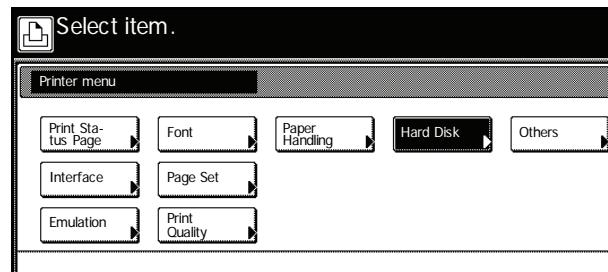
- *Writing Data*
- *Printing a List of Data Names (Partitions)*
- *Reading Data (Data and Program Data)*
- *Deleting Data (Data, Program Data, Font Data, and Macro Data)*
- *Formatting a Hard Disk*

NOTE: The operations of the hard disk are the same as those of the memory card. Refer to the relevant sections **Using the Memory Card** on page 2-30.

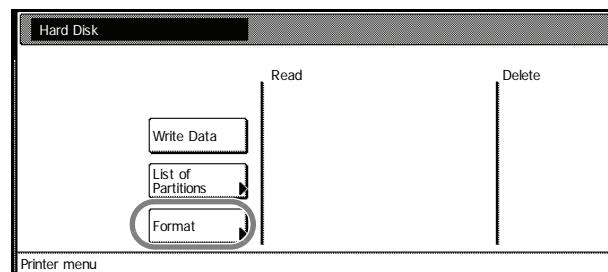
Formatting a Hard Disk

When a hard disk is inserted into the printer for the first time, it must be formatted before use.

- 1 Press the [Print] key. The machine enters the printer mode.
- 2 Press [Printer Menu].
- 3 Press [Hard Disk].



- 4 Press [Format].
*All data in the HDD will be deleted.
Are you sure?* is displayed.
- 5 Press [Yes].
Formatting of the hard disk starts.
- 6 After the deleting of data is finished, the display returns to the Printer menu screen.



e-MPS Function

The e-MPS is an abbreviation for *enhanced-Multiple Printing System* which implements the following functions that are available from the printer driver:

The following settings are available:

- **Printing a Quick Copy**
- **Using Proof-and-Hold**
- **Printing a Private Print/Job Storage**
- **Retrieving Jobs from Virtual Mailbox (VMB)**
- **Printing a List of Virtual Mailbox (VMB)**
- **Printing a List of Code Jobs**
- **Changing e-MPS Configuration**

NOTE: To use the e-MPS functions, the optional Hard Disk must be installed. For details on e-MPS, refer to the *KX Driver User Guide*. If the RAM Disk is switched *On*, the e-MPS function can still be used for proof-and-hold jobs, private print jobs, and printing a list of code jobs. Refer to **Activating the RAM Disk** on page **2-35**.

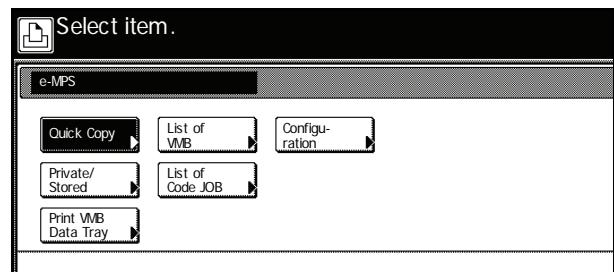
Printing a Quick Copy

This mode enables you to print the requested number of copies of a job, simultaneously storing the job on the hard disk. When additional copies are required, you can reprint the required number of copies from the printer operator panel.

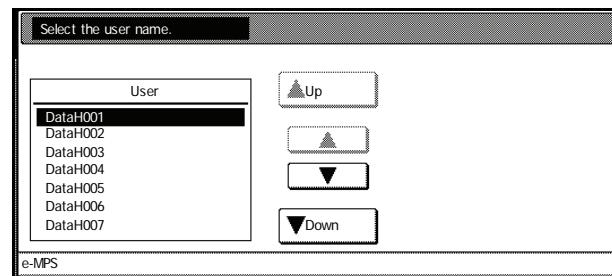
The default number of print jobs that can be stored on the hard disk is 32. This value can be increased to up to 50 from the configuration menu.

IMPORTANT: When the number of jobs reaches the limit, the oldest job will be overwritten by the new one. When the printer is turned off, all stored jobs will be deleted.

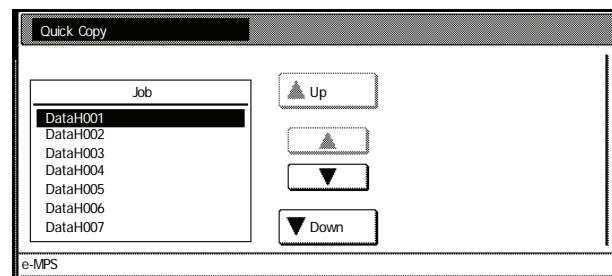
- 1 Press the [Print] key. The machine enters the printer mode.
- 2 Press [e-MPS].
- 3 Press [Quick Copy].



- 4** Press ▲ or ▼ to select the user name required and press [Next].



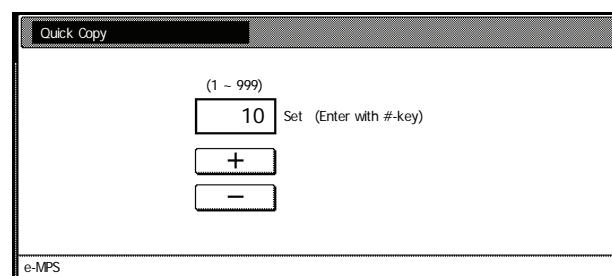
- 5** Press ▲ or ▼ to select a job required and press [Next].



NOTE: If you want to delete a job, press ▲ or ▼ to select a job required and press [Delete].

- 6** Press [+] or [-] or use the numeric keys to enter the number of copies and press [Printing].

The message *Processing data* appears and the printing starts.



- 7** After the printing is finished, and returns to the *Printer menu* screen.

Using Proof-and-Hold

When you print multiple copies, this mode first prints one copy so that you can proof it before continuing to print the remaining copies. Since you can proof the printouts before printing the remaining copies, wastage of paper can be reduced.

The printer prints one copy and, at the same time, saves the print job on the hard disk. You can also change the number of copies when resuming printing from the operator panel.

When the printer is turned off, all stored jobs will be deleted.

Printing Remaining Copies of a Proof and Hold Job

Printing a Proof-and-Hold job on the operator panel is the same as printing a quick copy job. Refer to the relevant sections *Printing a Quick Copy* on page 2-38.

