B6250/B6500

OKI
PRINTING SOLUTIONS

Reference Guide

B6250/B6500

Adobe, the Adobe logo, PostScript, PostScript 3 and the PostScript logo are trademarks of Adobe Systems Incorporated. Microsoft, Windows, Windows NT, Windows Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Permission has been obtained from Microsoft Corporation for use of software screen shots. PCL, HP, HP-GL, HP-GL/2 and HP-UX are registered trademarks of Hewlett-Packard Corporation. Netware is a registered trademark of Novel, Inc., in the United States and other countries. Macintosh, MacOS, AppleTalk, EtherTalk and TrueType are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. Intel and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. UNIX is a registered trademark of the Open Group in the United States and other countries. Solaris, SunOS and NIS (Network Information Services) are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries. All product/ brand names are trademarks or registered trademarks of the respective holders.

Data Loss in Hard Disk/Compact Flash Disk

Saved data may be lost if the hard disk/compact flash in the machine breaks down due to external shocks or if the power is accidentally cut off in a manner not following the methods listed in manuals or other documentation. OKI is not responsible for such data loss and any consequence caused by such data loss.

Damage related to computer virus

OKI is not responsible for any breakdown of machines due to infection of computer virus.

Important

This manual is copyrighted with all rights reserved. Under the copyright laws, this manual may not be copied or modified in whole or part, without the written consent of the publisher.

Parts of this manual are subject to change without prior notice.

We welcome any comments on ambiguities, errors, omissions, or missing pages.

Never attempt any procedure on the machine that is not specifically described in this manual. Unauthorized operation can cause faults or accidents. OKI is not liable for any problems resulting from unauthorized operation of the equipment.

PREFACE

Thank you for choosing this printer. This is a guide on operating this printer and the important points to note. To understand the features fully and to use the printer correctly and effectively, please read this guide before using it.

Keep this guide handy for a quick reference on using the printer.

This guide is written with the assumption that you are familiar with the basic knowledge and way of operating your computer environment and the network environment.

In this manual, safety instructions are described with the following symbol: ⚠

Always read and follow these instructions before performing the required procedure.

This product is a "Class I Laser System" that does not emit dangerous laser beam. Operate the machine according to the instructions in the manual. Do not carry out any operation not mentioned in the manual. Otherwise, it may lead to unforeseen accident or machine breakdown.

CONVENTIONS

1. In this guide, "computer" refers to both the personal computer and workstation.

2. The following headers are used in this guide:

Important Indicates important information which you should read.

Note Indicates additional information on operations or features.

Refer to Indicates reference sources.

3. The following conventions are used in this guide:

Refer to "xxx" The cross-reference is within this guide.

Refer to YYY The cross-reference is not within this guide.

[   ] Indicates items displayed on the computer and the printer control panel. Also indicates the title of printed reports/lists from the printer.

<   > Indicates items such as hard buttons and indicators on the keyboard and printer.

LOW POWER MODE FEATURE

This product has a power-saving feature, which switches the machine to the low power mode automatically if the machine is on and not operated for a certain period of time. In this mode the machine stops power to the fuser and saves power consumption. The default low power mode start time is set at 15 minutes.

You can set the low power mode start time between 5 and 240 minutes.

ILLEGAL COPIES AND PRINTOUTS

Copying or printing certain documents may be illegal in your country. Penalties of fines or imprisonment may be imposed on those found guilty. The following are examples of items that may be illegal to copy or print in your country.

- Currency
- Banknotes and checks
- Bank and government bonds and securities
- Passports and identification cards
- Copyright material or trademarks without the consent of the owner
- Postage stamps and other negotiable instruments

This list is not inclusive and no liability is assumed for either its completeness or accuracy. In case of doubt, contact your legal counsel.

TABLE OF CONTENTS

BASIC OPERATIONS

MAIN COMPONENTS AND THEIR FUNCTIONS

STANDARD CONFIGURATION
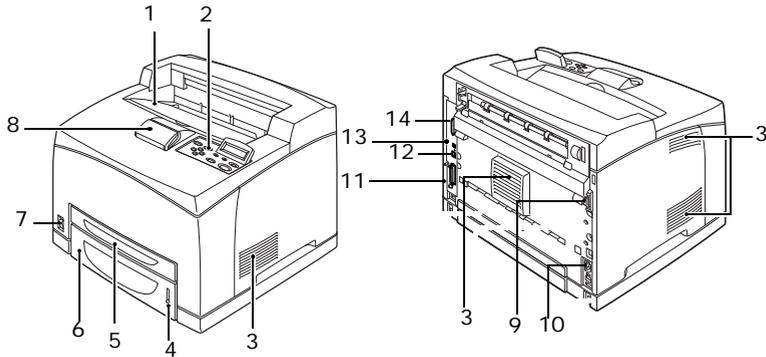
NO.	NAME	DESCRIPTION
1	Center output tray	Print jobs are output here with the printed side facing down.
2	Control panel	Consists of the essential operation buttons, indicators and display.
3	Ventilation hole	Releases heat to prevent the interior of the printer from heating up.
4	Paper meter	A meter to check the amount of remaining paper. Attached to the 550 tray.
5	Tray 1	Sets the 150 tray.
6	Tray 2	Sets the 550 tray.
7	Power switch	Switches the power of the printer on and off. Pressing the switch to the <|> position switches it on and pressing it to the <0> position switches it off.
8	Paper stopper	Raise this when printing on paper larger than Letter/A4 size.
9	Duplex unit connector	For connecting the optional duplex unit.

NO.	NAME	DESCRIPTION
10	Power cord connector	For connecting the power cord.
11	Parallel connector	For connecting the parallel cable.
12	Network connector	For connecting the network cable when connecting this printer to the network for use.
13	USB connector	For connecting the USB cable.
14	Serial connector	For connecting the serial cable.

WITH OPTIONAL ACCESSORIES
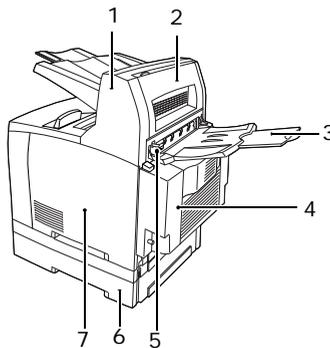
NO.	NAME	DESCRIPTION
1	Offset catch tray (optional)	Allows you to stagger the output position for each print job (offset output).
2	Cover D (optional)	Open this when paper is jammed inside the offset catch tray.
3	Rear tray (optional)	Use this tray if you want to reduce curling of paper when printing heavyweight paper. Print jobs are output here with the printed side facing up.
4	Duplex unit (Cover C)	Enables 2 sided printing. When paper is jammed inside the duplex unit, it is described as cover C.

NO.	NAME	DESCRIPTION
5	Rear output tray lever	When the rear tray has been installed, the paper output location can be switched between it and the center output tray. Raise the lever to output to the rear tray and lower the lever to output to the center output tray.
6	A4 universal tray	Can install up to two levels of an Letter/A4 universal tray (550) to this printer.
7	Right detachable cover	Remove this when installing optional accessories such as hard disk and additional memory.

INTERNAL VIEW
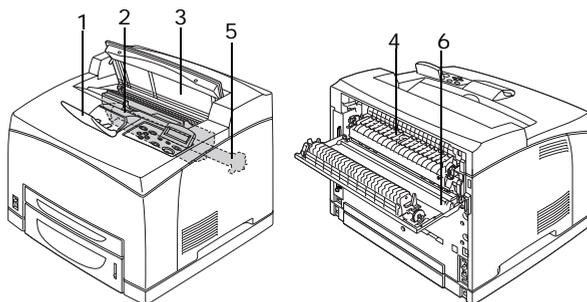
NO.	NAME	DESCRIPTION
1	Paper stopper	Raise this when printing on paper larger than A4 size.
2	Drum/toner cartridge	Contains the toner and the photosensitive drum.
3	Cover A	Open this when replacing the drum/toner cartridge and removing jammed paper.
4	Fuser unit	Fixes the toner on the paper. Do not touch this when using the printer as it is hot.
5	Transfer roll cartridge	Transfers the toner image on the surface of the photosensitive drum to the paper.
6	Cover B	Open this when removing jammed paper.

CONTROL PANEL
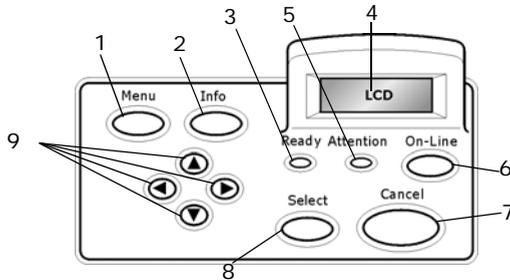
Note: see "Settings on the Control Panel" on page 57 for further detail.

NO.	NAME	DESCRIPTION
1	<Menu> button	Press to move to menu operation.
2	<Info> button	Press to print the menu map. The menu map (2 pages) will print with all the current printer settings.
3	<Ready> indicator	When the light is on, the printer is ready to receive data from the computer.
4	LCD display	Displays the setting items, machine status, and messages.
5	<Attention> indicator	When the light is on, there is a malfunction in the printer.
6	<On-Line> button	Press to enter the off-line status. When in the off-line status, the machine cannot receive data or process printing. Press again to exit the off-line status and enter the on-line status (where the machine can receive data from the computer).
7	<Cancel> button	Press to cancel printing. Press to exit Menu Mode.
8	<Select> button	Press to enter the menu item currently displayed.
9	< ▲ > < ▼ > < ◄ > < ► >	Press these buttons to move to the required menu, item and candidate value on the display.

DISPLAY

There are two types of screens shown: Print screen (for displaying printer status) and Menu screen (for setting configuration).

> *NOTE*
> *The message displayed differs according to the options installed and setting status.*

PRINT SCREEN

The Print screen appears when the machine is printing or waiting for data. The following contents are shown on the screen.
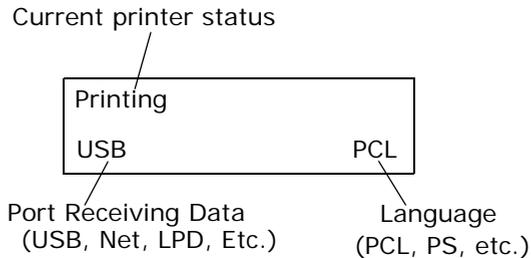
Current printer status

```
Printing

USB              PCL
```

Port Receiving Data
(USB, Net, LPD, Etc.)

Language
(PCL, PS, etc.)

MENU SCREEN

Screen for configuring settings related to the printer.

This screen appears when you press the <MENU> button. The initial Menu screen displayed is as follows.

```
Print Jobs Menu
```
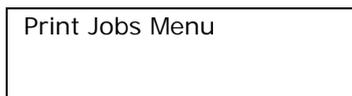
Refer to:

- Items that can be set on the Menu screen: "Settings on the Control Panel" on page 57

SWITCHING ON AND OFF THE POWER

SWITCHING ON THE POWER

1. Press the power switch of the printer to the < | > position.

2. When the power is switched on, various screens will be displayed on the control panel. Check that this display changes to "Online".
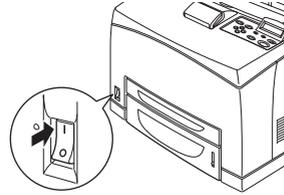
> *NOTE*
> *When "Please wait…" is displayed, the printer is in the process of warming up. Printing is unavailable during this period. When the printer is ready for printing, "Online" will be displayed.*

Important:

- If error message is displayed, refer to "Message List (alphabetical order)" on page 121 on how to fix it.

SWITCHING OFF THE POWER

Important:

- Do not switch off the printer power when printing is in progress. It may lead to a paper jam.

- Once the power is switched off, print data remaining in this printer or information saved in the memory of this printer will be deleted.

1. By checking the display on the control panel, confirm that the printer is not processing any data. "Online" or "Power Saver Mode" should be displayed.

> Online

2. Press the power switch to the <O> position to switch the power off.
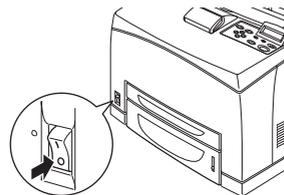
POWER SAVER MODES

This printer is equipped with a Power Save mode to reduce power consumption when it is left idle. The default idle time from last print activity until the printer enters Power Saver mode is 5 minutes. This time can be adjusted by the operator to any of the following: 5, 15, 30, 60 and 120 minutes.

When no print data is received within 5 minutes (default) since the last page is printed, the printer will enter Power Save mode. An informative message is displayed on the operator panel indicating Power Save Mode. Consumption of power during Power Save mode is 10 Watts or less, and the time required to exit from Power Saver mode to a print-ready status is about 10 seconds.

EXITING THE POWER SAVER MODE

The printer automatically exits from Power Saver mode once it receives data from the computer or if any key on the operator panel is pressed.

CANCELLING/CHECKING PRINTING

CANCELLING PRINTING

To cancel printing, you can either cancel the print job at the printer or at the computer.

Cancelling a Print Job at the Printer

Press the <CANCEL> button then press the <ON-LINE> button on the control panel. However, pages being printed at the moment will continue to be printed.

Cancelling Print Jobs at the Computer

Double-click the printer icon ![icon] at the bottom right of the taskbar in Windows.

From the displayed window, click the document name that you wish to delete and press the <Delete> key.
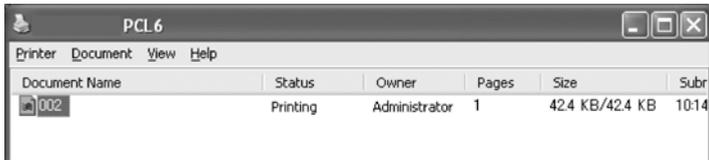
Checking in Windows

Double-click the printer icon 🖨 on the task bar at the bottom right of the screen.

From the displayed window, check the column, [Status].
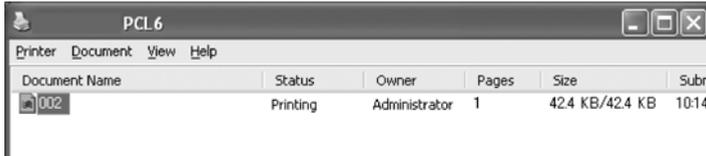
Document Name	Status	Owner	Pages	Size	Subr
002	Printing	Administrator	1	42.4 KB/42.4 KB	10:14

DISPLAYING OPTIONAL ACCESSORY CONFIGURATION AND PAPER TRAY SETTINGS

When using this printer as a network printer and with SNMP protocol enabled, you can display on the printer driver, the optional accessory configuration and settings configured at the control panel such as paper type or size. The printer can by used on network, USB or parallel. These settings are displayed on the [Options] tab. This section explains the procedure using Windows XP as an example.

Important:

- When using a serial connection to this printer, this feature cannot be used. You have to manually set the items on the printer driver.

- The rear tray information cannot be obtained automatically. You have to manually set the item.

- For paper size and paper type settings, you must configure them at the control panel beforehand. Even if you change the settings here, they will not be reflected on the printer itself.

NOTE
> *When using this feature on the network interface, you have to activate the SNMP port (default: [Enable]) on the printer using the control panel.*

> *For Windows NT 4. 0/Windows 2000/Windows XP, only users with administrator's rights can change the settings. Users without administrator's rights can only check the contents.*

1. From the [Start] menu, click [Printers and Faxes] and then display the properties of the printer to be used.

2. Click the [Device Options] tab.

3. Click [Get Information from Printer].

NOTE
The properties of the printer can be displayed on the printer driver.

4. Click [OK]. The contents of the [Device Options] tab will be updated based on the data obtained from the printer.

PRINTING

PRINTING FROM THE COMPUTER

This section explains the basic flow when printing from application software in a Windows® environment.

(The procedure may differ according to the computer or system configuration used.)

Important:

- Do not switch off the power to the printer when printing is in progress. It may lead to a paper jam.

NOTE
> *This section explains printing with the PCL driver as an example.*

1. From the [File] menu of the application software, select [Print].

2. Select this printer as the printer to be used to start printing. To use the various print features of this printer, display the printer properties dialogue box to set the necessary items. For details on each item and how to set them, refer to the Online Help for the print driver.

Important:

- If the paper tray information is not correct, change the settings on the [Set Up] tab of the print driver before continuing. For details on how to do the settings, refer to the Online Help for the print driver.

USEFUL PRINT FEATURES IN PROPERTIES DIALOG BOX

- The following selections are available in the [Setup] tab: Paper Size, Media Type, Paper Source, Paper Destination Paper Feed Options*, Finishing Mode**, and 2-sided Printing.

  *Paper Feed Options include: Auto Resize, Covers, Auto Tray Change, Media Check, and Skip Blank Pages, Tray 1 Settings, and Media Type.

  **Finishing Mode includes: Standard, 2-up, 4-up, 6-up, 8-up, 9-up, 16-up, PosterPrint, and Booklet.

NOTE
> *You can set the print features in the properties dialog box from the printer icon by selecting [Printers and Faxes] (or [Settings] > [Printers] depending on the OS).*

PRINTING ON ENVELOPES

For details on the envelopes that can be used, refer to "Usable Paper" on page 45. The procedure to print on envelopes is as follows.

LOADING ENVELOPES

You have to close the flaps of the envelopes and load them with the address side facing up in the orientation shown in the diagram below.

Paper feed direction

* The flap faces down
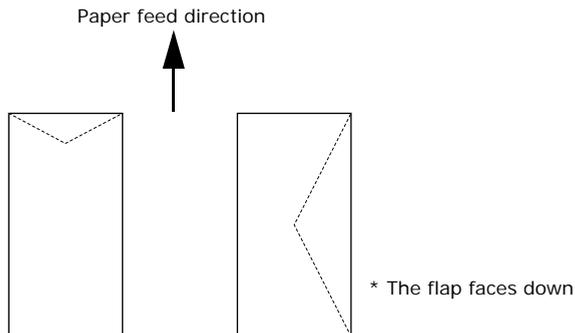
The following explains how to load the envelopes, using COM-10 envelopes as an example, in trays 1 to 4.

Important:

• The reverse side of the envelope cannot be printed on.

NOTE
> *For details on the procedure to load paper in a paper tray, refer to "Loading Paper in a Paper Tray" on page 49.*

1. Load the envelopes in the portrait orientation so that the flaps are turned to the right side.

2. Slide the length guide and right width guide to the size of the loaded envelopes.

3. On the control panel, change the paper type to [Envelope]. For details, refer to "Setting Paper Types" on page 54.

4. On the control panel, change the paper size of the tray to [COM-10 Envelope]. For details, refer to "Setting Custom Paper Sizes" on page 52.
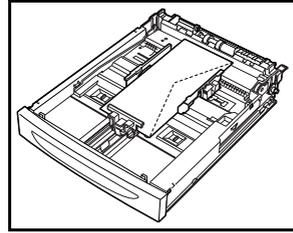
PRINTING ON ENVELOPES

To print on envelopes, display the [Tray/Output] tab and [Basic] tab. This section explains the procedure using WordPad on Windows XP as an example.

> *NOTE*
> > *The way to display the printer properties dialog box differs according to the application software. Refer to the manual of each application software.*

1. From the [File] menu, select [Print].

2. Select this printer from the drop down list and click [Properties].

3. Click the [Setup] tab.

4. Select the loaded paper tray from [Source] or click the [Media Type] and then select [Com10].

5. Click [OK].

6. Click [Print] in the [Print] dialog box to start printing.

PRINTING ON TRANSPARENCIES

LOADING TRANSPARENCIES

Load transparencies in trays 1 to 4.

Important

- Transparencies with white frames or full-color transparencies cannot be used.

The way to load transparencies in the paper tray is the same as the way to load standard size paper. For details, refer to " Loading Paper" (P. 49).

You must also set paper type for the paper tray to [Transparency] on the control panel.

Refer to " Setting Paper Types" (P. 54) to change the setting.

PRINTING ON TRANSPARENCIES

To print on transparencies, click on [Properties] from the [File] [Print] menu, click the [Setup] tab. This section explains the procedure using WordPad on Windows XP as an example.

> *NOTE*
> *> The way to display the printer properties dialog box differs according to the application software. Refer to the manual of your respective application software.*
>
> *> Printing transparencies continuously may lead to the output transparencies sticking to each other. As a guide, remove the transparencies from the output tray after about 20 sheets and then fan them to lower their temperatures.*

1. From the [File] menu, select [Print].

2. Select this printer as the printer to be used and click [Preferences].

3. Click the Media Type drop down box and click on transparencies.

4. Select the loaded paper tray from Source Drop down and click on the tray that contains the transparencies.

5. Click the Paper Size drop down.

6. From [Paper Size], select the size of the original document.

7. Click [OK].

8. Click [Print] in the [Print] dialog box to start printing.

PRINTING ON CUSTOM SIZE PAPER/LONG PAPER

This section explains how to print on custom size paper such as long paper.

The paper sizes that can be set on this printer are as follows:

■ **For trays 1 - 4**

Long edge:
146 to 356 mm
(5.75 to 14 in.)

