

**OKI**<sup>®</sup>

*Executive Series™*  
**1220n**



# User's Guide: Windows

*Oki, Network Solutions  
for a Global Society*

**59356001**

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# Introduction

Your new printer is designed with advanced features to give you clear, vibrant color printing and crisp black and white pages at high speed on a range of print media.

## Features:

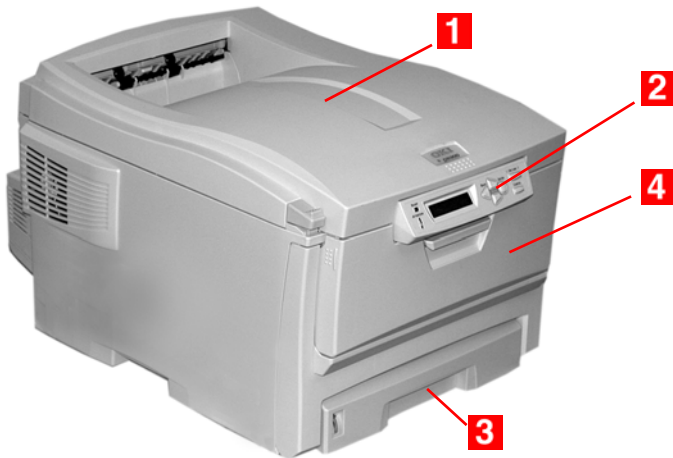
- Up to 12 pages per minute in full color.
- Up to 20 pages per minute in black and white.
- 600 dpi (dots per inch) print resolution.
- Single Pass Color Digital LED technology.
- Postscript emulation; PCL 5C and Epson FX emulations.
- 10 Base-T and 100 Base-TX network connection.
- Secure Print feature for printing confidential documents over the network
- Proof and Print feature which allows you to proof out one copy of your document before printing multiple copies. If the proof is okay, you can print the balance of the copies immediately without having to reprocess the document.

## Options:

- Duplex Unit for automatic two-sided printing: P/N 42158401—see page 247.
- Additional Memory—see page 245.
  - 64 MB (P/N 70043001)
  - 128 MB (P/N 70043101)
  - 256 MB (P/N 70043201).
- Internal 10 GB Hard Disk Drive for storage of overlays, macros and downloadable fonts, etc.: P/N 70043501—see page 248.
- Second Paper Tray, capacity 530 sheets 20-lb. paper:P/N 42158501—see page 246.

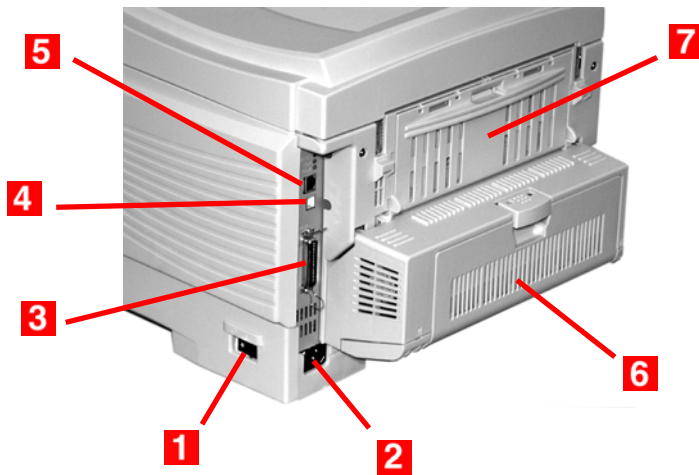
# Printer Overview

## Front View



- 1 Output Stacker, face down**  
Standard printed copy delivery point. Holds up to 250 sheets of 20-lb. US Bond (75 g/m<sup>2</sup>) paper.
- 2 Operator Panel**  
Menu driven operator controls and LCD display panel (can be changed to show different languages: see page 10).
- 3 PaperTray**  
Standard blank paper tray. Holds up to 300 sheets of 20-lb. US Bond (75 g/m<sup>2</sup>) paper.
- 4 Multi-Purpose Tray**  
Used for feeding heavier paper stocks, envelopes and other special media. Also for manual feeding of single sheets when required.

## Rear View



- 1** On/Off Switch
- 2** Socket for Power Cord
- 3** Parallel Interface
- 4** USB Interface
- 5** Network Interface
- 6** *Optional Duplex Unit*
- 7** **Rear Stacker** (face up), Capacity 100 sheets 20-lb. US Bond (75 g/m<sup>2</sup>) paper

When the rear paper stacker is folded down, paper exits the printer through the rear of the printer and is stacked here face up. This is mainly used for heavy print media. When used in conjunction with the Multi-Purpose Tray, the paper path through the printer is essentially straight. This avoids bending the paper around curves in the paper path and makes paper feeding more reliable.



## Notes, Cautions, etc.

### NOTE

A note appears like this. A note provides additional information to supplement the main text which helps you to use and understand the product.

### CAUTION!

A caution appears like this. A caution provides additional information which, if ignored, may result in equipment malfunction or damage.

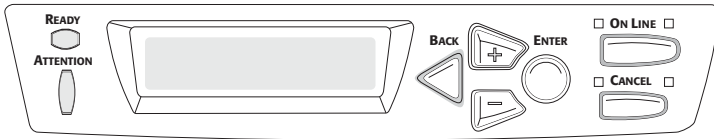
### WARNING!

*A warning appears like this. A warning provides additional information which, if ignored, may result in a risk of personal injury.*

### Important!

An important message appears like this. An important message provides supplemental information which can prevent potential problems.

# Changing the display language



1. Press **MENU +** repeatedly until you see

---

SYSTEM CONFIG MENU  
POWER SAVE DELAY TIME

---

2. Press **ENTER**.
3. Press **MENU +** repeatedly until you see

---

SYSTEM CONFIG MENU  
LANGUAGE

---

4. Press **ENTER**.
5. Press **MENU +** and/or **MENU -** repeatedly until you see the language you wish to select.
6. Press **ENTER** to select this language.
7. Press **ON LINE** to exit the menu and return the printer to standby.

# Media Recommendations

Your printer can handle a variety of print media, including a range of paper weights and sizes, transparencies, labels and envelopes. This section provides general advice on choice and use of media.

## CAUTION!

**Print media must be able to withstand 446°F (230°C) for 0.2 second.**

## Media Weight Designations

Weight Designation	Weight	Feed Tray	Duplexer?	Exit Tray
Light	16-19 lb. US Bond (60-71 g/m <sup>2</sup> )	Tray 1 Tray 2	No	Top <sup>a</sup> Rear <sup>b</sup>
Medium	20-27 lb. US Bond (75-101 g/m <sup>2</sup> )	Tray 1 Tray 2 MP Tray	Yes	Top Rear
Heavy	28-32 lb. US Bond (105-120 g/m <sup>2</sup> )	Tray 1 Tray 2 MP Tray	Yes (restricted to 28 lb. maximum)	Rear Only
Ultra Heavy	33-54 lb. US Bond (124-203 g/m <sup>2</sup> )	Tray 2 <sup>c</sup> MP Tray	No	Rear Only

- a. Face Down Stacker
- b. Face Up Stacker
- c. 47 lb. (177 g/m<sup>2</sup>) maximum for Tray 2

# Media Types

## Paper

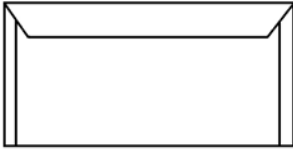
The best performance is obtained when using paper designed for use in copiers and laser printers. Suitable types include:

- Hammermill® Laser Printer Radiant White, 24 lb. US Bond (90 g/m<sup>2</sup>)
- Xerox® 4024, 20 lb. US Bond (75 g/m<sup>2</sup>)
- Oki® 52206101 Bright White Proofing Paper, 32 lb. US Bond (120 g/m<sup>2</sup>)

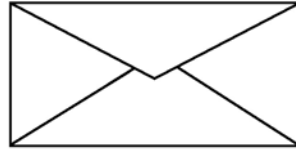
## Recommendations

- Check <http://my.okidata.com> for the latest information on recommended papers for your printer.
- Paper should be stored flat, away from moisture, direct sunlight and heat sources.
- **The use of heavily laid or textured paper will seriously affect the life of the image drum and give poor print quality.** Print quality can be improved by changing the media setting to 'Ultra Heavy.' However, this will reduce the output speed and prevent the use of the duplex option.
- *Avoid:*
  - Damp, damaged or curled paper.
  - Very smooth, shiny or glossy paper.
  - Heavily embossed letterhead paper, very rough paper or paper that has a large grain difference between the two sides.
  - Paper with perforations, cut-outs or ragged edges.
  - Carbon paper, recycled paper, NCR paper, photosensitive paper, pressure sensitive paper or thermal transfer paper.

## Envelopes



**Yes**



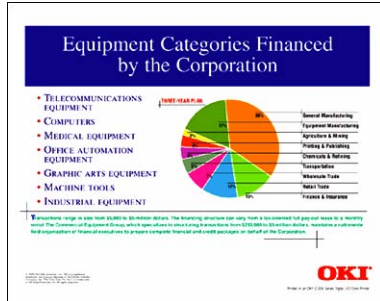
**No**

- Use only recommended envelopes (Oki 52206301 and 52206302: see “Selecting/Using OKI Print Media” in your *Handy Reference Guide* for more information).
- Envelopes should be stored flat and away from moisture, direct sunlight and heat sources.
- Don’t use envelopes with windows or metal clasps.
- Don’t use damp, damaged or curled envelopes.

### **CAUTION**

**Print media must be able to withstand 446°F (230°C) for 0.2 second.**

## Transparencies



- Use only recommended transparencies (3M CG3720, Oki 52205701).
- Avoid office transparencies designed for use by hand with marker pens. *These will melt in the fuser and cause damage.*

## Labels

- Avery 5161 White Laser Labels (letter size) work well with your printer. Check <http://my.okidata.com> for the latest information on media for your printer.
- Use only labels designed for use in color laser printers and photocopiers.

### CAUTION!

- **Labels should cover the entire carrier sheet.**
- **Carrier sheet or adhesive must not be exposed to any part of the printer**

# Media: Tray 1 and Optional Tray 2

## Media Sizes: Trays 1 & 2

Paper size	Feed		Exit	
	Tray 1	Tray 2	Top <sup>a</sup>	Rear <sup>b</sup>
Letter (8½ x 11")	S, D <sup>c</sup>	S, D	S, D	S, D
Legal-14 (8½ x 14")	S, D	S, D	S, D	S, D
Legal-13.5 (8½ x 13.5")	S, D	S, D	S, D	S, D
Legal-13 (8½ x 13")	S, D	S, D	S, D	S, D
Executive (7¼ x 10½")	S, D	S, D	S, D	S, D
A4 (210 x 297 mm)	S, D	S, D	S, D	S, D
A5 (145 x 210 mm)	S, D	S, D	S, D	S, D
A6 (105 x 148 mm)	S	Not Usable.	Not Usable.	S
B5 (182 x 257 mm)	S, D	S, D	S, D	S, D
Custom	S: min. 3.94 x 5.83" [100 x 148 mm], max. 8.5 x 14" [215.9 x 355.6 mm]	S: min. 3.94 x 8.27" [100 x 210 mm], max. 8.5 x 14" [215.9 x 355.6 mm]	S	Not Usable.

- Use the Top Exit (Face Down Stacker) only for paper up to 47 lb. US Bond (98 lb. Index, 177 g/m<sup>2</sup>).
- Switch to the Rear Exit (Face Up Stacker) when you are printing paper heavier than 47 lb. US Bond (98 lb. Index, 177 g/m<sup>2</sup>).
- S = Simplex; D = Duplex (printing on both sides)

## Auto Switching

If you have identical paper stock loaded in the Multi-Purpose Tray or the optional Second Paper Tray, you can have the printer automatically switch to the other tray when the current tray runs out of paper. This function is enabled in the Print Menu (see the “Menu Functions” section of this manual).

## Media: Multi-Purpose Tray

Use the Multi-Purpose (MP) Tray for printing card stock, labels, envelopes and transparencies. Or load a stack of letterhead stationery to switch to as needed.

- A stack of media about 3/8" (10 mm) high can be loaded into the MP Tray, equivalent to about 10 envelopes or 50 transparencies.
- Media should be loaded print side *up*, top edge facing into the printer.
- Generally, the rear exit (Face Up Stacker) is used with the MP Tray.

### Important!

The duplex unit can be used for paper only, at weights up to 28 lb. US Bond (105 g/m<sup>2</sup> metric, 58 lb. Index). Do not use the duplex (two-sided printing) function for labels, envelopes, transparencies, or paper heavier than 28 lb. US Bond.



## Media Sizes: Multi-Purpose Tray

Paper size	Feed	Exit	
	MP Tray	Rear <sup>a</sup>	Top <sup>b</sup>
Letter (8½ x 11")	Yes	Yes	Yes
Legal-14 (8½ x 14")	Yes	Yes	Yes
Legal-13.5 (8½ x 13.5")	Yes	Yes	Yes
Legal-13 (8½ x 13")	Yes	Yes	Yes
Executive (7¼ x 10½")	Yes	Yes	Yes
A4 (210 x 297 mm)	Yes	Yes	Yes
A5 (145 x 210 mm)	Yes	Yes	Yes
B5 (182 x 257 mm)	Yes	Yes	Yes
Envelopes (COM-10)	Yes	Yes	No
Custom: min. 3.94 to 5.83" [100 x 148 mm]; max. 8½ x 14" [216 x 356 mm], or banner <sup>c</sup>	Yes	Yes	No

- a. Use the Rear Exit (Face Up Stacker) for heavy paper, transparencies, envelopes, and labels.
- b. Use the Top Exit (Face Down Stacker) only for paper up to 47 lb. US Bond (98 lb. Index, 177 g/m<sup>2</sup>).
- c. Banner specifications:
  - Length: up to 47¼" (1.2 m)
  - Width Range = 8¼ to 8½" (210 to 215.9 mm)
  - Weight Range = 28 to 34 lb. US Bond (105 to 128 g/m<sup>2</sup>)
  - Path = Rear Exit (Face Up Stacker) only
  - Feed one sheet at a time.

## Top Exit (Face Down Stacker)

- Holds up to 250 sheets of 20-lb. US Bond (42 lb. Index, 75 g/m<sup>2</sup> metric) standard paper.
- Handles paper stocks up to 47 lb. US Bond (98 lb. Index, 176 g/m<sup>2</sup> metric).
- Pages are printed in reading order (page 1 first; last page on top, facing down).

## Rear Exit (Face Up Stacker)

The face up stacker at the rear of the printer should be opened and the tray extension pulled out when required for use. In this condition paper will exit via this path, regardless of driver settings.

- The face up stacker can hold up to 100 sheets of 20-lb. US Bond (42 lb. Index, 75 g/m<sup>2</sup>) standard paper.
- Handles stocks up to 54 lb. US Bond (113 lb. Index, 113 lb. Index, 203 g/m<sup>2</sup> metric).
- Papers are printed face up: for multi-page documents, select reverse order printing in your application Print dialog box so that the stack is in correct order.

### NOTE

**Always use this stacker and the Multi-Purpose Tray for paper stocks heavier than 47 lb. US Bond (98 lb. Index, 176 g/m<sup>2</sup> metric).**

## Optional Duplex Unit

This option provides automatic two-sided printing on the same range of paper sizes as optional Tray 2 (i.e. all Tray 1 sizes except A6), using paper from 20 to 28-lb. US Bond (42 to 58 lb. Index, 75 to 105 g/m<sup>2</sup> metric).

# Loading Paper

## Trays 1 and 2

### NOTE

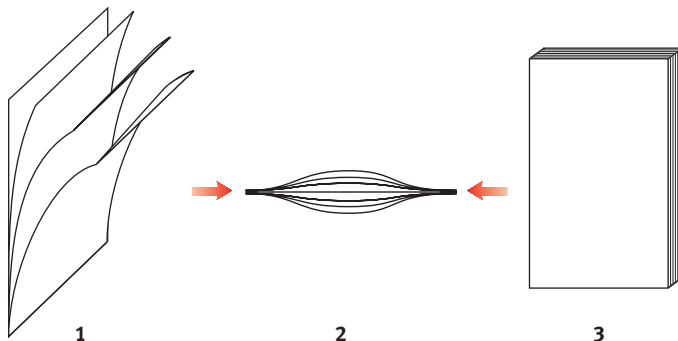
If you have the optional second paper tray installed:

- If you are printing from the 1st (upper) tray, you can pull out the 2nd (lower) tray and reload it while the printer is printing.
- If you are printing from the 2nd (lower) tray, *do not pull out the 1st (upper) tray while printing*. This will cause a paper jam.

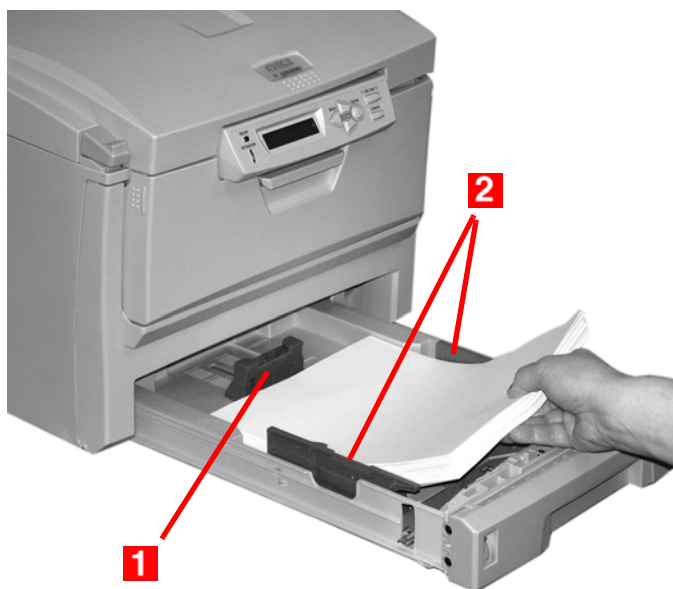
1. Remove the paper tray from the printer.



2. Fan the paper to be loaded at the edges (1) and in the middle (2), then tap the edges of the stack on a flat surface to make it flush again (3).

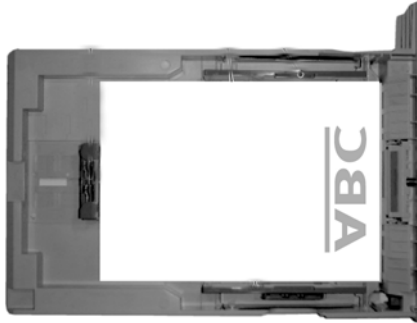


3. Load paper print side down, making sure the rear stopper (1) and paper guides (2) are snug against the paper.



## NOTE

Load letterhead paper face *down*, with the top edge aimed towards the front of the printer.



4. Gently close the paper tray.



## NOTE

To prevent paper jams:

- Do not leave space between the paper and the guides and rear stopper.
- Do not overfill the paper tray. Capacity depends on the type of paper stock.
- Do not load damaged paper.
- Do not load paper of different sizes or types at the same time.
- Do not pull the paper tray out during printing (except as described above for the 2nd tray).

## Multi-Purpose (MP) Tray

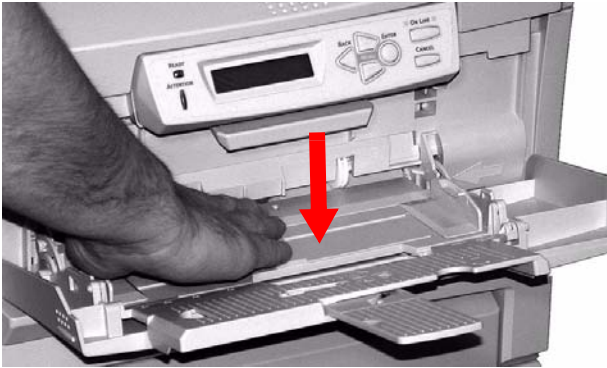
### NOTE

The MP Tray will take a stack of media about 3/8" (10 mm) high, equivalent to about 10 envelopes or 50 transparencies. Do not exceed the 3/8" (10 mm) media stack height.

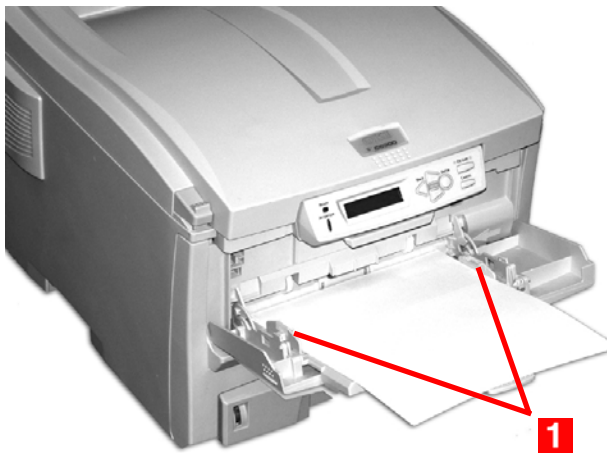
1. Open the MP Tray.



2. Press down on the loading platform.



3. Load the print media and adjust the guides (1) to the size media being used.



- Letterhead stationery:
  - For single-sided printing, load with pre-printed side *up* and the top edge *into* the printer.
  - For two-sided (duplex) printing, load with pre-printed side *down* and top edge *away from* the printer. (Optional duplex unit must be installed.)
- Envelopes: load print side up (flap down) with top edge to the left and short edge into the printer. Do not select duplex printing on envelopes.



4. Press the blue tray latch (1) toward the paper stack to lift the paper platform into the feed position.



# Postscript Emulation Driver

The Windows Postscript emulation printer driver contains settings for many of the same items as are found in the operator panel menus. Where items in the printer driver are the same as those in the operator panel menus, and you print documents from Windows, *the settings in the Windows printer driver will override those items in the operator panel menus.*

## Windows 98/Me

### NOTE

**The illustrations in this section show the Windows Me Operating System. The Windows 98 operating system may appear slightly different, but the principles are the same.**

- N-Up Printing: multiple pages on one sheet (see page 27)
- Custom Page Sizes (see page 28)
- Selecting Print Resolution (see page 32)
- Duplex Printing (see page 34)
- Collating (see page 36)
- Secure Print: printing confidential documents (see page 37)
- Storing Print Files to the Hard Disk Drive (see page 41)

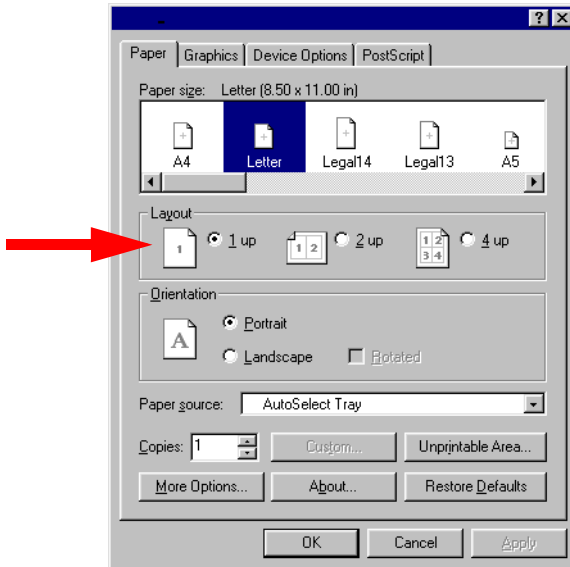
### NOTE

**Most applications allow the printer properties to be accessed from within the document print dialog box.**

## N-Up Printing (Printing Multiple Pages on One Sheet) Me and 98

You can print either 2 or 4 pages on one sheet of paper.

1. Open the file in your application and select **File** → **Print**.
2. In the Print dialog box, click the Postscript emulation printer, then click **Properties**.
3. On the **Paper** tab, under **Layout**, select **2 up** or **4 up** printing.



4. Click **OK** to return to the **Print** dialog box.
5. Click **OK** to print the document.

## Printing Custom Page Sizes Me and 98

Custom page sizes can be printed from Tray 1, Tray 2 or the Multi-Purpose (MP) Tray, one-sided printing only, rear exit only.

### Tray 1 and Tray 2 Custom Size Range

- minimum 3.94" x 5.83" [100 x 148 mm]
- maximum 8½" x 14" [215.9 x 355.6 mm].

### MP Tray Custom Size Range

- minimum 3.94" to 5.83" [100 x 148 mm]
- maximum 8½" x 14" [216 x 356 mm]
- or banners from 8¼" to 8½" (210 to 215.9 mm) wide by up to 47¼" (1.2 m) long. Banners must be fed one sheet at a time. Resolution must be set to Fast (see page 32).

### NOTE

Three custom paper sizes can be defined in the Postscript emulation driver.

The printer media size must be manually set in the driver to the custom paper size before use:

1. Open the rear exit path.

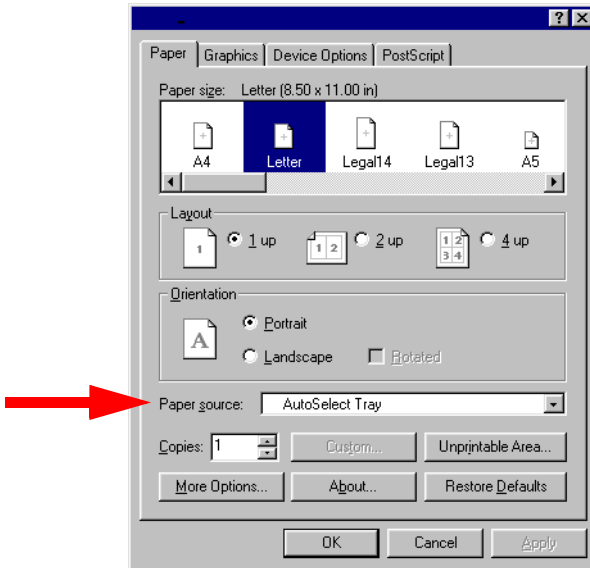


2. Load the custom size paper in the tray you will be using. For example, the MP Tray:



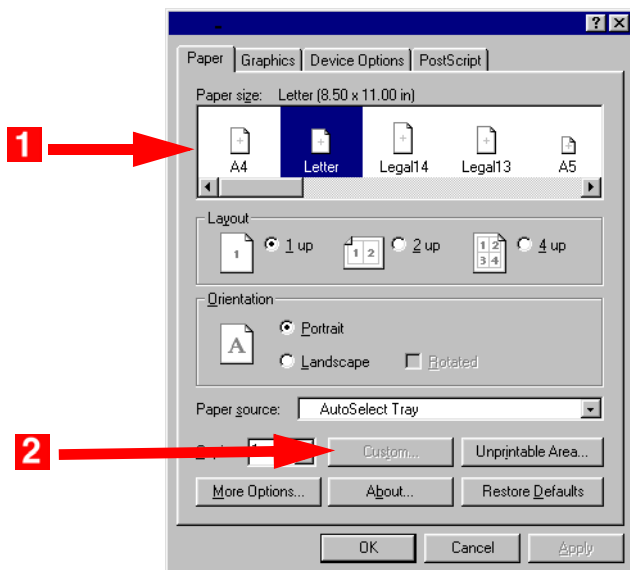
3. Open the file in your application and select **File** → **Print**.
4. In the **Print** dialog box, select the Postscript emulation printer, then click **Properties**.

5. On the **Paper** tab and select the tray you are using in the **Paper source** drop-down list.



6. Under **Paper Size** (1), scroll across and click one of the three **Custom** icons, then click **Custom** (2). Name and define your

custom size in the dialog box which appears, then click **OK** twice to go back to the **Print** dialog box.



7. Click **OK** to print the document.

## Changing The Resolution for a Print Job Me and 98

### NOTE

These instructions explain how to change the settings as you are printing a job. If you wish to change the settings to apply to all jobs (default settings):

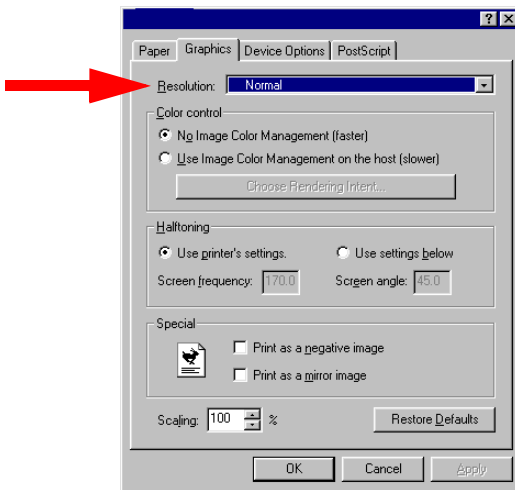
- Click **Start** → **Settings** → **Printers**.
- Right click the **Postscript emulation printer**, then select **Properties**.
- Follow steps 3, etc., below. Note that the **Properties** screen for setting defaults will have more tabs.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the **Postscript emulation printer**, then click **Properties**.



3. On the **Graphics** tab, select the required printing resolution in the **Resolution** drop-down list, then click **OK**:

- **Fine** = high resolution, slower speed: the default. Provides optimum results when printing graphics.
- **Normal** = medium resolution, medium speed: choose this setting for documents with lower resolution graphics, line art, or text only.
- **Fast** = low resolution, fast speed: choose this one for quick proofing of drafts.



4. Click **OK** to print the document.

## Duplex Printing (Printing on Both Sides of The Paper) Me and 98

### NOTE

The optional duplex unit must be installed in the printer and enabled before duplex printing can be carried out.

- Standard paper sizes only.
- Paper weight range 20 to 28 lb. US Bond (75 to 105 g/m<sup>2</sup>).
- Paper must be loaded print side *up*.
- Any tray (Tray 1, optional Tray 2, MP tray) can be used for duplex printing.

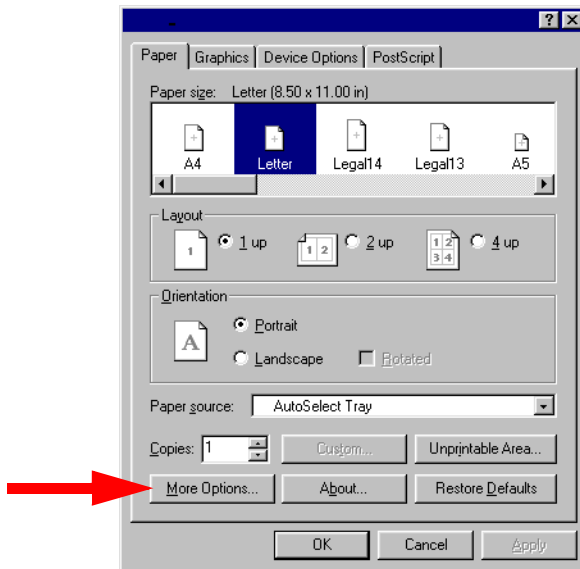
### NOTE

These instructions explain how to change the settings as you are printing a job. If you wish to change the settings to apply to all jobs:

- Click **Start** → **Settings** → **Printers**.
- **Right click the Postscript emulation printer, then select Properties.**
- **Follow steps 3, etc., below. Note that the Properties screen for setting defaults will have more tabs.**

1. Open the file in your application and select **File** → **Print**.
2. In the Print dialog box, click the Postscript emulation driver, then click **Properties**.

3. On the **Paper** tab, click **More Options...**. Select **Flip on Long Edge** or **Flip on Short Edge**, then click OK twice.

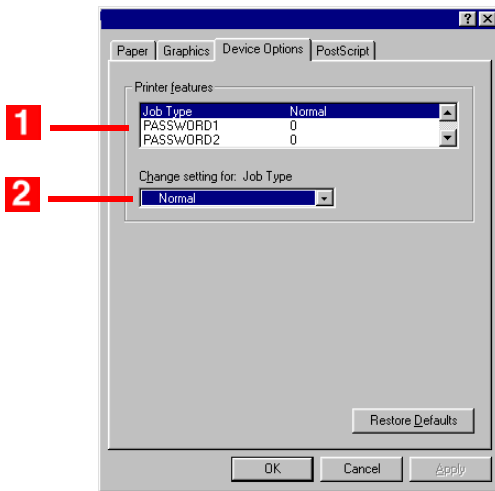


4. Click **OK** to print the document.

## Collating Me and 98

Collating can be carried out with or without a hard disk drive installed. However, printers with a hard disk drive will provide greater performance.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the Postscript emulation printer, then click **Properties**.
3. On the **Paper** tab, enter the number of **Copies** you wish to print.
4. Click the **Device Options** tab. In the **Printer features** list box (1), click **Collate**, then click **Yes** in the **Change setting** drop-down list (2).



5. Click **OK** to return to the **Print** dialog box, then click **OK** to print the document.

## Secure Print (Printing Confidential Documents) Me and 98

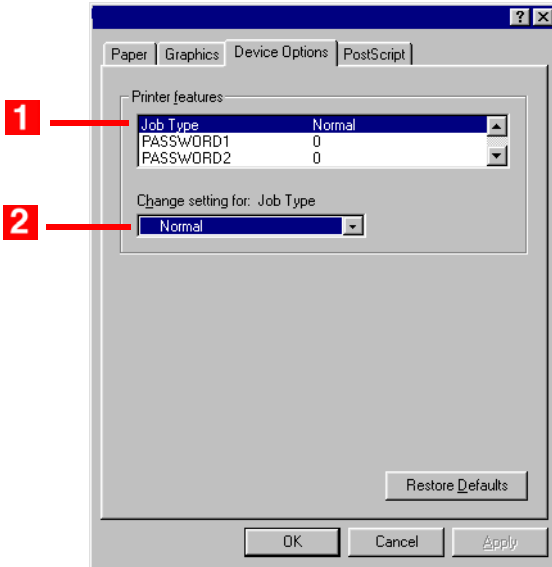
Secure printing or printing with passwords allows the printing of confidential documents on printers that are shared with other users. Once the document is printed, it is deleted from the Hard Disk Drive. If you wish to retain the document on the Hard Disk Drive after printing it, use the Store to Hard Disk feature (see page 41).

### NOTE

- The internal hard disk must be installed in the printer and enabled to allow for spooling of the print job before final printing.
- If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy is printed.
- If the software application being used has a collate print option, this must be turned OFF for secure printing to operate correctly.
- Secure printing may not be available in some software applications.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the Postscript printer, then click **Properties**.
3. On the **Paper** tab, enter the number of copies you wish to print.

4. Click the **Device Options** tab. In the **Printer features** list, click **Job Type** (1), then select **Secure print** under **Change setting** (2).



5. Enter your 4-digit password (0000 to 9999): In the **Printer features** list, click **PASSWORD1**, then select the value of your choice for that digit under **Change setting**. Repeat the process for each digit of the password, making note of the number you entered.
6. For collated printing, scroll down under **Printer features** and change the setting for **Collate** to **Yes**.
7. Click **OK**.
8. Click **OK**.  
*The document is processed to a print file and stored on the printer's hard disk drive.*
9. Go to the printer and print out the document using the front panel (see below).

## Printing a Confidential Document from The Front Panel

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. To print all jobs stored under your password, press **ENTER**. To print a specific job, press **+/-** until the job you wish to print appears on the second line of the display, then press **ENTER**. *The document prints and is deleted from the hard disk drive.*

## Deleting the Confidential Document Before Printing It

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+**/**-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB

ALL JOBS

---

5. Press **CANCEL**.

---

DELETE THE JOB

Y=ENTER/N=CANCEL

---

6. Press **ENTER** to delete the job, then press **ON LINE**.

### **NOTE**

**An alternative method of printing or deleting the document is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.**



## Store to Hard Disk Me and 98

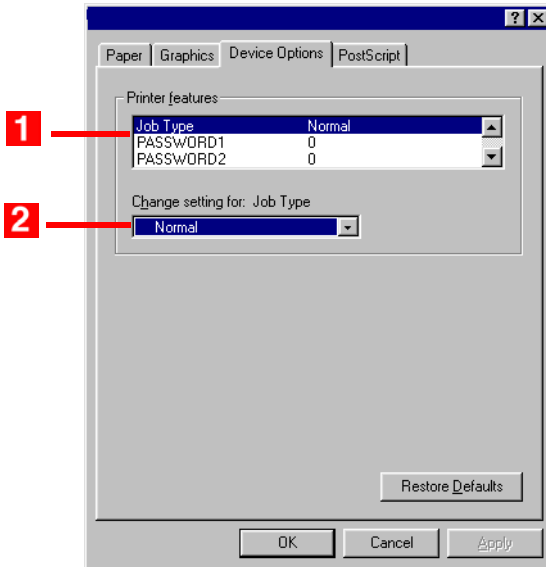
Store to hard disk (job spooling) allows print jobs to be prepared and stored on the hard disk for printing on demand. This is good for forms, generic memos, letterhead stationery, etc.

### NOTE

- The internal hard disk must be installed in the printer and enabled.
- If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.
- If the software application being used has a collate print option, this must be turned OFF for Store to Hard Disk to operate correctly.
- Store to Hard Disk may not be available in some software applications.

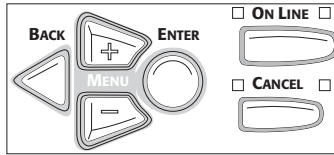
1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the Postscript emulation printer, then click **Properties**.
3. On the **Paper** tab, enter the number of copies you wish to print.

4. Click the **Device Options** tab. In the **Printer features** list (1), click **Job Type**, then select **Store to HDD** under **Change settings** (2).



5. **Enter your 4-digit password (0000 to 9999):** In the **Printer features** list, click **PASSWORD1**, then select the value of your choice for that digit under **Change setting**. Repeat the process for each digit of the password, making note of the number you entered.
6. For collated printing, scroll down under **Printer features** and change the setting for **Collate** to **Yes**.
7. Click **OK**.
8. Click **OK**.  
*The document is processed to a print file and stored on the printer's hard disk drive.*
9. Go to the printer and print out the document using the front panel (see below).

## Printing a Stored Document from The Front Panel



1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. To print all jobs stored under your password, press **ENTER**. To print a specific job, press **+/-** until the job you wish to print appears on the second line of the display, then press **ENTER**.  
*The document prints.*

## Deleting The Stored Document

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

---

\*\*\*\*

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

---

5\*\*\*

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. Press **CANCEL**.

---

DELETE THE JOB  
Y=ENTER/N=CANCEL

---

6. Press **ENTER** to delete the job, then press **ON LINE**.

### NOTE

An alternative method of printing or deleting a stored document is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.

# Windows 2000 and XP

## NOTE

The illustrations in this section show the Windows 2000 operating system. The Windows XP operating system dialog boxes appear slightly different, but the principles are the same.

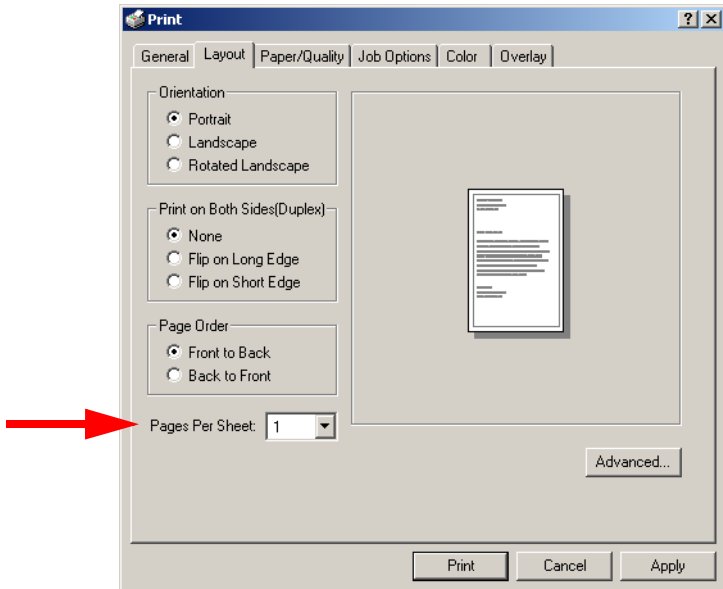
- N-up Printing: multiple pages on one sheet (see page 46)
- Booklets (see page 47)
- Custom Page Sizes (see page 49)
- Selecting Print Resolution (see page 51)
- Duplex Printing (see page 53)
- Watermarks (see page 55)
- Collating (see page 56)
- Secure Print: printing confidential documents (see page 57)
- Storing Print Files to the Hard Disk Drive (see page 65)

## NOTE

Most applications allow the printer properties to be accessed from within the document print dialog box.

## N-Up Printing (Printing Multiple Pages on One Sheet) 2000 and XP

1. Open the file in your application and select **File** → **Print**.
2. In the Print dialog box, select the Postscript emulation printer.
3. Windows XP only: click **Preferences**.
4. On the **Layout** tab, under **Pages Per Sheet**, select the required number of pages.