Printing a Private Print/Job Storage

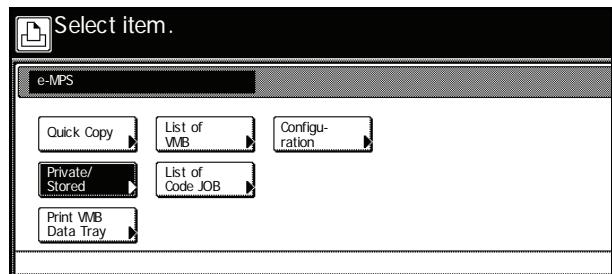
In private print, you can specify that a job is not printed until you release the job from the operator panel. When sending the job from the application software, specify a 4-digit access code in the printer driver. The job is released for printing by entering the access code on the operator panel ensuring confidentiality of the print job. The data is cleared after printing.

The job storage feature saves jobs on the hard disk for future printing, even if the printing system is switched off. You can also use access codes to restrict the printing of forms.

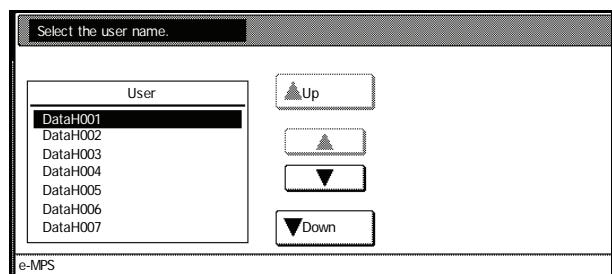
1 Press the [Print] key. The machine enters the printer mode.

2 Press [e-MPS].

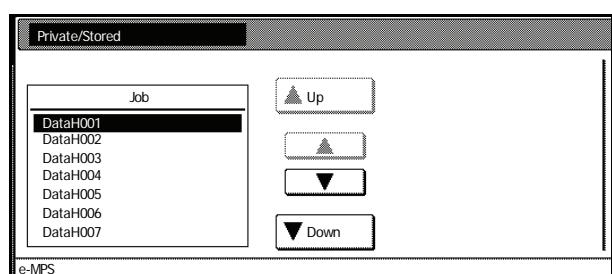
3 Press [Private/Stored].



4 Press ▲ or ▼ to select the user name required and press [Next].

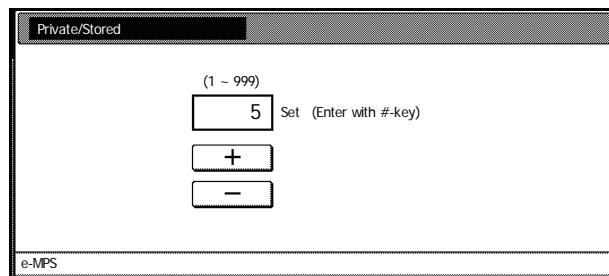


5 Press ▲ or ▼ to select a job required and press [Next].



NOTE: If you want to delete a job, press ▲ or ▼ to select a job required and press [Delete].

- 6** Press [+] or [-] or use the numeric keys to enter the number of copies, and press [Printing].

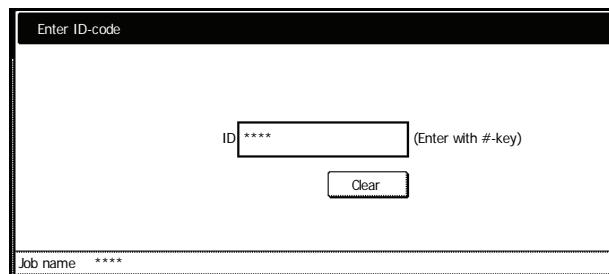


- 7** Press [Printing].

Enter ID-code is displayed.

- 8** Use the numeric keys to enter the four-digit access code in the printer driver and press [Enter].

The message *Processing data* appears and the printing starts.



- 9** After the printing is finished, and returns to the *Printer menu* screen.

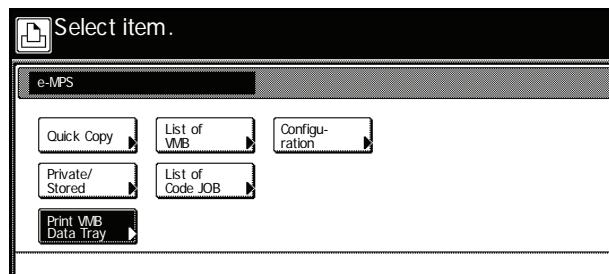
Retrieving Jobs from Virtual Mailbox (VMB)

Virtual mailbox is part of Job Storage, which stores print jobs on the hard disk without printing. It enables you to retrieve jobs later from the operator panel. When the job is printed the data is deleted from the mailbox.

- 1** Press the **[Print]** key. The machine enters the printer mode.

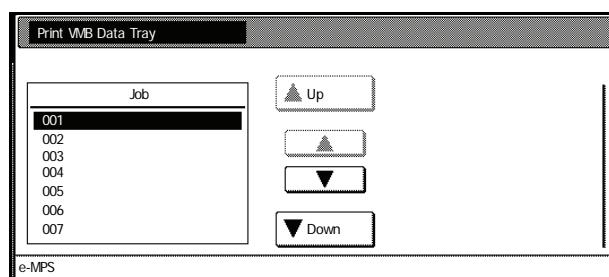
- 2** Press [e-MPS].

- 3** Press [Print VMB Data Tray].



- 4** Press ▲ or ▼ to select a job required and press [Printing].

The message *Processing data* appears and the printing starts.

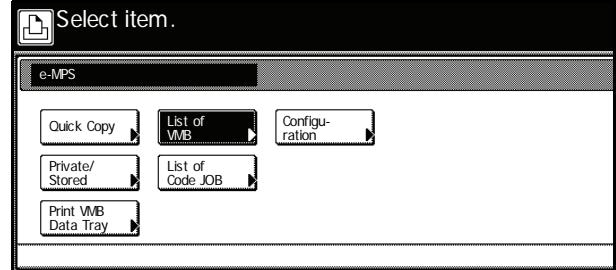


- 5 After the printing is finished, and returns to the *Printer menu* screen.

Printing a List of Virtual Mailbox (VMB)

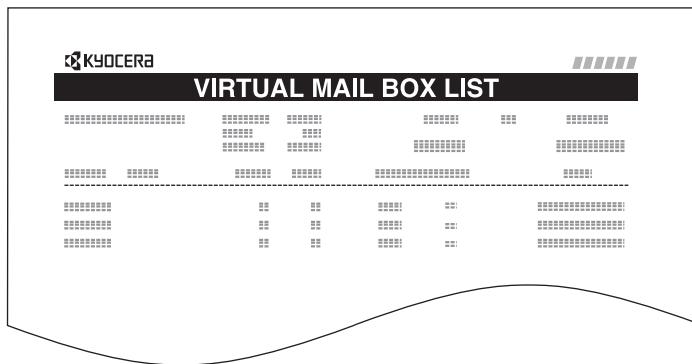
A list can be printed which shows the current virtual mailbox numbers, the data stored in a mailbox, the size of data stored and other information.

- 1 Press the **[Print]** key. The machine enters the printer mode.
- 2 Press **[e-MPS]**.
- 3 Press **[List of VMB]**.



- 4 Press **[Printing]**.

The message *Processing data* appears and the printing starts.