Short edge:
89 to 216 mm
(3 to 8.5 in.)
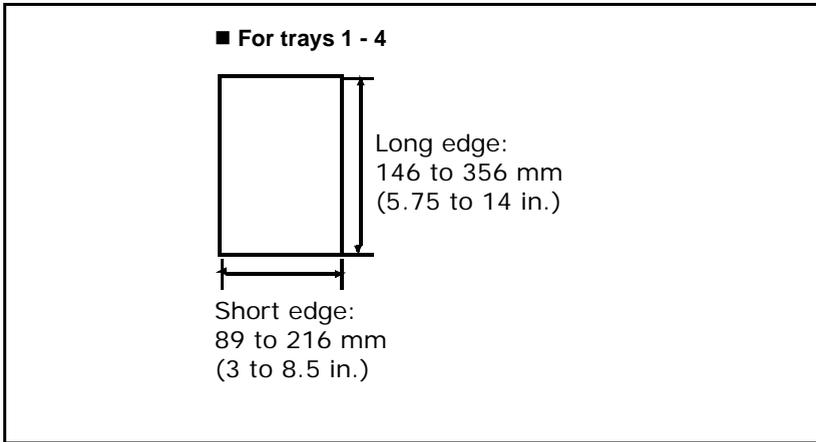
LOADING CUSTOM SIZE PAPER

The way to load custom size paper in trays 1 to 4 is the same as loading standard size paper. For details, refer to " Loading Paper" (P. 49).

SETTING CUSTOM PAPER SIZES

NOTE
> *The following paper sizes are not auto detectable by the trays: Statement, COM9, COM10, Monarch, A6, C5 and DL. To use these sizes you must use the operator panel on the printer to turn off auto detect for the tray and set the intended paper size.*

Before printing, set the custom size on the print driver.

You have to configure the settings on the control panel too when loading custom size paper in trays 1 to 4 for printing. For details on setting the control panel, refer to " Setting Custom Paper Sizes" (P. 52).

Important:

- When setting the paper size on the print driver and the control panel, be sure to specify the same size as the actual paper used. Setting the wrong size for printing will cause machine failure. This is especially true if you configure a bigger size when using a narrow width paper.

On the print driver, set the custom size in the [Paper Size] dialogue box. This section explains the procedure using Windows XP as an example.

NOTE
> *For Windows NT 4.0/Windows 2000/Windows XP, only users with administrator's rights can change the settings. Users without the rights can only check the contents.*

1. From the [File] menu, click [Print].

2. Select [Properties] then select the [Setup] tab.

3. Select Option as needed: Source, Media Type, etc.

4. You may select a previously stored custom size from the list or you may add an additional custom size.

5. To add a new custom size:

   A. Select paper feed options.

   B. Select Custom Size.

   C. In the Name Field, Type a name for your custom size.

   D. Click on the unit of measure radio button for the units you would like to use (mm for millimeters or inch for inches.)

   E. In the width field, enter the width of the custom size paper (89 to 216 mm, 3 to 8.5 in.).

   F. In the length field, enter the length of the custom size paper (146 to 356 mm, 5.75 to 14 in.).

   G. Click add to store the new custom size.

H. Click OK to close the Dialog Box.

NOTE
> *You may use the modify selection to change a previously stored custom size.*

NOTE
> *You may use the Delete Selection to delete a previously stored custom size.*

PRINTING ON CUSTOM SIZE PAPER

The procedure to print on custom size paper is as follows.

This section explains the procedure using WordPad on Windows XP as an example.

NOTE
> *The way to display the printer properties dialog box differs according to the application software. Refer to the manual of your respective application software.*

1. From the [File] menu, select [Print].

2. Select this printer as the printer to be used and click [Preferences].

3. Click the [Setup] tab.

4. Select the appropriate tray from [Source].

5. From [Paper Size], select the size of the original document.

6. From [Media Types], select the registered custom size, and then click [OK].

7. Click [Print] in the [Print] dialog box to start printing.

PRINT CONFIDENTIAL DOCUMENT - SECURE PRINT

Using the optional hard disk, compact flash or the standard user flash, you can use the secure print feature.

Important:
- The hard disk may be damaged and erase important data saved in the hard disk. We recommend you back up your data.

ABOUT SECURE PRINT

Secure Print is a feature that allows you to attach a password to a print job on the computer, send it to the printer for temporary storage, and then print the job from the printer control panel. When the printing of a Secure Print job is complete, the job is automatically deleted.
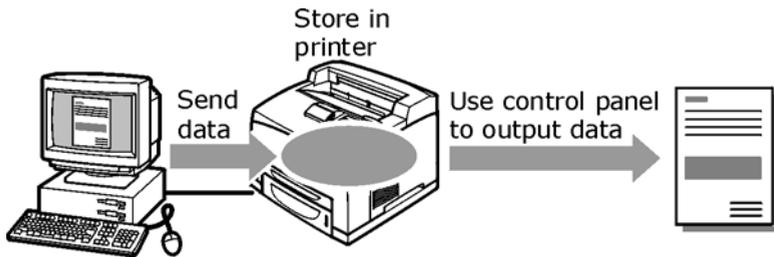
NOTE
> *The administrator can view a list of jobs using a password protected feature under Print Jobs Info in the Web page. The User id is root, and the password is a combination of su and the printer serial number, e.g. suCBxxxxxxQP. (The password is case sensitive, where su is lower case, and the serial number is uppercase.)*

STORED JOB

A stored job is the same as a secure print job except that it is not deleted from the storage device after it is printed. By storing frequently-used data in the printer, you can print the job from the printer control panel, without sending it from the computer again and again.

NOTE

> *You can select whether to delete the print data after printing. For details, refer to " At the Control Panel" (P. 33).*

CONFIGURING SECURE PRINT

The procedure to configure Secure Print is as follows.

At the Computer

This section explains the procedure using WordPad on Windows XP as an example. The procedure is the same for other OSs.

> *NOTE*
> > *The way to display the printer properties dialog box differs according to the application software. Refer to the manual of your respective application software.*

1. From the [File] menu, select [Print].

2. Select this printer as the printer to be used and click [Preferences].

3. From [Job Options] tab in the [Job Type] group, select [Secure Print].

4. In the [Job Identification] group, enter a name at [Job Name]. A job name must be entered. The job name will be used at the printer to retrieve the job.

5. Enter a password in the [Job Identification] group at [Job Pin].
Enter four numeric characters.

6. Click [OK].

7. Click [Print] in the [Print] dialog box to start printing.
The document will be stored in the printer.

At the Control Panel

This section explains the procedure to print data stored in the printer by Secure Print.

> *NOTE*
> > *You can also delete, without printing, secure print data stored in the printer.*

Refer to:
"Print Jobs Menu" on page 65

1. Press the <Menu> button.

2. Check that [Print Jobs Menu] is displayed and then press the < ► > button.

3. Press the < ▲ > or < ▼ > button until the desired digit of the Password (PIN number) is displayed, then press the < ► > button.

4. Repeat step 3 until all four digits of the password are displayed.

5. Press the <SELECT> button.

6. Press the < ▲ > or < ▼ > button until the desired document is displayed and then press the < ► > button.

7. Input the number of copies desired, then press <Select>.

8. After printing, the job is deleted.

9. Press [Cancel] to exit the menu.

PROOF PRINT - PRINT AFTER CHECKING PRINTING RESULT

Using the optional hard disk, compact flash or the standard User Flash, you can use the proof print feature.

Important:
• We recommend you back up your data.

ABOUT PROOF PRINT

Proof Print is a feature that allows you to store the print data of multiple copies on the hard disk or flash, print out only the first set to check the print result and if satisfactory, print the remaining copies from the control panel.

> *NOTE*
> *> The administrator can view a list of jobs using a password protected feature under Print Jobs Info in the Web page. The User id is root, and the password is a combination of su and the printer serial number, e.g. suCBxxxxxxQP. (The password is case sensitive, where su is lower case, and the serial number is uppercase.)*
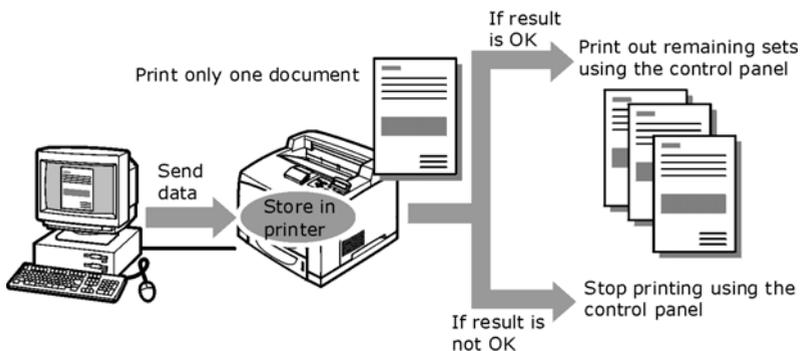
CONFIGURING PROOF PRINT

The procedure to configure Proof Print is as follows.

At the Computer

This section explains the procedure using WordPad on Windows XP as an example.

> *NOTE*
> *> The way to display the printer properties dialog box differs according to the application software. Refer to the manual of your respective application software.*

1. From the [File] menu, select [Print].

2. Select this printer from the drop down list and click [Properties].

   > *NOTE*
   > *> [Copies] must be set to at least two before [Proof Print] can be selected.*

3. On the [Job Options] tab, set [Copies] to at least two.

4. Select [Proof and Print] from [Job Type].

5. In the [Job Identification] group, enter a name at [Job Name]. The default job name is "blank", if left blank the job may fault.

6. Enter a password in the [Job Identification] group at [Job Pin].
   Enter four numeric characters.

7. Click [OK].

8. Click [Print] in the [Print] dialog box to start printing.

At the Control Panel

This section explains the procedure to print and delete data stored in the printer by Proof Print.

Refer to:
  "Print Jobs Menu" on page 65

1. Press the <Menu> button.

2. Press the <▲> or <▼> button until [Print Jobs Menu] is displayed and then press the <▶> button.

3. Press the <▲> or <▼> button until the desired digit of the Password (PIN number) is displayed, then press the <▶> button.

4. Repeat step 3 until all four digits of the password are displayed.

5. Press the <SELECT> button.

6. Press the <▲> or <▼> button until the required document is displayed and then press the <Select> button. The proof document will print.

7. Press the <▲> or <▼> button to select print or delete the saved document and then press the <▶> button. If Print is selected enter the number of copies.

8. Press the <SELECT> button. The document will be deleted or printed.

9. After the document is deleted or printed, press the <Cancel> button to exit the menu.

PRINT AT A SPECIFIED TIME - TIMED JOB

Using the optional hard disk, compact flash or the standard User Flash, you can use the delayed print feature. The delayed print feature allows you to store the data in the printer beforehand and then print it out automatically at the specified time.

Important:

- We recommend you back up your data.

NOTE
> *The administrator can view a list of jobs using a password protected feature under Print Jobs Info in the Web page. The User id is root, and the password is a combination of su and the printer serial number, e.g. suCBxxxxxxQP. (The password is case sensitive, where su is lower case, and the serial number is uppercase.)*

REGISTERING TIMED JOB

The procedure to configure Delayed Print is as follows.

This section explains the procedure using WordPad on Windows XP as an example. The procedure is the same for other OS.

1. From the [File] menu, select [Print].

2. Select this printer as the printer to be used and click [Preferences].

3. From [Job Type] on the [Job Options] tab, select [Timed Jobs].

4. Set the time to start printing by selecting [Elapse time] or [Real Time]. For [Elapse Time] specify the number of minutes to delay before printing. For [Real Time] specify the Year, Month, Day, Hour, and Minute to start printing.

5. In the [Job Identification] group, enter a name at [Job Name]. The default job name is "blank", if left blank the job may fault.

6. Click [OK].

7. Click [Print] in the [Print] dialog box to start printing. Printing will start at the specified time.

CANCELLING TIMED JOB

Use the control panel to cancel Timed Job or to print without waiting for the specified time.

1. Press the <Menu> button.

2. Press the <▲> or <▼> button until [Print Jobs Menu] is displayed and then press the <▶> button.

3. Press the <▲> or <▼> button until the desired digit of the Password (PIN number) is displayed, then press the <▶> button.

4. Repeat step 3 until all four digits of the password are displayed.

5. Press the <SELECT> button.

6. Press the <▲> or <▼> button until the required document is displayed and then press the <▶> button.

7. To delete job press the <Cancel> button.

8. Press <▶> to print displayed job.

9. Enter the number of copies using the <▲> or <▼> buttons.

10. Press the <SELECT> button. The document will be printed.

11. After the document is deleted or printed, press the <Cancel> button until Online is displayed.

> *NOTE*
> *> The document name displayed (up to 12 characters) is the [Document Name] set in the [Timed Job] dialogue box of the [Job Option] tab of the print driver.*

DIRECT PRINTING OF PDF FILES

This feature is available when the optional hard disk drive is installed.

> *For additional information refer to the OKI Direct PDF Printing utility found on the installation CD*

You can send a PDF file directly to the printer for printing without using the print driver. As the print data is sent directly to the printer, the printing process is simpler than printing with the print driver and is faster.

PDF Files That Can Be Printed

PDF files that can be printed are those created by Adobe Acrobat 4 and Adobe Acrobat 5. The B6250/B6500 supports Adobe PDF version 1.3

NOTE
> *You may not be able to print some PDF files directly by the printer due to the way they were created. When this happens, open the PDF files and use the print driver to print them.*

PRINTING PDF FILE

When sending the PDF file to the printer, printing will be done with the defaults set at the control panel. These defaults include:

- Copies
- Duplex
- Print mode
- Paper size
- Paper feed

PRINTING VIA ELECTRONIC MAIL - E-MAIL PRINTING

When the optional hard disk has been installed and the printer is connected to a network, enabling it to receive e-mails via TCP/IP communication, e-mails can be sent from the computer to this printer.

Printing of e-mail contents and PDF attachments can be done from this printer.

This feature is known as E-mail Printing.

Important:
- It is recommended that you back up your data.
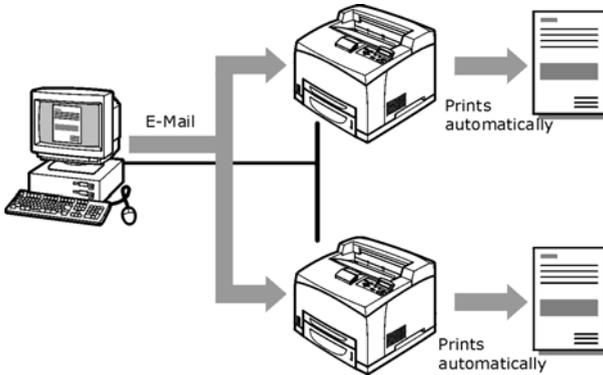
ENVIRONMENT SETTINGS FOR E-MAIL PRINTING

To use the E-mail Printing feature, you need to configure the server settings on your network environment.

> *NOTE*
> *> Wrong e-mail environment settings may cause disruptions in your network. Always ask your network administrator to configure e-mail environment settings.*

SENDING E-MAILS

Attachments That Can Be Sent

The following files can be sent as an attachment.

- PDF file created by Adobe Acrobat versions 4 & 5

NOTE
> *The PDF files sent will be printed by using the PostScript feature and according to the [PDF] setting on the control panel. For details on the print features of the PDF file in this printer, refer to " Direct Printing of PDF Files" (P. 36).*

Sending E-mails

This section explains how to send e-mails from the computer to the printer using Outlook Express as an example.

1. Create mail contents using your mailing software and attach PDF files if any.

Important:
• Only plain text format can be used for the mail contents. Set the format of the e-mail content to text format in your mailing software.

NOTE
> *If the extension of the attached file is not "pdf", it will not be printed correctly.*

2. Enter the printer's e-mail address in the address column.

3. Send the e-mail. The printer will print the e-mail automatically after receiving it.

Email Receive

The "Email Receive" feature allows the user to send Email directly to the printer. This facilitates printing Email without the need for a shared network driver.

1. From the printer web page select "Network" from the menu listing on the lower left side of the screen.

2. Under the "Email" bullet on the lower left side of the screen, select "Receive Settings".

3. The "Email Receive Settings" window will open allowing you to make the necessary selections.

Once the necessary selections have been made select either "Submit" or "Cancel".

Send File

The "Send File" feature allows the user to browse to a file that resides on the host PC and send the file to the printer. This facilitates the printing feature without the need for a shared network driver.

To use this feature:

1. From the printer web page select "Send File" from the menu listing on the lower left side of the screen.

2. Using the "Select File:" window, browse to the file in the host PC directory or type in the path to the requested file.
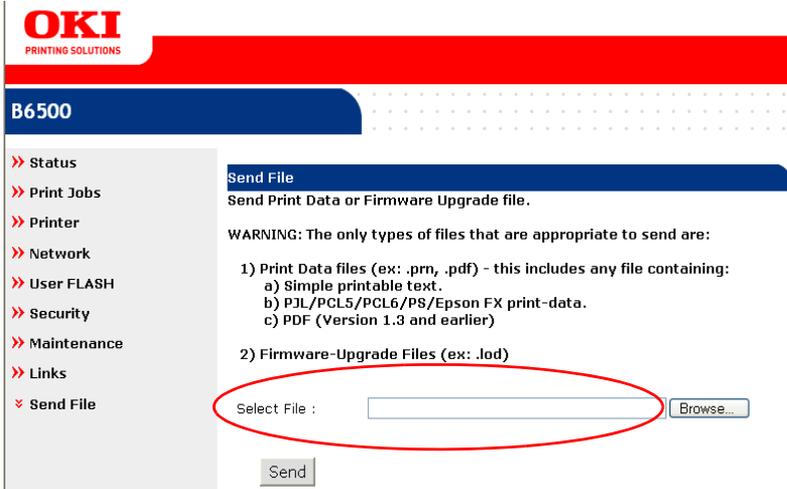
WARNING

The only types of files that are appropriate to send are:

> **Simple printable text**

> **PJL/PCL5/PCL6/PS/Epson FX print-data**

> **PDF (Version 1.3 and earlier)**

> **Firmware-Upgrade Files (ex: .lod)**

3. Select "Send" to print the file.

PRINTING BARCODING USING PCL

Algorithm generated barcodes are printed by firmware that uses special PCL font selection commands.

Benefits:

- Any size barcode generation
- Automatically generates checksums
- Automatically add stop and start characters

INTELLIGENT BARCODING

Unlike some barcode solutions, which merely add fonts to a PC or printer, this firmware actually extends the PCL5 language. Barcode formatting, error detection and checksum calculation are performed by the firmware, reducing the load on the host and the network. Barcodes can be printed in almost any size or rotation, bar width and height. The printing of HRI text is user selectable.

Other features that the user can select are:

- Barcode symbology
- Height of the barcode
- Rotation of the barcode
- HRI select or de-select
- HRI placement
- Width of bars
- Wide to narrow ratio of bars

    Note: See Appendix B for detailed use information (page 159)

ABOUT PAPER

ABOUT PAPER

Using unsuitable paper may lead to paper jams, poor print quality, breakdown and damage to your printer. In order to use the features of this printer effectively, we suggest using only paper that is recommended here.

> NOTE
> > The following paper sizes are not auto detectable by the trays: Statement, COM9, COM10, Monarch, A6, C5 and DL. To use these sizes you must use the operator panel on the printer to turn off auto detect for the tray and set the intended paper size.

When you use paper that is not recommended, contact service.

USABLE PAPER

The types of paper that can be used on this printer are as follows.

When printing on paper that is commonly sold, use the types of paper in the following table. However, it is recommended to use paper in the next category, standard paper for clearer printing.

PAPER TRAY	SIZE	WEIGHT	LOADING CAPACITY
Tray 1	Standard sizes that can be automatically detected: A5, B5, A4, Executive (7.25 × 10.5"), Letter (8.5 × 11"), Legal (8.5 × 13"), Legal (8.5 × 14") Others: A6[*1], COM-10 Envelope[*1], Monarch Envelope[*1], DL Envelope[*1], C5 Envelope[*1] Custom[*2] (76×127 - 216×900[*3] mm) Statement	64 - 216 g/m^2 (16 - 57.5 lb)	150 sheets (P paper) or 17. 5 mm or below

PAPER TRAY	SIZE	WEIGHT	LOADING CAPACITY
Trays 2 to 4 (trays 3 and 4 are optional)	Standard sizes that can be automatically detected: A5, B5, A4, Executive (7.25 × 10.5"), Letter (8. 5 × 11"), Legal (8. 5 × 13"), Legal (8. 5 × 14") Others: A6[*1], COM-10 Envelope[*1], Monarch Envelope[*1], DL Envelope[*1], C5 Envelope[*1], Custom[*2] (98×148 - 216×356 mm), Statement	64 - 216 g/m^2 (16 - 57.5 lb)	250-sheet tray: 250 sheets (P paper) or 27.6 mm or below 550-sheet tray: 550 sheets (P paper) or 59.4 mm or below

*1: Requires the paper size settings be done on the control panel.
*2: Requires the paper size settings be done on the control panel and the printer driver.
*3: Print quality on the part of the paper that extends beyond 356 mm cannot be guaranteed.

Important:
- Printing on paper whose setting is different from the paper size or paper type selected on the printer driver or loading paper into an unsuitable paper tray for printing may lead to paper jams. To ensure printing is correctly done, select the correct paper size, paper type, and paper tray.

- The printed image may fade due to moisture such as water, rain or vapor. For details, contact service.

Standard Paper

The following table shows the standard paper for this printer.

PAPER NAME	WEIGHT	PAPER TYPE	PAPER CHARACTERISTICS AND CAUTION ON USAGE
FX P	68 g/m^2 (17 lb)	Plain	Medium weight paper for internal distribution and general office use.
XEROX 4024	75 g/m^2 (20 lb)	Plain	Medium weight paper for internal distribution and general office use.