5. Windows XP only: click **OK** to return to the **Print** dialog box.
6. Click **Print**.

## Printing Booklets 2000 and XP

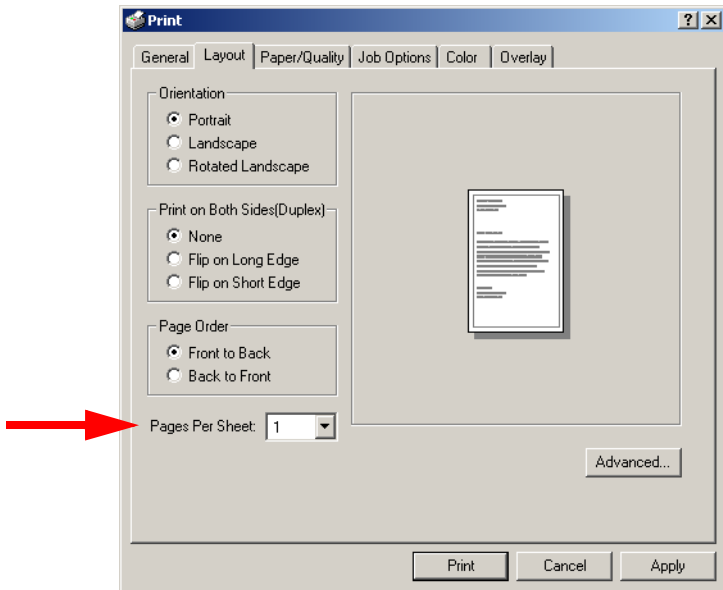
Booklets are restricted to two pages per sheet, i.e., you can print a 5½" x 8½" booklet on 8½" x 11" paper.

### NOTE

- You must have the duplex unit installed and enabled in order to print booklets.
- Not available on some network connections: see the Help file.
- Some software applications may not support booklet printing.
- The right-to-left setting allows a booklet to be printed for right to left reading, as used in some languages.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer.
3. Windows XP only: click **Preferences**.

4. On the **Layout** tab, under **Pages Per Sheet**, select **Booklet**.



5. Select **Portrait** or **Landscape** under **Orientation**.
6. Make sure **Flip on Long Edge** is selected under **Print on Both Sides(Duplex)**.
7. Select the desired **Page Order**.
8. Windows XP only: click **OK** to return to the **Print** dialog box.
9. Click **Print**.



## Printing Custom Page Sizes 2000 and XP

Custom page sizes can only be printed from the Multi-Purpose Tray. The printer media size for the Multi-Purpose Tray must be manually set in the driver to the custom paper size before use (range 3½" to 8½" [89 to 216 mm] wide x 5" to 14" [127 to 356 mm] long). Resolution must be set to Fast (see page 51)

### NOTE

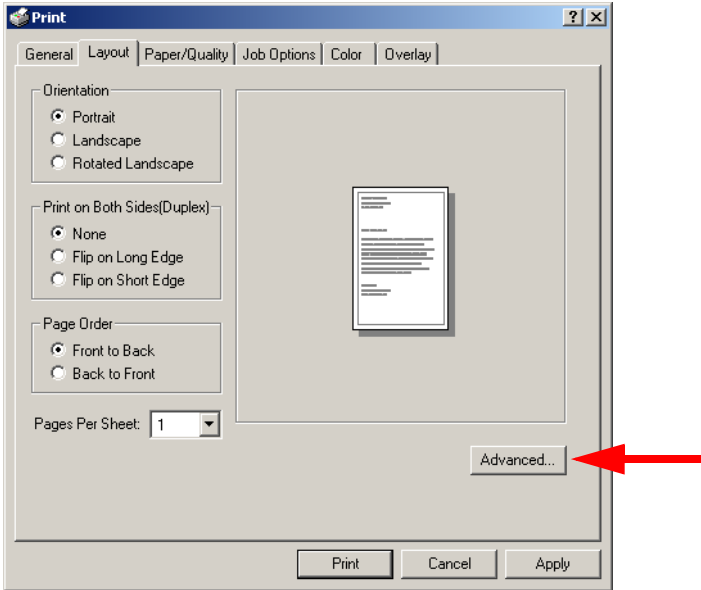
One custom paper size can be defined in the Windows 2000 and XP Postscript emulation driver.

1. Make sure the rear exit path is open:



2. Load the custom paper in the tray of your choice.
3. Open the file in your application and select **File** → **Print**.
4. In the **Print** dialog box, select the Postscript emulation printer.
5. Windows XP only: click **Preferences**.

6. On the **Layout** tab., click **Advanced**.



7. In the **Paper Size** drop-down list, select **Postscript Custom Page Size**.

8. Define your custom size in the dialog box which appears, then click **OK** twice.

9. Click the **Paper/Quality** tab and select the feed tray you are using for the custom size paper from the **Paper Source** drop-down list.

10. Windows XP only: click **OK** to return to the **Print** dialog box.

11. Click **Print**.

## Changing The Resolution for A Print Job 2000 and XP

### NOTE

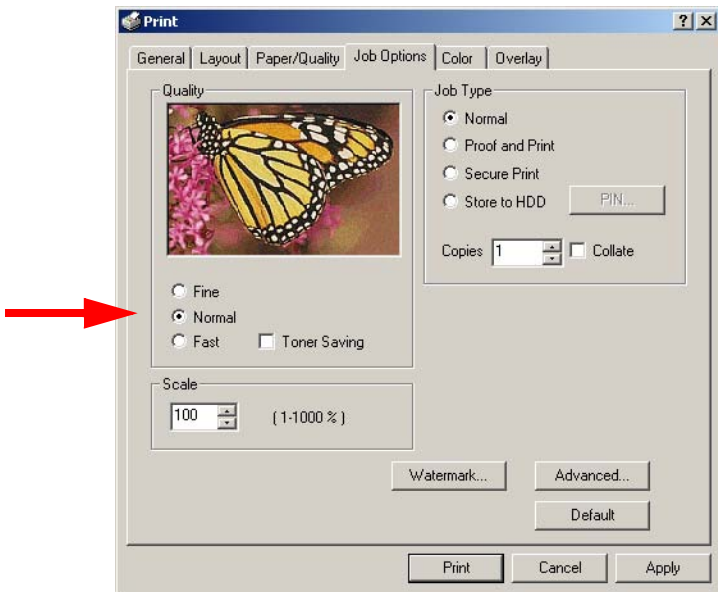
These instructions explain how to change the settings as you are printing a job. If you wish to change the settings to apply to all jobs (default settings):

- Click Start → Settings → Printers [for XP, Printers and Faxes].
- Right click the appropriate printer name, then select Properties.
- Click Printing Preferences.
- Follow steps 3, etc., below. Note that the Properties screen for setting defaults will have more tabs.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer.
3. Windows XP only: click **Preferences**.

4. On the **Job Options** tab, select the required printing resolution, then click **OK**:

- **Fine** = high resolution, slower speed: the default. Provides optimum results when printing graphics.
- **Normal** = medium resolution, medium speed: choose this setting for documents with lower resolution graphics, line art, or text only.
- **Fast** = low resolution, fast speed: choose this one for quick proofing of drafts.



5. Select **Toner Saving** if appropriate.

6. Windows XP only: click **OK** to return to the **Print** dialog box.

7. Click **Print**.

## Duplex Printing (Printing on Both Sides of The Paper) 2000 and XP

### NOTE

The optional duplex unit must be installed in the printer and enabled before duplex printing can be carried out.

- Standard paper sizes only.
- Paper weight range 20 to 28 lb. US Bond (75 to 105 g/m<sup>2</sup>).
- Paper must be loaded print side *up*.
- Any tray (Tray 1, optional Tray 2, MP tray) can be used for duplex printing.

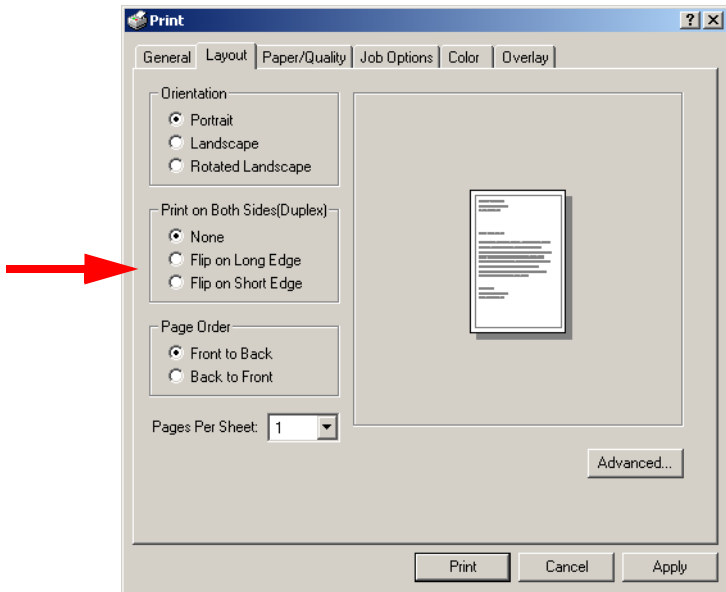
### NOTE

These instructions explain how to change the settings as you are printing a job. If you wish to change the settings to apply to all jobs:

- Click Start → Settings → Printers [for XP, Printers and Faxes].
- Right click the appropriate printer name, then select Properties.
- Click Printing Preferences.
- Follow steps 3, etc., below. Note that the Properties screen for setting defaults will have more tabs.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer.
3. Windows XP only: click **Preferences**.

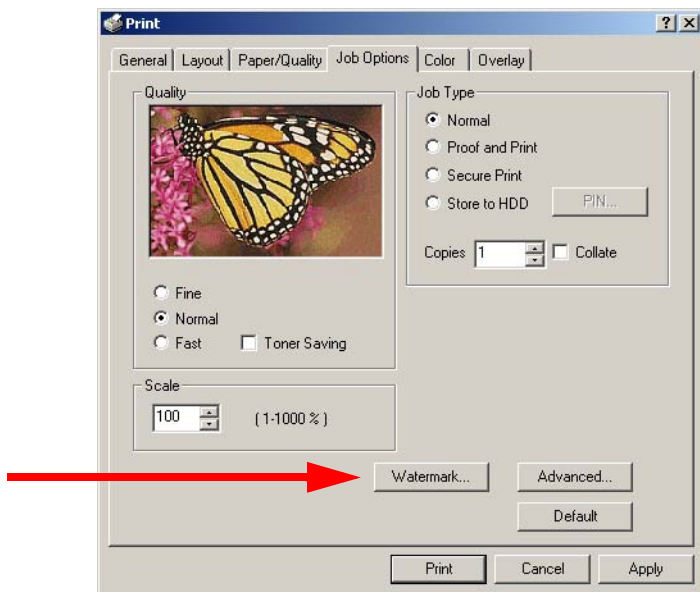
4. On the **Layout** tab, under **Print on Both Sides (Duplex)**, select **Flip on Long Edge** or **Flip on Short Edge**.



5. Windows XP only: click **OK** to return to the **Print** dialog box.
6. Click **Print**.

## Printing Watermarks 2000 and XP

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer.
3. Windows XP only: click **Preferences**.
4. On the **Job Options** tab, click **Watermark**.

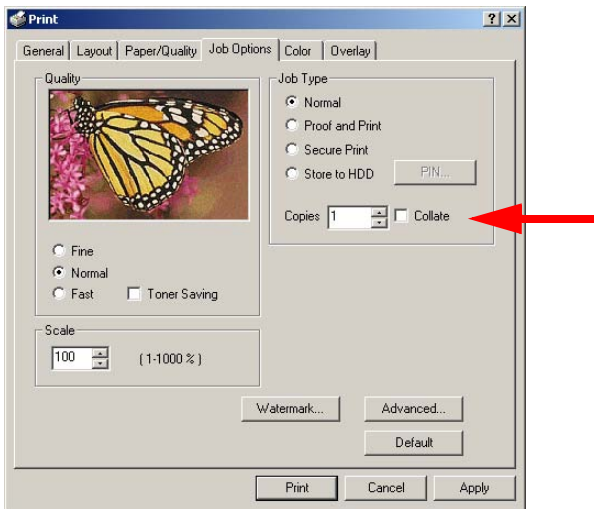


5. In the dialog box which appears, click **New** to define a watermark or select a predefined watermark from the list box, then click **OK**.
6. Windows XP only: click **OK** to return to the **Print** dialog box.
7. Click **Print**.

## Collating 2000 and XP

Collating can be carried out with or without the optional hard disk drive installed. However, printers with a hard disk drive will provide greater performance.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer.
3. Windows XP only: click **Preferences**.
4. On the **Job Options** tab, enter the number of **Copies** you wish to print, then select **Collate**.



5. Windows XP only: click **OK** to return to the **Print** dialog box.
6. Click **Print**.



## Secure Printing (Printing Confidential Documents) 2000 and XP

Secure printing allows the printing of confidential documents on printers that are shared with other users. First the document is assigned a password and processed to a print file which is saved on the hard disk drive. Then it is printed on demand by entering the password through the printer's front panel.

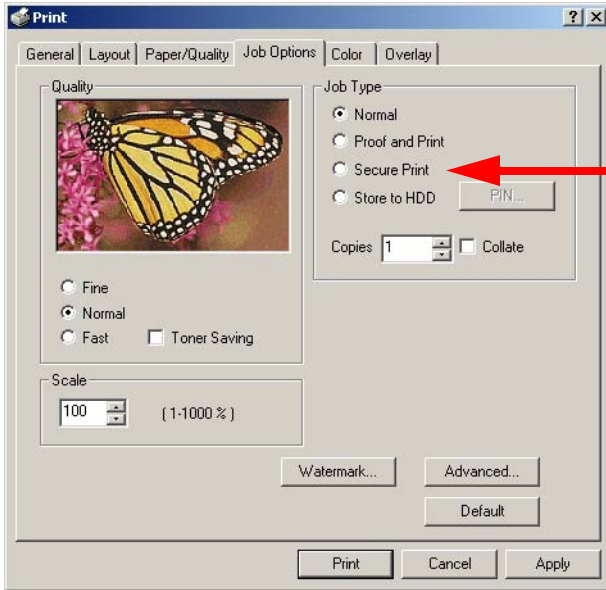
Once the document is printed, it is deleted from the hard drive. If you wish to retain the document on the hard disk drive after printing it, use the Store to Hard Disk feature (see page 65).

### NOTE

- The internal hard disk must be installed in the printer and enabled to allow for spooling of the print job before final printing.
- If the hard disk memory is insufficient for the spooled data, **DISK FULL** is displayed and only one copy printed.
- If the software application being used has a collate print option, this must be turned OFF for secure printing to operate correctly.
- Secure printing may not be available in some software applications.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer.
3. Windows XP only: click **Preferences**.

4. On the Job Options tab, select **Secure Print**.



5. In the dialog box which appears, enter a **Job Name** and 4-digit password (PIN) of your choice (0000 to 9999), then click **OK**. (If no dialog box appears, click **PIN**.)
6. Enter the number of copies to be printed, then select **Collate** if applicable.
7. Windows XP only: click **OK** to return to the **Print** dialog box.
8. Click **Print**.

*The document is processed to a print file and stored on the printer's hard disk drive.*

9. Go to the printer and print out the document using the front panel (see below).

### **Printing a Confidential Document from The Front Panel**

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB

ALL JOBS

---

5. Press **+/-** until the name of the job you wish to print appears on the second line of the display, then press **ENTER**.

*The document prints and is deleted from the hard disk drive.*

## **Deleting the Confidential Document Before Printing It**

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+** / **-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. Press **CANCEL**.

---

DELETE THE JOB  
Y=ENTER/N=CANCEL

---

6. Press **ENTER** to delete the job, then press **ON LINE**.

### **NOTE**

**An alternative method of printing or deleting a confidential document is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.**

## Proof and Print 2000 and XP

Proof and Print lets you print a proof of a document for review and approval before printing the document in quantity. First the document is assigned a password and processed to a print file. The file is saved on the hard disk drive and one copy prints. If the document is okay for printing, the remaining copies are printed on demand by entering the password through the printer's front panel.

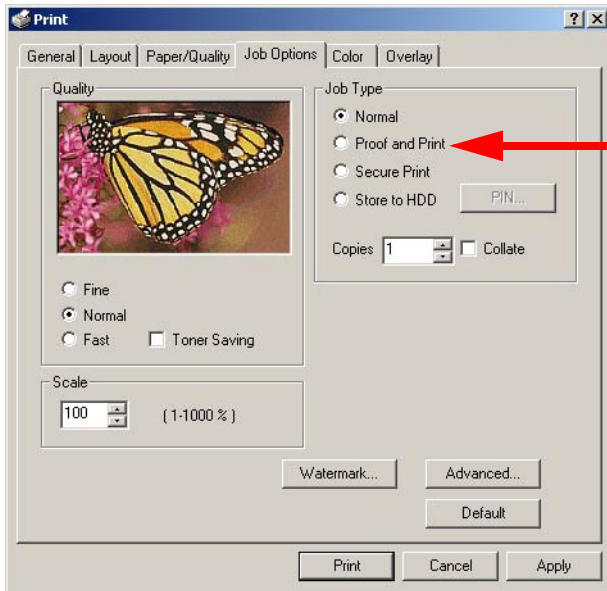
Once the document is printed, it is deleted from the hard drive. If you wish to retain the document on the hard disk drive after printing it, use the Store to Hard Disk feature (see page 65).

### NOTE

- The internal hard disk must be installed in the printer and enabled to allow for spooling of the print job before final printing.
- If the hard disk memory is insufficient for the spooled data, **DISK FULL** is displayed and only one copy printed.
- If the software application being used has a collate print option, this must be turned OFF for secure printing to operate correctly.
- Proof and Print may not be available in some software applications.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer.
3. Windows XP only: click **Preferences**.

4. On the Job Options tab, select **Proof and Print**.



5. In the dialog box which appears, enter a **Job Name** and 4-digit password (PIN) of your choice (0000 to 9999), then click **OK**. (If no dialog box appears, click **PIN**.)
6. Enter the number of copies to be printed, then select **Collate** if applicable.
7. Windows XP only: click **OK** to return to the **Print** dialog box.
8. Click **Print**.

*The document is processed to a print file and stored on the printer's hard disk drive. One copy prints for proofing.*

9. Once the proof is approved, print out the document using the front panel (see below).

## Printing The Proofed Document from The Front Panel

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. Press **+/-** until the name of the job you wish to print appears on the second line of the display, then press **ENTER**.

*The document prints and is deleted from the hard disk drive.*

## Deleting The Document Before Printing Multiple Copies

If the proof is not ready for printing, the job must be deleted from the printer:

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+**/**-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB

ALL JOBS

---

5. Press **CANCEL**.

---

DELETE THE JOB

Y=ENTER/N=CANCEL

---

6. Press **ENTER** to delete the job, then press **ON LINE**.

### NOTE

An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.



## Store to Hard Disk 2000 and XP

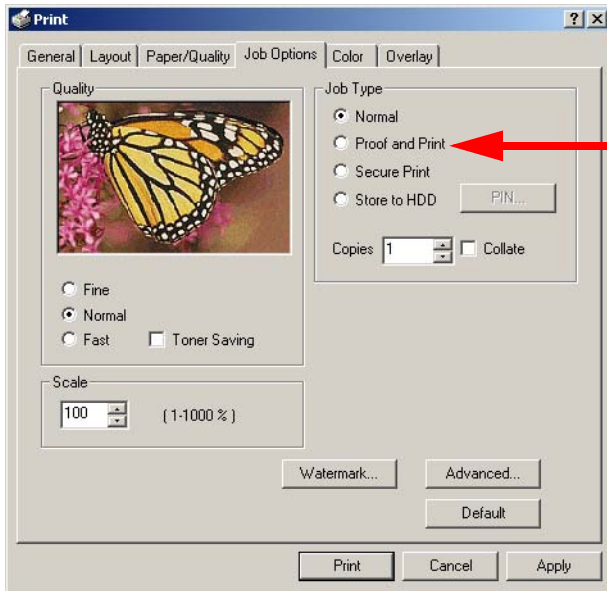
Store to hard disk (job spooling) allows print jobs to be prepared and stored on the hard disk for printing on demand. This is good for forms, generic memos, letterhead stationery, etc.

### NOTE

- The internal hard disk must be installed in the printer and enabled.
- If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.
- If the software application being used has a collate print option, this must be turned OFF for Store to Hard Disk to operate correctly.
- Store to Hard Disk may not be available in some software applications.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer.
3. Windows XP only: click **Preferences**.

4. On the Job Options tab, select **Store to HDD**.



5. In the dialog box which appears, enter a **Job Name** and 4-digit password (PIN) of your choice (0000 to 9999), then click **OK**. (If no dialog box appears, click **PIN**.)
6. Enter the number of copies to be printed, then select **Collate** if applicable.
7. Windows XP only: click **OK** to return to the **Print** dialog box.
8. Click **Print**.

*The document is processed to a print file and stored on the printer's hard disk drive.*

9. Print out the document using the front panel (see below).

## **Printing The Stored Document from The Front Panel**

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB

ALL JOBS

---

5. Press **+/-** until the name of the job you wish to print appears on the second line of the display, then press **ENTER**.

*The document prints.*

## **Deleting the Stored Document**

To delete a document stored on the Hard Disk Drive:

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+** / **-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB

ALL JOBS

---

5. Press **CANCEL**.

---

DELETE THE JOB

Y=ENTER/N=CANCEL

---

6. Press **ENTER** to delete the job, then press **ON LINE**.

### **NOTE**

**An alternative method of printing or deleting documents stored on the Hard Disk Drive is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.**

## **Printing Overlays 2000 and XP**

### **What are Overlays?**

An Overlay can be a combination of graphics, fonts, or text that is stored in the printer's flash memory or on the optional hard disk drive, and printed whenever required. The result is similar to the Watermark feature, but with the ability to be much more elaborate.

Overlays can be useful for tasks such as printing letterheads, forms, or invoices, and should reduce the need for pre-printed stationery.

### **An Example of Using Overlays:**

Suppose that you have created and stored three files in the printer using the Storage Device Manager:

- the company logo
- the company address
- the company mission statement.

The Overlay feature allows these files to be incorporated into your document in various combinations, depending on your requirements.

### **To Create Overlays:**

1. Create the document that you wish to use for Overlay printing (e.g. a letterhead) and generate a PRN file (print file) using the printer driver.
2. Use the Storage Device Manager utility to convert this PRN file (print file) to a storable file format, and download it to the printer.

Once someone has set up all the necessary overlay files on the printer, other users only have to switch on the required settings in the printer driver to use the overlays.

### NOTE

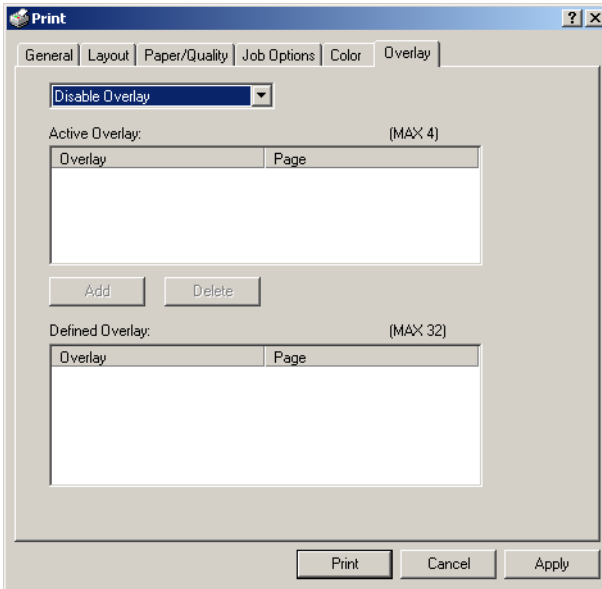
- **The internal hard disk must be installed in the printer to allow for spooling of the print job before final printing.**
- **If the hard disk memory is insufficient for the spooled data, **DISK FULL** is displayed and only one copy printed.**
- **If the software application being used has a collate print option, this must be turned OFF for overlay to operate correctly.**
- **An overlay may consist of more than one component files.**

### Creating Documents To Use As Overlays

An overlay can be created in any software application that can handle logos, letterheads, forms, etc. and can print to a file.

1. With the file to be stored as an overlay open in your application program, choose **File** then **Print**.
2. Ensure that the **Print To File** option is switched on in your application's Print dialog box.
3. Depending on the application, you may need to select your printer model, and then click **Properties...** This should open the printer driver settings.

4. Select the **Overlay** tab.



5. Choose **Create Form** from the drop-down list, then make your selections in the dialog box which appears and click **OK**.

6. Windows XP only: click **OK** to return to the **Print** dialog box.

7. Click **Print**.

Instead of sending the print job to the printer, this prompts you to save the print job on your PC's hard disk. Give the file a meaningful name.

### **Downloading The Print File To Use as An Overlay**

Use the Storage Device Manager utility to download the file for use as an overlay. Follow the instructions in the Utility Software section (see page 293), or use the Storage Device Manager Help.

# Windows NT 4.0

- N-up Printing: multiple pages on one sheet (see page 73)
- Custom Page Sizes (see page 74)
- Selecting Print Resolution (see page 76)
- Duplex Printing (see page 78)
- Watermarks (see page 80)
- Collating (see page 81)
- Secure Print: printing confidential documents (see page 82)
- Proof and Print (see page 86)
- Storing Print Files to the Hard Disk Drive (see page 90)

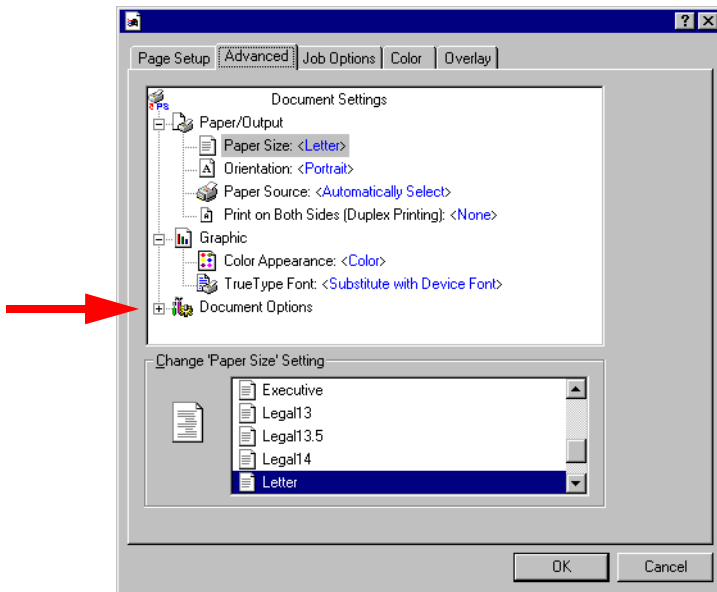
## NOTE

**Most applications allow the printer properties to be accessed from within the document print dialog box.**



## N-Up Printing (Printing Multiple Pages on One Sheet) NT 4.0

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer, then click **Properties**.
3. On the **Advanced** tab, double click **Document Options**.



4. Click **Page Layout (N-UP) Option**. In the dialog box which appears, select the desired number of pages to print per sheet.
5. Click **OK** to return to the **Print** dialog box.
6. Click **Print**.

## Printing Custom Page Sizes NT 4.0

Custom page sizes can only be printed from the Multi-Purpose Tray. The printer media size for the Multi-Purpose Tray must be manually set in the driver to the custom paper size before use (range 3½" to 8½" [89 to 216 mm] wide x 5" to 14" [127 to 356 mm] long).

### NOTE

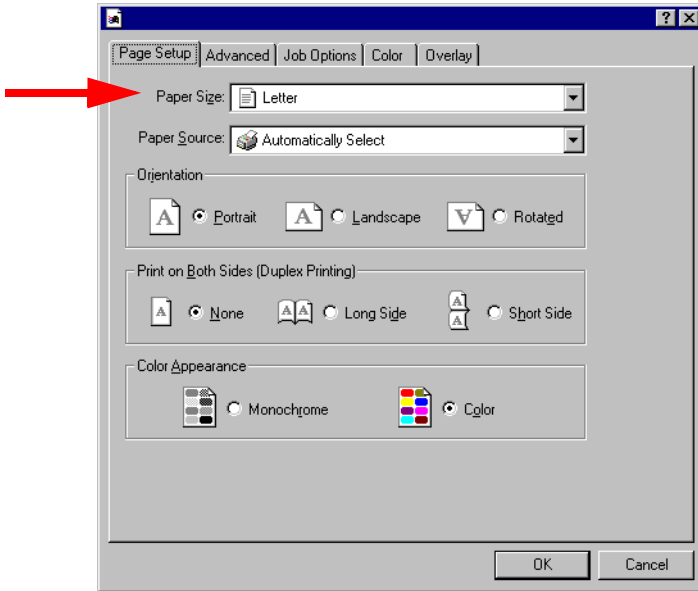
One custom paper size can be defined in the Windows NT 4.0 Postscript emulation driver.

1. Make sure the rear exit path is open:



2. Load the custom paper in the tray of your choice.
3. Open the file in your application and select **File** → **Print**.
4. In the **Print** dialog box, select the Postscript emulation printer, then click **Properties**.

5. On the **Page Setup** tab, select **Postscript Custom Page Size** at the bottom of the **Paper Size** drop-down list, then define the custom size in the dialog box which appears and click **OK**.



6. Select the tray you are using in the **Paper Source** drop-down box, then click **OK**.
7. Click **OK** to print the document

## Changing The Resolution for A Print Job NT 4.0

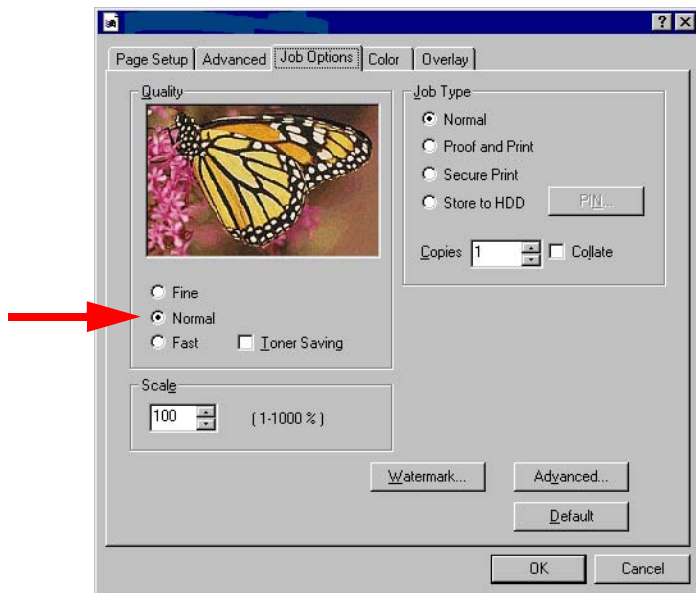
### NOTE

These instructions explain how to change the settings as you are printing a job. If you wish to change the settings to apply to all jobs (default settings):

- Click **Start** → **Settings** → **Printers** [for XP, Printers and Faxes].
- Right click the appropriate printer name, then select **Properties**.
- Click **Printing Preferences**.
- Follow steps 3, etc., below. Note that the **Properties** screen for setting defaults will have more tabs.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer, then click **Properties**.

3. On the **Job Options** tab, select the required print resolution under **Quality**, then click **OK**:
  - **Fine** = high resolution, slower speed: the default. Provides optimum results when printing graphics.
  - **Normal** = medium resolution, medium speed: choose this setting for documents with lower resolution graphics, line art, or text only.
  - **Fast** = low resolution, fast speed: choose this one for quick proofing of drafts.



4. Select **Toner Saving** if appropriate.
5. Click **OK**.
6. Click **OK** to print the document.

## Duplex Printing (Printing on Both Sides of The Paper) NT 4.0

### NOTE

The optional duplex unit must be installed in the printer and enabled before duplex printing can be carried out.

- Standard paper sizes only.
- Paper weight range 20 to 28 lb. US Bond (75 to 105 g/m<sup>2</sup>).
- Paper must be loaded print side *up*.
- Any tray (Tray 1, optional Tray 2, MP tray) can be used for duplex printing.

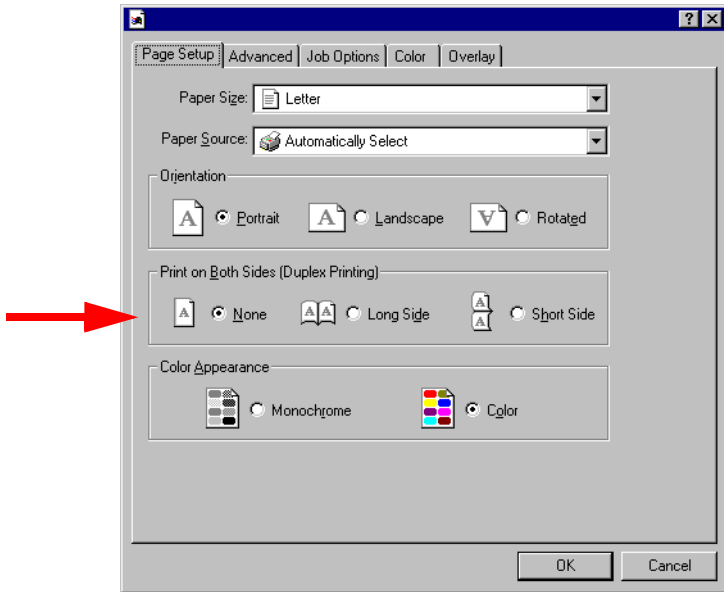
### NOTE

These instructions explain how to change the settings as you are printing a job. If you wish to change the settings to apply to all jobs:

- Click Start → Settings → Printers [for XP, Printers and Faxes].
- Right click the appropriate printer name, then select Properties.
- Click Printing Preferences.
- Follow steps 3, etc., below. Note that the Properties screen for setting defaults will have more tabs.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer, then click **Properties**.

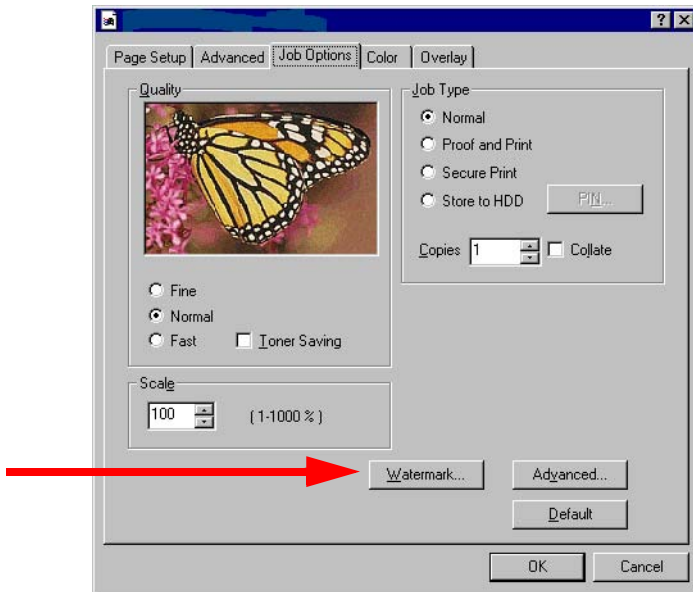
3. On the **Page Setup** tab, under **Print on Both Sides(Duplex)**, select **Long Side** or **Short Side**.



4. Click **OK** to print the document.

## Printing Watermarks NT 4.0

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer, then click **Properties**.
3. On the **Job Options** tab, click **Watermark**.



4. In the dialog box which appears, click **New** to define a watermark or select a predefined watermark from the list box, then click **OK**.
5. Click **OK** to return to the **Print** dialog box.
6. Click **OK**.



## Collating NT 4.0

Collating can be carried out with or without the optional hard disk drive installed. However, printers with a hard disk drive will provide greater performance.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer, then click **Properties**.
3. On the **Job Options** tab, enter the number of **Copies** you wish to print, then select **Collate**.



4. Click **OK** to return to the **Print** dialog box.
5. Click **OK**.

## Secure Printing (Printing Confidential Documents) NT 4.0

Secure printing allows the printing of confidential documents on printers that are shared with other users. First the document is assigned a password and processed to a print file which is saved on the hard disk drive. Then it is printed on demand by entering the password through the printer's front panel.

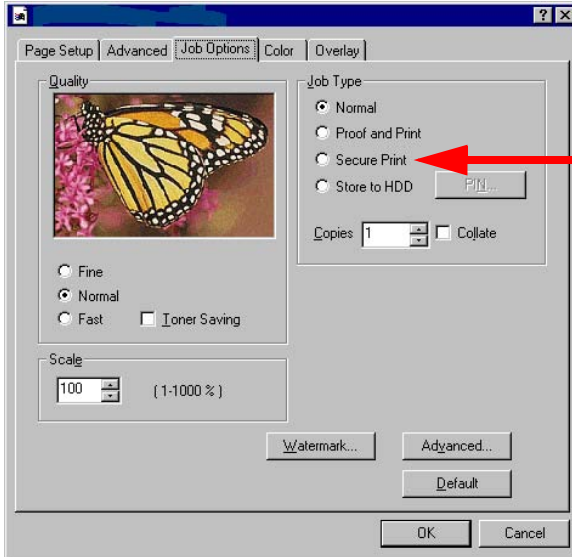
Once the document is printed, it is deleted from the hard drive. If you wish to retain the document on the hard disk drive after printing it, use the Store to Hard Disk feature (see page 90).

### NOTE

- The internal hard disk must be installed in the printer and enabled to allow for spooling of the print job before final printing.
- If the hard disk memory is insufficient for the spooled data, **DISK FULL** is displayed and only one copy printed.
- If the software application being used has a collate print option, this must be turned OFF for secure printing to operate correctly.
- Secure printing may not be available in some software applications.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer, then click **Properties**.

3. On the **Job Options** tab, select **Secure Print**.



4. In the dialog box which appears, enter a **Job Name** and 4-digit password (PIN) of your choice (0000 to 9999), then click **OK**. (If no dialog box appears, click **PIN**.)
5. Enter the number of copies to be printed, then select **Collate** if applicable.
6. Click **OK** to return to the **Print** dialog box.
7. Click **Print**.

*The document is processed to a print file and stored on the printer's hard disk drive.*

8. Go to the printer and print out the document using the front panel (see below).

### **Printing a Confidential Document from The Front Panel**

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB

ALL JOBS

---

5. Press **+/-** until the name of the job you wish to print appears on the second line of the display, then press **ENTER**.

*The document prints and is deleted from the hard disk drive.*

## **Deleting the Confidential Document Before Printing It**

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+** / **-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. Press **CANCEL**.

---

DELETE THE JOB  
Y=ENTER/N=CANCEL

---

6. Press **ENTER** to delete the job, then press **ON LINE**.

### **NOTE**

**An alternative method of printing or deleting the document is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.**

## Proof and Print NT 4.0

Proof and Print lets you print a proof of a document for review and approval before printing the document in quantity. First the document is assigned a password and processed to a print file. The file is saved on the hard disk drive and one copy prints. If the document is okay for printing, the remaining copies are printed on demand by entering the password through the printer's front panel.

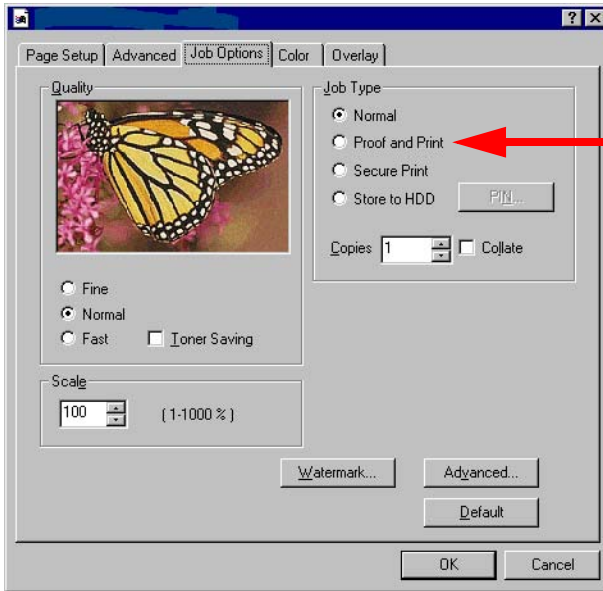
Once the document is printed, it is deleted from the hard drive. If you wish to retain the document on the hard disk drive after printing it, use the Store to Hard Disk feature (see page 90).

### NOTE

- The internal hard disk must be installed in the printer and enabled to allow for spooling of the print job before final printing.
- If the hard disk memory is insufficient for the spooled data, **DISK FULL** is displayed and only one copy printed.
- If the software application being used has a collate print option, this must be turned OFF for secure printing to operate correctly.
- Secure printing may not be available in some software applications.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer, then click **Properties**.

3. On the **Job Options** tab, select **Proof and Print**.



4. In the dialog box which appears, enter a **Job Name** and 4-digit password (PIN) of your choice (0000 to 9999), then click **OK**. (If no dialog box appears, click **PIN**.)
5. Enter the number of copies to be printed, then select **Collate** if applicable.
6. Click **OK** to return to the **Print** dialog box.
7. Click **Print**.  
*The document is processed to a print file and stored on the printer's hard disk drive. One copy prints for proofing.*
8. Once the proof is approved, print the additional copies of the document using the front panel (see below).

### Printing The Approved Document from The Front Panel

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB

ALL JOBS

---

5. Press **+/-** until the name of the job you wish to print appears on the second line of the display, then press **ENTER**.  
*The document prints and is deleted from the hard disk drive.*

### **Deleting the Document Before Printing Multiple Copies**

If the proof is not ready for printing, the job must be deleted from the printer:

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---



3. Use **+** / **-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB

ALL JOBS

---

5. Press **CANCEL**.

---

DELETE THE JOB

Y=ENTER/N=CANCEL

---

6. Press **ENTER** to delete the job, then press **ON LINE**.

### NOTE

**An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.**

## Store to Hard Disk NT 4.0

Store to hard disk (job spooling) allows print jobs to be prepared and stored on the hard disk for printing on demand. The job is password protected.

