



i m a g e R U N N E R

2545i / 2545 / 2535i / 2535

2530i / 2530 / 2525i / 2525

2520i / 2520

Printer Guide



Please read this guide before operating this product.
After you finish reading this guide, store it in a safe place for future reference.

ENG

imageRUNNER

2545i/2545

2535i/2535

2530i/2530

2525i/2525

2520i/2520

Printer Guide



Manuals for the Machine

The manuals for this machine are organized as shown below. Please refer to them for detailed information. Some manuals may not be needed for certain system configurations and products purchased.



Guides with this symbol are printed manuals.



Guides with this symbol are PDF manuals included on the accompanying CD-ROM.

- **Quick Reference for Basic Operations**

- **Legal Notices**
- **Setup Instructions**

- **Basic Operations**
- **Troubleshooting**

- **Copying Instructions**

- **Sending and Fax Instructions**

- **Remote User Interface Instructions**

- **Network Connectivity**
- **Security Management**

- **Color Network ScanGear Instructions**

- **USB Memory Media Printing Instructions**
- **PS/PCL/UFRII LT Printer Instructions**

- **PS/PCL/UFRII LT Printer Driver Instructions**

- **Fax Driver Instructions**

Easy Operation Guide



User's Guide



Reference Guide



Copying Guide



Sending and Facsimile Guide



Remote UI Guide



System Settings Guide



Network ScanGear Guide



Printer Guide (This Document)



Windows Printer Driver Guide



Windows Fax Driver Guide





How This Manual is Organized

Chapter 1 Introduction to Print Function

Chapter 2 Printing with USB Memory Media (Media Print)

Chapter 3 Managing Print Jobs

Chapter 4 Customizing Settings

Chapter 5 Troubleshooting

Chapter 6 Appendix

Includes the Symbol Sets Supported, Specifications, and Index.

Contents

Preface	viii
How to Use This Manual	viii
Symbols Used in This Manual	viii
Keys Used in This Manual	viii
Illustrations Used in This Manual	ix
Displays Used in This Manual	ix
Abbreviations Used in This Manual	x
Trademarks	x
Legal Notices	xi
License Notice	xi
Copyright	xi
Disclaimers	xi

Chapter 1 Introduction to Print Function

Overview of the Printer Function	1-2
---	------------

Chapter 2 Printing from USB Memory Media (Media Print)

Printing from USB Memory Media	2-2
Index Printing	2-7
Selecting All Files in Folder	2-8
Selecting Files by Date	2-9
Selecting Files by Extension	2-11

Chapter 3 Managing Print Jobs

Managing Print Jobs	3-2
Canceling a Print Job Using the Stop Key	3-2
Checking and Canceling Print Jobs Using the System Monitor	3-3
Checking Print Log	3-6

Chapter 4 Customizing Settings

Menu Functions	4-3
Setting Priorities	4-4
Using the Printer Settings Menu	4-5
Settings Menu	4-7
Default PaperSize	4-7
Default PaperType	4-8
Copies	4-8

2-Sided Printing	4-9
Print Quality	4-9
Layout	4-11
Combining the Binding and Margin Settings.	4-13
Auto Continue	4-13
Timeout	4-14
Finishing	4-15
Personality	4-18
Mode Priority	4-18
Auto Select	4-18
Initialize	4-19
PCL Settings	4-20
Paper Save	4-20
Orientation	4-20
Font Number	4-21
Point Size.	4-21
Pitch.	4-21
Form Lines.	4-21
Symbol Set	4-22
Custom Paper	4-22
Unit of Measure	4-22
X dimension	4-22
Y dimension	4-23
Append CR to LF.	4-23
Widen A4 Print.	4-24
Halftones	4-25
BarDIMM	4-25
FreeScape	4-25
Booklet.	4-26
PS Settings.	4-27
Job Timeout	4-27
Wait Timeout	4-27
Print PS Errors.	4-27
Halftones	4-28
Booklet.	4-28
Ppr Size Override.	4-30

Chapter 5 Troubleshooting

Identifying and Isolating Problems	5-2
Printer Problems	5-2
Printing Problems	5-4
Print Quality Problems	5-5

Chapter 6 Appendix

Printer Settings Menu	6-2
Some Basic Facts about Fonts	6-5

What Is a Font?	6-5
Attributes of Fonts	6-5
Typeface	6-6
Stroke Weight	6-6
Style	6-6
Point Size	6-7
Pitch (dpi)	6-7
Character Width (Fixed and PS)	6-8
Orientation	6-8
Symbol Set	6-9
Fonts and Scalable Fonts	6-10
Bitmapped Fonts	6-10
Scalable Fonts	6-11
Standard Scalable and OCR Sets Fonts (PCL)	6-12
Symbol Sets (For Scalable Typefaces Only)	6-16
PS Fonts	6-17
Typeface Samples	6-20
For PCL	6-20
For PS	6-24
Symbol Sets	6-33
ARABIC8	6-33
DeskTop	6-33
GREEK8	6-34
HEBREW7	6-34
HEBREW8	6-35
ISO United Kingdom	6-35
ASCII	6-36
ISO Swedish	6-36
ISO Italian	6-37
ISO Spanish	6-37
ISO German	6-38
ISO Norwegian	6-38
ISO French	6-39
ISOCYR	6-39
ISOGRK	6-40
ISOHEB	6-40
ISO 8859-1 Latin 1	6-41
ISO 8859-2 Latin 2	6-41
ISO 8859-9 Latin 5	6-42
ISO 8859-10 Latin 6	6-42
Legal	6-43
Math-8	6-43
MC Text	6-44
Microsoft Publishing	6-44
PC-775	6-45
PC-8	6-45

PC-850	6-46
PC-851	6-46
PC-852	6-47
PC-862	6-47
PC-864	6-48
PC-866	6-48
PC-8 D/N	6-49
PC-Turkish	6-49
PC8GRK	6-50
PC-1004	6-50
Pi Font	6-51
PS Math	6-51
PS Text	6-52
Roman-8	6-52
Ventura International	6-53
Ventura Math	6-53
Ventura US	6-54
Windows 3.0 Latin 1	6-54
WINARB	6-55
Windows Baltic	6-55
WINCYR	6-56
WINGRK	6-56
Windows 3.1 Latin 1	6-57
Windows 3.1 Latin 2	6-57
Windows 3.1 Latin 5	6-58
ISO Latin 9	6-58
PC-858	6-59
Roman 9	6-59
OCR-A	6-60
OCR-B	6-60
Symbol Sets Supported	6-61
ISO Substitution Table	6-61
Specifications	6-63
Software Specifications	6-63
Index	6-64

Preface

Thank you for purchasing the Canon imageRUNNER 2545i/2545/2535i/2535/2530i/2530/2525i/2525/2520i/2520. Please read this manual thoroughly before operating the machine to familiarize yourself with its capabilities, and to make the most of its many functions. After reading this manual, store it in a safe place for future reference.

How to Use This Manual

Symbols Used in This Manual

The following symbols are used in this manual to explain procedures, restrictions, handling precautions, and instructions that should be observed for safety.



IMPORTANT

Indicates operational requirements and restrictions. Be sure to read these items carefully to operate the machine correctly, and avoid damage to the machine or property.



NOTE

Indicates a clarification of an operation, or contains additional explanations for a procedure. Reading these notes is highly recommended.

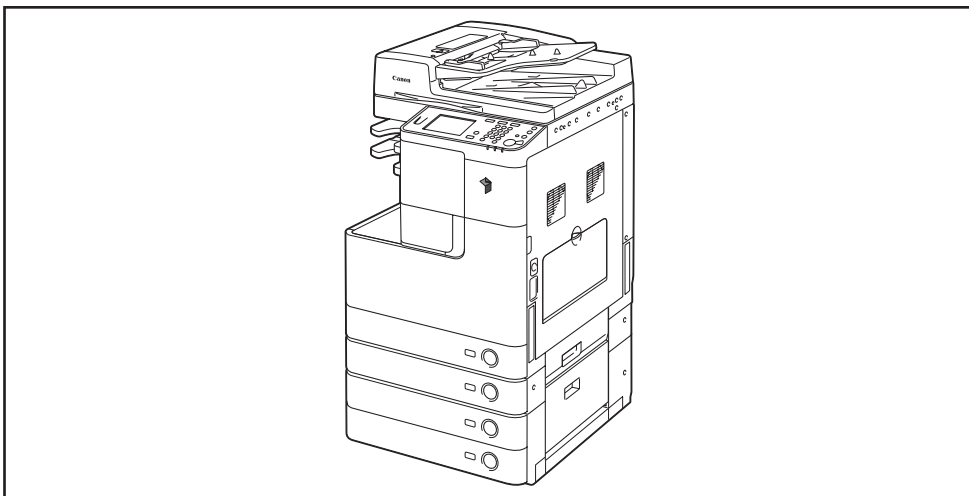
Keys Used in This Manual

The following table provides a few examples of how keys to be pressed are expressed in this manual:

	Keys	Example
Control Panel	Key icon + (Key Name)	 (Additional Functions)
Touch Panel Display	[Key Name]	[OK], [Cancel], etc.
	[Key Icon]	[▼], [▲], etc.

Illustrations Used in This Manual

Illustrations used in this manual are those displayed when the imageRUNNER 2545i has the following optional equipment attached to it: the Inner Finisher-B1, Inner Finisher Additional Tray-B1, and CST. Feeding Unit-AE1.

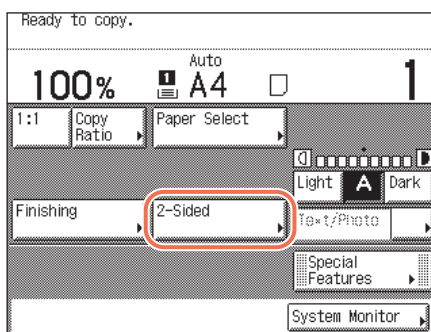


Displays Used in This Manual

Screen shots used in this manual may differ from actual displays depending on the machine configuration.

The keys to be pressed are marked with a , as shown below.

When multiple keys can be pressed, all of them will be marked. Select the keys best suited to your needs.



Abbreviations Used in This Manual

In this manual, the product name “Microsoft Windows operating system” is abbreviated as “Windows.”

Trademarks

Adobe and Adobe Acrobat are trademarks of Adobe Systems Incorporated.

PCL, PCL5, and PCL6 are trademarks of Hewlett-Packard Company.

Windows logo and Windows are trademarks or registered trademarks of Microsoft Corporation in the U.S. and/or other countries.

Concerning typeface credit, the actual names on a FONT LIST for this machine may differ from those listed below.

CG and UFST are trademarks of Monotype Imaging, Inc. or its affiliated companies and may be registered in some jurisdictions.

Marigold is trademark of AlphaOmega Typography, Inc.

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

Clarendon, Helvetica, New Century Schoolbook, Palatino, and Times are trademarks of Linotype-Hell AG and its subsidiaries. Univers is a trademark of Linotype-Hell AG and its subsidiaries and may be registered in some jurisdictions.

Coronet is a registered trademark of Ludlow Type Foundry.

Wingdings is a trademark of Microsoft Corporation.

Albertus, Arial, and Times New Roman are trademarks of the Monotype Corporation plc., and may be registered in some jurisdictions.

CG Omega is a product of Agfa Corporation and CG Times, based on Times New Roman under license from the Monotype Corporation plc, is a product of Agfa Corporation.

BarDIMM is a registered trademark of Jetmobile SAS.

Other product and company names herein may be the trademarks of their respective owners.

Legal Notices

License Notice

This product contains the Universal Font Scaling Technology or UFST® under license from Monotype Imaging, Inc.. UFST® is a trademark of Monotype Imaging, Inc. registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions.

UFST: Copyright © (2009) Monotype Imaging, Inc.

Copyright

Copyright 2009 by Canon Inc. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system without the prior written permission of Canon Inc.

Disclaimers

The information in this document is subject to change without notice.

CANON INC. MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THIS MATERIAL, EITHER EXPRESS OR IMPLIED, EXCEPT AS PROVIDED HEREIN, INCLUDING WITHOUT LIMITATION, THEREOF, WARRANTIES AS TO MARKETABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OF USE OR NON-INFRINGEMENT. CANON INC. SHALL NOT BE LIABLE FOR ANY DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM THE USE OF THIS MATERIAL.

Introduction to Print Function

1

CHAPTER

This chapter provides an overview of the Printer function.

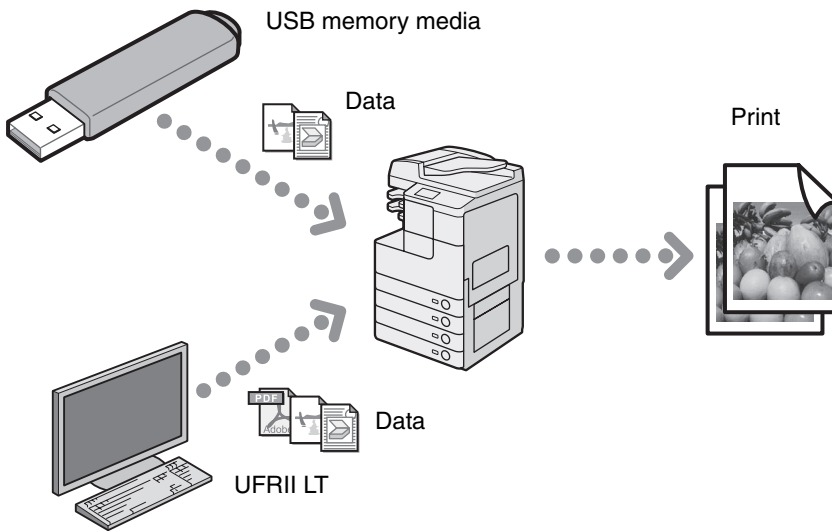
Overview of the Printer Function	1-2
--	-----

Overview of the Printer Function

There are two methods for using this machine as a printer to print documents, as shown below.

Printing directly from a USB memory media device

You do not need to connect the machine to your computer to print images. For details, see Chapter 2, “Printing from USB Memory Media (Media Print).”



Printing from a computer via the printer driver

For details, see the *Windows Printer Driver Guide*. For information on the printer settings from the machine, see Chapter 4, “Customizing Settings.”

Printing from USB Memory Media (Media Print)

2 CHAPTER

This chapter describes how to print from USB memory media.

Printing from USB Memory Media	2-2
Index Printing	2-7
Selecting All Files in Folder	2-8
Selecting Files by Date.	2-9
Selecting Files by Extension.	2-11

Printing from USB Memory Media

You can print data directly from a USB memory media device by inserting it into the machine and selecting the desired images on the touch panel display. You do not need to connect the machine to your computer to print images.



IMPORTANT

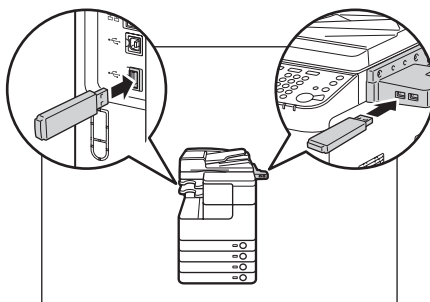
- The supported file systems of a USB memory media device are FAT16 and FAT32.
- The supported maximum sizes of a USB memory media device are as follows:
 - FAT32: 8GB
 - FAT16: 2GB
- USB memory media devices with security function or card readers are not supported.
- USB memory media devices used with an extension cable are not supported.
- Use of USB memory media devices through a USB hub (except for the optional USB Application 3-Port Interface Kit-A1) is not supported.
- USB memory media devices that does not comply with USB specifications are not supported.



NOTE

- You can only print data from one folder at a time.
- You cannot select data in a lower level folder.
- The following types of data can be printed:
 - JPEG (DCF/Exif2.21 and below/JFIF)
 - TIFF
- The size of the TIFF image cannot be scaled for printing. If the size of the TIFF image exceeds the size of the selected paper, only the part that fits on the paper is printed.

1

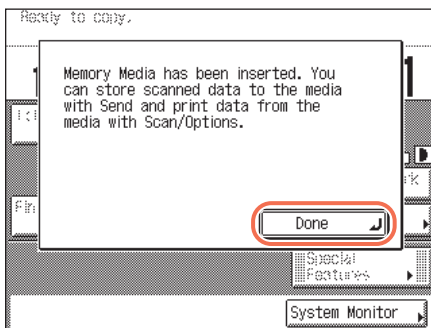


Insert the USB memory media device containing the data file you want to print into the USB port on the left or right side of the machine.



IMPORTANT

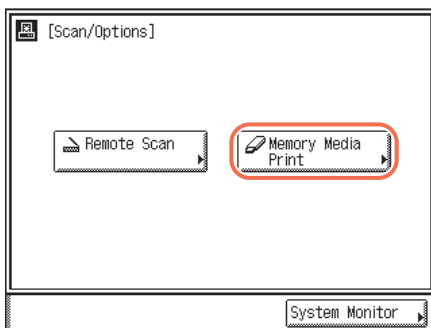
- The USB ports on the right side of the machine are optional (USB Application 3-Port Interface Kit-A1).
- The left side USB port is not available when the optional USB port is attached.



NOTE

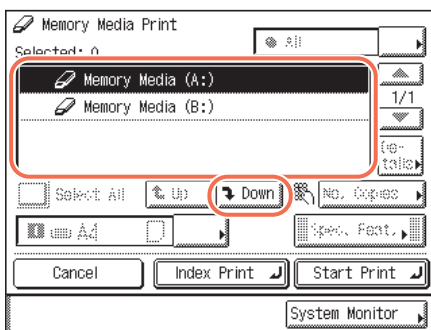
- If the screen on the left appears, press [Done].
- If the messages below appear, follow the instructions in Chapter 2, “Basic Operations,” in the *Reference Guide* to take the required steps.
 - <You must insert a control card.>
 - <Enter the Department ID and Password using the numeric keys.>
 - <Enter the User ID and Password.>

2



Press (SCAN/OPTIONS) → [Memory Media Print].

3

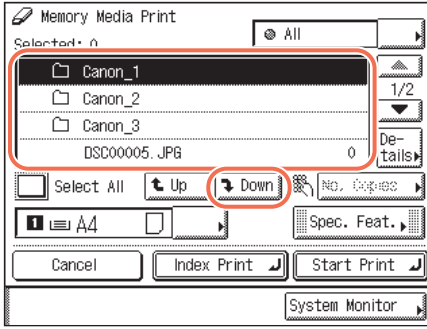


Select the USB memory media device that stores the data that you want to print → [Down].

NOTE

If you want to print an index of all the files in the selected USB memory media device, see “Index Printing,” on p. 2-7.

4



Select the folder that contains the data that you want to print → [Down].

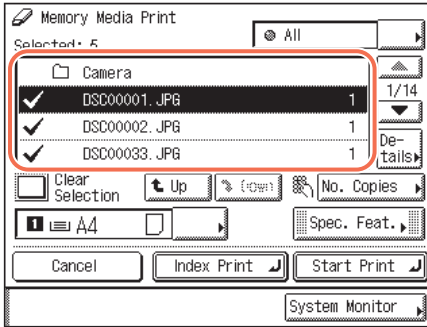
If you select data which is saved outside the folder, proceed to step 5.



NOTE

You can select the desired data by sorting all data according to date or extension. If you want to sort data by date, see “Selecting Files by Date,” on p. 2-9. If you want to sort data by extension, see “Selecting Files by Extension,” on p. 2-11.

5



Select the data that you want to print.

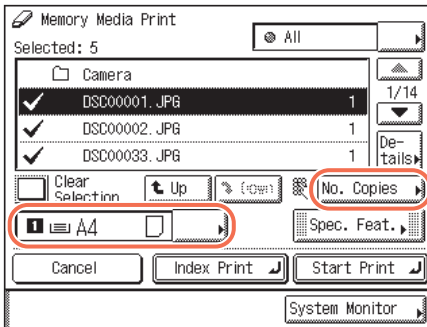
You can simultaneously select multiple files in the same folder.



NOTE

- You can select data from only one folder at a time.
- If you want to check the details of the data, press [Details].

6



Make the basic settings.

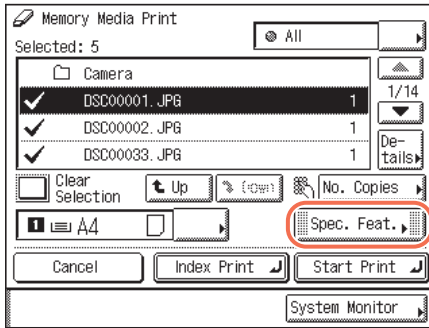


[No. Copies]:

Press and select the desired paper source.

Specify the number of prints by pressing [-] or [+] or using - (numeric keys). The number can be specified individually.

7



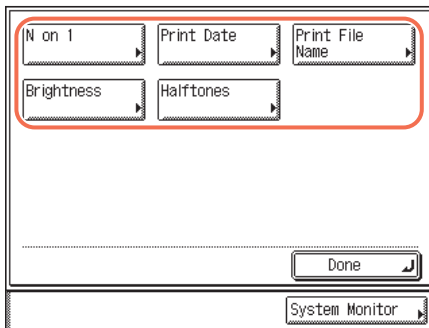
If you want to make the advanced settings, press [Spec. Feat.].

Otherwise, proceed to step 9.

NOTE

The settings below are only for JPEG files. If the selected data includes TIFF files, the settings are not applied to the TIFF files.

8



Select the desired settings for the prints.

[N on 1]: Select [2 On 1] or [4 On 1] to reduce two or four images onto one sheet.

NOTE

- The number of prints is limited to one.
- Only JPEG data can be printed. If the selected files include TIFF files, only the JPEG files are printed.
- The print size is adjusted automatically to fit on one sheet of paper.
- The layout order cannot be specified.
- This setting cannot be used with the 2-Sided Printing mode.
- A blank space for printing the date and file name is left below the printed image even if [Print Date] or [Print File Name] is set to [Off].

[Print Date]: Select whether or not to print the creation date on the printed image.

[Print File Name]: Select whether or not to print the file name on the printed image.

NOTE

- Only JPEG data can be printed. If the selected files include TIFF files, only the JPEG files are printed.
- The printable file name can consist of up to 20 characters.
- When you print an index, the date and file names are printed automatically. For instructions on how to print an index, see “Index Printing,” on p. 2-7

2

[Brightness]: Adjust brightness to suit your needs.

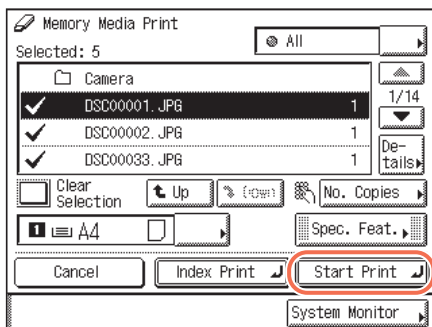
[Halftones]: Select [Error Diffusion] or [Gradation] to optimize the image for printing.

NOTE

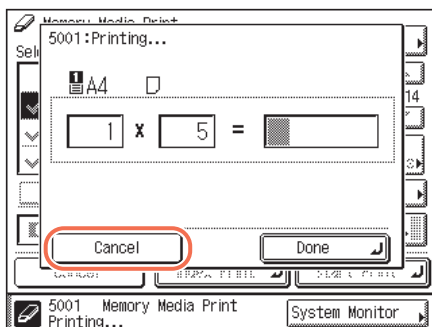
- The default setting is [Error Diffusion].
- [Error Diffusion] is suitable for scanned images and [Gradation] is suitable for photos taken with a digital camera.

2

9



Press [Start Print].



If you want to cancel the job, press [Cancel] or  (Stop) while the pop up screen is displayed.

NOTE

If you want to check the record of media print jobs, see “Checking Print Log,” on p. 3-6.

10 When printing is complete, remove the USB memory media device from the USB port.

IMPORTANT

Do not remove the USB memory media device when the Processing/Data indicator is blinking. The blinking indicator indicates that the machine is accessing the memory data. The data may be damaged if you remove the USB memory media device at this point.