PAPER NAME	WEIGHT	PAPER TYPE	PAPER CHARACTERISTICS AND CAUTION ON USAGE
XEROX 4200	75 g/m^2 (20 lb)	Plain	Medium weight paper for internal distribution and general office use.
RX 80 (3R 91720)	80 g/m^2 (21.3 lb)	Plain	Medium weight paper for internal distribution and general office use.

Special Media

The following types of paper can be used for printing on this printer. These types of paper are called special media.

PAPER NAME	PAPER TYPE	PAPER CHARACTERISTICS AND CAUTION ON USAGE
Transparencies XEROX P/N 3R2780 XEROX P/N JE-001 XEROX P/N 3R91334 3M P/N CG3300	Transparency	Transparency without any white frame *Note: As output transparencies may stick together, remove the transparencies from the output tray after about 20 sheets, and then fan them to lower their temperature.*
Labels XEROX P/N 3R4469 Avery Laser Labels P/N 5160 XEROX P/N V860 XEROX P/N 3R97408	Thick 1	
Envelopes Com#10 (104.8 × 241.3 mm) C5 (162 × 229 mm) DL (110 × 220 mm) Monarch (98.4 × 190.5 mm)	Thick 1	
3" × 5" Oxford Index Card (40801) Classic Crest Super Smooth Cover 3R3254 (Long Gain)	Thick 1 Thick 2 *Thick 3	*Note*: For rough or uneven media such as envelope, choose Thick3. When using Thick3, duplex is not available.*

Important:
- The reverse side of the envelope cannot be printed on.

- It may take a very long time (maximum 60 seconds) to print custom size Thick 2 paper.

NOTE
> *For details on special media, such as heavyweight not listed in the table, contact service.*

> *For details on printing transparencies and envelopes, refer to " Printing" (P. 22).*

UNUSABLE PAPER

Using the following types of paper might cause paper jams, malfunctions or damage to the machine. Do not use them.

- Fuji Xerox full-color transparencies (example: V556, V558, V302)

- Paper exclusively for ink-jet printer use

- Paper that is too thick or thin

- Paper that has been printed on before (including color printing)

- Wrinkled, folded or torn paper

- Wet paper

- Curled paper

- Paper with static electricity

- Adhesive paper

- Paper with special coatings

- Treated colored paper

- Paper using ink that will run at a temperature of 150°C

- Thermal paper

- Carbon paper

- Paper with staples, paper clips, ribbons or tape

- Paper with rough surfaces such as pulp paper, or fibrous paper

- If acid paper is used, the characters might appear fuzzy. Replace it with alkaline paper.

- Envelopes that are not flat or have metal fasteners

- Labels that do not fully cover the adhesive backing

STORING AND HANDLING PAPER

Even for suitable papers, poor storage conditions may lead to a change in the paper quality, paper jams, poor print quality and machine breakdown. Take note of the following points when storing paper:

- Store paper in the following locations: Temperature of 10 - 30 °C with a relative humidity of 30 - 65%

- After opening a ream of paper, use the original cover sheets to wrap up the paper not used and store it in a cabinet or a location with low humidity.

- Do not let the paper stand but store it in a flat location.

- Ensure that the paper is stored properly without being bent or curled.

- Store the paper in a location not exposed to direct sunlight.

LOADING PAPER

LOADING PAPER IN A PAPER TRAY

Refer to:
Paper type and size that can be loaded in paper tray: " Usable Paper" (P. 45)

1. Place the paper tray on a flat surface and remove the lid (if installed).
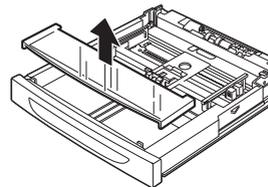
2. If the base plate of the paper tray is raised, push it down.
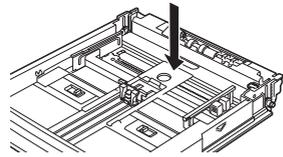
3. When loading paper longer than A4 size, slide the left and right lock tabs in the paper tray outwards to unlock them.
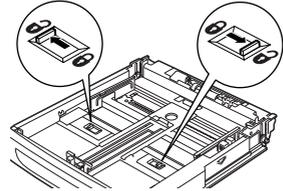
4. Hold the grip of the paper tray and pull its extendable part to the front until it reaches its maximum.
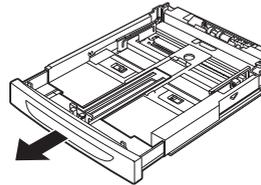
5. Squeeze the length guide and slide it to the desired paper size (1). Squeeze the right width guide and slide it to the desired paper size (2).
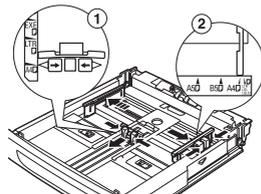
6. Load the paper with the side to be printed facing up and with all four corners aligned.
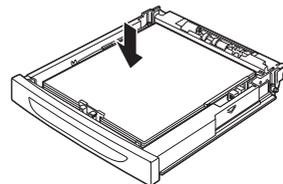
Important:
- Do not place paper over the right width guide.

- Do not load paper exceeding the maximum fill line or the maximum capacity allowed.

- Align the right width guide with the paper width correctly. If the right width guide is not in place, the paper will not be properly fed and this may cause paper jams.

7. Close the lid of the paper tray and push the tray completely into the printer.

Important:
- The lid of the tray must be firmly closed. If not, the paper might become misaligned.

8. Depending on the types and sizes of the loaded paper, you need to configure settings on the control panel. Change the paper type when non-plain paper such as recycled paper, heavyweight paper or transparencies are loaded. Configure the paper size when custom size paper is loaded.

Refer to:
- Paper type and size that can be loaded: "Usable Paper" on page 45

- Setting paper size: "Setting Custom Paper Sizes" on page 52

- Setting paper type: "Setting Paper Types" on page 54

AUTOMATIC TRAY SELECTION

If you display the properties dialog box of the printer driver and select a paper type for [Specify Paper Type] and [Auto] for [Paper Source] on the [Tray/Output] tab for printing, this printer will be able to automatically detect paper trays loaded with the selected paper type and then among them, select the tray that matches the size and orientation of the document to be printed. This feature is known as automatic tray selection.

If there are multiple trays that match those criteria for automatic tray selection, a tray is selected based on the lowest tray number. For example, if tray 1 and tray 2 match the criteria, tray 1 will be selected.

NOTE

> *If there are no paper trays that match the automatic tray selection, an error message prompting for replenishment of paper will be displayed. You can configure the printer not to display this message but to automatically select a nearest or larger paper size of the document for printing. (Substitute Tray)*

> *If paper runs out during printing, a paper tray containing paper of the same size and orientation of the paper used for printing will be selected to continue printing (automatic tray switching).*

> *If there are no paper trays that match the paper types that are set for [Specify Paper Type], a message prompting to confirm printing on another paper type will be displayed. Press the <FEED/SELECT> button to print on paper of another type or press <CANCEL> to cancel the job.*

Refer to:
• Specify Paper Type: Online Help for the printer driver

SETTING CUSTOM PAPER SIZES

To print on custom size paper loaded in trays 1 to 4, you must set the paper size on the control panel.

You may also need to set it on the printer driver, depending on the paper size.

This section explains how to set the size on the control panel.

Important:

- When setting the paper size on the printer driver and control panel, be sure to specify the same size as the actual paper used. Setting the wrong size for printing will cause machine failure. This is especially true if you configure a bigger size when using a narrow width paper.

NOTE
> *To return to standard paper size settings, select [Auto] in step below. This printer will automatically detect the size and orientation of the loaded paper.*

1. Press the <MENU> button to display the Menu screen.

2. Press the <▲> or <▼> button until [Media Menu] is displayed, then press the <▶> button.

3. Press the <▲> or <▼> button until [Tray X Auto Sense] is displayed (X = the tray number you wish to set), then press the <▶> button. Set Auto Sense to OFF.

4. Press the <▲> or <▼> button until [Tray X Paper Size] is displayed (X = the tray number you wish to set). Then press the <▶> button.

5. Press the <▲> or <▼> button until the desired paper size is displayed, Then press the <▶> button.

OR

Press the <▼> button to display [Custom], then press the <SELECT> button.

6. Press the <▲> or <▼> button to display [Portrait (Y) Size] or [Landscape (X) Size], then press the <▶> button.
Enter values for the paper size to be used by pressing the <▲> or <▼> button

7. Press the <SELECT> button.

8. Press the <CANCEL> button to exit the menus.

SETTING PAPER TYPES

"Media Type" selects the type of material to print on.
Examples: Plain paper, Transparency, and Card stock. Ensure that the selected media type is loaded into the selected input tray. Some applications may override this setting.

MEDIA	WEIGHT
Plain	68-105 gsm
Thin	64-67 gsm
Thick1	106-159 gsm
Thick2	160-216 gsm
Thick3*	106-216 gsm
*For rough or uneven media such as envelope, choose Thick3. When using Thick3, duplex is not available.	

Settings on the control panel are required for the types of paper loaded in trays 1 to 4. For accurate image quality processing, refer to the following table and set the paper types on the control panel.

Important:
- Paper type settings must match those of the actual paper loaded in the trays. Otherwise, image quality cannot be processed accurately. Toner may not fuse properly on the paper, resulting in dirty and poor quality printouts.

- Changes in paper type settings on the printer driver are not reflected in this printer.

Refer to:
- Paper sizes that can be loaded: "Usable Paper" on page 45

Paper types available:

Plain	Post Card	Colored
Other	Card Stock	Letter Head
Thin	Label	Pre-Punched
Thick 2	Bond	Transparency
Thick 1	Pre-Printed	
Envelope	Thick 3	

PAPER NAME	WEIGHT	PAPER TYPE SET IN TRAY
FX P	68 - 105 g/m^2 (16-24 lb)	Plain (default)
Label, envelope	106 - 159 g/m^2 (24 - 42 lb)	Thick 1
	160 - 216 g/m^2 (42 - 57.5 lb)	Thick 2
	106 - 216 g/m^2 (24 - 57.5 lb)	Thick 3
JE001	-	Transparency

Settings on the Control Panel

1. Press the <MENU> button to display the Menu screen.

2. Press the <▲> or <▼> button until [Media Menu] is displayed, then press the <►> button.

3. Press the <▲> or <▼> button until [Tray X Media Menu] is displayed (X = the tray number you wish to set). Then press the <►> button.

4. Press the <▲> or <▼> button until the desired media type is displayed, then press the <SELECT> button.

5. Press the <CANCEL> button to exit the menu.

SETTINGS ON THE CONTROL PANEL

ABOUT THIS CHAPTER

This chapter explains the control panel and its functions, and also demonstrates how to navigate through the control panel menus and submenus that allow you to view and change the printer settings. Web access to the printer is also discussed.

CONTROL PANEL FEATURES

The control panel is located on the front of the printer (Figure below), and contains the display (LCD), indicators, and push buttons that allow you to view and change the printer settings.
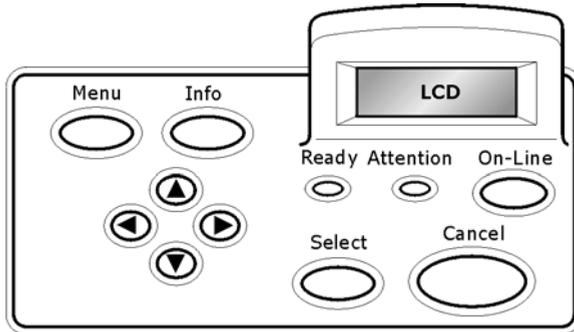
NAME	DESCRIPTION
<MENU> button	Press to move to the menu operation. Once in the menu operation, repeatedly pressing the menu button moves down the menu list.
<INFO> button	Press to print the menu map. The menu map (2pages) will print with all the current printer settings.
<READY> indicator	When the light is on, the printer is ready to receive data from the computer.
LCD display	Displays the setting items, machine status, and messages.
<ATTENTION> indicator	When the light is on, there is a malfunction in the printer.

NAME	DESCRIPTION
\<On-Line\> button/indicator	Press to enter the off-line status. When in the off-line status, the machine cannot receive data or process printing. Press again to exit the off-line status and enter the on-line status (where the machine can receive data from the computer).
\<CANCEL\> button	Press to cancel printing. Press to exit the menu mode.
\<Select\> button	Press to activate the displayed setting. When you are changing the candidate values, pressing the Select button runs the currently displayed activity or saves the currently displayed candidate.
\<▲\> \<▼\> \<◄\> \<►\> buttons	Press these to move to the required menu, item and candidate value on the display.

LCD DISPLAY

The LCD display shows status and error messages that inform you of the current status of the printer, and also displays menus, submenus, and printer settings when you are in the menu system. The display contains two lines of text, each with a maximum of sixteen characters.
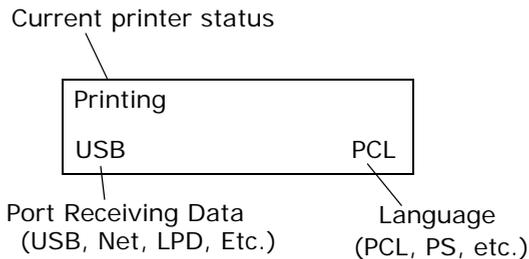
Current printer status

```
Printing

USB                  PCL
```

Port Receiving Data
(USB, Net, LPD, Etc.)

Language
(PCL, PS, etc.)

MENU SCREEN

Screen for configuring settings related to the printer.

This screen appears when you press the <MENU> button. The initial Menu screen displayed is as follows.

```
Print Jobs Menu
```

NAVIGATING THE CONTROL PANEL MENUS

When you press the **MENU** button on the control panel, you enter the printer's menu system. At that point, the first line of the display lists the active menu. You can change the active menu by pressing the <▲> or <▼> button or by pressing the **MENU** button.

If you press the <▲> button repeatedly, the first line of the display cycles through the main menus in the following order:

- Print Jobs Menu
- Information Menu
- Print Menu
- Media Menu
- Sys Config Menu
- PCL Emulation
- FX Emulation
- Parallel Menu
- Serial Menu
- USB Menu
- Network Menu
- Sys Adjust Menu

- Date/Time Menu

- Maintenance Menu

- Usage Menu

- Flash Menu

- Disk Menu

- Comp FLASH Menu

- Job Accounting

- Spooling

Menus and submenus may or may not be displayed, depending on the options installed.

The following text describes the sequence of push buttons and display messages that would allow you to print the PS (PostScript) font list. This example illustrates the basic relationship between menus and submenus and demonstrates how the <▲>, <▶>, SELECT, and Cancel buttons help you to navigate through the menus.

1. Press the **MENU** button on the control panel.

2. The LCD will display "**Print Jobs Menu**" on the first line of the display.

3. Press the **<▼> or <Menu>** button to display "**Information Menu**" on the first line of the display.

4. Press the **<▶>** button to enter the "**Information Menu"**. "**Print Menu Map"** is displayed on the first line and "**Execute"** is on the second line of the display.

5. Press the <▼> button to display "**Print PCL Fonts**" on the first line of the display.

6. Press the **<▼>** button to display "**Print PS Fonts**" on the first line of the display.

7. Press the **Select** button to print the list, or press the **CANCEL** button to exit the menu system.

MENU STRUCTURE

The following shows the structure of the control panel main menus and submenus.

Print Jobs Menu

Information Menu

Print Menu Map

Print PCL Fonts

Print PS Fonts

Print FX Fonts

Print Demo

Print Menu

Copies

Duplex

Duplex Bind

Paper Feed

Auto Tray Switch

Output Tray

Separator Page

Resolution

Print Density

Toner Save Mode

Orientation

Lines Per Page

Auto Resize

Media Check

White Page Skip

Media Menu

Tray1 Auto Sense

Tray1 Paper Size

Tray1 Media Type

Tray2 Auto Sense

Tray2 Paper Size

Tray2 Media Type

Tray3 Auto Sense

Tray3 Paper Size

Tray3 Media Type

Unit Of Measure

Tray1 X Dimen

Tray1 Y Dimen

Tray2 X Dimen

Tray2 Y Dimen

Tray3 X Dimen

Tray3 Y Dimen

Sys Config Menu

Power save time

Personality

Wait Timeout

Toner Low

Language

Print PS Errors

PCL Emulation

    Font Source

    Font No.

    Font Pitch

    Symbol Set

    CR Function

    LF Function

    A4 Print Width

    Print Area

FX Emulation

    Character Pitch

    Character Set

    Symbol Set

    Letter 0 Style

    Zero Character

    Line Pitch

    CR Function

    Line Length

    Form Length

    Top Position

    Left Margin

    Fit To Letter

    Text Height

Parallel Menu

    Parallel

    Bi-Direction

    PS Protocol

Serial Menu

    Serial

    Baud Rate

    Data Bits

    Stop Bits

    Parity

    DTR Ready/Busy

    DTR Onl/Offl

    DTR Error

    RTS Ready/Busy

    RTS Onl/Offl

    RTS Error

    XON Ready/Busy

    XON Onl/Offl

    XON Error

    DTR Polarity

    RTS Polarity

    Robust XON

    PS Protocol

USB Menu

    USB

    PS Protocol

Network Menu

    TCP/IP

    Netware

    Ethertalk

    IP Address Set

    IP Address

    Subnet Mask

    Gateway Address

    Factory Default

    Web

    SNMP

    Hub Link Setting

    PS Protocol

    HTTP Port

    Netware Frame

Sys Adjust Menu

    Tray1 X Adjust

    Tray1 Y Adjust

    Tray2 X Adjust

    Tray2 Y Adjust

    Tray3 X Adjust

    Tray3 Y Adjust

    Duplex X Adjust

    Duplex Y Adjust

    PCL Tray1 ID#

    PCL Tray2 ID#

    PCL Tray3 ID#

    PCL Auto ID#

    Hex Dump

    PCL Auto ID

Date/Time Menu

    Month

    Day

    Year

    Hour

    Minute

    Second

    GMT Offset/Hours

    GMT Offset/Mins

    Daylight Saving

Maintenance Menu

    Menu Reset

    Save Menu

    Power Save

Usage Menu

    Page Count

    Fuser Count

    Toner

    Tray1 Level

    Tray2 Level

    Tray3 Level

Flash Menu

    Data Security

    Print

    Format Usr FLASH

    Flash Summary

Disk Menu

    Data Security

    Print

    Delete

    Format Disk

    Disk Summary

Comp FLASH Menu

    Data Security

    Print

    Delete

    Format Cmp FLASH

    CFLASH Summary

Job Accounting

    Enabled

    Print Info

Spooling

    Start Spooling

    Destination

NOTE

Menus and submenus may or may not appear in the printer menu system depending upon the options installed.

PRINT JOBS MENU

1. Press the MENU button on the control panel.

2. **"Print Jobs Menu"** is shown on the first line of the display.

3. Press the < ► > button to enter the Print Jobs Menu. **"Enter Password"** is displayed on the first line and **"****"** is displayed on the second line.

> *NOTE*
> *The password is entered by you at the PC using the print driver, see "Configuring Secure Print" on page 30.*

4. To enter the first digit of your password (Pin Number), press the < ▲ > to increase the number or < ▼ > to decrease the number.

5. When the correct number is displayed, press the < ► > button to move to the next digit position

6. Repeat steps 4 & 5 until all four numbers are correct.

7. Press the **SELECT** button to enter the submenu.

8. All the jobs associated with your password will be available. Use the < ▲ > or < ▼ > buttons to scroll through the list of jobs or you can select "ALL JOBS".

9. With the desired job displayed, you may press "Select" to print the job or you may press "Cancel" to delete the job.

10. If you press Select to print the job, "Copies" will be shown on the display. You may select the number of copies to be printed by using the < ▲ > or < ▼ > buttons.

11. With the desired number displayed, press the "Select" button to print the job.

Use the procedures in the following table to access and change the system settings.

SUBMENU	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Enter Password	User Selected	0-65535	See Steps Above

INFORMATION MENU

The **Information Menu** provides access to the printer settings for various printing functions. Use the following procedure to enter the information menu:

1.   Press the **MENU** button on the control panel.

2.   Press the <▼> button until the text "**Information Menu**" is shown on the first line of the display.

3.   Press the <▶> button to enter the Information Menu.

4.   Press the <▲> or <▼> buttons to move through the submenus.

5.   Press the **SELECT** button to print the displayed submenu.

Use the procedures in the following table to access and change the printer information settings:

SUBMENUS	PROCEDURE TO EXECUTE
Print Menu Map This function allows you to print the menu map.	Press SELECT to print the Menu Map.
Print PCL Fonts This function allows you to print the PCL font list.	Press SELECT to print the PCL font list.
Print PS Fonts This function allows you to print the Postscript font list.	Press SELECT to print the Postscript fonts list.

SUBMENUS	PROCEDURE TO EXECUTE
Print FX Fonts This function allows you to print the FX font list.	Press SELECT to print the FX Fonts list.
Print Demo This function allows you to print a demo page.	Press SELECT to print a Demo Page.

PRINT MENU

The **Print Menu** provides access to the print setup procedures. These settings are defaults for the printer. A print job can specify and use other settings. Use the following procedure to enter the print menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**Print Menu**" is shown on the first line of the display.