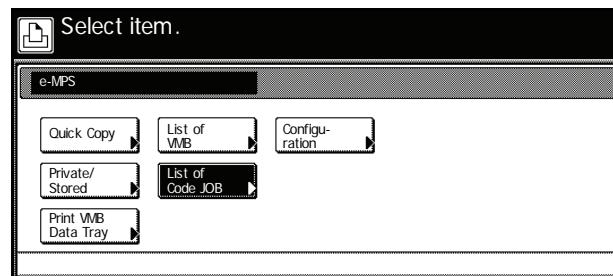
- 5 After the printing is finished, and returns to the *Printer menu* screen.

Printing a List of Code Jobs

Permanent code jobs in the hard disk can be printed.

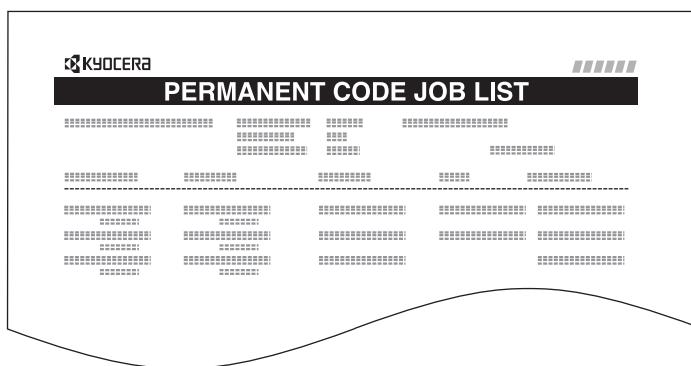
- 1 Press the **[Print]** key. The machine enters the printer mode.
- 2 Press **[e-MPS]**.

- 3** Press [List of Code JOB].



- 4** Press [Printing].

The message *Processing data* appears and the printing starts.



- 5** After the printing is finished, and returns to the *Printer menu* screen.

Changing e-MPS Configuration

The e-MPS settings such as the maximum number of documents that can be stored on the hard disk and the capacity assigned to each function, can be changed.

The following settings are available:

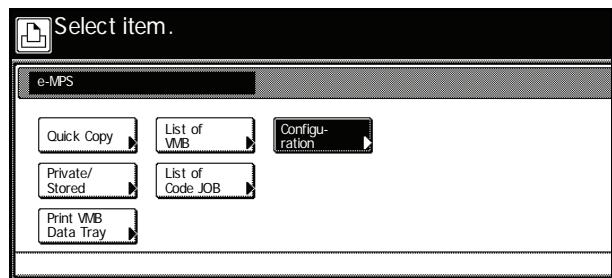
- Changing the Maximum Number of Quick Copy Jobs
- Maximum Space Assigned to Temporary Code Jobs
- Maximum Space Assigned to Permanent Code Jobs
- Maximum Space Assigned to Virtual Mailboxes (VMB)

Changing the Maximum Number of Quick Copy Jobs

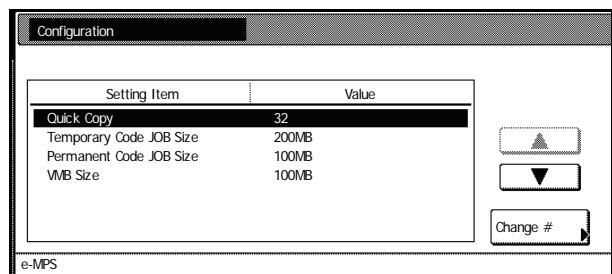
This changes maximum number of quick copy jobs from 0 to 50. The default is 32.

- 1** Press the [**Print**] key. The machine enters the printer mode.
- 2** Press [**e-MPS**].

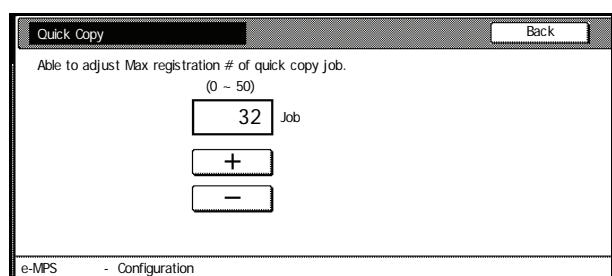
- 3** Press [Configuration].



- 4** Press ▲ or ▼ to select *Quick Copy* and press [Change #].



- 5** Press [+] or [-] or use the numeric keys to enter the maximum number of jobs.



- 6** Press [Close] and returns to the *Configuration* screen.

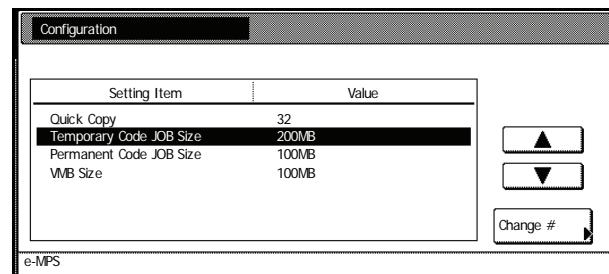
- 7** Press [Close] and returns to the e-MPS screen.

Maximum Space Assigned to Temporary Code Jobs

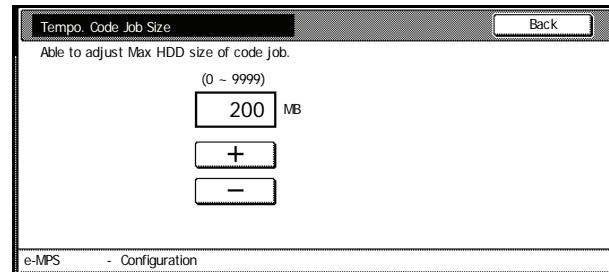
This changes the hard disk space that holds temporary code jobs. You can change the maximum space from 0 to 9999 (megabytes). The actual maximum size depends on the size of free hard disk space.

- 1** Press the **[Print]** key. The machine enters the printer mode.
- 2** Press [e-MPS].
- 3** Press [Configuration].

- 4** Press ▲ or ▼ to select *Temporary Code JOB Size* and press [Change #].



- 5** Press [+] or [-] or use the numeric keys to enter the maximum size.



- 6** Press [Close] and returns to the *Configuration* screen.

- 7** Press [Close] and returns to the e-MPS screen.

Maximum Space Assigned to Permanent Code Jobs

This changes the hard disk space that holds permanent code jobs. You can change the maximum space from 0 to 9999 (megabytes). The actual maximum size depends on the size of free hard disk space. The operations are the same as *Maximum Space Assigned to Temporary Code Jobs*.

Maximum Space Assigned to Virtual Mailboxes (VMB)

This changes the hard disk space for virtual mailboxes. You can change the maximum space from 0 to 9999 (megabytes). The actual maximum size depends on the size of free hard disk space. The operations are the same as *Maximum Space Assigned to Temporary Code Jobs*.