### NOTE

- The internal hard disk must be installed in the printer and enabled.
- If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.
- If the software application being used has a collate print option, this must be turned OFF for Store to Hard Disk to operate correctly.
- Store to Hard Disk may not be available in some software applications.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer, then click **Properties**.

3. On the **Job Options** tab, select **Store to HDD**.



4. In the dialog box which appears, enter a **Job Name** and 4-digit password (PIN) of your choice (0000 to 9999), then click **OK**. (If no dialog box appears, click **PIN**.)
5. Enter the number of copies to be printed, then select **Collate** if applicable.
6. Click **OK** to return to the **Print** dialog box.
7. Click **Print**.  
*The document is processed to a print file and stored on the printer's hard disk drive.*
8. Go to the printer and print out the document using the front panel (see below).

## Printing The Stored Document from The Front Panel

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB

ALL JOBS

---

5. Press **+/-** until the name of the job you wish to print appears on the second line of the display, then press **ENTER**.  
*The document prints.*

## Deleting a Stored Document

To delete a document stored on the Hard Disk Drive:

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+** / **-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. Press **CANCEL**.

---

DELETE THE JOB  
Y=ENTER/N=CANCEL

---

6. Press **ENTER** to delete the job, then press **ON LINE**.

### **NOTE**

**An alternative method of printing or deleting a stored document is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.**

## **Printing Overlays**

### **NT 4.0**

#### **What are Overlays?**

An Overlay can be a combination of graphics, fonts, or text that is stored in the printer's flash memory or on the optional hard disk drive, and printed whenever required. The result is similar to the Watermark feature, but with the ability to be much more elaborate.

Overlays can be useful for tasks such as printing letterheads, forms, or invoices, and should reduce the need for pre-printed stationery.

#### **An Example of Using Overlays:**

Suppose that you have created and stored three files in the printer using the Storage Device Manager:

- the company logo
- the company address
- the company mission statement.

The Overlay feature allows these files to be incorporated into your document in various combinations, depending on your requirements.

#### **To Create Overlays:**

1. Create the document that you wish to use for Overlay printing (e.g. a letterhead) and generate a PRN file (print file) using the printer driver.
2. Use the Storage Device Manager utility to convert this PRN file (print file) to a storable file format, and download it to the printer.

Once someone has set up all the necessary overlay files on the printer, other users only have to switch on the required settings in the printer driver to use the overlays.

### NOTE

- **The internal hard disk must be installed in the printer to allow for spooling of the print job before final printing.**
- **If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.**
- **If the software application being used has a collate print option, this must be turned OFF for overlay to operate correctly.**
- **An overlay may consist of more than one component files.**

### Creating Documents To Use As Overlays

An overlay can be created in any software application that can handle logos, letterheads, forms, etc. and can print to a file.

1. With the file to be stored as an overlay open in your application program, choose **File** then **Print**.
2. Ensure that the **Print To File** option is switched on in your application's Print dialog box.
3. Depending on the application, you may need to select your printer model, and then click **Properties...** This should open the printer driver settings.
4. Select the **Overlay** tab.
5. Choose **Create Form** from the drop-down list, then make your selections in the dialog box which appears and click **OK**.
6. Click **Print**.

Instead of sending the print job to the printer, this prompts you to save the print job on your PC's hard disk. Give the file a meaningful name.

## **Downloading The Print File To Use as An Overlay**

Use the Storage Device Manager utility to download the file for use as an overlay. Follow the instructions in the Utility Software section (see page 293), or use the Storage Device Manager Help.



# PCL Emulation Driver

The Windows PCL emulation printer driver contains settings for many of the same items as are found in the operator panel menus. Where items in the printer driver are the same as those in the operator panel menus, and you print documents from Windows, *the settings in the Windows printer driver will override those items in the operator panel menus.*

## Windows 98/Me/XP/NT 4.0

### NOTE

**The illustrations in this section show the Windows Me Operating System. The other Windows operating systems may appear slightly different, but the principles are the same.**

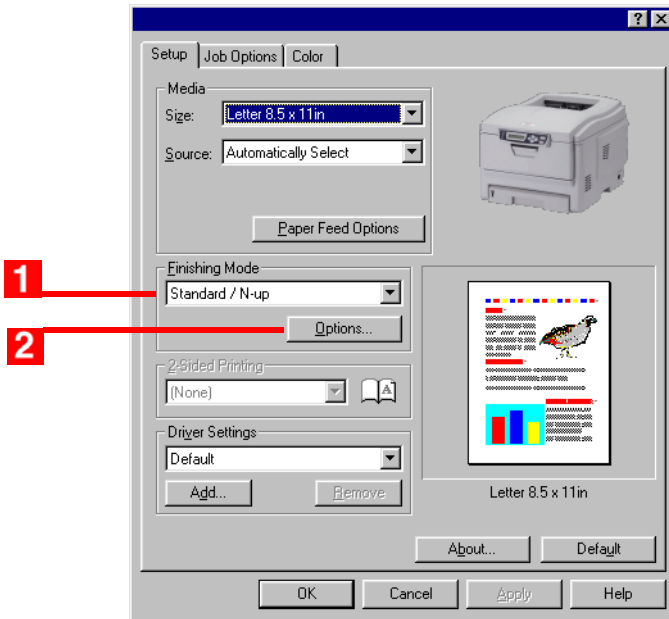
- N-up Printing: multiple pages on one sheet (see page 98)
- Custom Page Sizes (see page 99)
- Selecting Print Resolution (see page 102)
- Duplex Printing (see page 104)
- Watermarks (see page 108)
- Collating (see page 110)
- Proof and Print (see page 111)
- Secure Print: printing confidential documents (see page 116)
- Storing Print Files to the Hard Disk Drive (see page 121)
- Printing Posters (see page 126)

### NOTE

**Most applications allow the printer properties to be accessed from within the document print dialog box.**

## N-Up Printing (Printing Multiple Pages on One Sheet) 98 / Me / XP / NT 4.0

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the PCL printer, then:
  - a. Windows 98/Me/NT4.0: click **Properties**.
  - b. Windows XP: click **Preferences**.
3. On the **Setup** tab, under **Finishing Mode** (1), select the required number of pages per sheet in the drop-down list. To set additional parameters, click **Options** (2), then make your selections and click **OK**.



4. Click **OK**.
5. Windows 98/Me/NT4.0: click **OK**.  
Windows XP: click **Print**.

## Printing User Defined Sizes 98 / Me / XP / NT 4.0

User defined (custom) page sizes can only be printed from the Multi-Purpose Tray. The printer media size for the Multi-Purpose Tray must be manually set in the driver to the custom paper size before use.

### MP Tray Custom Size Range

- minimum 3.94" to 5.83" [100 x 148 mm]
- maximum 8½" x 14" [216 x 356 mm]
- or banners from 8¼" to 8½" (210 to 215.9 mm) wide by up to 47¼" (1.2 m) long. Banners must be fed one sheet at a time. Resolution must be set to Fast (see page 102).

### NOTE

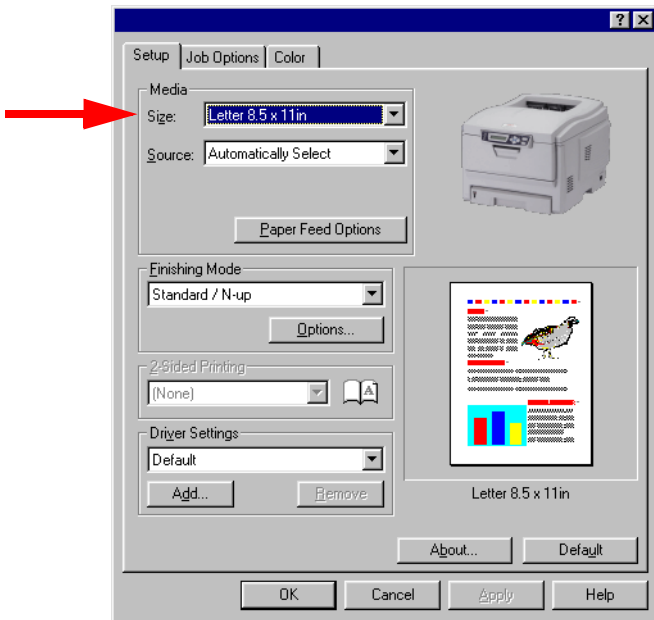
Up to 32 custom page sizes can be defined in the PCL driver.

1. Make sure the rear exit path is open:



2. Load the custom size paper in the tray of your choice.
3. Open the file in your application and select **File** → **Print**.
4. In the **Print** dialog box, select the PCL printer, then:
  - a. Windows 98/Me/NT4.0: click **Properties**.
  - b. Windows XP: click **Preferences**.

5. On the **Setup** tab, under **Media**, select **User Defined Size** in the **Size** drop-down list. Define the custom size in the dialog box which appears, then click **OK**.



## NOTE

You may see a Warning dialog box indicating a conflict. If you do, click OK and the driver will automatically make the needed changes to correct for the conflict.

6. **User Defined Size** appears in the **Size** list.

### **NOTE**

To save the setting for future use:

- Click **Paper Feed Options**, then click **Custom Size**.
- Select the unit, then enter the relevant information for **Width and Height** and give your custom size a name under **Name**.
- Click **Add**.
- Click **OK**.

*The Custom Page Size is added to the bottom of the Paper Size list.*

7. Select the tray you will be using in the **Source** drop-down list under **Media**, then click **OK**.

8. Windows 98/Me/NT4.0: click **OK**.

Windows XP: click **Print**.

## Changing the Resolution for A Print Job 98 / Me / XP / NT 4.0

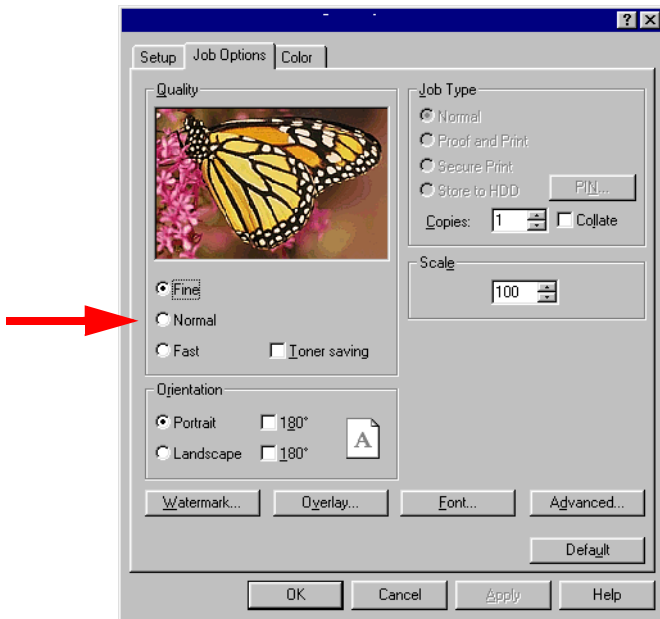
### NOTE

These instructions explain how to change the settings as you are printing a job. If you wish to change the settings to apply to all jobs (default settings):

- Click **Start** → **Settings** → **Printers** [for **XP**, **Printers** and **Faxes**].
- **Right click** the appropriate printer name, then select **Properties**.
- Click **Printing Preferences**.
- Follow steps 3, etc., below. Note that the **Properties** screen for setting defaults will have more tabs.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer, then:
  - a. Windows 98/Me/NT4.0: click **Properties**.
  - b. Windows XP: click **Preferences**.

3. On the **Job Options** tab, select the required printing resolution under **Quality**:
- **Fine** = high resolution, slower speed: choose this one for optimum results when printing graphics.
  - **Normal** = medium resolution, medium speed: the default.
  - **Fast** = low resolution, fast speed: choose this one for drafts or documents without graphics.



4. Select **Toner Saving** if appropriate.
5. Click **OK**
6. Windows 98/Me/NT4.0: click **OK**.  
Windows XP: click **Print**.

## Duplex Printing (Printing on Both Sides of The Paper) 98 / Me / XP / NT 4.0

### NOTE

The optional duplex unit must be installed in the printer and enabled before duplex printing can be carried out. (See the instructions supplied with the duplex unit.)

- Standard paper sizes only.
- Paper weight range 20 to 28 lb. US Bond (75 to 105 g/m<sup>2</sup>).
- Paper must be loaded print side *up*.
- Any tray (Tray 1, optional Tray 2, MP tray) can be used for duplex printing.

### NOTE

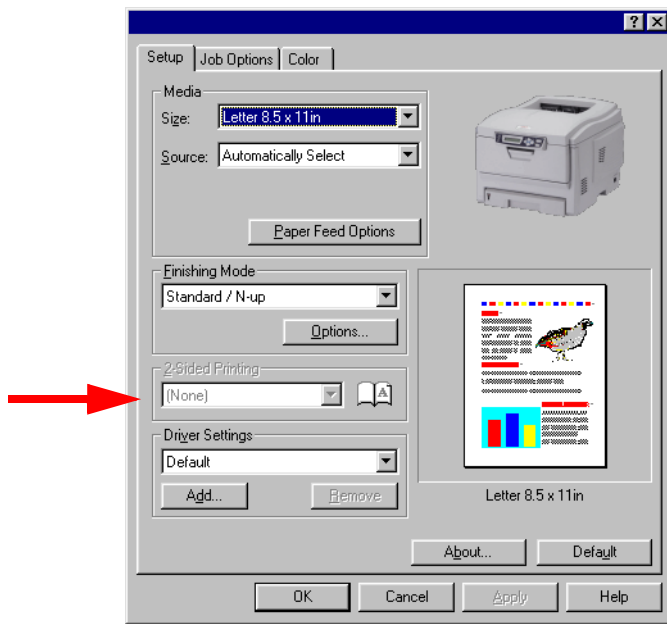
These instructions explain how to change the settings as you are printing a job. If you wish to change the settings to apply to all jobs:

- Click Start → Settings → Printers [for XP, Printers and Faxes].
- Right click the appropriate printer name, then select Properties.
- Click Printing Preferences.
- Follow steps 3, etc., below. Note that the Properties screen for setting defaults will have more tabs.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer, then:
  - a. Windows 98/Me/NT4.0: click **Properties**.
  - b. Windows XP: click **Preferences**



3. On the **Setup** tab, under **2-Sided Printing**, select **Long Edge** or **Short Edge**.



4. Click **OK**.
5. Windows 98/Me/NT4.0: click **OK**.  
Windows XP: click **Print**.

## Printing Booklets

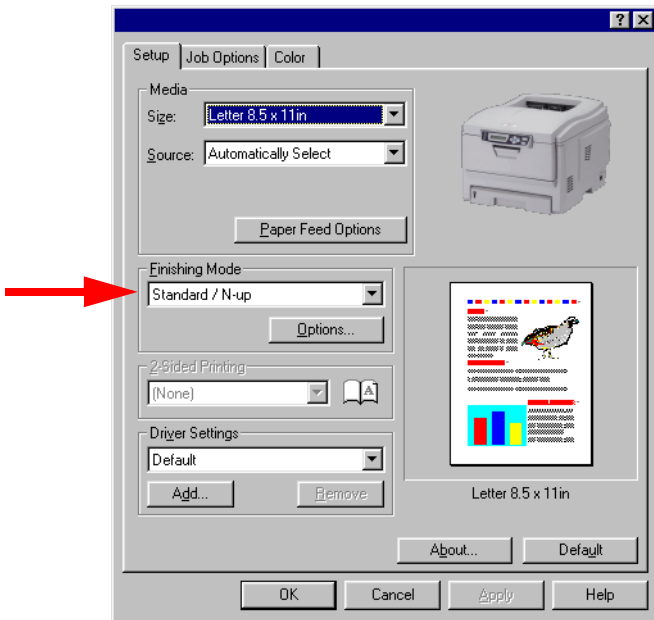
### 98 / Me / XP / NT 4.0

#### NOTES

- You must have the duplex unit installed and enabled in order to print booklets.
- Not available on some network connections: see the Help file.
- Some software applications may not support booklet printing.
- The right-to-left setting allows a booklet to be printed for right to left reading, which is used in some languages.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer, then:
  - a. Windows 98/Me/NT4.0: click **Properties**.
  - b. Windows XP: click **Preferences**.

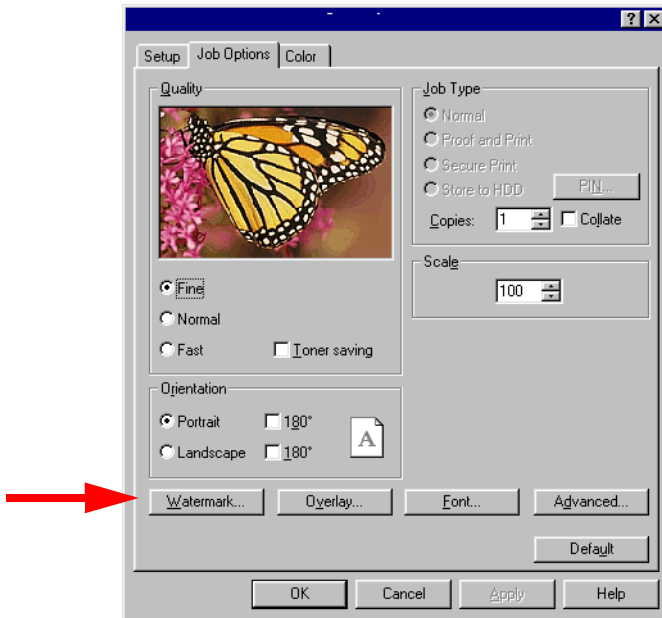
3. On the **Setup** tab, under **Finishing Mode**, select **Booklet** in the drop-down list.



4. Click **Options**, enter your settings, and click **OK**.
5. Click **OK**.
6. Windows 98/Me/NT4.0: click **OK**.  
Windows XP: click **Print**.

## Printing Watermarks 98 / Me / XP / NT 4.0

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer, then:
  - a. Windows 98/Me/NT4.0: click **Properties**.
  - b. Windows XP: click **Preferences**.
3. On the **Job Options** tab, click **Watermark**.



4. Select a name from the **Watermark** list or click New to set up a new watermark.

## NOTE

To create a new watermark or edit an existing watermark:

- Click the **New or Edit** button.
- Enter the text for the watermark and select the font, size, angle, etc., to be used.
- Click **OK**.

*The new watermark appears in the Watermark list.*

5. If you wish to print the watermark only on the first page of the document, select **First Page only**.
6. Click **OK** twice.
7. Windows 98/Me/NT4.0: click **OK**.  
Windows XP: click **Print**.

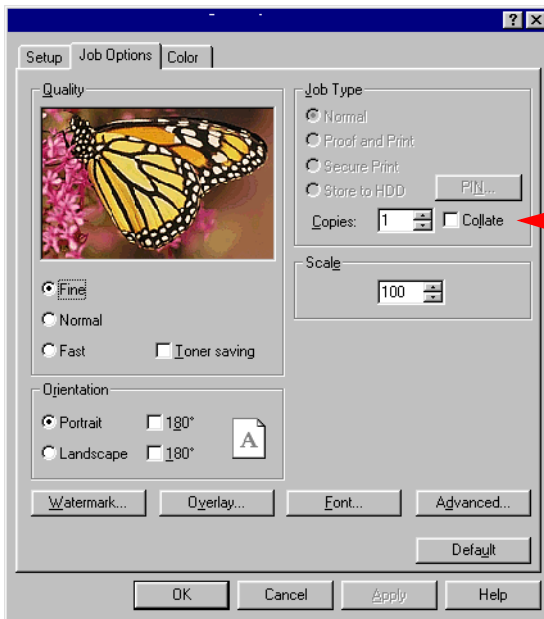
## Collating

### 98 / Me / XP / NT 4.0

Collating can be carried out with or without a hard disk drive installed. However, printers with a hard disk drive will provide greater performance.

The following instructions explain how to select collating using the printer driver.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer, then:
  - a. Windows 98/Me/NT4.0: click **Properties**.
  - b. Windows XP: click **Preferences**.
3. On the **Job Options** tab, under **Job Type**, enter the number of copies required and select **Collate**.



4. Click **OK**.
5. Windows 98/Me/NT4.0: click **OK**.  
Windows XP: click **Print**.

## **Proof and Print**

### **98 / Me / XP / NT 4.0**

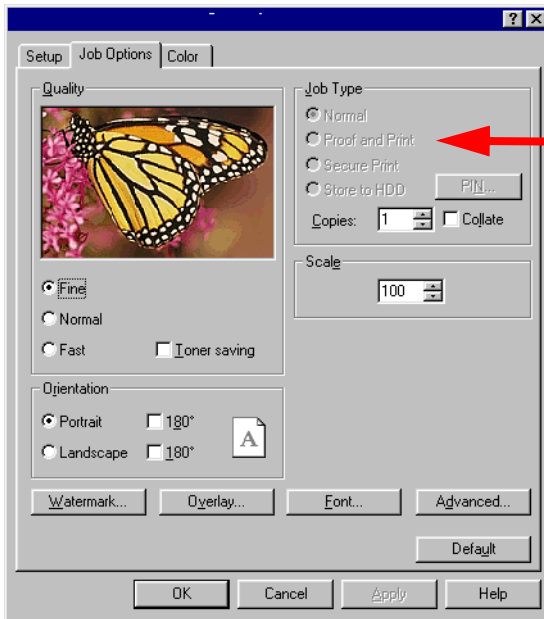
Proof and print allows printing of a single copy of a document for checking before printing multiple copies of the same document.

#### **NOTES**

- The internal hard disk must be installed in the printer and enabled, to allow for spooling of the print job before final printing.
- If the hard disk memory is insufficient for the spooled data, **DISK FULL** is displayed and only one copy is printed.
- If the software application being used has a collate print option, it must be turned OFF for proof and print to operate correctly.
- Proof and print may not be available in some software applications.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer, then:
  - a. Windows 98/Me/NT4.0: click **Properties**.
  - b. Windows XP: click **Preferences**.

3. On the **Job Options** tab, under **Job Type**, select **Proof and Print**.



4. In the dialog box which appears, enter a **Job Name** and password (PIN) of your choice, then click **OK**. (If no dialog box appears, click **PIN**.)
5. Enter the number of copies and select **Collate**, if applicable, then click **OK**.
6. Windows 98/Me/NT4.0: click **OK**.  
Windows XP: click **Print**.

*The document is processed to a print file and stored on the hard disk drive. One copy is printed for checking.*

7. After checking the proof, print or delete (if incorrect) the remaining copies of the document using the procedures given below.



## Printing The Additional Copies

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

---

\*\*\*\*

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

---

5\*\*\*

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. To print all jobs stored under your password, press **ENTER**. To print a specific job, press **+/-** until the name of the job you wish to print appears on the second line of the display, then press **ENTER**.

*The document prints and is deleted from the hard disk drive.*

## Deleting The Document

If the proof is not ready for printing, the job must be deleted from the printer:

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+**/**-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. Press **+**/**-** until the name of the job you wish to delete appears on the second line of the display.

6. Press **CANCEL**.

---

DELETE THE JOB  
Y=ENTER/N=CANCEL

---

7. Press **ENTER** to delete the job, then press **ON LINE**.

### **NOTE**

**An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.**

## Secure Printing (Printing Confidential Documents) 98 / Me / XP / NT 4.0

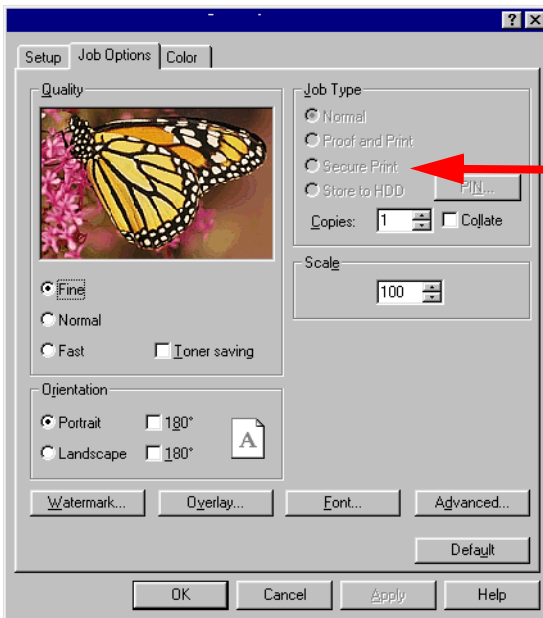
Secure printing or printing with passwords allows the printing of confidential documents on printers that are shared with other users.

### NOTE

- The internal hard disk must be installed in the printer and enabled to allow for spooling of the print job before final printing.
- If the hard disk memory is insufficient for the spooled data, **DISK FULL** is displayed and only one copy printed.
- If the software application being used has a collate print option, this must be turned OFF for secure printing to operate correctly.
- Secure printing may not be available in some software applications.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer, then:
  - a. Windows 98/Me/NT4.0: click **Properties**.
  - b. Windows XP: click **Preferences**.

3. On the **Job Options** tab, under **Job Type**, select **Secure Print**.



4. In the dialog box which appears, enter a **Job Name** and password (PIN) of your choice, then click **OK**. If no dialog box appears, click **PIN**.)
5. Enter the number of copies and select **Collate**, if applicable, then click **OK**.
6. Windows 98/Me/NT4.0: click **OK**.  
Windows XP: click **Print**.  
*The document is processed to a print file and stored on the hard disk drive.*
7. Go to the printer and print out the document using the front panel (see below).

## Printing A Confidential Document from The Front Panel

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

---

\*\*\*\*

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

---

5\*\*\*

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. To print all jobs stored under your password, press **ENTER**. To print a specific job, press **+/-** until the name of the job you wish to print appears on the second line of the display, then press **ENTER**.

*The document prints and is deleted from the hard disk drive.*

## Deleting The Confidential Document Before Printing It

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

---

\*\*\*\*

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

---

5\*\*\*

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. Press **+/-** until the name of the job you wish to delete appears on the second line of the display.

6. Press **CANCEL**.

---

DELETE THE JOB  
Y=ENTER/N=CANCEL

---

7. Press **ENTER** to delete the job, then press **ON LINE**.

**NOTE**

**An alternative method of printing or deleting the document is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.**



## Store to Hard Disk

### 98 / Me / XP / NT 4.0

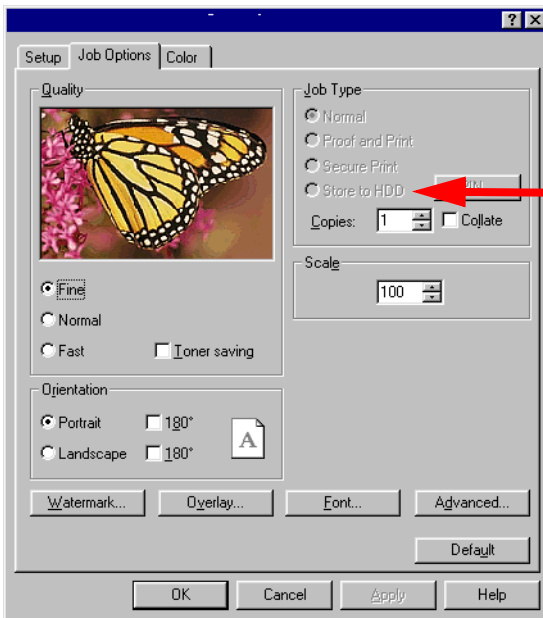
Store to hard disk (job spooling) allows print jobs to be prepared and stored on the hard disk for printing on demand. This is good for forms, generic memos, letterhead stationery, etc.

#### NOTE

- The internal hard disk must be installed in the printer and enabled.
- If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.
- If the software application being used has a collate print option, this must be turned OFF for Store to Hard Disk to operate correctly.
- Store to Hard Disk may not be available in some software applications.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer, then:
  - a. Windows 98/Me/NT4.0: click **Properties**.
  - b. Windows XP: click **Preferences**.

3. On the **Job Options** tab, under **Job Type**, select **Store to HDD**.



4. In the dialog box which appears, enter a **Job Name** and password (PIN) of your choice, then click **OK**. (If no dialog box appears, click **PIN**.)
5. Enter the number of copies and select **Collate**, if applicable, then click **OK**.
6. Windows 98/Me/NT4.0: click **OK**.  
Windows XP: click **Print**.  
*The document is processed to a print file and stored on the hard disk drive.*
7. Go to the printer and print out the document using the front panel (see below).

## To Print A Stored Document

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

---

\*\*\*\*

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

---

5\*\*\*

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. To print all jobs stored under your password, press **ENTER**. To print a specific job, press **+/-** until the name of the job you wish to print appears on the second line of the display, then press **ENTER**.

*The document prints.*

## To Delete A Stored Document from The Hard Disk Drive

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

\*\*\*\*

---

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

5\*\*\*

---

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. Press **+/-** until the name of the job you wish to delete appears on the second line of the display.
6. Press **CANCEL**.

---

DELETE THE JOB  
Y=ENTER/N=CANCEL

---

7. Press **ENTER** to delete the job, then press **ON LINE**.

### **NOTE**

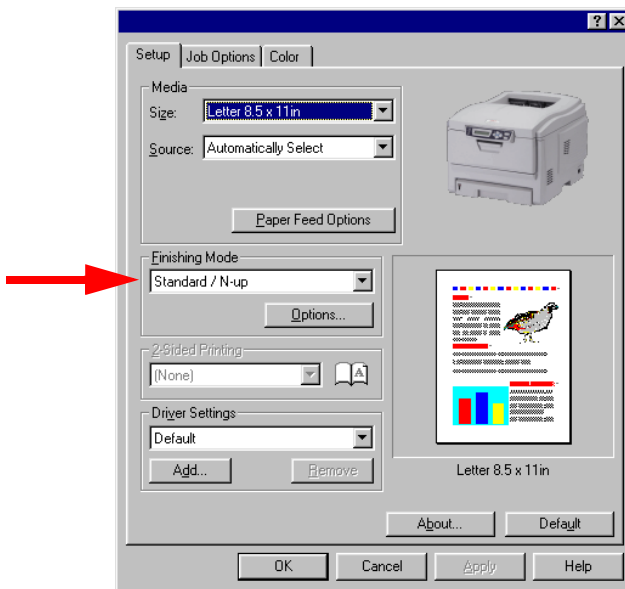
**An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.**

## Printing Posters

### 98 / Me / XP / NT 4.0

This option allows you to configure and print posters by breaking up the document page into multiple pieces which print enlarged on separate sheets. Then the separate sheets are combined to produce a poster. It is only available with the PCL printer driver

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer, then:
  - a. Windows 98/Me/NT4.0: click **Properties**.
  - b. Windows XP: click **Preferences**.
3. On the **Setup** tab, under **Finishing Mode**, select **PosterPrint**.



4. Click **Options...** and enter the configuration details (Note: an overlap of at least 0.2 mm must be specified), then click **OK**.
5. Click **OK**.
6. Windows 98/Me/NT4.0: click **OK**.  
Windows XP: click **Print**.

# Windows 2000

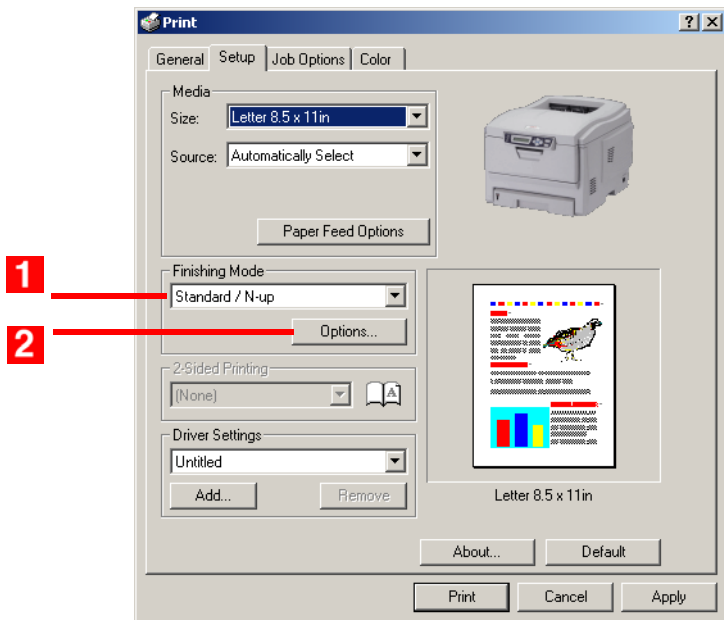
- N-up Printing: multiple pages on one sheet (see page 128)
- Custom Page Sizes (see page 129)
- Selecting Print Resolution (see page 132)
- Duplex Printing (see page 134)
- Watermarks (see page 137)
- Collating (see page 139)
- Proof and Print (see page 140)
- Secure Print: printing confidential documents (see page 145)
- Storing Print Files to the Hard Disk Drive (see page 150)
- Printing Posters (see page 155)

## NOTE

**Most applications allow the printer properties to be accessed from within the document print dialog box.**

## N-Up Printing (Printing Multiple Pages on One Sheet) 2000

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the PCL printer.
3. On the **Setup** tab, under **Finishing Mode** (1), select the required number of pages per sheet in the drop-down list. To set additional parameters, click **Options** (2), then make your selections and click **OK**.



4. Click **Print**.



## Printing Custom Page Sizes 2000

Custom page sizes can only be printed from the Multi-Purpose Tray. The printer media size for the Multi-Purpose Tray must be manually set in the driver to the custom paper size before use (range 3½" to 8½" [89 to 216 mm] wide x 5" to 14" [127 to 356 mm] long).

### NOTE

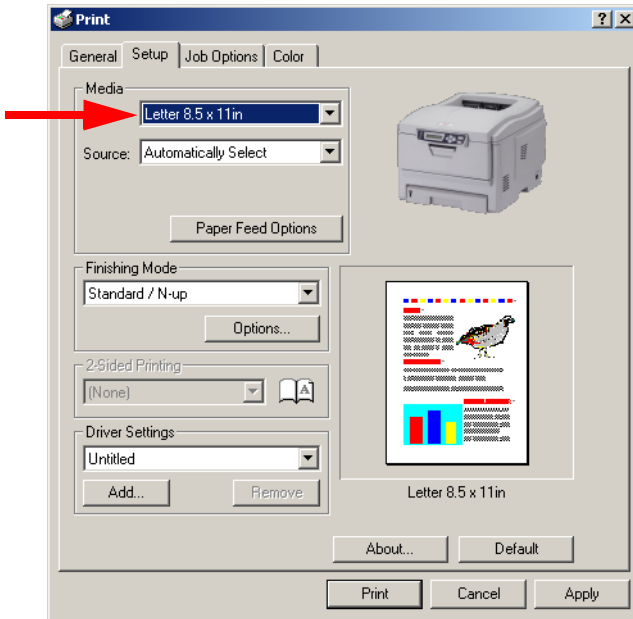
Up to 32 custom page sizes can be defined in the PCL driver.

1. Make sure the rear exit path is open:



2. Load the custom size paper in the tray of your choice.
3. Open the file in your application and select **File** → **Print**.
4. In the **Print** dialog box, select the PCL printer.

5. On the **Setup** tab, under **Media**, select **User Defined Size** in the **Size** drop-down list. Define the custom size in the dialog box which appears, then click **OK**.



## NOTE

You may see a Warning dialog box indicating a conflict. If you do, click OK and the driver will automatically make the needed changes to correct for the conflict.

6. **User Defined Size** now appears in the **Size** list.

### **NOTE**

To save the setting for future use:

- Click Paper Feed Options, then click Custom Size.
- Select the unit, then enter the relevant information for Width and Height and give your custom size a name under Name.
- Click Add.
- Click OK.

*The Custom Page Size is added to the bottom of the Paper Size list.*

7. Select the tray you will be using in the **Source** drop-down list under **Media**, then click **OK**.

8. Click **Print**.

## Changing the Resolution for A Print Job 2000

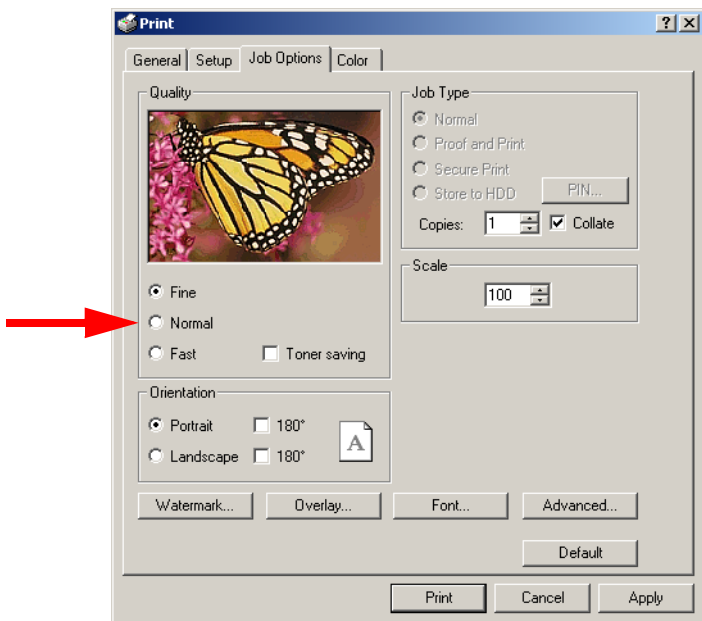
### NOTE

These instructions explain how to change the settings as you are printing a job. If you wish to change the settings to apply to all jobs (default settings):

- Click **Start** → **Settings** → **Printers**.
- Right click the appropriate printer name, then select **Properties**.
- Click **Printing Preferences**.
- Follow steps 3, etc., below. Note that the **Properties** screen for setting defaults will have more tabs.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer.

3. On the **Job Options** tab, select the required printing resolution under **Quality**:
- **Fine** = high resolution, slower speed: choose this one for optimum results when printing graphics.
  - **Normal** = medium resolution, medium speed: the default.
  - **Fast** = low resolution, fast speed: choose this one for drafts or documents without graphics.



4. Select **Toner Saving** if appropriate.
5. Click **Print**.

## Duplex Printing (Printing on Both Sides of The Paper) 2000

### NOTE

The optional duplex unit must be installed in the printer and enabled before duplex printing can be carried out.

- Standard paper sizes only.
- Paper weight range 20 to 28 lb. US Bond (75 to 105 g/m<sup>2</sup>).
- Paper must be loaded print side *up*.
- Any tray (Tray 1, optional Tray 2, MP tray) can be used for duplex printing.

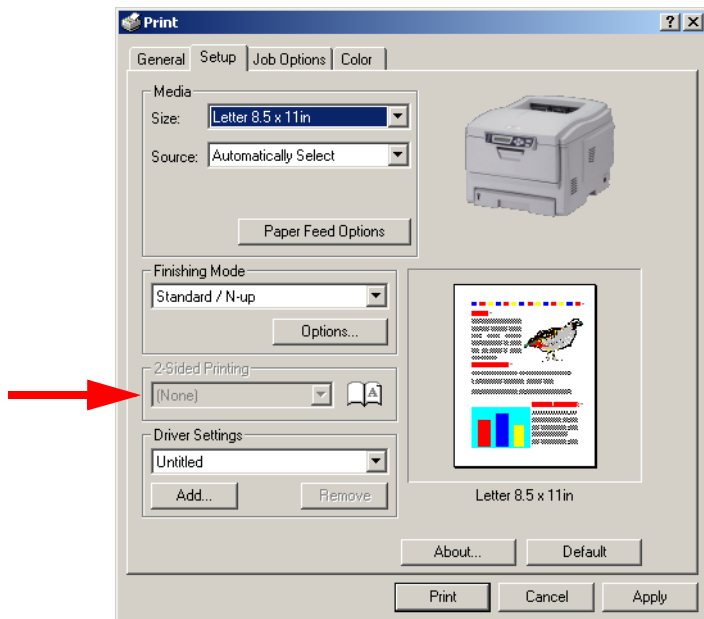
### NOTE

These instructions explain how to change the settings as you are printing a job. If you wish to change the settings to apply to all jobs:

- Click **Start** → **Settings** → **Printers**.
- **Right click the appropriate printer name, then select Properties.**
- **Click Printing Preferences.**
- **Follow steps 3, etc., below. Note that the Properties screen for setting defaults will have more tabs.**

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the PCL printer.

3. On the **Setup** tab, under **2-Sided Printing**, select **Long Edge** or **Short Edge**.



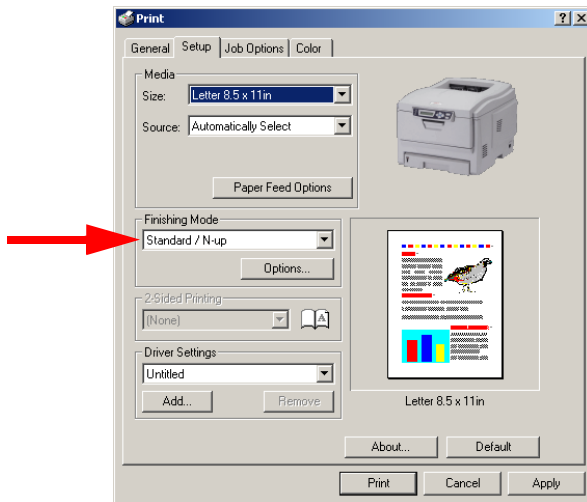
4. Click **Print**.

# Printing Booklets 2000

## NOTES

- You must have the duplex unit installed and enabled in order to print booklets.
- Not available on some network connections: see the Help file.
- Some software applications may not support booklet printing.
- The right-to-left setting allows a booklet to be printed for right to left reading, which is used in some languages.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer.
3. On the **Setup** tab, under **Finishing Mode**, select **Booklet** in the drop-down list.