3. Press the <▶> button to enter the print menu.

4. Press the <▲> or <▼> buttons to move through the submenus.

5. Press the <▶> button to enter the submenu.

Use the procedures in the following table to access and change the print menu settings:

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Copies This submenu allows you to change the number of copies printed.	1	Numbers 1 - 999	Press <▲> or <▼> buttons to increase or decrease the number of copies printed. Press <SELECT> to save this setting.
Duplex This submenu allows you to turn the duplex on or off	Off	On/Off	Press <▲> or <▼> buttons toggle between ON and OFF. Press <SELECT> to save this setting.
Duplex Bind This submenu allows you to choose the bind edge. Choose Long Edge or Short Edge.	Long Edge	Long Edge/ Short Edge	Press <▲> or <▼> buttons toggle between Long Edge and Short Edge. Press <SELECT> to save this setting.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Paper Feed This submenu allows you to choose the default paper tray.	Tray 1	Tray 1 Tray 2 Tray 3 Tray 4	Press < ▲ > or <▼ > buttons to select the tray. Press <SELECT> to save this setting.
Auto Tray Switch This submenu allows you to switch the tray auto switch function on or off.	On	On Off	Press < ▲ > or <▼ > buttons to toggle between ON and OFF. Press <SELECT> to save this setting.
Output Tray This submenu allows you to choose the default output tray.	Face Down Tray	Face Down Tray Offset Catch Tray (option) Rear Tray (option)	Press < ▲ > or <▼ > buttons to scroll through the available trays. Press <SELECT> to save the tray.
Separator Page This submenu allows you to select the tray for the separator page or switch it off.	Off	Off Tray 1 Tray 2 Tray 3 Tray 4	Press < ▲ > or <▼ > buttons to scroll through the available trays. Press <SELECT> to save the tray.
Resolution This submenu allows you to set the resolution (dpi).	600 DPI	600 DPI 1200 DPI	Press < ▲ > or <▼ > buttons to scroll through the available resolutions. Press <SELECT> to save the dpi.
Print Density This submenu allows you to set the print density.	4	1 to 7	Press < ▲ > or <▼ > buttons to increase of decrease the setting. Press <SELECT> to save this setting.
Toner Save Mode	On	On Off	Press < ▲ > or <▼ > buttons to toggle between ON and OFF. Press <SELECT> to save this setting.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Orientation	Portrait	Portrait Landscape	Press < ▲ > or <▼> buttons to toggle between Portrait and Landscape. Press <SELECT> to save this setting.
Lines Per Page	60	5 to 128	Press < ▲ > or <▼> buttons to increase or decrease the setting. Press <SELECT> to save this setting.
Auto Resize	Disable	Enable Disable	Press < ▲ > or <▼> buttons to toggle between Enable and Disable. Press <SELECT> to save the selection.
Media Check	Enable	Enable Disable	PPress < ▲ > or <▼> buttons to toggle between Enable and Disable. Press <SELECT> to save the selection.
White Page Skip	Disable	Enable Disable	PPress < ▲ > or <▼> buttons to toggle between Enable and Disable. Press <SELECT> to save the selection.

MEDIA MENU

The **Media Menu** provides access to the paper tray settings. Use the following procedure to enter the media menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**Media Menu**" is shown on the first line of the display.

3. Press the <▶> button to enter the media menu.

4. Press the <▲> or <▼> button to move through the submenus.

5. Press the <▶> button to enter the submenu.

Use the procedures in the following table to access and change the printer media settings:

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Tray1 Auto-Sense This submenu allows you to set the Paper size auto sense feature on or off.	On	On Off	Press <▲> or <▼> button to toggle on or off. Press <SELECT> to save the selected size.
Tray1 Paper Size This submenu allows you to set the media size. Tray1 Auto-Sense must be off.	Letter (US) else (A4)	Letter, A4, Legal13, Legal14, Custom, Executive, Monarch Envel., Com10 Envelope, DL Envelope, C5 Envelope, Com9 Envelope, A6, A5, Statement, B5	Press <▲> or <▼> buttons to scroll through the available sizes. Press <SELECT> to save the selected size.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Tray1 Media Type This submenu allows you to set the media type.	Plain	Plain, Transparency, Prepunched, Letterhead, Colored, Preprinted, Bond, Label, Card Stock, Postcard, Envelop, Thick 1, Thick 2, Thick 3, Thin, Other	Press < ▲ > or <▼> buttons to scroll through the available MEDIA TYPES. Press <SELECT> to set a media type.
Tray2 Auto-Sense This submenu allows you to set the Paper size auto sense feature on or off.	ON	ON OFF	Press < ▲ > or <▼> button to toggle on or off. Press <SELECT> to save the selected size.
Tray2 Paper Size This submenu allows you to set the media size. Tray 2 Auto-Sense must be off.	Letter (US) else (A4)	Letter, A4, Legal13, Legal14, Custom, Executive, Monarch Envel., Com10 Envelope, DL Envelope, C5 Envelope, COM 9 Envelope, Envelope, A6, A5, Statement, B5	Press < ▲ > or <▼> button to scroll through the available sizes. Press <SELECT> to set a paper size.
Tray2 Media Type This submenu allows you to set the media type.	Plain	Plain, Transparency, Prepunched, Letterhead, Colored, Preprinted, Bond, Label, Card Stock, Postcard, Envelop, Thick 1, Thick 2, Thick 3, Thin, Other	Press < ▲ > or <▼> button to scroll through the available media types Press <SELECT> to set a type.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Tray3 Auto-Sense This submenu allows you to set the Paper size auto sense feature on or off.	On	On Off	Press < ▲ > or <▼> button to toggle on or off. Press <SELECT> to save the selected size.
Tray3 Paper Size This submenu allows you to set the media size. Tray 3 Auto-Sense must be off.	Letter (US) else (A4)	Letter, A4, Legal13, Legal14, Custom, Executive, Monarch Envel., Com10 Envelope, DL Envelope, C5 Envelope, Com9 Envelope, A6, A5, Statement, B5	Press < ▲ > or <▼> button to scroll through the available sizes. Press <SELECT> to set a paper size.
Tray3 Media Type This submenu allows you to set the media type.	Plain	Plain, Transparency, Prepunched, Letterhead, Colored, Preprinted, Bond, Label, Card Stock, Postcard, Envelop, Thick 1, Thick 2, Thick 3, Thin, Other	Press < ▲ > or <▼> button to scroll through the available media types Press <SELECT> to set a type.
Tray4 Auto-Sense This submenu allows you to set the Paper size auto sense feature on or off.	On	On Off	Press < ▲ > or <▼> button to toggle on or off. Press <SELECT> to save the selected size.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Tray4 Paper Size This submenu allows you to set the media size. Tray 4 Auto-Sense must be off.	Letter (US) else (A4)	Letter, A4, Legal13, Legal14, Custom, Executive, Monarch Envel., Com10 Envelope, DL Envelope, C5 Envelope, Com9 Envelope, A6, A5, Statement, B5	Press < ▲ > or < ▼ > button to scroll through the available sizes. Press <SELECT> to set a paper size.
Tray4 Media Type This submenu allows you to set the media type.	Plain	Plain, Transparency, Prepunched, Letterhead, Colored, Preprinted, Bond, Label, Card Stock, Postcard, Envelop, Thick 1, Thick 2, Thick 3, Thin, Other	Press < ▲ > or < ▼ > button to scroll through the available media types Press <SELECT> to set a type.
Unit Of Measure This menu is used to set the unit of measurement for the Custom Paper Size feature.	Inch (Default If US) Millimeter (Default If Non-US)	Inches Millimeters	Press < ▲ > or < ▼ > buttons to toggle between INCHES and MILLIMETERS. Press <SELECT> to save this setting.
Tray1 X Dimen Sets the paper width.	8.50 Inch (216 Millimeter)	3.88 - 8.50 Inch (99 - 216 Millimeter)	Press < ▲ > or < ▼ > buttons to select the X dimension Press <SELECT> to set dimension.
Tray1 Y Dimen Sets the paper length	11.00 Inch (279 Millimeter)	5.83 - 14.00 Inch (148 - 356 Millimeter)	Press < ▲ > or < ▼ > buttons to select the Y dimension Press <SELECT> to set dimension.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Tray2 X Dimen Sets the paper width	8.50 Inch (216 Millimeter)	3.88 - 8.50 Inch (99 - 216 Millimeter)	Press <▲> or <▼> button to select the X dimension Press <SELECT> to set dimension.
Tray2 Y Dimen Sets the paper length	11.00 Inch (279 Millimeter)	5.83 - 14.00 Inch (148 - 356 Millimeter)	Press <▲> or <▼> button to select the Y dimension Press <SELECT> to set dimension.
Tray3 X Dimen Sets the paper length	8.50 Inch (216 Millimeter)	3.88 - 8.50 Inch (99 - 216 Millimeter)	Press <▲> or <▼> button to select the Y dimension Press <SELECT> to set dimension.
Tray3 Y Dimen Sets the paper length	11.00 Inch (279 Millimeter)	5.83 - 14.00 Inch (148 - 356 Millimeter)	Press <▲> or <▼> button to select the Y dimension Press <SELECT> to set dimension.
Tray4 X Dimen Sets the paper length	8.50 Inch (216 Millimeter)	3.88 - 8.50 Inch (99 - 216 Millimeter)	Press <▲> or <▼> button to select the Y dimension Press <SELECT> to set dimension.
Tray4 Y Dimen Sets the paper length	11.00 Inch (279 Millimeter)	5.83 - 14.00 Inch (148 - 356 Millimeter)	Press <▲> or <▼> button to select the Y dimension Press <SELECT> to set dimension.

SYS CONFIG MENU

The **Sys Config Menu** provides access to the system settings. Use the following procedure to enter the Sys Config menu:

1.   Press the **MENU** button on the control panel.

2.   Press the <▼> button until the text "**Sys Config Menu**" is shown on the first line of the display.

3.   Press the <►> button to enter the sys config menu.

4.   Press the <▲> or <▼> button to move through the submenus.

5.   Press the <►> button to enter the submenu.

Use the procedures in the following table to access and change the Sys Config Menu settings:

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Power Save Time This submenu allows you to change the time (in minutes) when the printer enters the Power Saver Mode.	5	5 min, 15 min, 30 min, 60 min, 120 min	Press <▲> or <▼> buttons to select the number of minutes. Press <SELECT> to save the time.
Personality	Auto Emulation	Auto Emulation, PCL, Postscript 3, FX	Press <▲> or <▼> buttons to scroll through the selections. Press <SELECT> to save the selection.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Wait Timeout This submenu allows you to increase or decrease the length of time (in seconds) that the printer will remain in the waiting state—a job is being processed, no end-of-file has been detected, and there is no more data to process.	00020	0 - 65535	Press < ▲ > or <▼ > buttons to increase or decrease the digit in the selected position. Press the < ▶ > to select the digit and move to the next position Press <SELECT> after changing the last digit to save this setting.
Toner Low This submenu sets the printer to either stop or continue printing when it goes into a low toner condition.	Continue	Continue Stop	Press < ▲ > or <▼ > buttons to toggle between Continue and Stop. Press <SELECT> to save this setting.
Language This submenu sets the default language for the display.	English	English, Czecho, Hungary, Finland, Brazil, Turkish, Russian, Polish, Greek, Swedish, Norwegian, Danish, Dutch, Portugal, spanol, Italiano, Deutsch, Francais	Press < ▲ > or <▼ > buttons to scroll through the options. Press <SELECT> to save this setting.
Print PS Errors	Off	On Off	Print PS Errors

PCL EMULATION

The **PCL Emulation** provides access to the PCL settings and functions. Use the following procedure to enter PCL Emulation Menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**PCL Emulation**" is shown on the first line of the display.

3. Press the <►> button to enter the PCL emulation menu.

4. Press the <▲> or <▼> buttons to move through the submenus.

5. Press the <►> button to enter the submenu.

Use the procedures in the following table to access and change the PCL Emulation settings:

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Font Source This submenu allows you to choose a font source.	Internal	Internal	Press <▲> or <▼> buttons to scroll through the selections. Press <SELECT> to save the selection.
Font No. This submenu allows you to set the font number.	50	0 - 152	Press <▲> or <▼> buttons to scroll through the selections. Press <SELECT> to save the selection.
Font Pitch This submenu allows you to change the font pitch of text.	10.00	0.08 - 100.00	Press <▲> or <▼> buttons to scroll through the selections. Press <SELECT> to save the selection.
Symbol Set This submenu allows you to choose a symbol set.	10U:PC-8 CP437	See Appendix A for a complete list of all the available symbol sets	Press <▲> or <▼> buttons to scroll through the selections. Press <SELECT> to save the selection.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
CR Function This submenu allows you to define the action prompted by a carriage return—a carriage return equals either a carriage return alone, or a carriage return and a line feed together.	CR	CR CR+LF	Press < ▲ > or < ▼ > buttons to toggle between CR and CR+LF. Press <SELECT> to save the selection.
LF function This submenu allows you to define the action prompted by a line feed—a line feed equals either a line feed alone or a carriage return and a line feed together.	LF	LF LF+CR	Press < ▲ > or < ▼ > buttons to toggle between LF and LF+CR. Press <SELECT> to save the selection.
A4 Print Width	78 Columns	78 Columns 80 Columns	Press < ▲ > or < ▼ > buttons to toggle between 78 and 80. Press <SELECT> to save the selection.
Print Area	Normal	Normal Expanded	Press < ▲ > or < ▼ > buttons to toggle between Normal and Expanded. Press <SELECT> to save the selection.

FX EMULATION

The **FX Emulation** provides access to the FX settings and functions. Use the following procedure to enter FX Emulation Menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**FX Emulation**" is shown on the first line of the display.

3. Press the <►> button to enter the FX emulation menu.

4. Press the <▲> or <▼> buttons to move through the submenus.

5. Press the <►> button to enter the submenu.

Use the procedures in the following table to access and change the FX Emulation settings:

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Character Pitch This submenu allows you to choose the Characters Per Inch.	10 CPI	10 cpi 12 cpi 17 cpi 20 cpi Proportional	Press <▲> or <▼> buttons to scroll through the selections. Press <SELECT> to save the selection.
Character Set	Set-2	Set-1 Set-2	Press <▲> or <▼> buttons to scroll through the selections. Press <SELECT> to save the selection.
Symbol Set This submenu allows you to choose a symbol set.	8U:Roman 8		Press <▲> or <▼> buttons to scroll through the selections. Press <SELECT> to save the selection.
Letter 0 Style	Disable	Enable/Disable	Press <▲> or <▼> buttons to scroll through the selections. Press <SELECT> to save the selection.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Zero Character	Normal	Normal/Slashed	Press < ▲ > or < ▼ > buttons to scroll through the selections. Press <SELECT> to save the selection.
Line Pitch This submenu allows you to choose the Lines Per Inch.	6 LPI	6 LPI 8 LPI	Press < ▲ > or < ▼ > buttons to scroll through the selections. Press <SELECT> to save the selection.
CR Function This submenu allows you to define the action prompted by a carriage return—a carriage return equals either a carriage return alone, or a carriage return and a line feed together.	CR	CR CR+LF	Press < ▲ > or < ▼ > buttons to toggle between CR and CR+LF. Press <SELECT> to save the selection.
Line Length	80	80 136	Press < ▲ > or < ▼ > buttons to toggle between 80 and 136. Press <SELECT> to save the selection.
Form Length This submenu allows you to choose the paper length.	11 Inch	11 Inch 11.7 Inch 12 Inch	Press < ▲ > or < ▼ > buttons to scroll through the selections. Press <SELECT> to save the selection.
TOF Position This submenu allows you to shift the image down in 0.1 Inch increments.	0 Inch	0 Inch 0.1 Inch 1.0 Inch	Press < ▲ > or < ▼ > buttons to scroll through the selections. Press <SELECT> to save the selection.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Left Margin This submenu allows you to shift the image to the right in 0.1 Inch increments.	0 Inch	0 Inch 0.1 Inch 1.0 Inch	Press < ▲ > or <▼> buttons to scroll through the selections. Press <SELECT> to save the selection.
Fit To Letter This submenu allows you to fit the image to letter size paper.	Disable	Enable Disable	Press < ▲ > or <▼> buttons to scroll through the selections. Press <SELECT> to save the selection.
Text Height	Same	Same/Diff	Press < ▲ > or <▼> buttons to scroll through the selections. Press <SELECT> to save the selection.

PARALLEL MENU

The **Parallel Menu** provides access to the Parallel settings. Use the following procedure to enter the parallel menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**Parallel Menu**" is shown on the second line of the display.

3. Press the <▶> button to enter the parallel menu.

4. Press the <▲> or <▼> buttons to move through the submenus.

5. Press the <▶> button to enter the submenu.

Use the procedures in the following table to access and change the Parallel Menu settings:

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Parallel This submenu allows you to set up the parallel interface.	Enable	Enable Disable	Press <▲> or <▼> buttons to toggle between Enable and Disable. Press <SELECT> to save the selection.
Bi-Direction Enable bidirectional communication with the PC.	Enable	Enable Disable	Press <▲> or <▼> buttons to toggle between Enable and Disable. Press <SELECT> to save the selection.
PS Protocol	ASCII	ASCII Raw	Press <▲> or <▼> buttons to toggle between EASCII and Raw. Press <SELECT> to save the selection.

SERIAL MENU

The **Serial Menu** provides access to the Serial settings. Use the following procedure to enter the serial menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**Serial Menu**" is shown on the first line of the display.

3. Press the < ▶> button to enter the serial menu.

4. Press the < ▲ > or <▼> buttons to move through the submenus.

5. Press the < ▶> button to enter the submenu.

Use the procedures in the following table to access and change the Serial Menu settings:

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Serial	Enable	Enable Disable	Press < ▲ > or <▼> buttons to toggle between Enable and Disable. Press <SELECT> to save the selection.
Baud Rate	9600	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	Press < ▲ > or <▼> buttons to scroll through the selections. Press <SELECT> to save the selection.
Data Bits	8	8 7	Press < ▲ > or <▼> buttons to toggle between 7 and 8. Press <SELECT> to save the selection.
Stop Bits	1	1 2	Press < ▲ > or <▼> buttons to toggle between 1 and 2. Press <SELECT> to save the selection.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Parity	None	None Even Odd	Press < ▲ > or <▼ > buttons to toggle between None, Even, and Odd. Press <SELECT> to save the selection.
DTR Ready/ Busy	Off	Off On	Press < ▲ > or <▼ > buttons to toggle between Off and On. Press <SELECT> to save the selection.
DTR Onl/Offl	Off	Off On	Press < ▲ > or <▼ > buttons to toggle between Off and On. Press <SELECT> to save the selection.
DTR Error	Off	Off On	Press < ▲ > or <▼ > buttons to toggle between Off and On. Press <SELECT> to save the selection.
RTS Ready/ Busy	Off	Off On	Press < ▲ > or <▼ > buttons to toggle between Off and On. Press <SELECT> to save the selection.
RTS Onl/Offl	Off	Off On	Press < ▲ > or <▼ > buttons to toggle between Off and On. Press <SELECT> to save the selection.
RTS Error	Off	Off On	Press < ▲ > or <▼ > buttons to toggle between Off and On. Press <SELECT> to save the selection.
XON Ready/ Busy	On	Off On	Press < ▲ > or <▼ > buttons to toggle between Off and On. Press <SELECT> to save the selection.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
XON Onl/Offl	On	Off On	Press < ▲ > or <▼> buttons to toggle between Off and On. Press <SELECT> to save the selection.
XON Error	Off	Off On	Press < ▲ > or <▼> buttons to toggle between Off and On. Press <SELECT> to save the selection.
DTR Polarity	High	High Low	Press < ▲ > or <▼> buttons to toggle between High and Low. Press <SELECT> to save the selection.
RTS Polarity	High	High Low	Press < ▲ > or <▼> buttons to toggle between High and Low. Press <SELECT> to save the selection.
Robust XON	Off	Off On	Press < ▲ > or <▼> buttons to toggle between Off and On. Press <SELECT> to save the selection.
PS Protocol	ASCII	ASCII Raw	Press < ▲ > or <▼> buttons to toggle between ASCII and Raw. Press <SELECT> to save the selection.

USB MENU

The **USB Menu** provides access to the USB settings. Use the following procedure to enter the USB menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> **NEXT** button until the text "**USB Menu**" is shown on the first line of the display.

3. Press the <▶> button to enter the USB menu.

4. Press the <▲> or <▼> buttons to move through the submenus.

5. Press the <▶> button to enter the submenu.

Use the procedures in the following table to access and change the USB Menu settings:

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
USB This submenu allows you to set up the USB interface.	Enable	Enable Disable	Press <▲> or <▼> buttons to toggle between Enable and Disable. Press <SELECT> to save the selection.
PS Protocol	ASCII	ASCII Raw	Press <▲> or <▼> buttons to toggle between ASCII and Raw. Press <SELECT> to save the selection.

NETWORK MENU

The **Network Menu** provides access to the printer network settings. Use the following procedure to enter the network menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**Network Menu**" is shown on the first line of the display.