Index Printing

You can print an index of the data saved on a USB memory media device.

NOTE

- This function is available only for JPEG files. If the selected folder contains TIFF files, they are not printed.
- The print date and file names are printed under the images automatically.

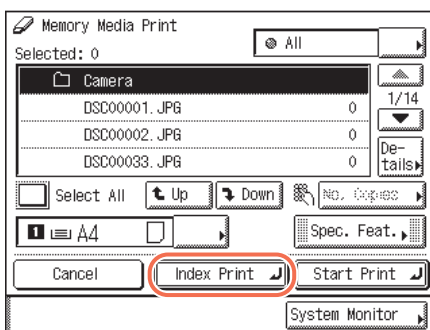
1 Display the media print screen to specify the files for printing.

For help, see steps 1 to 3 of “Printing from USB Memory Media,” on p. 2-2.

2 Select the folder that contains the files for which you want to print an index.

If you want to select a folder, press the folder → [Down].

3

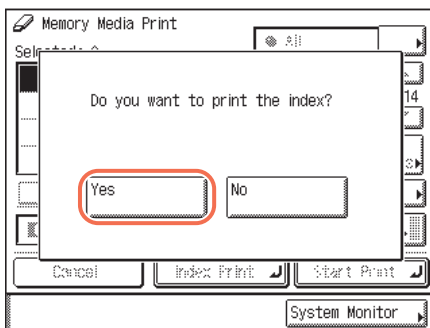


Press [Index Print] → [Yes].

When printing is complete, remove the USB memory media device from the USB port.

IMPORTANT

Do not remove the USB memory media device when the Processing/Data indicator is blinking. The blinking indicator indicates that the machine is accessing the memory data. The data may be damaged if you remove the USB memory media device at this point.



Selecting All Files in Folder

You can print all files saved on the selected folder at a single time. The number of prints can be specified for each individual file.

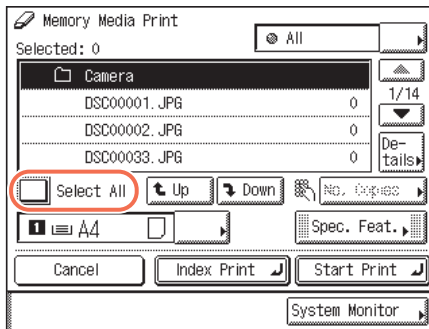
1 Display the media print screen to specify the files for printing.

For help, see steps 1 to 3 of “Printing from USB Memory Media,” on p. 2-2.

2 Select the folder that contains the files that you want to print.

If you want to select a folder, press the folder → [Down].

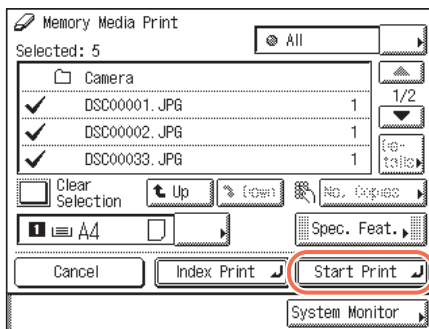
3



Press [Select All].

If you want to specify the number of prints for individual files, see “Printing from USB Memory Media,” on p. 2-2.

4



Press [Start Print].

When printing is complete, remove the USB memory media device from the USB port.



IMPORTANT

Do not remove the USB memory media device when the Processing/Data indicator is blinking. The blinking indicator indicates that the machine is accessing the memory data. The data may be damaged if you remove the USB memory media device at this point.

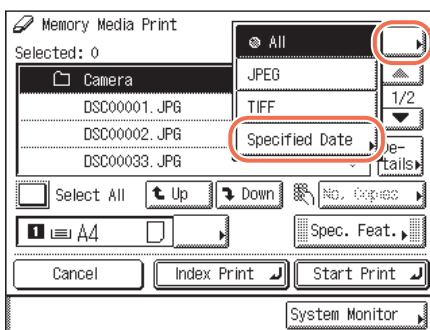
Selecting Files by Date

You can search files by date to select and print only the desired files. This function is useful especially when there are a number of files in the folder or when the file names make it difficult to identify the desired file(s).

1 Display the media print screen to specify the files for printing.

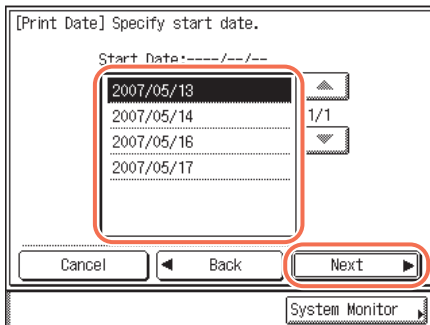
For help, see steps 1 to 3 of “Printing from USB Memory Media,” on p. 2-2.

2



Press  → [Specified Date].

3

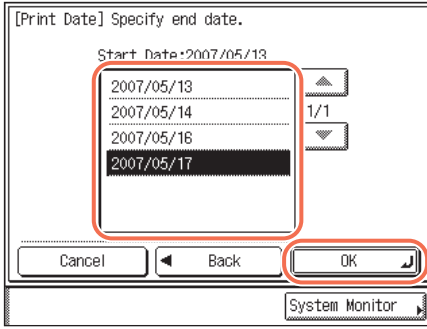


Select the start date → [Next].

2

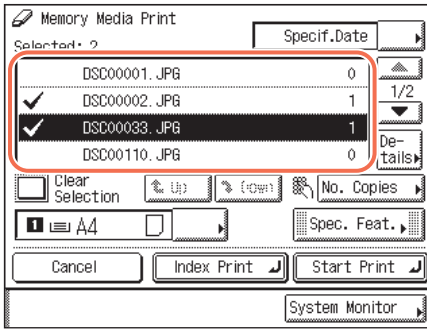
Printing from USB Memory Media (Media Print)

4



Select the end date → [OK].

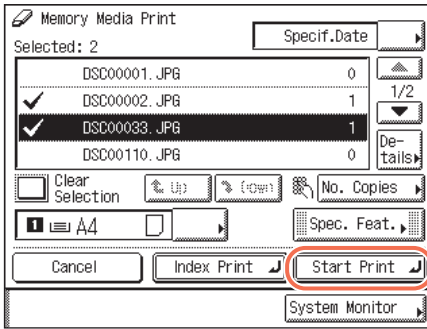
5



Select the data that you want to print.

If you want to specify the number of prints for individual files, see “Printing from USB Memory Media,” on p. 2-2.

6



Press [Start Print].

When printing is complete, remove the USB memory media device from the USB port.



IMPORTANT

Do not remove the USB memory media device when the Processing/ Data indicator is blinking. The blinking indicator indicates that the machine is accessing the memory data. The data may be damaged if you remove the USB memory media device at this point.

Selecting Files by Extension

You can search files by format to select and print only the desired files.

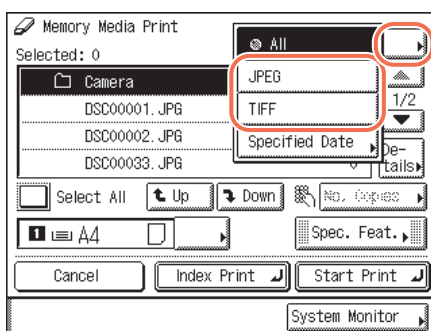
1 Display the media print screen to specify the files for printing.

For help, see step 1 to 3 of “Printing from USB Memory Media,” on p. 2-2.

2 Select a folder that contains the files that you want to print.

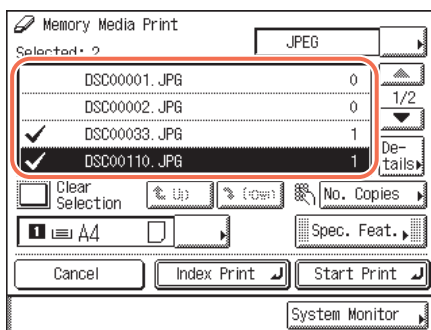
If you want to select a folder, press the folder → [Down].

3



Press → [JPEG] or [TIFF].

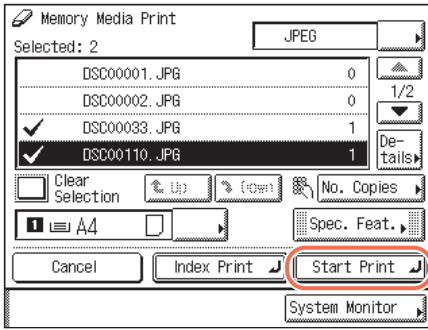
4



Select the data that you want to print.

If you want to specify the number of prints individually, see “Printing from USB Memory Media,” on p. 2-2.

5



Press [Start Print].

When printing is complete, remove the USB memory media device from the USB port.



IMPORTANT

Do not remove the USB memory media device when the Processing/Data indicator is blinking. The blinking indicator indicates that the machine is accessing the data in the USB memory media device. The data may be damaged if you remove the USB memory media device at this point.

Managing Print Jobs

3

CHAPTER

This chapter describes how to check the details and records of print jobs using the System Monitor screen, and how to cancel print jobs using  (Stop) and the System Monitor screen.

Managing Print Jobs	3-2
Canceling a Print Job Using the Stop Key	3-2
Checking and Canceling Print Jobs Using the System Monitor	3-3
Checking Print Log	3-6

Managing Print Jobs

This section describes the procedures for the processes listed below.

- Canceling a Print Job Using the Stop Key (See p. 3-2)
- Checking and Canceling Print Jobs Using the System Monitor (See p. 3-3)
- Checking Print Log (See p. 3-6)

Canceling a Print Job Using the Stop Key

You can cancel a print job using  (Stop) while printing.



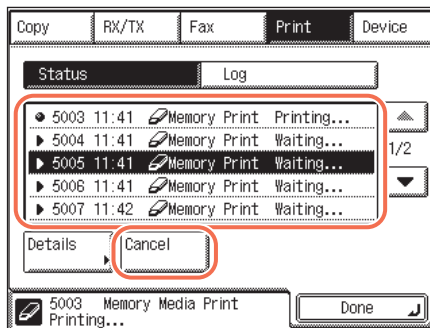
NOTE

Several prints may be output after you cancel a job.

1 Press (Stop).

If the screen returns to the top screen, the print job is canceled.

● If the Print Job Status screen below appears:

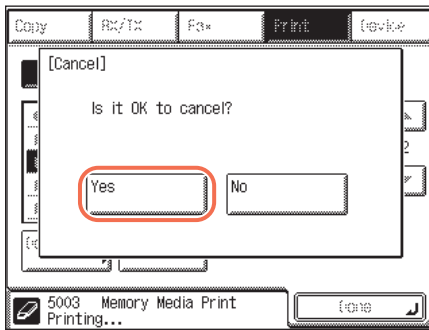


- ☐ Select the job you want to cancel → press [Cancel].



NOTE

You cannot select multiple jobs and cancel them all at once.



□ Press [Yes].

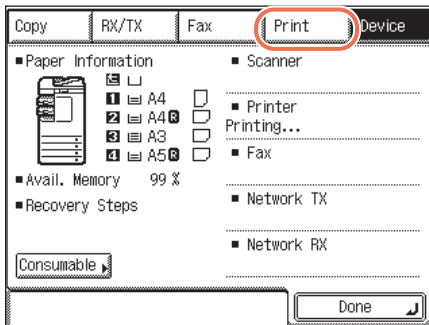
Checking and Canceling Print Jobs Using the System Monitor

You can check the status of print jobs and cancel jobs from the System Monitor screen before or during printing.

NOTE

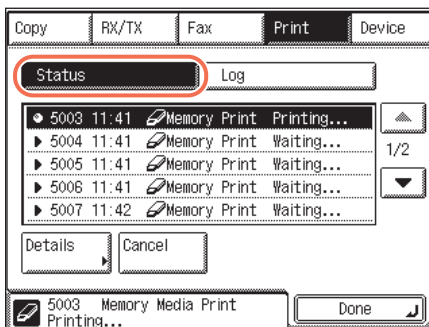
Several prints may be output after you cancel a job.

1

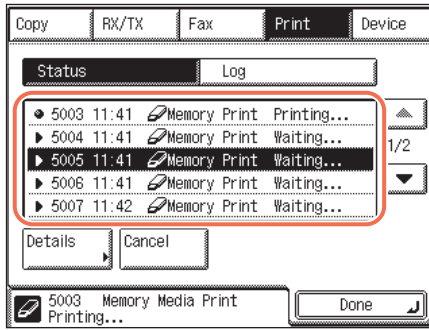


Press [System Monitor] → [Print].

2



Press [Status].

3

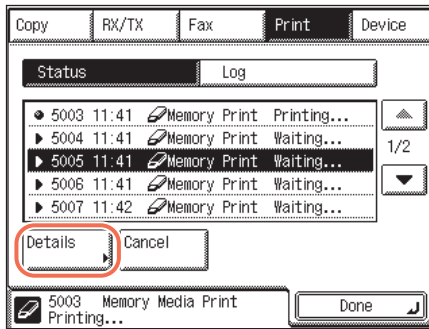
Use [▼] or [▲] to scroll through the job list, and select the job that you want to check or cancel.

If you want to cancel the job, proceed to step 5.

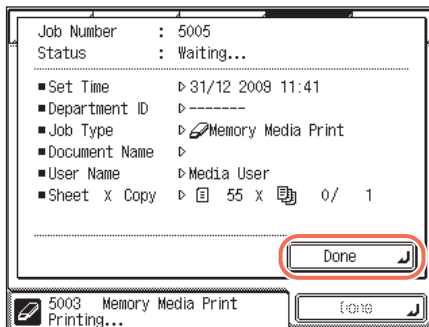
NOTE

The messages displayed on the Status screen are as follows:

- [Printing]: Current job
- [Waiting]: Reserved jobs

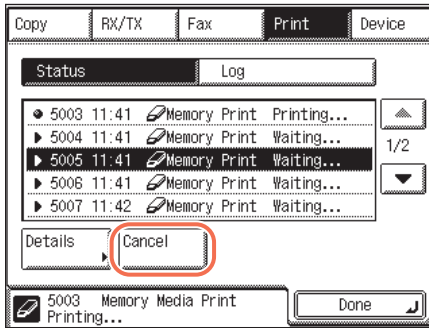
4

If you want to check the job details, press [Details].



Check the job details and press [Done].

5

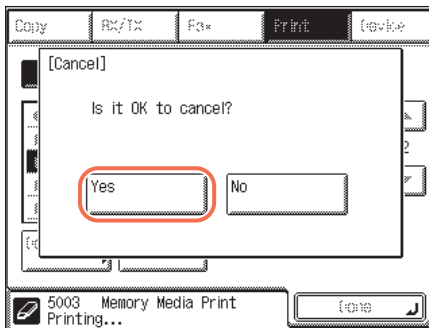


If you want to cancel the job, press [Cancel].

NOTE

You cannot select multiple jobs and cancel them all at once.

6



Press [Yes].

If you do not want to cancel the job, select [No] to return to the previous display.

7

Press (Reset) to return to the top screen.

3

Checking Print Log

You can check all of the completed print jobs using the System Monitor screen.

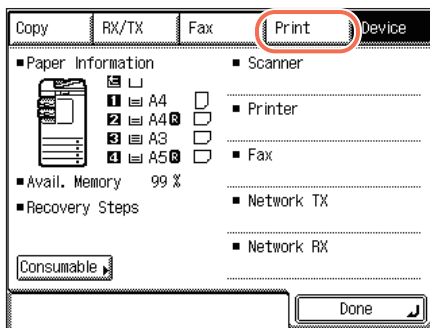
NOTE

If Job Log Display in System Settings is set to 'Off', the print log screen is not displayed on the System Monitor screen. For instructions on how to set Job Log Display, see Chapter 6, "Protecting the Machine from Unauthorized Access" in the *System Settings Guide*.

3

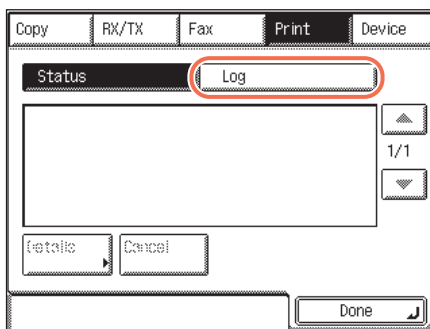
Managing Print Jobs

1



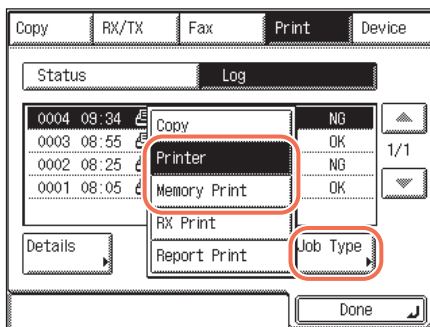
Press [System Monitor] → [Print].

2



Press [Log].

3

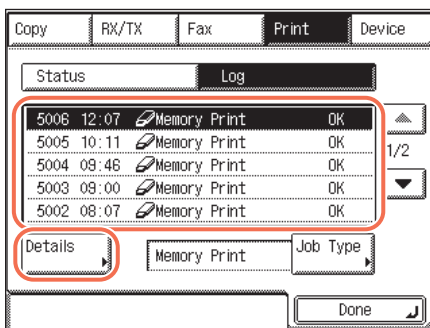


Press [Job Type] → [Printer] or [Memory Print].

[Printer]:
To check the print jobs from the printer driver.

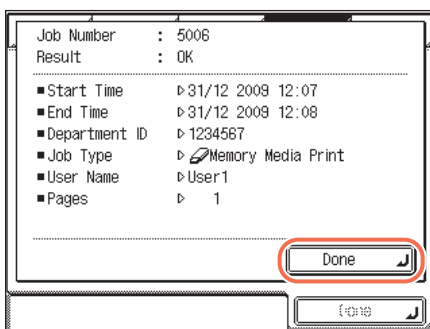
[Memory Print]:
To check the print jobs with the USB memory media device.

4



Use [▼] or [▲] to scroll through the job list, and select the job that you want to check → press [Details].

5



Check the details of job log → [Done].

Customizing Settings

4

CHAPTER

This chapter describes how to use the Printer Settings menu and its submenus from the Additional Functions.

Menu Functions	4-3
Setting Priorities	4-4
Using the Printer Settings Menu	4-5
Settings Menu	4-7
Default PaperSize	4-7
Default PaperType	4-8
Copies	4-8
2-Sided Printing	4-9
Print Quality	4-9
Layout	4-11
Auto Continue	4-13
Timeout	4-14
Finishing	4-15
Personality	4-18
Mode Priority	4-18
Auto Select	4-18
Initialize	4-19
PCL Settings	4-20
Paper Save	4-20
Orientation	4-20
Font Number	4-21
Point Size	4-21
Pitch	4-21
Form Lines	4-21
Symbol Set	4-22
Custom Paper	4-22
Unit of Measure	4-22
X dimension	4-22
Y dimension	4-23
Append CR to LF	4-23
Widen A4 Print	4-24
Halftones	4-28

4. Customizing Settings

BarDIMM 4-25

FreeScape 4-25

Booklet 4-26

PS Settings 4-27

 Job Timeout 4-27

 Wait Timeout 4-27

 Print PS Errors 4-27

 Halftones 4-28

 Booklet 4-28

Ppr Size Override 4-30

Menu Functions

This section describes the menu functions and how to access them using the touch panel display.

The basic settings, such as the number of copies and the paper size, can be specified by the application sending the print job or by the printer driver. The machine, however, has more printer settings including those that cannot be specified remotely from an application or from the printer driver. “Menu Functions” include both of these types of settings. The menu functions are grouped together according to the type of settings, making them easy to set.

There are two ways to specify the menu settings, as follows.

- Specifying the settings on the touch panel display:
Display the Printer Settings screen on the touch panel display and specify the settings by pressing the appropriate keys on the screen.
- Specifying the settings on the Remote UI:
You can specify some settings from your computer using your web browser.

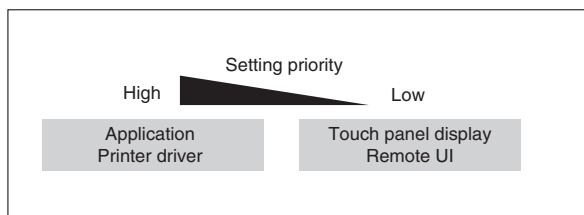
NOTE

- This guide only explains how to specify the menu settings on the touch panel display. For instructions on how to specify the menu settings on the Remote UI, see the *Remote UI Guide*.
- The Printer Settings are stored in the machine’s nonvolatile memory. Therefore, the settings are stored even if the power to the machine is switched OFF, and they will still be available when the power is switched ON again.

Setting Priorities

When the particular menu function setting can be specified either by using the touch panel display on the machine or by specifying the setting in an application or the printer driver, the setting from the application or printer driver will override the settings made on the touch panel display on the machine.

For settings available only on the touch panel display or Remote UI, the most recently specified settings take priority.



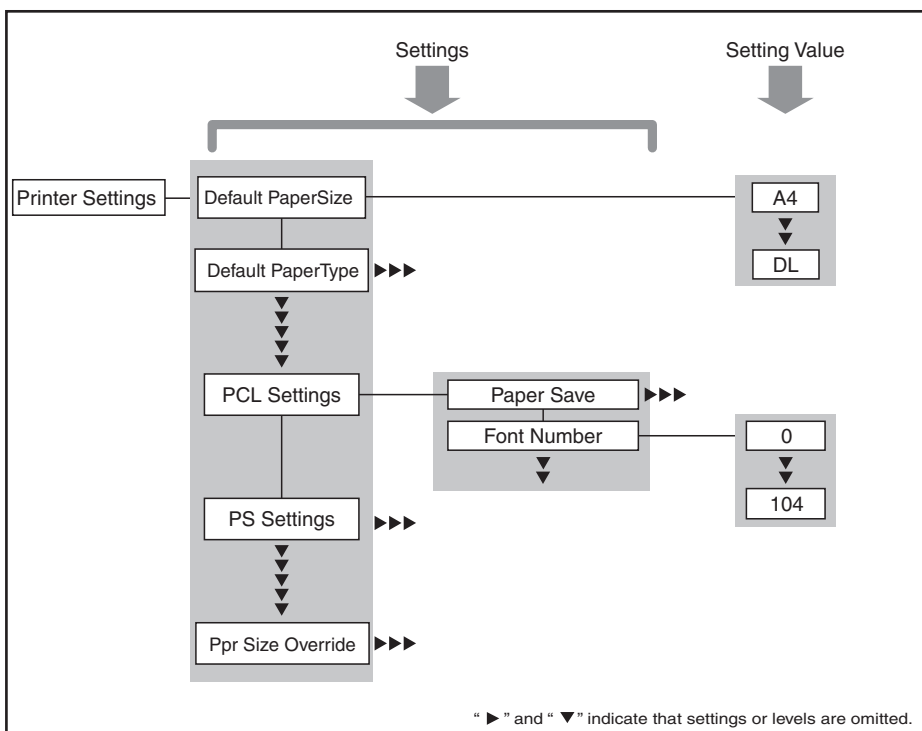
The printer drivers are included on the user software CD-ROMs provided with the machine. For more information, see Chapter 3, “Accompanying CD-ROMs,” in the *User's Guide*.

Using the Printer Settings Menu

The Printer Settings menu enables you to access common features. Below is an abbreviated outline of the Printer Settings menu structure. For a detailed description of all the Printer Settings menu options, see “Settings Menu,” on p. 4-7.

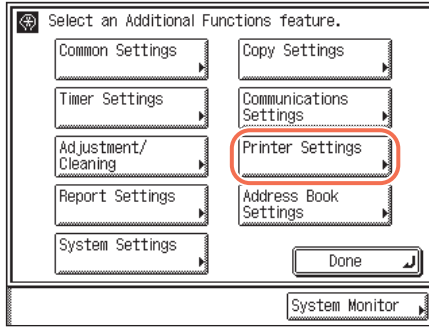
 NOTE

Depending on the printer environment, some settings may not be available.