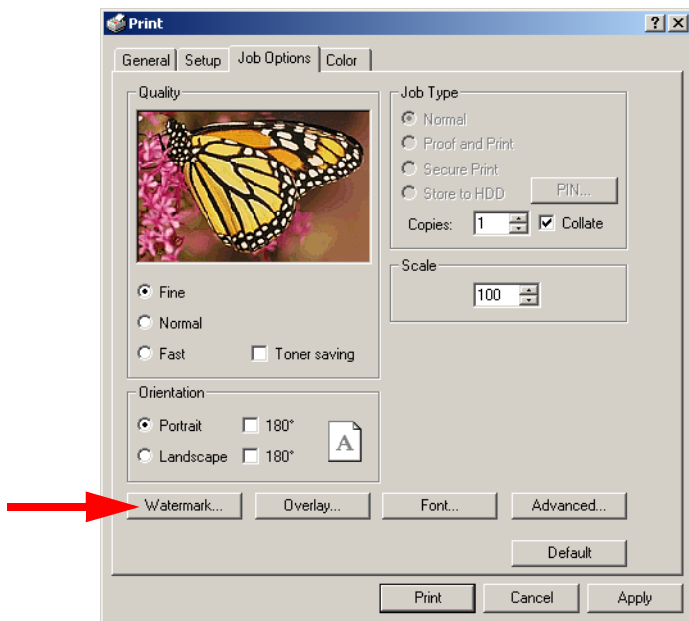


4. Click **Options**, enter your settings, and click **OK**.
5. Click **Print**.



## Printing Watermarks 2000

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer.
3. On the **Job Options** tab, click **Watermark**.



4. Select a name from the **Watermark** list or click **New** to set up a new watermark. When you're finished setting up the new watermark, click **OK**.

## NOTE

To create a new watermark or edit an existing watermark:

- Click the **New or Edit** button.
- Enter the text for the watermark and select the font, size, angle, etc., to be used.
- Click **OK**.

*The new watermark appears in the Watermark list.*

5. If you wish to print the watermark only on the first page of the document, select **First Page only**.
6. Click **OK**.
7. Click **Print**.

## Collating 2000

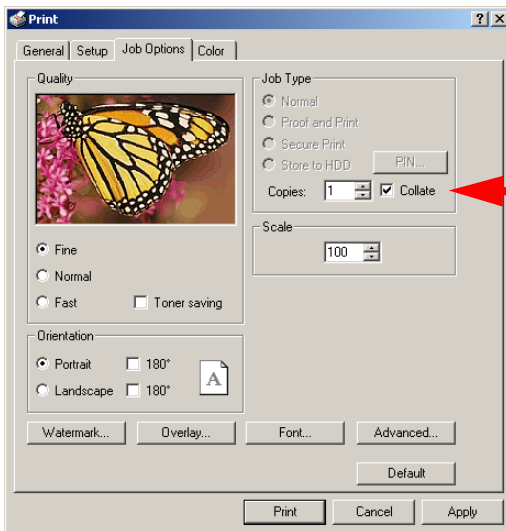
Collating can be carried out with or without a hard disk drive installed. However, printers with a hard disk drive will provide greater performance.

### Important

If your software application has a collate option, use it instead of the collate option in the printer driver.

The following instructions explain how to select collating using the printer driver.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer.
3. On the **Job Options** tab, under **Job Type**, enter the number of copies required and select **Collate**.



4. Click **Print**.

## Proof and Print 2000

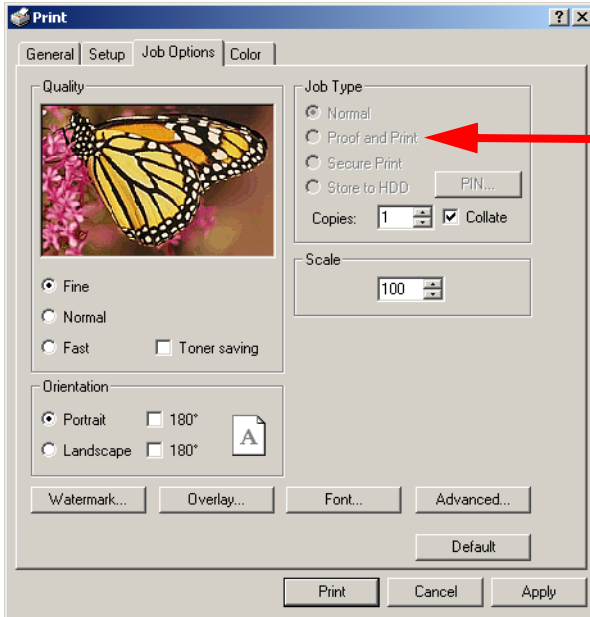
Proof and print allows printing of a single copy of a document for checking before printing multiple copies of the same document.

### NOTES

- The internal hard disk must be installed in the printer and enabled, to allow for spooling of the print job before final printing.
- If the hard disk memory is insufficient for the spooled data, **DISK FULL** is displayed and only one copy is printed.
- If the software application being used has a collate print option, it must be turned OFF for proof and print to operate correctly.
- Proof and print may not be available in some software applications.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer.

3. On the **Job Options** tab, under **Job Type**, select **Proof and Print**.



4. In the dialog box which appears, enter a **Job Name** and password (PIN) of your choice, then click **OK**. (If no dialog box appears, click **PIN**.)
5. On the **General** tab, enter the number of copies and select **Collate**, if applicable, then click **OK**.
6. Click **Print**.  
*The document is processed to a print file and stored on the hard disk drive. One copy is printed for checking.*
7. After checking the proof, print or delete (if incorrect) the remaining copies of the document using the procedures given below.

## Printing The Additional Copies

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

---

\*\*\*\*

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

---

5\*\*\*

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. To print all jobs stored under your password, press **ENTER**. To print a specific job, press **+/-** until the name of the job you wish to print appears on the second line of the display, then press **ENTER**.

*The document prints and is deleted from the hard disk drive.*

## Deleting The Document

If the proof is not ready for printing, the job must be deleted from the printer:

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

---

\*\*\*\*

3. Use **+**/**-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

---

5\*\*\*

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. Press **+**/**-** until the name of the job you wish to delete appears on the second line of the display.

6. Press **CANCEL**.

---

DELETE THE JOB  
Y=ENTER/N=CANCEL

---

7. Press **ENTER** to delete the job, then press **ON LINE**.

### **NOTE**

**An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.**



## Secure Printing (Printing Confidential Documents) 2000

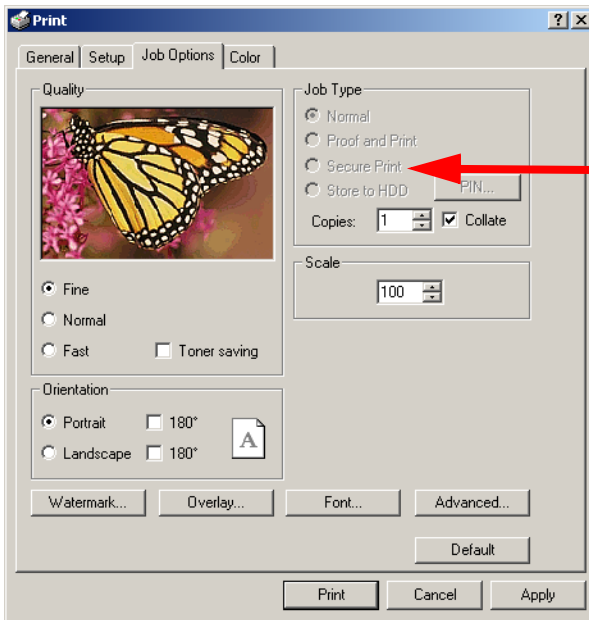
Secure printing or printing with passwords allows the printing of confidential documents on printers that are shared with other users.

### NOTE

- The internal hard disk must be installed in the printer and enabled to allow for spooling of the print job before final printing.
- If the hard disk memory is insufficient for the spooled data, **DISK FULL** is displayed and only one copy printed.
- If the software application being used has a collate print option, this must be turned OFF for secure printing to operate correctly.
- Secure printing may not be available in some software applications.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer.

3. On the **Job Options** tab, under **Job Type**, select **Secure Print**.



4. In the dialog box which appears, enter a **Job Name** and password (PIN) of your choice, then click **OK**. (If no dialog box appears, click **PIN**.)
5. Enter the number of copies and select **Collate**, if applicable.
6. Click **Print**.  
*The document is processed to a print file and stored on the hard disk drive.*
7. Go to the printer and print out the document using the front panel (see below).

## Printing A Confidential Document from The Front Panel

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

---

\*\*\*\*

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

---

5\*\*\*

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. To print all jobs stored under your password, press **ENTER**. To print a specific job, press **+/-** until the name of the job you wish to print appears on the second line of the display, then press **ENTER**.

*The document prints and is deleted from the hard disk drive.*

## Deleting The Confidential Document Before Printing It

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

---

\*\*\*\*

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

---

5\*\*\*

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. Press **+/-** until the name of the job you wish to delete appears on the second line of the display.

6. Press **CANCEL**.

---

DELETE THE JOB  
Y=ENTER/N=CANCEL

---

7. Press **ENTER** to delete the job, then press **ON LINE**.

### **NOTE**

**An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.**

## Store to Hard Disk 2000

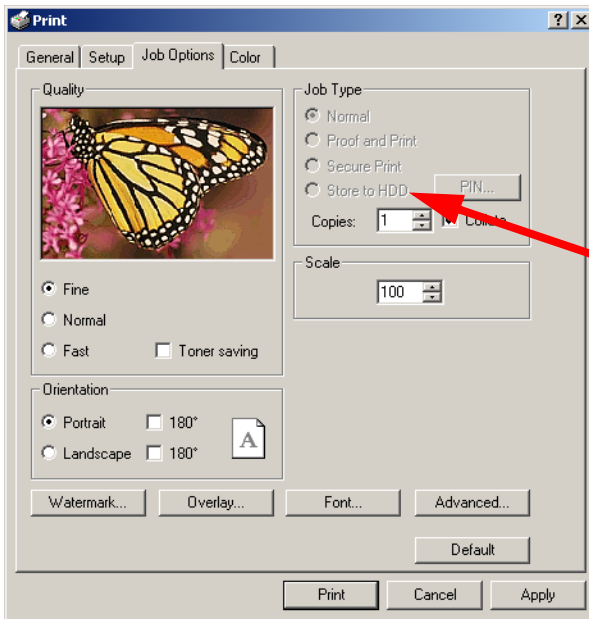
Store to hard disk (job spooling) allows print jobs to be prepared and stored on the hard disk for printing on demand. This is good for forms, generic memos, letterhead stationery, etc.

### NOTE

- The internal hard disk must be installed in the printer and enabled.
- If the hard disk memory is insufficient for the spooled data, DISK FULL is displayed and only one copy printed.
- If the software application being used has a collate print option, this must be turned OFF for Store to Hard Disk to operate correctly.
- Store to Hard Disk may not be available in some software applications.

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer.

3. On the **Job Options** tab, under **Job Type**, select **Store to HDD**.



4. In the dialog box which appears, enter a **Job Name** and password (PIN) of your choice, then click **OK**. (If no dialog box appears, click **PIN**.)
5. Enter the number of copies and select **Collate**, if applicable.
6. Click **Print**.  
*The document is processed to a print file and stored on the hard disk drive.*
7. Go to the printer and print out the document using the front panel (see below).

## To Print A Stored Document

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

---

\*\*\*\*

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

---

5\*\*\*

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. To print all jobs stored under your password, press **ENTER**. To print a specific job, press **+/-** until the name of the job you wish to print appears on the second line of the display, then press **ENTER**.

*The document prints.*



## To Delete A Stored Document from The Hard Disk Drive

1. Press **+** to enter the menu mode.

---

PRINT JOBS MENU

---

2. Press **ENTER**.

---

ENTER PASSWORD

---

\*\*\*\*

3. Use **+/-** to set the number for the first digit of the password, then press **ENTER** to engage the number and move to the next digit:

---

ENTER PASSWORD

---

5\*\*\*

4. Repeat step 3 for each of the remaining digits in the password.

---

SELECT JOB  
ALL JOBS

---

5. Press **+/-** until the name of the job you wish to delete appears on the second line of the display.
6. Press **CANCEL**.

---

DELETE THE JOB  
Y=ENTER/N=CANCEL

---

7. Press **ENTER** to delete the job, then press **ON LINE**.

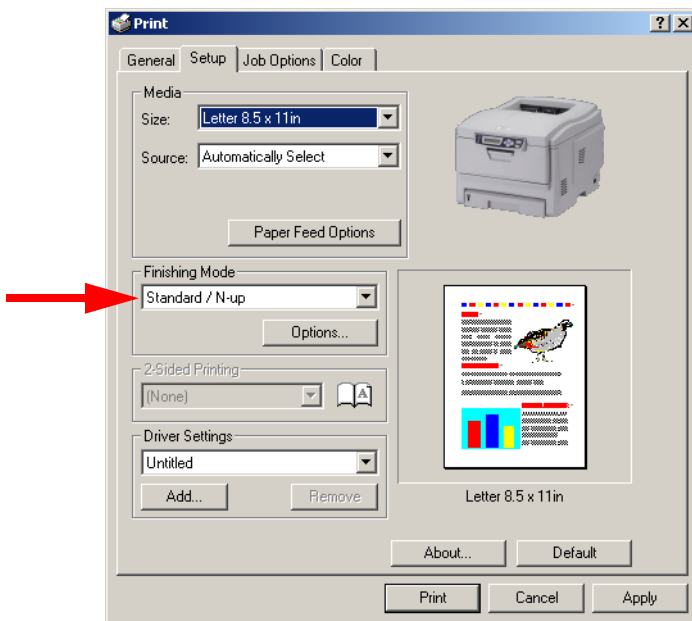
### **NOTE**

**An alternative method of printing or deleting the remaining copies of the document is to use the Storage Device Manager. Please refer to the On-line help for Storage Device Manager.**

## Printing Posters 2000

This option allows you to configure and print posters by breaking up the document page into multiple pieces which print enlarged on separate sheets. Then the separate sheets are combined to produce a poster. It is only available with the PCL printer driver

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, click the PCL printer.
3. On the **Setup** tab, under **Finishing Mode**, select **PosterPrint** in the drop-down list.



4. Click **Options...** and enter the configuration details (Note: an overlap of at least 0.2 mm must be specified), then click **OK**.
5. Click **Print**.

# Color Printing

The PCL and Postscript emulation printer drivers supplied with this printer provide several controls for changing the color output of your printer. For general use the Auto settings will suffice, providing reasonable default settings that will produce good results for most documents.

Many applications have their own color settings, and these may override the settings in the printer driver. Please refer to the documentation for your software application for details on how that particular program's color management functions.

## General Information

### Factors That Affect the Appearance of Printed Documents

If you wish to manually adjust the color settings in your printer driver, please be aware that *color reproduction is a complex topic, and there are many factors to take into consideration*. Some of the most important factors are listed below.

### Differences between the Range of Colors a Monitor or Printer Can Reproduce

- Neither a printer nor a monitor is capable of reproducing the full range of colors visible to the human eye. Each device is restricted to a certain range of colors. In addition to this, a printer cannot reproduce all of the colors displayed on a monitor, and vice versa.
- Both devices use very different technologies to represent color. A monitor uses Red, Green and Blue (RGB) phosphors (or LCDs), a printer uses Cyan, Magenta, Yellow and Black (CMYK) toner or ink.
- A monitor can display very vivid colors such as intense reds and blues and these cannot be easily produced on any printer using toner or ink. Similarly, there are certain colors, (some yellows for example), that can be printed, but cannot be displayed accurately on a monitor. This disparity between monitors and printers is often the main reason that printed colors do not match the colors displayed on screen.

## Viewing conditions

A print can look very different under different lighting conditions. For example, the colors in a print may look different when viewed standing next to a sunlit window, compared to how they look under standard office fluorescent lighting.

## Printer driver color settings

The driver settings for Manual color can change the appearance of a print. There are several options available to help match the printed colors with those displayed on screen.

## Monitor settings

The brightness and contrast controls on your monitor can change how your document looks on-screen. Additionally, your monitor's color temperature influences how "warm" or "cool" the colors look.

### NOTE

**Several of the Color Matching options make reference to your monitor's Color Temperature. Many modern monitors allow the color temperature to be adjusted using the monitor's control panel.**

There are several settings found on a typical monitor:

- **5000k\***

Warmest; yellowish lighting, typically used in graphics arts environments.

- **6500k**

Cooler; approximates daylight conditions.

- **9300k**

Cool; the default setting for many monitors and television sets.

\*k = degrees Kelvin, a measurement of temperature

## **How Your Software Application Displays Color**

Some graphics applications such as CorelDRAW® or Adobe® Photoshop® may display color differently from "office" applications such as Microsoft® Word. Please see your application's on-line help or user manual for more information.

### **Paper Type**

The type of paper used can also significantly affect the printed color. For example, a printout on recycled paper can look duller than one on specially formulated glossy paper.

# Choosing a Color Matching Method

There is no correct way to achieve a good match between the document displayed on your monitor, and its printed equivalent. There are many factors involved in achieving accurate and reproducible color.

The following guidelines may help in achieving good color output from your printer. There are several suggested methods, depending on the type of document you are printing.

## NOTE

**These suggestions are for guidance only. Your results may vary depending on the application from which you are printing. Some applications will override any color matching settings in the printer driver without warning.**

## RGB or CMYK?

The guidelines for choosing a color matching method makes distinctions between Red, Green, Blue (RGB) and Cyan, Magenta, Yellow, Black (CMYK).

Generally, most documents you print will be in RGB format. This is the most common, and if you do not know your document's color mode, assume that it is RGB.

Typically CMYK documents are only supported in professional Desktop Publishing and Graphics applications.

## Matching Photographic Images

### RGB only

Oki Color Matching is a generally a good choice. Select a matching method appropriate to your monitor.

## **RGB or CMYK**

If you are printing photographic images from a graphics application such as Adobe Photoshop, you may be able to use Soft-Proofing to simulate the printed image on your monitor. To do this, you can use the ICC-Profiles provided by Oki, and then print using the ICC profiles as the Print Space (or Output space).

## **Matching Specific Colors (e.g., a Company logo): RGB only**

- Option 1: Select Oki Color Matching, and the sRGB setting on the Color tab in the PCL or Postscript emulation driver.
- Option 2: For Postscript emulation print jobs: Select Postscript Color Matching using the Absolute Colorimetric option on the Color tab in the printer driver.
- Option 3: Use the Color Swatch Utility provided on the CD supplied with your printer to print out a chart of RGB swatches, then enter the desired RGB values in your application's color picker.

## **Printing Vivid Colors: RGB Only**

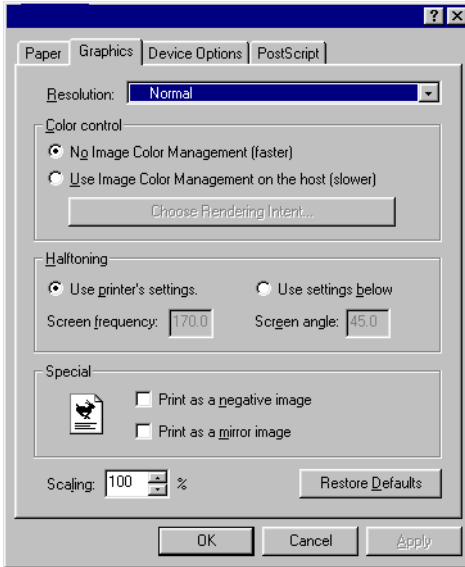
Use Oki Color Matching, with either the Monitor 6500k Vivid, sRGB or Digital Camera settings (PCL or Postscript emulations).



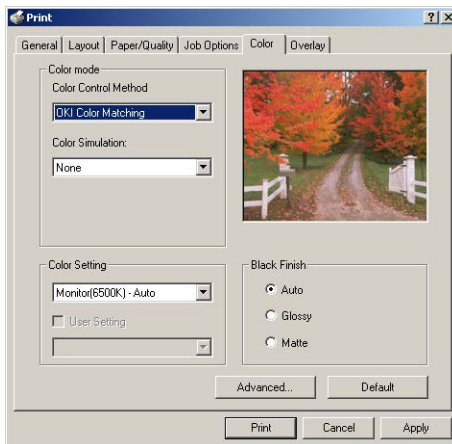
# Color matching: Postscript emulation driver

The Postscript emulation driver color matching options are found:

- Windows 98 and Me: on the **Graphics** tab in the driver:



- Windows 2000, XP and NT 4.0: on the Color tab in the driver:



## **To change the Postscript emulation driver's color matching defaults from the Windows Control Panel:**

1. Click **Start** → **Settings** → **Printers** [**Printers and Faxes** in Windows XP].
2. Right-click the printer name and choose **Properties**.
3. Click **Printing Preferences**.
4. Click the appropriate tab (**Graphics** tab for Windows 98/Me, **Color** tab for Windows 2000/XP/NT 4.0) and make your changes.

## **To change the Postscript emulation Color Matching options for a particular print job:**

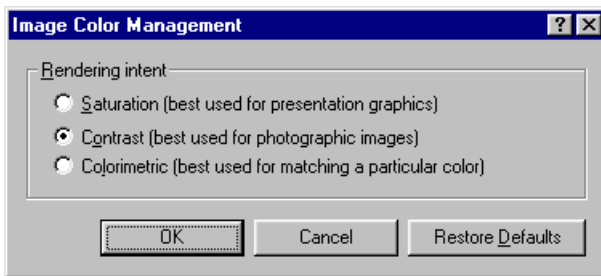
1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the Postscript emulation printer.
  - a. Windows 98/Me/NT4.0: click **Properties**.
  - b. Windows XP: click **Preferences**.
3. Click the appropriate tab (**Graphics** tab for Windows 98/Me, **Color** tab for Windows 2000/XP/NT 4.0) and make your changes, then go back to the **Print** dialog box and print the document.

## Color Matching Options: Windows Me and 98

The Graphics tab on the Postscript emulation driver in these Windows operating systems offers several rendering intents for controlling the color output of the printer.

When a document is printed, a conversion takes place from the document's color to the printer color. The rendering intents are essentially a set of rules that determine how this color conversion takes place.

Select **Use Image Color Management**, then click **Choose Rendering Intent**:



### Saturation

Best choice for printing graphs, charts, diagrams etc. Maps fully saturated colors in the source gamut to fully saturated colors in the printer's gamut.

### Contrast

Best choice for printing photographs.

### Colorimetric

Best for printing solid colors and tints, such as company logos. Matches colors common to both the printer and the screen.

## Color Matching Options: Windows 2000, XP and NT 4.0

The **Color** tab on the Postscript emulation driver in these Windows operating systems offers several different methods of controlling the color output of the printer.

Some of the color matching options only work on certain types of data. The table below summarizes the various options available, and what types of data they affect.

Color Matching Option	RGB data	CMYK data
Oki Color Matching	Yes	No
Postscript Color Matching	Yes	Yes
CMYK Ink Simulation	No	Yes
Windows ICM Matching <sup>a</sup>	Yes	No
Using ICC Profiles	Yes	No

a. Not Windows NT 4.

### Oki Color Matching

This is Oki's proprietary color matching system, and affects RGB data only.

- **Perceptual** settings are best for printing photographic images.
- **Vivid** or **Digital Camera** settings produce brightest colors.
- **sRGB** is the best choice for matching specific colors (such as printing logos).

#### Monitor (6500k) Perceptual

Optimized for printing photographs when using a monitor with a color temperature of 6500K.

#### Monitor (6500k) Vivid

Optimized for printing bright colors when using a monitor with a color temperature of 6500K. Good for office graphics and text.

#### Monitor (9300k)

Optimized for printing photographs when using a monitor with a color temperature of 6500K.

## Digital Camera

Optimized for printing photographs taken with a digital camera. This tends to produce prints with lighter and brighter colors. For some photographs, other settings may be better depending on the subjects and the conditions under which they were taken.

## sRGB

Optimized for matching specific colors, such as a company logo color.

The colors within the printer's color gamut are printed without any modification, and only colors that fall outside the gamut (set) of printable colors are modified.

## Postscript Color Matching

This uses Postscript Color Rendering Dictionaries built into the printer, and affects both RGB and CMYK data.

## Rendering Intents

When a document is printed, a conversion takes place from the document's color space to the printer color space. The rendering intents are essentially a set of rules that determine how this color conversion takes place.

The rendering intents that the printer driver provides are listed below:

- **Perceptual**

Best choice for printing photographs. Compresses the source gamut into the printer's gamut whilst maintaining the overall appearance of an image. This may change the overall appearance of an image as all the colors are shifted together.

- **Saturation**

Best choice for printing bright and saturated colors, but less accurately matched. This makes it the recommended choice for graphs, charts, diagrams etc. Maps fully saturated colors in the source gamut to fully saturated colors in the printer's gamut.

- **Absolute Colorimetric**

Best for printing solid colors and tints, such as Company logos etc. Matches colors common to both devices exactly, and clips the out of gamut colors to their nearest printed equivalent. Tries to print white as it appears on screen. The white of a monitor is

often very different from paper white, so this may result in color casts, especially in the lighter areas of an image.

- **Relative Colorimetric**

Good for proofing CMYK color images on a desktop printer. Much like Absolute Colorimetric, except that it scales the source white to the (usually) paper white. Unlike Absolute Colorimetric, this attempts to take the paper white into account.

## **CMYK Ink Simulation**

Affects CMYK data only.

This option simulates what the output will look like on a printing press using the ink types SWOP, Euroscale or Toyo. If using CMYK Ink Simulation, it is recommended that you switch off all other Printer Color Matching. Select the No Color Matching option under the Color Match option in the printer driver.

## **Windows ICM Color Matching**

Windows 98, Me, 2000 and XP only. This affects RGB data only.

ICM is the color management system built into Windows.

Windows ICM uses ICC profiles for your monitor and printer; these profiles describe the colors that your device is capable of reproducing. ICC profiles can be associated with your printer via the Color Management tab of the printer driver.

Depending on how you have installed the printer driver, the color profiles may already be associated with the driver.

To associate ICC Color Profiles with the printer driver:

1. Access the printer settings via the **Start** menu.
2. Right-click the printer name and choose **Properties**.
3. Click the Color Management tab.
4. Under "Color Profiles currently associated with this printer," you should see the names of profiles that match your printer model. If you do not see any profiles associated with the driver, click "Add..." and locate the ICC profiles for your printer.

Windows ICM uses the information in these profiles to convert colors in your documents to colors that the printer can reproduce. The way

in which this conversion is performed can be controlled via the ICM Intent control in the printer driver.

### **Using ICC Profiles**

Affects RGB data only.

This provides a method of matching RGB colors similar to Windows ICM matching. The main advantage it has over Windows ICM color matching is that it provides a method of printing using both input and output profiles. Windows ICM matching only allows output profiles to be chosen.

**Input profiles** provide information about the color in the original device that was used to capture or display the image data. For example, an input device could be a scanner, digital camera or monitor.

**Output profiles** provide information about the device to which you are printing.

The “Using ICC Profiles” function allows both an input profile (e.g. digital camera), and an output profile (e.g. your printer) to be selected. It uses both these profiles to generate a CRD (Color Rendering Dictionary), and this is used to match the colors as closely as possible.

#### **NOTE**

**This feature may not work for all application programs. However, many professional graphics applications offer a similar feature in their print settings, with the ability to choose a source (input) color space, and a print (output) color space.**

# Color Matching: PCL Driver

## Color Matching Options

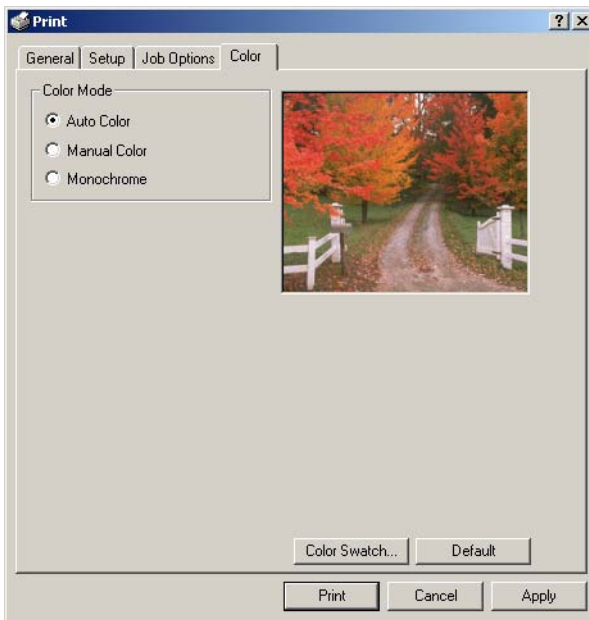
The Color Matching options in the PCL driver can be used to help match your printed colors to the ones displayed on your monitor.

### NOTE

The PCL driver's color options are only designed to work with RGB data.

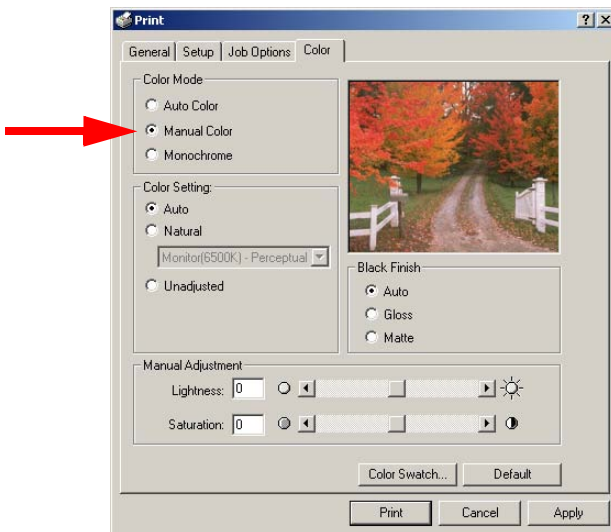
If you are printing CMYK data, we recommend you use the Postscript emulation driver.

The PCL driver color matching options are found on the Color tab in the driver:





To set the color matching options manually, click Manual Color. The Color tab screen will change to:



Choose from the following options:

- **Monitor (6500k) Perceptual**  
Optimized for printing daylight photographs.
- **Monitor (6500k) Vivid**  
Optimized for printing bright colors. Good for office graphics.
- **Monitor (9300k)**  
Optimized for printing photographs when using a monitor with this color temperature.
- **Digital Camera**  
Optimized for printing photographs taken with a digital camera. This tends to produce prints with lighter and brighter colors. For some photographs, other settings may be better depending on the subjects and the conditions under which they were taken.
- **sRGB**  
Optimized for matching specific colors, such as a company logo color. The colors within the printer's color gamut are printed without any modification, and only colors that fall outside the printable colors are modified.

## **To change the PCL driver's color matching defaults from the Windows Control Panel:**

1. Click **Start** → **Settings** → **Printers** [**Printers and Faxes** in Windows XP].
2. Right-click the printer name and choose **Properties**.
3. Click **Printing Preferences**.
4. Click the **Color** tab and make your changes.

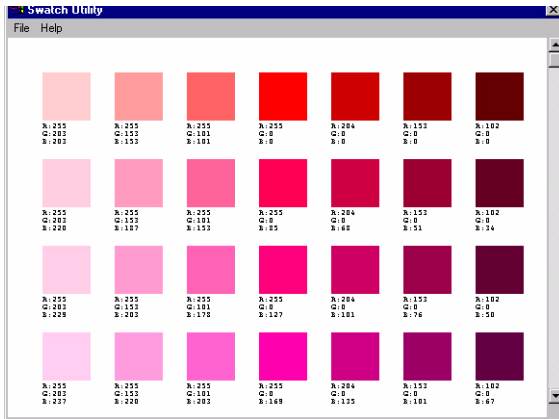
## **To change the PCL Color Matching options for a particular print job:**

1. Open the file in your application and select **File** → **Print**.
2. In the **Print** dialog box, select the PCL printer.
  - a. Windows 98/Me/NT4.0: click **Properties**.
  - b. Windows XP: click **Preferences**.
3. Click the **Color** tab, select **Manual Color** and make your changes, then go back to the **Print** dialog box and print the document.

## The Print Color Swatch Utility

For use with applications which allow you to set your own RGB values for colors.

The Color Swatch utility prints out charts of sample colors. Listed below each color are the corresponding RGB (Red, Green, Blue) values to use in your application to match that printed color:



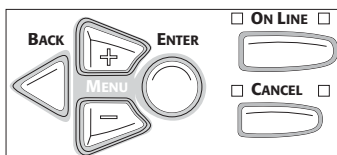
For more information see "Color Swatch Utility" on page 290.

# Menu Functions

This section lists the menus accessed via the controls on the printer's operator panel and displayed in the LCD window.

Many of these settings can be overridden by settings in the Windows printer drivers. However, several of the driver settings can be left at "Printer Setting," which will then default to the settings entered in these printer menus

## How To Make Changes in The Menus



1. Press **+** to enter the menu mode.
2. Press **+** or **-** to scan through the available menus until the menu you wish to enter appears on the display.

### NOTE

The menus and their various listings will vary depending on which options you have installed on your printer.

3. Press **ENTER** to enter the menu.
4. Use **+/-** to move up and down through the items in the selected menu. When the item you want to change is displayed, press **ENTER** to edit that item.
5. Use **+/-** to move up and down through the available settings for this item.

6. When the setting you wish to use appears on the display, press **ENTER**.

*An asterisk (\*) appears next to the setting, and the setting flashes.*

7. To finish:

a. If you are through making settings in the menu, press **ON LINE** to engage the setting and exit the menu.

b. If you wish to make additional changes in the menu, press **BACK** to engage the setting.

– To change another setting in the same menu, use **MENU +/ MENU –** to move through the list of menu items to the one you wish to change, then follow steps 5 through 7.

– To change the setting for an item in a different menu, press **BACK** again, then follow steps 2 through 7.

### **For Example:**

To engage duplex printing (default setting is OFF):

1. Press **MENU +** to enter the menu mode.

2. Press **MENU +** and/or **MENU –** repeatedly until you see

---

PRINT MENU

---

3. Press **ENTER** to go into the Print Menu.

---

COPIES

1\*

---

4. Press **MENU +** and/or **MENU –** repeatedly until you see

---

DUPLEX

OFF

\*

---

5. Press **ENTER** to select this item.

6. Press **MENU +** to change the setting to ON:

---

DUPLEX  
ON

---

*The second line of the display begins flashing.*

7. Press **ENTER** to select the new setting:

---

DUPLEX  
ON \*

---

*An asterisk appears on the second line of the display.*

8. Press **ON LINE** to engage the new setting and to exit the menu.  
*The printer returns to standby mode.*

# Summary of Menu Defaults

## Menu Defaults

**Note:** Menus/Items with a dagger (†) only appear when the appropriate option (e.g., Hard Disk Drive, Duplex Unit, Second Paper Tray, etc.) is installed.

Menu	Item	Default Setting
PRINT JOBS MENU†	ENTER PASSWORD	****
	SELECT JOB	ALL JOBS
INFORMATION MENU	PRINT MENU MAP	[EXECUTE]
	PRINT FILE LIST	[EXECUTE]
	PRINT PCL FONT	[EXECUTE]
	PRINT PSE FONT	[EXECUTE]
	PRINT PPR FONT	[EXECUTE]
	PRINT FX FONT	[EXECUTE]
	DEMO1	[EXECUTE]
SHUTDOWN MENU†	PRINT ERROR LOG	[EXECUTE]
	SHUTDOWN START	[EXECUTE]
PRINT MENU	COPIES	1
	DUPLEX	OFF
	PAPER FEED	TRAY1
	AUTO TRAY SWITCH	ON
	TRAY SEQUENCE	DOWN
	MP TRAY USAGE	DO NOT USE
	MEDIA CHECK	ENABLE
	RESOLUTION	600x1200DPI
	TONER SAVE MODE	OFF
	MONO-PRINT SPEED	AUTO
	ORIENTATION	PORTRAIT
LINES PER PAGE	60 LINES	
EDIT SIZE	CASSETTE SIZE	

## Menu Defaults (continued)

**Note:** Menus/Items with a dagger (†) only appear when the appropriate option (e.g., Hard Disk Drive, Duplex Unit, Second Paper Tray, etc.) is installed.

Menu	Item	Default Setting
MEDIA MENU	TRAY1 PAPERSIZE	LETTER
	TRAY1 MEDIATYPE	PLAIN
	TRAY1 MEDIAWEIGHT	MEDIUM
	TRAY2 PAPERSIZE†	LETTER
	TRAY2 MEDIATYPE†	PLAIN
	TRAY2 MEDIAWEIGHT†	MEDIUM
	MP TRAY PAPERSIZE	LETTER
	MP TRAY MEDIATYPE	PLAIN
	MP TRAY MEDIAWEIGHT	MEDIUM
	UNIT OF MEASURE	INCH
	X DIMENSION	8.5 INCH
	Y DIMENSION	11 INCH
	COLOR MENU	DENSITY CONTROL
ADJUST DENSITY		[EXECUTE]
COLOR TUNING		PRINT PATTERN
C HIGHLIGHT		0
C MID-TONE		0
C DARK		0
M HIGHLIGHT		0
M MID-TONE		0
M DARK		0
Y HIGHLIGHT		0
Y MID-TONE		0
Y DARK	0	
K HIGHLIGHT	0	



## Menu Defaults (continued)

**Note:** Menus/Items with a dagger (†) only appear when the appropriate option (e.g., Hard Disk Drive, Duplex Unit, Second Paper Tray, etc.) is installed.

Menu	Item	Default Setting
COLOR MENU (cont.)	K MID-TONE	0
	K DARK	0
	C DARKNESS	0
	M DARKNESS	0
	Y DARKNESS	0
	K DARKNESS	0
	AJST REGISTRATION	[EXECUTE]
	C REG FINE AJSTS	0
	M REG FINE AJST	0
	Y REG FINE AJST	0
	INK SIMULATION	OFF
	UCR	LOW
	CMY100% DENSITY	DISABLE
	CMYK CONVERSION	ON
	SYS CONFIG MENU	POW SAVE TIME
PERSONALITY		AUTO EMULATION
PARA PS-PROTOCOL		ASCII
USB PS-PROTOCOL		RAW
CLRABLE WARNING		ON
AUTO CONTINUE		OFF
MANUAL TIMEOUT		60 SEC
WAIT TIMEOUT		40 SEC
LOW TONER		CONTINUE
JAM RECOVERY	ON	
ERROR REPORT	OFF	

## Menu Defaults (continued)

**Note:** Menus/Items with a dagger (†) only appear when the appropriate option (e.g., Hard Disk Drive, Duplex Unit, Second Paper Tray, etc.) is installed.

Menu	Item	Default Setting
SYS CONFIG MENU (cont.)	LANGUAGE	ENGLISH
PCL EMULATION	FONT SOURCE	RESIDENT
	FONT NO.	I000
	FONT PITCH	10.00 CPI
	FONT HEIGHT	12.00 POINT
	SYMBOL SET	PC-8
	A4 PRINT WIDTH	78 COLUMN
	WHITE PAGE SKIP	OFF
	CR FUNCTION	CR
	LF FUNCTION	LF
	PRINT MARGIN	NORMAL
	TRUE BLACK	OFF
	PEN WIDTH ADJUST	ON
PPR EMULATION	CHARACTER PITCH	10 CPI
	FONT CONDENSE	12CPI TO 20CPI
	CHARACTER SET	SET-2
	SYMBOL SET	IBM-437
	LETTER O STYLE	DISABLE
	ZERO CHARACTER	NORMAL
	LINE PITCH	6 LPI
	WHITE PAGE SKIP	OFF
	CR FUNCTION	CR
	LF FUNCTON	LF
	LINE LENGTH	80 COLUMN
	FORM LENGTH	11 INCH

## Menu Defaults (continued)

**Note:** Menus/Items with a dagger (†) only appear when the appropriate option (e.g., Hard Disk Drive, Duplex Unit, Second Paper Tray, etc.) is installed.

Menu	Item	Default Setting
PPR EMULATION (cont.)	TOF POSITION	0.0 INCH
	LEFT MARGIN	0.0 INCH
	FIT TO LETTER	ENABLE
	TEXT HEIGHT	SAME
FX EMULATION	CHARACTER PITCH	10 CPI
	CHARACTER SET	SET-2
	SYMBOL SET	IBM-437
	LETTER O STYLE	DISABLE
	ZERO CHARACTER	NORMAL
	LINE PITCH	6 LPI
	WHITE PAGE SKIP	OFF
	CR FUNCTION	CR
	LINE LENGTH	80 COLUMN
	FORM LENGTH	11 INCH
	TOF POSITION	0.0 INCH
	LEFT MARGIN	0.0 INCH
	FIT TO LETTER	ENABLE
	TEXT HEIGHT	SAME
PARALLEL MENU	PARALLEL	ENABLE
	BI-DIRECTION	ENABLE
	ECP	ENABLE
	ACK WIDTH	NARROW
	ACK/BUSY TIMING	ACK IN BUSY
	I-PRIME	DISABLE
	OFFLINE RECEIVE	DISABLE

## Menu Defaults (continued)

**Note:** Menus/Items with a dagger (†) only appear when the appropriate option (e.g., Hard Disk Drive, Duplex Unit, Second Paper Tray, etc.) is installed.