3. Press the <▶> button to enter the Network menu.

4. Press the <▲> or <▼> buttons to move through the submenus.

5. Press the <▶> button to enter the submenu.

Use the procedures in the following table to access and change the Network Menu settings:

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
TCP/IP	Enable	Enable Disable	Press <▲> or <▼> buttons to toggle between Enable and Disable. Press <SELECT> to save the selection.
Netware	Enable	Enable Disable	Press <▲> or <▼> buttons to toggle between Enable and Disable. Press <SELECT> to save the selection.
Ethertalk	Enabled	Enable Disable	Press <▲> or <▼> buttons to toggle between Enable and Disable. Press <SELECT> to save the selection.
IP Address Set	Automatic	Automatic Manual	Press <▲> or <▼> buttons to toggle between Automatic and Manual. Press <SELECT> to save the selection.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
IP Address	(user-specified)	(user-specified)	The first set of numbers blinks Press < ▲ > or <▼ > to scroll to the desired number. Press < ▶ > to save the current set of numbers and move to the next set. Repeat the procedure for each set of numbers. When the last set of numbers is set, press <SELECT> to save the IP address.
Subnet Mask	(user-specified)	(user-specified)	The first set of numbers blinks Press < ▲ > or <▼ > to scroll to the desired number. Press < ▶ > to save the current set of numbers and move to the next set. Repeat the procedure for each set of numbers. When the last set of numbers is set, press <SELECT> to save the IP address.
Gateway Address	(user-specified)	(user-specified)	The first set of numbers blinks Press < ▲ > or <▼ > to scroll to the desired number. Press < ▶ > to save the current set of numbers and move to the next set. Repeat the procedure for each set of numbers. When the last set of numbers is set, press <SELECT> to save the IP address.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Factory Default	Execute	Execute	Press <SELECT> to save the selection.
Web	Enable	Enable Disable	Press < ▲ > or < ▼ > buttons to toggle between Enable and Disable. Press <SELECT> to save the selection.
SNMP	Enable	Enable Disable	Press < ▲ > or < ▼ > buttons to toggle between Enable and Disable. Press <SELECT> to save the selection.
Hub Link Setting	Auto Negotiate	Auto Negotiate 10 Base-T Full 10 Base-T Half 100 Base-T Full 100 Base-T Half	Press < ▲ > or < ▼ > buttons to scroll through the selections. Press <SELECT> to save the selection.
PS Protocol	ASCII	ASCII Raw	Press < ▲ > or < ▼ > buttons to toggle between ASCII and Raw. Press <SELECT> to save the selection.
HTTP Port	80	1 - 65535	Press < ▲ > or < ▼ > buttons to scroll through the selections. Press <SELECT> to save the selection.
Netware Frame	Auto-Sense	802.2 802.2 SNAP Ethernet II 802.3	Press < ▲ > or < ▼ > buttons to scroll through the selections. Press <SELECT> to save the selection.

SYS ADJUST MENU

The **Sys Adjust Menu** provides access to the tray adjustment settings. Use the following procedure to enter the Sys Adjust menu:

1.   Press the **MENU** button on the control panel.

2.   Press the <▼> button until the text "**Sys Adjust Menu**" is shown on the first line of the display.

3.   Press the <►> button to enter the Sys Adjust menu.

4.   Press the <▲> or <▼> button to move through the submenus.

5.   Press the <►> button to enter the submenu.

Use the procedures in the following table to access and change the Sys Adjust Menu settings:

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Tray1 X Adjust This submenu fine adjusts the registration in the X axis.	8	0 to 15	Press <▲> (increase number) to move the image to the right or press <▼> (decrease number) to move the image to the left. Press <SELECT> to save the selection.
Tray1 Y Adjust This submenu fine adjusts the registration in the Y axis.	8	0 to 15	Press <▲> (increase number) to move the image to the down or press <▼> (decrease number) to move the image to the up. Press <SELECT> to save the selection.
Tray2 X Adjust This submenu fine adjusts the registration in the X axis.	8	0 to 15	Press <▲> (increase number) to move the image to the right or press <▼> (decrease number) to move the image to the left. Press <SELECT> to save the selection.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Tray2 Y Adjust This submenu fine adjusts the registration in the Y axis.	8	0 to 15	Press < ▲ > (increase number) to move the image to the down or press <▼> (decrease number) to move the image to the up. Press <SELECT> to save the selection.
Tray3 X Adjust This submenu fine adjusts the registration in the X axis.	8	0 to 15	Press < ▲ > (increase number) to move the image to the right or press <▼> (decrease number) to move the image to the left. Press <SELECT> to save the selection.
Tray3 Y Adjust This submenu fine adjusts the registration in the Y axis.	8	0 to 15	Press < ▲ > (increase number) to move the image to the down or press <▼> (decrease number) to move the image to the up. Press <SELECT> to save the selection.
Tray4 X Adjust This submenu fine adjusts the registration in the X axis.	8	0 to 15	Press < ▲ > (increase number) to move the image to the right or press <▼> (decrease number) to move the image to the left. Press <SELECT> to save the selection.
Tray4 Y Adjust This submenu fine adjusts the registration in the Y axis.	8	0 to 15	Press < ▲ > (increase number) to move the image to the down or press <▼> (decrease number) to move the image to the up. Press <SELECT> to save the selection.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Duplex X Adjust This submenu fine adjusts the registration in the X axis.	8	0 to 15	Press < ▲ > (increase number) to move the image to the right or press < ▼ > (decrease number) to move the image to the left. Press <SELECT> to save the selection.
Duplex Y Adjust This submenu fine adjusts the registration in the Y axis.	8	0 to 15	Press < ▲ > (increase number) to move the image to the down or press < ▼ > (decrease number) to move the image to the up. Press <SELECT> to save the selection.
PCL Tray1 ID# PCL escape sequence parameter value.	0001	0000 to 9999	Press < ▲ > or < ▼ > buttons to increase or decrease the digit in the selected position. Press the < ▶ > to select the digit and move to the next position Press <SELECT> after changing the last digit to save this setting.
PCL Tray2 ID# PCL escape sequence parameter value.	0004	0000 to 9999	Press < ▲ > or < ▼ > buttons to increase or decrease the digit in the selected position. Press the < ▶ > to select the digit and move to the next position Press <SELECT> after changing the last digit to save this setting.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
PCL Tray3 ID# PCL escape sequence parameter value.	0005	0000 to 9999	Press < ▲ > or < ▼ > buttons to increase or decrease the digit in the selected position. Press the < ▶ > to select the digit and move to the next position Press <SELECT> after changing the last digit to save this setting.
PCL Tray4 ID# PCL escape sequence parameter value.	0006	0000 to 9999	Press < ▲ > or < ▼ > buttons to increase or decrease the digit in the selected position. Press the < ▶ > to select the digit and move to the next position Press <SELECT> after changing the last digit to save this setting.
PCL Auto ID# PCL escape sequence parameter value.	0007	0000 to 9999	Press < ▲ > or < ▼ > buttons to increase or decrease the digit in the selected position. Press the < ▶ > to select the digit and move to the next position Press <SELECT> after changing the last digit to save this setting.
Hex Dump	Disable	Enable Disable	Press < ▲ > or < ▼ > to toggle between Enable and Disable. Press <SELECT> to save this setting.

DATE/TIME MENU

The **Date/Time Menu** provides access to the printer time settings. Use the following procedure to enter the date/time menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**Date/Time Menu**" is shown on the first line of the display.

3. Press the <►>button to enter the date/time menu.

4. Press the <▲> or <▼> buttons to move through the submenus.

5. Press the <►> button to enter the submenu.

Use the procedures in the following table to access and change the Date/Time Menu settings:

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Month This submenu allows you to set the current month.	Current month	January thru December	Press <▲> or <▼> to scroll through the months. Press <SELECT> to set the month.
Day This submenu allows you to set the current day.	Current day of month	1 to 31	Press <▲> or <▼> to scroll through the days. Press <SELECT> to set the day.
Year This submenu allows you to set the current year.	Current year	2000 - 2099	Press <▲> or <▼> to scroll through the years. Press <SELECT> to set the year.
Hour This submenu allows you to set the current hour.	Current hour	Midnight, 1 AM to 11 AM, Noon, 1 PM to 11 PM	Press <▲> or <▼> to scroll through the hours. Press <SELECT> to set the hour.
Minute This submenu allows you to set the current minute.	Current minute	0 - 59	Press <▲> or <▼> to scroll through the minutes. Press <SELECT> to set the minute.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Second This submenu allows you to set the current second.	Current second	0 - 59	Press < ▲ > or < ▼ > to scroll through the seconds. Press <SELECT> to choose and set the second.
GMT Offset/ Hours This submenu allows you to set time for a different time zone in hours.	0	-12 through + 12	Press < ▲ > or < ▼ > to scroll through the offset selections. Press <SELECT> to set the offset hours.
GMT Offset/ Mins This submenu allows you to set time for a different time zone in minutes.	0	0 30	Press < ▲ > or < ▼ > to toggle between 0 and 30. Press <SELECT> to set the offset hours.
Daylight Saving	On	On Off	Press < ▲ > or < ▼ > to toggle between On and Off. Press <SELECT> to save the selection.

MAINTENANCE MENU

The **Maintenance Menu** provides access to the printer maintenance settings. Use the following procedure to enter the maintenance menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**Maintenance Menu**" is shown on the first line of the display.

3. Press the <►>button to enter the maintenance menu.

4. Press the <▲> or <▼> buttons to move through the submenus.

5. Press the <►> button to enter the submenu.

Use the procedures in the following table to access and change the Maintenance Menu settings:

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Menu Reset	Execute	Execute	Press <SELECT> to reset the menu.
Save Menu	Execute	Execute	Press <SELECT> to save the menu.
Power Save	Disable	Enable Disable	Press <▲> or <▼> to toggle between enable and disable. Press <SELECT> to save the setting.

USAGE MENU

The **Usage Menu** provides access to the printer status. Use the following procedure to enter the usage menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**Usage Menu**" is shown on the first line of the display.

3. Press the <▶> button to enter the usage menu.

4. Press the <▲> or <▼> buttons to move through the submenus.

5. Press the <▶> button to enter the submenu.

Use the procedures in the following table to display the Usage Menu settings:

SUBMENUS	EXAMPLE	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Page Count	123456		Press <SELECT> to display the total prints produced.
Fuser Count	123456	Current Count	Press <SELECT> to display the total prints produced.
Toner	97%		Press <SELECT> to display the percentage of toner remaining.
Tray1 Level	OK	OK Low Empty	Press <SELECT> to display the paper supply level in tray 1.
Tray2 Level	OK	OK Low Empty	Press <SELECT> to display the paper supply level in tray 2.
Tray3 Level	OK	OK Low Empty	Press <SELECT> to display the paper supply level in tray 3.
Tray4 Level	OK	OK Low Empty	Press <SELECT> to display the paper supply level in tray 4.

FLASH MENU

The **Flash Menu** provides access to the flash device. Use the following procedure to enter the flash menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**Flash Menu**" is shown on the first line of the display.

3. Press the <▶> button to enter the flash menu.

4. Press the <▲> or <▼> buttons to move through the submenus.

5. Press the <▶> button to enter the submenu.

Use the procedures in the following table to perform the Flash Menu options.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Data Security When set to ON, as data is deleted, the location where the data was stored, is overwritten by random data. When set to OFF, the data is deleted.	Off	On/Off	Press <▲> or <▼> to toggle between On or OFF. Press <SELECT> to save the selection.
Print This selection will read the selected file from FLASH and print it as if it were being received from one of the input ports.	Selected File	Files	Press <▲> or <▼> to scroll through the files. Press <SELECT> to print the file.

SUBMENUS	DEFAULT SETTING	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Delete This selection will delete the selected file or directory from the FLASH DIMM. To delete an entire directory, you must first delete all the files within that directory.	Selected File	Files	Press < ▲ > or < ▼ > to scroll through the files. Press <SELECT> to delete the file.
Format Usr FLASH This selection will reformat the FLASH DIMM.	Execute	Execute	Press <SELECT> to reformat the FLASH DIMM.
Flash Summary This selection will print a page containing information about the installed FLASH DIMM including a list of all the current existing files and directories.	Execute	Execute	Press <SELECT> to print the FLASH summary.

WARNING

All files on the FLASH DIMM will be deleted if the Format FLASH function is selected.

DISK MENU

The **Disk Menu** provides access to the disk settings. Use the following procedure to enter the disk menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**Disk Menu**" is shown on the first line of the display.

3. Press the <▶> button to enter the disk menu.

4. Press the <▲> or <▼> buttons to move through the submenus.

5. Press the <▶> button to enter the submenu.

Use the procedures in the following table to perform the Disk Menu options.

SUBMENUS	PROCEDURE FOR CHANGING SETTING
Data Security When set to ON, as data is deleted, the location where the data was stored, is overwritten by random data. When set to OFF, the data is deleted.	Press <▲> or <▼> to toggle between On or OFF. Press <SELECT> to save the selection.
Print This selection will read the selected file from Disk and print it as if it were being received from one of the input ports.	Press <▲> or <▼> to scroll through the files. Press <SELECT> to print the file.
Delete This selection will delete the selected disk file or directory from the hard disk. To delete an entire directory, you must first delete all the files within that directory.	Press <▲> or <▼> to scroll through the files. Press <SELECT> to delete the file.

SUBMENUS	PROCEDURE FOR CHANGING SETTING
Format Disk This selection will reformat the hard disk.	Press <SELECT> to reformat the hard disk.
Disk Summary This selection will print a page containing information about the installed hard disk, including a list of all the current existing files and directories.	Press <SELECT> to print the Disk summary.

WARNING
All files on the hard disk will be deleted if the Format Disk function is selected

COMP FLASH MENU

The **Comp Flash Menu** provides access to the compact flash settings. Use the following procedure to enter the compact flash menu:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**Comp Flash Menu**" is shown on the first line of the display.

3. Press the <►> button to enter the compact flash menu.

4. Press the <▲> or <▼> buttons to move through the submenus.

5. Press the <►> button to enter the submenu.

Use the procedures in the following table to perform the Comp Flash Menu options.

SUBMENUS	PROCEDURE FOR CHANGING SETTING
Data Security When set to ON, as data is deleted, the location where the data was stored, is overwritten by random data. When set to OFF, the data is deleted.	Press <▲> or <▼> to toggle between On or OFF. Press <SELECT> to save the selection.
Print This selection will read the selected file from Compact Flash and print it as if it were being received from one of the input ports.	Press <▲> or <▼> to scroll through the files. Press <SELECT> to print the file.
Delete This selection will delete the selected file or directory from the Compact FLASH. To delete an entire directory, you must first delete all the files within that directory.	Press <▲> or <▼> to scroll through the files. Press <SELECT> to delete the file.

SUBMENUS	PROCEDURE FOR CHANGING SETTING
Format Cmp FLASH This selection will reformat the Compact Flash.	Press <SELECT> to reformat the Compact Flash.
CFLASH Summary This selection will print a page containing information about the installed compact flash, including a list of all the current existing files and directories.	Press <SELECT> to print the Compact Flash summary.

WARNING

All files on the compact flash will be deleted if the Format Cmp Flash function is selected

JOB ACCOUNTING

The Job Accounting Menu provides access to functions and settings related to this feature. Use the following procedure to enter the Job Accounting Menu to change the settings or access the functions:

1. Press the **MENU** button on the control panel.

2. Press the $<\blacktriangledown>$ button until the text "**Job Accounting**" is shown on the first line of the display.

3. Press the $<\blacktriangleright>$ button to enter the Job Accounting Menu.

4. Press the $<\blacktriangle>$ or $<\blacktriangledown>$ buttons to move through the submenus.

5. Press the $<\blacktriangleright>$ button to enter a submenu.

Use the procedures in the following table to access and change the Job Accounting settings.

SUBMENU	DEFAULT SETTINGS	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Enabled	No	Yes No	Press $<\blacktriangle>$ or $<\blacktriangledown>$ to toggle between the Yes and No options. Press <SELECT> to save the setting.
Print Info	Execute		Press <SELECT> to begin printing the Job Accounting Summary Report.

SPOOLING

The Spooling Menu provides access to the functions and settings related to this feature. Use the following procedure to enter the Spooling Menu to change the settings or access the functions:

1. Press the **MENU** button on the control panel.

2. Press the <▼> button until the text "**Spooling Menu**" is shown on the first line of the display.

3. Press the <►> button to enter the Spooling Menu.

4. Press the <▲> or <▼> buttons to move through the submenus.

5. Press the <►> button to enter a submenu.

Use the procedures in the following table to access and change the spooling settings.

SUBMENU	DEFAULT SETTINGS	AVAILABLE SETTINGS	PROCEDURE FOR CHANGING SETTING
Start Spooling The spooling feature allows print jobs to be automatically spooled to the Flash memory or Hard Drive.	Off	Spool and Print Spool Only Off	Press <▲> or <▼> to scroll through the settings. Press <SELECT> to save this setting.
Destination The spooling feature allows print jobs to be automatically spooled to the Flash memory or Hard Drive.	Customer Selectable	User Flash Disk Compact Flash	Press <▲> or <▼> to scroll through the settings. Press <SELECT> to save this setting.

TROUBLESHOOTING

WHEN PAPER JAMS

⚠ CAUTION

- **When removing jammed paper, make sure that no pieces of torn paper are left in the machine. A piece of paper remaining in the machine can cause fire. If a sheet of paper is wrapped around the heat roller, or when clearing a jammed paper that is difficult or impossible to see, do not try to remove it by yourself. Doing so can cause injuries or burns. Switch off the machine immediately, and contact your dealer or service.**

Following the message on the control panel, open the cover and remove the jammed paper. If paper is torn, check for any remaining torn pieces of paper.

Cover A

When the optional offset catch tray is installed, fold the tray first before opening cover A.

Open Cover A when a message to remove the drum/toner cartridge is displayed.
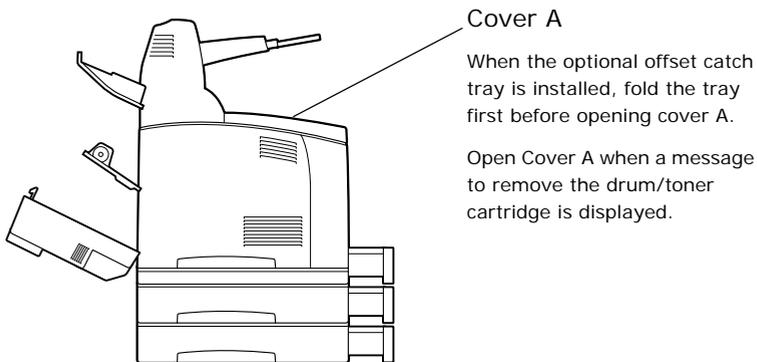
Inside Cover A

Follow the procedure below to remove any jammed paper when the control panel displays the following messages: "Paper Jam Open Cover A" or "Remove cartridge Clear jam"

1. Open cover A, and holding the drum/toner cartridge by the grip, remove it from the printer (1).

2. Turn the roll as shown in the diagram and remove any jammed paper inside (2).

3. Return the drum/toner cartridge and cover A to their original positions.
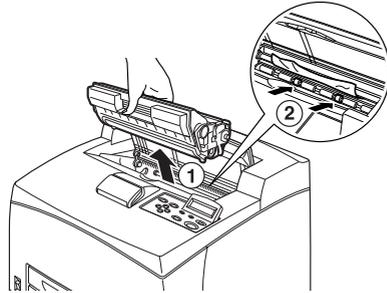
NOTE
> *When the optional offset catch tray is installed, close cover A first before returning the tray to its original position.*

> *If you continue to print with the offset catch tray folded, this may cause a paper jam. Always use the printer with the tray open.*

Inside Paper Tray

Follow the procedure below to remove any jammed paper when messages are displayed. Pull out all trays. Clear jam and close Covers.

Paper Trays

Pull out the tray(s) and follow the procedure to remove paper.
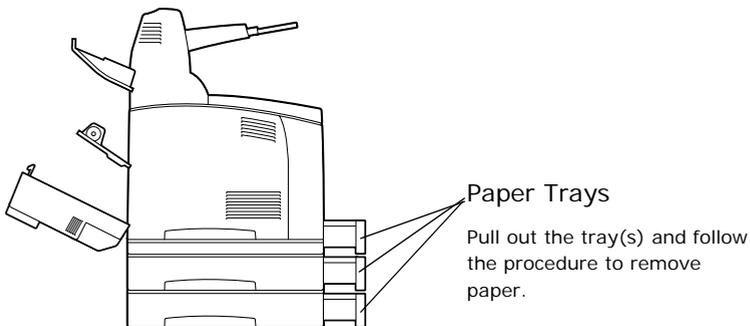
Pulling out paper trays

1. Pull out all paper trays and remove any wrinkled paper.

2. Examine the inside of the printer and remove any jammed paper.
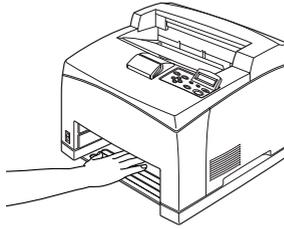
After removing paper,

1. Push the paper trays completely back into the printer.

2. Open and close cover A. Doing this will clear the error message.
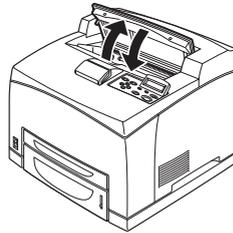
Cover B

Remove the rear tray when opening the back cover.

Raise the lever as shown in the diagram and open the cover B (1). After opening cover B, open the cover of the fuser unit (2) and remove any jammed paper.
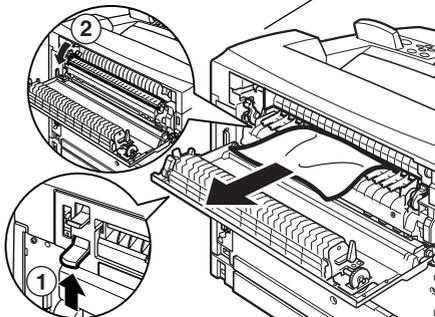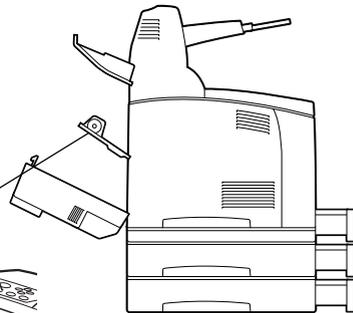
⚠ **CAUTION**

The fuser unit is hot. You may get burned if you touch it directly

Cover C

Duplex unit

Remove the rear tray when opening the back cover.