Other Modes

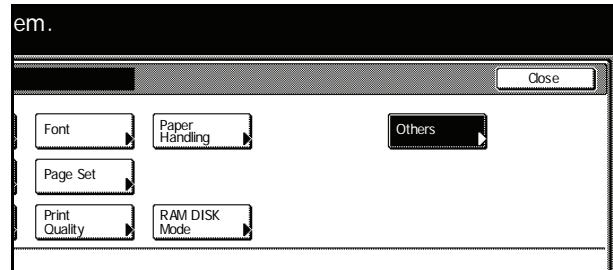
The following modes can be accessed in the Others submenu:

- **Automatic Form Feed Timeout Setting**
- **Resource Protect Mode**
- **Auto Error Clear Setting**
- **Finishing Error Detection**
- **Printing the Service Status Page**
- **Restart**
- **Received Data Dump**

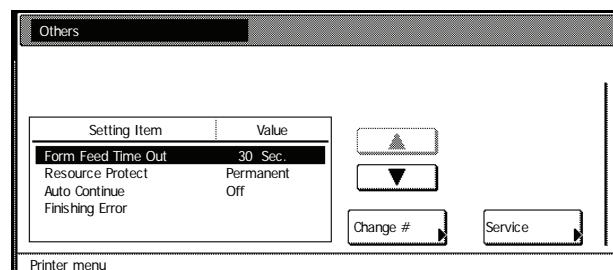
Automatic Form Feed Timeout Setting

If this machine does not receive any information indicating the end of data after receiving the last data, the machine waits for a certain time without printing the last page. When the preset time elapses, the machine automatically performs a form feed. If you set the time to 0, the machine does not perform a form feed until GO is manually selected.

- 1** Press the **[Print]** key. The machine enters the printer mode.
- 2** Press **[Printer Menu]**.
- 3** Press **[Others]**.

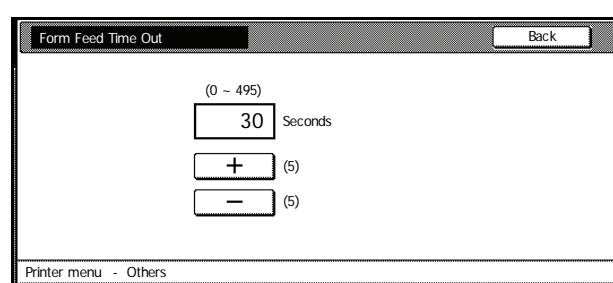


- 4** Press **▲** or **▼** to select *Form Feed Time Out* and press **[Change #]**.



- 5** Press **[+]** or **[-]** or use the numeric keys to enter the form feed time.

The timeout time can be between 0 and 495 seconds, in 5-second increments.



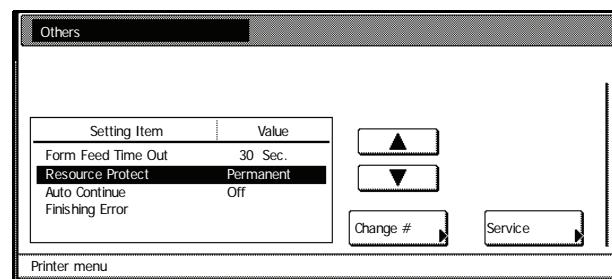
- 6** Press [Close] and returns to the *Others* screen.
- 7** Press [Close] and returns to the *Printer menu* screen.

Resource Protect Mode

The *Resource Protect Mode* protects the resource data such as downloaded fonts and macros and memorizes the PCL resources even if the emulation mode is switched *Off*. If you select *Permanent*, temporary resources are not protected. If you select *Permanent/Temporary*, temporary resources are protected.

- 1** Access *Others*, refer to *Automatic Form Feed Timeout Setting on page 2-46*.

- 2** Press **▲** or **▼** to select *Resource Protect* and press [Change #].



- 3** Press [Off], [Permanent], or [Permanent/Temporary].
- 4** Press [Close] and returns to the *Others* screen.
- 5** Press [Close] and returns to the *Printer menu* screen.

Auto Error Clear Setting

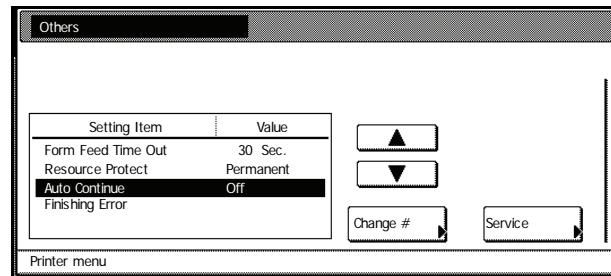
If an error that still allows you to continue printing occurs, the next received data is automatically printed after a set period of time elapses. For example, if the printer is shared over a network as a network printer and one person causes one of the above errors, after the set period of time elapses, the data sent from the next person is printed. The default setting is *Off* (Auto Error Clear disabled). The auto clear errors are:

- *Print overrun* Press GO.
- *Memory overflow* Press GO.

You can also set the time that elapses before *Auto Continue* is activated.

- 1** Access *Others*, refer to *Automatic Form Feed Timeout Setting on page 2-46*.

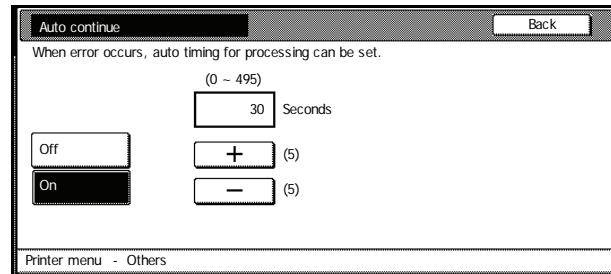
- 2** Press **▲** or **▼** to select *Auto Continue* and press [Change #].



- 3** Press [On] or [Off].

When you have selected *On*, press **[+]** or **[−]** or use the numeric keys to enter the auto continue time.

The auto continue time can be between 0 and 495 seconds, in 5-second increments.



- 4** Press [Close] and returns to the *Others* screen.

- 5** Press [Close] and returns to the *Printer menu* screen.

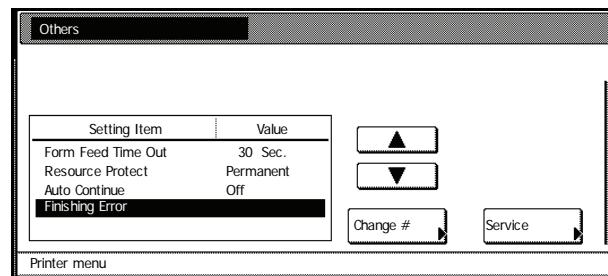
Finishing Error Detection

If the error detection setting for duplex (staple) printing has been turned *On*, and you attempt to print onto a paper size and paper type that cannot be used for duplex (staple) printing, the error message will be displayed and printing will stop. To print onto one-side (without staple) of the paper only when this message is displayed, press [GO]. The default setting is *Off*.