Menu	Item	Default Setting
USB MENU	USB	ENABLE
	SOFT RESET	DISABLE
	SPEED	480Mbps
	OFFLINE RECEIVE	DISABLE
NETWORK MENU	TCP/IP	ENABLE
	NETBEUI	ENABLE
	NETWARE	ENABLE
	ETHERTALK	ENABLE
	FRAME TYPE	AUTO
	IP ADDRESS SET	AUTO
	IP ADDRESS	192.168.100.100
	SUBNET MASK	255.255.255.000
	GATEWAY ADDRESS	192.168.100.254
	WEB/IPP	ENABLE
	TELNET	ENABLE
	FTP	ENABLE
	SNMP	ENABLE
	LAN	NORMAL
HUB LINK SETTING	AUTO NEGOTIATE	
MEMORY MENU†	RECEIVE BUF SIZE	AUTO
	RESOURCE SAVE	OFF
DISK MAINTENANCE†	HDD INITIALIZE	[EXECUTE]
	PARTITION SIZE	Not Applicable
	HDD FORMATTING	[EXECUTE]

## Menu Defaults (continued)

**Note:** Menus/Items with a dagger (†) only appear when the appropriate option (e.g., Hard Disk Drive, Duplex Unit, Second Paper Tray, etc.) is installed.

Menu	Item	Default Setting
SYS ADJUST MENU†	X ADJUST	0.00 MILLIMETER
	Y ADJUST	0.00 MILLIMETER
	DUPLEX X ADJUST	0.00 MILLIMETER
	DUPLEX Y ADJUST	0.00 MILLIMETER
	PCL TRAY2 ID#†	5
	PCL MP TRAY ID#	4
	DRUM CLEANING	OFF
MAINTENANCE MENU	HEX DUMP	[EXECUTE]
	MENU RESET	[EXECUTE]
	SAVE MENU	[EXECUTE]
	POWER SAVE	ENABLE
	PAPER BLACK SET	0
	PAPER COLOR SET	0
	TRNSPR BLACK SET	0
USAGE MENU	TRNSPR COLOR SET	0
	TRAY1 PAGE COUNT	nnnn
	TRAY2 PAGE COUNT†	nnnn
	MPT PAGE COUNT	nnnn
	COLOR PAGE COUNT	nnnn
	MONO PAGE COUNT	nnnn
	K DRUM LIFE	REMAINING nn%
C DRUM LIFE	REMAINING nn%	
M DRUM LIFE	REMAINING nn%	

## Menu Defaults (continued)

**Note:** Menus/Items with a dagger (†) only appear when the appropriate option (e.g., Hard Disk Drive, Duplex Unit, Second Paper Tray, etc.) is installed.

Menu	Item	Default Setting
USAGE MENU (cont)	Y DRUM LIFE	REMAINING nn%
	BELT LIFE	REMAINING nn%
	FUSER LIFE	REMAINING nn%
	K TONER	REMAINING nn%
	C TONER	REMAINING nn%
	M TONER	REMAINING nn%
	Y TONER	REMAINING nn%

# Printer Menus

## Print Jobs Menu

This menu only appears if you have the optional Hard Disk Drive installed.

Item	Action	Explanation
ENTER PASSWORD	****	Use <b>MENU +</b> and <b>MENU -</b> to enter a digit of the password, then press ENTER to progress to the next digit.
SELECT JOB	NO JOBS <b>ALL JOBS</b> FILE NAME #1 ... FILE NAME #n	Select the job you wish to print.

## Information Menu

Item	Action	Explanation
PRINT MENU MAP	EXECUTE	Prints the MenuMap (menu listing) with current settings shown. Information about your printer is also shown at the top of each MenuMap page.
PRINT FILE LIST	EXECUTE	Prints a listing of the files stored in the flash memory and on the optional Hard Disk Drive (see "Hard Disk Drive" on page 248).
PRINT PCL FONT	EXECUTE	Prints a list of internal PCL fonts, plus those stored in ROM (slot 0), flash memory and on the optional Hard Disk Drive (see "Hard Disk Drive" on page 248).
PRINT PSE FONT	EXECUTE	Prints a list of internal Postscript emulation fonts.
PRINT PPR FONT	EXECUTE	Prints a list of internal IBM ProPrinter III XL emulation fonts, including any downloaded to flash memory or the optional Hard Disk Drive (see "Hard Disk Drive" on page 248).
PRINT FX FONT	EXECUTE	Prints a list of internal Epson FX emulation fonts, including any downloaded to flash memory or the optional Hard Disk Drive (see "Hard Disk Drive" on page 248).
PRINT ERROR LOG	EXECUTE	Prints a listing of errors stored in the printer's memory.





## Print Menu

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
COPIES	<b>1</b> to 999	Enter the number of copies of a document to be printed.
DUPLEX	ON <b>OFF</b>	Turns the duplex (2-sided) printing function on or off <i>if this option is installed</i> .
PAPER FEED	<b>TRAY1</b> TRAY2 MP TRAY	Selects the default tray for paper feed.
AUTO TRAY SWITCH	<b>ON</b> OFF	If two trays contain identical print media, the printer can switch to an alternate tray when the current tray runs out in the middle of a print job.
TRAY SEQUENCE	<b>DOWN</b> UP PAPER FEED TRAY	Sets the sequence in which the printer will seek an alternate tray with the same media size should the currently selected tray run out of media while printing a job.
MP TRAY USAGE	<b>DO NOT USE</b> WHEN MISMATCH XXX	If a document to be printed demands a paper size not installed in the selected tray, the printer can automatically feed from the Multi-Purpose Tray instead. If this function is not enabled, the printer will stop and request that the correct size be loaded.
MEDIA CHECK	<b>ENABLE</b> DISABLE	Set to DISABLE if you do not wish the printer to check to see if the size paper loaded in the selected tray matches that required for the document being printed.

## Print Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
RESOLUTION	<b>600x1200DPI</b> 600DPI	If you don't need 600x1200DPI resolution, switch to 600DPI to print faster, to reduce the amount of printer memory and toner used.
TONER SAVE MODE	<b>OFF</b> ON	Reduces the amount of toner used for imaging. Toner saving gives lighter prints but is more economical.
MONO-PRINT SPEED	<b>AUTO</b> COLOR SPEED NORMAL SPEED	Sets the print engine speed. If you are printing only color documents, switch to COLOR SPEED. If you are printing only monochrome documents, switch to NORMAL SPEED.
ORIENTATION	<b>PORTRAIT</b> LANDSCAPE	Selects default page orientation:  Portrait:   Landscape: 
LINES PER PAGE	5 to 128 LINES Default = <b>60 LINES</b>	Sets the number of lines of text per page when raw text is received from systems other than Windows.

## Print Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
EDIT SIZE	<b>CASSETTE SIZE</b> LETTER EXECUTIVE LEGAL14 LEGAL13.5 LEGAL13 A4, A5, A6, B5 CUSTOM COM-9 ENVELOPE COM-10 ENVELOPE MONARCH ENV DL ENVELOPE C5 ENVELOPE	Sets the size of the printable page area to match the size of paper in use. This is not the same as the physical paper size, which is always slightly larger.

## Media Menu

### Notes:

- Factory default settings are shown in **bold**.
- Menus/Items with an asterisk (†) only appear when the appropriate option (e.g., Hard Disk Drive, Duplex Unit, Second Paper Tray, etc.) is installed.

Item	Settings	Explanation
TRAY1 PAPERSIZE	A4, A5, A6, B5 LEGAL14 LEGAL13.5 LEGAL13 <b>LETTER</b> EXECUTIVE CUSTOM	Defines the size of paper loaded in Tray 1.
TRAY1 MEDIATYPE	<b>PLAIN</b> LETTERHEAD BOND RECYCLED ROUGH	Defines the type of media loaded in Tray 1. This will help the printer to adjust its internal operating parameters, such as engine speed and fusing temperature.
TRAY1 MEDIAWEIGHT	LIGHT <b>MEDIUM</b> HEAVY	Adjusts the printer for the weight of paper stock loaded in the tray. (See “Media Weight Designations” on page 11.)
TRAY2 PAPERSIZE†	A4, A5, B5, LEGAL14 LEGAL13.5 LEGAL13 <b>LETTER</b> EXECUTIVE CUSTOM	Defines the size of paper loaded in optional Tray 2.
TRAY2 MEDIATYPE†	<b>PLAIN</b> LETTERHEAD BOND RECYCLED ROUGH	Defines the type of media loaded in optional Tray 2.
TRAY2 MEDIAWEIGHT†	LIGHT <b>MEDIUM</b> HEAVY	Adjusts the printer for the weight of paper stock loaded in optional Tray 2.

## Media Menu (continued)

### Notes:

- Factory default settings are shown in **bold**.
- Menus/Items with an asterisk (\*) only appear when the appropriate option (e.g., Hard Disk Drive, Duplex Unit, Second Paper Tray, etc.) is installed.

Item	Settings	Explanation
MPT PAPERSIZE	<b>LETTER</b> EXECUTIVE LEGAL14 LEGAL13.5 LEGAL13 A4, A5, A6, B5 CUSTOM COM-9 ENVELOPE COM-10 ENVELOPE MONARCH ENV DL ENVELOPE C5 ENVELOPE	Defines the size of paper to be fed from the Multi-Purpose Tray.
MPT PAPERTYPE	<b>PLAIN</b> LETTERHEAD TRANSPARENCY LABELS BOND RECYCLED CARD STOCK ROUGH GLOSSY	Defines the type of media to be fed from the Multi-Purpose Tray so that the printer can adjust its internal parameters for the media.
MPT MEDIAWEIGHT	<b>MEDIU</b> HEAVY ULTRA HEAVY	Defines the media weight to be fed from the Multi-Purpose Tray.
UNIT OF MEASURE	MILLIMETER <b>INCH</b>	Defines the unit of measure for the next two items.
X-DIMENSION	3 to 8.5 INCH Default = <b>8.5 INCH</b>	Defines the width of paper defined by the "CUSTOM" settings.

## Media Menu (continued)

### Notes:

- Factory default settings are shown in **bold**.
- Menus/Items with an asterisk (\*) only appear when the appropriate option (e.g., Hard Disk Drive, Duplex Unit, Second Paper Tray, etc.) is installed.

Item	Settings	Explanation
Y-DIMENSION	5 to 35.5 INCH Default = <b>11 INCH</b>	Defines the length of paper defined by the "Custom" settings. Note that media of up to 47" (1.2 m) in length can be fed one sheet at a time from the Multi-Purpose Tray-for banner printing.

## NOTE

The printer automatically adjusts color balance and density at appropriate intervals, optimizing the printed output for bright white paper viewed in natural daylight conditions. The items on this menu provide a means of changing the default settings for special or particularly difficult print jobs. Settings revert to their default values when the next print job is complete.

## Color Menu

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
DENSITY CONTROL	<b>AUTO</b> MANUAL	AUTO = image density is automatically adjusted: <ul style="list-style-type: none"><li>• at power on</li><li>• when a new image drum or toner cartridge is installed</li><li>• at intervals of 100, 300 and 500 drum counts</li></ul> Auto adjustment takes up to 55 seconds. Switch to manual only if you wish to initiate Density Control manually using the printer menu.
AUTO DENSITY	EXECUTE	Selecting this will perform the auto density set up.
COLOR TUNING	PRINT PATTERN	Prints the pattern for the user to manually adjust TRC. Ordinarily this function is not needed because TRC is automatically adjusted. See "Setting Color Tuning from The Front Panel" on page 214.

## Color Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
C HIGHLIGHT C MID-TONE C DARK M HIGHLIGHT M MID-TONE M DARK Y HIGHLIGHT Y MID-TONE Y DARK K HIGHLIGHT K MID-TONE K DARK	-3 to + 3 in increments of 1 Default = <b>0</b>	Adjusts image density for each color component (cyan, magenta, yellow and black). Normal setting is 0. See "Setting Color Tuning from The Front Panel" on page 214.
C DARKNESS M DARKNESS Y DARKNESS K DARKNESS	-3 to + 3 in increments of 1 Default = <b>0</b>	Adjusts darkness of each color component (cyan, magenta, yellow and black). Normal setting is 0.
AJST REGISTRATION	EXECUTE	Performs automatic color registration adjustment. Normally this is done at power on and when the top cover is opened and then closed. This process accurately aligns the cyan, magenta and yellow images to the black image.
C REG FINE ADJUST M REG FINE ADJUST Y REG FINE ADJUST	-3 to + 3 in increments of 1 Default = <b>0</b>	Performs fine adjustment of image timing in relation to the black image component. Choosing a positive value darkens the color; choosing a negative value lightens the color.
INK SIMULATION	<b>OFF</b> SWOP EUROSCALE JAPAN	Selects from a range of industry standard color swatches.
UCR	<b>LOW</b> MEDIUM HIGH	If paper curl occurs when printing pages with large areas of black print, changing this setting may help reduce the curl.



## Color Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
CMY 100% DENSITY	<b>DISABLE</b> ENABLE	When enabled, black areas are produced using 100% C, M, and Y instead of black. This results in a glossier finish.
CMYK CONVERSION	<b>ON</b> OFF	Postscript emulation only. Switch to OFF to shorten the processing time for CMYK data. Not available when the Ink Simulation menu item is set to a value other than OFF (the default).

## System Configuration Menu

**Note:** Factory default settings are shown in **bold**.

Items	Settings	Explanation
POW SAVE TIME	5 15 30 <b>60</b> 240	Adjusts the time before the printer automatically switches into power saving mode. In this mode power consumption is reduced, but when a job is sent the printer will require a warm-up time of up to 1 minute before printing can begin.
PERSONALITY	<b>AUTO</b> PCL IBM PPR III XL EPSON FX PS3 EMULATION	This item selects which industry standard emulation your printer uses. When set to <b>AUTO</b> , incoming data is examined and the correct emulation is automatically selected each time a print job is received.
PARA PS-PROTOCOL	<b>ASCII</b> RAW	Sets the protocol to be used for Postscript emulation print jobs through the parallel interface.
USB PS-PROTOCOL	<b>RAW</b> ASCII	Sets the protocol to be used for Postscript emulation print jobs through the USB interface.
NET PS-PROTOCOL	<b>RAW</b> ASCII	Sets the protocol to be used for Postscript emulation print jobs over the network.
CLEARABLE WARNING	<b>ON</b> JOB	When <b>ON</b> , non-critical warnings, such as requests for a different paper size, can be cleared by pressing the <b>ON LINE</b> button. When set to <b>JOB</b> , they are only cleared when the print job resumes.
AUTO CONTINUE	ON <b>OFF</b>	Determines whether or not the printer will automatically recover from a memory overflow condition.
MANUAL TIMEOUT	OFF 30 <b>60</b>	Specifies how many seconds the printer will wait for paper to be fed before cancelling the job.

## System Configuration Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Items	Settings	Explanation
WAIT TIMEOUT	5 to 300 SEC Default = <b>40</b> seconds	Specifies how many seconds the printer will wait when received data pauses before forcing a page eject. In Postscript emulation mode the job will be cancelled if timeout occurs.
LOW TONER	<b>CONTINUE</b> <b>STOP</b>	Specifies whether the printer should continue printing after a low toner condition is detected. If you change this to STOP, when low toner is detected, the printer goes off line.
JAM RECOVERY	<b>ON</b> OFF	Specifies whether the printer should perform jam recovery after a paper jam has occurred. If ON, the printer will attempt to print again any pages lost due to a paper jam once the jam has been cleared.
ERROR REPORT	ON <b>OFF</b>	Change this to ON, if you wish the printer to print the error details when a Postscript emulation error occurs.
LANGUAGE	<b>English</b> German French Italian Spanish Swedish Norwegian Danish Dutch Turkish Portuguese Polish	Sets the language used for the display window and printed reports.

## PCL Emulation Menu

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
FONT SOURCE	<b>RESIDENT</b> / DIMM0 / DIMM1 / DOWNLOADED	Specifies the location of the PCL default font. Change the setting appropriately if additional fonts are installed in the expansion ROM slot or additional fonts have been downloaded to the printer as permanent fonts.
FONT NO.	<b>I000</b> / C001 / S001	Sets the current default font number from the currently selected source: I = internal (resident font); I000 = Courier. C = Font stored in the printer's Flash memory. S = downloaded soft font, stored on the printer's internal hard disk drive. <i>Applies only to printers with the optional hard disk drive installed.</i>
FONT PITCH	0.44 to 99.99 CPI Default = <b>10.00</b> CPI	Sets the character width of the default font in characters per inch (CPI). This is only available when the selected font is fixed width and scalable.

## PCL Emulation Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
SYMBOL SET	<p><b>PC-8</b>, PC-8 Dan/Nor, PC-8 TK, PC-775, PC-850, PC-852, PC-855, PC-857 TK, PC-858, PC-866, PC-869, PC-1004, Pi Font, Plska Mazvia, PS Math, PS Text, Roman-8, Roman-9, Roman Ext, Serbo Croat1, Serbo Croat2, Spanish, Ukrainian, VN Int'l, VN Math, VN US, Win 3.0, Win 3.1 Bit, Win 3.1 Cyr, Win 3.1 Grk, Win 3.1 Heb, Win 3.1 L1, Win 3.1 L2, Win 3.1 L5, Wingdings, Dingbats MS, Symbol, OCR-A, OCR-B, HP ZIP, USPSFIM, USPSSTP, ISO Swedish1, ISO Swedish2, ISO Swedish3, ISO-2 IRV, ISO-4 UK, ISO-6 ASC, ISO-10 S/F, ISO-11 Swe, ISO-14 JASC, ISO-15 Ita, ISO-16 Por, ISO-17 Spa, ISO-21 Ger, ISO-25 Fre, ISO-57 Chi, ISO-60 Nor, ISO-61 Nor, ISO-69 Fre, ISO-84 Por, ISO-85 Spa Kamenicky, Legal, Math-8, MC Text, MS Publish, PC Ext D/N, PC Ext US, PC Set1, PC Set2 D/N, PC Set2 US, USPSZIP, Bulgarian, CWI Hung, DeskTop, German, Greek-437, Greek-437 Cy, Greek-928, Hebrew NC, Hebrew OC, IBM-437, IBM-850, IBM-860, IBM-863, IBM-865, ISO Dutch, ISO L1, ISO L2, ISO L5, ISO L6, ISO L9</p>	<p>PCL symbol set. If the font source and number are changed to one which does not support the selected symbol set, this must be changed to an available symbol set for that font.</p>

## PCL Emulation Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
A4 PRINT WIDTH	<b>78 COLUMN</b> 80 COLUMN	If you are printing a letter size document on an A4 size sheet, select 80 column. This condenses the print to fit on the slightly narrower A4 sheet, without changing the line breaks.
WHITE PAGE SKIP	<b>OFF</b> ON	Selects whether blank pages are printed or not.
CR FUNCTION	<b>CR</b> CR+LF	Selects whether a received carriage return character also causes a line feed.
LF FUNCTION	<b>LF</b> LF+CR	Selects whether a received line feed character also causes a carriage return.
PRINT MARGIN	<b>NORMAL</b> 1/5 INCH 1/6 INCH	Sets the non-printable page area. NORMAL is PCL compatible.
TRUE BLACK	<b>OFF</b> ON	Selects whether black image data is printed using black toner (ON) or 100% CMY (OFF).
PEN WIDTH ADJUST	<b>ON</b> OFF	When switched ON, emphasizes the pen width to improve the appearance of lines specified with minimum width.

## PPR Emulation Menu

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
CHARACTER PITCH	<b>10 CPI</b> 12 CPI 17 CPI 20 CPI PROPORTIONAL	Specifies character pitch (characters per inch).
FONT CONDENSE	<b>12CPI TO 20CPI</b> 12CPI TO 12CPI	Specifies 12CPI pitch for Condense Mode.
CHARACTER SET	<b>SET 2</b> SET 1	Specifies the character set to be used.

## PPR Emulation Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
SYMBOL SET	<b>IBM-437</b> , IBM-850, IBM-860, IBM-863, IBM-865, PC Set1, PC Ext US, PC Ext D/N, PC Set2 US, PC Set2 D/N, Roma3n-8, ISO L1, PC-8, PC-8 Dan/Nor, PC-850, Legal, ISO-2 IRV, ISO-4 UK, ISO-6 ASC, ISO-10 S/F, ISO-11 Swe, ISO-14 JASC, ISO-15 Ita , ISO-16 Por, ISO-17 Spa, ISO-21 Ger, ISO-25 Fre, ISO-57 Chi, ISO-60 Nor, ISO-61 Nor, ISO-69 Fre, ISO-84 Por, ISO-85 Spa, German, Spanish, ISO Dutch, Roman Ext, ISO Swedish1, ISO Swedish2, ISO Swedish3, VN Int'l, VN US, VN Math, PS Math, PS Text, Math-8, Pi Font, MS Publish, in 3.0, DeskTop, Win 3.1 L1, MC Text, PC-852, Win 3.1 L5, Win 3.1 L2, CWI Hung, PC-857 TK, ISO L2, ISO L5, PC-8 TK, Kamenicky, Hebrew NC, Hebrew OC, Plska Mazvia, ISO L6, Win 3.1 Heb, Win 3.1 Cyr, PC-866, Win 3.1 Grk, PC-869, PC-855, Greek-437, Greek-437 Cy, Greek-737, Greek-928, Serbo Croat2, Ukrainian, Bulgarian, PC-1004, Win 3.1 Bit, PC-775, Serbo Croat1, PC-858, Roman-9, ISO L9	Specifies the symbol set to be used.
LETTER O STYLE	<b>Disable</b> Enable	Specifies the style that replaces 9B Hex with the letter o and 9D Hex with a zero



## PPR Emulation Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
ZERO CHARACTER	<b>Normal</b> Slashed	Sets the zero to be slashed or unslashed.
LINE PITCH	<b>6 LPI</b> 8 LPI	Specifies the line spacing (lines per inch).
WHITE PAGE SKIP	<b>OFF</b> ON	Change this setting to ON if you do not wish to print blank pages. Not available for duplex printing.
CR FUNCTION	<b>CR</b> CR+LF	Sets functionality on receipt of CR code.
LF FUNCTION	<b>LF</b> LF+CR	Sets functionality on receipt of LF code.
LINE LENGTH	<b>80 COLUMN</b> 136 COLUMN	Specifies the number of characters per line.
FORM LENGTH	<b>11 INCH</b> 11.7 INCH 12 INCH	Specifies the length of paper.
TOF POSITION	<b>0.0</b> to 1.0 INCH, in 0.1-inch increments	Specifies the distance of print from the top edge of the paper.
LEFT MARGIN	<b>0.0</b> to 1.0 INCH, in 0.1-inch increments	Specifies the distance of print from the left hand edge of the paper.
FIT TO LETTER	DISABLE <b>ENABLE</b>	Fits print data, equivalent to 11 inches (66 lines), in the LETTER-size printable area.
TEXT HEIGHT	<b>SAME</b> DIFF	Sets the height of a character. Change to DIFF if you wish the character height to vary with the Character Pitch setting.

## FX Emulation Menu

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
CHARACTER PITCH	<b>10 CPI</b> 12 CPI 17 CPI 20 CPI PROPORTIONAL	Specifies character pitch (characters per inch).
CHARACTER SET	<b>Set 2</b> SET 1	Specifies which Epson character set is used.

## FX Emulation Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
SYMBOL SET	<b>IBM-437</b> , IBM-850, IBM-860, IBM-863, IBM-865, PC Set1, PC Ext US, PC Ext D/ N, PC Set2 US, PC Set2 D/ N, Roman-8, ISO L1, PC-8, PC-8 Dan/Nor, PC-850, Legal, ISO-2 IRV, ISO-4 UK, ISO-6 ASC, ISO-10 S/F, ISO-11 Swe, ISO-14 JASC, ISO-15 Ita , ISO-16 Por, ISO-17 Spa, ISO-21 Ger, ISO-25 Fre, ISO-57 Chi, ISO-60 Nor, ISO-61 Nor, ISO-69 Fre, ISO-84 Por, ISO-85 Spa, German, Spanish, ISO Dutch, Roman Ext, ISO Swedish1, ISO Swedish2, ISO Swedish3, VN Int'l, VN US, VN Math, PS Math, PS Text, Math-8, Pi Font, MS Publish, Win 3.0, DeskTop, Win 3.1 L1, MC Text, PC-852, Win 3.1 L5, Win 3.1 L2, CWI Hung, PC-857 TK, ISO L2, ISO L5, PC-8 TK, Kamenicky, Hebrew NC, Hebrew OC, Plska Mazvia, ISO L6, Win 3.1 Heb, Win 3.1 Cyr, PC-866, Win 3.1 Grk, PC-869, PC-855, Greek-437, Greek-437 Cy, Greek-737, Greek-928, Serbo Croat2, Ukrainian, Bulgarian, PC-1004, Win 3.1 Bit, PC-775, Serbo Croat1, PC-858, Roman-9, ISO L9	Specifies a symbol set.
LETTER O STYLE	<b>DISABLE</b> ENABLE	Specifies the style that replaces 9B Hex with letter o and 9D Hex with a zero

## FX Emulation Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
ZERO CHARACTER	<b>NORMAL</b> SLASHED	Sets the zero to be slashed or unslashed.
LINE PITCH	<b>6 LPI</b> 8 LPI	Specifies the line spacing (lines per inch).
WHITE PAGE SKIP	<b>OFF</b> ON	Change this setting to ON if you do not wish to print blank pages Not available for duplex printing.
CR FUNCTION	<b>CR</b> CR+LF	Sets functionality on receipt of CR code.
LINE LENGTH	<b>80 COLUMN</b> 136 COLUMN	Specifies the number of columns that will print on a page (characters per line).
FORM LENGTH	<b>11 inch;</b> 11.7 inch 12 inch	Specifies the length of print media.
TOF POSITION	<b>0.0</b> to 1.0 inch in 0.01-inch increments	Specifies the distance of print from the top edge of the paper.
LEFT MARGIN	<b>0.0</b> to 1.0 inch in 0.01-inch increments	Specifies the distance of print from the left hand edge of the paper.
FIT TO LETTER	DISABLE <b>ENABLE</b>	Sets the printing mode that can fit print data, equivalent to 11 inches (66 lines), in the LETTER-size printable area.
TEXT HEIGHT	<b>SAME</b> DIFF	Sets the height of a character. Change to DIFF if you wish the character height to vary with the Character Pitch setting.

## Parallel Menu

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
PARALLEL	<b>ENABLE</b> DISABLE	Enables or disables the parallel port.
BI-DIRECTION	<b>ENABLE</b> DISABLE	Enables or disables bi-directional functionality of the parallel port.
ECP	<b>ENABLE</b> DISABLE	Enables or disables ECP mode.
ACK WIDTH	<b>NARROW</b> MEDIUM WIDE	Sets width of ACK signal in compatible receiving: <ul style="list-style-type: none"> <li>• Narrow = 0.5 <math>\mu</math>S</li> <li>• Medium = 1.0 <math>\mu</math>S</li> <li>• Wide = 3.0 <math>\mu</math>S</li> </ul>
ACK/BUSY TIMING	<b>ACK IN BUSY</b> ACK WHILE BUSY	Sets the order in which the BUSY signal is output. <ul style="list-style-type: none"> <li>• ACK IN BUSY = BUSY goes low at end of ACK pulses.</li> <li>• ACK WHILE BUSY = BUSY goes low at centre of ACK pulse.</li> </ul>
I-PRIME	3 MICRO SEC 50 MICRO SEC <b>DISABLE</b>	Sets the time interval to enable/disable the I-PRIME signal.
OFF LINE RECEIVE	<b>DISABLE</b> ENABLE	Enable = maintains reception without changing the interface signal, even though an alarm occurs. The interface stays open even if the ON LINE button is pressed. The interface issues a BUSY signal only when the receive buffer is full.

## USB Menu

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
USB	<b>ENABLE</b> DISABLE	Enables or disables operation of the USB port.
SOFT RESET	ENABLE <b>DISABLE</b>	Enables or disables the SOFT RESET command.
SPEED	<b>480Mbps</b> 12Mbps	Sets the maximum transfer speed for the USB interface.
OFFLINE RECEIVE	<b>DISABLE</b> ENABLE	Enable = maintains reception without changing the interface signal, even though an alarm occurs. The interface stays open even if the ON LINE button is pressed. The interface issues a BUSY signal only when the receive buffer is full.

## Network Menu

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
TCP/IP	<b>ENABLE</b> DISABLE	Enables or disables this network protocol.
NETBEUI	<b>ENABLE</b> DISABLE	Enables or disables this network protocol.
NETWARE	<b>ENABLE</b> DISABLE	Enables or disables this network protocol.
ETHERTALK	<b>ENABLE</b> DISABLE	Enables or disables this network protocol.
FRAME TYPE	<b>AUTO</b> 802.2 802.3 ETHERNET II SNAP	Selects the Ethernet MAC layer frame type.

## Network Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
IP ADDRESS SET	<b>AUTO</b> MANUAL	Change this to Manual to specify the IP address through the front panel.(see next entry) Required for non-DHCP networks.
IP ADDRESS	xxx.xxx.xxx.xxx Default = 192.168.100.100	Current assigned IP address. To change: <ul style="list-style-type: none"> <li>• Press <b>ENTER</b>.</li> <li>• Use +/- keys to increment first octet.</li> <li>• Press <b>ENTER</b> to move on to the next octet.</li> <li>• Use +/- keys to increment second octet.</li> <li>• Press <b>ENTER</b> to move on to the next octet.</li> <li>• Use +/- keys to increment third octet.</li> <li>• Press <b>ENTER</b> to move on to the last octet.</li> <li>• Use +/- keys to increment 1st octet.</li> <li>• Press <b>ENTER</b> to register the new address.</li> </ul>
SUBNET MASK	xxx.xxx.xxx.xxx Default = 255.255.255.000	Current assigned subnet mask. To change, proceed as above.
GATEWAY ADDRESS	xxx.xxx.xxx.xxx Default = 192.168.100.254	Current assigned gateway address. To change, proceed as above.
INITIALIZE NIC?	[EXECUTE]	Initializes the network card.
WEB/IPP	<b>ENABLE</b> DISABLE	Enables or disables Web config. facility and Internet Printing Protocol. This item will not appear in the menu if TCP/IP is set to DISABLE.
TELNET	<b>ENABLE</b> DISABLE	Enables or disables Telnet config. facility. This item will not appear in the menu if TCP/IP is set to DISABLE.

## Network Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
FTP	<b>ENABLE</b> DISABLE	Enables or disables communication via FTP. This item will not appear in the menu if TCP/IP is set to DISABLE.
SNMP	<b>ENABLE</b> DISABLE	Enables or disables SNMP protocol.
LAN	<b>NORMAL</b> SMALL	Normal = Global network Small = Local network
HUB LINK SETTING	<b>AUTO</b> <b>NEGOTIATE</b> 100BASE-TX FUL 100BASE-TX HALF 10BASE-T FULL 10BASE-T HALF	Sets full or half duplex for communication via a network hub.



## CAUTION!

The Disk Maintenance Menu can be used to initialize the printer's internal hard disk drive, to reassign the partition contents, or to reformat the partitions.

Unless you know what you are doing, please avoid this section of the Menu.

It is recommended that disk maintenance be done through the Storage Device Manager software by the System Administrator, or by someone who is knowledgeable in this area.

### Disk Maintenance Menu

This menu only appears if the optional Hard Disk Drive is installed in your printer. See "Hard Disk Drive" on page 248.

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
HDD INITIALIZE	[EXECUTE]	Partitions the hard disk and formats each partition. Appears only if hard disk drive is installed.
PARTITION SIZE	[EXECUTE]	If you press <b>ENTER</b> to execute this item, the PCL/COMMON menu item appears. If you press <b>MENU +</b> , the HDD FORMATION menu item appears.
HDD FORMATING	<b>PCL</b> COMMON PSE	Formats the specified partition. <b>Careful!</b> This deletes all the items from the specified partition.

## System Adjust Menu

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
X ADJUST	-2.00MILLIMETER TO +2.00MILLIMETER Default = <b>0.00</b>	Adjusts overall print position horizontally in 0.25 increments.
Y ADJUST	-2.00MILLIMETER TO +2.00MILLIMETER Default = <b>0.00</b>	Adjusts overall print position vertically in 0.25 increments.
DUPLEX X ADJUST	-2.00MILLIMETER TO +2.00MILLIMETER Default = <b>0.00</b>	Adjusts overall print position of print face horizontally in 0.25 increments.
DUPLEX Y ADJUST	-2.00MILLIMETER TO +2.00MILLIMETER Default = <b>0.00</b>	Adjusts overall print position of print face vertically in 0.25 increments.
PCL TRAY2 ID#	1 to 59 Default = <b>20</b>	Appears only if the optional Second Paper Tray (see "Second Paper Tray" on page 246) is installed. Sets Tray 2 number for the PCL emulation.
PCL MP TRAY ID#	1 to 59; Default = <b>4</b>	Sets MP tray number for PCL emulation.
DRUM CLEANING	<b>OFF</b> ON	If you are experiencing horizontal white lines on your printed pages, enter the menu and temporarily change this setting to ON, then send a one page print job. This will cause an extra blank sheet to print, cleaning the drum prior to printing. <b>Careful!</b> Leaving this set to ON will reduce the image drum life.

## System Adjust Menu (continued)

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
HEX DUMP	[EXECUTE]	Press <b>ENTER</b> to switch the printer to the Hexadecimal Dump mode in which all data received is printed in both Hexadecimal and ASCII format. To return to normal print mode, switch the printer off then on again.

## Maintenance Menu

**Note:** Factory default settings are shown in **bold**.

Item	Settings	Explanation
MENU RESET	EXECUTE	Resets menus to the default settings.
SAVE MENU	EXECUTE	Saves current menu settings as default values. At confirmation prompt, press <b>ENTER</b> to confirm save, or <b>CANCEL</b> .
POWER SAVE	<b>ENABLE</b> DISABLE	Change this setting to Disable if you do not want the printer to enter the power save mode after the specified time.
PAPER BLACK SET	-2 to +2 in increments of 1 Default = <b>0</b>	Used for small adjustment when you experience faded print or light specks / streaking in monochrome printing on white paper. Select a higher value to reduce fading, or a lower value to reduce specks or streaking in high density print areas.
PAPER COLOR SET	-2 to +2 in increments of 1 Default = <b>0</b>	As above, but for color printing.
TRANSPR BLACK SET	-2 to +2 in increments of 1 Default = <b>0</b>	As above, but for mono printing on transparencies.
TRANSPR COLOR SET	-2 to +2 in increments of 1 Default = <b>0</b>	As above, but for color printing on transparencies.

## Usage Menu

This menu is for information only, and provides an indication of total usage of the printer and the expected life left in its consumable items. This is particularly useful if you do not have a full set of replacement consumables on hand and you need to know how soon you will need them

Item	Explanation
TRAY1 PAGE COUNT	The total number of pages fed from Tray 1.
TRAY2 PAGE COUNT	The total number of pages fed from optional Tray 2. Appears only if the optional Second Paper Tray (see "Second Paper Tray" on page 246) is installed.
MPT PAGE COUNT	The total number of pages fed from the Multi-Purpose Tray.
COLOR PAGE COUNT	The total number of pages printed in color.
MONO PAGE COUNT	The total number of pages printed in monochrome.
K DRUM LIFE C DRUM LIFE M DRUM LIFE Y DRUM LIFE	Percentage of life remaining in these consumable items.
K TONER C TONER M TONER Y TONER	Percentage of life remaining in these consumable items.

# Setting Color Tuning from The Front Panel

## Important!

- In most cases, using Color Tuning is not necessary as the printer is optimized for color printing at its default settings.
- Once you change these settings, they remain in effect until you go back in and change them.
- To return the settings to the defaults, use the steps below to set each value back to 0 (zero).

You can use the printer's menu to adjust the color intensity for a specific color by adjusting the HIGHLIGHT, MID-TONE and DARK (shadows) Color Tuning Patterns.

- To *increase* the color intensity, use a higher positive setting (default = 0, maximum = +3).
- To *decrease* the color intensity, use a higher negative setting (default = 0, maximum = -3).

For example, to adjust the intensity of the magenta portion:

## NOTE

**When using the optional Print Job Accounting utility, you cannot print when "Local Print" is set to "No printing" or "No color printing."**

1. Print the Color Tuning Pattern:



a. Make sure letter-size paper is loaded in the tray.

b. Press **+** repeatedly, until you see

---

COLOR MENU

---

c. Press **ENTER**.

d. Press **+** one or more times, until you see

---

COLOR TUNING  
PRINT PATTERN

---

e. Press **ENTER**.

*The Color Tuning Pattern prints and the display reads.*

---

C HIGHLIGHT

---

0\*

---

2. Adjust the Cyan highlight color.

- a. Press **ENTER** to select the Cyan Highlight item.

*The second line of the display begins flashing.*

- b. Press **+** one or more times, until the new value you wish to use displays (e.g., +3).

- c. Press **ENTER**, to select the new value.

*An asterisk (\*) appears at the right of the new selection.*

- d. Press **BACK** to engage the setting.

*The second line stops flashing.*

- e. Press **+**. The display reads

---

C MID-TONE

0\*

---

3. Adjust the Cyan mid-tone color:

- a. Press **ENTER** to select the Cyan Mid-Tone item.

*The second line of the display begins flashing.*

- b. Press **+** one or more times, until the new value you wish to use displays (e.g., +3).

- c. Press **ENTER**, to select the new value.

*An asterisk (\*) appears at the right of the new selection.*

- d. Press **BACK** to engage the setting.

*The second line stops flashing.*

- e. Press **+**. The display reads

---

C DARK

0\*

---



4. Adjust the Cyan dark color:

- a. Press **ENTER** to select the Cyan Dark item.

*The second line of the display begins flashing.*

- b. Press **+** one or more times, until the new value you wish to use displays (e.g., +3).

- c. Press **ENTER**, to select the new value.

*An asterisk (\*) appears at the right of the new selection.*

- d. Press **BACK** to engage the setting.

*The second line stops flashing.*

5. Press **+**.

6. Press **ON LINE** to save the new setting and return the printer to online status

7. Print from your application.

Repeat the above steps until you get the desired cyan color intensity.

**NOTE**

**To adjust these settings for the Magenta, Yellow or Black color intensity, substitute the appropriate color name in the steps above.**

# Replacing Consumables

- **Toner Cartridge** — Life expectancy approximately 5,000 pages, assuming about 5% coverage, which means that 5% of the addressable dots in an image are printed with this color of toner. See “Toner Cartridge Replacement” on page 219.

## NOTE

**When installing a toner cartridge in a new image drum, the life expectancy of the cartridge will be reduced by approximately 1,500 pages (at 5% coverage) as the toner charges the new drum.**

- **Image Drum** — Life expectancy approximately 15,000 pages, assuming an average of 3 pages per print job. If the average print job is longer than this, the image drums could last longer, but if the average print job is shorter, then image drums will be used more quickly. See “Image Drum Replacement” on page 226.
- **Transfer Belt** — Life expectancy about 50,000 letter-size pages. See “Belt Unit Replacement” on page 235.
- **Fuser** — Life expectancy about 45,000 letter-size pages. See “Fuser Replacement” on page 240.

# Toner Cartridge Replacement

---

REPLACE TONER

nnn: ZZZZ TONER EMPTY

---

- \* nnn: ZZZZ = 410: YELLOW
- 411: MAGENTA
- 412: CYAN
- 413: BLACK

Toner Color	Order #
Black	52115101
Cyan	52115102
Magenta	52115103
Yellow	52115104

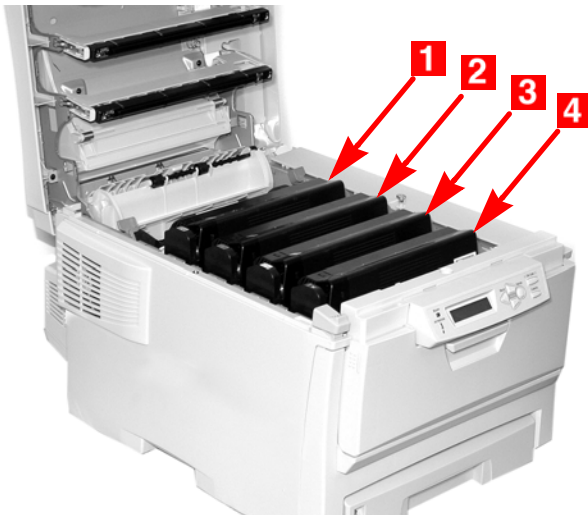
1. Press the cover release and open the printer's top cover fully.



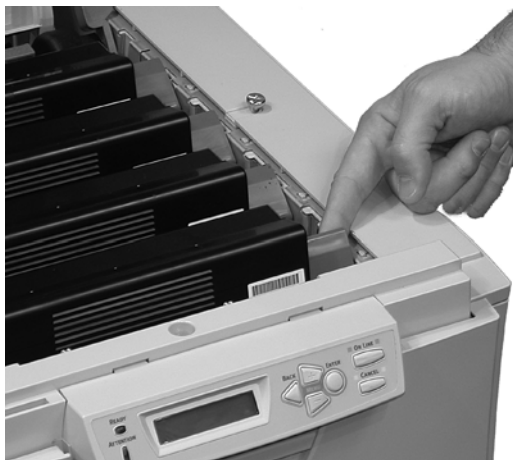
### **WARNING!**

*If the printer has been powered on, the fuser is hot. This area is clearly labelled. Do not touch.*

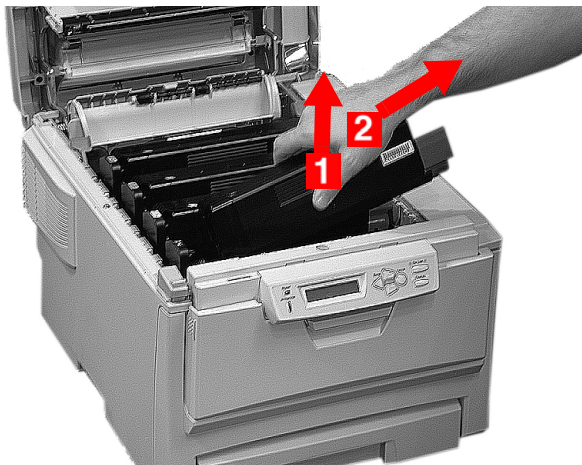
2. Note the positions of the four cartridges: Cyan (1), Magenta (2), Yellow (3), Black (4):



3. Pull the colored toner release lever on the cartridge to be replaced (here we are showing replacement of the black toner cartridge) towards the front of the printer.