Push up the lever shown in the diagram to open the cover.
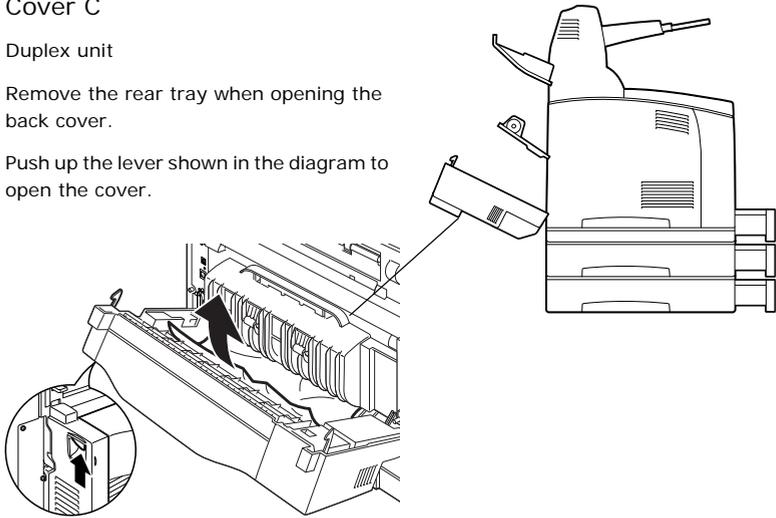
Cover D

Offset catch tray
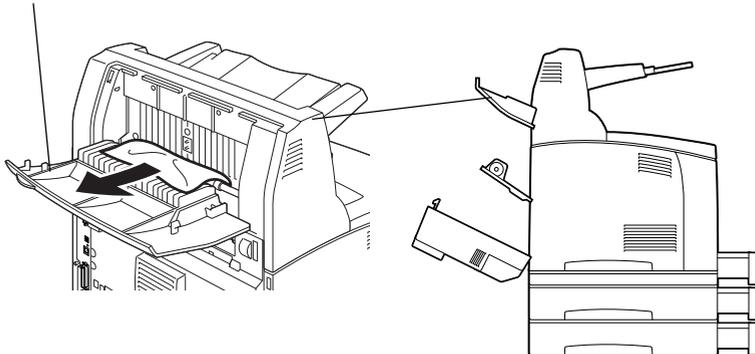
WHEN PROBLEMS OCCUR

Before treating the problem as a machine breakdown, refer to the following table and check the printer condition again.

WARNING

- Never open or remove machine covers that are secured with screws unless specifically instructed in the user guide. A high voltage component can cause electric shock.

- Do not try to alter the machine configuration, or modify any parts. An unauthorized modification can cause smoke or fire.

NOTE

> *Information on incorrect print processing will be stored in the [Error Log]. When no print processing is carried out, print the [Error Log] and check the print status. Print data that cannot be correctly processed may be discarded. Refer to "Information Menu" on page 66 on how to print the [Error Log].*

> *Limitations of the printer and incorrect settings at the printer, computer and server corresponding to your network environment may also result in printing problems.*

SYMPTOM	REASON/ACTION
No power.	Is the power of the printer switched off? Push the power switch to the <|> position to switch on the power. " Switching On and Off the Power" (P. 17)
	Is the power cord disconnected or not securely connected? Switch off the power of the printer and connect the power cord to the power outlet again. Then, switch on the power to the printer. Setup and Quick Reference Guide Connecting the Power Cord to Switch On the Printer
	Is the power cord connected to a power outlet with the correct voltage? Connect the printer exclusively to a power outlet with a suitable voltage and current rating. Setup and Quick Reference Guide Safety Notes

SYMPTOM	REASON/ACTION
Cannot print.	Is the light of the <READY> indicator off? If so, this printer is off-line or in menu setting mode. Fix the problem according to the following display status: "Off-line" Press the <ON LINE> button to exit the off-line mode. Others Press the <MENU> button to exit the menu setting mode. "Main Components and Their Functions" on page 11
	Is there a message displayed on the control panel? Follow the message to rectify the problem. "Message List" on page 121
	When a parallel cable is used for connection, are you using a computer that supports bi-directional communication? By default, the bi-directional communication setting of the printer is set to [Enable]. If the computer is not responding to bi-directional communication, printing cannot be done. In this case, turn the bi-directional communication setting to [Disable] on the control panel and then print again. "Parallel Menu" on page 83
	If insufficient memory, use one of the following methods to rectify the problem. When the printer driver is set to [1200dpi] on the [Graphics] tab, set it to [600dpi]. Install the additional memory (optional) to increase the memory. Reduce the complexity of the print job. [Print Mode] / [Page Print Mode]: Online Help for the printer driver.
Print job sent but the light of the <READY> indicator is not blinking or on.	Is the interface cable disconnected? Switch off the power and check the connection of the interface cable.
	Is the interface configured? Check the port status of the interface.
	Is the computer environment correctly set up? Check the computer environment, such as the printer driver.
Light of <ATTENTION> indicator is on.	Is there an error message displayed on the control panel? Check the displayed message and rectify the error. " Message List" (P. 121)

SYMPTOM	REASON/ACTION
Light of <ATTENTION> indicator is blinking.	An error that you cannot rectify yourself has occurred. Record the displayed error message or error code, switch off the power, pull out the power plug from the outlet, and then contact service.
Although no print job is sent, the message "Printing" is displayed on the control panel (when using the parallel interface).	Did you switch on the power of the computer after switching on the power to the printer? Pressing the <CANCEL> button cancels the printing. Check that you switch on the power of the computer when switching on the power to the printer.
Poor print quality.	There may be a problem with the image. Refer to the section after this, "When the Print Quality is Poor" to rectify the problem. " When the Print Quality is Poor" (P. 117)
The correct characters are not printed (printing garbage).	This printer is printing with non-standard built-in fonts. Check the fonts used in the application. Download the necessary fonts when using PostScript.
The printout is different from what is displayed on the screen.	Did you change the TrueType font settings to printer fonts? Change to TrueType font printing for [Font Substitution] on the [Setup] tab of the printer driver. Online Help for the printer driver
The light of the <READY> indicator is on and blinking but there is no print output.	There are jobs remaining in the printer. Cancel printing or force the remaining data to be printed. To forcibly print the job, press the <ON LINE> button to set the printer in off-line mode, then press the <FEED/SELECT> button. After the job has been printed, press the <ON LINE> button again to return the printer to online mode. When a parallel/USB port is used, data may be transmitted in the middle of a job depending on when the <ON LINE> button is pressed. In this case, subsequent print data received after the <FEED/SELECT> button is pressed, will be recognized as a new job. The data will be printed after the off-line mode has been cancelled. Furthermore, it may not be printed properly. Cancelling printing: " Cancelling/Checking Printing" (P. 19)

SYMPTOM	REASON/ACTION
Printing is taking up a lot of time.	The receive buffer is insufficient. When printing documents of high resolution, reduce the memory capacity of items not in use. It is recommended to disable ports not in use, and channel the memory to other purposes.
	Is the printer driver set to [1200dpi] on the [Graphics] tab? Changing the setting to [600dpi] will shorten the print time. Online Help for the printer driver
	Printing with TrueType fonts may take up printing time. Change the printing method for TrueType fonts in [Specify Font] on the [Detailed Settings] tab of the printer driver. Online Help for the printer driver
Top section of printed document is missing. Text is reduced.	Are the paper tray guides set in the correct positions? Set the length guide and the right width guide in the correct positions. " Loading Paper in a Paper Tray" (P. 49)

SYMPTOM	REASON/ACTION
Paper cannot be fed. Paper jam. Multiple papers are fed. Papers are fed at an angle. Paper is wrinkled.	Is the paper correctly set? Load the paper correctly. For labels, transparencies or envelopes, fan them well first to allow air to enter between each sheet before loading. " Loading Paper" (P. 49)
	Is the paper damp? Replace with paper from a new ream. " Loading Paper" (P. 49)
	Is the correct type of paper used? Load the correct type of paper. " Usable Paper" (P. 45)
	Is the paper tray set correctly? Push the paper tray completely into the printer.
	Is the printer placed on a flat location? Place the printer on a stable surface. Setup and Quick Reference Guide Safety Notes
	Are the paper tray guides set in the correct positions? Set the length guide and right width guide in the correct positions. " Loading Paper in a Paper Tray" (P. 49)
	Have you used any picture papers? Clean the feed roll. " Cleaning the Feed Roll" (P. 154)
	Papers are fed in more than 1 sheet. Multiple feeding of papers may occur before the sheets of paper loaded in the tray are used up. Fan the paper to be loaded and load again. Replenish paper only when all the sheets of the loaded paper are used up.

SYMPTOM	REASON/ACTION
Envelope is wrinkled.	Envelopes can get wrinkled depending on the type used. Open cover B of this printer and lift up the levers at both ends of the fuser unit. The wrinkles can be reduced. After printing the envelope, remember to return the levers to their original positions.
Strange noise.	Is the printer placed on a flat location? Place the printer on a stable surface. Setup and Quick Reference Guide Safety Notes
	Is cover A open? Close cover A securely.
	Is the paper tray set correctly? Push the paper tray completely into the printer.
	Are there foreign objects inside the printer? Switch off the power and remove any foreign objects inside the printer. If the object cannot be removed unless the printer is disassembled, contact service.
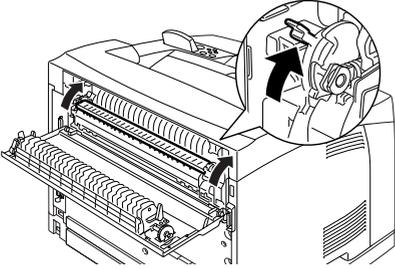
When the Print Quality is Poor

When the print quality is poor, select the closest symptom from the following table to rectify the problem.

If the print quality does not improve after carrying out the appropriate action, contact service.

SYMPTOM	REASON/ACTION
Printing is light. (faded, blurred).	The paper is damp. Replace with paper from a new ream. " Loading Paper" (P. 49)
	The drum/toner cartridge is defective/damaged or there is no more toner inside the cartridge. Replace with a new drum/toner cartridge. " Replacing the Drum/Toner Cartridge" (P. 140)
	The Toner Saving feature is on. Uncheck the [Toner Saving] checkbox on the [Graphics] tab of the printer driver. Online Help for the printer driver
	Levers on both sides of the fuser unit are raised. Open cover B of this printer and push down the levers at both ends of the fuser unit.
Black spots or streaks are printed.	The drum/toner cartridge is defective or damaged. Replace with a new drum/toner cartridge. " Replacing the Drum/Toner Cartridge" (P. 140)
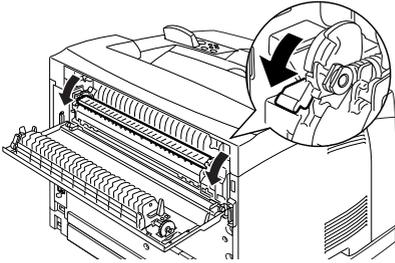
SYMPTOM	REASON/ACTION
Dirt appears at equal intervals.	The feed route of the paper is stained. Print a few pages to remove the stains.
	The drum/toner cartridge is defective or damaged. Replace with a new drum/toner cartridge. " Replacing the Drum/Toner Cartridge" (P. 140)
White dots appear in black filled areas.	The paper used is not suitable. Load the correct type of paper. " Usable Paper" (P. 45)
	The drum/toner cartridge is defective or damaged. Replace with a new drum/toner cartridge. " Replacing the Drum/Toner Cartridge" (P. 140)
Printed image smudges when rubbed with your finger. The toner is not fixed on the paper. Paper is smeared with toner.	The paper loaded in the paper tray does not match the paper type set on the control panel. Set the appropriate paper type of the paper loaded in the paper tray on the control panel. " Usable Paper" (P. 45) " Setting Paper Types" (P. 54)
	The paper is damp. Replace with paper from a new ream. " Loading Paper" (P. 49)
	The paper used is not suitable. Load the correct type of paper. " Usable Paper" (P. 45)
The whole piece of paper is printed black.	The drum/toner cartridge is defective or damaged. Replace with a new drum/toner cartridge. " Replacing the Drum/Toner Cartridge" (P. 140)
	This may be due to breakdown of high voltage power. Contact service.

SYMPTOM	REASON/ACTION
Nothing is printed.	Multiple sheets of paper are fed simultaneously. Fan the paper well and reload. " Loading Paper" (P. 49)
	The drum/toner cartridge is defective/damaged or there is no more toner inside the cartridge. Replace with a new drum/toner cartridge. " Replacing the Drum/Toner Cartridge" (P. 140)
Spots of missing text.	This may be due to breakdown of high voltage power. Contact service.
	The paper is damp. Replace with paper from a new ream. " Loading Paper" (P. 49)
	The paper used is not suitable. Load the correct type of paper. " Usable Paper" (P. 45)
Text is blurred.	The paper used is not suitable. Load the correct type of paper. " Usable Paper" (P. 45)
	The paper is damp. Replace with paper from a new ream. " Loading Paper" (P. 49)
Missing characters throughout the length of the paper.	The drum/toner cartridge is defective/damaged or there is no more toner inside the cartridge. Replace with a new drum/toner cartridge. " Replacing the Drum/Toner Cartridge" (P. 140)
Text or images are printed at an angle.	The paper tray guides are not set in the correct positions. Set the length guide and the right width guide in the correct positions. " Loading Paper in a Paper Tray" (P. 49)

SYMPTOM	REASON/ACTION
Transparencies and envelopes are not printed clearly.	The type of transparency or envelope loaded cannot be used in this printer. Load the correct type of paper. " Usable Paper" (P. 45)
	Check that the paper type on the printer driver or the control panel is correctly set. " Setting Paper Types" (P. 54)
	The Draft Mode feature is turned on and the resolution is set at a low level on the printer driver. Change the settings on the [Detailed Settings] or [Graphics] tab of the printer driver.

MESSAGE LIST

MESSAGE LIST (ALPHABETICAL ORDER)

This section describes the messages displayed on the control panel.

MESSAGE	CONDITION/REASON/ACTION
Bad Action	Format error.
Bad Action Str	Missing or bad action defined for job.
Bad BUFSIZE Cmd	Format error on BUFSIZE command.
Bad COLUMN Cmd	Format error on COLUMN command.
Bad FEntry CMD	Unrecognized Form Entry command.
Bad FORMLINES	Format error on FORMLINES command.
Bad Header Cmd	Unrecognized Header command.
Bad LINE Cmd	Format error on LINE command.
Bad PAGE Cmd	Format error on PAGE command.
Bad PORT Cmd	Format error on PORT command.
Bad Target Str	TARGET string format error.
Bad TEntry CMD	Unrecognized Target Entry command.
Call Service	Help message used for service-type errors.
Cancel Job	Confirmation prompt used when CANCEL is pressed.
Canceling Job	An operator-requested Cancel is in progress.
Clock Not Set	Real Time Clock has not bee initialized.
Close Duplexer	Recovery message displayed when duplex door is open.
Close Rear Cover	Recovery message displayed when rear cover is open.
Close Top Cover	Recovery message displayed when top cover is open.
Code FLASH Error	Defective Code Flash - user forced into Firmware Upgrade.
Command Format	Bad command format.
Completed	Display for the files status.
Cover Open	Recovery action displayed when cover is open
Disk Unformatted	Error message displayed when unformatted disk is detected.

MESSAGE	CONDITION/REASON/ACTION
Duplex	Paper jam detected. Error message displayed for Duplex Tray.
Duplex Failure	Duplex Unit Failure.
End Job	Confirmation prompt used when CANCEL is pressed.
Engine NV Fail	Error message displayed for Engine NV Failure.
Exit Jam	Paper jam detected
Face Up Failure	Error message displayed for Face-Up tray unit failure.
Fan Failure	Error message displayed for Fan Failure.
File Error	Status display for "File Error xx" (where xx is error code).
File Not Found	Could not find a filter configuration file.
Filter Error	Displayed on line 1, detail of error on line 2.
Firmware Upgrade	Indicates "Firmware Upgrade" mode is active.
Format Error	Failure during attempted format of flash.
Formatting	Status display for file status.
Fuser Failure	Error message for Fuser Failure.
ID Mismatch	Displayed for OEM ID Mismatch on EP Cartridge.
Initializing	Displayed during Power-on Initialization.
Insert Tray	Recovery action displayed when tray needs inserted
Install/Reset	Recovery message displayed for ROS failure.
Load Paper	Un-specific "Load Paper" prompt.
Load Paper Tray 1	A user prompt that paper needs to be put into Tray 1.
Load Paper Tray 2	A user prompt that paper needs to be put into Tray 2.
Load Paper Tray 3	A user prompt that paper needs to be put into Tray 3.
Load Paper Tray 4	A user prompt that paper needs to be put into Tray 4.
Lower Switch	Face Up Tray Failure.
Main Motor Fail	Displayed for Main Motor Failure.
Maintenance Reqd	Used for error/warning when Maintenance is required (replace fuser/rollers/etc.)
Misfeed Jam	Paper jam detected inside the printer.
Net Comm Error	Error Message used to report Network Interface Communication Failure.

MESSAGE	CONDITION/REASON/ACTION
Net: Error	Used for display of Network Interface error code (Net1: Error yy)
NVRAM Failure	NVRAM failure message.
Offset Tray	Optional face-down output tray (offset-capable)
Offset Tray Fail	Error message displayed for Offset Tray Unit Failure.
Offset Tray Full	Error message displayed when optional output bin is full
Offset Tray Jam	Paper jam detected. Error message displayed for Offset Tray Jam
Out of Memory	Error displayed when there is insufficient memory to print a page or job.
Out of Toner	Error message is displayed when the toner cartridge is empty.
Output Tray Full	Error message displayed when output tray is full
Panel Disabled	String used when panel is being Disabled.
Panel Enabled	String used when panel is being Enabled.
Panel Locked	Message "flashed" when user requests panel function that has been disabled.
Paper Low Tray 1	Tray 1 is low on paper.
Paper Low Tray 2	Tray 2 is low on paper.
Paper Low Tray 3	Tray 3 is low on paper.
Paper Low Tray 4	Tray 4 is low on paper.
Paper Out Tray 1	Tray 1 has no paper
Paper Out Tray 2	Tray 2 has no paper
Paper Out Tray 3	Tray 3 has no paper
Paper Out Tray 4	Tray 4 has no paper
Paper Size Error	Used to report Paper Size Error has occurred.
Power Saver Mode	Displayed when printer is "Warming Up"
Press ONLINE	Prompts the user to press the "ONLINE" button
Processing	Printer is actively processing job data.
Receive	Status display for file status "Receive xx" (where xx is percentage received).
Remove Paper	A help message to removed paper
Replace EP Cart	A help message to replace the EP Cartridge.

MESSAGE	CONDITION/REASON/ACTION
ROS Failure	Error message displayed for ROS failure.
SELECT to Format	User prompt displayed when unformatted disk detected.
Service Error	Prefix string used to report Service errors ("Service Error xx").
Toner Low	Toner cartridge is low
Toner Missing	Error message displayed when Toner cartridge is missing.
Toner Out	Toner Out message.
Too Many Filters	Too many filters defined.
Tray 1 Missing	Warning message displayed when Tray 1 is missing
Tray 2 Missing	Warning message displayed when Tray 2 is missing
Tray 3 Missing	Warning message displayed when Tray 3 is missing
Tray 4 Missing	Warning message displayed when Tray 4 is missing
User FLASH	String used to describe FLASH used for USER storage.
User FLASH Error	Displayed when unformatted disk detected.
Waiting	Printer has completed processing data, but has not detected end-of-job.
Warming Up	Displayed when printer is "Warming Up".
Write	Status display for file status "Write xx" (where xx is percentage received).

NETWORK RELATED TROUBLES

USING TCP/IP

This section describes how to identify the cause and fix an error when a problem occurs in the TCP/IP environment. For the troubles that occur in other environments, refer to the Network Print Environment User Guide.

When the printer is not printing

This section explains how to fix the printer status when "Unable to print (xxxx Error)" appears in the window displayed by clicking [Start] > [Settings] > [Printers].

Cause	Verification	Action
The printer and the computer are connected to different networks.	Check with your network system administrator to verify that the network connecting the computer and that connecting the printer are linked by a router or a gateway.	Connect this printer directly to the network connecting the computer.
An error has occurred in the network between the computer and the printer. Connection cannot be established.	"Unable to print (NetworkError)" is displayed.	Ask your network system administrator to check the network for errors.
The printer is switched off after a print instruction has been sent from a computer. Or the print instruction is sent to the printer which is switched off.	"Unable to print (NetworkError)" is displayed. Check whether the printer is switched on.	Switch on the printer.

Cause	Verification	Action
Print instructions from multiple computers are sent to the printer at the same time.	"Unable to print (NetworkError)" is displayed.	None (Printing will be resumed automatically).
Printing files cannot be spooled due to insufficient disk capacity of the computer.	"Unable to print (SpoolError)" is displayed. Double-click [My Computer] and right-click the disk (example: C drive) installed with Windows® 98, Windows® Me. Select [Properties] from the menu displayed and then check the free space available.	After deleting unnecessary files to increase the free space available, select [Pause] from the [Documents] menu of the [Printers] window to enable printing to restart.