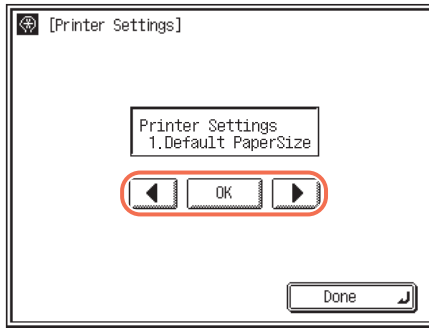
1 Press (Additional Functions).

2



Press [Printer Settings].

3



Press [◀] or [▶] to select the setting that you want to change
→ press [OK].

Referring to the descriptions of the following settings, select the option best suited to your preferences:

- Default PaperSize (See p. 4-7)
- Default PaperType (See p. 4-8)
- Copies (See p. 4-8)
- 2-Sided Printing (See p. 4-9)
- Print Quality (See p. 4-9)
- Layout (See p. 4-11)
- Auto Continue (See p. 4-13)
- Timeout (See p. 4-14)
- Finishing (See p. 4-15)
- Personality (See p. 4-18)
- Mode Priority (See p. 4-18)
- Auto Select (See p. 4-18)
- Initialize (See p. 4-19)
- PCL Settings (See p. 4-20)
- PS Settings (See p. 4-27)
- Ppr Size Override (See p. 4-30)

4

Press  (Reset) to return to the top screen.

Settings Menu

This section provides detailed information on the Printer Settings.



NOTE

The default settings are indicated in bold.

Default PaperSize

A4, A3, A5, 11 × 17, LGL, LTR, STMT, EXECUTIV, ISO-B5, ISO-C5, No. 10 (COM10), MONARCH, DL

This setting defines the default paper size used when the paper size cannot be set from the printer driver in the computer, or when no paper source is specified.



IMPORTANT

If you are printing from a computer that does not have the appropriate printer driver for the machine, make sure that the paper loaded in the paper drawer matches the paper size selected for this setting. If paper of the selected size is missing in any of the paper sources, the machine displays an error message on the touch panel display and suspends further printing. If no paper source has been selected through the application, the machine automatically selects the default printer setting for the paper size. (See Chapter 3, “Configuring the Machine’s Basic Settings,” in the *Reference Guide*.)

Default PaperType

Plain, Color, Recycled, Heavy Paper 1, Heavy Paper 2, Heavy Paper 3, Bond, 3HOLE PUNCH PAPER, Transparency, Labels, ENVELOPE

This setting sets the default paper type to be used for print jobs. This machine has internally defined optimal print modes for each specified paper type.



IMPORTANT

If you are printing from a computer that does not have the appropriate printer driver for the machine, make sure that the paper loaded in the paper drawer matches the paper type selected for this setting. If paper of the selected type is missing in any of the paper sources, the machine displays an error message on the LCD display and suspends further printing. If no paper source has been selected through the application, the machine automatically selects the default printer setting for the paper type. (See Chapter 3, “Configuring the Machine’s Basic Settings,” in the *Reference Guide*.)



NOTE

- Use the following figures as a guideline to decide whether paper should be specified as Plain Paper or Heavy Paper:
 - Plain Paper: 64 to 80 g/m²
 - Heavy Paper 1: 81 to 90 g/m²
 - Heavy Paper 2: 91 to 105 g/m²
 - Heavy Paper 3: 106 to 128 g/m²
- Canon transparency film is recommended for printing on transparencies.
- Canon label paper is recommended for printing on labels.
- Two-sided printing is not available for the following paper types:
 - Heavy Paper (1, 2, 3)
 - Bond
 - Transparency
 - Labels
 - Envelope

Copies

1 to 999; **1**

This setting enables you to specify the number of copies printed. The default setting is ‘1’, but you can specify up to 999 copies.

2-Sided Printing

Off, On

This setting selects one- or two-sided printing. In the 2-Sided Printing mode, the document is printed on both sides of the paper.



NOTE

- In the 2-Sided Printing mode, you can use either the paper drawers or stack bypass as the paper source, with A4, A3, A5R, A4R, B4, B5, B5R, LTR, LTRR, LGL, 11" × 17", STMTR, or EXEC paper loaded.
- In the 2-Sided Printing mode, you can use the 64 to 80 g/m² paper.

Print Quality

■ Image Refinement

On, Off

This setting smoothes the jagged outlines of characters and graphics.

If [On] is selected, smoothing is performed before printing.

If [Off] is selected, jobs are printed without being smoothed.



NOTE

The effects of image refinement may vary depending on the types of characters and graphics on the printed document.

■ Density

9 levels; 5

This setting adjusts the print density.

Pressing [◀] or [▶] makes the print image lighter or darker, respectively. You can select from nine levels, with level '5' (middle) being the default setting.



IMPORTANT

This setting applies only to print jobs sent from a computer via a printer driver. To adjust the density when printing from USB memory media, use the Printer Density setting in Common Settings. (See Chapter 3, "Configuring the Machine's Basic Settings," in the *Reference Guide*.)

■ Toner Save

Off, On

This setting enables or disables the toner saving feature. When this feature is enabled, less toner is used to print documents, resulting in a longer toner life.



IMPORTANT

This setting applies only to print jobs sent from a computer via a printer driver. To save toner when printing from USB memory media, enable the Toner Save Mode in Common Settings. (See Chapter 3, "Configuring the Machine's Basic Settings," in the *Reference Guide*.)



NOTE

If [On] is selected for Toner Saver, very light or finely detailed images may not be printed clearly.

■ Line Refinement

On, Off

This setting enables you to make clearer prints of documents containing fine lines and small characters.

■ Horizontal Line

Off, Level 1, Level 2, Level 3, Level 4

This setting adjusts the thickness of horizontal lines to produce fine lines and small characters more clearly. The higher the level number, the thicker the horizontal lines printed.



NOTE

- This setting is also available when the Line Refinement is set to [On] in the printer driver.
- With this setting, horizontal lines are based on the direction in which the paper is fed.
- Selecting [Level 2] or higher for this setting may result in abrupt changes in gradation with halftone images.

■ Vertical Line

Off, Level 1, Level 2, Level 3, Level 4

This setting adjusts the thickness of vertical lines to produce fine lines and small characters more clearly. The higher the level number, the thicker the vertical lines printed.



NOTE

- This setting is also available when the Line Refinement is set to [On] in the printer driver.
- With this setting, vertical lines are based on the direction in which the paper is fed.

- Selecting [Level 2] or higher for this setting may result in abrupt changes in gradation with halftone images.

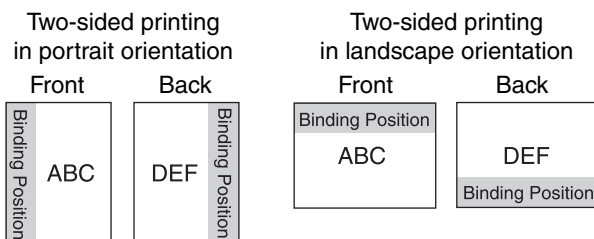
Layout

■ Binding Location

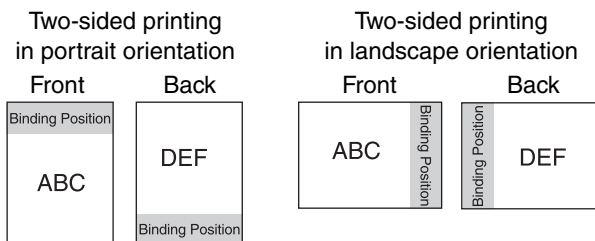
Long Edge, Short Edge

This setting determines whether the binding position is along the long edge or the short edge of the paper. When binding for two-sided printing, the image orientation is automatically adjusted to produce the correct layout.

When the binding position is on the long edge of the paper:



When the binding position is on the short edge of the paper:



NOTE

- You cannot create a binding margin with this setting alone. Use this setting in combination with the Margin setting (described below) to create a binding margin.
- For two-sided printing, the orientation of the image on the back side of the page may be changed using this setting.

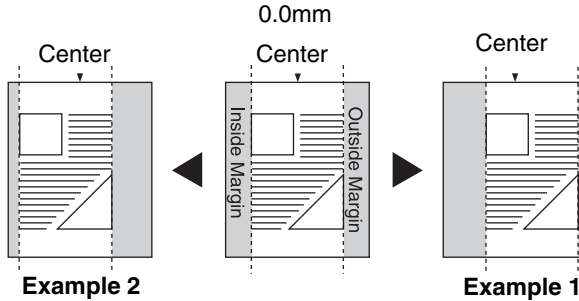
■ Margin

-50.0 to +50.0mm (in increments of 0.5 mm); **0.0mm**

This setting sets the page margin in millimeters or inches.

Press [►] to increase the width of the inside margin. (**Example 1**)

Press [◄] to increase the width of the outside margin. (**Example 2**)



You can specify the edge along which the margin will be created in the Binding setting. To create a margin along one of the edges of the paper, use this setting in combination with the Binding setting.



IMPORTANT

If this setting moves the image outside the printable area, part of the image may be cut off.



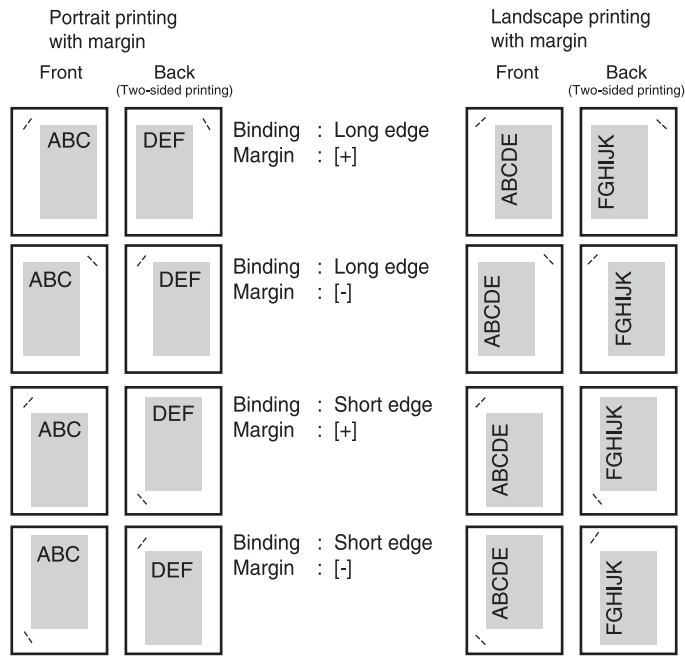
NOTE

Holding down [◄] or [►] makes the values change faster.

Combining the Binding and Margin Settings

The figures below illustrate how the Binding and Margin settings are combined. You can set the paper orientation using the printer driver. (See Chapter 3, “Printing Functions,” in the *Windows Printer Driver Guide*.)

Binding and Margin Settings



Auto Continue

Off, On

This setting enables you to automatically clear an error and continue printing when an error occurs (Error skip).

If [Off] is selected, you must perform error skips from the touch panel display.

If [On] is selected, error skips are performed automatically.

NOTE

- Error skip only temporarily clears an error, so the data may not print correctly.
- This setting is valid even if multiple errors have occurred.

On (5 to 300sec), **Off**; **15sec**

The Timeout setting enables the machine to discard a print job that remains in the machine's memory after a specified period of time.

This setting is useful when the data for the current job has some error and prevents the machine from performing further printing. In this case, the machine will not receive other print commands because it performs printing in chronological order (jobs are printed in the order they are received).

If the Timeout setting is enabled, the current job is discarded automatically after the specified period of time. For example, if the Timeout is enabled at '20 sec', the data for the current job will be erased from the machine's memory 20 seconds after the machine starts processing the data.

If [Off] is selected, the machine will not discard jobs automatically.



IMPORTANT

- This setting applies only for PCL and PS data.
- If a job that consists of a large amount of data is sent from a computer, the function may cause the machine to end the print job before all of the data is received. In this case, set a longer timeout period (in seconds).
- If [Off] is selected, you will not be able to make copies until print jobs that use the Staple mode are complete.



NOTE

When a job is being processed, the Processing/Data indicator blinks on the control panel.

Off, Collate, Rotate+Collate, Rotate+Group, Offset+Collate, Offset+Group, Staple+Collate (Corner (Upper-L), Corner (Upper-R), Corner (Lower-L), Corner (Lower-R), Double (Left), Double (Right), Double (Top), Double (Bottom))



IMPORTANT

The table below shows all the Finishing modes that are available with the optional Inner Finisher-B1, and the paper sizes that can be used.

✓: Available

N/A: Not Available

	When the Inner Finisher-B1 Is Not Attached	When the Inner Finisher-B1 Is Attached
Off	✓	✓
Collate	✓	✓
Rotate+Collate	✓	N/A
Rotate+Group	✓	N/A
Offset+Collate	N/A	✓
Offset+Group	N/A	✓
Staple+Collate	N/A	✓

You can select from several features when collating printed documents.

Off

This setting prints all copies of the same page before printing the next page.

Collate

This setting prints all pages of each copy before printing the next copy.

Rotate+Collate

This setting prints all pages of each copy (collating), and rotates every other complete copy 90 degrees to indicate where each copy starts.

Rotate+Group

This setting prints all copies of the same page before printing the next page. It rotates every other complete set of pages to indicate where each new set starts.

Offset+Collate

This setting prints all pages of each copy (collating), and offsets every other complete copy to indicate where each copy starts.

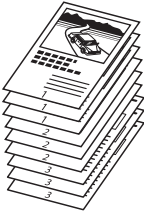
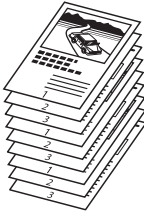
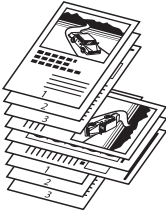
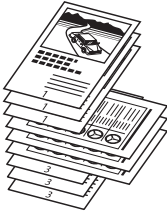
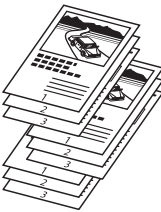
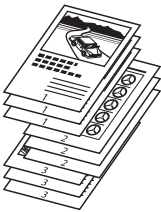
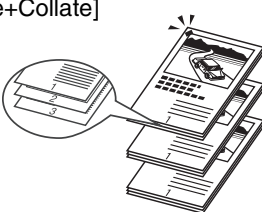
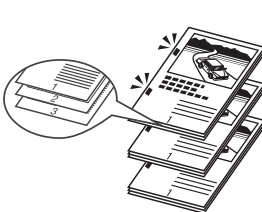
Offset+Group

This setting prints all copies of the same page before printing the next page. It offsets every other complete set of pages to indicate where each new set starts.

Staple+Collate

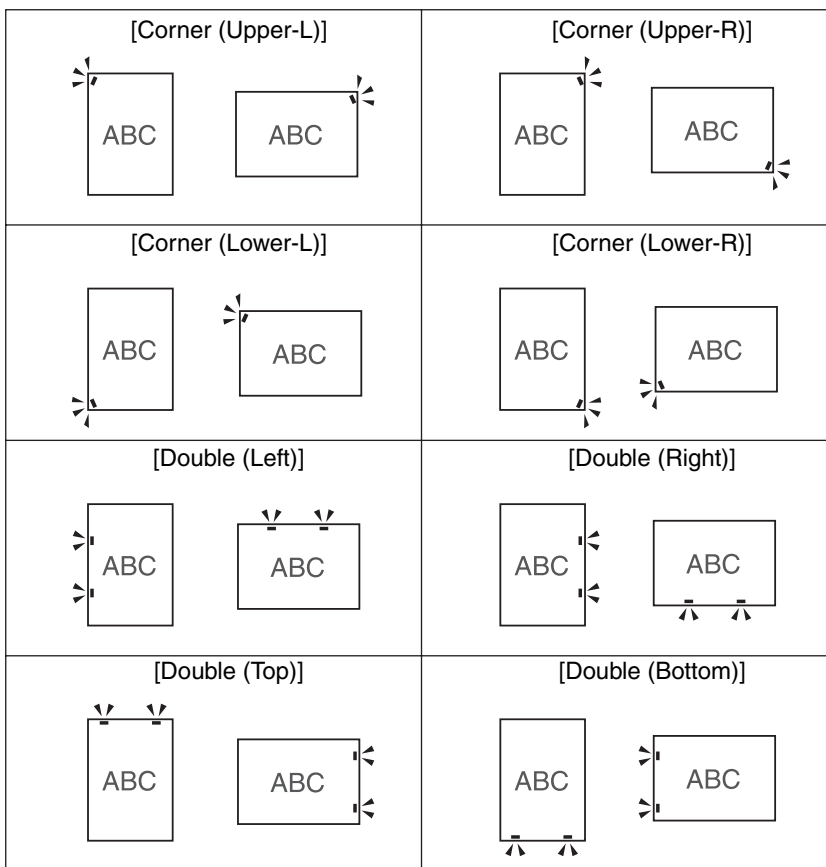
This setting prints all pages of each copy (collating), and staples them together before printing the next copy.

Examples of each Finishing option when printing three copies of a three page document:

[Off] 	[Collate] 
[Rotate+Collate] 	[Rotate+Group] 
[Offset+Collate] 	[Offset+Group] 
[Staple+Collate] 	

NOTE

- Rotate+Collate and Rotate+Group are available for selection if the paper size is A4, A4R, B5, B5R, LTR, or LTRR.
- If Rotate+Collate and Rotate+Group is selected, part of the print image may be cut off when the image is rotated. You need to load the same size paper as the original in the paper drawers in both landscape and portrait positions. If you do not, all the sheets will be printed in the orientation that the loaded paper is in.
- Offset+Collate and Offset+Group are available for the following paper sizes: A4, A4R, A3, B4, B5, LTR, LTRR, LGL, or 11" × 17".
- When you select Staple, you can select the stapling position.
- The Staple+Collate mode is available for selection if the paper size is A4, A4R, A3, B4, B5, LTR, LTRR, LGL, or 11" × 17".
- The maximum number of sheets that can be stapled is 30 for A4R, A3, B4, LTRR, LGL, and 11" × 17", and 50 for A4, B5, and LTR. If the number of sheets is greater than the limit, they will not be stapled.
- When you are stapling paper in landscape orientation, the image orientation and the staple position may not match, as shown below.



Personality

Auto, PCL, PS

This setting enables the machine to process data received from the host computer in the specified data format. Setting the 'Personality' to [Auto] makes the machine determine the type of data received from the host on a job-by-job basis. If you are printing from applications on a computer, we recommend that you use the [Auto] setting.

NOTE

- The Personality function is available only when the PCL Printer Kit-AF1 (optional for the imageRUNNER 2545/2535/2530/2525/2520) and optional PS Printer Kit-AF1 are activated.
- If the machine does not correctly switch to the appropriate personality when 'Personality' is set to [Auto], change the setting manually to match the data you are sending from the host computer.

Mode Priority

Off, PCL, PS

This setting determines which personality should be used if a job is received without a specified command language. 'Mode Priority' is available only when 'Personality' is set to [Auto].

[Off]:	Applies the current Personality setting if the machine cannot detect a command language.
[PCL]:	Assigns priority to the PCL personality.
[PS]:	Assigns priority to the PS personality.

Auto Select

PCL: **On**, Off

PS: **On**, Off

This setting determines which personality should be used when [Auto] is selected in the Personality setting.

If [On] is selected in each mode, the mode is available for the Personality setting.

If [Off] is selected in each mode, the mode is not available for the Personality setting.

Initialize

Off, On

The menu settings can be returned to the factory defaults by initializing the printer settings.

If [On] is selected, the settings are initialized. If [Off] is selected, the settings are not initialized.



IMPORTANT

Do not turn OFF the machine while the settings are being initialized, as this may damage the machine's memory.

PCL Settings



NOTE

The PCL Printer function is available only when the PCL Printer Kit-AF1 (optional for the imageRUNNER 2545/2535/2530/2525/2520) is activated.

Paper Save

OFF, ON

This setting specifies whether to output a blank page when software does not send print data between End Page codes.

If [OFF] is selected, a blank page is output.

If [ON] is selected, a blank page is not output, thus saving paper.

Orientation

Portrait, Landscape

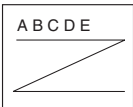
This setting enables you to set the paper orientation.

If [Portrait] is selected, the print image is printed in portrait orientation regardless of the orientation of the paper in the paper drawers.



Portrait

If [Landscape] is selected, the print image is printed in landscape orientation regardless of the orientation of the paper in the paper drawers.



Landscape

Font Number

0 to 104; **0**

You can set the default font typeface for this printer function using the corresponding font numbers.

For typeface samples for each font number, see “Typeface Samples,” on p. 6-20.

Point Size

4.00 to 999.75 point (in increments of 0.25 point); **12.00**

This setting enables you to specify the point size for the default font.



NOTE

This setting is available if a value from ‘1’ to ‘78’ is specified for the ‘Font Number’ option.

Pitch

0.44 to 99.99 cpi (in increments of 0.01 cpi); **10.00**

This setting enables you to specify the pitch for the default font.



NOTE

This setting is available if a value of ‘0’ or from ‘79’ to ‘104’ is specified for the ‘Font Number’ option.

Form Lines

5 to 128 lines; **64**

This setting enables you to specify the number of lines to be printed on a page.

Symbol Set

PC8, PC850, PC851, PC852, PC862, PC864, PC866, PC8DN, PC8GRK, PC8TK, PC1004, PIFONT, PSMATH, PSTEXT, ROMAN8, VNINTL, VNMATH, VNUS, WIN30, WINARB, WINBALT, WINCYR, WINGRK, WINL1, WINL2, WINL5, ARABIC8, DESKTOP, GREEK8, HEBREW7, HEBREW8, ISO4, ISO6, ISO11, ISO15, ISO17, ISO21, ISO60, ISO69, ISOCYR, ISOGRK, ISOHEB, ISOL1, ISOL2, ISOL5, ISOL6, LEGAL, MATH8, MCTEXT, MSPUBL, PC775

This setting enables you to select the symbol set most suited to the needs of the host computer.

Custom Paper

Off, On

This setting enables you to specify a custom paper size. If [On] is selected, you can enter a custom size.



NOTE

You can only select the custom paper size entered with settings from the printer driver.

Unit of Measure

Millimeters, Inches

This setting enables you to specify the unit of measurement to use to specify the custom paper size.



NOTE

This function is available if [On] is selected in the Custom Paper setting.

X dimension

148.0 to 432.0 mm; **432.0**

This setting enables you to specify the horizontal size of the custom paper.

This function is useful when part of the printed image is cut off. Increasing this value may allow some of the missing text to be correctly printed. Make sure not to increase the value beyond the actual size of the paper you are using for printing.



NOTE

This function is available if [On] is selected in the Custom Paper setting.

Y dimension

99.0 to 297.0 mm; **297.0**

This setting enables you to specify the vertical size of the custom paper.

This function is useful when part of the printed image is cut off, increasing this value may allow some of the missing text to be correctly printed. Make sure you do not increase the value beyond the actual size of the paper you are using for printing.



NOTE

This function is available if [On] is selected in the 'Custom Paper' setting.

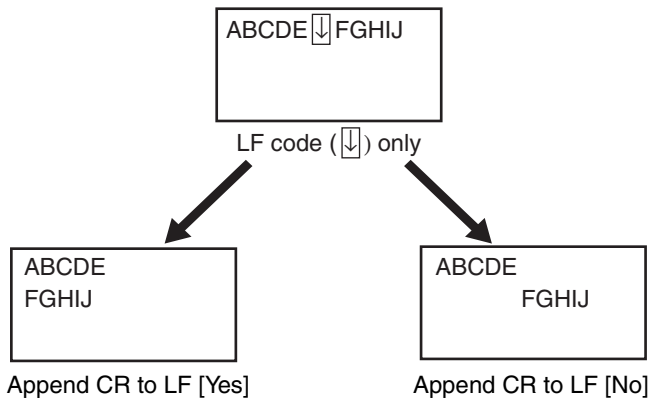
Append CR to LF

No, Yes

This setting enables you to specify whether to append a carriage return (CR) when a line feed code (LF) is received.