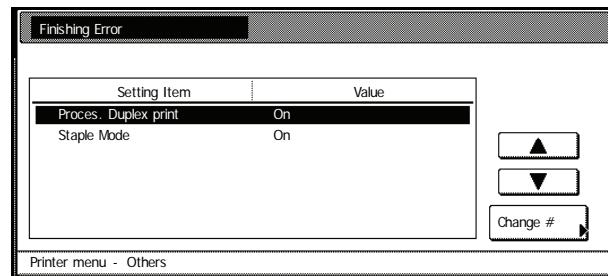
Mode		Description
<i>Proces. Duplex print</i>	<i>On</i>	Displays an error message. Press [GO] to continue single side printing. Press [Cancel] to cancel printing.
	<i>Off</i>	Continues 1-sided printing without showing an error message.
<i>Staple Mode</i>	<i>On</i>	Displays an error message. Press [GO] to clear the error message and continue printing without stapling. Press [Cancel] to cancel printing.
	<i>Off</i>	No error message is shown and printing continues without stapling.

- 1** Access *Others*, refer to *Automatic Form Feed Timeout Setting* on page 2-46.

- 2** Press **▲** or **▼** to select *Finishing Error* and press [Change #].



- 3** Press **▲** or **▼** to select *Proces. Duplex print* and press [Change #].



- 4** Press [On] or [Off].

- 5** Press [Close] and returns to the *Finishing Error* screen.

- 6** Repeat steps 3 to 5 to set the *Staple Mode*.

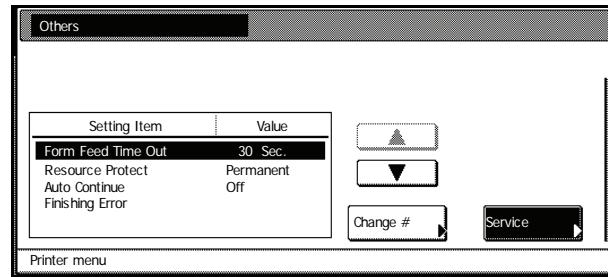
- 7** Press [Close] and returns to the *Others* screen.

- 8** Press [Close] and returns to the *Printer menu* screen.

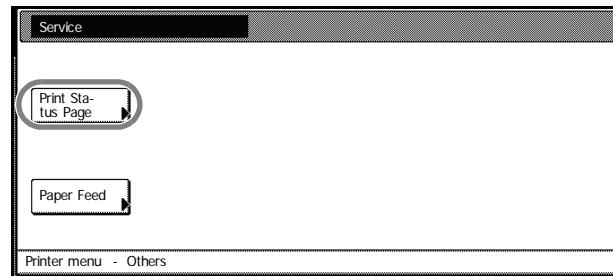
Printing the Service Status Page

The service status page contains printer settings information that is more detailed than the standard status page and is therefore mostly for service purposes. However, there is a great deal of information on the service status page that may be useful to you.

- 1** Access *Others*, refer to *Automatic Form Feed Timeout Setting on page 2-46*.
- 2** Press [Service].



- 3 Press [Print Status Page].



- 4 Press [Printing].

The message *Processing data* appears and the machine prints a service status page or test page.

- 5 After the service status page is printed, the display returns to the *Printer menu* screen.

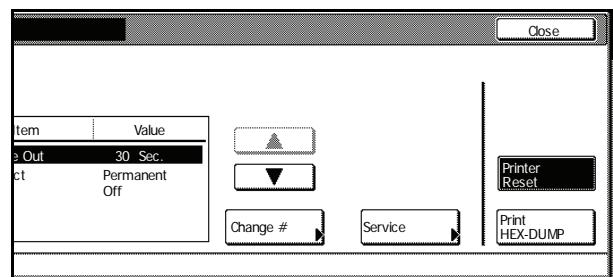
Restart

To reset only the printer board without the need to turn off to the machine, perform the following procedure. All of the printing data and waiting data are deleted when this machine is restarted.

- 1 Access *Others*, refer to *Automatic Form Feed Timeout Setting* on page 2-46.

- 2 Press [Printer Reset].

Only printer board is working without turning off the main SW. Are you sure? is displayed.



- 3 Press [Yes].

Restart is executed.

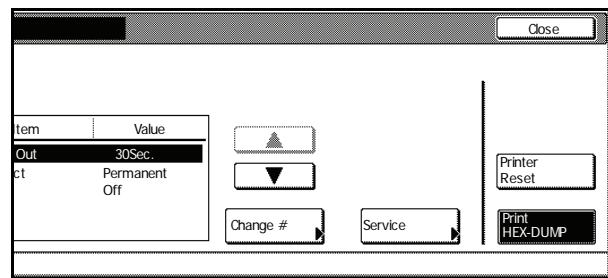
Received Data Dump

You can print data received by the printer as hexadecimal code for debugging programs and files.

- 1 Access *Others*, refer to *Automatic Form Feed Timeout Setting* on page 2-46.

- 2** Press [Print HEX-DUMP].

*Printing mode with dump Rx data.
Are you sure?* is displayed.



- 3** Press [Yes].

The message *Processing data* appears for a second, followed by *Waiting*.

- 4** While the message display is indicating *Waiting* send data to be hex-dumped to the printer. The message display indicates *Processing data* while the data is being received.

NOTE: You can cancel printing of any more dump data by pressing [GO] and then [CANCEL].

- 5** Once all data has been received, the message *Waiting* will appear. Press [GO] to finish hex-dump printing.

3 Troubleshooting

Basic troubleshooting chart

If you experience trouble while you are using this machine as a printer, refer to the table below to perform minor adjustments. If trouble persists, contact your service representative or an authorized service center.

NOTE: For information in regard to general mechanical trouble with the machine, refer to the Operation Guide for your copier.

Problem	Check point	Procedure
Nothing is printed out	Is the power cord loose?	Connect the power cord securely to a power source.
	Is the power on to the printer?	Turn the main switch to the printer on.
	Is the printer cable appropriate and is it connected properly?	Be sure to use a compliant printer cable and make sure it is connected properly.
	Did you connect the printer cable after you turned the power to the printer On?	Connect the printer cable before you turn the power to the printer on.
	Is the printer off-line? (Is the Status indicator flashing amber?)	Perform the appropriate procedure to put the printer on-line. Press the [Print] key to switch to the printer mode. Press [GO]. The Status indicator will go out.
Text is not printed correctly	Is the printer cable appropriate and is it connected properly?	Be sure to use a compliant printer cable and make sure it is connected properly.
	Is the setting configuration in your PC correct?	Confirm the settings in the printer driver as well as in the software application in use.
Print out is not correct	Is the emulation protocol setting correct?	Check the emulation protocol setting.

Display message

If an error message appears on the operation panel, first check the following tables for cause of the trouble and then perform the corresponding procedure. For more detailed information, refer to the Operation Guide for your copier as well as the Operation Guide for any optional equipment that is installed in your machine.