FOR WINDOWS NT 4. 0/WINDOWS 98/WINDOWS 2000/WINDOWS XP

When the printer is not printing

CAUSE	VERIFICATION	ACTION
Incorrect IP address.	Ask your network administrator to check that the IP address is correct.	Specify the correct IP address for the printer.
When [LPD Spool] is set to [Memory], the print data sent from a computer in a single print instruction has exceeded the upper limit of the receiving capacity.	Check the memory capacity of [LPD Spool] and compare it with the print data which was sent in the single print instruction.	1. If a single file of print data has exceeded the upper limit of the memory capacity, divide the file into smaller ones and try again.
		2. If multiple files have exceeded the upper limit of memory capacity, reduce the number of files to be sent at one time.
An irrecoverable error has occurred during printing.	Check if an error is displayed on the control panel.	Switch off and then on the printer.
The transport protocol is different from that of the computer.	Check the selected transport protocol.	Select the same transport protocol as that of the computer.

USING PRINTER WEB PAGE

SYMPTOM	REASON/ACTION
Cannot be connected to Printer Web Page.	Is the printer working correctly? Check if the power of the printer is switched on.
	Is Printer Web Page enabled? Print out the [System Settings List] to check.
	Is the URL correctly entered? Check the URL again. If connection fails, enter the IP address to connect.
	Is the proxy server used? Some proxy servers do not allow this feature. Try connection without using the proxy server. Refer to: • Online Help for the web browser
The "Please wait" message is displayed throughout the Web browser.	Wait for a while as instructed. If the problem persists, refresh the Web browser. If nothing happens, check if the printer is working properly.
The [Refresh] button is not working.	Are you using the supported OS and Web browser? Refer to "Checking Printer Status via E-mail" on page 146 to check whether the OS and web browser you are using are supported.
Selecting the left frame menu does not change the display.	
The screen display is distorted.	Change the window size of the web browser.
The latest information is not displayed.	Click [Refresh].
The new settings were not reflected by clicking the [Submit] button.	Is the entered value correct? If an invalid value is entered, it will be automatically changed to a value within the range.
Clicking the [Submit] button prompts messages such as "no data" or "the server has returned invalid or unrecognizable response".	Are the user name and password correct? Enter the correct user name and password.
	Switch off and then on the printer.

MAIL RELATED TROUBLES

This section explains how to fix the troubles when the mail notification services and E-mail Printing features are used.

SYMPTOM	REASON/ACTION
Cannot perform E-mail printing.	Check the following settings: • Is the printer e-mail address specified? • Is [Enable] set for [Receive E-mail]? • Is the server IP address specified correctly? • Are the POP user name and password specified correctly?
	Is the server working correctly? Check with your network administrator.
During E-mail printing, the attached PDF file was not printed.	If the memory capacity is insufficient, it may not be printed. If you print big attachments frequently, we recommend adding memory.
During mail notification services, the printer status was not notified by e-mail.	Check the following settings: • Is the printer e-mail address specified? • Is the POP3 server IP address (if [POP3] is selected as the receive protocol) specified correctly? • Are the POP user name and password specified correctly? • Are the items to be notified set correctly? • Are the destination e-mail addresses entered
	Is the POP server working correctly? Check with your network administrator.

NETWORKS AND SYSTEMS

CHECKING/MANAGING THE PRINTER STATUS ON THE COMPUTER

When the printer is installed in a TCP/IP environment, you can check printer status and configure settings using a web browser on a network computer.

You can also check the remaining volume of consumables and paper loaded in this printer via the network.

SETTINGS FOR NETWORK

This section explains the environment and settings required for using the network.

> *NOTE*
> > *Network commands are not available when the printer is used as a local printer.*

COMPUTER OSS

- Microsoft® Windows® 98 Operating System

- Microsoft® Windows® Me Operating System

- Microsoft® Windows NT® Workstation 4.0 (Service Pack 4 or later)

- Microsoft® Windows® 2000 Professional

- Microsoft® Windows® 2000 Server

- Microsoft® Windows® Server 2003 (cluster and virtual servers)

- Microsoft® Windows® XP Professional

- Microsoft® Windows® XP Home Edition

- Mac OS 9, 10 or later

BROWSERS

- Netscape

- Internet Explorer

- Opera

- Firefox

WEB BROWSER SETTINGS

You are recommended to bypass the proxy server and specify the printer's address directly.

> *NOTE*
> *> Specifying the printer's address via the proxy server may slow down the response or disable the display of the screen.*
>
> *> For details on the settings, refer to the Online Help for your web browser.*

For the network to work properly, the following settings must be configured on the web browser.

For Netscape Communicator

- Settings that enable Java Script are selected.

- To compare the document in the cache and the document on the network, either the setting that compares them every session or the setting that compares them every time is selected.

For Internet Explorer

- Settings that enable active script are selected for the security level.

- For newer versions of stored pages, either the setting that displays it or the setting that checks it every time Internet Explorer starts is selected.

Setting IP Address

To use Printer Web Page, the IP address of this printer must be set and the printer web page [Web] enable under the [Network] menu. When [Printer Web Page] is disabled, set it to [Enable] on the control panel.

To use Printer Web Page, follow the procedures below to activate the web browser.

1.   Activate the computer and web browser.

2.   At the address column of the web browser, enter the IP address or URL of the printer and then press the <Enter> key.

• Example of an IP address entry   • Example of a URL entry

Back ▾ ⊗ · ✗ ⊠ ⌂ 🔍 Search	Back ▾ ⊗ · ✗ ⊠ ⌂ 🔍 Search
Address http://129.249.242.178/	Address http://printer1.aaa.bbb.oki.co.jp/
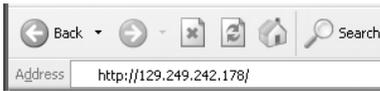
The [Status] screen appears.

3.   If you want to configure each settings of the printer, press [Login] to login to this printer.

> *NOTE*
> **>** *The user name (administrator's name) for login to the printer is fixed at "root". And the password is the last six characters of the MAC address (factory defaults), the password is CASE Sensitive.*

IP FILTER FEATURE VIA IP ADDRESS LIST

This feature allows you to register the IP addresses of computers that can be used in this printer. This will limit IP address used for receiving print data.

From the printer's web page:

1. Click [Network].

2. Click [IP Filtering] from the left menu.

3. Select the [Enable] and click the [Edit] button.

4. Set the IP address permitted for TCP/IP connection in [Permitted IP Address].

5. Set the address mask in [IP Mask] corresponding to the registered IP address in [Permitted IP Address]. For example, if the [Permitted IP Address] is 129.249.110.23 and the [IP Mask] is 255.255.255.0, the IP address for receiving print data is 129.249.110.* (* is from 1 to 254). This means that IP addresses from 129.249.110.1 to 129.249.110.254 can be received.

6. Click [Submit] to reboot the printer.

NOVELL

NETWARE

QUEUE-BASED PRINTING

A NetWare printing system allows for creation and management of queues for printing and other tasks.

Queue Management System (QMS) is the original name for queue-based printing. It is not used in current documentation, but exists still in some system messages.

Introduction

This section describes the features and capabilities of the B6250/ B6500 controller that enable support for Novell network printing.

The B6250/B6500 controller firmware has been designed to support versions 5.1 and higher of the Novell NetWare operating system. Some features may operate with earlier versions of NetWare.

The B6250/B6500 has been designed to operate with the following Novell Printing mechanisms:

- NPRINTER
- PSERVER
- NDPS
- Banner Pages

NOVELL PRINTING MECHANISMS

NPRINTER Printing

NPRINTER is a type of non-NDPS printing. With NPRINTER (called RPRINTER in pre-4.x versions of NetWare), a Novell print server module running on a NetWare server manages a print queue to which clients send their print jobs. The Novell print server sends data from the queue to the B6250/B6500 acting as a network printer.

The protocol requires the printer to log in to the network and check in with its server. Thus, the printer must be told the name of the print server used. The provided print server name should be the same as the NetWare printer object that represents it.

The Print Server must be selected by the PSERVER NetWare Loadable Module (NLM) prior to printing. After the printer has made the connection to the print server, the print server can begin sending it print jobs from the associated queues.

The client must have Novell network printing (at least non-NDPS) installed to print to this printer. The client should also be logged onto the Novell network.

The client connects to the associated server print queue. When using the Add Printer interface, the client would choose a network printer and navigate to the print queue which the user could think of as a printer. The B6250/B6500 print driver for the client operating system driver is used. As an alternative to using Add Printer, the user can simply navigate to the print queue, right click it and choose connect.

NPRINTER mode requires IPX to be used between the printer and the Novell server. However, clients can use TCP/IP to print jobs. That is, TCP/IP can be used as the transport protocol between the client and the server hosting the print queue.

PSERVER Printing

PSERVER is a type of non-NDPS printing. It does not look much different from NPRINTER to the user since it is still queue-based and the user still connects to the queue. However, the server is now embedded in the printer. The print queue is still on the server, but the PSERVER NLM module need not be loaded (unless there are other printers on the network that need it).   Instead, the printer reads the data directly from the queue on the server.

The print server name should be the same as the NetWare print server object that represents it.

After the printer has made the connection to the print queue it can begin servicing jobs in the queues.

The client must have Novell network printing (at least non-NDPS) installed to print to this printer. The client should also be logged onto the Novell network.

The client connects to the associated server print queue. That is, when using the Add Printer interface, the client would choose a network printer and navigate to the print queue which the user could think of as a printer. The standard print driver for the client operating system driver is used. As an alternative to using Add Printer, the user can simply navigate to the print queue, right click it and choose connect.

NDPS Printing

The B6250/B6500 printer can be used in a NDPS environment. The B6250/B6500 support for NDPS uses the Novell gateway (NDPSGW). By using this gateway, the printer needs no special Novell-unique feature to implement NDPS printing. The printer is simply installed as a generic IP device to the Netware server.

NOVELL PROTOCOLS

The table below shows the network link-layer protocols used for each of the Novell printing mechanisms supported.

PRINTING MECHANISM	IPX/SPX	TCP/IP
NPRINTER	Supported	Not Supported
PSERVER	Supported	Not Supported
NDPS/NEPS	Not Supported	Supported
iPRINT	Not Supported	Supported

TCP/IP Protocol

The current B6250/B6500 controller includes TCP/IP support and this is essentially unchanged as a result of the Novell printing capabilities.

IPX/SPX/NCP Network Protocols

Certain Novell networking protocols are required to support certain printing mechanisms. These protocols include the following:

IPX– This is a Novell link layer protocol for connectionless datagram message delivery.

SPX– This is a Novell, connection-oriented protocol that is layered on top of IPX.

NCP (NetWare Core Protocols): This protocol is used to allow NetWare clients to send requests and receive responses from a NetWare server.

Auto-reattach to file server

The B6250/B6500 monitors the network status to the Novell server. This status is displayed on the Network Status page. This is not a real-time status, but indicates that network failure will be reported after multiple attempts to talk to the server have timed out.

Banner Pages

Banner pages are supported in all printing modes discussed in this document. Banners can be configured and controlled using the NetWare server and client utilities.

DAILY CARE

TONER COVERAGE AVERAGE

This feature shows the current running average of toner use per page and is shown along with "Remaining Toner:".

To view this information:

1. From the printer web page select "Printer Status" located under the " Status" listing on the left side of the window

2. The "Toner Coverage Average" bar is located on the right side of the window.

3. Selecting "Supplies" shows "Remaining Toner" and "Toner Coverage Average".

4. This window also displays:

- Total Page Count - Total number of pages printed

- Fuser Page Count - Total number of pages run through the Fuser

- Toner Page Count - The number of pages currently applied to calculating toner cartridge life

Toner Coverage Page Count - The number of pages used in calculating the percentage of Toner Coverage Area.

REPLACING THE DRUM/TONER CARTRIDGE

The drum/toner cartridge includes the toner and the photosensitive drum. When it is about time to replace the drum/toner cartridge, the following message will appear on the control panel.

After the message is displayed, you can continue to print normally for about 200 sheets.

During this period, prepare a new drum/toner cartridge.

When this message is displayed, replace the drum/toner cartridge.

| Online
Toner Low | → | Toner Out
Replace EP Cartridge | Printing
stops |

NOTE
> *The possible number of pages that can be printed with the drum/toner cartridge is the number of pages printed continuously at a print ratio of 5% using A4 size paper.*

> *The possible number of pages that can be printed differs according to factors such as the print contents, paper size, paper type, environment used, and the frequency of switching on/off the power of the machine.*

> *You can set whether to stop printing when the drum/toner cartridge is due for replacement.*

CAUTION ON HANDLING THE DRUM/TONER CARTRIDGE

When handling the drum/toner cartridge, take note of the following points:

WARNING
> **Never throw a drum/toner cartridge into an open flame. It can cause an explosion and you can get burnt.**

- Do not subject it to direct sunlight or strong light.

- When installing the drum/toner cartridge, select a location not subject to strong light and try to finish the installation within 5 minutes.

- Do not touch the surface of the photosensitive drum. Do not let the drum/toner cartridge stand or place it upside down. The drum might be damaged.

- A drum shutter protects the photosensitive drum from light. Do not open the drum shutter.

- Although the toner is not harmful to the body, wash it off immediately if your hands or clothes are stained with it.

- It is recommended to use the drum/toner cartridge within 1 year after opening it.

REPLACING THE DRUM/TONER CARTRIDGE

1. Remove any output paper and open cover A.

   NOTE
   > *When the offset catch tray (optional) is installed, fold the tray first before opening cover A.*

Important:
- Do not touch any parts inside the printer.
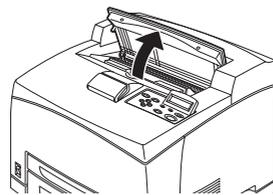
2. Hold the drum/toner cartridge by the grip and pull it out slowly.

NOTE
> *To prevent the toner from dirtying the floor, lay a piece of paper on the floor first before putting the drum/toner cartridge down.*
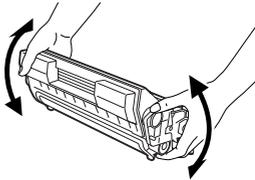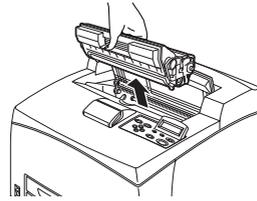
3. Take the new drum/toner cartridge out of the packaging box and shake it 7 to 8 times as shown in the diagram.

Important:
• If the toner is not evenly spread out, the print quality may be reduced. Also, if you did not shake the drum/toner cartridge well, there may be operating noise or the interior of the cartridge may be damaged during operation.

• Do not touch the surface of the photosensitive drum.
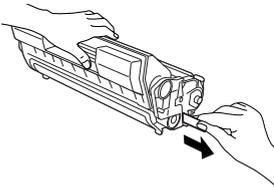
4. Place the drum/toner cartridge on a flat surface and pull out the seal horizontally.

Important:
• When pulling out the seal, pull it out horizontally. The tape might break if it is pulled out diagonally.

• After the seal has been pulled out, do not shake or bump the drum/toner cartridge.

5. Hold the drum/toner cartridge by the grip and insert it into the slot inside the printer.

Important:
• Do not touch any parts inside the printer.

• Ensure that the drum/toner cartridge is firmly set.

• After opening cover A, remove any dust or stains inside the printer with a dry clean cloth.
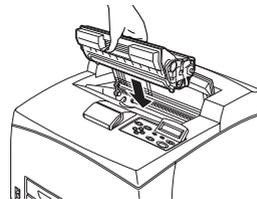
6. Close cover A securely.

Important:
- If the offset catch tray is folded as in step 1, close cover A and then return the tray to its original position.

- If you continue to print with the offset catch tray folded, this may cause a paper jam. Always use the printer with the tray open.

PRINTING REPORTS/LISTS

This section explains the types of reports/lists and how to print them.

TYPES OF REPORTS/LISTS

Other than print data from the computer, this printer has the feature to print the following reports/lists:

- Print Menu Map
- Print PCL Fonts
- Print PS Fonts
- Print FX Fonts
- Print Demo

See: "Information Menu" on page 66

Print the report/list by operating the control panel.

1. Press the <MENU> button to display the Menu screen.

2. Press the < ▲ > or < ▼ > button until [Information Menu] is displayed, then press the < ► > button.

3. Press the < ▲ > or < ▼ > button until the desired report/list is displayed, then press the <Select> button.

4. The selected report/list will be printed.

5. When printing has completed, press the <CANCEL> button to exit the menu system.

PRINTING JOB ACCOUNTING SUMMARY

Prints a summary of all jobs printed. Use the following procedure to enter the Job Accounting Menu and print the summary

1. Press the **MENU** button on the control panel.

2. Press the < ▼ > button until the text "**Job Accounting**" is shown on the first line of the display.

3. Press the < ► > button to enter the Job Accounting Menu.

4. Press the < ▲ > or < ▼ > buttons to move through the submenus until [Print Info] is displayed.

5. Press the <SELECT> button to print the summary.

REPORTS	DESCRIPTION
Job Accounting Summary. See "Job Accounting" on page 105	Prints a summary of all jobs.

PRINTING STORAGE SUMMARY

This selection will print a page containing information about the selected storage device, including a list of all the current existing files and directories. Use the following procedure to enter the menu:

1. Press the **MENU** button on the control panel.

2. Press the < ▼ > button until the text "**Disk Menu,**" "Flash Menu," or "Comp Flash Menu" is shown on the first line of the display.

3. Press the < ▶ > button to enter the selected menu.

4. Press the < ▲ > or < ▼ > buttons to move through the submenus until [XXXX Summary] is displayed (XXXX = Disc, Flash, or Compact Flash).

5. Press the <SELECT> button to print the summary.

REPORTS	DESCRIPTION
Storage Summary	Prints summary information about the storage device including a list of directories and files. See: • "Flash Menu" on page 99 • "Disk Menu" on page 101 • "Comp FLASH Menu" on page 103

CHECKING PRINTER STATUS VIA E-MAIL

When connected to a network environment where sending and receiving of e-mails is possible, this printer can send an email with printer status information.

This feature is known as Mail Notice Service.

ABOUT EMAIL SEND SERVICE

The types of information that can be sent through Email Send are listed below.

TYPES OF INFORMATION	DESCRIPTION
Job Completion	Notifies the status of print jobs (completed, cancelled or confirm) from the computer (set in driver).
Printer status	Off-line Consumable message Toner low / toner out Paper low / paper out Paper Jam Cover open Stacker error Mass storage error Recoverable error Service call required

SETTINGS FOR EMAIL SEND

To use the Email Send, settings on the network and e-mail environment are required. Check with your network administrator whether these settings are completed.

SETTING THE EMAIL SEND ENVIRONMENT (AT THIS PRINTER)

Configure the following items according to your email environment under [Network], [Email] [Send Settings].

Configure the email Alert settings for this device to send Email alerts for various error conditions under [Network], [Email] [Alert Settings]
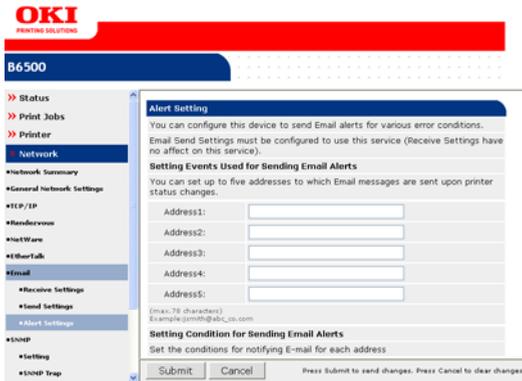
NOTE

> You can set up to five Email addresses to which status changes are sent.

NOTE

> After configuring the settings, always click [Submit] and switch off/on the printer to reboot.

SETTING THE PRINTER DRIVER PROPERTIES

Configure the following settings in the properties of the PCL printer driver in order to receive e-mails regarding print job results. This section explains the procedure using Windows XP as an example.

1. Click [Start] on the taskbar, then select [Printers and Faxes].

2. Click the icon of this printer, and then select [Printing Preferences] from the [File] menu.

3. Select the [Job Options] tab.

4. Check the [Email on completion] check box and enter an email address for notification [Email Address].

5. Click [Printing Preferences] on the [General] tab.
The [Printing Preferences] dialog box will be displayed.

6. Click the [Job Options] tab.

7. Select the [Email on Job Completion] check box.

8. Enter the e-mail address for notification in [E-mail Address].

9. Click [OK].

JOB ACCOUNTING

With Job Accounting enabled this tab allows additional user identification through the use of a "User Name" and a "Job Account ID".

To access this tab:

1. Click [Start] on the task bar, then select [Printers and Faxes].

2. Click the icon of this printer, and then select [Properties] from the [File] menu.

3. Select the [Job Accounting] tab. The window has two fields:

    • User Name (displayed in Job Accounting Summary from the printer).

    • Job Account ID (Used as part of the OKI Job Accounting package.

    Note: See OKI Job Accounting information for additional detail.

CHECKING PRINTED PAGES

This section explains how to check the total number of printed pages.

CHECKING TOTAL PRINTED PAGES ON METER

The total number of printed pages for different meters can be checked on the display of the control panel.

The following procedure shows how to check the meter.

1. Press the <MENU> button to display the Menu screen.

2. Press the < ▲ > or < ▼ > button until [Usage Menu] is displayed and then press the < ▶ > button.

3. Press the < ▲ > or < ▼ > button until [Page Count] is displayed.

4. After checking, press the <CANCEL> button.

CLEANING THE PRINTER

This section describes how to clean the printer in order to maintain it in good condition and print clean printouts all the time.