4. Lift the right-hand end of the cartridge and then pull the cartridge to the right to release the left-hand end as shown. Remove the toner cartridge and discard it in accordance with your local regulations.



5. Unpack the new toner cartridge and gently shake it from *side to side* to loosen and distribute the toner evenly inside the cartridge.



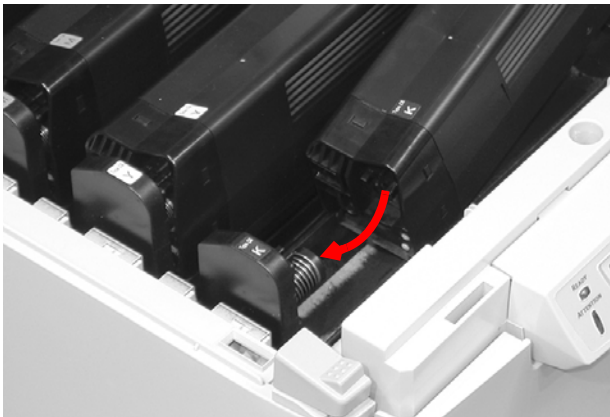
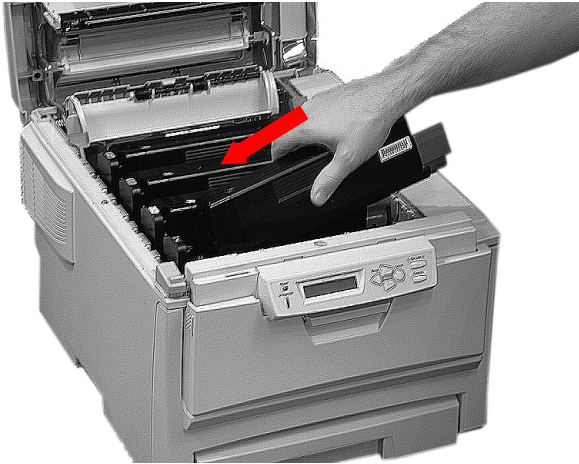
6. Remove the adhesive tape from the underside of the cartridge.



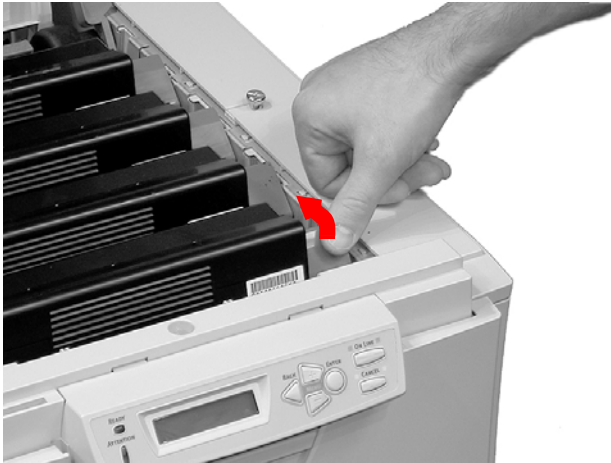
### **CAUTION!**

**Do not touch the toner release lever until the toner cartridge is installed in the image drum. If you do, it will open the toner release slot and spill toner.**

7. Holding the cartridge by its top center with the colored release lever to the right, insert the left end of the cartridge into the top of the image drum, pushing it firmly against the spring on the drum unit.



8. Lower the right end of the cartridge into the image drum unit, pressing it firmly down in place, then push the colored lock lever back to open the toner slot and lock it in place.



### **Important!**

The lever should move easily. If it does not, **STOP!** and push down on the toner cartridge to be sure that it is properly seated in the image drum, then press back on the lever again.

To avoid toner spillage, do **NOT** open the toner release lever until the toner cartridge is firmly seated in the image drum.



9. Close and latch the top cover.



# Image Drum Replacement

---

REPLACE IMAGE DRUM

nnn: ZZZZ DRUM LIFE

---

- \* nnn: ZZZZ = 350: YELLOW  
351: MAGENTA  
352: CYAN  
353: BLACK

Drum Color	Order #
Black	56118101
Cyan	56118102
Magenta	56118103
Yellow	56118104

1. Place two sheets of paper on your working surface to protect it. You will put the image drum and toner cartridge on the paper while replacing them.

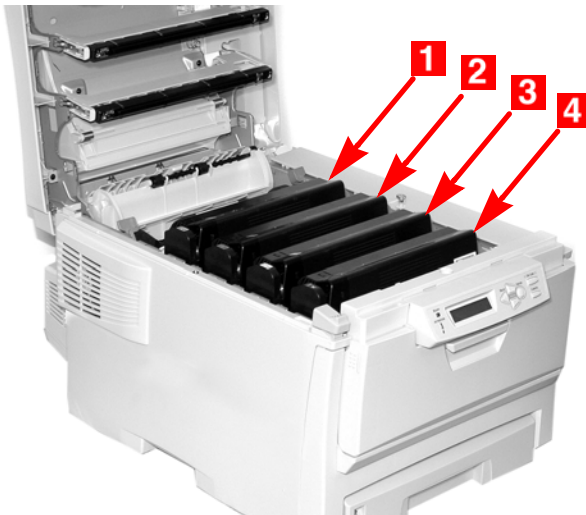
2. Press the cover release and open the top cover fully.



### **WARNING!**

*If the printer has been powered on, the fuser is hot. This area is clearly labelled. Do not touch it.*

3. Note the positions of the four image drums: Cyan (1), Magenta (2), Yellow (3), Black (4):



4. Lift the image drum, complete with its toner cartridge, out of the printer and put it down on one of the sheets of paper.



5. With the colored toner release lever (1) to the right, pull the lever towards you. This will release the bond between the toner cartridge and the image drum.



6. Lift the right-hand end of the toner cartridge, move the cartridge to the right, and remove the toner cartridge from the image drum. Place the toner cartridge on a sheet of paper to avoid marking your furniture.



7. Discard the used image drum in accordance with your local regulations.

### **CAUTION!**

**The green image drum surface at the base of the cartridge is very delicate and light sensitive. Do not touch it and do not expose it to normal room light for more than 5 minutes. If the drum unit needs to be out of the printer for longer than this, please wrap the cartridge inside a black plastic bag to keep it away from light. Never expose the drum to direct sunlight or very bright room lighting.**

8. Unpack the new image drum.

**CAUTION!**

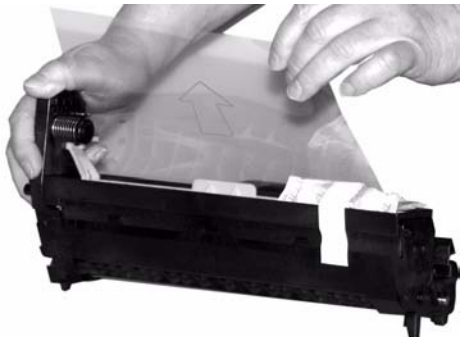
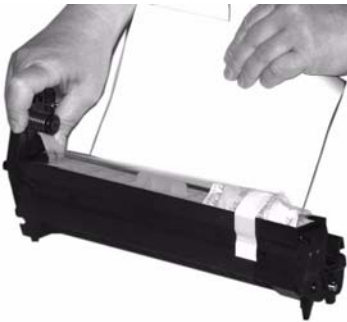
**Image drum handling: The image drum contains toner. To avoid spilling toner, be careful to *keep it upright*.**



9. Grasp the white tape tab and peel the tape off the drum.



10. Remove the paper sheet, then the clear plastic film.



**11. Remove the silica gel pack.**



**12. Place the image drum in the printer.**

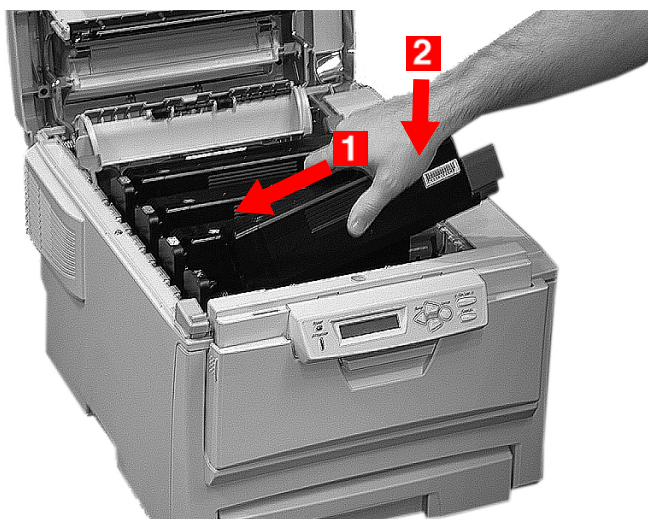




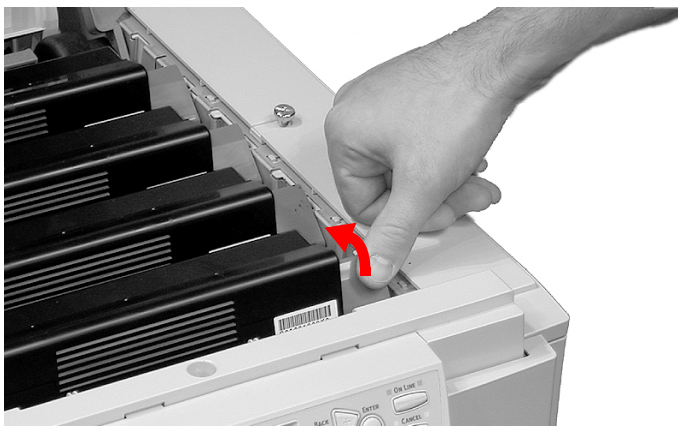
13. Remove the orange drum seal.



14. Install the toner cartridge in the image drum.



**15.** Push back the toner cartridge lock lever.



**16.** Close and latch the top cover.



# Belt Unit Replacement

## P/N 42158701

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REPLACE BELT  
355: BELT LIFE

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The belt unit is located under the four image drums. This unit requires replacement approximately every 50,000 pages.

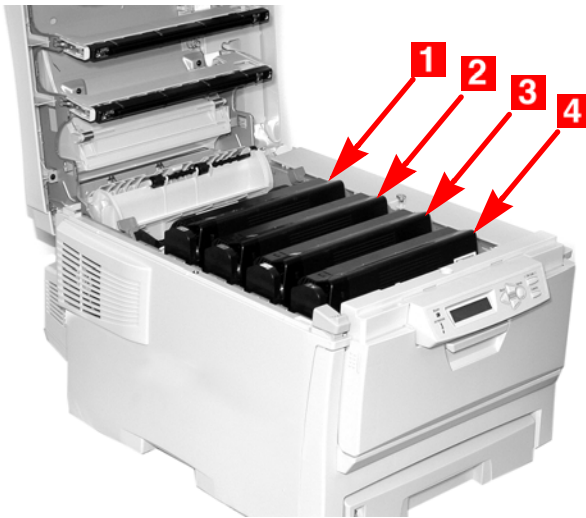
1. Press the cover release and open the top cover fully.



### **WARNING!**

*If the printer has been powered on, the fuser is hot. This area is clearly labelled. Do not touch it.*

2. Note the positions of the four image drums: Cyan (1), Magenta (2), Yellow (3), Black (4). ***It is essential that they go back in the correct order!***



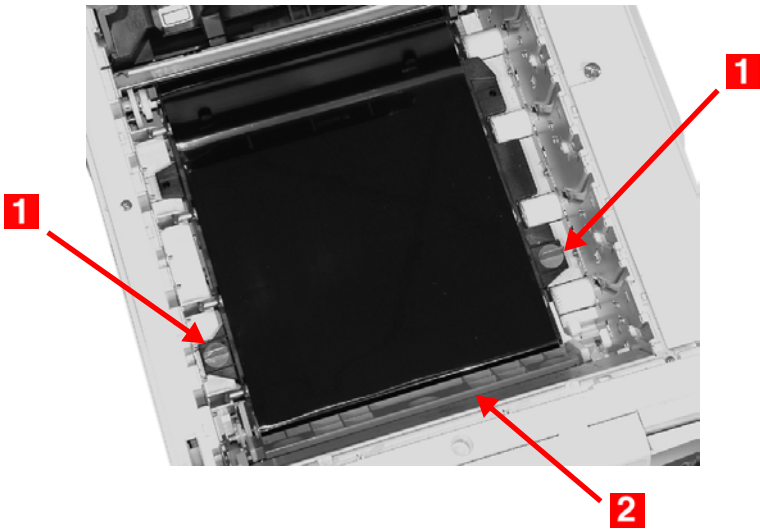
3. Lift each of the image drum units out of the printer and place them on a *flat* surface in a safe place away from direct sources of heat and light.

### **CAUTION!**

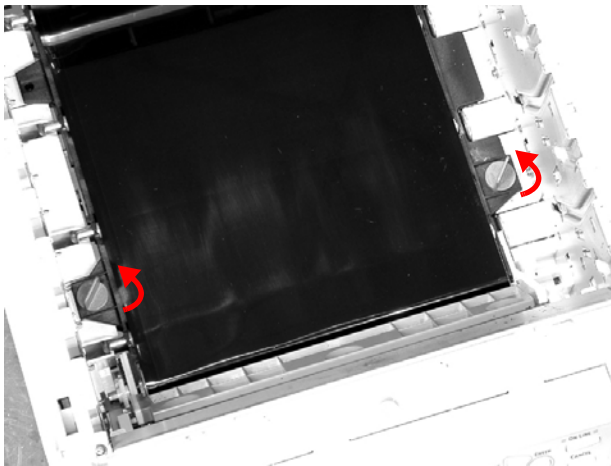
The green surface at the base of each image drum is very delicate and light sensitive.

- Do not touch the green surface.
- Never expose the drum to direct sunlight or to very bright room lighting.
- Do not expose it to normal room light for more than 5 minutes.
- If the image drum must be out of the printer for longer than 5 minutes, place the image drum inside a black plastic bag or carefully place it in a drawer or cabinet to keep it away from light.

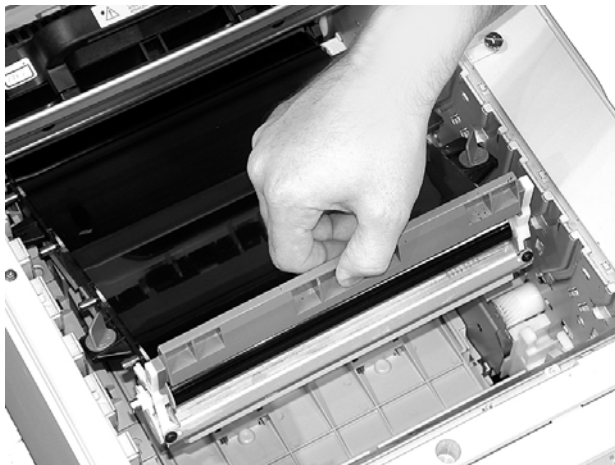
4. Locate the two blue locks (1) and the handle (2).



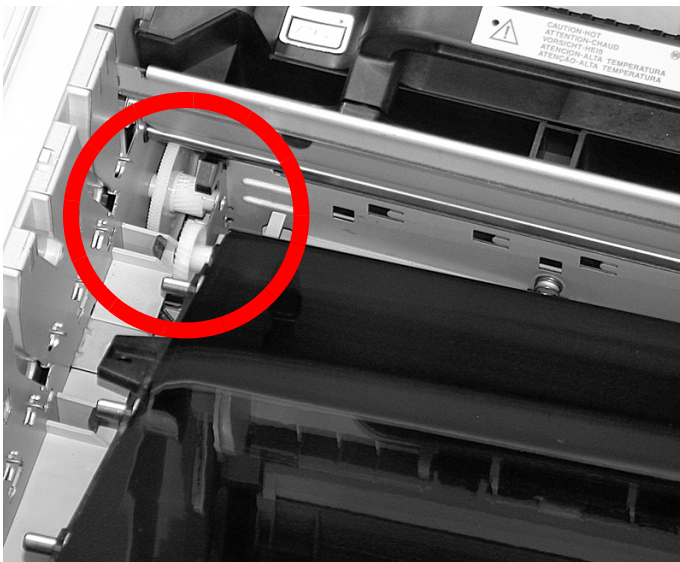
5. Turn the two locks about 45° *counterclockwise* to release the belt.



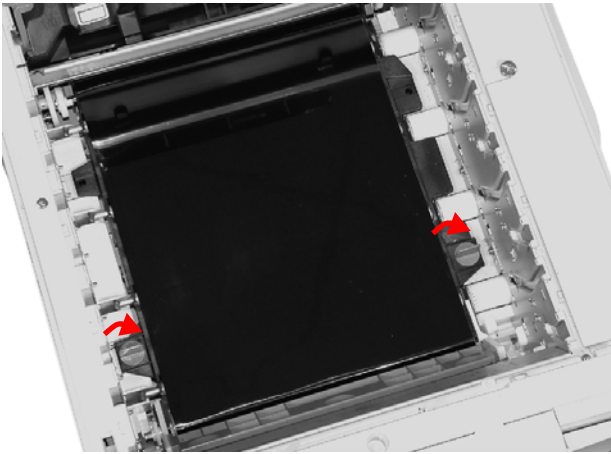
6. Pull up the handle and lift the belt unit out of the printer.



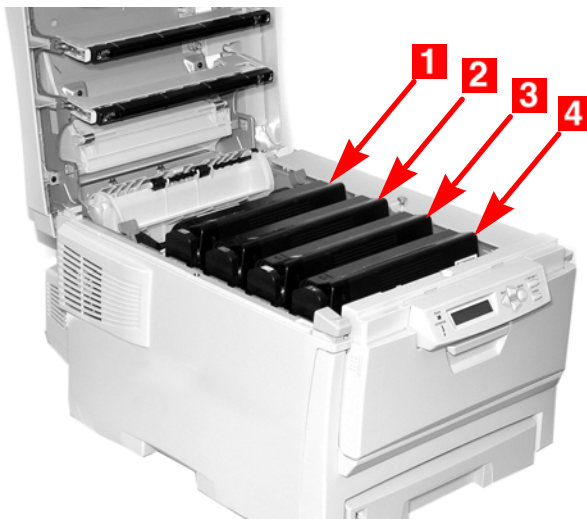
7. Unpack the new belt unit and hold it with the blue handle toward the front of the printer.
8. Place the drive gear at the back of the belt unit in the gear at the left rear corner of the printer, and lower the belt unit into the printer.



9. Turn the two belt locks about 45° clockwise to secure the belt unit in place.



10. Place the four image drums/toner cartridges back in the printer (1 = Cyan, 2 = Magenta, 3 = Yellow, 4 = Black):



11. Close and latch the top cover.



## Fuser Replacement

**P/N 42158601 (120V)**

**P/N 42158602 (230V)**

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REPLACE FUSER  
354: FUSER LIFE

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### **WARNING!**

*If the printer has recently been powered on, some fuser components will be very hot. Handle the fuser with extreme care, holding it only by its handle, which will only be mildly warm to the touch.*

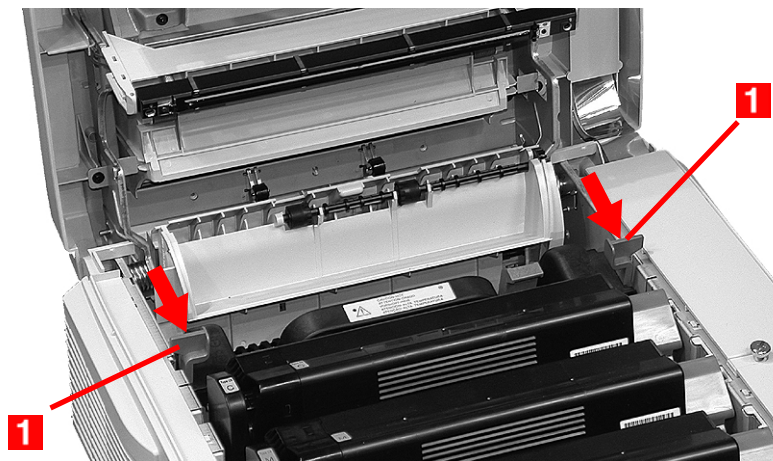
*A warning label clearly indicates the area. If in doubt, switch the printer off and wait at least 10 minutes for the fuser to cool before opening the printer cover.*



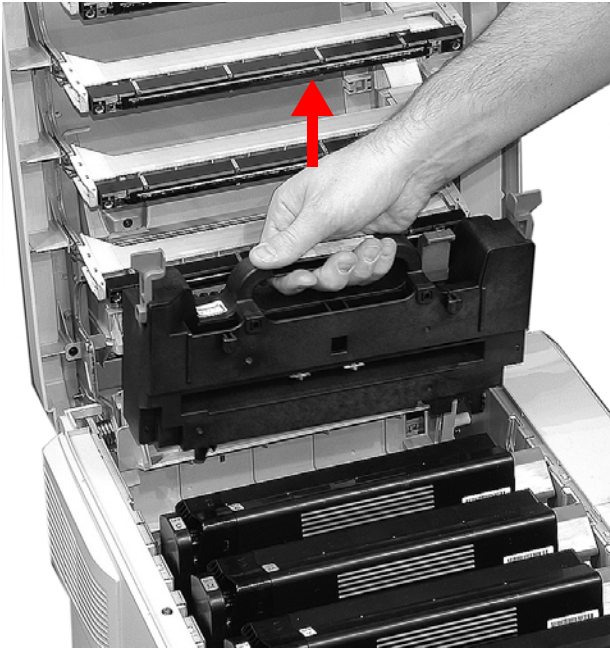
1. Press the cover release and open the printer's top cover fully.



2. Pull the two blue fuser lock levers (1) towards the front of the printer.



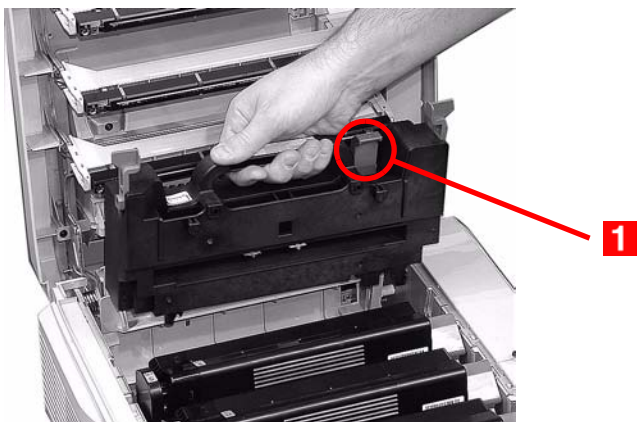
3. Holding the fuser by its handle, lift the fuser out of the printer. *If the fuser is still warm, place it on a flat surface which will not be damaged by heat.* After letting the fuser cool down, discard it.



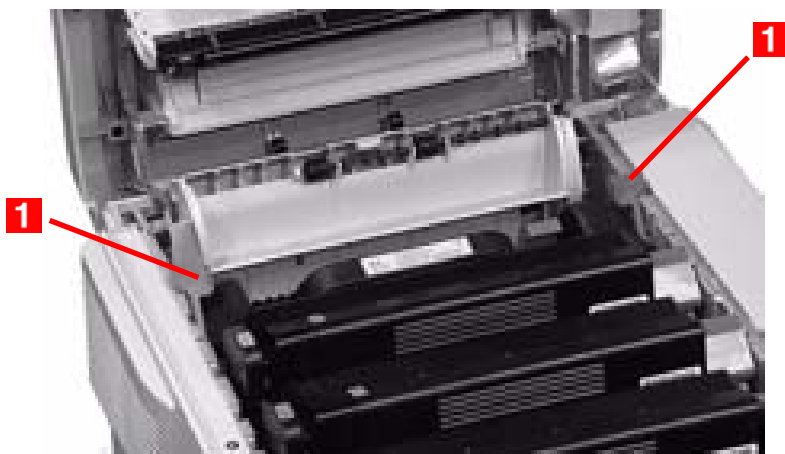
4. Remove the new fuser from its packaging, then remove any packing tape.
5. Push the orange transport lock to the left to release it (you'll hear it snap), then remove it:



6. Holding the new fuser by the handle, with the fuser pressure release lever (1) on the right, lower the fuser into the printer.



7. Push the two blue retaining levers (1) toward the rear of the printer to lock the fuser in place.



8. Close and latch the top cover.



# Options

The following options are available for your printer:

- Additional RAM memory (see below)
- Second Paper Tray (see page 246)
- Duplex Unit, for two sided printing (see page 247)
- 10 GB Hard Disk Drive (see page 248)

Instructions for installing these options are found in the packaging with the option.

## RAM Memory

**(P/N 70043001, 70043101, 70043201)**



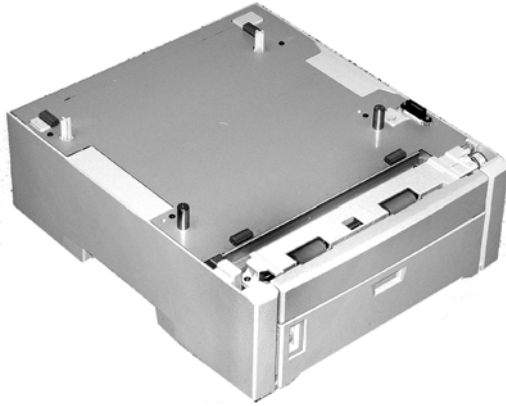
The basic printer comes equipped with 64 MB of main memory. This can be upgraded with an additional memory board containing

- 64 MB (P/N 70043001)
- 128 MB (P/N 70043101)
- 256 MB (P/N 70043201)

giving a maximum total memory capacity of 320MB.

# Second Paper Tray

(P/N 42158501)

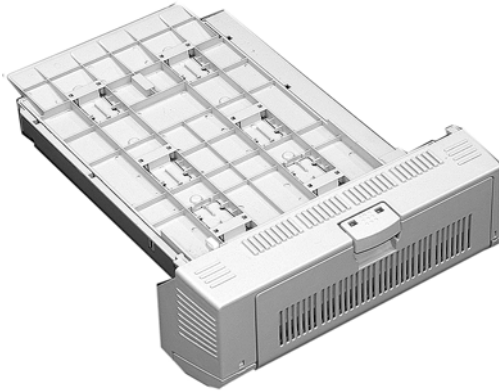


The second paper tray takes:

- Up to 530 sheets of 20-lb. paper.
- All the same size media as Tray 1 except A6.
- Paper weight range 16 to 47 lbs. US Bond (33 to 98 lbs Index, 60 to 177 g/m<sup>2</sup> metric).

# Duplex Unit

(P/N 42158401)



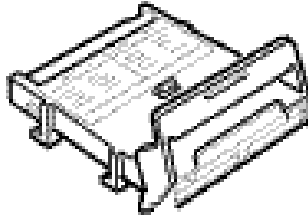
The duplex unit adds the function of two sided printing and enables booklet printing. The duplex unit slides straight into the rear of the printer and requires no tools to install.

The duplex unit handles:

- Paper sizes letter, legal-14, legal-13.5, legal-13, A4, A5, B5.
- Paper weights from 20 to 28 lbs. US Bond (42 to 58 lb. Index, 75 to 105 g/m<sup>2</sup> metric).

# Hard Disk Drive

(P/N 70043501)



The Hard Disk Drive plugs into the printer's main circuit board and provides 10 GB of space. It is highly recommended if you plan to use the printer's Proof and Print or Secure Print features.

It is required

- If you wish to use the printer's Store to Hard Disk Drive feature.
- If you wish to use the optional Print Job Accounting software with the printer when it is installed on a network.

The Storage Device Manager software provided with the printer is used to manage the Hard Disk Drive.



# Clearing Paper Jams

Jams can occur due to paper misfeeding from a paper tray or at any point along the paper path.

When a jam occurs, the printer immediately stops, and the LCD display indicates the area where the first sheet is jammed. All jammed sheets must be removed in order to restore the printer to normal operation.

Once you clear a jam and close the cover, you may see a new jam message indicating an additional jammed sheet which must be cleared. This is especially likely if you are printing a multi-page document or multiple copies of a single document.

Unless you have entered the menu and changed the Jam Recovery setting in the System Configuration Menu to OFF, once all jams have been cleared, the printer will automatically attempt to reprint any pages lost due to paper jams.

- Jam 370: see page 261
- Jam 371: see page 263
- Jam 372: see page 259
- Jam 373: see page 261
- Jam 380: see page 259
- Jam 381: see page 253
- Jam 382: see page 250
- Jam 383: see page 261
- Jam 390: see page 268
- Jam 391: see page 266
- Jam 392: see page 266

# Jam 382

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## OPEN TOP COVER 382: PAPER JAM

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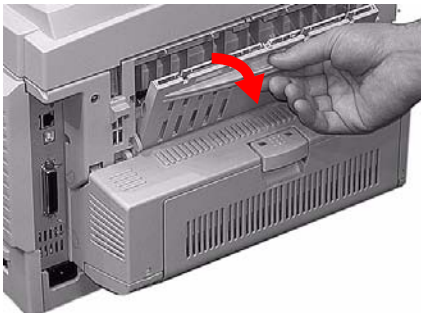
1. Open the top cover.



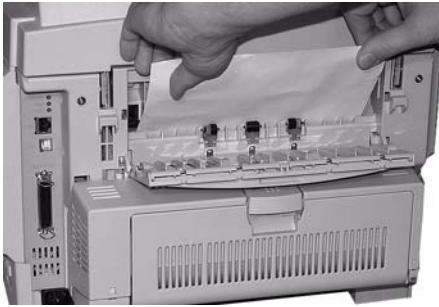
2. Gently pull the sheet out.
  - If the sheet does *not* come out easily, go to the next step.
  - If the sheet does come out, close the cover.



3. Lower the rear exit tray.



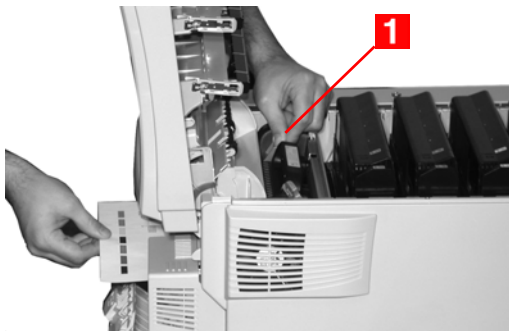
4. Pull out the jammed sheet.



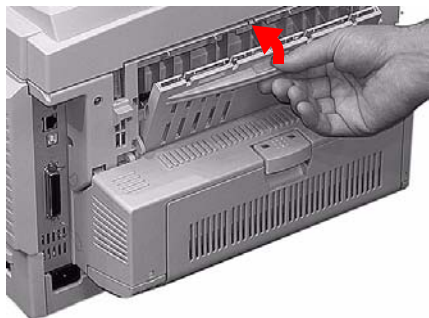
### Important!

**WARNING! The fuser may be HOT!**

If the sheet is difficult to remove, it is partially jammed in the fuser. To get it out, reach around the top cover and press down on the fuser pressure release lever (1) before pulling the sheet out. Then let go of the fuser pressure release lever.



5. Close the rear exit.



6. Close the top cover.



# Jam 381

---

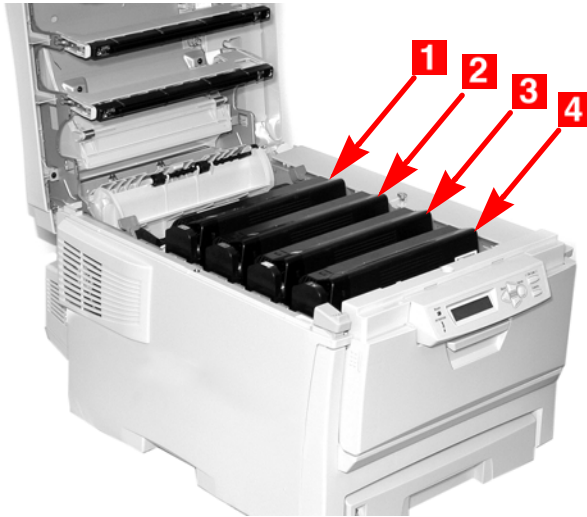
OPEN TOP COVER  
381: PAPER JAM

---

1. Press the cover release and open the printer's top cover fully.



2. Note the positions of the four image drums: Cyan (1), Magenta (2), Yellow (3), Black (4). *It is essential that they go back in the correct order!*



### **WARNING!**

***If the printer has been powered on, the fuser is hot. This area is clearly labelled. Do not touch it.***

3. Lift each of the image drum/toner cartridge units out of the printer and place them on a *flat* surface in a safe place *away from direct sources of heat and light*.



### **CAUTION!**

The green surface at the base of each image drum is very delicate and light sensitive.

- Do not touch the green surface.
- Never expose the drum to direct sunlight or to very bright room lighting.
- Do not expose it to normal room light for more than 5 minutes.
- If the image drum must be out of the printer for longer than 5 minutes, place the image drum inside a black plastic bag or carefully place it in a drawer or cabinet to keep it away from light.

4. Remove any sheets of paper on the belt unit.



### **CAUTION!**

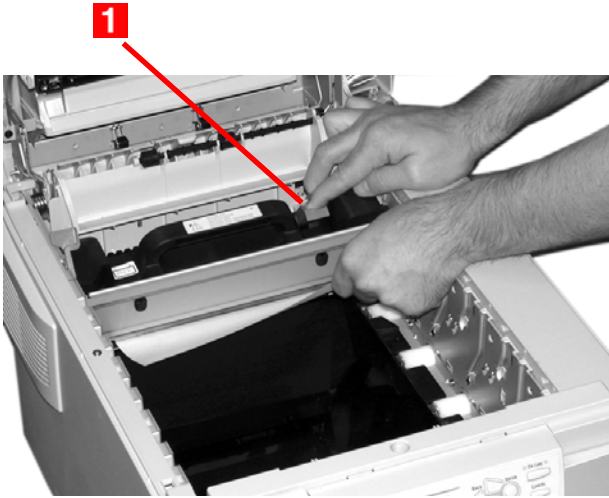
**Do not use any sharp or abrasive objects to separate sheets from the belt. This may damage the belt surface.**



## NOTE

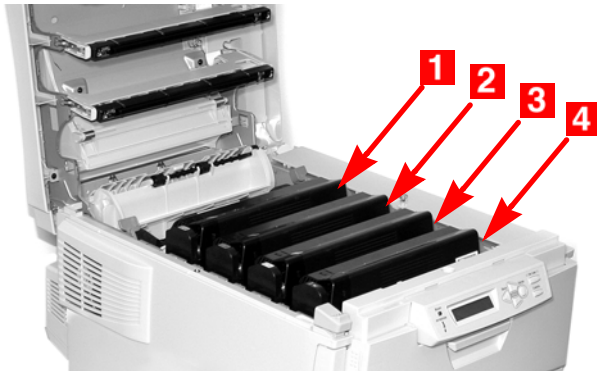
**Warning! If the printer has been printing, the fuser will be HOT!**

To remove a sheet trapped in the fuser, grasp the edge of the sheet, push the fuser pressure release lever (1) towards the front and down, and lift out the sheet. Then let go of the fuser pressure release lever.



If the sheet is well advanced into the fuser (only a short length is still visible), do not attempt to pull it back. See step 4 under “Jam 382” .

5. Place the four image drums/toner cartridges back in the printer, being careful to place them in the proper sequence (1 = Cyan, 2 = Magenta, 3 = Yellow, 4 = Black):



6. Close the top cover.



# Jam 372 and 380

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OPEN FRONT COVER

nnn: PAPER JAM

---

nnn = 372 or 380.

1. Lift the front cover release and pull open the front cover.



2. Remove any jammed sheets.



3. Close the front cover.



# Jam 370, 373 and 383

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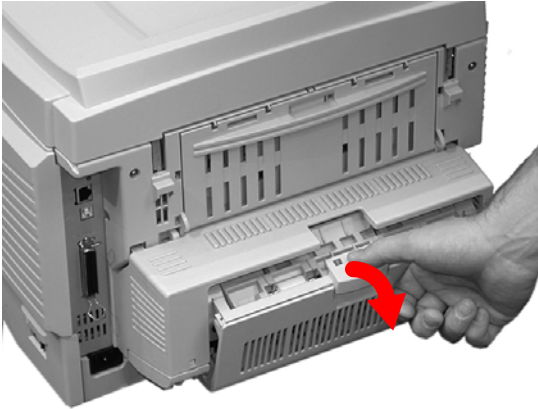
OPEN DUPLEX COVER

nnn: PAPER JAM

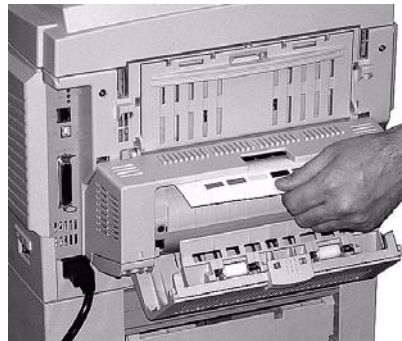
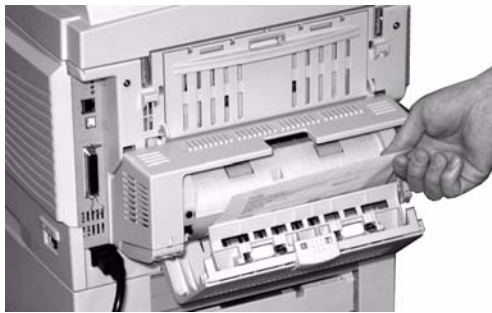
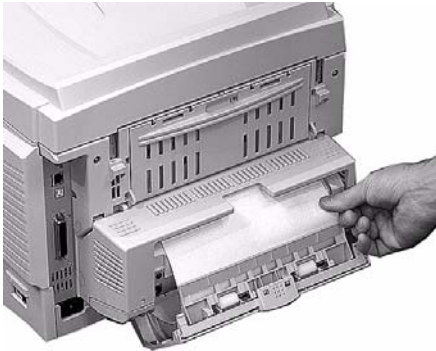
---

nnn = 370, 373, 383

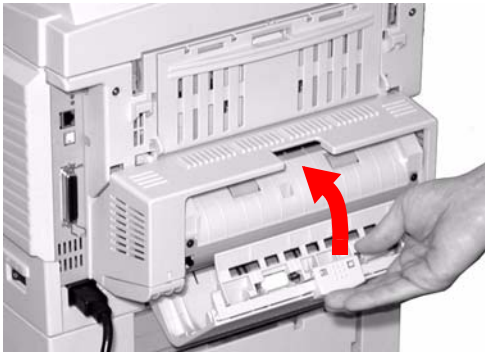
1. Press the duplex cover release and open the duplexer cover.



2. Remove any jammed sheets.



3. Close the duplex unit cover.



## Jam 371

---

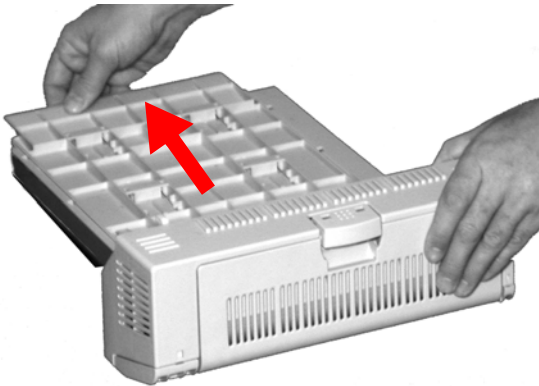
OPEN DUPLEX COVER  
371: PAPER JAM

---

1. Turn off the printer.
2. Pull out the duplexer.



3. Pull the duplexer lid to unlock it.



4. Open the lid and remove the jammed sheet.

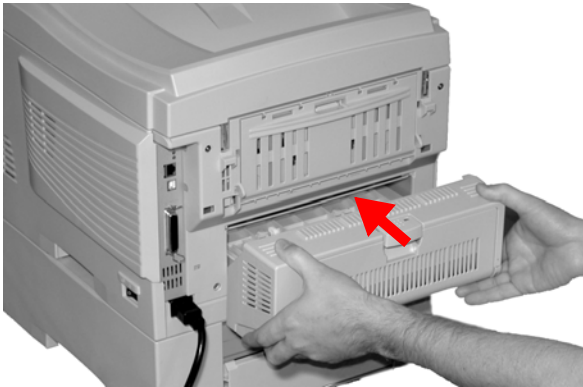




5. Close the lid and push it back to lock it in place.



6. Push the duplexer back into the printer.



7. Turn on the printer

# Jam 391 and 392

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OPEN FRONT COVER  
391: PAPER JAM

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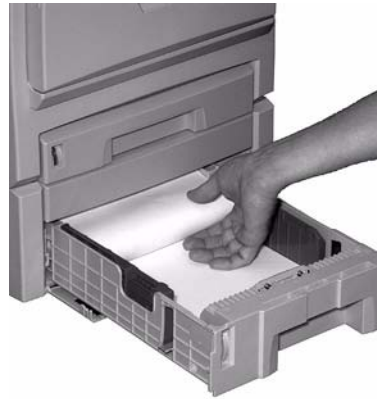
OPEN FRONT COVER  
392: PAPER JAM

---

1. Pull out the appropriate tray (391 = Tray 1, 392 = Optional Tray 2) and remove any sheet jammed as it exited the tray.