If [Yes] is selected, the print head moves to the beginning of the next line when a line feed code is received.

If [No] is selected, the print head moves down to the next line when a line feed code is received, and the margin does not change (such as to the beginning of the next line).

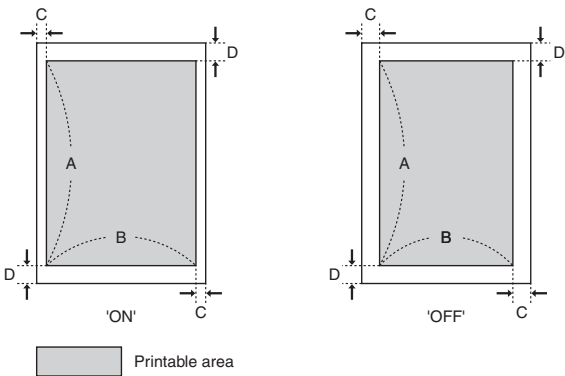


Off, On

This setting determines whether to expand the printable area of A4 size paper to that of Letter size in width.

If [On] is selected, the entire area on a page 4.23 mm from the top and bottom edges and 1.28 mm from the left and right edges is available for printing on A4 paper. Only the width increases.

If [Off] is selected, the entire area on a page 4.23 mm from the top, bottom, left, and right edges is available for printing on A4 paper.



Settings	'ON'	'OFF'
A: Length	288.54 mm	
B: Width	207.44 mm	201.54 mm
C: Left and right edges	1.28 mm	4.23 mm
D: Top and bottom edges	4.23 mm	

 **IMPORTANT**
This setting is available for PCL5 printing only. PCL6 printing is not supported.

 **NOTE**

- This setting is available for A4 paper only.
- This setting is available for portrait orientation only.

Halftones

Text: **Resolution**, High Resolution, Tone, Gradation
Graphics: **Tone**, Gradation, Resolution, High Resolution
Image: **Tone**, Gradation, Resolution, High Resolution

This setting specifies how to express halftones in black and white data.

Print data is expressed in dots. Fine gradations, edges, and shades are expressed by using dither patterns, which are groups of dots. This is called halftone processing.

For example, using a pattern that sharpens character and line edges, or a pattern that smoothens image and graph gradation, enables you to obtain the most suitable texture.

- | | |
|--------------------|--|
| [Tone]: | Select to print with sharp gradation and well-balanced texture, contrasting light and shade. Best for printing images. |
| [Gradation]: | Select to print with both smooth gradation and outlines. Best for printing graphs and graphics that use gradation. |
| [Resolution]: | Select to print text with distinct outlines. Best for printing text and thin lines. |
| [High Resolution]: | Select to print finer than with [Resolution], although toner stability is somewhat weaker. Best for printing small characters, fine lines, and outlines (such as from CAD data) sharply. |

BarDIMM

Enable, Disable

This setting is available only if the BarDIMM function is activated.

FreeScape

~, ", #, \$, /, \, ?, {, }, |, OFF

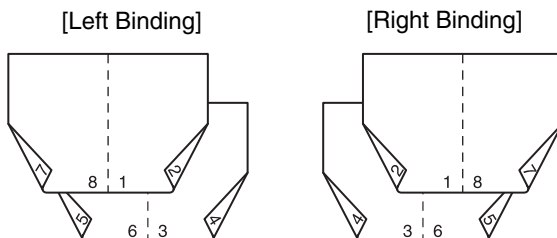
This setting is available only if the BarDIMM function is activated.

Off, Left Binding, Right Binding

This setting enables you to print two pages of data in such a way that the printouts are made into a booklet.

If [Left Binding] is selected, the pages are bound on the left side.

If [Right Binding] is selected, the pages are bound on the right side.



NOTE

- Please note that the machine's memory can store up to 100 jobs. If the memory is full (already reached its maximum capacity) when you send a document to the memory, it will not be stored.
- If the pages are not all the same size, this function will not work.
- This function is available for selection if the image paper size is A4, A5, JIS-B5, Letter or Statement. The data for these page sizes is printed on the types of paper listed in the table below.

Page Size	Paper
A4	A3
A5	A4R
JIS-B5	JIS-B4
Letter	11" × 17"
Statement	Letter-R

PS Settings



NOTE

The PS Printer function is available only when the optional PS Printer Kit-AF1 is activated.

Job Timeout

0 to 3600 seconds (in increments of 1); **0s**

This setting enables you to specify the amount of time before a job times out. If a job has not finished within the set time limit, the job automatically cancels.

Wait Timeout

0 to 3600 seconds (in increments of 1); **300s**

This setting enables you to specify the amount of time the machine will wait for data sent from the host computer before it times out. If data is not received within the set time limit, the job automatically cancels.

Print PS Errors

Off, On

This setting determines whether an error page is printed when an error occurs.

Halftones

Text: **High Resolution**, Gradation, Resolution

Graphics: **Gradation**, Resolution, High Resolution

Image: **Gradation**, Resolution, High Resolution

This setting specifies how to express halftones in black and white data.

Print data is expressed in dots. Fine gradations, edges, and shades are expressed by using dither patterns, which are groups of dots. This is called halftone processing.

For example, using a pattern that sharpens character and line edges, or a pattern that smoothens image and graph gradation, enables you to obtain the most suitable texture.

[Gradation]: Select to print with both smooth gradation and outlines. Best for printing graphs and graphics that use gradation.

[Resolution]: Select to print text with distinct outlines. Best for printing text and thin lines.

[High Resolution]: Select to print finer than with [Resolution], although toner stability is somewhat weaker. Best for printing small characters, fine lines, and outlines (such as from CAD data) sharply.

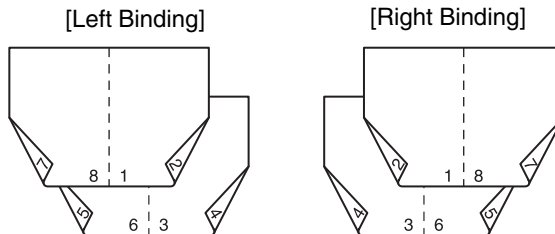
Booklet

Off, Left Binding, Right Binding

This setting enables you to print two pages of data in such a way that the printouts are made into a booklet.

If [Left Binding] is selected, the pages are bound on the left side.

If [Right Binding] is selected, the pages are bound on the right side.



NOTE

- Please note that the machine's memory can store up to 100 jobs. If the memory is full (already reached its maximum capacity) when you send a document to the memory, it will not be stored.
- If the pages are not all the same size, this function will not work.

- This function is available for selection if the image paper size is A4, A5, JIS-B5, Letter or Statement. The data for these page sizes is printed on the types of paper listed in the table below.

Page Size	Paper
A4	A3
A5	A4R
JIS-B5	JIS-B4
Letter	11" × 17"
Statement	Letter-R

Ppr Size Override

Off, On

Paper of the size selected in the printer driver might not be loaded in any of the machine's paper drawers. If the Auto Size Detection setting is enabled, the machine will automatically substitute paper of an available size for the missing paper, as shown in the table below.

Printer Driver Setting	Substitute Paper
Letter	A4
A4	Letter
11" × 17"	A3
A3	11" × 17"

 NOTE

The machine does not use substitute paper if the above substitute paper is not loaded in the machine's paper drawers.

Troubleshooting

5

CHAPTER

This chapter describes how to identify and solve problems you may face when operating the machine.

Identifying and Isolating Problems	5-2
Printer Problems	5-2
Printing Problems	5-4
Print Quality Problems	5-5

Identifying and Isolating Problems

You may experience problems while operating the machine. Take a minute to see if there is a simple solution to your problem before contacting your local authorized Canon dealer.

Printer Problems

Indicators are off and the display is blank.

Cause 1 Power switch is not turned ON.

Remedy Check the power switch to ensure that the machine is turned ON.

Cause 2 Power cord is not connected.

Remedy Check the power cord and make sure it is connected at both ends.

Cause 3 No power at the AC outlet.

Remedy Check the AC outlet. Consult an electrician or the local power company. If you are using a power strip, ensure that the power lead is connected at the source and turned ON.

Printing does not start.

Cause 1 Output tray is full of paper during the print job. (When the optional Inner Finisher-B1 is set up, the selected tray is full of paper.)

Remedy Remove the paper in the tray.

Cause 2 The machine and host computer are not properly connected.

Remedy Check the cable connection between the host computer and the machine. (See Chapter 1, "Machine Installation," in the *User's Guide*.)

Cause 3 A failure occurred in the machine or an optional device.

Remedy Follow the instructions in the message on the touch panel display.

Cause 4 The paper size loaded in the drawer is different from the paper size you have set up in the application software, or the appropriate paper size you have set for enlarging or reducing the copy is not loaded.

Remedy 1 Change the paper in the selected drawer to the paper size you have set in the application software (or to the size you have set for enlarging/reducing copy), and then print again.

Remedy 2 Select the drawer with the appropriate paper size you have set up in the application software (or to the size you have set for enlarging/reducing copy), and then print again.

Cause 5 The paper in the drawer or the stack bypass has run out.

Remedy Load more paper.

The machine does not work.

Cause There is a problem with the machine or software.

Remedy Follow the instructions in the message on the touch panel display.

You cannot print a job or store a job.

Cause The total number of pages in all jobs has exceeded the limit which can be processed.

Remedy 1 Delete other processes, cancel other jobs being processed, or wait until those jobs are finished, and then print again.

Remedy 2 Divide the job, and then print again.

Paper is excessively curled after coming out of the machine.

Cause You may be using paper that curls too easily.

Remedy 1 Remove the paper stack, turn it over, reload it in the drawer and try again.

Remedy 2 Make sure that the paper meets the paper requirements. (See Chapter 7, "Appendix," in the *Reference Guide*.)

High jam rates, incorrect feeding, or multiple sheet feed errors.

Cause You may be using unsuitable paper.

Remedy Always use paper that is suitable for the machine. (See Chapter 2, "Basic Operations," in the *Reference Guide*.)

The service call (E730) appears when using the PS functions.

Cause A malfunction occurred when using the PS driver.

Remedy Restart the machine—turn OFF the machine, wait at least 10 seconds, and then turn it ON. (See Chapter 6, “Troubleshooting,” in the *Reference Guide*.)

Printing Problems

Printer is not using the font you want.

Cause You have specified a font that is not available.

Remedy Check whether the font you specified is available with the machine. (See “Typeface Samples,” on p. 6-20 and “Symbol Sets,” on p. 6-33.)

One edge of the document is cut off.

Cause You are trying to print something outside the printable area of the page.

Remedy Use your software application to adjust the margins of the page. Make sure that your software application is not trying to print graphics or text outside the printable area. (See the application software manual.)

Printer is printing garbled text.

Cause 1 The printer driver selection you made when you set up or installed your software application was incorrect.

Remedy Make sure that the correct printer driver is selected.

Cause 2 If different portions of the text are garbled every time you print, the USB cable may be too long, causing noise to corrupt the data.

Remedy A USB cable of 3 meters or shorter is recommended. If your USB cable is longer than this, replace it with a shorter one.

Cause 3 The machine is plugged into an outlet shared with another electrical device capable of generating noise, such as a photocopier, shredder or air conditioner.

Remedy Plug the machine into a different outlet or consult a qualified technician to install a noise filter.

Print Quality Problems

Printed text is faded or streaked with white.

Cause The level of toner remaining in the toner cartridge may be low, or the toner may not be evenly distributed inside the cartridge.

Remedy Replace the toner cartridge. (See Chapter 5, “Routine Maintenance,” in the *Reference Guide*.)

Printed pages are dirty or have white specks.

Cause The fixing roller inside the fixing assembly has become dirty with toner dust.

Remedy Clean the fixing assembly inside the machine. (See Chapter 5, “Routine Maintenance,” in the *Reference Guide*.)

The printout is too light or too dark.

Cause 1 The toner density settings are not correct.

Remedy Adjust the toner density and print the data again. (See “Print Quality,” on p. 4-9.)

Cause 2 [Toner Saver] is set to ‘On’.

Remedy Set [Toner Saver] to ‘Off’ and print the data again. (See “Toner Save,” on p. 4-10.)

Black spots appear on the front and back of the printed pages

Cause The fixing roller inside the fixing assembly unit may be dirty.

Remedy Clean the fixing roller. (See Chapter 5, “Routine Maintenance,” in the *Reference Guide*.)

Black stripes appear on multiple sheets in sequence.

Cause The toner cartridge is old or damaged.

Remedy Contact your local authorized Canon dealer.

Appendix

6

CHAPTER

This chapter summarizes the machine's specifications and includes the index.

Printer Settings Menu	6-2
Some Basic Facts about Fonts	6-5
What Is a Font?	6-5
Attributes of Fonts	6-5
Fonts and Scalable Fonts	6-10
Typeface Samples	6-20
Symbol Sets	6-33
Symbol Sets Supported	6-61
ISO Substitution Table	6-61
Specifications	6-63
Software Specifications	6-63
Index	6-64

Printer Settings Menu

The table below lists all settings of the Printer Settings menu. The default settings are indicated in bold.

■ Settings Menu

Additional Functions	Available Settings	Applicable Page
Default PaperSize	A4 , A3, A5, 11 × 17, LGL, LTR, STMT, EXECUTIV, ISO-B5, ISO-C5, No. 10 (COM10), MONARCH, DL	p. 4-7
Default PaperType	Plain , Color, Recycled, Heavy Paper 1, Heavy Paper 2, Heavy Paper 3, Bond, 3HOLE PUNCH PAPER, Transparency, Labels, ENVELOPE	p. 4-8
Copies	1 to 999; 1	p. 4-8
2-Sided Printing	Off , On	p. 4-9
Print Quality		
Image Refinement	On , Off	p. 4-9
Density	9 levels; 5	p. 4-9
Toner Save	Off , On	p. 4-10
Line Refinement	On , Off	p. 4-10
Horizontal Line	Off , Level 1, Level 2, Level 3, Level 4	p. 4-10
Vertical Line	Off , Level 1, Level 2, Level 3, Level 4	p. 4-10
Layout		
Binding Location	Long Edge , Short Edge	p. 4-11
Margin	-50.0 to +50.0mm; 0.0mm	p. 4-12
Auto Continue	Off , On	p. 4-13
Timeout	On (5 to 300sec), Off; 15sec	p. 4-14

Additional Functions	Available Settings	Applicable Page
Finishing	Off , Collate, Rotate+Collate* ¹ , Rotate+Group* ¹ , Offset+Collate* ² , Offset+Group* ² , Staple+Collate* ² (Corner (Upper-L), Corner (Upper-R), Corner (Lower-L), Corner (Lower-R), Double (Left), Double (Right), Double (Top), Double (Bottom))	p. 4-15
Personality	Auto , PCL, PS	p. 4-18
Mode Priority	Off , PCL, PS	p. 4-18
Auto Select		
PCL	On , Off	p. 4-18
PS	On , Off	
Initialize	Off , On	p. 4-19

*1 The Rotate modes are not available when the optional Inner Finisher-B1 is attached to the machine.

*2 The Offset and Staple modes are available only when the Inner Finisher-B1 is attached to the machine.

■ PCL Settings*³

Additional Functions	Available Settings	Applicable Page
Paper Save	OFF , ON	p. 4-20
Orientation	Portrait , Landscape	p. 4-20
Font Number	0 to 104; 0	p. 4-21
Point Size	4.00 to 999.75 point; 12.00	p. 4-21
Pitch	0.44 to 99.99 cpi; 10.00	p. 4-21
Form Lines	5 to 128 lines; 64	p. 4-21
Symbol Set	PC8 , PC850, PC851, PC852, PC862, PC864, PC866, PC8DN, PC8GRK, PC8TK, PC1004, PIFONT, PSMATH, PSTEXT, ROMAN8, VNINTL, VNMATH, VNUS, WIN30, WINARB, WINBALT, WINCYR, WINGRK, WINL1, WINL2, WINL5, ARABIC8, DESKTOP, GREEK8, HEBREW7, HEBREW8, ISO4, ISO6, ISO11, ISO15, ISO17, ISO21, ISO60, ISO69, ISOCYR, ISOGRK, ISOHEB, ISOL1, ISOL2, ISOL5, ISOL6, LEGAL, MATH8, MCTEXT, MSPUBL, PC775	p. 4-22
Custom Paper	Off , On	p. 4-22
Unit of Measure	Millimeters , Inches	p. 4-22
X dimension	148.0 to 432.0 mm; 432.0	p. 4-22
Y dimension	99.0 to 297.0 mm; 297.0	p. 4-23

Additional Functions	Available Settings	Applicable Page
Append CR to LF	No , Yes	p. 4-23
Widen A4 Print	Off , On	p. 4-24
Halftones		
Text	Resolution , High Resolution, Tone, Gradation	p. 4-25
Graphics	Tone , Gradation, Resolution, High Resolution	
Image	Tone , Gradation, Resolution, High Resolution	
BarDIMM* ⁴	Enable , Disable	<i>Bar Code Printing Guide</i>
FreeScope	~, ", #, \$, /, \, ?, {, }, , OFF	
Booklet	Off , Left Binding, Right Binding	p. 4-26

*3 The PCL Printer function is available only when the PCL Printer Kit-AF1 (optional for the imageRUNNER 2545/2535/2530/2525/2520) is activated.

*4 The BarDIMM function is available only when it is activated.

■ PS Settings*⁵

Additional Functions	Available Settings	Applicable Page
Job Timeout	0 to 3600 seconds; 0s	p. 4-27
Wait Timeout	0 to 3600 seconds; 300s	p. 4-27
Print PS Errors	Off , On	p. 4-27
Halftones		
Text	High Resolution , Gradation, Resolution	p. 4-28
Graphics	Gradation , Resolution, High Resolution	
Image	Gradation , Resolution, High Resolution	
Booklet	Off , Left Binding, Right Binding	p. 4-28

*5 The PS Printer function is available only when the optional PS Printer Kit-AF1 is activated.

■ Other Settings

Additional Functions	Available Settings	Applicable Page
Ppr Size Override	Off , On	p. 4-30

Some Basic Facts about Fonts

This section summarizes some of the basic facts you should know about fonts.

What Is a Font?

A font is a collection of letters and symbols used when printing a document. In general, a group of letters and symbols sharing a common design is referred to as a font. A font consists of the letters A to Z in both upper and lowercase, as well as numerals and symbols.

The design that distinguishes one font from another is referred to as a “typeface.” Each font has a typeface name, such as Courier, CG Times, Letter Gothic, etc.

Attributes of Fonts

All fonts share some common characteristics, called “attributes.” The typeface is one such attribute. The letters and symbols that are actually printed are determined by these attributes.

Typeface	The design of the letters (for example, Courier, CG Times, Helvetica, or Gothic).
Stroke Weight	The thickness of the lines with which the letters are drawn (e.g. bold, medium, or light).
Style	Whether the letters are drawn straight or at an angle (e.g. upright or italic).
Point Size	Height of the letters (e.g. 10 point or 5 point).
Pitch (cpi)	Number of characters that are printed in one inch (e.g. 10 cpi, 12 cpi, or Scale).
Character Width (Fixed/PS)	Indicates whether the character width is set to <Helvetica>“Fixed<Helvetica>” or <Helvetica>“Proportional.<Helvetica>”
Orientation	Orientation of the characters on a page (<Helvetica>“Portrait<Helvetica>” or <Helvetica>“Landscape<Helvetica>”).
Symbol Set	The rule that defines the correspondence between the character codes coming from the host computer, and the letter forms that appear on the page (for example, Roman-8).

Typeface

Typeface refers to the design of the characters and symbols. The following figure shows an example of some typefaces.

Courier ABCDEFGHIJKLMNOPQRSTUVWXYZ

CG Times ABCDEFGHIJKLMNOPQRSTUVWXYZ

Helvetica ABCDEFGHIJKLMNOPQRSTUVWXYZ

Stroke Weight

Stroke weight refers to the thickness of the print. There are light, medium, and bold stroke weights. The printer function has medium and bold fonts available. The figure below shows an example of medium and bold printing.

MEDIUM MEDIUM MEDIUM

BOLD BOLD BOLD BOLD BOLD

Style

Style refers to the shape of the characters. The printer function can print in two styles: upright and italic.

With some fonts, like CourierPS and Letter Gothic, the terms “Oblique” and “Slanted” are used in the same manner as italics.

UPRIGHT UPRIGHT UPRIGHT

ITALIC ITALIC ITALIC

Point Size

Point size refers to the height of the character. Character size is measured in points. One inch is divided into 72 points and 1 point is 1/72 of an inch (about 0.35 mm). The printer function has bitmapped fonts and scalable fonts available. The bitmapped fonts are fixed in size, but the scalable fonts are not fixed in size. Scalable fonts are freely scalable to any size you wish in 0.1 point increments. The following figure shows an example of various point sizes.

CGTimes 7pt
CGTimes 8pt
CGTimes 9pt
CGTimes 10pt
CGTimes 11pt
CGTimes 12pt
CGTimes 14pt
CGTimes 18pt
CGTimes 24pt

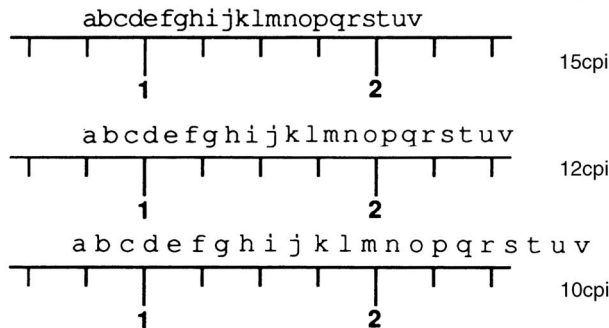


NOTE

See “Fonts and Scalable Fonts,” on p. 6-10, for more information on bitmapped fonts and scalable fonts.

Pitch (cpi)

Pitch refers to the number of characters that are printed in one inch. The unit is cpi (characters per inch). As the number of characters per inch increases, the space between characters decreases; as the cpi decreases, the space between characters increases.



Character Width (Fixed and PS)

Each character has a different width from all the other characters in a font at a given point size. For example, “W” is a wider letter than “l.” There are two ways to print letters of different widths: you can print all letters with the same spacing, regardless of their actual width; or you can change the spacing between letters to accommodate these different widths. Printing all letters with the same spacing is called “Fixed spacing,” while changing the spacing to accommodate different letter widths is called “Proportional spacing.”

Because the Fixed spacing method prints all letters with the same spacing, the number of characters which will fit into a given length is a fixed quantity which can be specified.

If the characters are printed with Proportional spacing, then the number of characters that will fit into an inch varies depending on the letters printed.

will

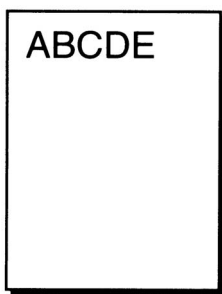
Proportional spacing

w i l l

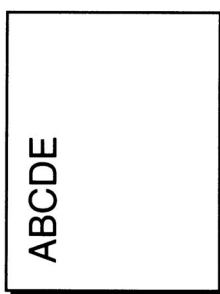
Fixed spacing

Orientation

Orientation refers to the direction of printing. The printer function can print using two different paper orientations: portrait and landscape. With portrait orientation, text is printed across the width of the paper (short edge), and with landscape orientation, text is printed across the length of the paper (long edge).