⚠ CAUTION
Be sure to switch off and unplug the machine before accessing the interior of the machine for cleaning, maintenance, or fault clearance. Access to a live machine's interior can cause electric shock.

CLEANING THE EXTERIOR

Clean the exterior of the printer about once a month. Wipe the parts with a wet but well-wrung soft cloth. Then wipe with another dry soft cloth. For stubborn stains, moisten a soft cloth with a small amount of neutral detergent, and gently wipe the stain off.

Important:
- Do not spray the detergent directly on the printer. The liquid detergent may enter the printer through a gap and cause problems. Never use cleaning agents other than water or neutral detergent.
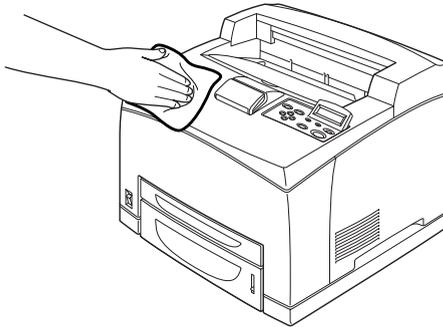
CLEANING THE INTERIOR

After clearing paper jams or replacing the drum/toner cartridge, inspect the inside of the printer before closing cover A.

⚠ CAUTION
Never touch a labelled area found on or near the heat roller. You can get burned. If a sheet of paper is wrapped around the heat roller, do not try to remove it by yourself to avoid

injuries or burns. Switch off the machine immediately, and contact service.

- Remove any remaining pieces of paper.
- Remove any dust or stains with a clean dry cloth.
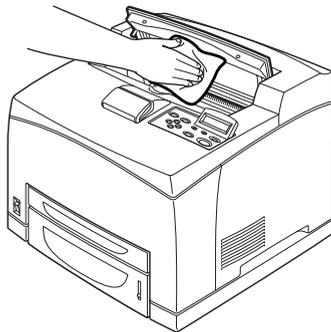
CLEANING THE FEED ROLL

When feeding cannot be done, follow the procedure below to wipe the feed roll gently with a well-wrung soft cloth.

There are feed rolls in the interior of this printer (two locations, total of four), tray module (one location) and paper tray (one location).

Feed rolls

Inside of machine (two locations)

Tray module (one Location)

Paper tray (one location)
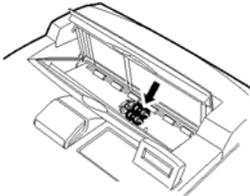
Open cover A and after removing the drum/toner cartridge, clean the feed roll.
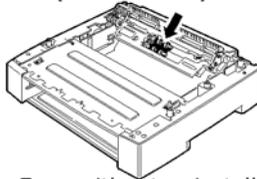
Even without uninstalling the tray module, you can clean the feed roll after pulling out the paper tray.
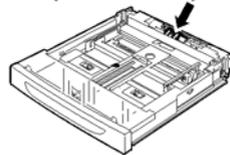
Pull out the paper tray and clean the feed roll.

The following procedure explains how to clean the feed roll set in the paper tray. Follow this procedure also when cleaning the feed rolls inside of the printer and the tray module.

NOTE
> *The feed roll is a regular replacement part.*

1. Pull the paper tray out of the printer.
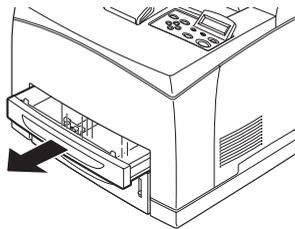
2. While pushing the retard part (see right diagram) down (1), widen the tab on the feed roll to loosen it (2) and then slowly remove the feed roll from the shaft of the paper tray (3).
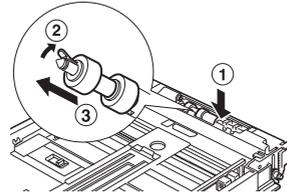
3. Wipe the rubber parts with a wet but well-wrung soft cloth.

4. Turn the short tab of the feed roll to the right and slowly push it onto the shaft of the paper tray.
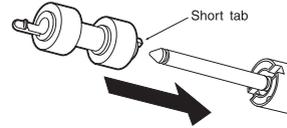
By aligning the slot of the feed roll with that of the shaft, push the feed roll completely in so that the short tab fits into the slot of the shaft.
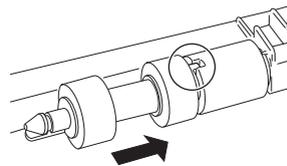
5. Push the paper tray completely into the printer.

WHEN MOVING THE PRINTER

Carry out the following procedure when moving the printer.

⚠ **CAUTION**

- **The machine, without the optional accessories, paper trays, consumables and paper, weighs 18.8 kg. When moving the equipment, make sure that there are two or more persons carrying it.**

- **When lifting the machine, be sure to observe the following points, failure to do so may cause the machine to fall and result in injuries.**

    - **2 persons, one facing the front of the machine (control panel) and the other facing the back, should firmly grip the recessed areas on the bottom part of both sides of the machine. Never try to lift the machine by gripping any other areas.**

    - **Bend your knees to avoid possible injuries to your back.**

    - **Do not tilt the machine more than 10 degrees**
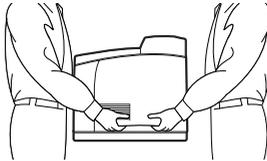
Important:
- If the duplex unit (optional) or Letter / A4 universal tray (optional) has been installed, uninstall it before moving the printer. If these are not fixed securely to the printer, they may fall to the ground and cause injuries.

1. Press the power switch of this printer to the <O> position to switch the power off.

2. Remove all cords, such as the power cord and interface cables.

3. Remove any paper in the center output tray and return the paper stopper to its original position if it's raised.

4. Pull out the paper tray from the printer and remove any paper in the tray.
Keep the paper wrapped and away from humidity and dirt.

5. Push the paper tray completely into the printer.

6. Open cover..
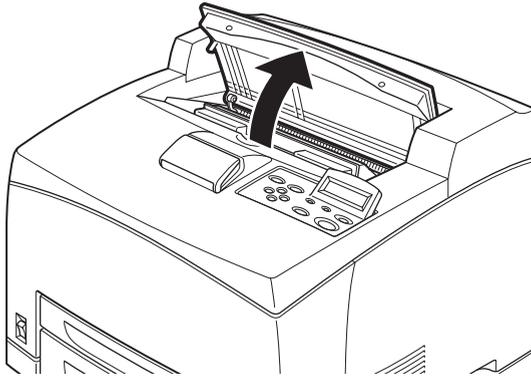
Important:
- Do not touch any parts inside the printer.

7. Hold the drum/toner cartridge by the grip and pull it out slowly.

Important:
- It is necessary to uninstall the drum/toner cartridge. If you move the printer with the drum/toner cartridge installed, the toner may spill out inside of the machine.

- Do not shake the drum/toner cartridge after uninstalling it from the printer. The toner will spill.

- Put the uninstalled drum/toner cartridge back into its original aluminium bag or wrap it with a thick cloth to prevent it from being exposed to strong light.

8. Close cover A securely.

9. Lift the printer and move it gently. If the printer is to be moved over a long distance, pack it inside a box.

APPENDIX A

PCL EMULATION SYMBOL SETS

10U: PC-8 CP437
11U: PC-8 D/N
12U: PC-850
17U: PC-852
9T: PC-Turkish
19U: WIN Latin1
9E: WIN Latin2
5T: WIN Latin5
7J: Desk Top
10J: PS Text
13J: Ventura Int
14J: Ventura US
6J: Microsoft Pub
8M: Math-8
5M: PS Math
6M: Ventura Math
15U: Pi Font
1U: Legal
1E: ISO4 UK
0U: ISO6 ASCII
0S: ISO11 Swedish
0I: ISO15 Italian
2S: ISO17 Spanish
1G: ISO21 German
0D: ISO60 Norweg
1F: ISO69 French
9U: WIN3.0 Latin1
2U: ISO2 IRV
3S: ISO10 S/F
0K: ISO14 JASCII
4S: ISO16 PORTUG
0F: ISO25 FRENCH
2K: ISO57 CHINESE
1D: ISO61 Nor.V2
5S: ISO84 PORTUG

6S: ISO85 SPANISH
OG: GERMAN
1S: SPANISH
90D: ISO DUTCH
0E: ROMAN EXT
91S: ISO SWEDISH 1
92S: ISO SWEDISH 2
93S: ISO SWEDISH 3
2038Z: IBM-437
2039Z: IBM-850
2037Z: IBM-860
2036Z: IBM-863
2035Z: IBM-865
8Q: PC SET 1
9Q: PC EXT US
2033Z: PCEXT D/N
2034Z: PCSET2 US
2032Z: PCSET2 DN
12J: MC TEXT
2044Z: CWI HUNG
2040Z: PC-857 TK
2022Z: KAMENICKY
2020Z: HEBREW NC
2021Z: HEBREW OC
2023Z: PLSKA MAZ
6N: ISO L6
2019Z: WIN3.1 HEB
15Y: HP ZIP
9R: WIN3.1 CYR
3R: PC-866
2042Z: WIN3.1GRK
2041Z: PC-869
2031Z: PC-855
579L: WINGDINGS
19M: SYMBOL

2024Z: GREEK-437
2025Z: GRK-437CY
2026Z: GREEK 928
2018Z: SERCROAT 2
2017Z: UKRAINIAN
2016Z: BULGARIAN
0O: OCR-A
1O: OCR-B
10L: DINGBATS
9J: PC-1004
19L: WIN BALTIC
26U: PC-775
2010Z: SERCROAT 1
9N: ISO L9
2009Z: GREEK-737
2008Z: ARABIC 864
8U: Roman 8
0N: ISO 8859-1
2N: ISO 8859-2
5N: ISO 8859-5

APPENDIX B

INTRODUCTION

The Barcode feature provides access to scalable, configured barcode printing via special PCL font selection sequences. Such barcodes can be printed in a variety of sizes and rotations, with automatic generation of check characters, etc. upon request. The barcodes are rendered algorithmically; there are no "barcode fonts" used.

This feature offers better barcode support than bar coding fonts, due to the fact that bar thickness, wide-to-narrow ratios, check digit support, etc. can be supported in ways that are not available with bar coding fonts. Also, there are some barcodes (like Interleaved 2 of 5) that cannot conveniently be supported with barcode fonts.

HOW BARCODING WORKS

The use of the B6250/B6500 PCL5 bar codes requires the user to insert certain special font selection commands in the PCL5 data stream. Special typefaces are reserved for activation of the processor.

There are several steps that are taken in order to process barcode data.

1.   Activation is by selection of one of the reserved typeface numbers in the standard PCL typeface selection escape sequence <ESC>(s#T. In general, the reserved typefaces are all in the range of 24580 to 24800.
     Additional barcode parameters are specified by way of the other standard font selection commands (see page 161 for descriptions of how these commands are interpreted):

     • <ESC>(s#P

     • <ESC>(s#H

     • <ESC>(s#V

     • <ESC>(s#S

     • <ESC>(s#B

2.   After the barcode parameters have been selected, subsequent text data will be gathered for processing. The end of bar code data is determined according to the bar code type:

In general:
If the barcode numeric only data, the end of barcode data is indicated by space/CR/LF/FF/Escape code.
If the barcode is alphanumeric, end of data is indicated by CR/LF/FF/Escape code.

Some bar code formats support use of the full 128-character ASCII character set. (128A, 128auto, EAN/UCC128). If you want to print special characters (ASCII code < 32) with those bar codes, a Transparent Print Data PCL sequence (Esc&p#X, where # is replaced with the number of following data bytes) must follow immediately the font selection sequence. This is the only way to know how many characters have to be printed as bar codes. Please analyse the sample Code/EAN/UCC 128 test files for more information.

3. Once the data is gathered, it is analysed to verify it fits in the bar code specs:
    Correct data size EAN 8/13 and UPC A/E have fixed lengths etc…).
    Valid data: some systems, like UPC-E, accept only specially structured data.

4. Then the barcode data is compressed, if necessary. Some code systems, like UPC-E, print compressed data, while ours allows the barcode data to be precompressed (6-characters input) or uncompressed (10 characters input). If uncompressed data is provided, but the barcode requires the data to be compressed, then compression is done automatically.

5. If necessary, check digits are generated. Most barcode types require check digits in the generated barcode. The user has the option to either provide the checksum with the barcode data characters, or have them generated automatically. In the case of UPC/EAN barcodes, if the user provides checksum characters, they are discarded, and one will be generated.

6. This feature then renders the barcode itself at the current cursor position, in the current text direction (only 90-degree rotations are supported. The parameters specified by the data stream determine the final properties of the rendered barcode.

INTERPRETATION OF FONT SELECTION PARAMETERS

When the barcode properties are being determined, the standard PCL font selection parameters take on new meanings that are different from their traditional ones. Detailed descriptions of these parameter follows.

<ESC>(#t#b#s#p#h#V

"t" parameter	Selects the barcode symbology to use when a reserved typeface ID is selected.
"p" parameter	Defines if/how text is printed with bars
"h" parameter	Defines what font to use for that text
"y" parameter	Bar code vertical size, in points (like fonts). 1 point size = 1/72 inch.
"b" parameter	Black bars widths (has up to 4 values separated by commas or semicolons)
"s" parameter	White bars widths (has up to 4 values separated by commas or semicolons)

BARCODE SYMBOLOGY

T parameter Esc(s#T (Typeface): Controls what bar code system to use (see table below)

Note: for the bar code types with a "+CHK" in their names (IS's

TYPEFACE ID	SYMBOLOGY	TYPEFACE ID	SYMBOLOGY
24600	UPC-A	24620	EAN/JAN-8
24601	UPC-A +2	24621	EAN/JAN-8 +2
24602	UPC-A +5	24622	EAN/JAN-8 +5
24610	UPC-E	24630	EAN/JAN-13
24611	UPC-E +2	24631	EAN/JAN-13 +2
24612	UPC-E +5	24632	EAN/JAN-13 +5
24640	25 (2 of 5) interleaved	24670	39 (3 of 9)
24641	25 interleaved + CHK	24671	39 + CHK
24700	128 autoswitch	24770	ZIP+4 POSTNET 5
24701	128 A	24771	ZIP+4 POSTNET 9
24702	128 B	24772	ZIP+4 POSTNET 11
24704	128 C	24750	CODABAR
24710	UCC-128	24751	CODABAR+CHK
24720	EAN-128	24690	Code 93

24641 and 24751), it is required that the checksum character is included in the barcode data, because the checksum character for these types will not be generated automaticall.

HUMAN READABLE INTERPRETATION (HRI) OUTPUT CONTROL

"P" parameter Esc(s#p

The base value of the "P" parameter indicates if and how the HRI is printed:

> **0** Use default value (depends on symbology used)
>
> **1** Don't print human readable text
>
> **2** Print human readable text embedded below barcode
>
> **3** Print human readable text half embedded below barcode

4 Print human readable text completely below code

5 Print human readable text above code

Below are some options for this parameter.

Add 10 to print UPC/EAN/JAN checksum middle right rather than bottom right of bar code (only applies to UPC/EAN/JAN bar codes).

Add 10 to print start & end _*_characters with 39 bar code text (only applies to code 39 bar codes).

Note: The first "add 10" is a description of how adding 10 is interpreted with UPC/EAN/JAN (ONLY!) barcodes are printed. The second "add 10" is a description of how it is interpreted for CODE39 ONLY.

Add 100 to print checksum character with text.

Example: Print checksum character and text half-embedded below barcode: 103p.

HUMAN READABLE INTERPRETATION (HRI) FONT CONTROL

"H" parameter Esc(s#h

This value control the font used for the printing of the HRI text. The value represents the typeface of font to use:

0 Use Courier to print text (default)

1 Use Letter Gothic to print text

2 Use Univers to print text

3 Use Univers Condensed to print text

4 Use CG-Times to print text

5 Use OCR-B to print text (great with UPC/EAN)

The size of the font used for HRI is automatically selected based on the size of the barcode.

BARCODE HEIGHT SPECIFICATION

"V" parameter Esc(s#v

Short bar height in points (1/72 inch). If the specified value is smaller than the Minimum allowable height for the selected barcode type, the allowed minimum value will be substituted.

Example: Bar code in point size 87: 87v

BAR WIDTH CONFIGURATION

"B" parameter Esc(s#1,#2,#3,#4b or Esc(s#1;#2b

This parameter can perform one of two functions:

> Function 1: Specify the exact number of dots to use for bar widths

> Function 2: Specify bar width parameters in terms of unit module width and wide-to-narrow ratio

To perform the Function 1, the values in the escape sequence must be separated by the comma character. When performing Function 1, it is also necessary to set the space width by setting the "S" parameter value (see below)

To perform Function 2, the values in the escape sequence must be separated by the semicolon character. When specifying bar width information in this manner, it is not necessary to specify the "S" parameter for space width, as space width generation is controlled automatically.

Function 2, when used, enables high precision barcode rendering. *Specifying bar parameters in this manner is preferred* so as to be independent of the particular device being used for barcode printing.

Different printing devices have differing amounts of dot gain that can affect the actual width of generated bars and spaces. The printer takes this dot gain into account to accurately control bar and space sizes.

FUNCTION 1 PARAMETER INTERPRETATION

In Function 1, the parameters represent the width of drawn bars in 600 DPI units. The number of parameters required depends on the symbology being used:

UPC, EAN, Code 128: Four parameters are required. The parameters indicate how wide to render drawn bars in 1/600th inch units for stacks of 1, 2, 3, and 4 modules, respectively.

Code 39,
I-25 Two parameters are required. The parameters indicate the width of the narrow and wide bars, respectively.

FUNCTION 2 PARAMETER INTERPRETATION

In Function 2, the first parameter specifies the desired unit module width in 0.001 inch units (mils). The second parameter indicates the desired wide-to-narrow ratio. The value to enter here is an integer representing the desired ratio multiplied by 100.

For example, to specify a unit module width of 17 mils and a wide-to-narrow ratio of 2.5, you would use the following sequence:

Esc(s17;250B

The second parameter is optional. If omitted, a traditional default wide-to-narrow ratio will be used (actual value depends on the barcode type).

SPACE WIDTH CONFIGURATION

"S" parameter Esc(s#1,#2,#3,#4s

This parameter must be set when using "Function 1" of the Bar Width Configuration (or "B" parameter (see description above)

The parameters are interpreted exactly as in Function 1 of the "B" parameter, except that this parameter specifies the width of the spaces in the barcode, as rather than the width of the bars.

Note: There is no "function 2" variety of this command.

"S" parameter example:

The syntax for the "S" parameter is always in "function 1" form (see "function 1" of "B parameter description). The "S" parameter would only be used when using "function 1" of the "b" parameter. Therefore, the example would really look like this:

(When included in the same escape command:)

<ESC>(s8,16,24,32b8,16,24,32S

(and when done separately)

<ESC>(s8,16,24,32B<ESC>(s8,16,24,32S

Code 128 Control Codes

Code 128 has five non-data special control codes, called FUNCTION CODES, and 2 control codes to switch from one 128 set (A, B or C) to another one. The switching control codes are used to force one 128 set. As an example, the string <<123456>> can be printed with sets A, B and C. Inserting a character with ASCII value = 134 at the beginning of the string will force the barcode feature to use the set B of code 128. Note that both Code 128 Autoswitch and EAN 128 analyze the data and optimise the barcode length by switching automatically between sets A, B and C. EAN128 and UCC-128 already include the FNC1 code as the first character: you should not send it with the data. Special control codes are inserted by passing the following special decimal characters in the bar code:

- 128 = SHIFT
- 129 = FNC 1
- 130 = FNC 2
- 131 = FNC 3
- 132 = FNC 4
- 133 = CODE A
- 134 = CODE B
- 135 = CODE C

PCL Escape Sequence Example

A valid PCL escape sequence to select a barcode is like the following:

<Esc>(s4p102h40v12;250b24670T

Parameter Meaning

24670T (Symbology: code 39)

4p (Readable text below bars, without start/stop chars(*))

102h HRI text in Univers Regular

40v Bars height: 40 points 40/72=0.555 inches 40*2.54/72=1.41 cm

12;250b Unit module width 12 mils, wide-to-narrow ration of 2.50

ANOTHER PCL ESCAPE SEQUENCE EXAMPLE

PARAMETER MEANING

A valid PCL escape sequence to select a barcode is like the following:

<Esc>(s0p5h40v8,16,24,32b8,16,24,32s24600T

24670T Symbology: UPC-A

0p Default HRI

5h HRI text in OCRB

40v Bars height: 40 points 40/72=0.555 inches 40*2.54/72=1.41 cm

8,16,24,32b Use thicknesses of 8, 16, 24, and 32 dots for 1-, 2-, 3-, and 4-module bars, respectively.

8,16,24,32 Use thicknesses of 8, 16, 24, and 32 dots for 1-, 2-, 3-, and 4-module spaces, respectively.

INDEX

Duplex unit connector 11
E
Email 147
E-mail Printing 37
Email Send 147
F
<FEED/SELECT> button 14, 57
forced printing 113
fuser unit 13
I
IP address
    limit IP address (IP Filter) 133
L
LCD display 14, 57
loading paper
    loading envelope 23
    loading paper in paper tray 49
    loading transparencies 25
long size 26
M
Mail 146
Mail Notice Service 146
<MENU> button 14, 57
message list 121
N
Network connector 12
O
offset catch tray 12
<ON LINE> button 14, 58
[Options] tab 20
P
Paper 11
paper
    storing and handling paper 49

W