**391**

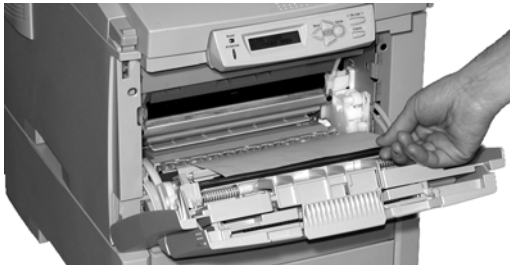


**392**

2. Open the front cover.



3. Remove any jammed sheets.



4. Close the front cover.



# Jam 390

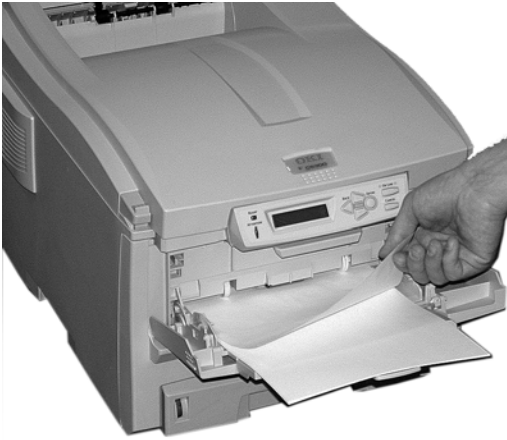
---

CHECK MP TRAY  
390: PAPER JAM

---

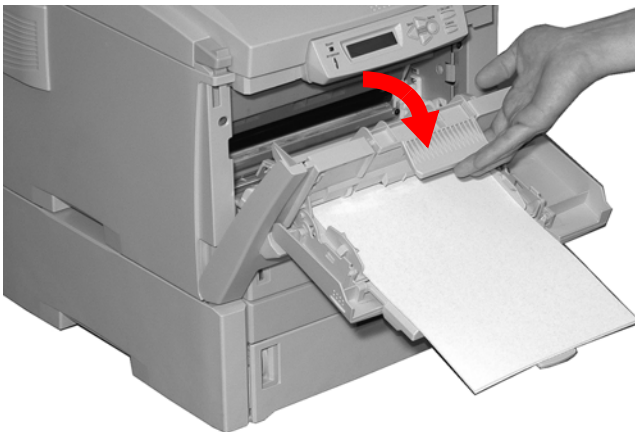
## If the Sheet Has Just Begun to Enter the Printer

1. Gently pull the sheet out of the printer.

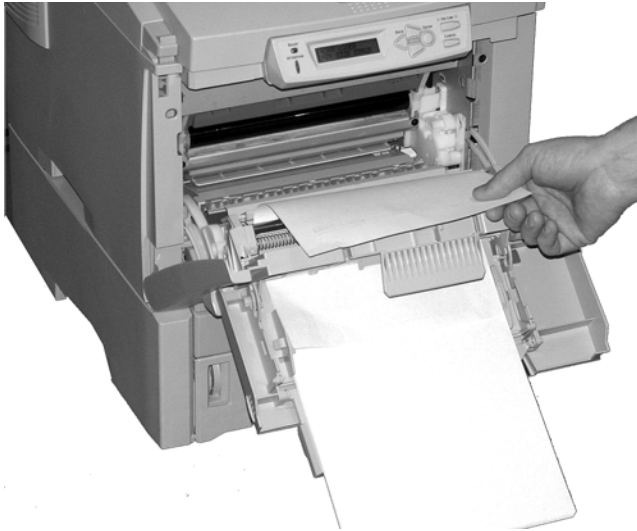


## If the Sheet Can't Easily Be Pulled Out from the Front

1. Lift the front cover release and pull open the front cover.



**2. Remove any jammed sheets.**




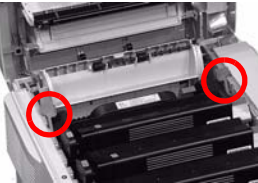
**3. Close the front cover.**




# Troubleshooting

## LCD messages

Message	Meaning	What to Do
* TONER SENSOR ERROR	Flashes across the second line of the display: the indicated color toner (*) is missing from the printer.	Open the top cover and make sure the indicated toner is there and properly seated in the printer: C = Cyan, Y = Yellow, M = Magenta, K = Black.
ADD MORE MEMORY 420: MEMORY OVERFLOW	The document size is too large for the printer's memory.	Reduce the size of the document. If this happens frequently, install additional memory (see "RAM Memory" on page 245).
CANCELING JOB (USER DENIED)	The optional Job Accounting utility is being used and the client sending the print job is not authorized to print.	The client must go to the system administrator and get print privileges assigned to them.
CANCELLING JOB (BUFFER FULL)	The optional Job Accounting utility is being used and the printer's buffer is full.	Check with your system administrator.
CANCELLING JOB (JAM)	The setting for Jam Recovery in the menu has been changed to off and a paper jam has occurred. Any unprinted data is being deleted.	Clear the jam and resend the missing pages of the print job.

Message	Meaning	What to Do
CHECK BELT 330: BELT MISSING	The belt unit is not properly installed.	<p>Open the top cover and lift out the black (K) and Yellow (Y) image drums, placing them on a <i>flat</i> surface. Check to be sure that the belt unit latches are fully in the latched position:</p>  <p>then reinstall the image drums.</p>
CHECK FUSER 320: FUSER MISSING	The fuser unit is not properly installed.	<p>Open the top cover and check to be sure that the fuser unit is properly seated in the printer and that the lock levers are pushed all the way toward the back of the printer:</p> 
CHECK MP TRAY 390: PAPER :JAM	Paper has jammed while exiting the MP Tray.	Clear the jam: see “Jam 390” on page 268.

Message	Meaning	What to Do
CLOSE COVER 316: DUPLEX COVER OPEN	The duplex cover is open or not properly latched.	Close the duplex cover: 
CLOSE COVER nnn: COVER OPEN	Either the top cover or the front cover is open.	Be sure both the top cover and the front cover are firmly closed.
HARD DISK FULL	The optional hard disk drive has no more memory available.	Stored files must be cleared out of the hard disk drive either by individual clients from the front panel or by the system administrator (using Storage Device Manager).
INSTALL PAPER CASSETTE 430: TRAY 1 MISSING	Tray 1 is not installed in the printer.	Install the missing tray.
INSTALL PAPER CASSETTE 440: TRAY 1 OPEN	Tray 1 is not properly installed in the printer.	Make sure the tray is pushed fully into the printer.
INVALID ID JOB REJECTED	The optional Job Accounting utility is being used and a print job was received from a client who does not have print privileges.	The client must go to the system administrator and get a valid ID assigned to them.
LOAD mmm AND PRESS ONLINE SWITCH 490: MP TRAY EMPTY	Print job from MP Tray has been received and the MP Tray is empty.	Load the requested media (mmm) in the MP Tray and press <b>ON-LINE</b> .



Message	Meaning	What to Do
LOAD mmm nnn: tttt EMPTY	A print job has been received and the indicated paper tray is empty.	Load mmm media in the indicated (tttt) tray.
LOAD mmm/ppp AND PRESS ONLINE SWITCH nnn: tttt MEDIA MISMATCH	The media type in the indicated tray (tttt) does not match that specified in the print job being processed.	Load the appropriate media in the tray and press <b>ON-LINE</b> .
LOAD mmm/ppp AND PRESS ONLINE SWITCH nnn: tttt SIZE MISMATCH	The media size (mmm) and/or type (ppp) loaded in the indicated tray (tttt) does not match that specified in the print job being processed.	Load the appropriate media in the tray and press <b>ON-LINE</b> .
OPEN DUPLEX COVER nnn: PAPER JAM	Paper has jammed entering or exiting the duplexer.	Clear the jam: see page 261.
OPEN FRONT COVER nnn: PAPER JAM	Paper jam.	Clear the jam: see page 259
OPEN TOP COVER nnn: PAPER JAM	Paper jam.	Clear the jam: see page 250, ff.
ORDER xxx	Appears on the second line of the display to indicate that consumable xxx (e.g., belt, fuser, toner, image drum) is nearing end of life.	Make sure you have a replacement unit on hand.
POWER ON/OFF 300: NETWORK ERROR	An error has occurred involving the network.	Shut the printer off, then turn it back on. If the message still appears, check with your network administrator.

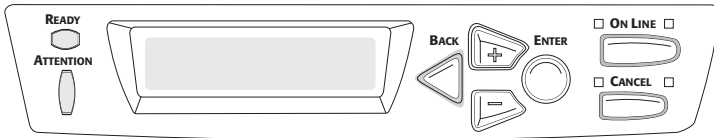
Message	Meaning	What to Do
PRESS ONLINE SW INVALID DATA	The printer has received invalid data.	Press <b>ON-LINE</b> . Reprocess and resend the print job.
PS3 EMULATION ERROR	Applies to Postscript emulation only. An error occurred or virtual memory was used up.	Reprocess and resend the job to the printer. Try reducing the size of the print file being sent.
REPLACE TONER nnn: * TONER EMPTY	The indicated toner needs replacement.	Replace the indicated toner: 410: Y = Yellow 411 M = Magenta 412: C = Cyan 413: K = Black
REPLACE YYYY nnn: YYYY LIFE	The indicated component is nearing end of life and should be replaced.	Replace the indicated component: YYYY = Fuser, Belt, C Drum, Y Drum, M Drum, K Drum.
tttt EMPTY	Appears on the second line of the display to indicate that ttt tray has run out of media.	Load media in tray tttt.
xxx LIFE	Appears on the second line of the display to indicate that consumable xxx (e.g., belt, fuser, image drum) will need to be replaced soon.	Replace the indicated item.

Message	Meaning	What to Do
YYYY nnn: FATAL ERROR	An error has occurred which requires service. YYYY = the general cause. nnn = error number.	Write down the message including the error number "nnn," then call your authorized Service Dealer for service. <b>Note:</b> If you see a series of octets containing letters and numbers scrolling across the display, be sure to write these down also and report them to the Service Dealer.

# Parallel Transmission Mode

The parallel port supports IEEE-1284 and ECP mode. If your computer's parallel port is not compatible with one of these modes, the printer may not print at all or it may print corrupted data.

To correct for this, enter the printer's Parallel Menu and change the ECP setting to Disable.



1. Press **+** to enter the Menu mode.
2. Press **-** repeatedly until you see

---

PARALLEL MENU

---

3. Press **ENTER**.

---

PARALLEL  
ENABLE \*

---

4. Press **ENTER**.  
*The second line of the display starts blinking.*
5. Press **+** to change the setting to Disable.
6. Press **ENTER**, then **BACK** to engage the setting.
7. Press **ON LINE**.

# Problem Solving

## Problems Printing

### Paper Feed Problems

If paper jams are frequent:

- More than one sheet feeds at a time.
- Paper curls.
- Paper feeds at an angle.

Possible cause	Remedy
The printer is not horizontal.	Place the printer on a stable, level surface.
The paper is too thin.	Use the correct type of paper (see “Media Recommendations” on page 11).
The paper is moist or affected by static.	Store paper within specified temperature and humidity levels (see “Specifications” on page 287).
The paper is creased or wrinkled.	Remove the creased/wrinkled paper from the feed tray.
The paper is not aligned correctly.	Adjust tray or manual feed guides.
Paper doesn't feed.	Correct paper feed selection in the printer driver: <ul style="list-style-type: none"><li>• <i>Postscript emulation</i>: Windows 98 and Me = <b>Paper</b> tab Windows 2000/XP = <b>Paper/Quality</b> tab Windows NT 4.0 = <b>Setup</b> tab.</li><li>• <i>PCL emulation</i>: Windows 98/Me/2000/XP/ NT 4.0 = <b>Setup</b> tab.</li></ul>

## Paper jam has been cleared, but printer does not print.

Possible cause	Remedy
The top cover has not remained open until all paper jams have been cleared.	Removing a paper jam is not sufficient: Raise and <i>gently</i> lower the top cover, especially if the paper jam has been removed from behind the front cover.

## Application error or general protection fault is displayed.

Possible cause	Remedy
Application is not suitable for Windows version.	Upgrade the application.
Memory is insufficient for number of applications running.	Close all other applications.
Print file is corrupted.	Correct or recreate the file.
Memory is insufficient for application.	Increase computer's memory.
Insufficient free space on hard disk.	Delete unnecessary files.
Printer driver is incorrectly configured.	Correctly configure printer driver.

## Printing is slow.

Possible cause	Remedy
Print resolution is set high.	Set lower print resolution in the printer driver:: <ul style="list-style-type: none"><li>• <i>Postscript emulation</i>: Windows 98 and Me = <b>Graphics</b> tab Windows2000/XP/NT 4.0 = <b>Job Options</b> tab</li><li>• <i>PCL emulation</i>: Windows 98/Me/XP/ NT 4.0 = <b>Job Options</b> tab.</li><li>• Wlndows 2000: <b>General</b> tab</li></ul>
Data is too complex.	Simplify data.

## Printer requests paper size change to continue printing.

Possible cause	Remedy
Paper loaded in tray is different size from that formatted in software application.	Either change paper in tray to match size formatted in application and press <b>ON-LINE</b> to continue, or continue printing on existing paper by pressing <b>ON-LINE</b> .

## The power is on, but the printer does not go online.

Possible cause	Remedy
Bad connection	Switch off the printer and disconnect the power cable. Reconnect the power cable and switch the printer on. If this does not clear the fault, call for service.

## Print processing does not start.

Possible cause	Remedy
Printer error	Check the control panel. If an error message is displayed, correct the problem.

## Print processing cancels.

Possible cause	Remedy
The printer interface cable is faulty.	Replace the printer interface cable.
The time out setting is too short.	Reset time out in the menu to a higher value ( <b>SYS CONFIG MENU</b> → <b>WAIT TIMEOUT</b> ).

## Computer Interface Problems

### Cannot configure for parallel connection.


Possible cause	Remedy
The computer does not support bi-directional parallel interface.	There is no fix for this problem. You should only use a computer that does support a bi-directional parallel interface.
Parallel cable does not meet specifications.	Use a bi-directional parallel cable to IEEE 1284 standard.
The interface is disabled.	Check that the parallel interface is set to enable in the menu (see "Parallel Transmission Mode" on page 276).
Configuration procedure was not correctly followed or cancelled.	Configure again from the beginning.
Parallel cable is disconnected or faulty.	Reconnect or try another cable.
A converter, buffer or extension cable is being used.	Test by connecting printer and computer directly.



## Cannot configure for USB connection.

### NOTE

- Windows 95 and NT 4.0 do not support USB; Windows 98 upgraded from Windows 95 may not support USB.
- Windows 98 original installation and Windows Me, 2000, and XP all support USB.

Possible cause	Remedy
Computer does not support USB interface.	Check if there is a USB controller in the Windows device manager.
USB cable does not meet specifications.	Use USB cable to specification Ver.1.1.
Interface is disabled.	Check that USB interface is set to Enable in the menu ( <b>USB MENU</b> → <b>USB</b> → <b>ENABLE</b> ).
Configuration procedure was not correctly followed or cancelled.	Configure again from the beginning.
USB cable is disconnected or faulty.	Reconnect or try another cable.
A USB hub is being used.	The printer cannot be used with a USB hub. Connect the printer and computer directly.
The USB cable is installed in the Ethernet port.	Make sure the USB cable is plugged into the white USB port (1) on the printer: 

## Printout is garbled or incorrect with parallel connection.

Possible cause	Remedy
Possible mismatch on parallel connection between computer and printer.	Change parallel transmission mode (see "Parallel Transmission Mode" on page 276).

## Cannot print.

- **LPT WRITE ERROR** is displayed.
- **PRNUSBX WRITE ERROR** is displayed.

Possible cause	Remedy
Interface is disabled.	In the printer menu settings, enable the Parallel interface ( <b>PARALLEL MENU</b> → <b>PARALLEL</b> → <b>ENABLE</b> ) or the USB interface ( <b>USB MENU</b> → <b>USB</b> → <b>ENABLE</b> ).
Printer is switched OFF.	Turn on the printer.
Printer interface cable is disconnected.	Reconnect the printer interface cable.
A converter, buffer, extension cable or USB hub is being used.	Test by connecting the printer and computer directly.
Printer driver output port is incorrect.	Set correct output port to which the printer interface cable is connected.
Printer is not selected in the printer driver.	Select the printer or set to default printer.
Incorrect printer driver is being used.	Delete this printer driver and install correct printer driver from the Drivers CD supplied with your printer.

# Print Quality Problems

## Longitudinal white stripes

Remedy
Clean LED head with lens cleaner or soft tissue.
Change toner cartridge.
Change image drum.

## Longitudinal fading

Possible cause	Remedy
LED head is dirty.	Clean LED head with lens cleaner or soft tissue.
Toner is low.	Change toner cartridge.
Paper is unsuitable for printer.	Use recommended paper.

## Faint printing

Possible cause	Remedy
The toner cartridge is incorrectly installed.	Reinstall the toner cartridge (see “Toner Cartridge Replacement” on page 219).
Toner is low.	Change toner cartridge (see “Toner Cartridge Replacement” on page 219).
The paper is moist.	Store paper within specified temperature and humidity levels (see “Specifications” on page 287).
Paper is unsuitable for printer.	Use recommended paper (see “Media Recommendations” on page 11 ).

## Fading in patches

Possible cause	Remedy
The paper is moist.	Store paper within specified temperature and humidity levels (see “Specifications” on page 287).

## Longitudinal black stripes

Possible cause	Remedy
Image drum is damaged.	Replace image drum (see "Image Drum Replacement" on page 226).
Toner is low.	Change toner cartridge (see "Toner Cartridge Replacement" on page 219).
Periodic black lateral lines or spots.	<ul style="list-style-type: none"><li>• If the lines or spots occur at intervals of approximately 44 - 94 mm, the green surface of the image drum is damaged or dirty. If damaged, replace the image drum cartridge (see "Image Drum Replacement" on page 226). If dirty, wipe the image drum gently with soft tissue. If this does not work, replace the image drum.</li><li>• If the lines or spots occur at intervals of approximately 113 mm, the fuser roller is damaged. Change the fuser (see "Fuser Replacement" on page 240).</li></ul>
The image drum has been exposed to light.	Remove the image drum from the printer and store it in a dark place for several hours. If this does not work, replace the image drum (see "Image Drum Replacement" on page 226).

## Faint shading on unprinted sections

Possible cause	Remedy
Paper has been affected by static electricity.	Store paper within specified temperature and humidity levels (see "Specifications" on page 287).
Paper is too thick.	Use recommended paper (see "Media Recommendations" on page 11).
Toner is low.	Replace toner cartridge (see "Toner Cartridge Replacement" on page 219).

## Blurred letter edges

Possible cause	Remedy
LED is dirty.	Clean LED with lens cleaner or soft tissue.
Cannot print desired color because toner is low.	Replace toner cartridge (see “Toner Cartridge Replacement” on page 219).

## One side of printed pages appears blurred

Possible cause	Remedy
Top cover is not properly closed.	Press the cover release latch and open, then close, the cover.
One or more of the toner cartridges is not seated properly.	Open the top cover and check to be sure that each toner cartridge is fully seated and that each toner cartridge lock lever is pushed all the way back.

## Toner rubs off when you rub the printed surface.

Possible cause	Remedy
Media Weight and Media Type settings may not be appropriate.	Set the value of media weight in the menu to the next heaviest one ( <b>MEDIA MENU</b> → <b>YYY MEDIA WEIGHT</b> ).
Packing materials were left on the fuser when it was installed.	<b>Careful!</b> Fuser may be <b>HOT!</b> Open the top cover and check to be sure that all the packing materials were removed from the fuser. To remove the fuser see “Fuser Replacement” on page 240.

## Miscellaneous Problems

### Printer makes a strange noise.

Possible cause	Remedy
The printer is not horizontal.	Place the printer on a stable, level surface.
There are scraps of paper or other foreign matter inside the printer.	Check the inside of the printer and remove any such objects.
The top cover is not firmly shut.	Press the left and right sides of the top cover.

### Printer takes a long time to start printing.

Possible cause	Remedy
The printer has to warm up returning from power save mode.	In the printer menu settings, set power save to a higher value to increase the length of time before entering power save mode ( <b>SYS CONFIG MENU</b> → <b>POW SAVE TIME</b> ).
The image drum carries out a cleaning process to ensure print quality, which takes time.	Wait until this process has been completed.
The fuser unit adjusts temperature, which takes time.	Wait until this process has been completed.
The printer is processing data from another interface.	Wait until this data is processed.

# Specifications

Item	Specification
Dimensions	16.61" W x 22.09" D x 13.58" H (422 mm W x 561 mm D x 345 mm H)
Net Weight	57.3 lbs. (26 Kg)
Print speeds	12 pages per minute (ppm) color 20 ppm monochrome <i>For Transparencies:</i> 5 ppm color, 12 ppm monochrome
Resolution	600 dpi or 600 x 1200 dpi
Emulations	Postscript 3 emulation PCL 5c Epson FX IBM Pro Printer III XL
Environmental	<i>Temperature</i> <ul style="list-style-type: none"> <li>• Operating: 50 to 90°F (10 to 32°C)</li> <li>• Storage (packed up): -14 to 110°F (-10 to 43 °C)</li> <li>• Power Off: 32 to 110°F (0 to 43°C)</li> </ul> <i>Relative Humidity</i> <ul style="list-style-type: none"> <li>• Operating: 20 to 80% RH</li> <li>• Storage (packed up): 10 to 90% RH</li> <li>• Power Off: 10 to 90% RH</li> </ul>
Auto Features	Auto registration Auto density adjustment Auto consumable counter reset
Memory	64 MB standard, upgradable to 128 MB, 192 MB or 320 MB (see "RAM Memory" on page 245)
Paper capacity (20-lb. [75 g/m <sup>2</sup> ] paper)	<i>Tray 1:</i> 300 sheets <i>Optional Tray 2:</i> 530 sheets <i>Multi-Purpose Tray:</i> 100 sheets
Paper weight Range	<i>Tray 1:</i> 17 to 32 lb. (64 to 120 g/m <sup>2</sup> ) <i>Optional Tray 2:</i> 17 to 47 lb. (64 to 177 g/m <sup>2</sup> ) <i>Multi-Purpose Tray:</i> 20 to 54 lb. (75 to 203 g/m <sup>2</sup> )
Paper output	<i>Top Exit (Face Down Stacker):</i> 250 sheets 20-lb. 75 g/m <sup>2</sup> paper <i>Rear Exit (Face Up Stacker):</i> 100 sheets 20-lb. 75 g/m <sup>2</sup>

Item	Specification
Printer life	420,000 pages or 5 years, whichever comes first
Duty cycle	<i>Maximum:</i> 50,000 pages per month at 5% coverage (equivalent to an average business letter) <i>Average:</i> 4,000 pages per month
Toner life	5,000 pages at 5% coverage
Image drum life	15,000 pages at 3 pages per job
Belt life	50,000 letter-size pages
Fuser life	45,000 letter-size pages



# Software Utilities

## Overview

Included with your printer is a selection of software utility programs designed to help you get the most out of your printer. These programs are located on the Drivers CD supplied with your printer.

Utilities included:

- **Color Utility**
  - Color Swatch (see page 290)
- **Hard Disk Drive Utility**
  - Storage Device Manager for Windows® (see page 293)
- **Network Utilities**
  - PrintSuperVision (see page 320)
  - Network Printer Status (see page 321)
  - Oki LPR (see page 323)

In addition, Print Job Accounting software is available as an option (see page 324)

# Color Swatch Utility

## General Information

The Color Swatch Utility allows you to print swatches of color samples on your printer. The swatches are used with your software program to select and reproduce color accurately. The swatches represent selected samples of the printer's color palette and provide corresponding RGB values which can be used to set up the desired colors for your printed documents.

### NOTE

- **Your software may not be able to match colors using the swatch information. You may need to use other matching methods.**
- **The color swatch samples do not show all the colors your printer can print.**
- **Other factors influence how you see color: the color and finish of the paper, ambient light, even the color surrounding the one you are looking at.**

## Installing the Color Swatch Utility

1. Place the driver CD supplied with your printer in your CD-ROM drive and wait for the Menu Installer to open.  
  
(If the CD does not AutoPlay, click Start → Run → Browse. Browse to your CD-ROM and double-click Install.exe, then click OK.)
2. Click **Next** to accept the terms in the license agreement.
3. Click **Productivity Software** → **Color Swatch Utility** and follow the on-screen instructions.

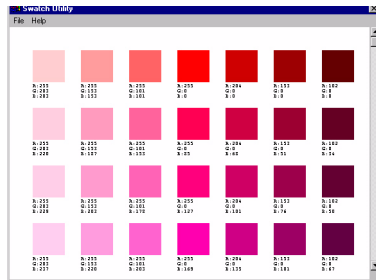
## Opening the Color Swatch utility

Click **Start** → **Programs** → **Color Swatch** → **Color Swatch Utility**.

# Using the Color Swatch Utility

## Selecting Colors

When you load the utility, a swatch page displays commonly used colors. Select print to print sample pages.



## Color Samples

Use the color blocks to pick the specific colors that you want to appear in your printed document.

## Color Values

Each color block, or sample, is identified with information your software package needs to reproduce that color accurately. The numbers under each block specify the amounts of the primary colors—red (R), green (G), and blue (B)—that mix to form each particular shade. The amounts are given as a numerical value between 0 and 255.

## Creating Custom Swatch Colors

If you don't find your desired color, you can create or customize colors:

1. Select **Custom Swatch** from the **File** menu.
2. On the pop-up window, there are 3 slide bars that allow you to customize swatches:
  - **Hue** bar changes the hue of the swatches, for example, red to green or blue to yellow.
  - **Saturation** bar changes vividness.
  - **Lightness** bar changes darkness.
3. Adjust the bars until you see the desired color. Color variations are created to help you find the best match.
4. Click **OK**, then print the custom swatch page.
5. Repeat these steps if you still don't find the desired printed color.

### NOTE

- **The Color Swatch Utility does not guarantee that the printer will print the same color displayed on your monitor. Consider the displayed color as a reference.**
- **The printer may not be able to print the exact color that you desire.**

For additional information, including **Applying Color Value in your Application**, and **Setting Monitor Color**, see the Color Swatch Utility Read-me file located in the Windows Programs list.

# Storage Device Manager Utility for Windows

## General Information

### NOTE

Storage Device Manager requires Microsoft Internet Explorer 4.0 or higher to run.

Storage Device Manager (SDM) lets you manage

- The optional 10 GB internal hard disk drive.
- The printer's built-in 2 MB flash memory.

## **Summary of Storage Device Manager Functions**

- Create or modify a project.
- Download files to a printer.
- Add or remove printers being administered.
- Reboot the printer.
- Manage the Proof & Print and Secure Print spooler queues on the internal hard disk drive.
- Delete files from the internal hard disk drive or from the flash memory.
- View the status, configuration and variables for a printer.
- Print the PCL fonts list, or PostScript font list from a printer.
- Test print downloaded PCL format macros or PostScript forms (Overlays).

### **NOTE**

**The hard disk drive does not communicate directly back to the Storage Device Manager software; it sends any error messages to the printer display. If things seems to be “stuck,” go to the printer and check the display.**

## Installing Storage Device Manager

1. Place the driver CD supplied with your printer in your CD-ROM drive and wait for the Menu Installer to open.

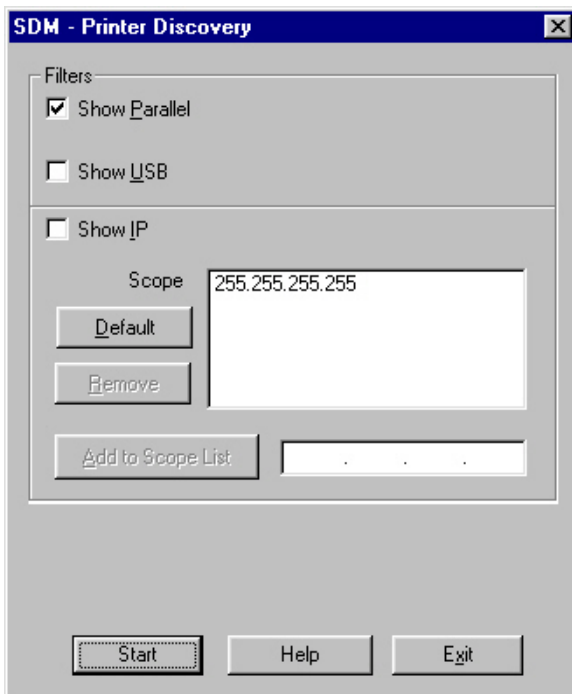
If the CD does not AutoPlay, click Start → Run → Browse. Browse to your CD-ROM and double-click Install.exe, then click OK.)

2. Click **Next** to accept the terms in the license agreement.
3. Click **Productivity Software** → **Storage Device Mgr** and follow the on-screen instructions.

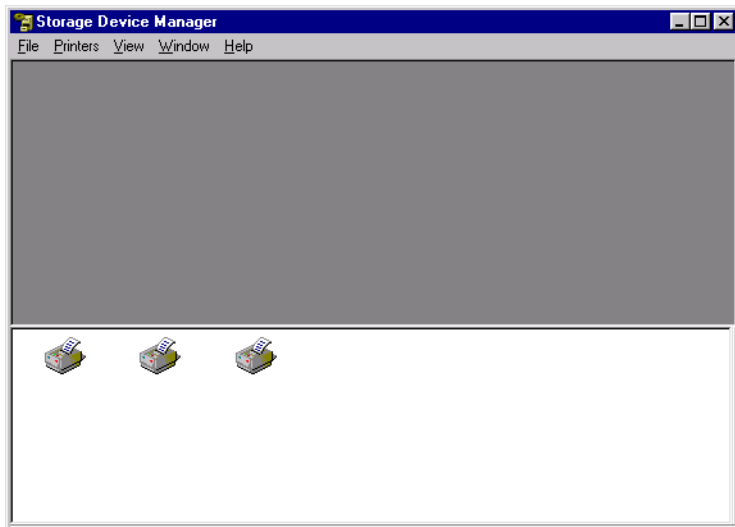
## Opening Storage Device Manager

1. Click **Start** → **Programs** → **Oki** → **Oki Storage Device Manager** → **Oki Storage Device Manager**.

*The SDM - Printer Discovery dialog box opens.*



2. Select the appropriate computer connection(s), then click **Start**.  
*The printer searches for connected printers and places icons in the window at the bottom of the dialog box.*
3. Click **Exit**.  
*The Storage Device Manager dialog box opens.*



## Using Storage Device Manager

### On-Line Help

- From the main Storage Device Manager window, click **Help Topics** from the **Help** pull-down menu.
- From other Storage Device Manager windows, click the **Help** button.

### Administration

On network systems, the Administrator oversees the Storage Device Manager software and can use it to manage and monitor the printer's internal hard disk and flash memory.

The Administrator's Functions feature lets you:

- Set up the Administrative Password.



- Enter 4-digit PIN numbers for clients.

### **NOTE**

**Clients must choose their own PIN number. The administrator needs to know these PINs in order to manage client information.**

- Reboot the printer.
- Delete files. (Show Resources is the preferred method.)

### **NOTE**

**With Show Resources, you can browse to the file, click it, click Delete, then click OK to confirm the deletion. Using Administrator Functions to delete a file requires that you print out a File List, then use the information in the File List to type in the exact path (case sensitive) to the file. The file is deleted without confirmation.**

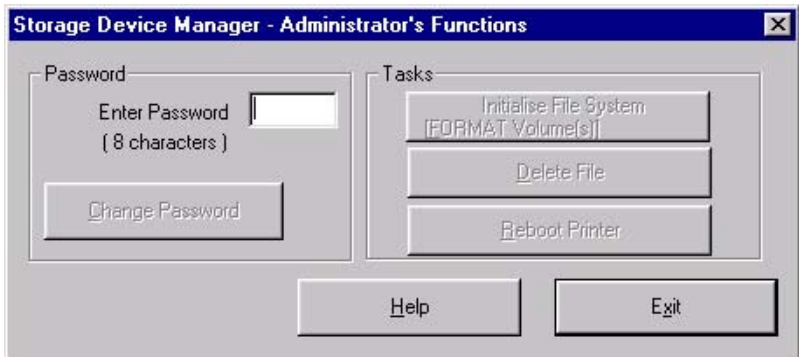
- Format the hard disk drive.

### **CAUTION!**

**You can also use Storage Device Manager to format the partitions on the printer's hard drive, but this will wipe out all the contents of the partition and can cause serious problems. We recommend that you use the Show Resources and HDD Print Jobs features to maintain the disk.**

## Setting Up an Administrative Password

1. With the Storage Device Manager program open, click **Administrator Functions** in the **Printers** menu.



### NOTE

Passwords consist of eight digits, letters or numbers, and are case sensitive.

2. Type in the default password (p1xs7d0m) under **Enter Password**, then click **Change Password**.
3. Type the 8-digit, alpha-numeric password of your choice under **New Password**.
4. Type the password again under **Confirm New Password**. *New Password Accepted appears.*
5. Click **OK**.
6. Click **Exit** twice.

## Creating PostScript Forms

### NOTE

PostScript forms are the ones to use if you are not experienced with PCL Macro commands.

### *Creating & Downloading a PostScript Project*

### Important!

Remember that file names and paths are case sensitive.

#### Step 1: Create the Forms in Your Software Application

1. Create the document in your software application.
2. Click **File** → **Print** and make sure the PostScript driver is selected.
3. Select **Print to file**.
4. Engage the Encapsulated PostScript (EPS) output option.

##### **Windows Me/98/95:**

- Click **Properties** (or your application's equivalent).
- Click the PostScript tab, then, if it is not already selected, click **Encapsulated PostScript (EPS)**.

##### **Windows NT 4.0:**

- Click **Properties** (or your application's equivalent).
  - Scroll down to **PostScript Options** and click it, then click **PostScript Output Option** and select **Encapsulated PostScript (EPS)**.
5. Click **OK**.
  6. Print the document to a file using the extension PRN.

#### Step 2: Create a New Project

1. Open Storage Device Manager.

2. Click **Projects** → **New Project**.  
*The Project dialog box opens.*
3. Click **Projects** → **Save Project**, enter the path/name for storing the project on your hard drive or your network, then click **Save**.

### **Step 3: Add Files to the Project**

1. Click **Projects** → **Add File to Project**.  
*The Open dialog box appears.*
2. Make sure **PRN files (\*.prn)** is selected in the **Files of type** drop-down list.
3. Browse to the folder where the files are saved and select the files you wish to add to the project, then click **Open**.  
*The Information dialog box appears.*
4. Click **OK**.  
*The files are saved as HST.*
5. Repeat steps 1 through 4 until you have added all the files you wish to add to the Project.

#### **NOTE**

**To delete a file from the project, click the file name, then click **Projects** → **Remove File from Project**.**

#### **Step 4: Check the Location for Storing the Files in the Printer's Memory**

- If your printer is equipped with an internal hard disk drive, the Storage Device Manager will automatically save the forms to the PostScript partition on the hard drive.
- If your printer does not have an internal hard disk drive, the Storage Device Manager will automatically store the forms in the PostScript section of the Flash memory.

To store the forms in the Flash memory instead of on the hard disk drive:

1. Double-click the file name in the Project window.  
*The Edit Component Name and ID dialog box appears.*
2. Under **Volume**, type in%Flash0%, then click **OK**.

#### **Step 5: Save the Project and Download it to the Printer**

1. Click **Projects** → **Save Project**.
2. Click **Projects** → **Send Project Files to Printer**.  
*Command Issued appears.*
3. Click **OK**.

#### **Step 6: Test Print the Form**

1. With Storage Device Manager open and the appropriate printer icon highlighted, click **Printers** → **Test Form**.  
*The Test PostScript Form dialog box appears.*
2. Click the file name for the form you wish to print (you can get this from the File List printout), then click **OK**.  
*Command Issued appears.*
3. Click **OK** and wait for the form to print.

## Creating PCL Macros (Forms)

### Important!

Unless you are experienced with PCL macro commands, it is best to stay with the PostScript Forms.

There are two basic processes to producing PCL macros:

- A: Creating and downloading the PCL project
- B: Test printing the macro

### A: Creating and Downloading a PCL Project

### Important!

Remember that file names and paths are case sensitive.

#### Step 1: Create the Forms in Your Software Application

1. Create the document in your software application.
2. Click **File** → **Print** and make sure the PCL driver is selected.
3. Print the document to a file using the extension PRN.

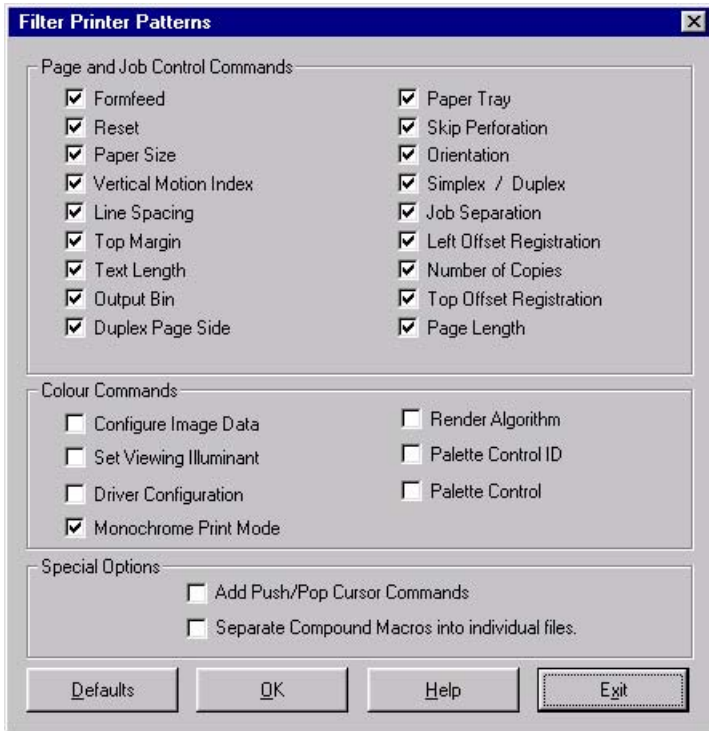
#### Step 2: Create a New Project

1. Open Storage Device Manager.
2. Click **Projects** → **New Project**.  
*The Project dialog box opens.*
3. Click **Projects** → **Save Project**, enter the path/name for storing the project on your hard drive or your network, then click **Save**.

### Step 3: Convert the Files to Binary (.bin) Format

1. Click **Projects** → **Filter Macro File**.

*The Filter Printer Patterns dialog box appears.*



2. Make any adjustments in the settings.

#### **Example**

If you create a black oval in MS Paint and leave all the color command filters checked, the black oval will print as a black rectangle when the overlay is used. To maintain the oval shape, turn off (deselect) the “Configure Image Data,” “Palette ID,” and “Palette Control” filters.

3. Click **OK**.

*The Open dialog box appears.*

4. Make sure **Print spool files (\*.prn)** is selected in the **File of type** drop-down list.
5. Under **Look in**, go to the folder where the files are saved and double-click the file name.  
*The file is saved as a bin file. Filter File Created appears.*
6. Click **OK**.
7. Repeat steps 1 through 6 until you have converted all the files you wish to add to the project.

#### **Step 4: Add the bin Files to the Project**

### **NOTE**

**You can also add files to the project by opening either My Computer or Microsoft Explorer, browsing to the directory where the prn files are stored, then selecting the files and dragging them into the Project box.**

1. Click **Projects** → **Add File to Project**.  
*The Open dialog box appears.*
2. Highlight the .bin file you wish to add and click **Open**.  
*The file name appears in the Project dialog box.*
3. Repeat steps 1 and 2 until all the files you wish to include in the project appear in the Project dialog box.

To delete a file from the project, click the file name, then click **Projects** → **Remove File from Project**.

#### **Step 5: Check .bin File Settings and Save the Project**

1. To check the settings for the bin files, double-click the file name.  
*The Edit Component Name and ID dialog box appears.*



## 2. Here you can edit the

- file name
- ID number (the number you need to enter in the printer driver when printing overlays)
- volume:
  - 0: = printer's disk drive PCL partition
  - 1: = printer's disk drive Common partition
  - %disk0%: = printer's disk drive PostScript partition
  - 2: = Flash memory PCL
  - %Flash0% = Flash memory PostScript
- path.

## 3. Click **OK**.

## 4. When you're through reviewing the settings, click **Projects** → **Save Project**.

### **Step 6: Download the Project to the Printer**

#### 1. Click **Projects** → **Send Project Files to Printer**. *Command Issued appears.*

#### 2. Click **OK**.

### **B: Test Printing PCL Macros**

#### 1. With Storage Device Manager open and the appropriate printer icon highlighted, click **Printers** → **Test Macro**. *The Test Macro dialog box appears.*

#### 2. Enter the ID number for the macro file you wish to print (you can get this from the File List printout: look under Volume 0; e.g., for 2:OKI.BIN, enter 2), then click **OK**. *Command Issued appears.*

#### 3. Click **OK** and wait for the macro to print.

### ***Printing the File List***

To print out a list of files in the printer's memory:

1. With Storage Device Manager open, click **Printers** → **Print File Listing**.  
*Command Issued appears.*
2. Click **OK** and wait for the File List to print.