Portrait

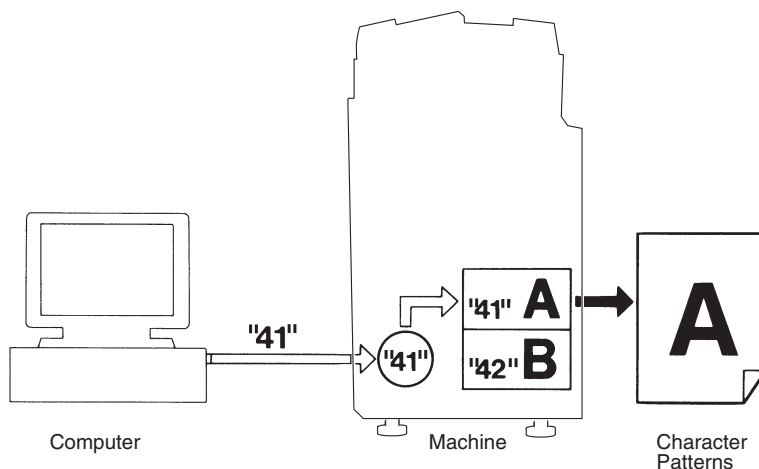


Landscape

Symbol Set

When you print the letter “A,” the host computer sends a code corresponding to “A” (hexadecimal 41 is an example of this) to the machine. This code is referred to as the character code. The machine stores an internal representation of each character, and selects from among these character patterns the pattern corresponding to the received code. In this case, the machine searches for the pattern for “A,” and prints it.

■ The process by which letters are printed



The machine uses a fixed rule to decide which letter or symbol corresponds to the character code sent from the host computer. For example, the letter “A” is printed for the hexadecimal code “41.” The rule which determines the correspondence between character codes and printed letters is called the “symbol set.”

Fonts and Scalable Fonts

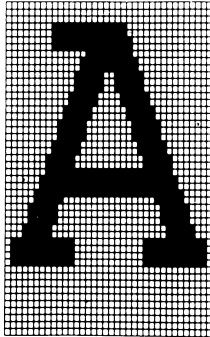
There are two types of fonts available, and these fonts are distinguished by the type of data from which they are formed.

- Bitmapped fonts
- Scalable fonts

Bitmapped Fonts

Each character of bitmapped fonts are composed of a grid of small dots and stored in the machine's memory in dot matrix format.

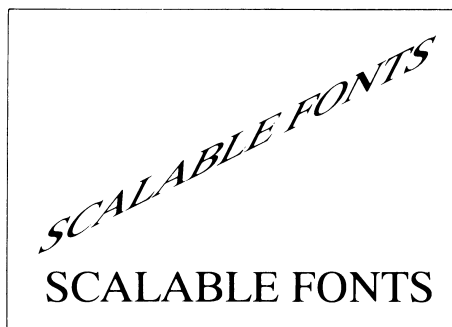
Bitmapped fonts are fixed in size and specified by characteristics called “attributes,” such as typeface, stroke weight, style and so on. Various types of bitmapped fonts are produced by the combination of these attributes.



Scalable Fonts

With scalable fonts, characters are freely enlarged or compressed from the one point to any size you wish in 0.1 point increments.

UPSCALINGDOWNSCALING



Standard Scalable and OCR Sets Fonts (PCL)

With scalable fonts, characters are freely enlarged or compressed from one point to any size you wish in 0.1 point increments. (The maximum range of scaling depends on the size of the memory installed in the machine and the size of the paper used.)

The following scalable typefaces are included with the machine.

Font Number	Font Name
0	Courier
1	CG Times
2	CG Times Bold
3	CG Times Italic
4	CG Times Bold Italic
5	CG Omega
6	CG Omega Bold
7	CG Omega Italic
8	CG Omega Bold Italic
9	Coronet
10	Clarendon Condensed Bold
11	Univers Medium
12	Univers Bold
13	Univers Medium Italic
14	Univers Bold Italic
15	Univers Medium Condensed
16	Univers Bold Condensed
17	Univers Medium Condensed Italic
18	Univers Bold Condensed Italic
19	Antique Olive
20	Antique Olive Bold
21	Antique Olive Italic
22	Garamond Antiqua
23	Garamond Halbfett
24	Garamond Kursiv
25	Garamond Kursiv Halbfett
26	Marigold
27	Albertus Medium
28	Albertus Extra Bold
29	Ryadh

Font Number	Font Name
30	Ryadh Bold
31	Malka
32	Malka Bold
33	Malka Italic
34	Dorit
35	Dorit Bold
36	Naamit
37	Naamit Bold
38	Arial
39	Arial Bold
40	Arial Italic
41	Arial Bold Italic
42	Times New Roman
43	Times New Roman Bold
44	Times New Roman Italic
45	Times New Roman Bold Italic
46	Helvetica
47	Helvetica Bold
48	Helvetica Oblique
49	Helvetica Bold Oblique
50	Helvetica Narrow
51	Helvetica Narrow Bold
52	Helvetica Narrow Oblique
53	Helvetica Narrow Bold Oblique
54	Palatino Roman
55	Palatino Bold
56	Palatino Italic
57	Palatino Bold Italic
58	ITC Avant Garde Gothic Book
59	ITC Avant Garde Gothic Demi
60	ITC Avant Garde Gothic Book Oblique
61	ITC Avant Garde Gothic Demi Oblique
62	ITC Bookman Light
63	ITC Bookman Demi
64	ITC Bookman Light Italic

Font Number	Font Name
65	ITC Bookman Demi Italic
66	New century Schoolbook Roman
67	New century Schoolbook Bold
68	New century Schoolbook Italic
69	New century Schoolbook Bold Italic
70	Times Roman
71	Times Bold
72	Times Italic
73	Times Bold Italic
74	ITC Zapf Chancery Medium Italic
75	Symbol
76	SymbolPS
77	Wingdings
78	ITC Zapf Dingbats
79	Courier Bold
80	Courier Italic
81	Courier Bold Italic
82	Letter Gothic
83	Letter Gothic Bold
84	Letter Gothic Italic
85	Naskh
86	Naskh Bold
87	Koufi
88	Koufi Bold
89	CourierPS
90	CourierPS Bold
91	CourierPS Oblique
92	CourierPS Bold Oblique
93	OCR-A
94	OCR-B
95	Line Printer
96	Line Printer
97	Line Printer
98	Line Printer
99	Line Printer

Font Number	Font Name
100	Line Printer
101	Line Printer
102	Line Printer
103	Line Printer
104	Line Printer

Symbol Sets (For Scalable Typefaces Only)

The following symbol sets are included with the machine.

ASCII (ISO6)	PC-8 Greek CP437
Arabic-8(ARABIC8)	PC-8 Greek(PC8GRK)
DeskTop	PC-850
Dingbats (14L)	PC-851
Greek-8(GREEK8)	PC-852
Hebrew-7(HEBREW7)	PC-858 *
Hebrew-8(HEBREW8)	PC-860 Portugal
ISO 8859-1 Latin1	PC-862
ISO 8859-10 Latin 6	PC-864
ISO 8859-2 Latin 2	PC-865 Norway
ISO 8859-9 Latin 5	PC-866
ISO 8859-5 Latin/Cyrillic(ISOCYR)	PC-Turkish
ISO 8859-7 Latin/Greek (ISOGRK)	Pi Font
ISO 8859-8 Latin/Hebrew(ISOHEB)	PS Math *
ISO French (ISO69)	PS Text
ISO German (ISO21)	Roman-8
ISO Italian (ISO15)	Roman 9 *
ISO Latin 9 *	Symbol
ISO Norwegian (ISO60)	Ventura International
ISO Spanish (ISO17)	Ventura Math
ISO Swedish:names (ISO11)	Ventura US
ISO United Kingdom (ISO4)	Windows 3.0 Latin 1 *
Legal	Windows Baltic *
Math-8	Windows 3.1 Latin 1 *
MC Text *	Windows 3.1 Latin 2 *
Microsoft Publishing	Windows 3.1 Latin 5 *
OCR-A	Windows Arabic (WINARB)
OCR-B	Windows Latin/Cyrillic (WINCYR)
PC-1004 (OS/2)	Windows Latin/Greek (WINGRK)
PC-775	Wingdings
PC-8	
PC-8 D/N	

* Supports the euro symbol.

PS Fonts

AlbertusMT	BodoniCE-Italic
AlbertusMT-Italic	BodoniCE-Poster
AlbertusMT-Light	BodoniCE-PosterCompressed
AntiqueOlive-Bold	Bookman-Demi
AntiqueOlive-Compact	Bookman-DemItalic
AntiqueOlive-Italic	Bookman-Light
AntiqueOlive-Roman	Bookman-LightItalic
AntiqueOliveCE-Bold	BookmanCE-Demi
AntiqueOliveCE-Compact	BookmanCE-DemItalic
AntiqueOliveCE-Italic	BookmanCE-Light
AntiqueOliveCE-Roman	BookmanCE-LightItalic
Apple-Chancery	Candid
Apple-ChanceryCE	Chicago
Arial-BoldItalicMT	ChicagoCE
Arial-BoldMT	Clarendon
Arial-ItalicMT	Clarendon-Bold
ArialCE	Clarendon-Light
ArialCE-Bold	ClarendonCE
ArialCE-BoldItalic	ClarendonCE-Bold
ArialCE-Italic	ClarendonCE-Light
ArialMT	CooperBlack
AvantGarde-Book	CooperBlack-Italic
AvantGarde-BookOblique	Copperplate-ThirtyThreeBC
AvantGarde-Demi	Copperplate-ThirtyTwoBC
AvantGarde-DemiOblique	Coronet-Regular
AvantGardeCE-Book	CoronetCE-Regular
AvantGardeCE-BookOblique	Courier
AvantGardeCE-Demi	Courier-Bold
AvantGardeCE-DemiOblique	Courier-Oblique
Bodoni	CourierCE
Bodoni-Bold	CourierCE-Bold
Bodoni-BoldItalic	CourierCE-BoldOblique
Bodoni-Italic	CourierCE-Oblique
Bodoni-Poster	Courier-BoldOblique
Bodoni-PosterCompressed	Eurostile
BodoniCE	Eurostile-Bold
BodoniCE-Bold	Eurostile-BoldExtendedTwo
BodoniCE-BoldItalic	Eurostile-ExtendedTwo

EurostileCE	HelveticaCE-Narrow
EurostileCE-Bold	HelveticaCE-NarrowBold
EurostileCE-BoldExtendedTwo	HelveticaCE-NarrowBoldOblique
EurostileCE-ExtendedTwo	HelveticaCE-NarrowOblique
Geneva	HelveticaCE-Oblique
GenevaCE	HoeflerText-Black
GillSans	HoeflerText-BlackItalic
GillSans-Bold	HoeflerText-Italic
GillSans-BoldCondensed	HoeflerText-Ornaments
GillSans-BoldItalic	HoeflerText-Regular
GillSans-Condensed	HoeflerTextCE-Black
GillSans-ExtraBold	HoeflerTextCE-BlackItalic
GillSans-Italic	HoeflerTextCE-Italic
GillSans-Light	HoeflerTextCE-Regular
GillSans-LightItalic	JoannaMT
GillSansCE-Bold	JoannaMT-Bold
GillSansCE-BoldCondensed	JoannaMT-BoldItalic
GillSansCE-BoldItalic	JoannaMT-Italic
GillSansCE-Condensed	JoannaMTCE
GillSansCE-ExtraBold	JoannaMTCE-Bold
GillSansCE-Italic	JoannaMTCE-BoldItalic
GillSansCE-Light	JoannaMTCE-Italic
GillSansCE-LightItalic	LetterGothic
GillSansCE-Roman	LetterGothic-Bold
Goudy	LetterGothic-BoldSlanted
Goudy-Bold	LetterGothic-Slanted
Goudy-BoldItalic	LetterGothicCE
Goudy-ExtraBold	LetterGothicCE-Bold
Goudy-Italic	LetterGothicCE-BoldSlanted
Helvetica	LetterGothicCE-Slanted
Helvetica-Bold	LubalinGraph-Book
Helvetica-BoldOblique	LubalinGraph-BookOblique
Helvetica-Condensed	LubalinGraph-Demi
Helvetica-Oblique	LubalinGraph-DemiOblique
Helvetica-Condensed-Bold	LubalinGraphCE-Book
Helvetica-Condensed-BoldOblique	LubalinGraphCE-BookOblique
Helvetica-Condensed-Oblique	LubalinGraphCE-Demi
Helvetica-Narrow	LubalinGraphCE-DemiOblique
Helvetica-Narrow-Bold	Marigold
Helvetica-Narrow-BoldOblique	Monaco
Helvetica-Narrow-Oblique	MonacoCE
HelveticaCE	MonaLisa-Recut
HelveticaCE-Bold	NewCenturySchlbk-Bold
HelveticaCE-BoldOblique	NewCenturySchlbk-BoldItalic
HelveticaCE-Cond	NewCenturySchlbk-Italic
HelveticaCE-CondBold	NewCenturySchlbk-Roman
HelveticaCE-CondBoldOblique	NewCenturySchlbkCE-Bold
HelveticaCE-CondOblique	NewCenturySchlbkCE-BoldItalic

NewCenturySchlbkCE-Italic
 NewCenturySchlbkCE-Roman
 NewYork
 NewYorkCE
 Optima
 Optima-Bold
 Optima-BoldItalic
 Optima-Italic
 OptimaCE-Bold
 OptimaCE-BoldItalic
 OptimaCE-Italic
 OptimaCE-Roman
 Oxford
 Palatino-Bold
 Palatino-BoldItalic
 Palatino-Italic
 Palatino-Roman
 PalatinoCE-Bold
 PalatinoCE-BoldItalic
 PalatinoCE-Italic
 PalatinoCE-Roman
 StempelGaramond-Bold
 StempelGaramond-BoldItalic
 StempelGaramond-Italic
 StempelGaramond-Roman
 StempelGaramondCE-Bold
 StempelGaramondCE-BoldItalic
 StempelGaramondCE-Italic
 StempelGaramondCE-Roman
 Symbol
 Taffy
 Times-Bold
 Times-BoldItalic
 Times-Italic
 Times-Roman
 TimesCE-Bold
 TimesCE-BoldItalic
 TimesCE-Italic
 TimesCE-Roman
 TimesNewRomanCE

TimesNewRomanCE-Bold
 TimesNewRomanCE-BoldItalic
 TimesNewRomanCE-Italic
 TimesNewRomanPS-BoldItalicMT
 TimesNewRomanPS-BoldMT
 TimesNewRomanPS-ItalicMT
 TimesNewRomanPSMT
 Univers-Bold
 Univers
 Univers-BoldExt
 Univers-BoldExtObli
 Univers-BoldOblique
 Univers-Oblique
 Univers-Condensed
 Univers-CondensedBold
 Univers-CondensedBoldOblique
 Univers-CondensedOblique
 Univers-Extended
 Univers-ExtendedObli
 Univers-Light
 Univers-LightOblique
 UniversCE-Bold
 UniversCE-BoldExt
 UniversCE-BoldExtObli
 UniversCE-BoldOblique
 UniversCE-Condensed
 UniversCE-CondensedBold
 UniversCE-CondensedBoldOblique
 UniversCE-CondensedOblique
 UniversCE-Extended
 UniversCE-ExtendedObli
 UniversCE-Light
 UniversCE-LightOblique
 UniversCE-Medium
 UniversCE-Oblique
 Windings-Regular
 ZapfChanceryCE-MediumItali
 ZapfChancery-MediumItalic
 ZapfDingbats

For PCL

Courier	ABCDEFGHIJKLMNOPQRSTUVWXYZ
CG Times	ABCDEFGHIJKLMNOPQRSTUVWXYZ
CG Times Bold	ABCDEFGHIJKLMNOPQRSTUVWXYZ
CG Times Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
CG Times Bold Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
CG Omega	ABCDEFGHIJKLMNOPQRSTUVWXYZ
CG Omega Bold	ABCDEFGHIJKLMNOPQRSTUVWXYZ
CG Omega Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
CG Omega Bold Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
Coronet	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
Clarendon Condensed Bold	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Univers Medium	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Univers Bold	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Univers Medium Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
Univers Bold Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
Univers Medium Condensed	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Univers Bold Condensed	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Univers Medium Condensed Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
Univers Bold Condensed Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
Antique Olive	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Antique Olive Bold	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Antique Olive Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
Garamond Antiqua	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Garamond Halbfett	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Garamond Kursiv	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>

Garamond Kursiv Halbfett
Marigold
Albertus Medium
Albertus Extra Bold
Ryadh
Ryadh Bold
Malka
Malka Bold
Malka Italic
Dorit
Dorit Bold
Naamit
Naamit Bold
Arial
Arial Bold
Arial Italic
Arial Bold Italic
Times New Roman
Times New Roman Bold
Times New Roman Italic
Times New Roman Bold Italic
Helvetica
Helvetica Bold
Helvetica Oblique
Helvetica Bold Oblique

ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ

Helvetica Narrow	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Helvetica Narrow Bold	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Helvetica Narrow Oblique	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
Helvetica Narrow Bold Oblique	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
Palatino Roman	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Palatino Bold	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Palatino Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
Palatino Bold Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
ITC Avant Garde Gothic Book	ABCDEFGHIJKLMNOPQRSTUVWXYZ
ITC Avant Garde Gothic Demi	ABCDEFGHIJKLMNOPQRSTUVWXYZ
ITC Avant Garde Gothic Book Oblique	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
ITC Avant Garde Gothic Demi Oblique	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
ITC Bookman Light	ABCDEFGHIJKLMNOPQRSTUVWXYZ
ITC Bookman Demi	ABCDEFGHIJKLMNOPQRSTUVWXYZ
ITC Bookman Light Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
ITC Bookman Demi Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
New Century Schoolbook Roman	ABCDEFGHIJKLMNOPQRSTUVWXYZ
New Century Schoolbook Bold	ABCDEFGHIJKLMNOPQRSTUVWXYZ
New Century Schoolbook Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
New Century Schoolbook Bold Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
Times Roman	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Times Bold	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Times Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
Times Bold Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>
ITC Zapf Chancery Medium Italic	<i>ABCDEFGHIJKLMNOPQRSTUVWXYZ</i>

For PS

AlbertusMT
 AlbertusMT-Italic
 AlbertusMT-Light
 AntiqueOlive-Bold
 AntiqueOlive-Compact
 AntiqueOlive-Italic
 AntiqueOlive-Roman
 AntiqueOliveCE-Bold
 AntiqueOliveCE-Compact
 AntiqueOliveCE-Italic
 AntiqueOliveCE-Roman
 Apple-Chancery
 Apple-ChanceryCE
 Arial-BoldItalicMT
 Arial-BoldMT
 Arial-ItalicMT
 ArialCE
 ArialCE-Bold
 ArialCE-BoldItalic
 ArialCE-Italic
 ArialMT
 AvantGarde-Book
 AvantGarde-BookOblique
 AvantGarde-Demi
 AvantGarde-DemiOblique
 AvantGardeCE-Book
 AvantGardeCE-BookOblique
 AvantGardeCE-Demi

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ

AvantGardeCE-DemiOblique
Bodoni
Bodoni-Bold
Bodoni-BoldItalic
Bodoni-Italic
Bodoni-Poster
Bodoni-PosterCompressed
BodoniCE
BodoniCE-Bold
BodoniCE-BoldItalic
BodoniCE-Italic
BodoniCE-Poster
BodoniCE-PosterCompressed
Bookman-Demi
Bookman-Demitalic
Bookman-Light
Bookman-LightItalic
BookmanCE-Demi
BookmanCE-Demitalic
BookmanCE-Light
BookmanCE-LightItalic
Candid
Chicago
ChicagoCE
Clarendon
Clarendon-Bold
Clarendon-Light
ClarendonCE

ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ

ClarendonCE-Bold
 ClarendonCE-Light
 CooperBlack
 CooperBlack-Italic
 Copperplate-ThirtyThreeBC
 Copperplate-ThirtyTwoBC
 Coronet-Regular
 CoronetCE-Regular
 Courier
 Courier-Bold
 Courier-BoldOblique
 Courier-Oblique
 CourierCE
 CourierCE-Bold
 CourierCE-BoldOblique
 CourierCE-Oblique
 Eurostile
 Eurostile-Bold
 Eurostile-BoldExtendedTwo
 Eurostile-ExtendedTwo
 EurostileCE
 EurostileCE-Bold
 EurostileCE-BoldExtendedTwo
 EurostileCE-ExtendedTwo
 Geneva
 GenevaCE
 GillSans
 GillSans-Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ

GillSans-BoldCondensed
GillSans-BoldItalic
GillSans-Condensed
GillSans-ExtraBold
GillSans-Italic
GillSans-Light
GillSans-LightItalic
GillSansCE-Bold
GillSansCE-BoldCondensed
GillSansCE-BoldItalic
GillSansCE-Condensed
GillSansCE-ExtraBold
GillSansCE-Italic
GillSansCE-Light
GillSansCE-LightItalic
GillSansCE-Roman
Goudy
Goudy-Bold
Goudy-BoldItalic
Goudy-ExtraBold
Goudy-Italic
Helvetica
Helvetica-Bold
Helvetica-BoldOblique
Helvetica-Condensed
Helvetica-Condensed-Bold
Helvetica-Condensed-BoldOblique
Helvetica-Condensed-Oblique

[illegible]

[illegible]

JoannaMT-BoldItalic
JoannaMT-Italic
JoannaMTCE
JoannaMTCE-Bold
JoannaMTCE-BoldItalic
JoannaMTCE-Italic
LetterGothic
LetterGothic-Bold
LetterGothic-BoldSlanted
LetterGothic-Slanted
LetterGothicCE
LetterGothicCE-Bold
LetterGothicCE-BoldSlanted
LetterGothicCE-Slanted
LubalinGraph-Book
LubalinGraph-BookOblique
LubalinGraph-Demi
LubalinGraph-DemiOblique
LubalinGraphCE-Book
LubalinGraphCE-BookOblique
LubalinGraphCE-Demi
LubalinGraphCE-DemiOblique
Marigold
Monaco
MonacoCE
MonaLisa-Recut
NewCenturySchlbk-Bold
NewCenturySchlbk-BoldItalic

ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ

NewCenturySchlbk-Italic
 NewCenturySchlbk-Roman
 NewCenturySchlbkCE-Bold
 NewCenturySchlbkCE-BoldItalic
 NewCenturySchlbkCE-Italic
 NewCenturySchlbkCE-Roman
 NewYork
 NewYorkCE
 Optima
 Optima-Bold
 Optima-BoldItalic
 Optima-Italic
 OptimaCE-Bold
 OptimaCE-BoldItalic
 OptimaCE-Italic
 OptimaCE-Roman
 Oxford
 Palatino-Bold
 Palatino-BoldItalic
 Palatino-Italic
 Palatino-Roman
 PalatinoCE-Bold
 PalatinoCE-BoldItalic
 PalatinoCE-Italic
 PalatinoCE-Roman
 StempelGaramond-Bold
 StempelGaramond-BoldItalic
 StempelGaramond-Italic

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ

StempelGaramond-Roman
StempelGaramondCE-Bold
StempelGaramondCE-BoldItalic
StempelGaramondCE-Italic
StempelGaramondCE-Roman
Symbol
Taffy
Times-Bold
Times-BoldItalic
Times-Italic
Times-Roman
TimesCE-Bold
TimesCE-BoldItalic
TimesCE-Italic
TimesCE-Roman
TimesNewRomanCE
TimesNewRomanCE-Bold
TimesNewRomanCE-BoldItalic
TimesNewRomanCE-Italic
TimesNewRomanPS-BoldItalicMT
TimesNewRomanPS-BoldMT
TimesNewRomanPS-ItalicMT
TimesNewRomanPSMT
Univers
Univers-Bold
Univers-BoldExt
Univers-BoldExtObl
Univers-BoldOblique

ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABXΔEΦΓHΙΘKAMNOPΘPΣTYςΩΞΨZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ

[illegible]

Symbol Sets

ARABIC8

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0				• @	ل	ء	ح					ل	ل	ل	ل	ل
1			!	ا	ب	ب	خ					ل	ل	ل	ل	ل
2			"	٢	ل	ت	ة					ل	ل	ل	ل	ل
3			#	٣	ص	ث	ة					ل	ل	ل	ل	ل
4			\$	٤	ض	ف	ل					ل	ل	ل	ل	ل
5			%	٥	ج	ح	ي					ل	ل	ل	ل	ل
6			&	٦	أ	ه	ي					ل	ل	ل	ل	ل
7			,	٧	آ	ه	ي					ل	ل	ل	ل	ل
8			)	٨	ل	ة	خ					ل	ل	ل	ل	ل
9			(	٩	ل	×	ي					ل	ل	ل	ل	ل
A			*	:	ل	÷	ي					ل	ل	ل	ل	ل
B			+	;	ل	]	}					ل	ل	ل	ل	ل
C			,	>	ل	\						ل	ل	ل	ل	ل
D			-	=	ل	[	غ					ل	ل	ل	ل	ل
E			.	<	ل	^	ه					ل	ل	ل	ل	ل
F			/	?	ل	_	ج					ل	ل	ل	ل	ل