Display message	Procedure
<i>Add paper in drawer (cassette). ## size (####)</i>	<p>The size or type of paper selected for printing does not match the size or type of paper in the cassette. Replace the paper in the drawer with that of the correct size and type.</p> <p>If you want to switch to and print from a different cassette, select the desired cassette on the touch panel and then press [GO].</p> <p>The following commands will be displayed in the printer mode.</p> <p>[GO]: Force-prints onto the current size or type of paper. [Cancel]: Cancels the printing operation completely.</p>
<i>Use alternative? Press GO.</i>	Displayed after changing the drawer. Press [GO].
<i>Set paper Press GO.</i>	This mode feeds a stack of multiple sheets one at a time. Every time you want to feed a sheet, press [GO].
<i>Load paper.</i>	The cassette has run out of paper. Add paper.
<i>Add staples.</i>	The finisher (option) has run out of staples. Refer to the Operation Guide for the finisher and replenish the staples.
<i>Call service.</i>	Trouble has occurred within the printer. Contact your service representative or an authorized service center.
<i>Account ID mismatch.</i>	The account code you entered does not match the registered one. Check the account code that is registered in the printer driver.
<i>Exceeded print quantity limit.</i>	The amount of printing accomplished has exceeded the acceptable capacity as set under copy management. In order to print further, change the copy management setting in the printer.
<i>Error has occur. PLS change to printer screen and check.</i>	This message will appear when a printer error occurs and the machine is in a mode other than the printer mode. Press the [Print] key to switch to the print mode screen and the corresponding error message will be displayed.
<i>Memory card error Press GO. Code: ##</i>	A memory card error has occurred. Look at the error code given in place of ## and refer to <i>Memory Card Errors on page 3-4</i> . To ignore the memory card error, press [GO].
<i>HARD DISK error Press GO. Code: ##</i>	A hard disk error has occurred. Look at the error code given in place of ## and refer to <i>Hard Disk Errors on page 3-5</i> . To ignore the hard disk error, press [GO].
<i>KPDL error Press GO. Code: ##</i>	<p>The current print job cannot continue. Press [GO] prints out the data that has already been processed. If auto recovery time has been set, printing will resume automatically when the set time elapses. A KPDL error report can be printed out from the Printer Menu.</p> <p>For more information, refer to <i>KPDL Error Printing on page 2-11</i> and <i>Automatic Form Feed Timeout Setting on page 2-46</i>.</p>
<i>Memory Card error Insert again.</i>	The Memory Card (CompactFlash) was removed during operation under the menu for printer-related settings. Reinsert the Memory Card. Be sure to turn the main switch off before inserting the Memory Card.

Display message	Procedure
<i>Insert the same memory card.</i>	<p>The Memory Card (CompactFlash) could not be detected during an operation in which the printer was reading data from that card. Reinsert the Memory Card.</p> <p>Be sure to turn the main switch off before inserting the Memory Card.</p>
<i>Format error Memory card.</i>	<p>Initialization of the Memory Card (CompactFlash) currently inserted is necessary.</p>
<i>Incollect slot. Please re-install.</i>	<p>The optional interface board is loaded in the wrong slot. Turn power off and load the board in the correct slot.</p>
<i>File not found Press GO.</i>	<p>File error. Press [GO].</p>
<i>Read fonts: Failed</i>	<p>The printer failed to read the font data. Try to read the font data again.</p>
<i>Read macro: Failed</i>	<p>The printer failed to read the macro. Try to read the macro again.</p>
<i>Warning low memory.</i>	<p>There is not enough memory. You can check how much printer memory there is by printing out a status page. Delete any unnecessary font data and macros.</p>
<i>Warning image adapt.</i>	<p>Because there is not enough memory, printing cannot be performed at the set resolution. Either add more memory to the printer or change the resolution.</p>
<i>Print overrun Press GO.</i>	<p>A data overrun error has occurred due to insufficient memory. Press the [Print] key to switch to the printer mode. Following commands will be displayed.</p> <p>[GO]: Continues printing. [Cancel]: Cancels the printing operation completely. If auto recovery time has been set, printing will resume automatically when the set time elapses. Once this error message is displayed, Page protect mode will be turned On automatically.</p>
<i>Memory overflow Press GO.</i>	<p>The current print job could not be completed due to insufficient memory in the printer.</p> <p>Press the [Print] key to switch to the printer mode. Following commands will be displayed.</p> <p>[GO]: Continues printing. The data that has already been processed will be printed out and the remaining portion of the print job will be printed onto the following page. [Cancel]: Cancels the printing operation completely. If this error occurs often, it is recommended that you install additional memory into the printer. For more detailed information on adding memory, contact your service representative or an authorized service center. If auto recovery time has been set, printing will resume automatically when the set time elapses.</p>
<i>Virtual mailbox full.</i>	<p>There is not enough area in the virtual mailbox. Print out data in the virtual mailbox.</p>
<i>Interface occupied.</i>	<p>The selected interface is currently in use. Wait for a while and then attempt the operation again.</p>
<i>Format error Hard Disk.</i>	<p>Initialize the hard disk.</p>

Storage Error Codes

RAM Disk Errors

Check the error code displayed in place of ## and refer to the following.

Code	Meaning
01	Format error. Turn power off and on again.
02	The RAM disk mode is off. Turn it on.
03	A write error has occurred. Turn off write protection.
04	The RAM disk does not have enough area to store the data. Delete any unnecessary data to make more room.
05	The selected file could not be found. Check the file name and whether it is on the RAM disk or not.
06	There is not enough system memory. Increase memory capacity.
98	Some of the data being collated was not read. Job data is corrupt.

Memory Card Errors

Check the error code displayed in place of ## and refer to the following.

Code	Meaning
01	Format error. Reformat the memory card.
02	Memory card load error. Correctly load the memory card.
03	A write error has occurred. Turn off write protection.
04	The memory card does not have enough area to store the data. Delete any unnecessary data to make more room.
05	The selected file could not be found. Check the file name and whether it is on the memory card or not.

Hard Disk Errors

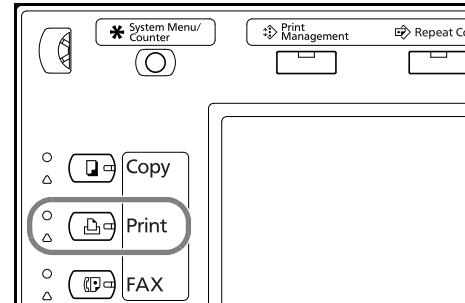
Check the error code displayed in place of ## and refer to the following.

Code	Meaning
01	Format error. Reformat the hard disk.
02	Hard disk load error. Correctly load the hard disk.
03	A write error has occurred. Turn off write protection.
04	The hard disk does not have enough area to store the data. Delete any unnecessary data to make more room.
05	The selected file could not be found. Check the file name and whether it is on the hard disk or not.
06	There is not enough system memory. Increase memory capacity.
20	The hard disk is loaded in the wrong slot. Load the hard disk in the correct slot.
85	An illegal name has been used for the virtual tray. Rename the tray correctly.
86	The wrong password was used for the virtual mailbox. Input the correct password.
88	Some of the data in the virtual mailbox was not read. Job data is corrupt.
97	No more jobs can be saved. The limit has been reached. Increase the number of storable jobs and available area.
98	Some of the data in the job was not read. Job data is corrupt.