DeskTop

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	'	p					"	—	<	a	^
1			!	1	A	Q	a	q				"	±	>	o	`
2			"	2	B	R	b	r				§	μ	×	«	æ
3			#	3	C	S	c	s				†	‰	÷	»	Æ
4			\$	4	D	T	d	t				‡	•	°	,	ð
5			%	5	E	U	e	u				©	●	'	„	Ð
6			&	6	F	V	f	v				®	○	"	·	ij
7			'	7	G	W	g	w				™	○	¼	j	IJ
8			(	8	H	X	h	x				%	■	½	¿	°
9			)	9	I	Y	i	y				¢	■	¾	Pt	Ł
A			*	:	J	Z	j	z				—	□	1	ℓ	œ
B			+	;	K	[	k	{				—	□	2	£	Œ
C			,	<	L	\	l					...	'	3	¥	ø
D			-	=	M	]	m	}				fi	¬	/	□	Ø
E			.	>	N	^	n	~				fl			f	þ
F			/	?	O	_	o	☒				=		ß	p	

GREEK8

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	'	p							O	ú	o
1			!	1	A	Q	a	q					A	Π	α	π
2			"	2	B	R	b	r					B	P	β	ρ
3			#	3	C	S	c	s					Γ	Σ	γ	σ
4			\$	4	D	T	d	t					Δ	Τ	δ	τ
5			%	5	E	U	e	u					E	Υ	ε	υ
6			&	6	F	V	f	v					Z	Φ	ζ	φ
7			'	7	G	W	g	w					H		η	ς
8			(	8	H	X	h	x					Θ	X	θ	κ
9			)	9	I	Y	i	y					I	Ψ	ι	ψ
A			*	:	J	Z	j	z						Ω		ω
B			+	;	K	[	k	{					K	ά	κ	έ
C			,	<	L	\	l						ı	Λ	ή	λ
D			-	=	M	]	m	}					M	ό	μ	ώ
E			.	>	N	^	n	~					ü	N		ν
F			/	?	O		o	☒					Ξ		ξ	

6

HEBREW7

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	א	י									
1			!	1	A	Q	ב	ס								
2			"	2	B	R	ג	ע								
3			#	3	C	S	ד	ה								
4			\$	4	D	T	ו	פ								
5			%	5	E	U	ז	ץ								
6			&	6	F	V	ט	צ								
7			'	7	G	W	ק	ך								
8			(	8	H	X	ל	ר								
9			)	9	I	Y	ש	ז								
A			*	:	J	Z	ת	נ								
B			+	;	K	[	כ	{								
C			,	<	L	\	ל									
D			-	=	M	]	ם	}								
E			.	>	N	^	נ	~								
F			/	?	O	_	ל	☒								

Appendix

HEBREW8

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	'	p					@	'	א	נ	
1			!	1	A	Q	a	q			!			ב	ס	
2			"	2	B	R	b	r			"			ג	ע	
3			#	3	C	S	c	s			#			ד	ף	
4			\$	4	D	T	d	t			\$			ה	פ	
5			%	5	E	U	e	u			%			ו	ץ	
6			&	6	F	V	f	v			&			ז	צ	
7			'	7	G	W	g	w			'			ח	ק	
8			(	8	H	X	h	x			)			ט	ר	
9			)	9	I	Y	i	y			(			י	ש	
A			*	:	J	Z	j	z			*	:		ך	ת	
B			+	;	K	[	k	{			+	;		ל	כ	}
C			,	<	L	\	l				,	>		\	ז	
D			-	=	M	]	m	}			-	=		[	ם	{
E			.	>	N	^	n	~			.	<		^	מ	~
F			/	?	O	_	o	☒			/	?		_	ל	

ISO United Kingdom

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p									
1			!	1	A	Q	a	q								
2			"	2	B	R	b	r								
3			£	3	C	S	c	s								
4			\$	4	D	T	d	t								
5			%	5	E	U	e	u								
6			&	6	F	V	f	v								
7			'	7	G	W	g	w								
8			(	8	H	X	h	x								
9			)	9	I	Y	i	y								
A			*	:	J	Z	j	z								
B			+	;	K	[	k	{								
C			,	<	L	\	l									
D			-	=	M	]	m	}								
E			.	>	N	^	n	~								
F			/	?	O	_	o	☒								

ASCII

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	'	p									
1		!	1	A	Q	a	q									
2		"	2	B	R	b	r									
3		#	3	C	S	c	s									
4		\$	4	D	T	d	t									
5		%	5	E	U	e	u									
6		&	6	F	V	f	v									
7		'	7	G	W	g	w									
8		(	8	H	X	h	x									
9		)	9	I	Y	i	y									
A		*	:	J	Z	j	z									
B		+	;	K	[	k	{									
C		,	<	L	\	l										
D		-	=	M	]	m	}									
E		.	>	N	^	n	~									
F		/	?	O	_	o	☒									

6

ISO Swedish

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	É	P	é	p									
1		!	1	A	Q	a	q									
2		"	2	B	R	b	r									
3		#	3	C	S	c	s									
4		□	4	D	T	d	t									
5		%	5	E	U	e	u									
6		&	6	F	V	f	v									
7		'	7	G	W	g	w									
8		(	8	H	X	h	x									
9		)	9	I	Y	i	y									
A		*	:	J	Z	j	z									
B		+	;	K	Ä	k	ä									
C		,	<	L	Ö	l	ö									
D		-	=	M	Å	m	å									
E		.	>	N	Ü	n	ü									
F		/	?	O	_	o	☒									

ISO Italian

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	§	P	ù	p									
1			!	1	A	Q	a	q								
2			"	2	B	R	b	r								
3			£	3	C	S	c	s								
4			\$	4	D	T	d	t								
5			%	5	E	U	e	u								
6			&	6	F	V	f	v								
7			'	7	G	W	g	w								
8			(	8	H	X	h	x								
9			)	9	I	Y	i	y								
A			*	:	J	Z	j	z								
B			+	;	K	°	k	à								
C			,	<	L	ç	l	ò								
D			-	=	M	é	m	è								
E			.	>	N	^	n	ì								
F			/	?	O	_	o	☒								

ISO Spanish

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	§	P	`	p									
1			!	1	A	Q	a	q								
2			"	2	B	R	b	r								
3			£	3	C	S	c	s								
4			\$	4	D	T	d	t								
5			%	5	E	U	e	u								
6			&	6	F	V	f	v								
7			'	7	G	W	g	w								
8			(	8	H	X	h	x								
9			)	9	I	Y	i	y								
A			*	:	J	Z	j	z								
B			+	;	K	ı	k	°								
C			,	<	L	Ñ	l	ñ								
D			-	=	M	¿	m	ç								
E			.	>	N	^	n	~								
F			/	?	O	_	o	☒								

ISO German

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	§	P	`	p									
1		!	1	A	Q	a	q									
2		"	2	B	R	b	r									
3		#	3	C	S	c	s									
4		\$	4	D	T	d	t									
5		%	5	E	U	e	u									
6		&	6	F	V	f	v									
7		'	7	G	W	g	w									
8		(	8	H	X	h	x									
9		)	9	I	Y	i	y									
A		*	:	J	Z	j	z									
B		+	;	K	Ä	k	ä									
C		,	<	L	Ö	l	ö									
D		-	=	M	Ü	m	ü									
E		.	>	N	^	n	ß									
F		/	?	O	_	o	☒									

ISO Norwegian

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p									
1		!	1	A	Q	a	q									
2		"	2	B	R	b	r									
3		#	3	C	S	c	s									
4		\$	4	D	T	d	t									
5		%	5	E	U	e	u									
6		&	6	F	V	f	v									
7		'	7	G	W	g	w									
8		(	8	H	X	h	x									
9		)	9	I	Y	i	y									
A		*	:	J	Z	j	z									
B		+	;	K	Æ	k	æ									
C		,	<	L	Ø	l	ø									
D		-	=	M	Å	m	å									
E		.	>	N	^	n	–									
F		/	?	O	_	o	☒									

ISO French

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	à	P	μ	p									
1		!	1	A	Q	a	q									
2		"	2	B	R	b	r									
3		£	3	C	S	c	s									
4		\$	4	D	T	d	t									
5		%	5	E	U	e	u									
6		&	6	F	V	f	v									
7		'	7	G	W	g	w									
8		(	8	H	X	h	x									
9		)	9	I	Y	i	y									
A		*	:	J	Z	j	z									
B		+	;	K	°	k	é									
C		,	<	L	ç	l	ù									
D		-	=	M	§	m	è									
E		.	>	N	^	n	''									
F		/	?	O	_	o	☒									

ISOCYR

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p					А	Р	а	р	№
1		!	1	A	Q	a	q					Ё	Б	С	б	с
2		"	2	В	R	b	r					Ъ	В	Т	в	т
3		#	3	С	S	c	s					Ѓ	Г	У	г	у
4		\$	4	D	T	d	t					Є	Д	Ф	д	ф
5		%	5	E	U	e	u					Ѕ	Е	Х	е	х
6		&	6	F	V	f	v					І	Ж	Ц	ж	ц
7		'	7	G	W	g	w					Ї	З	Ч	з	ч
8		(	8	H	X	h	x					Ј	И	Ш	и	ш
9		)	9	I	Y	i	y					Љ	Й	Щ	й	щ
A		*	:	Ј	Z	j	z					Њ	К	Ъ	к	ъ
B		+	;	K	[	k	{					Ќ	Л	Ы	л	ы
C		,	<	L	\	l						Ќ	М	Ь	м	ь
D		-	=	M	]	m	}					-	Н	Э	н	э
E		.	>	N	^	n	~					Ў	О	Ю	о	ю
F		/	?	O	_	o	☒					Ѹ	П	Я	п	я

ISOGRK

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p				°	ı	Π	ü	π	
1			!	1	A	Q	a	q			'	±	A	P	α	ρ
2			"	2	B	R	b	r			'	²	B		β	ς
3			#	3	C	S	c	s			£	³	Γ	Σ	γ	σ
4			\$	4	D	T	d	t			€	'	Δ	T	δ	τ
5			%	5	E	U	e	u			ℒ	"	E	Y	ε	υ
6			&	6	F	V	f	v				'	A	Z	Φ	ζ
7			'	7	G	W	g	w			§	·	H	X	η	κ
8			(	8	H	X	h	x			"	'	E	Θ	Ψ	θ
9			)	9	I	Y	i	y			©	'	H	I	Ω	ι
A			*	:	J	Z	j	z			,	'	I	K	İ	ı
B			+	;	K	[	k	{			«	»	Λ	Ÿ	λ	ü
C			,	<	L	\	l				¬	'	O	M	ά	μ
D			-	=	M	]	m	}			-	½	N	έ	ν	ύ
E			.	>	N	^	n	~			;	'	Y	Ξ	ή	ξ
F			/	?	O	_	o	☒			-	Ω	O	ί	ο	

6

ISOHEB

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p				°				א	י
1			!	1	A	Q	a	q				±			ב	ו
2			"	2	B	R	b	r			¢	²			ג	ע
3			#	3	C	S	c	s			£	³			ד	ה
4			\$	4	D	T	d	t			¤	'			ה	פ
5			%	5	E	U	e	u			¥	μ			ו	ץ
6			&	6	F	V	f	v				¶			ז	צ
7			'	7	G	W	g	w			§	·			ח	ק
8			(	8	H	X	h	x			"	,			ט	ך
9			)	9	I	Y	i	y			©	¹			י	ש
A			*	:	J	Z	j	z			×	÷			ל	ת
B			+	;	K	[	k	{			«	»			נ	
C			,	<	L	\	l				¬	¼			ס	
D			-	=	M	]	m	}			-	½			ע	
E			.	>	N	^	n	~			®	¾			פ	
F			/	?	O	_	o	☒			—				ל	

Appendix

ISO 8859-1 Latin 1

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p				°	À	Ā	à	ä	
1		!	1	A	Q	a	q				ı	±	Á	Ñ	á	ñ
2		"	2	B	R	b	r				¢	²	Â	Ò	â	ò
3		#	3	C	S	c	s				£	³	Ã	Ó	ã	ó
4		\$	4	D	T	d	t				¤	´	Ä	Ô	ä	ô
5		%	5	E	U	e	u				¥	µ	Å	Ö	å	ö
6		&	6	F	V	f	v					¶	Æ	Ø	æ	ø
7		'	7	G	W	g	w				§	·	Ç	×	ç	÷
8		(	8	H	X	h	x				"	,	È	Ø	è	ø
9		)	9	I	Y	i	y				©	ı	É	Ù	é	ù
A		*	:	J	Z	j	z				ª	º	Ê	Ú	ê	ú
B		+	;	K	[	k	{				«	»	Ë	Û	ë	û
C		,	<	L	\	l					¬	¼	Ì	Ü	ì	ü
D		-	=	M	]	m	}				-	½	Í	Ý	í	ý
E		.	>	N	^	n	~				®	¾	Î	Þ	î	þ
F		/	?	O	_	o	☒				-	¿	Ï	ß	ï	ÿ

ISO 8859-2 Latin 2

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p				°	Ř	Ď	ř	ď	
1		!	1	A	Q	a	q				À	á	Á	Ñ	á	ñ
2		"	2	B	R	b	r				˘	˙	Â	Ň	â	ň
3		#	3	C	S	c	s				Ł	ł	Ã	Ó	ã	ó
4		\$	4	D	T	d	t				¤	´	Ä	Ô	ä	ô
5		%	5	E	U	e	u				Ł	ł	Ĺ	Ő	ĺ	ő
6		&	6	F	V	f	v				Š	š	Ć	Ö	ć	ö
7		'	7	G	W	g	w				§	˘	Ç	×	ç	÷
8		(	8	H	X	h	x				"	,	Č	Ř	č	ř
9		)	9	I	Y	i	y				Š	š	É	Ů	é	ů
A		*	:	J	Z	j	z				Š	š	Ê	Ú	ê	ú
B		+	;	K	[	k	{				Ť	ť	Ë	Û	ë	û
C		,	<	L	\	l					Ž	ž	Ě	Ü	ě	ü
D		-	=	M	]	m	}				-	˘	Í	Ý	í	ý
E		.	>	N	^	n	~				Ž	ž	Î	Ť	î	ť
F		/	?	O	_	o	☒				Ž	ž	Ď	ß	ď	˘

ISO 8859-9 Latin 5

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p				°	À	Ğ	à	ğ	
1		!	1	A	Q	a	q				ı	±	Á	Ñ	á	ñ
2		"	2	B	R	b	r				ç	²	Â	Ò	â	ò
3		#	3	C	S	c	s				£	³	Ã	Ó	ã	ó
4		\$	4	D	T	d	t				¤	´	Ä	Ö	ä	ö
5		%	5	E	U	e	u				¥	µ	Å	Ö	å	õ
6		&	6	F	V	f	v					¶	Æ	Ö	æ	ö
7		'	7	G	W	g	w				§	·	Ç	×	ç	÷
8		(	8	H	X	h	x				¨	¸	È	Ø	è	ø
9		)	9	I	Y	i	y				©	¹	É	Ù	é	ù
A		*	:	J	Z	j	z				ª	º	Ê	Ú	ê	ú
B		+	;	K	[	k	{				«	»	Ë	Û	ë	û
C		,	<	L	\	l					¬	¼	Ì	Ü	ì	ü
D		-	=	M	]	m	}				-	½	Í	Ý	í	ý
E		.	>	N	^	n	~				®	¾	Î	Ş	î	ş
F		/	?	O	_	o	☒				-	¿	İ	ß	ï	ÿ

6

ISO 8859-10 Latin 6

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p				°	À	Đ	ā	ð	
1		!	1	A	Q	a	q				À	ą	Á	Ń	á	ą
2		"	2	B	R	b	r				Ê	ē	Â	Ō	â	ō
3		#	3	C	S	c	s				Ç	ġ	Ã	Ó	ã	ó
4		\$	4	D	T	d	t				Ī	ī	Ä	Ö	ä	ö
5		%	5	E	U	e	u				Ī	ī	Å	Ö	å	õ
6		&	6	F	V	f	v				Ɔ	ķ	Æ	Ö	æ	ö
7		'	7	G	W	g	w				§	·	İ	Ū	ı	ū
8		(	8	H	X	h	x				Ł	ł	Č	Ø	č	ø
9		)	9	I	Y	i	y				Đ	đ	É	Ů	é	ů
A		*	:	J	Z	j	z				Š	š	Ě	Ú	ě	ú
B		+	;	K	[	k	{				Ʀ	t	Ë	Ů	ë	ů
C		,	<	L	\	l					Ž	ž	È	Ů	è	ů
D		-	=	M	]	m	}				-	—	Í	Ý	í	ý
E		.	>	N	^	n	~				Ū	ū	Î	Ɔ	î	Ɔ
F		/	?	O	_	o	☒				Ń	ŋ	İ	ß	ï	κ

Appendix

Legal

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	°	p									
1			!	1	A	Q	a	q								
2			"	2	B	R	b	r								
3			#	3	C	S	c	s								
4			\$	4	D	T	d	t								
5			%	5	E	U	e	u								
6			&	6	F	V	f	v								
7			'	7	G	W	g	w								
8			(	8	H	X	h	x								
9			)	9	I	Y	i	y								
A			*	:	J	Z	j	z								
B			+	;	K	[	k	§								
C			,	=	L	®	l	¶								
D			-	=	M	]	m	‡								
E			.	¢	N	©	n	™								
F			/	?	O	_	o	☒								

Math-8

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	∴	∏	∴	π					¬	⊕	Å	Γ	]
1			√	1	A	P	α	ρ				↑	∇	⊙	¬	]
2			"	2	B	Σ	β	σ				→	∃	⊗	¬	]
3			°	3	Γ	T	γ	τ				↓	T	⊖	⊥	}
4			∞	4	Δ	T	δ	υ				←	⊥	⊗	∂	]
5			÷	5	E	Φ	ε	φ				↑	U	∧	∫	]
6			∞	6	Z	X	ξ	χ				⇒	∩	∇	∫	]
7			'	7	H	Ψ	η	ψ				↓	∈	∇	∫	]
8			(	8	Θ	Ω	θ	ω				←	∃	¬	⊗	]
9			)	9	I	∇	ι	∂				∂	∉	⊙	∞	]
A			×	e	K	∂	κ	φ				↔	C	·	∩	]
B			+	ε	Λ	ς	λ	σ				⊕	∩	·	∩	]
C			,	<	M	≤	μ	≈				↔	∩	·	∩	]
D			-	=	N	≠	ν	≡				↔	∩	·	∩	]
E			.	>	Ξ	≥	ξ	≠				↔	∩	·	∩	]
F			/	≈	O	_	o	☒				¬	∩	·	∩	]

MC Text

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p	Ä	é	†	∞	¿	-	‡		
1		!	1	A	Q	a	q	Å	ë	°	±	ı	—	·	Ò	
2		"	2	B	R	b	r	Ç	í	ç	≤	¬	“	,	Ú	
3		#	3	C	S	c	s	É	ì	£	≥	√	”	„	Û	
4		\$	4	D	T	d	t	Ñ	ï	§	¥	ƒ	‘	‰	Ü	
5		%	5	E	U	e	u	Ö	ï	•	μ	≈	’	Â	ı	
6		&	6	F	V	f	v	Û	ñ	¶	∂	Δ	÷	Ê	^	
7		'	7	G	W	g	w	á	ó	β	Σ	«	◊	Á	~	
8		(	8	H	X	h	x	à	ò	®	Π	»	ÿ	Ë	-	
9		)	9	I	Y	i	y	â	ô	©	π	...	ÿ	È	˘	
A		*	:	J	Z	j	z	ä	ö	™	∫		/	Í	˙	
B		+	;	K	[	k	{	ā	ō	˘	ˆ	À	€	Î	°	
C		,	<	L	\	l		á	ú	˝	°	Ã	<	Ï	ˆ	
D		-	=	M	]	m	}	ç	ù	≠	Ω	Ô	>	Ì	˜	
E		.	>	N	^	n	~	é	û	Æ	æ	Œ	fi	Ó	.	
F		/	?	O	_	o		è	ü	Ø	ø	œ	fl	Ô	˘	

6

Microsoft Publishing

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0				²		‘						°			Ω	
1		¹									’	•	˘	˘		
2		”			℞						”	•	˘	˘		
3		³			Š	%	š				^	●	^	^		
4		⁴			™						˜	◊	˜	˜		
5		⁵										○	˜	˜		ı
6		⁷										○	˘	˘	IJ	ij
7		’										■	˘	˘	L	ł
8		⁹										■	˝	˝	Ł	ł
9		⁰			ÿ						fi	■				
A		⁸			Ž		ž				fl	□	ˆ	ˆ		
B		†									ff	□	ˆ	ˆ		
C		˘	„	L		ℓ					ffi	□				
D		—	‡	—							ffl	%	˝	˝		
E		...		—	⁶		“			Pt	<	◆	˘	˘		
F		/		Œ	=	œ				f	>	◇	˘	˘	˘	˘

Appendix

PC-775

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		►		0	@	P	`	p	Ć	É	Ā	⋮	Ł	ą	Ó	-
1	☉	◄	!	1	A	Q	a	q	ü	æ	Ī	⌘	⊥	č	β	±
2	☼	⋈	"	2	B	R	b	r	é	Æ	ó	⌘	⊥	e	Ō	“
3	♥	!!	#	3	C	S	c	s	ā	ō	Ž		└	é	Ń	¼
4	♦	¶	\$	4	D	T	d	t	ä	ö	ž	└	—	i	ō	¶
5	♣	§	%	5	E	U	e	u	ğ	Ġ	ž	À	+	š	Ō	§
6	♠	—	&	6	F	V	f	v	â	ç	”	Č	Ů	u	μ	÷
7	•	‡	'	7	G	W	g	w	ć	Ś		Ę	Ū	ū	ń	„
8	■	↑	(	8	H	X	h	x	ł	ś	®	È	Ł	ž	Ų	°
9	○	↓	)	9	I	Y	i	y	ē	Ö	®	≡	≡	└	ķ	·
A	☉	→	*	:	J	Z	j	z	Ř	Ů	└		≡	└	Ł	·
B	♂	←	+	;	K	[	k	{	ŗ	ø	½	≡	≡	■	ł	¹
C	♀	└	,	<	L	\	l		ī	£	¼	≡	≡	■	ņ	³
D	♪	↔	-	=	M	]	m	}	Ž	Ø	Ł	ı	=	■	Ė	²
E	♫	▲	.	>	N	^	n	~	Ä	×	«	Š	≡	■	Ų	■
F	☼	▼	/	?	O	_	o	△	Å	¤	»	└	Ž	■	'	

PC-8

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		►		0	@	P	`	p	Ç	É	á	⋮	Ł	Ł	α	≡
1	☉	◄	!	1	A	Q	a	q	ü	æ	í	⌘	⊥	≡	β	±
2	☼	⋈	"	2	B	R	b	r	é	Æ	ó	⌘	⊥	≡	Γ	≥
3	♥	!!	#	3	C	S	c	s	â	ô	ú		└	Ł	π	≤
4	♦	¶	\$	4	D	T	d	t	ä	ö	ñ	└	—	Ł	Σ	└
5	♣	§	%	5	E	U	e	u	à	ò	Ñ	≡	+	≡	σ	└
6	♠	—	&	6	F	V	f	v	â	û	ª	└	≡	≡	μ	÷
7	•	‡	'	7	G	W	g	w	ç	ù	º	└	└	≡	τ	≈
8	■	↑	(	8	H	X	h	x	ê	ÿ	ı	≡	Ł	≡	Φ	°
9	○	↓	)	9	I	Y	i	y	ë	Ö	└	≡	≡	└	Θ	·
A	☉	→	*	:	J	Z	j	z	è	Ü	└		≡	└	Ω	·
B	♂	←	+	;	K	[	k	{	ï	ç	½	≡	≡	■	δ	√
C	♀	└	,	<	L	\	l		î	£	¼	≡	≡	■	∞	n
D	♪	↔	-	=	M	]	m	}	ì	¥	ı	≡	=	■	φ	²
E	♫	▲	.	>	N	^	n	~	Ä	Pt	«	≡	≡	■	€	■
F	☼	▼	/	?	O	_	o	△	Å	f	»	└	≡	■	∩	

PC-850

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		►		0	@	P	`	p	Ç	É	á	⋮	⌞	ð	Ó	-
1	☺	◄	!	1	A	Q	a	q	ü	æ	í	⌘	⌞	Ð	ß	±
2	☹	↕	"	2	B	R	b	r	é	Æ	ó	⌘	⌞	Ê	Ô	=
3	♥	!!	#	3	C	S	c	s	â	ô	ú		⌞	È	Ò	¾
4	♦	¶	\$	4	D	T	d	t	ä	ö	ñ	⌞	⌞	È	õ	¶
5	♣	§	%	5	E	U	e	u	à	ò	Ñ	Á	⌞	ı	Õ	§
6	♠	—	&	6	F	V	f	v	â	û	ª	Â	ã	Í	μ	÷
7	•	‡	'	7	G	W	g	w	ç	ù	º	À	Ã	Î	þ	,
8	■	↑	(	8	H	X	h	x	ê	ÿ	¿	◊	⌞	İ	Þ	°
9	○	↓	)	9	I	Y	i	y	ë	Ö	®	⌞	⌞	⌞	Ú	”
A	☑	→	*	:	J	Z	j	z	è	Ü	¬	⌞	⌞	⌞	Û	·
B	♂	←	+	;	K	[	k	{	ï	ø	½	⌞	⌞	■	Ù	¹
C	♀	⌞	,	<	L	\	l		î	£	¼	⌞	⌞	■	Ý	³
D	♪	↔	-	=	M	]	m	}	ì	Ø	ı	◊	⌞	⌞	Ý	²
E	♫	▲	.	>	N	^	n	~	Ä	×	«	¥	⌞	İ	-	■
F	☼	▼	/	?	O	_	o	△	Å	f	»	⌞	⌞	■	'	

6

PC-851

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		►		0	@	P	`	p	Ç	İ	ü	⋮	⌞	T	ç	-
1	☺	◄	!	1	A	Q	a	q	ü		ü	⌘	⌞	Y	η	±
2	☹	↕	"	2	B	R	b	r	é	’	ó	⌘	⌞	Φ	θ	u
3	♥	!!	#	3	C	S	c	s	â	ô	ú		⌞	X	ı	φ
4	♦	¶	\$	4	D	T	d	t	ä	ö	Ä	⌞	⌞	Ψ	κ	x
5	♣	§	%	5	E	U	e	u	à	’	Y	B	K	⌞	Ω	λ
6	♠	—	&	6	F	V	f	v	’	û	Γ	Λ	Π	α	μ	Ψ
7	•	‡	'	7	G	W	g	w	ç	ù	Δ	M	P	β	v	,
8	■	↑	(	8	H	X	h	x	ê	’	E	N	⌞	Y	ξ	°
9	○	↓	)	9	I	Y	i	y	ë	Ö	Z	⌞	⌞	⌞	o	”
A	☑	→	*	:	J	Z	j	z	è	Ü	H	⌞	⌞	⌞	π	ω
B	♂	←	+	;	K	[	k	{	ï	’	½	⌞	⌞	■	ρ	ü
C	♀	⌞	,	<	L	\	l		î	£	⊙	⌞	⌞	■	σ	ü
D	♪	↔	-	=	M	]	m	}	’	é	I	Σ	=	ø	ς	ó
E	♫	▲	.	>	N	^	n	~	Ä	’	η	«	o	⌞	ε	τ
F	☼	▼	/	?	O	_	o	△	’	ı	»	⌞	Σ	■	'	

PC-852

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		►		0	@	P	`	p	Ç	É	á	⋮	⌞	d	Ó	-
1	☺	◄	!	1	A	Q	a	q	ü	Í	í	⌘	⌞	Ð	ß	ˆ
2	☹	►	"	2	B	R	b	r	é	í	ó	⌘	⌞	Ǿ	Ô	˙
3	♥	!!	#	3	C	S	c	s	â	ô	ú		⌞	È	Ñ	˘
4	♦	¶	\$	4	D	T	d	t	ä	ö	À	⌞	—	d'	ñ	˘
5	♣	§	%	5	E	U	e	u	û	L	a	Á	+	Ñ	ñ	§
6	♠	—	&	6	F	V	f	v	é	í	Ž	À	Ǻ	Í	Š	÷
7	•	‡	'	7	G	W	g	w	ç	Š	ž	Ě	Ǻ	Î	š	,
8	■	↑	(	8	H	X	h	x	ł	ś	Ę	Ś	Ł	ě	Ř	°
9	○	↓	)	9	I	Y	i	y	ë	Ö	e	≡	≡	⌞	Ú	˝
A	☼	→	*	:	J	Z	j	z	Ő	Ű		≡	≡	⌞	ř	'
B	♂	←	+	;	K	[	k	{	õ	ť	ž	≡	≡	■	Ů	ů
C	♀	⌞	,	<	L	\	l		ı	ı	Č	≡	≡	■	ý	Ř
D	♪	↔	-	=	M	]	m	}	Ž	Ł	ś	Ž	=	⌞	Ý	ř
E	♫	▲	.	>	N	^	n	~	Ǻ	×	«	ž	≡	Ů	ı	■
F	☼	▼	/	?	O	_	o	△	Ć	č	»	⌞	≡	■	'	

PC-862

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		►		0	@	P	`	p	æ	ı	á	⋮	⌞	⌞	α	≡
1	☺	◄	!	1	A	Q	a	q	ı	ı	í	⌘	⌞	⌞	ß	±
2	☹	►	"	2	B	R	b	r	ı	ı	ó	⌘	⌞	⌞	Γ	≡
3	♥	!!	#	3	C	S	c	s	ı	ı	ú		⌞	⌞	π	≡
4	♦	¶	\$	4	D	T	d	t	ı	ı	ñ	⌞	—	⌞	Σ	∫
5	♣	§	%	5	E	U	e	u	ı	ı	Ń	≡	+	⌞	σ	∫
6	♠	—	&	6	F	V	f	v	ı	ı	ª	≡	⌞	⌞	μ	÷
7	•	‡	'	7	G	W	g	w	ı	ı	º	⌞	⌞	⌞	τ	≈
8	■	↑	(	8	H	X	h	x	ı	ı	ç	≡	⌞	⌞	φ	°
9	○	↓	)	9	I	Y	i	y	ı	ı	ı	≡	⌞	⌞	⊙	•
A	☼	→	*	:	J	Z	j	z	ı	ı	ı	≡	⌞	⌞	Ω	•
B	♂	←	+	;	K	[	k	{	ı	ı	½	⌞	⌞	■	ø	√
C	♀	⌞	,	<	L	\	l		ı	ı	¼	⌞	⌞	■	∞	n
D	♪	↔	-	=	M	]	m	}	ı	ı	ı	≡	⌞	⌞	φ	²
E	♫	▲	.	>	N	^	n	~	ı	ı	ı	≡	⌞	⌞	ε	■
F	☼	▼	/	?	O	_	o	△	ı	ı	ı	≡	⌞	⌞	ı	

PC-864

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		▶		0	@	P	˘	p	°	β		•	¢	ذ	ـ	ا
1	☺	◀	!	1	A	Q	a	q	•	∞	-	۱	ء	ر	ف	ء
2	♪	♯	"	2	B	R	b	r	•	φ	آ	۲	آ	ز	ف	ن
3	♪	!!	#	3	C	S	c	s	√	±	£	۳	أ	ك	ه	ه
4	☼	¶	\$	4	D	T	d	t	½	¼	¤	۴	ؤ	ل	ش	ه
5	=	§	%	5	E	U	e	u	—	¼	£	۵	ع	م	م	م
6		—	&	6	F	V	f	v		≈		۶	أ	ن	ج	ج
7		↑	'	7	G	W	g	w	+	«		۷	ا	ط	ط	ط
8		↑	(	8	H	X	h	x	+	»	ل	۸	ب	ظ	و	ق
9		↓	)	9	I	Y	i	y	+	لأ	ب	۹	ة	ع	ي	لأ
A		→	*	:	J	Z	j	z	+	لأ	ت	ف	غ	ا	ي	لأ
B		←	+	;	K	I	k	{	+		ث	؛	ث	ا	ض	ل
C		⌞	,	<	L	\	l		⌞		،	ج	ر	ر	ك	ك
D		↔	-	=	M	I	m	}	⌞	لا	ج	ش	ر	÷	ي	ي
E		▲	.	>	N	^	n	~	⌞	لا	ح	ص	خ	×	غ	■
F		▼	/	?	O	_	o	△	⌞	ل	خ	؟	د	ع	م	

6

PC-866

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		▶		0	@	P	˘	p	A	P	a	⋮	⌞	⌞	p	ё
1	☺	◀	!	1	A	Q	a	q	Б	С	б	⋮	⌞	⌞	с	ё
2	☺	♯	"	2	B	R	b	r	В	Т	в	⋮	⌞	⌞	т	ё
3	♥	!!	#	3	C	S	c	s	Г	У	г		⌞	⌞	у	ё
4	♦	¶	\$	4	D	T	d	t	Д	Ф	д	⌞	—	⌞	ф	ї
5	♣	§	%	5	E	U	e	u	Е	Х	е	⌞	+	⌞	х	ї
6	♠	—	&	6	F	V	f	v	Ж	Ц	ж	⌞	⌞	⌞	ц	ѳ
7	•	↑	'	7	G	W	g	w	З	Ч	з	⌞	⌞	⌞	ч	ѳ
8	□	↑	(	8	H	X	h	x	И	Ш	и	⌞	⌞	⌞	ш	°
9	○	↓	)	9	I	Y	i	y	Й	Щ	й	⌞	⌞	⌞	щ	•
A	☑	→	*	:	J	Z	j	z	К	Ъ	к	⌞	⌞	⌞	ъ	•
B	♂	←	+	;	K	I	k	{	Л	Ы	л	⌞	⌞	⌞	ы	√
C	♀	⌞	,	<	L	\	l		М	Ь	м	⌞	⌞	⌞	ь	№
D	♪	↔	-	=	M	I	m	}	Н	Э	н	⌞	=	⌞	э	¤
E	♪	▲	.	>	N	^	n	~	О	Ю	о	⌞	⌞	⌞	ю	■
F	☼	▼	/	?	O	_	o	△	П	Я	п	⌞	⌞	⌞	я	

Appendix

PC-8 D/N

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		►		0	@	P	`	p	Ç	É	á	⋮	┐	⌌	α	≡
1	☉	◄	!	1	A	Q	a	q	ü	æ	í	⌘	┌	≡	β	±
2	☼	⦿	"	2	B	R	b	r	é	Æ	ó	⌘	┐	≡	Γ	≥
3	♥	!!	#	3	C	S	c	s	â	ô	ú		┐	⌌	π	≤
4	♦	¶	\$	4	D	T	d	t	ä	ö	ñ	┐	┐	⌌	Σ	∫
5	♣	§	%	5	E	U	e	u	à	ò	Ñ	≡	+	≡	σ	∫
6	♠	—	&	6	F	V	f	v	â	û	õ	┐	≡	≡	μ	÷
7	•	‡	'	7	G	W	g	w	ç	ù	Ö	┐	┐	≡	τ	≈
8	■	↑	(	8	H	X	h	x	ê	ÿ	ı	≡	⌌	≡	Φ	°
9	○	↓	)	9	I	Y	i	y	ë	Ö	ã	≡	≡	┐	Θ	·
A	☉	→	*	:	J	Z	j	z	è	Ü	Ã		⌌	┐	Ω	·
B	♂	←	+	;	K	[	k	{	ï	ø	ℓ	≡	≡	■	δ	√
C	♀	┐	,	<	L	\	l		î	£	'n	≡	≡	■	∞	n
D	♫	↔	-	=	M	]	m	}	ì	Ø	ı	≡	≡	■	φ	²
E	♫	▲	.	>	N	^	n	~	Ä	Ł	³	≡	≡	■	€	▪
F	☼	▼	/	?	O	_	o	△	Å	ł	¤	┐	≡	■	∩	

PC-Turkish

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		►		0	@	P	`	p	Ç	É	á	⋮	┐	⌌	α	≡
1	☉	◄	!	1	A	Q	a	q	ü	æ	í	⌘	┌	≡	β	±
2	☼	⦿	"	2	B	R	b	r	é	Æ	ó	⌘	┐	≡	Γ	≥
3	♥	!!	#	3	C	S	c	s	â	ô	ú		┐	⌌	π	≤
4	♦	¶	\$	4	D	T	d	t	ä	ö	ñ	┐	┐	⌌	Σ	∫
5	♣	§	%	5	E	U	e	u	à	ò	Ñ	≡	+	≡	σ	∫
6	♠	—	&	6	F	V	f	v	â	û	Ğ	┐	≡	≡	μ	÷
7	•	‡	'	7	G	W	g	w	ç	ù	ğ	┐	┐	≡	τ	≈
8	■	↑	(	8	H	X	h	x	ê	İ	ı	≡	⌌	≡	Φ	°
9	○	↓	)	9	I	Y	i	y	ë	Ö	ı	≡	≡	┐	Θ	·
A	☉	→	*	:	J	Z	j	z	è	Ü	ı		⌌	┐	Ω	·
B	♂	←	+	;	K	[	k	{	ï	ç	½	≡	≡	■	δ	√
C	♀	┐	,	<	L	\	l		î	£	¼	≡	≡	■	∞	n
D	♫	↔	-	=	M	]	m	}	ı	¥	ı	≡	≡	■	φ	²
E	♫	▲	.	>	N	^	n	~	Ä	Ş	«	≡	≡	■	€	▪
F	☼	▼	/	?	O	_	o	△	Å	Ş	»	┐	≡	■	∩	

PC8GRK

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		►		0	@	P	`	p	A	P	ı	⋮	⊥	⊥	ω	≡
1	☺	◄	!	1	A	Q	a	q	B	Σ	κ	⊞	⊥	⊥	á	±
2	☹	↓	"	2	B	R	b	r	Γ	T	λ	⊞	⊥	⊥	é	≥
3	♥	!!	#	3	C	S	c	s	Δ	Υ	μ		⊥	⊥	ή	≤
4	♦	¶	\$	4	D	T	d	t	E	Φ	v	⊥	—	⊥	ı	∫
5	♣	§	%	5	E	U	e	u	Z	X	ξ	⊥	⊥	⊥	ı	∫
6	♠	—	&	6	F	V	f	v	H	Ψ	o	⊥	⊥	⊥	ó	÷
7	•	↑	'	7	G	W	g	w	Θ	Ω	π	⊥	⊥	⊥	ú	≈
8	■	↑	(	8	H	X	h	x	I	α	ρ	⊥	⊥	⊥	ü	°
9	○	↓	)	9	I	Y	i	y	K	β	σ	⊥	⊥	⊥	ó	·
A	☒	→	*	:	J	Z	j	z	Λ	γ	ς	⊥	⊥	⊥	Ω	·
B	♂	←	+	;	K	[	k	{	M	ø	τ	⊥	⊥	⊥	ø	√
C	♀	L	,	<	L	\	l		N	ε	υ	⊥	⊥	⊥	∞	n
D	♪	↔	-	=	M	] m	}	Ξ	ζ	φ	⊥	⊥	⊥	⊥	φ	²
E	♫	▲	.	>	N	^	n	~	O	η	x	⊥	⊥	⊥	ε	■
F	☼	▼	/	?	O	_	o	△	Π	θ	ψ	⊥	⊥	⊥	ο	

6

PC-1004

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0				0	@	P	`	p			°	À	Đ	à	ð	
1			!	1	A	Q	a	q		‘	ı	±	Á	Ñ	á	ñ
2			"	2	B	R	b	r	,	'	ç	²	Â	Ò	â	ò
3			#	3	C	S	c	s		“	£	³	Ã	Ó	ã	ó
4	ˆ		\$	4	D	T	d	t	„	”	¤	´	Ä	Ô	ä	ô
5	ˇ		%	5	E	U	e	u	...	•	¥	μ	Å	Ö	å	ö
6	˙		&	6	F	V	f	v	†	—		¶	Æ	Ö	æ	ö
7			'	7	G	W	g	w	‡	—	§	·	Ç	×	ç	÷
8	˘		(	8	H	X	h	x	^	˜	™	˙	È	Ø	è	ø
9			)	9	I	Y	i	y	‰	™	©	ı	É	Ù	é	ù
A	˚		*	:	J	Z	j	z	Š	š	ª	º	Ê	Ú	ê	ú
B	˛		+	;	K	[	k	{	‘	’	«	»	Ë	Û	ë	û
C	˜		,	<	L	\	l		Œ	œ	¬	¼	Ì	Ü	ì	ü
D			-	=	M	] m	}				-	½	Í	Ý	í	ý
E			.	>	N	^	n	~			®	¾	Î	Þ	î	þ
F			/	?	O	_	o	△		ÿ	ˉ	¿	Ï	ß	ï	ÿ

Pi Font

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0				ˆ	::	Ø	┐	┑								
1				˘	Δ	ø	└	┓								
2			˙	˘		℞	┐	┑								
3			˙	˘		Σ	┐	┑								
4			˙	↗			+	+								
5			˙	↘			+	+								
6			˙	↙	F		—	⊥								
7			˙	↖												
8			<	Δ	ħ		U	U								
9			>	▷			∩	∩								
A			™	▽			∏	∏								
B			SM	△												
C			⊗	⊗	ℒ		□	■								
D			⊗	§	ℓ		◇	◆								
E			⊗	⊗		<										
F				⊗		>		⊗								

PS Math

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	≡	Π	—	π				°	※	∠	◇	€	
1		!	1	A	Θ	α	θ				τ	±	ℑ	▽	<	>
2		√	2	B	P	β	ρ				'	"	℔	®	®	§
3		#	3	X	Σ	χ	σ				≤	≥	⊗	©	©	¦
4		∃	4	Δ	T	δ	τ				/	×	⊗	™	™	
5		%	5	E	Y	ε	υ				∞	α	⊕	Π	Σ	∫
6		&	6	Φ	ζ	φ	ω				f	∂	∅	✓	┐	┑
7		∃	7	Γ	Ω	γ	ω				♣	•	∩	·		
8		(	8	H	Ξ	η	ξ				◆	÷	∪	┐	┑	┑
9		)	9	I	Ψ	ι	ψ				♥	≠	∩	∧	┐	┑
A		*	:	∂	Z	φ	ζ				♠	≡	∩	∨		
B		+	;	K	[	κ	{				↔	≈	∩	↔	┐	┑
C		,	<	Λ	∴	λ					←	...	∩	≡	┐	┑
D		—	=	M	]	μ	}				↑		≡	↑	{	}
E		.	>	N	⊥	ν	~				→	—	∈	⇒	┐	┑
F		/	?	O	—	o					↓	↵	∉	↓		

PS Text

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	'	p							—		
1		!	1	A	Q	a	q			i	-	`			Æ	æ
2		"	2	B	R	b	r			ç	†	'				
3		#	3	C	S	c	s			£	‡	^			a	
4		\$	4	D	T	d	t			/	·	~				
5		%	5	E	U	e	u			¥		-			ı	
6		&	6	F	V	f	v			f	¶	˘				
7		'	7	G	W	g	w			§	•	·				
8		(	8	H	X	h	x			¤	,	"			L	ł
9		)	9	I	Y	i	y			'	„				Ø	ø
A		*	:	J	Z	j	z			“	”	°			Œ	œ
B		+	;	K	[	k	{			«	»	„			°	ß
C		,	<	L	\	l				<	...					
D		-	=	M	]	m	}			>	‰	˜				
E		.	>	N	^	n	~			fi						
F		/	?	O	_	o				fl	¿	˘				

6

Roman-8

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	'	p				—	â	Ã	Á	Þ	
1		!	1	A	Q	a	q				À	Ý	ê	î	Ã	þ
2		"	2	B	R	b	r				Â	ý	ô	ø	ä	·
3		#	3	C	S	c	s				È	°	û	Æ	Ð	μ
4		\$	4	D	T	d	t				Ê	Ç	á	å	ð	¶
5		%	5	E	U	e	u				Ë	ç	é	í	Í	¾
6		&	6	F	V	f	v				Î	Ñ	ó	ø	Ì	—
7		'	7	G	W	g	w				Ï	ñ	ú	æ	Ó	¼
8		(	8	H	X	h	x				´	ı	à	Ä	Ò	½
9		)	9	I	Y	i	y				`	¿	è	ì	Õ	ª
A		*	:	J	Z	j	z				^	¤	ò	Ö	õ	°
B		+	;	K	[	k	{				ˆ	£	ù	Ü	Š	«
C		,	<	L	\	l					˜	¥	ä	É	š	■
D		-	=	M	]	m	}				Û	§	ë	ï	Ú	»
E		.	>	N	^	n	~				Û	f	ö	ß	ÿ	±
F		/	?	O	_	o	☒				£	ç	ü	Ô	ÿ	

Ventura International

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	'	p				„	‰	â	Ã	Á	Æ
1		!	1	A	Q	a	q				À	“	ê	î	Ã	œ
2		"	2	B	R	b	r				Â	”	ó	Ø	ã	ſ
3		#	3	C	S	c	s				È	°	û	Æ		†
4		\$	4	D	T	d	t				Ê	Ç	á	â		‡
5		%	5	E	U	e	u				È	ç	é	í	Í	—
6		&	6	F	V	f	v				Î	Ñ	ó	ø	Ì	-
7		'	7	G	W	g	w				Ï	ñ	ú	æ	Ó	
8		(	8	H	X	h	x				®	ì	à	Ä	Ò	
9		)	9	I	Y	i	y				®	í	è	ì	Õ	ª
A		*	:	J	Z	j	z				™	ü	ò	Ö	õ	º
B		+	;	K	[	k	{				‹	£	ù	Ü	Š	«
C		,	<	L	\	l					›	¥	ä	É	š	•
D		-	=	M	]	m	}				Ù	§	ë	ï	Ú	»
E		.	>	N	^	n	~				Û	ƒ	ö	ß	ÿ	
F		/	?	O	_	o						ç	ü	Ó	ÿ	...

Ventura Math

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	≡	Π	—	π				◇	®	≤	↓		Π
1		!	1	A	Θ	α	θ				√	⊃	◆	←	·	™
2		√	2	B	P	β	ρ				l	⊇	≥	®	∠	⇐
3		#	3	X	Σ	χ	σ				Γ	Γ	∂	"	J	⇔
4		∃	4	Δ	T	δ	τ						κ	f		∇
5		%	5	E	Υ	ε	υ				L	♣	'	℔	}	Σ
6		&	6	Φ	ς	φ	ϖ				l	⊕	℔	©		™
7		∃	7	Γ	Ω	γ	ω					⊗	∅	±	}	
8		(	8	H	Ξ	η	ξ				↑	≤	∞	→		⌋
9		)	9	I	Ψ	ι	ψ				⇒	U	♠	↑	⌈	∅
A		*	:	∅	Z	φ	ζ				↓	—	∞	≠	∇	∩
B		+	;	K	[	κ	{				∠	...	•	≡		∈
C		,	<	Λ	∴	λ					⊂		/	°		⊙
D		-	=	M	]	μ	}				J	∧	♥	↔		∉
E		.	>	N	⊥	ν	~					↵	×	⌋	J	
F		/	?	O	_	o						≈	T	∫	÷	⟨

Ventura US

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	'	p				”	%				
1			!	1	A	Q	a	q				“				
2			"	2	B	R	b	r				”				¶
3			#	3	C	S	c	s				°				†
4			\$	4	D	T	d	t								‡
5			%	5	E	U	e	u								—
6			&	6	F	V	f	v								-
7			'	7	G	W	g	w								
8			(	8	H	X	h	x			©					
9			)	9	I	Y	i	y			®					
A			*	:	J	Z	j	z			™					
B			+	;	K	[	k	{								
C			,	<	L	\	l									•
D			-	=	M	]	m	}				§				
E			.	>	N	^	n	~								
F			/	?	O	_	o					¢				...