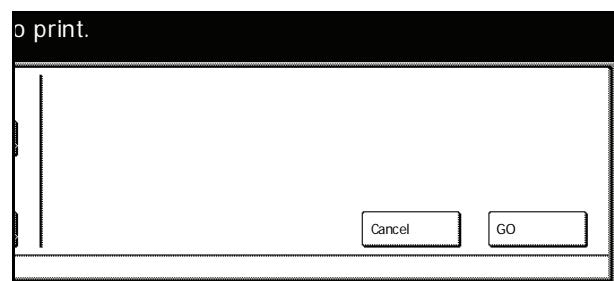
Pausing Printing

Toggle the printer's on-line and off-line states. You can temporarily stop the print job by switching the printer off-line, perform the following procedure.

- 1 Press the [Print] key. The machine enters the printer mode.



- 2 Press [GO]. The message *Off line* is displayed and changes off-line.



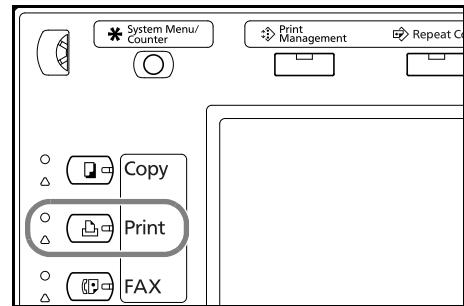
NOTE: In off-line state, the printer can receive data, but cannot print.

- 3 To resume processing of the prints, press [GO] again. The message of *Off line* goes out, returns to the on-line.

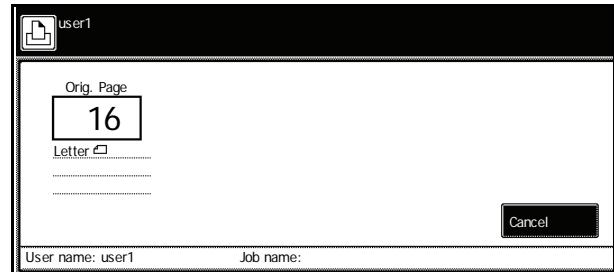
Canceling Printing

To cancel printing and clear the data, perform the following procedure.

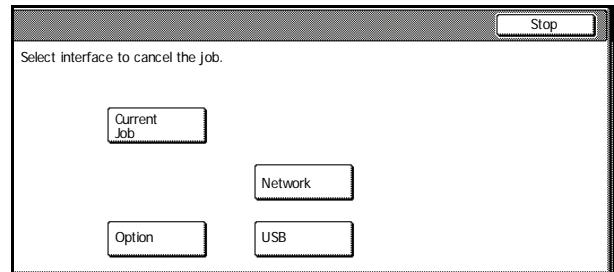
- 1 Press the [Print] key. The machine enters the printer mode.



- 2 Press [Cancel].



- 3 Select the interface through which printing to be canceled is performed.



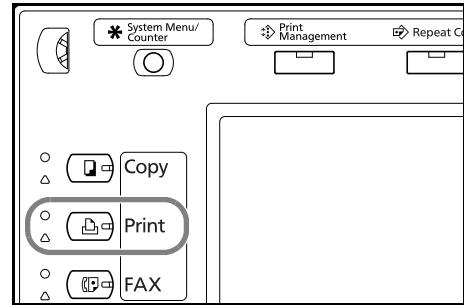
NOTE: To stop canceling printing, press [Stop].

- 4 Printing is canceled.

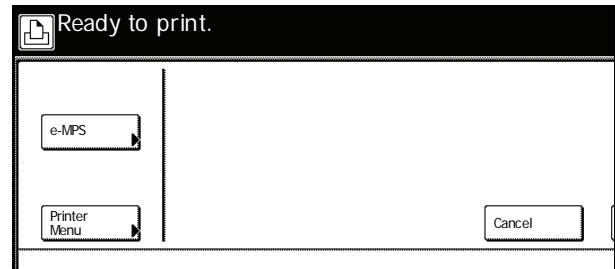
Restart

To reset only the printer board without the need to turn off the machine, perform the following procedure. All of the printing data and waiting data are deleted when this machine is restarted.

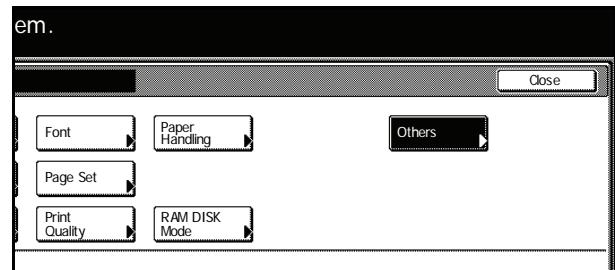
- 1 Press the [Print] key. The machine enters the printer mode.



- 2 Press [Printer Menu].

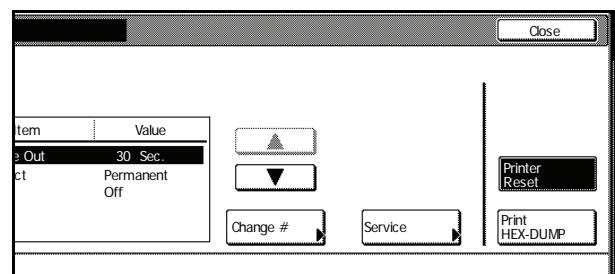


- 3 Press [Others].



- 4 Press [Printer Reset].

Only printer board is working without turning off the main SW. Are you sure? is displayed.



- 5 Press [Yes].

Restart is executed.

4 Options

This machine has the following options available to satisfy your printing requirements.

Additional Memory

To expand the printer memory for more complex print jobs and faster print speed, you can plug in optional memory modules (dual in line memory modules) in two memory slots provided on the printer main controller board. You can select additional memory modules from 64, 128, or 256MB. The maximum memory size is 512MB (256MB x 2).

Hard Disk (HD-5)

The hard disk is used for saving print data. This is advantageous when printing multiple sets of copies, as high-speed printing is possible using the electronic sorting function. The hard disk is further required in order to use the e-MPS function.

Memory Card

The printer is equipped with a slot for a memory card with the maximum size of 256MB. A memory card is useful for storing fonts, macros, and overlays.

Network Interface Card (IB-21E/IB-23)

Along with the standard for the network interface on the printer, the network interface card supports TCP/IP, IPX/SPX, NetBEUI and AppleTalk protocols, so that the printer can be used on network environments including Windows, Macintosh, UNIX, NetWare, etc. The network interface card must be installed in the option interface slot.

Options

5 Specifications

NOTE: Specifications are subject to change without notice.