6

Windows 3.0 Latin 1

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p	€			°	À	Đ	à	ð	
1			!	1	A	Q	a	q		‘	ı	±	Á	Ñ	á	ñ
2			"	2	B	R	b	r		’	ç	²	Â	Ò	â	ò
3			#	3	C	S	c	s			£	³	Ã	Ó	ã	ó
4			\$	4	D	T	d	t			¤	´	Ä	Ô	ä	ô
5			%	5	E	U	e	u			¥	µ	Å	Ö	å	ö
6			&	6	F	V	f	v				¶	Æ	Ö	æ	ö
7			'	7	G	W	g	w			§	·	Ç	×	ç	÷
8			(	8	H	X	h	x			¨	˙	È	Ø	è	ø
9			)	9	I	Y	i	y			©	ı	É	Ù	é	ù
A			*	:	J	Z	j	z			ª	º	Ê	Ú	ê	ú
B			+	;	K	[	k	{			«	»	Ë	Û	ë	û
C			,	<	L	\	l				¬	¼	Ì	Ü	ì	ü
D			-	=	M	]	m	}			-	½	Í	Ý	í	ý
E			.	>	N	^	n	~			®	¾	Î	Þ	î	þ
F			/	?	O	_	o	☒			™	¿	Ï	ß	ï	ÿ

Appendix

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		٠	١	٢	٣	٤	٥	٦	٧	٨	٩	٠	١	٢	٣	٤
1		!	١	A	Q	a	q	ح	م	١	ء	ر	ف	ق	ك	ع
2		"	2	B	R	b	r	خ	ن	٢	آ	ز	ق	ك	ع	ع
3		#	3	C	S	c	s	ط	ظ	٣	أ	س	ك	ع	ك	ع
4		\$	4	D	T	d	t	ل	پ	٤	ش	و	ل	ش	و	ل
5		%	5	E	U	e	u	ي	٥	ص	م	ص	م	ص	م	ص
6		&	6	F	V	f	v	ئ	٦	ض	ن	ض	ن	ض	ن	ض
7		'	7	G	W	g	w	ي	٧	ط	ه	ط	ه	ط	ه	ط
8		(	8	H	X	h	x	ل	٨	ظ	و	ظ	و	ظ	و	ظ
9		)	9	I	Y	i	y	ل	٩	ع	ى	ع	ى	ع	ى	ع
A		*	:	J	Z	j	z	ل	١٠	غ	ي	غ	ي	غ	ي	غ
B		+	;	K	[	k	{	ل	١١	ج	ي	ج	ي	ج	ي	ج
C		,	<	L	\	l		ل	١٢	ج	ك	ج	ك	ج	ك	ج
D		-	=	M	]	m	}	ل	١٣	خ	د	خ	د	خ	د	خ
E		.	>	N	^	n	~	ل	١٤	د	ئ	د	ئ	د	ئ	د
F		/	?	O	_	o	~	ل	١٥	د	ئ	د	ئ	د	ئ	د

Windows Baltic

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p	€			°	À	Š	à	š	
1		!	1	A	Q	a	q	‘			±	Ī	Ņ	ī	ņ	
2		"	2	B	R	b	r	, ’	¢	²	Ā	Ņ	ā	ņ		
3		#	3	C	S	c	s	“	£	³	Č	Ó	č	ó		
4		\$	4	D	T	d	t	„ ”	¤	´	Ä	Ö	ä	ö		
5		%	5	E	U	e	u	… •		μ	Å	Ö	å	ö		
6		&	6	F	V	f	v	† –	¶	¶	Ę	Ö	ę	ö		
7		'	7	G	W	g	w	‡ —	§	·	Ē	×	ē	×		
8		(	8	H	X	h	x		Ø	ø	Č	U	č	u		
9		)	9	I	Y	i	y	‰ ™	®	ı	É	Ł	é	ł		
A		*	:	J	Z	j	z		Ŕ	ŕ	Ž	Ś	ž	ś		
B		+	;	K	[	k	{	‹ ›	« »		Ê	Ū	ê	ū		
C		,	<	L	\	l			¬ ¼		Ġ	Ū	ġ	ū		
D		-	=	M	]	m	}	“ ”	- ½		Ķ	Ž	ķ	ž		
E		.	>	N	^	n	~	˘	® ¾		Ī	Ž	ī	ž		
F		/	?	O	_	o	~	„	Æ æ		Ł	ß	ł	·		

WINCYR

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p	Ђ	ђ		°	А	Р	а	р	
1			!	1	А	Q	a	q	Ѓ	Ћ	Ї	±	В	С	б	с
2			"	2	В	R	b	r	,	'	Ї	І	В	Т	в	т
3			#	3	С	S	c	s	Ѓ	"	Ј	і	Г	У	г	у
4			\$	4	D	T	d	t	"	"	Ѡ	Г	Д	Ф	д	ф
5			%	5	E	U	e	u	...	•	Г	μ	Е	Х	е	х
6			&	6	F	V	f	v	†	—	І	Ж	Ц	ж	ц	
7			'	7	G	W	g	w	‡	—	Ѕ	•	З	Ч	з	ч
8			(	8	H	X	h	x	€		Ё	ё	И	Ш	и	ш
9			)	9	I	Y	i	y	‰	™	©	№	Й	Щ	й	щ
A			*	:	J	Z	j	z	Љ	љ	Є	є	К	Ъ	к	ъ
B			+	;	K	[	k	{	<	>	«	»	Л	Ы	л	ы
C			,	<	L	\	l		Њ	њ	Ћ	ј	М	Ь	м	ь
D			-	=	M	]	m	}	Ќ	ќ	-	Š	Н	Э	н	э
E			.	>	N	^	n	~	Ћ	ћ	®	š	О	Ю	о	ю
F			/	?	O	_	o	о	Ѧ	Ѧ	İ	ı	П	Я	п	я

6

WINGRK

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p	€			°	İ	Π	ü	π	
1			!	1	А	Q	a	q		ˆ	ˆ	±	А	Р	а	р
2			"	2	В	R	b	r	,	'	ˆ	²	В		β	ς
3			#	3	С	S	c	s	f	"	£	³	Г	Σ	γ	σ
4			\$	4	D	T	d	t	"	"	¤	'	Δ	Т	δ	τ
5			%	5	E	U	e	u	...	•	¥	μ	Е	Υ	ε	υ
6			&	6	F	V	f	v	†	—	І	Ж	Φ	ζ	φ	
7			'	7	G	W	g	w	‡	—	Ѕ	•	Н	Χ	η	χ
8			(	8	H	X	h	x			"	ˆ	Θ	Ψ	θ	ψ
9			)	9	I	Y	i	y	‰	™	©	ˆ	Η	Ι	Ω	ι
A			*	:	J	Z	j	z			ˆ	ˆ	Κ	İ	κ	ı
B			+	;	K	[	k	{	<	>	«	»	Λ	Ÿ	λ	ü
C			,	<	L	\	l				ˆ	ˆ	Ο	Μ	ά	μ
D			-	=	M	]	m	}			-	½	Ν	έ	ν	ύ
E			.	>	N	^	n	~			®	ˆ	Υ	Ξ	ή	ξ
F			/	?	O	_	o	о					Ω	Ο	ί	ο

Windows 3.1 Latin 1

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p	€			°	À	Ð	à	ð	
1		!	1	A	Q	a	q		‘	ı	±	Á	Ñ	á	ñ	
2		"	2	B	R	b	r	,	’	ç	²	Â	Ò	â	ò	
3		#	3	C	S	c	s	f	“	£	³	Ã	Ó	ã	ó	
4		\$	4	D	T	d	t	„	”	¤	´	Ä	Ô	ä	ô	
5		%	5	E	U	e	u	...	•	¥	µ	Å	Ö	å	ö	
6		&	6	F	V	f	v	†	—		¶	Æ	Ø	æ	ø	
7		'	7	G	W	g	w	‡	—	§	·	Ç	×	ç	÷	
8		(	8	H	X	h	x	^	~	”	.	È	Ø	è	ø	
9		)	9	I	Y	i	y	‰	™	©	ı	É	Ù	é	ù	
A		*	:	J	Z	j	z	Š	š	ª	º	Ê	Ú	ê	ú	
B		+	;	K	[	k	{	‹	›	«	»	Ë	Û	ë	û	
C		,	<	L	\	l		Œ	œ	¬	¼	Ì	Ü	ì	ü	
D		-	=	M	]	m	}			-	½	Í	Ý	í	ý	
E		.	>	N	^	n	~	Ž	ž	®	¾	Î	Þ	î	þ	
F		/	?	O	_	o	◼		ÿ	ˆ		İ	ß	ï	ÿ	

Windows 3.1 Latin 2

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p	€			°	Ř	Đ	ř	đ	
1		!	1	A	Q	a	q		‘	˘	±	Á	Ň	á	ň	
2		"	2	B	R	b	r	,	’	˘	˘	Â	Ň	â	ň	
3		#	3	C	S	c	s		“	Ł	ł	Ă	Ó	ă	ó	
4		\$	4	D	T	d	t	„	”	¤	´	Ä	Ô	ä	ô	
5		%	5	E	U	e	u	...	•	À	µ	Í	Ő	í	ő	
6		&	6	F	V	f	v	†	—		¶	Ć	Ö	ć	ö	
7		'	7	G	W	g	w	‡	—	§	·	Ç	×	ç	÷	
8		(	8	H	X	h	x			”	.	Č	Ř	č	ř	
9		)	9	I	Y	i	y	‰	™	©	ª	É	Ů	é	ů	
A		*	:	J	Z	j	z	Š	š	§	§	Ê	Ú	ê	ú	
B		+	;	K	[	k	{	‹	›	«	»	Ë	Ů	ë	ů	
C		,	<	L	\	l		Š	š	¬	Ł	Ê	Ü	ê	ü	
D		-	=	M	]	m	}	Ť	ť	-	˘	Í	Ý	í	ý	
E		.	>	N	^	n	~	Ž	ž	®	ı	Î	Ť	î	ť	
F		/	?	O	_	o	◼	Ž	ž	Ž	ž	Đ	ß	đ	·	

Windows 3.1 Latin 5

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p	€			°	À	Ğ	à	ğ	
1		!	1	A	Q	a	q		‘	ı	±	Á	Ñ	á	ñ	
2		"	2	B	R	b	r	,	’	ç	²	Â	Ò	â	ò	
3		#	3	C	S	c	s	f	“	£	³	Ã	Ó	ã	ó	
4		\$	4	D	T	d	t	„	”	¤	´	Ä	Ö	ä	ö	
5		%	5	E	U	e	u	...	•	¥	μ	Å	Ö	å	õ	
6		&	6	F	V	f	v	†	–		¶	Æ	Ö	æ	ö	
7		'	7	G	W	g	w	‡	—	§	·	Ç	×	ç	÷	
8		(	8	H	X	h	x	^	-	™	,	È	Ø	è	ø	
9		)	9	I	Y	i	y	‰	™	©	ı	É	Ù	é	ù	
A		*	:	J	Z	j	z	Š	š	a	°	Ê	Ú	ê	ú	
B		+	;	K	[	k	{	‹	›	«	»	Ë	Û	ë	û	
C		,	<	L	\	l		Œ	œ	¬	¼	Ì	Ü	ì	ü	
D		-	=	M	]	m	}			-	½	Í	Ý	í	ý	
E		.	>	N	^	n	~			®	¾	Î	Ş	î	ş	
F		/	?	O	_	o	☒		ÿ	™	¿	İ	ß	ï	ÿ	

6

ISO Latin 9

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			0	@	P	`	p				°	À	Đ	à	đ	
1		!	1	A	Q	a	q				ı	±	Á	Ñ	á	ñ
2		"	2	B	R	b	r				ç	²	Â	Ò	â	ò
3		#	3	C	S	c	s				£	³	Ã	Ó	ã	ó
4		\$	4	D	T	d	t				€	Ž	Ä	Ö	ä	ö
5		%	5	E	U	e	u				¥	μ	Å	Ö	å	õ
6		&	6	F	V	f	v				Š	¶	Æ	Ö	æ	ö
7		'	7	G	W	g	w				§	·	Ç	×	ç	÷
8		(	8	H	X	h	x				š	ž	È	Ø	è	ø
9		)	9	I	Y	i	y				©	ı	É	Ù	é	ù
A		*	:	J	Z	j	z				a	°	Ê	Ú	ê	ú
B		+	;	K	[	k	{				«	»	Ë	Û	ë	û
C		,	<	L	\	l					¬	Œ	Ì	Ü	ì	ü
D		-	=	M	]	m	}				-	œ	Í	Ý	í	ý
E		.	>	N	^	n	~				®	ÿ	Î	Þ	î	þ
F		/	?	O	_	o	☒				™	¿	İ	ß	ï	ÿ

Appendix

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		►		0	@	P	`	p	Ç	É	á	⋮	⌒	ø	Ó	-
1	☉	◄	!	1	A	Q	a	q	ü	æ	í	⌘	⌒	Ð	β	±
2	☉	⬆	"	2	B	R	b	r	é	Æ	ó	⌘	⌒	Ê	Ô	=
3	♥	!!	#	3	C	S	c	s	â	ô	ú		⌒	È	Ò	¾
4	♦	¶	\$	4	D	T	d	t	ä	ö	ñ	⌒	⌒	È	ö	¶
5	♣	§	%	5	E	U	e	u	à	ò	Ñ	Á	⌒	€	Õ	§
6	♠	—	&	6	F	V	f	v	â	û	ª	Â	ã	Í	μ	÷
7	•	⬆	'	7	G	W	g	w	ç	ù	º	À	Ã	Î	þ	.
8	■	↑	(	8	H	X	h	x	ê	ÿ	¿	©	⌒	İ	þ	°
9	○	↓	)	9	I	Y	i	y	ë	Ö	®	⌒	⌒	⌒	Ú	ˆ
A	☉	→	*	:	J	Z	j	z	è	Ü	¬	⌒	⌒	⌒	Û	·
B	♂	←	+	;	K	[	k	{	ï	ø	½	⌒	⌒	⌘	Ü	¹
C	♀	⌒	,	<	L	\	l		î	£	¼	⌒	⌒	⌘	ý	³
D	♫	↔	-	=	M	]	m	}	ì	Ø	¡	¢	⌒	⌒	Ý	²
E	♫	▲	.	>	N	^	n	~	Ä	×	«	¥	⌒	⌒	ÿ	■
F	☼	▼	/	?	O	_	o	△	Å	f	»	⌒	⌒	⌘	'	

Roman 9

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0				0	@	P	'	p				ˆ	â	Â	Á	þ
1			!	1	A	Q	a	q			À	Ý	ê	î	Ã	þ
2			"	2	B	R	b	r			Â	ý	ô	Ø	ã	·
3			#	3	C	S	c	s			È	º	û	Æ	Ð	μ
4			\$	4	D	T	d	t			Ê	Ç	á	å	ð	¶
5			%	5	E	U	e	u			È	ç	é	í	Í	¾
6			&	6	F	V	f	v			Î	Ñ	ó	ø	Ì	—
7			'	7	G	W	g	w			Ï	ñ	ú	æ	Ó	¼
8			(	8	H	X	h	x			´	ı	à	Ä	Ò	½
9			)	9	I	Y	i	y			`	¿	è	ì	Õ	ª
A			*	:	J	Z	j	z			^	€	ò	Ö	õ	º
B			+	;	K	[	k	{			ˆ	£	ù	Û	Š	«
C			,	<	L	\	l				ˆ	¥	ä	É	š	■
D			-	=	M	]	m	}			Û	§	ë	ï	Ú	»
E			.	>	N	^	n	~			Û	f	ö	ß	Ÿ	±
F			/	?	O	_	o	⌘			£	c	ü	Ô	ÿ	

OCR-A

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0				0	@	P	H	p								
1			!	1	A	Q	a	q								
2			"	2	B	R	b	r								
3			#	3	C	S	c	s								
4			\$	4	D	T	d	t								
5			%	5	E	U	e	u								
6			&	6	F	V	f	v								
7			'	7	G	W	g	w								
8			(	8	H	X	h	x								
9			)	9	I	Y	i	y								
A			*	:	J	Z	j	z								
B			+	;	K	[	k	{								
C			,	<	L	\	l									
D			-	=	M	]	m	}								
E			.	>	N	^	n	~								
F			/	?	O	_	o									

OCR-B

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0				0	@	P	'	p								
1			!	1	A	Q	a	q								
2			"	2	B	R	b	r								
3			#	3	C	S	c	s								
4			\$	4	D	T	d	t								
5			%	5	E	U	e	u								
6			&	6	F	V	f	v								
7			'	7	G	W	g	w								
8			(	8	H	X	h	x								
9			)	9	I	Y	i	y								
A			*	:	J	Z	j	z								
B			+	;	K	[	k	{								
C			,	<	L	\	l									
D			-	=	M	]	m	}								
E			.	>	N	^	n	~								
F			/	?	O	_	o									

Symbol Sets Supported

This section provides a list of the character code tables for the characters in each symbol set.

ISO Substitution Table

	0	1	2	3	4	5	6	7
0				0	@	P	'	p
1			!	1	A	Q	a	q
2			"	2	B	R	b	r
3			#	3	C	S	c	s
4			\$	4	D	T	d	t
5			%	5	E	U	e	u
6			&	6	F	V	f	v
7				7	G	W	g	w
8			(	8	H	X	h	x
9			)	9	I	Y	i	y
A			*	:	J	Z	j	z
B			+	;	K	[	k	{
C			,	<	L	\	l	
D			-	=	M	]	m	}
E			.	>	N	^	n	~
F			/	?	O	_	o	

The shaded characters in the table are replaced with the corresponding ones in the following table according to the graphic set used.

GRAPHIC SET NAME	CHARACTER CODE											
	23	40	5B	5C	5D	5E	60	7B	7C	7D	7E	
ISO_USA	#	@	[	\	]	^	'	{		}	~	
ISO_UK	£	@	[	\	]	^	`	{		}	—	
ISO_S/F	#	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü	
ISO_N/D	#	@	Æ	Ø	Å	^	`	æ	ø	å	—	
ISO_JPN	#	@	[	¥	]	^	`	{		}	—	
ISO_GER	#	§	Ä	Ö	Ü	^	`	ä	ö	ü	ß	
ISO_FRC	£	à	°	ç	§	^	µ	é	ù	è	..	
ISO_ITY	£	§	°	ç	é	^	ù	à	ò	è	ì	
ISO_SPN	£	§	ì	Ñ	¿	^	`	°	ñ	ç	~	

Specifications

This section lists the specifications of the machine.

Software Specifications

Command Language	PCL5e, PCL6, PostScript 3 emulation (PS3)* ¹ , and UFR II LT	
Resident Fonts	PCL:	93 Scalable fonts, 2 OCR fonts, and 10 Bitmap fonts
	PS3* ¹ :	251 Scalable fonts
Printable Area	PCL5e, PCL6:	Reduced to 4.23 mm from the top, bottom, left, and right edges of the paper.
	PS3* ¹ :	Reduced to 4 mm from the top, bottom, left, and right edges of the paper.
	UFR II LT:	Reduced to 5 mm* ² from the top, bottom, left, and right edges of the paper.

*1 Only available for the PS3 Printer.

*2 For envelopes:10 mm

Numerics

2-Sided Printing, 4-9, 6-2
3-Hole Punch Paper, 4-8

A

Abbreviations Used in This Manual, x
Append CR to LF, 4-23, 6-4
Attributes of Fonts, 6-5
Auto Continue, 4-13
Auto Select, 4-18

B

BarDIMM, 4-25
Binding, 4-11
Bitmapped Fonts, 6-10
Bond Paper, 4-8
Booklet (PCL Settings), 4-26
Booklet (PS Settings), 4-28

C

Carriage Return, 4-23
Character Width, 6-5, 6-8
Color Paper, 4-8
Copies, 4-8
Cpi, 4-21
Custom Paper, 4-22

D

Default PaperSize, 4-7

Default PaperType, 4-8
Density, 4-9

E

Envelope, 4-8
Executive, 4-7

F

Finishing, 4-15
Fixed and PS, 6-5
Fixed Spacing, 6-8
Font Number, 4-21
Fonts
 Attributes, 6-5
 Bitmapped, 6-10
 Definition, 6-5
 Scalable, 6-11
 Standard Scalable, 6-12
Form Lines, 4-21
FreeScape, 4-25, 6-4

H

Halftones, 4-25
Heavy Paper, 4-8

I

Image Refinement, 4-9
Index Printing, 2-7
Initialize, 4-19
ISO Substitution Table, 6-61
Italics, 6-6

J

Job Timeout, 4-27

L

Labels, 4-8
Landscape, 4-20
Layout, 4-11
Line Feed, 4-23

M

Margin, 4-12
Media Print, 2-1, 2-2
 Index Printing, 2-7
 Selecting All Files in Folder, 2-8
 Selecting Files by Date, 2-9
 Selecting Files by Extension, 2-11

O

Oblique, 6-6
OCR Sets, 6-12
Offset + Collate, 4-15
Offset + Group, 4-15
Orientation, 4-20, 6-5, 6-8

P

Paper Save, 4-20
PCL font lists, 6-12, 6-20
PCL Settings, 4-20
Pitch, 4-21, 6-5, 6-7
Plain Paper, 4-8
Point Size, 4-21, 6-5, 6-7
Portrait, 4-20
Print Quality, 4-9
Print Quality Problems, 5-5
Printer Problems, 5-2

Printer Settings Menu
 Functions List, 6-2
 Using, 4-5
Printing Problems, 5-4
Proportional Spacing, 6-8
PS Fonts, 6-17

R

Recycled Paper, 4-8

S

Scalable Fonts, 6-10, 6-11
Software Specifications, 6-63
Specifications, 6-63
Stack Bypass, 4-9
Staple, 4-15
Staple Position, 4-16
Stroke Weight, 6-5, 6-6
Style, 6-5, 6-6
Symbol Set, 4-22, 6-5, 6-9, 6-16, 6-33

T

Timeout, 4-14
Toner Saver, 4-10
Transparency, 4-8
Typeface, 6-5, 6-6
Typeface Samples, 6-20

U

Unit of Measure, 4-22
Upright, 6-6
Using the Printer Settings Menu, 4-5

W

Widen A4 Print, 4-24

X

X dimension, 4-22



CANON INC.

30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo 146-8501, Japan

CANON U.S.A., INC.

One Canon Plaza, Lake Success, NY 11042, U.S.A.

CANON CANADA INC.

6390 Dixie Road Mississauga, Ontario L5T 1P7, Canada

CANON EUROPA N.V.

Bovenkerkerweg 59-61 1185 XB Amstelveen, The Netherlands

(See <http://www.canon-europe.com/> for details on your regional dealer)

CANON LATIN AMERICA, INC.

703 Waterford Way Suite 400 Miami, Florida 33126 U.S.A.

CANON AUSTRALIA PTY. LTD

1 Thomas Holt Drive, North Ryde, Sydney, N.S.W. 2113, Australia

CANON CHINA CO., LTD

15F Jinbao Building No.89 Jinbao Street, Dongcheng District, Beijing 100005, China

CANON SINGAPORE PTE. LTD.

1 HarbourFront Avenue #04-01 Keppel Bay Tower, Singapore 098632

CANON HONGKONG CO., LTD

19/F., The Metropolis Tower, 10 Metropolis Drive, Hungghom, Kowloon, Hong Kong