Item	Specification
Printing speed (A4/Letter)	KM-2540: 25 pages/minute KM-3040: 30 pages/minute
Resolution	Fast1200 mode, 600 dpi, 300 dpi
Controller	Power PC 750CXr 400MHz
Main memory	Standard: 64 MB Maximum: 576 MB
Additional memory	64 MB, 128 MB, and 256 MB (2 slots)
Compatible Operating Systems	Microsoft Windows 2000/XP/Vista Microsoft Windows Server 2003 Apple Macintosh OS 9 Apple Macintosh OS X
Interfaces	
- USB	Hi-speed USB, 1 port
- Ethernet	Protocol support: TCP/IP, IPX/SPX, NetBEUI, AppleTalk, 1 port
- Option	Network interface card, 1 port
Memory card slot	1 slot (CompactFlash card)
Hard disk slot	1 slot
Installed Fonts	PCL: 80 KPDL: 136 Bitmap: 1

**QUALITY
CERTIFICATE**

This machine has passed
all quality controls and
final inspection.

KYOCERA MITA AMERICA, INC.

Headquarters:

225 Sand Road,
Fairfield, New Jersey 07004-0008
TEL : (973) 808-8444
FAX : (973) 882-6000

New York Branch:

1410 Broadway 23rd floor
New York, NY 10018
TEL : (917) 286-5400
FAX : (917) 286-5402

Northeastern Region:

225 Sand Road,
Fairfield, New Jersey 07004-0008
TEL : (973) 808-8444
FAX : (973) 882-4401

Midwestern Region:

201 Hansen Court Suite 119
Wood Dale, Illinois 60191
TEL : (630) 238-9982
FAX : (630) 238-9487

Western Region:

14101 Alton Parkway,
Irvine, California 92618-7006
TEL : (949) 457-9000
FAX : (949) 457-9119

Southeastern Region:

1500 Oakbrook Drive,
Norcross, Georgia 30093
TEL : (770) 729-9786
FAX : (770) 729-9873

Southwestern Region:

2825 West Story Road,
Irving, Texas 75038-5299
TEL : (972) 550-8987
FAX : (972) 252-9786

National Operation Center & National Training Center:

2825 West Story Road,
Irving, Texas 75038-5299
TEL : (972) 659-0055
FAX : (972) 570-5816

Latin America Division:

8240 N.W. 52nd. Terrace Dawson Building,
Suite 108 Miami, Florida 33166
TEL : (305) 421-6640
FAX : (305) 421-6666

KYOCERA MITA CANADA, LTD.

6120 Kestrel Road, Mississauga,
Ontario L5T 1S8, Canada
TEL : (905) 670-4425
FAX : (905) 670-8116

KYOCERA MITA MEXICO, S.A. DE C.V.

Av. 16 de Septiembre #407
Col. Santa Inés,
Azcapotzalco México,
D.F. 02130, México
TEL : (55) 5383-2741
FAX : (55) 5383-7804

KYOCERA MITA EUROPE B.V.

Hoeksteen 40, 2132 MS Hoofddorp,
The Netherlands
Phone: +31.20.654.0000
Home page: <http://www.kyoceramita-europe.com>
Email: info@kyoceramita-europe.com

KYOCERA MITA NEDERLAND B.V.
Beechavenue 25, 1119 RA Schiphol-Rijk
The Netherlands
Phone: +31.20.58.77.200

KYOCERA MITA (UK) LTD
8 Beacontree Plaza
Gillette Way Reading Berks RG2 0BS,
U.K.
Phone: +44.1189.311.500

KYOCERA MITA ITALIA S.p.A.
Via G. Verdi, 89 / 91, 20063 Cernusco s/N
Milano, Italy
Phone: +39.02.92179.1

S.A. KYOCERA MITA BELGIUM N.V.
Sint-Martinusweg 199-201, 1930 Zaventem,
Belgium
Phone: +32.2.720.9270

KYOCERA MITA FRANCE S.A.
Parc Les Algorithmes Saint Aubin
91194 GIF-SUR-YVETTE,
France
Phone: +33.1.6985.2600

KYOCERA MITA ESPAÑA S.A.
Edificio Kyocera, Avda de Manacor No. 2,
28290 Las Matas (Madrid),
Spain
Phone: +34.91.631.8392

KYOCERA MITA FINLAND OY
Kirvesmiehenkatu 4, 00880 Helsinki,
Finland
Phone: +358.9.4780.5200

KYOCERA MITA (SCHWEIZ)
Hohlstrasse 614, 8048 Zürich
Switzerland
Phone: +41.1.908.4949

KYOCERA MITA DEUTSCHLAND GMBH
Otto-Hahn-Str. 12 D-40670 Meerbusch,
Germany
Phone: +49.2159.918.0

KYOCERA MITA GMBH AUSTRIA
Eduard-Kittenberger-Gasse 95,
1230 Wien,
Austria
Phone: +43.1.86338.210

KYOCERA MITA SVENSKA AB
Esbogatan 16B 164 75 Kista,
Sweden
Phone: +46.8.546.55000

KYOCERA MITA NORGE

Postboks 150 Oppsal, NO 0619 Oslo
Olaf Helsetsvei 6, NO 0694 Oslo,
Norway
Phone: +47.22.62.73.00

KYOCERA MITA DANMARK A/S
Ejby Industrievæj 1, DK-2600 Glostrup,
Denmark
Phone: +45.5687.1100

KYOCERA MITA PORTUGAL LDA.
Rua do Centro Cultural, 41 (Alvalade) 1700-106 Lisbon,
Portugal
Phone: +351.21.842.9100

KYOCERA MITA SOUTH AFRICA (PTY) LTD.
527 Kyalami Boulevard,
Kyalami Business Park Midrand,
South Africa
Phone: +27.(0)11.540.2600

KYOCERA MITA AMERICA, INC.

Headquarters:
225 Sand Road,
Fairfield, New Jersey 07004-0008,
U.S.A.
Phone: (973) 808-8444

KYOCERA MITA AUSTRALIA PTY. LTD.
Level 3, 6-10 Talavera Road, North Ryde,
N.S.W. 2113 Australia
Phone: (02) 9888-9999

KYOCERA MITA NEW ZEALAND LTD.
1-3 Parkhead Place, Albany
P.O. Box 302 125 NHPC, Auckland,
New Zealand
Phone: (09) 415-4517

KYOCERA MITA (THAILAND) CORP., LTD.
9/209 Ratchada-Prachachem Road,
Bang Sue, Bangkok 10800, Thailand
Phone: (02) 586-0320

KYOCERA MITA SINGAPORE PTE LTD.
121 Genting Lane, 3rd Level,
Singapore 349572
Phone: 67418733

KYOCERA MITA HONG KONG LIMITED
11/F., Mita Centre,
552-566, Castle Peak Road,
Tsuen Wan, New Territories,
Hong Kong
Phone: 24297422

KYOCERA MITA TAIWAN Corporation.
7F-1~2, No.41, Lane 221, Gangchi Rd.
Neihu District, Taipei, Taiwan, 114. R.O.C.
Phone: (02) 87511560

KYOCERA MITA Corporation

2-28, 1-chome, Tamatsukuri, Chuo-ku
Osaka 540-8585, Japan
Phone: (06) 6764-3555
<http://www.kyoceramita.com>