#### **NOTE**

You can also print the File List from the printer's menu:

- Press **MENU** until **INFORMATION MENU** appears.
- Press **ITEM** until **PRINT FILE LIST** appears.
- Press **SELECT**.

## Maintaining the Internal Hard Drive and Flash Memory

### HDD Print Jobs

The HDD Print Jobs feature allows you to view and delete the Proof & Print and Secure Print files stored on the printer's internal hard drive.

1. Open Storage Device Manager and click the icon for the printer whose contents you wish to view.
2. Click **Printers** → **HDD Print Jobs**.  
*The HDD Print Jobs dialog box appears.*

Name	ID	Type	Copies	Stored
------	----	------	--------	--------

3. Under **Job Types**, select **Secure Jobs** to view Secure Print jobs and/or **Proof and Print Jobs** to view Proof & Print jobs.
  - To view the jobs stored for a particular client, select **View User Jobs** under **Access**, then type in the client's 4-digit User PIN and press **Enter**.
  - To view all stored jobs, select **View All Jobs** and type in your Administrator's Password, then press **Enter**.

4. Delete the files.

## Important!

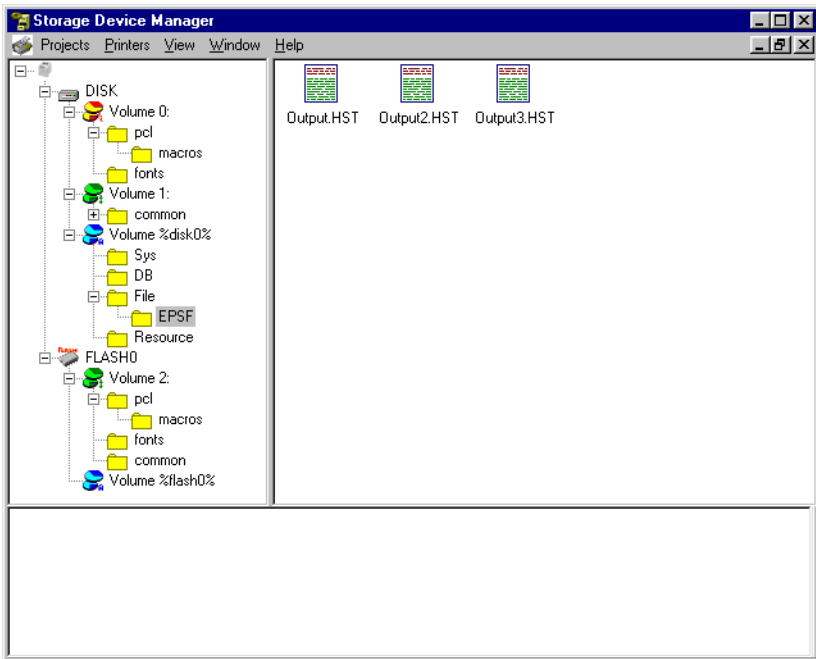
You will not be prompted to confirm the deletion.

- Click **Cancel Job(s)** to delete the files without printing them.
- Click **Print Job(s)** to print the files out before they are automatically deleted.

### Show Resources

Use the Show Resources feature to delete files from the internal hard drive and flash memory.

1. Open Storage Device Manager and click the icon for the printer whose contents you wish to view.
2. Click **Printers** → **Show Resources**.



3. Click the file(s) to be deleted (press Shift to select a span of files; press Ctrl to select additional files).
  - PCL Macro files are under Volume 0 (internal hard drive) or Volume 2 (flash memory).
  - PostScript Forms are under Volume &disk0% (internal hard drive) or %flash0% (flash memory).
4. Click **Printers** → **Delete File(s)**.
5. Click **Yes** to confirm the deletion.
6. Close the dialog box.

## Using Overlays

### NOTES

- Before overlays can be printed, they must be created in a software application and saved as a print file, then downloaded to the printer's internal hard disk drive or flash memory using Storage Device Manager.
- For Windows Me/98/95, the Overlay Feature is available only for the PCL driver. It is not available for the PostScript driver.

### **General Information**

To use overlays, the Storage Device Manager software must be installed. In order to ensure enough memory is available for storing overlay files, it is recommended that the printer be equipped with the optional hard disk drive.

You can save logos, letterheads, etc. as overlays

- on the printer's internal hard disk drive (maximum available space, 2 MB each for PCL Macros and PostScript Forms) or
- in the printer's flash memory (available space limited to about 0.5 MB each for PCL Macros and PostScript Forms)

then add one or any combination of them to a file as it is being printed.

Use overlays

- in place of pre-printed stationery
- to add your logo or company address to a document
- to create forms from pre-stored modular pieces.

### **Important!**

When the hard disk drive is installed, you must use the Shutdown Menu before turning the printer off.

- Overlay elements must be created in the software application of your choice, then stored on the printer's hard drive using Storage Device Manager before they can be used.
- If the hard disk memory is insufficient for the spooled data, the message DISK FULL appears.
- If the software application has a collate print option, it must be turned OFF before you print overlays.
- Overlay printing cannot be done using the Windows 2000 PostScript driver or the Macintosh driver.

### **Using Overlays: Windows 2000 and XP PCL**

*In Windows 2000, overlays can only be printed using the PCL driver.*

#### Defining Overlays: 2000 PCL

1. Click **Start** → **Settings** → **Printers**.
2. Right click the PCL printer icon, then click **Printing Preferences**.  
*The Printing Preferences dialog box appears.*
3. Click the **Overlay** tab.
4. Click **Define Overlays**.
5. Under **Overlay Name**, enter a name for the overlay.
6. Under **ID Value**, enter the ID number for the file saved using the Storage Device Manager software (see the File List printout).
7. In the **Print on Pages** drop-down list, select on which pages the overlay is to be printed, or select **Custom** and enter specific page numbers under **Custom pages**.
8. Click **Add**, then click **Close**.  
*The overlay you defined appears in the Defined overlays list.*
9. Click **OK** and close the Printers dialog box.

#### Printing Using Overlays: 2000 PCL

1. Open the document in the software application.
2. Click **File** → **Print**.  
*The Print dialog box appears.*
3. Click the **Overlay** tab.

4. Under **Defined Overlays**, click any overlays you wish to use (to select more than one, press the Ctrl key while selecting the names), then click **Add**.
  - Each name appears in the **Active overlays** box.
  - To print a sample of an overlay to see what it looks like, click the name under **Defined Overlays**, then click **Test Print**.
  - If you wish to add more overlays to the list, click **Define overlays**, then fill in the appropriate information in the **Define overlays** dialog box and click **Close**.
5. Click **Print using active overlays**, then click **Print**.

#### Editing Defined Overlays: 2000 PCL

1. Click **Start** → **Settings** → **Printers**.
2. Right click the PCL printer icon, then click **Printing Preferences**.  
*The Printing Preferences dialog box appears.*
3. Click the **Overlay** tab.
4. Click **Define overlays**.  
*The Define overlays dialog box appears.*
5. Under **Defined overlays**, click the overlay to be edited.
6. Make your changes, then click **Apply**.
7. Click **Close**.
8. Click **OK** and close the Printers dialog box.

#### Deleting Defined Overlays: 2000 PCL

1. Click **Start** → **Settings** → **Printers**.
2. Right click the PCL printer icon, then click **Printing Preferences**.  
*The Printing Preferences dialog box appears.*
3. Click the **Overlay** tab.
4. Click **Define Overlays**.  
*The Define Overlays dialog box appears.*
5. Under **Defined overlays**, click the overlay to be deleted.
6. Click **Remove**, then click **Close**.



## **Using Overlays: Windows Me/98/95 PCL**

### Defining Overlays: Me/98/95 PCL

1. Click **Start** → **Settings** → **Printers**.
2. Right click the PCL printer icon, then click **Properties**.  
*The Properties dialog box appears.*
3. Click the **Job Options** tab, click the **Overlay** button.
4. Click **Define overlays**.
5. Under **Overlay Name**, enter a name for the overlay.
6. Under **ID Value**, enter the ID number for the file saved using Storage Device Manager (see the File List printout).
7. In the **Print on Pages** drop-down list, select on which pages the overlay is to be printed, or select **Custom** and enter specific page numbers under **Custom pages**.
8. Click **Add**, then click **Close**.  
*Each overlay you defined appears in the Defined overlay list.*
9. Click **OK** and close the Printers dialog box.

### Printing Overlays: Me/98/95 PCL

1. Open the document in the software application.
2. Click **File** → **Print**.  
*The Print dialog box appears.*
3. Make sure the PCL driver is selected, then click **Properties** (or your application's equivalent).  
*The Properties dialog box appears.*
4. Click the **Overlay** tab.
5. Under **Defined Overlays**, click any overlays you wish to use (to select more than one, press the Ctrl key while selecting the names), then click **Add**.  
*The names appear in the Active overlays box.*
  - To print a sample of an overlay to see what it looks like, click its name in the **Defined overlays** box, then click **Test Print**.
  - If you wish to add more overlays to the list, click **Define overlays**, then fill in the appropriate information in the **Define overlays** dialog box and click **Close**.

6. Click **Print using active overlays**, then click **OK** and print the document.

#### Editing Defined Overlays: Me/98/95 PCL

1. Click **Start** → **Settings** → **Printers**.
2. Right click the PCL printer icon, then click **Properties**.  
*The Properties dialog box appears.*
3. Click the **Job Options** tab. Click the **Overlay** button.
4. Click **Define overlays**.  
*The Define overlays dialog box appears.*
5. Under **Defined overlays**, click the overlay to be edited.
6. Make any changes, then click **Apply**.
7. Click **Close**.
8. Click **OK** and close the Printers dialog box.

#### Deleting Defined Overlays: Me/98/95 PCL

1. Click **Start** → **Settings** → **Printers**.
2. Right click the PCL printer icon, then click **Properties**.  
*The Properties dialog box appears.*
3. Click the **Job Options** tab. Click the **Overlay** button.
4. Click **Define overlays**.  
*The Define overlays dialog box appears.*
5. Under **Defined overlays**, click the overlay to be deleted.
6. Click **Remove**, then **Close**.
7. Click **OK** and close the Printers dialog box.

## **Using Overlays: Windows NT 4.0 PCL**

### Defining Overlays: NT 4.0 PCL

1. Click **Start** → **Settings** → **Printers**.
2. Right click the PCL printer icon, then click **Document Defaults**.  
*The Default dialog box appears.*
3. Click the **Job Options** tab. Click the **Overlay** button.
4. Click **Define overlays**.  
*The Define overlays dialog box appears.*
5. Under **Overlay Name**, enter a name for the overlay.
6. Under **ID Value**, enter the ID number for the file saved using Storage Device Manager (see the File List printout).
7. In the **Print on Pages** drop-down list, select on which pages the overlay is to be printed, or select **Custom** and enter specific page numbers under **Custom pages**.
8. Click **Add**, then click **Close**.  
*The overlays you defined will appear in the Defined overlays window.*
9. Click **OK** and close the Printers dialog box.

### Printing Overlays: NT 4.0 PCL

1. Click **File** → **Print**.  
*The Print dialog box appears.*
2. Make sure the PCL driver is selected, then click **Properties** (or your application's equivalent).  
*The Properties dialog box appears.*
3. Click the **Overlay** tab.
4. Under **Defined Overlays**, click any overlays you wish to use (to select more than one, press the Ctrl key while selecting the names), then click **Add**.  
*The names appears in the Active overlays box.*

## NOTE

To print a sample of an overlay to see what it looks like, click its name in the **Defined Overlays** box, then click **Test Print**. If you wish to add more overlays to the list, click **Define Overlays**, then fill in the appropriate information in the **Define overlays** dialog box and click **Close**.

5. Click **Print using active overlays**, then click **OK** and print the document.

### Editing Defined Overlays: NT 4.0 PCL

1. Click **Start** → **Settings** → **Printers**.
2. Right click the PCL printer icon, then click **Document Defaults**.  
*The Defaults dialog box appears.*
3. Click the **Job Options** tab. Click the **Overlay** button.
4. Click **Define Overlays**.  
*The Define overlays dialog box appears.*
5. Under **Defined overlays**, click the overlay to be edited.
6. Make your changes, then click **Apply**.
7. Click **Close**.
8. Click **OK** and close the Printers dialog box.

### Deleting Defined Overlays: NT 4.0 PCL

1. Click **Start** → **Settings** → **Printers**.
2. Right click the PCL printer icon, then click **Document Defaults**.  
*The Defaults dialog box appears.*
3. Click the **Job Options** tab. Click the **Overlay** button.
4. Click **Define Overlays**.
5. Under **Defined overlays**, click the overlay to be deleted.
6. Click **Remove**, then **Close**.
7. Click **OK** and close the Printers dialog box.

## Defining Overlays: NT 4.0 PCL

1. Click **Start** → **Settings** → **Printers**.
2. Right click the PostScript printer icon, then click **Document Defaults**.  
*The Default dialog box appears.*
3. Scroll down to **Layout**, and click **Overlay**.
4. Under Change '**Overlay**' **Setting**, click **Use Overlay**.
5. Click **Setting of Overlay**.  
*The Setting of Overlay dialog box appears.*

## Set up an Overlay Group:

6. Click **New**.  
*The Define Overlays dialog box appears.*
7. Under **Group Name**, enter a name for the group of overlays you are creating.
8. In the **Print on Pages** drop-down list, select on which pages the overlay is to be printed, or select **Custom** and enter specific page numbers under **Custom pages**.
9. Under **Overlay Name**, type in the name of the overlay file exactly as it was stored using Storage Device Manager (see the File List printout).  
*Overlay file names are case sensitive.*
10. Click **Add**.
11. Repeat steps 9 and 10 to add additional overlays (maximum of three per group).
12. Click **OK**.

*To create additional overlay groups (up to 32 can be defined), repeat steps 6 to 12 above.*

## Save Your Settings

13. Click **OK** twice and close the Printers dialog box.

## **Using Overlays: Windows NT 4.0 PostScript**

### Defining Overlays: NT 4.0 PostScript

1. Click **Start** → **Settings** → **Printers**.
2. Right click the PostScript printer icon, then click **Document Defaults**.  
*The Default dialog box appears.*
3. Click the **Job Options**, and click **Overlay**.
4. Click **New**.  
*The Define Overlays dialog box appears.*
5. Under **Overlay Name**, enter a name for the group of overlays you are creating.
6. In the **Print on Pages** drop-down list, select on which pages the overlay is to be printed, or select **Custom** and enter specific page numbers under **Custom pages**.
7. Under **Form Name**, type in the name of the overlay file exactly as it was stored using the Storage Device Manager software (see the File List printout), including the file extension.HST.  
*Overlay file names are case sensitive.*
8. Click **Add**.
9. Repeat steps 7 and 8 to add additional overlays (maximum of three per group).
10. Click **OK**.

*To create additional overlay groups (up to 32 can be defined), repeat steps 5 to 10 above.*

11. Click **OK** twice and close the Printers dialog box.

### Printing Using Overlays: NT 4.0 PostScript

1. Open the document in the software application.
2. Click **File** → **Print**.  
*The Print dialog box appears.*
3. Scroll down to **Layout**, then click **Use Overlay**.
4. Click **Setting of Overlay**.  
*The Setting of Overlay dialog box appears.*
5. Select the Overlay group(s) you wish to print, then click **Add**.  
*The group will appear in the Active Overlay Groups list.*

6. Click **OK** twice and print the document.

#### Editing Defined Overlays: NT 4.0 PostScript

1. Click **Start** → **Settings** → **Printers**.
2. Right click the PostScript printer icon, then click **Document Defaults**.  
*The Defaults dialog box appears.*
3. Scroll down to **Layout**, and click **Overlay**.
4. Click **Setting of Overlay**.  
*The Setting of Overlay dialog box appears.*
5. Under **Defined Overlay Groups**, click the name of the group you wish to modify, then click **Edit**.  
*The Define Overlays dialog box appears.*
6. Make your changes, then click **OK**.
7. Click **OK** twice and close the Printers dialog box.

#### Deleting Defined Overlays: NT 4.0 PostScript

1. Click **Start** → **Settings** → **Printers**.
2. Right click the PostScript printer icon, then click **Document Defaults**.  
*The Default dialog box appears.*
3. Scroll down to **Layout**, and click **Overlay**.
4. Click **Setting of Overlay**.  
*The Setting of Overlay dialog box appears.*
5. Click the name of the **Defined Overlay Group** you wish to remove, then click **Delete** and click **Yes** to confirm the deletion.
6. Click **OK** twice and close the Printers dialog box.

#### Additional Information

For more information, click **Help** in the Storage Device Manager program.

# PrintSuperVision Utility

## General Information

PrintSuperVision is a web-based application for managing printing devices connected to a network. PrintSuperVision provides access to networked printer data for monitoring, reporting and managing networked printers. It provides a full range of management functions for Oki printers, and for other brands of printers as well.

## Installing PrintSuperVision

1. Place the driver CD supplied with your printer in your CD-ROM drive and wait for the Menu Installer to open.

*(If the CD does not AutoPlay, click Start → Run → Browse. Browse to your CD-ROM and double-click Install.exe, then click OK.)*

2. Click **Next** to accept the terms in the license agreement.
3. Click **Network Software** → **Administration Tools** → **PrintSuperVision** and follow the on-screen instructions.

## Features

- Provides real-time status of all your printers to monitor and report printer usage, manage consumables usage and replenishment.
- Interfaces to the system via a standard web browser enabling you to check on printer status and compatible multi-function devices from anywhere on the web.
- Performs initial discovery and configuration of printing devices connected to network.
- Lets you view groups of printers by list, floorplan or maps.
- Monitors devices over time, including maintenance data, and saves data for statistical reports.
- Sends mail alerts of events affecting device functionality.
- Generates reports on-screen or in XHTML, Excel, XML, Text, and CSV formats.
- Integrates with Oki Data's on-line web support.



## Additional Information

For more information:

- See your on-line OkiLAN® 8100 SoftNIC User's Guide (on the Drivers CD supplied with your printer

**or**

- Click on **Help** in the PrintSuperVision program.

## Network Printer Status Utility

This utility creates an additional tab (STATUS) in the PostScript and PCL drivers that allows the client to monitor the selected printer's status.

### Installing The Network Printer Status Utility

1. Place the driver CD supplied with your printer in your CD-ROM drive and wait for the Menu Installer to open.

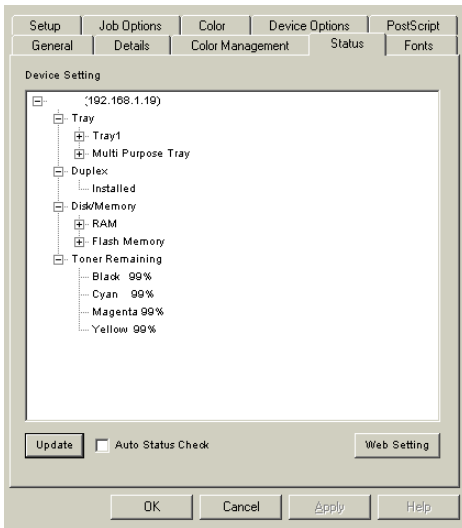
*(If the CD does not AutoPlay, click Start → Run → Browse. Browse to your CD-ROM and double-click Install.exe, then click OK.)*

2. Click **Next** to accept the terms in the license agreement.
3. Click **Network Software** → **Administration Tools** → **Network Printer Status** and follow the on-screen instructions.

### To Open The Network Printer Status Utility

1. Click **Start** → **Settings** → **Printers**. Right-click the Oki Printer icon, click **Properties**.
2. Click on the **STATUS** tab.

3. Click **UPDATE** to see the device settings. The following window displays:



Click on an item to see this information:

Trays:	Paper Type, weight, size
Duplex:	Installed/not installed
Disk/Memory:	RAM size and % used; Flash Memory size and % used
Toner Remaining:	% toner remaining is shown for each cartridge.

### NOTE

If the **Automatic Status Check** box is checked, this utility will “ping” the printer each time you open the **Printer Properties** dialog in the printer driver. This will severely slow down the opening of this dialog.

To save time, click **Update** to refresh the display.

# Oki LPR Utility

The LPR Utility allows you to print directly to a printer on the network without a print server. It creates an Oki Printer Port, and installs a pop-up status box so you can monitor the printer status.

LPR operates in Windows Me/98/95, Windows NT 4.0, Windows 2000, and Windows XP operating systems.

## How to Install

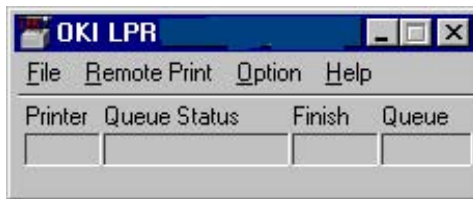
The LPR Utility supports TCP/IP. Your network administrator will first need to set up an IP address and TCP/IP properties for your printer.

1. Place the driver CD supplied with your printer in your CD-ROM drive and wait for the Menu Installer to open.

*(If the CD does not AutoPlay, click Start Æ Run Æ Browse. Browse to your CD-ROM and double-click Install.exe, then click OK.)*

2. Click **Next** to accept the terms in the license agreement.
3. Click **Network Software** → **Administration Tools** → **Oki LPR** and follow the on-screen instructions.

## LPR Status box



The LPR Utility Status Box displays the following information:

- **Printers:** Names of added printers (You can add up to 30 printers)
- **Status:** LPR Utility status (empty, connecting, sending, paused, checking status, not connected)
- **Finish:** Number of completed jobs.
- **Queue:** Number of jobs waiting to be printed.

## Additional Information

For help using the LPR Utility, click on **HELP** in the program.

# Print Job Accounting Utility (optional software)

## Introduction

Oki Print Job Accounting software, designed specifically for Oki printers, provides job accounting features that allow you to track printer usage, calculate printing costs, and specify user access.

File Printer Log Help		Log 2001/11										
Log No	Account ID	User	Document Name	Total Sheets	Pages	Status	Pages Size	Duplex Print	Sheets	Color	Monro	
1	10001	User01	Microsoft Word - Document1	1	1	Printed	A4	Simplex	1	0	1	
2	10001	User01	Book1	1	1	Printed	A4	Simplex	1	0	1	
3	10002	User02	properly	1	1	Printed	A4	Simplex	1	1	0	
4	10002	User02	Untitled - Notepad	1	1	Printed	A4	Simplex	1	0	1	
5	0	Administrator	users3.csv	0	0	Page...						
6	0	Administrator	Microsoft Word - Document1	0	0	Page...						
7	10003	User03	No page to display	1	1	Printed	A4	Simplex	1	1	0	
8	10003	User03	Document	1	1	Printed	A4	Simplex	1	0	1	
9	10004	User04	ReadMe.pdf	2	2	Printed	A4	Simplex	2	1	1	
10	10004	User04	Acrobat.pdf	1	1	Printed	A4	Simplex	1	1	0	
11	0	Administrator	Oki Print Job Accounting	0	0	Page...						
12	0	Administrator	Oki Print Job Accounting	0	0	Page...						
13	10005	User05	Microsoft Word - MyDoc.doc	1	1	Printed	A4	Simplex	1	0	1	
14	10005	User05	MySheet.xls	1	1	Printed	A4	Simplex	1	0	1	
15	10005	User05	Print Bubbles.bmp (1 page)	1	1	Printed	A4	Simplex	1	1	0	
16	10005	User05	Untitled - Notepad	1	1	Printed	A4	Simplex	1	0	1	

Print Job Accounting requires a Server computer using Windows and a series of Client computers, including both Windows and Macintosh versions. See "Operating System Requirements" on page 327.

## NOTE

The optional Oki Print Job Accounting software requires that your printer have the optional Hard Disk Drive installed.

## **With Print Job Accounting**

- You can limit use of color printing to contain costs.
- You can monitor exactly how much each user prints and use that information to plan equipment allocation.

### ***For each printer user, you can:***

- set print enabled/disabled or color print enabled/disabled
- set upper limits for items such as printed pages
- log selected items, including:
  - the date
  - user name
  - printer name
  - document name (Note: the information on document names cannot be acquired while printing from some Windows applications or from a Macintosh.)
  - number of printed pages broken down by color versus monochrome
  - paper size
  - Simplex or Duplex printing, etc.
- set up an account, allowing printing only within the limits set\*.

### ***For each printer, you can:***

- set fees by sheets, paper sizes, and so forth
- set print enabled/disabled or color print enabled/disabled
- set upper limits for items such as printed pages
- set up an account, allowing printing only within the limits set\*.

### **\*NOTE**

**Whether the upper limits have been exceeded or not is checked according to the set interval time. Even if the upper limits have been exceeded, printing can continue as long as it is within the interval time.**

***For Print Logs, you can:***

- export print logs as comma-separated value (csv) files, which can be imported into any spreadsheet software program.
- acquire a print log for print jobs sent from a client directly to a printer, bypassing the print server.
- accurately record printed pages through print logs even when a user has cancelled his/her print jobs or paper jams have occurred.

# Installation

## Operating System Requirements

### ***Server Computer***

The Server Software must be run under

- Windows 2000
- Windows XP, or
- Windows NT 4.0 (SP6 or later)

with the latest Service Packs installed. A connection to the printer which will be managed is also required, this can be a direct connection (USB or Parallel), or a network TCP/IP connection.

The Server Software acquires and saves print logs at the time specified. Up to five times can be set per day. If the Server computer is shut down, the software cannot acquire print log information.

Therefore, the Server computer must be running continuously, or at least be running at the specified time(s) each day.

### ***Client Computers***

Client computers can run under any of the following:

- Windows 95
- Windows 98
- Windows Me
- Windows 2000
- Windows XP
- Windows NT4.0 (SP6 or later)
- Macintosh OS 8.x
- Macintosh ODS 9.04 to 9.2

## **Print Job Accounting Software Overview**

To use Print Job Accounting, you need to install both the Server and Client Software and you must install one or both of the ES 1220n drivers supplied on the CD which came with your printer.

### **1. Server Software**

This is a management tool for the system manager. It registers printers and users and sets print limits. Even when it is not running, this tool acquires and saves print logs at the set interval time.

Install the Server Software on the computer which will function as the system's Server. This can be the same computer on which the other server software, such as file server and print server, are installed.

### **2. Client Software**

This software gets installed, along with the printer driver, on each client computer. It is used to set up the ES 1220n driver(s) as the Print Job Account Printer Driver(s).



## Installing The Print Job Accounting Software

### **Installing the Server Software**

1. Place the “Drivers, Color and Network Utilities“ CD supplied with your printer in the CD-ROM drive on the Server computer and wait for the Menu Installer to open.

*If the CD does not AutoPlay, click Start → Run → Browse. Browse to your CD-ROM and double-click Install.exe, then click OK.*

2. Click **Next** to accept the terms in the license agreement.
3. Click **Network Software** → **Administration Tools** → **Job Accounting** → **Server** and follow the on-screen instructions. Be sure to note the Server ID that is issued. You will need this later.

### **Installing the Client Software on Windows Computers**

1. Place the driver CD supplied with your printer in the CD-ROM drive of the Client computer and wait for the Menu Installer to open.

*If the CD does not AutoPlay, click Start Æ Run Æ Browse. Browse to your CD-ROM and double-click Install.exe, then click OK.*

2. Click **Next** to accept the terms in the license agreement.
3. Click **Network Software** → **Administration Tools** → **Job Accounting** → **Client** and follow the on-screen instructions.

### **Activating the Client Software on Macintosh Computers**

Normally, the Oki Job Accounting software is automatically installed when you install the printer driver. To activate Job Accounting:

1. Select **Print Desktop...** on the **File** menu.
2. Ensure that your printer model is selected, then click **General** and select **Plug-in Preferences**.
3. Open the **Print Time Filters** menu, then check **Print Time Filters**, **JobType** and **JobAccounting**.
4. Click **Save Settings**, then click **OK**.
5. Click **Cancel**.

## **User Name Versus Account ID**

### **The Difference**

The User Name is displayed whenever print logs are displayed, and its sole purpose is to make it easy to see who has been printing.

Account ID is the number Job Accounting actually utilizes to identify users.

The User Name does not necessarily need to be the same as Windows Login User Name.

## **Account ID**

An Account ID has to be assigned to each user. If the same Account ID is assigned to different users, all the print jobs they have made will be added up as the same user when the System totals up.

- Users who do not have their own Account ID will be recognized as Unregistered ID(0).
- Account ID values of 1 through 1879048191 can be assigned.
- All Account IDs must be set in the Server computer for each of the Client computers that will be allowed to print to a specific printer.

### ***Examples of assigning Account ID***

#### To permit only some users to print.

In this case, you need not necessarily assign an Account ID to each and every user. You assign one only to those users who are permitted to print. All other users will be recognized as Unregistered ID(0) and all you have to do is to inhibit printing by Unregistered ID users.

#### To permit only some users to print in color

You can prevent any Unregistered ID users from printing in color, in the same way as above.

#### To set the print limits and collect print logs by departments

In this case, you need not necessarily assign an Account ID to each and every user. All you have to do is to assign an Account ID to each department and specify the Group Name in place of User Name.

#### To set the print limits and collect print logs for each user

Here, you need to assign an Account ID to each individual user and ensure that you do not to assign the same Account ID to more than one.

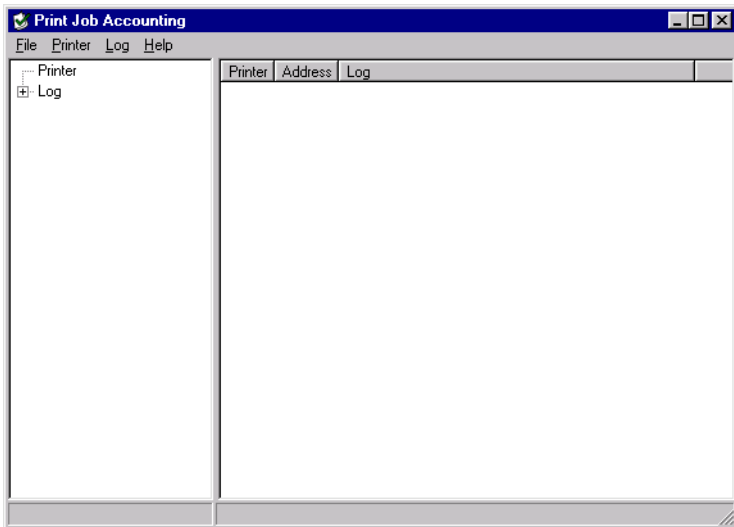
## Using the Server Software

- “Starting the Server Software” see page 332
- “Setting Account IDs on the Server Computer” see page 333
- “File Pull-down Menu” see page 333
- “Printer Pull-down Menu” see page 334
- “Help Pull-down Menu” see page 335
- “How to Add a Printer” see page 337
- “How to Change Account ID settings” see page 342
- “How to set up the Log Display” see page 343
- “How to Read Logs” see page 344

## Starting the Server Software

Click **Start** → **Programs** → **Okidata** → **Print Job Accounting** → **Print Job Accounting**.

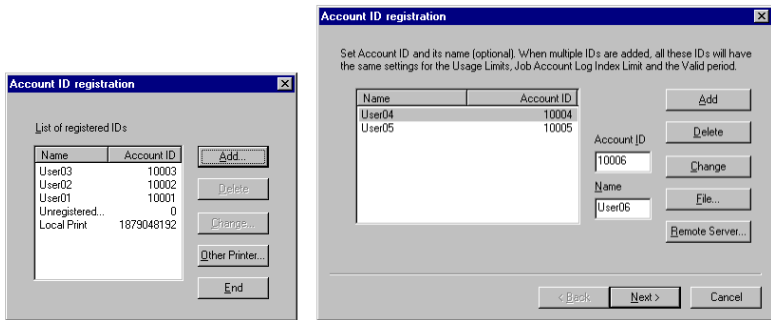
The following window appears:



## Setting Account IDs on the Server Computer

Start up the Server Software, then click **Printer** → **Add Printer** to register printers. You can set an Account ID for each printer at this time. Even after having registered the printers, you can still add to or change them. Therefore, you need not necessarily set an Account ID for each printer when registering.

For more information, “How to Add a Printer” on page 337.



## File Pull-down Menu

**Exit** Closes the application.

## **Printer Pull-down Menu**

**(for more information, see **NOTES** box below)**

<b>Add a Printer</b>	Registers a new printer.
<b>Delete a Printer*</b>	Deletes a registered printer.
<b>Start/End Log*</b>	Starts/ends the process of acquiring information for logs from the printer at the set interval time.
<b>Acquire a Log*</b>	Acquires a print log saved in the printer.‡
<b>Setting the Time*</b>	Sets the present time in the printer.**
<b>Define Fees</b>	Sets up and selects fees.
<b>Properties</b>	Sets the printer properties.

## Log Pull-down Menu

(for more information, see **NOTES** box below)

<b>Display Logs†</b>	Changes the display from Total to Logs.
<b>Display Total†</b>	Changes the display to Total per Printer, Account ID or month.
<b>Export Report Logs†</b>	Exports the required fields for the report macro in a .csv file.
<b>Export Logs†</b>	Exports the log as a .csv file.
<b>Export Total†</b>	Exports totals by Printer, Account ID or month as a .csv file.
<b>Delete the log†</b>	Deletes the selected log
<b>Display Details</b>	Switches Default display/Details display.‡
<b>Display/Export Item Settings</b>	Selects the items to be displayed at Default Display.‡
<b>Log Storing Folder...</b>	Sets where you wish to store the logs.
<b>Refresh Display</b>	Refreshes the display.

## Help Pull-down Menu

<b>Server ID</b>	Displays Server ID.
<b>Help</b>	Displays the Help Topics window with Contents, Index and Find tabs.
<b>Version Info</b>	Displays version information.

## NOTES

- \* Before running this menu, select the subject printer from the “Printer Tree” on the Select pane (Left side of window).
- † Before running this menu, select the subject item from the “Log Tree” on the Select pane (Left side of window). If you select “Log”, all items will be subject to displaying/exporting. If you select one printer, only that printer will be subject to displaying.
- \*\* If the printer has been switched on and off, the correct time will not be set in the printer until the next time printer logs are acquired. You need only do this if the printer has been switched on and off in between acquisition of logs.
- ‡ Run the “Update to the latest status” menu in order to update the information on the log pane after having run this menu.

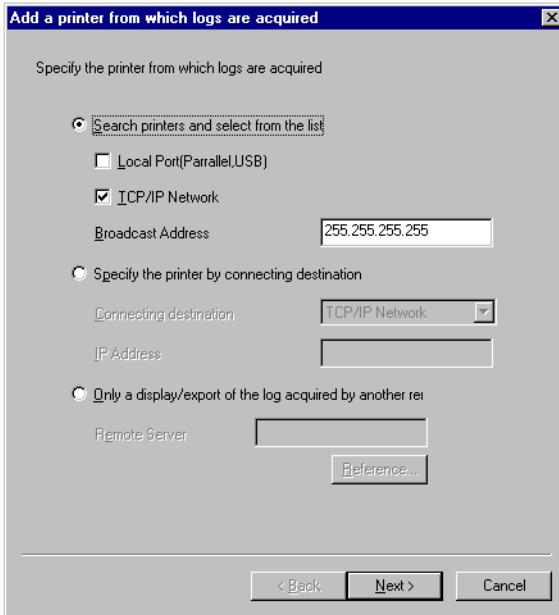


## How to Add a Printer

To use this System, you need to register printers in the Server Software.

Check that the printers to be managed by this System are powered up and properly connected, and then register them by following the procedure below.

1. Select **Add a printer** from the **Printer** menu. The following window will appear.



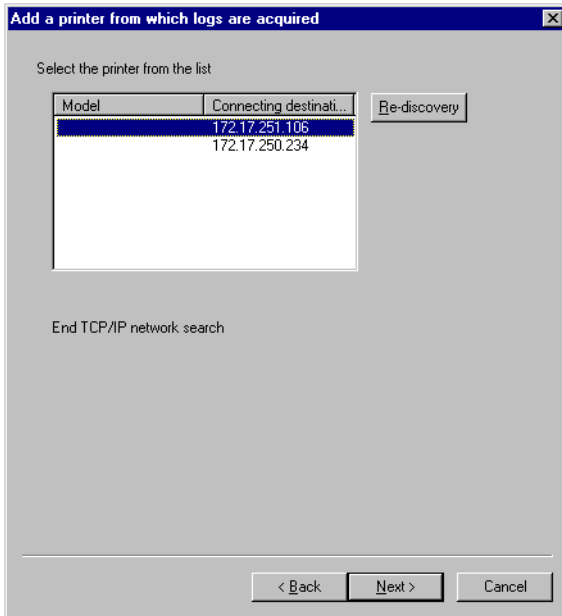
The screenshot shows a dialog box titled "Add a printer from which logs are acquired". The dialog has a blue title bar with a close button. The main area is light gray and contains the following elements:

- Text: "Specify the printer from which logs are acquired"
- Radio button:  "Search printers and select from the list"
- Checkbox:  "Local Port(Parallel,USB)"
- Checkbox:  "TCP/IP Network"
- Text field: "Broadcast Address" with the value "255.255.255.255"
- Radio button:  "Specify the printer by connecting destination"
- Text field: "Connecting destination" with a dropdown menu showing "TCP/IP Network"
- Text field: "IP Address" (empty)
- Radio button:  "Only a display/export of the log acquired by another rei"
- Text field: "Remote Server" (empty)
- Button: "Reference..."

At the bottom of the dialog are three buttons: "< Back", "Next >", and "Cancel".

- Select the appropriate box(es).
- To search printers, select **Search printers...** and click on the **Next** button.
- To specify the address directly, select **Specify the printer...** and click the **Next** button.

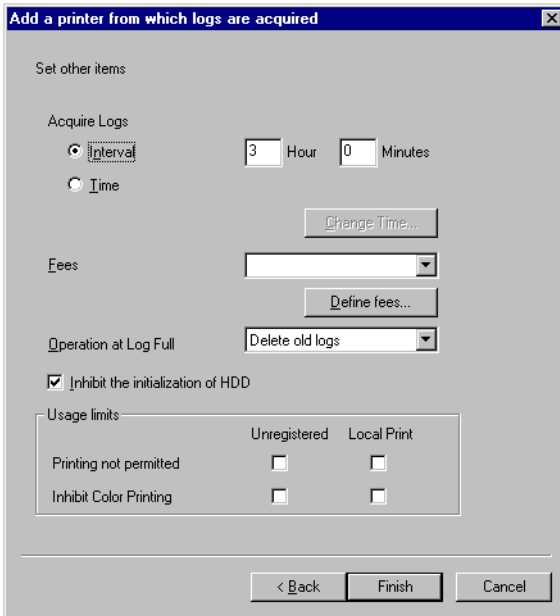
2. Searching printers will prompt the following window to appear:



Only those printers supported by this System will be searched. If no search can be made, check to see the printers being searched are online and properly connected.

Select the printer you want to register from the list of printers searched and click the **Next** button.

3. The following window appears. Use it to set up the printer.



### Acquire Logs

You can designate time to acquire logs by an interval or up to five specific times per day. If this value exceeds 24 hours, it is set to 24 hours.

### Fees

In the combo box, select a fee definition. Some fee settings are available with defaults, and can also be defined. For definition, refer to “How to set up fees.”

### Operation at log full

You can select an operation that a printer performs when the buffer for log storing becomes full and cannot store any more logs from the combo box. There are the following three options.

- |                       |  |
|-----------------------|--|
| Cancel the job:       | Cancels the jobs once the buffer is full.              |
| Does not acquire log: | Prints without acquiring logs once the buffer is full. |
| Delete old logs:      | Deletes old logs and stores new logs.                  |

## Inhibit the initialization of HDD

This controls whether or not Printer Flash and the Hard Disk Drive (HDD) can be initialized. If initialization is inhibited, a user cannot delete the log using the printer's front panel. Use this in order to prevent the logs stored in the printer from being deleted.

## Usage Limits

You can set usage limits for unregistered users (data without ID) and for local print (print from operator panel such as menu map or file list). When "Printing not permitted" is set, users cannot change other settings.

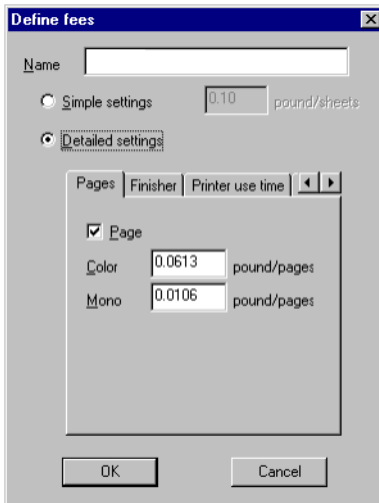
Printing not permitted: All printing is cancelled.

Inhibit color printing: Color data printing is cancelled.

## 4. Next, set up the Register Account ID.

### Define Fees

Clicking on the **Define fees** button will display the window for setting up/selecting fees. Clicking on the **Add** or **Property** button will display the following window.



### Simple settings (Fee charged per sheet)

You can set a fee to be charged per sheet of color/mono print. Select the **Simple settings** radio button, and enter a fee per

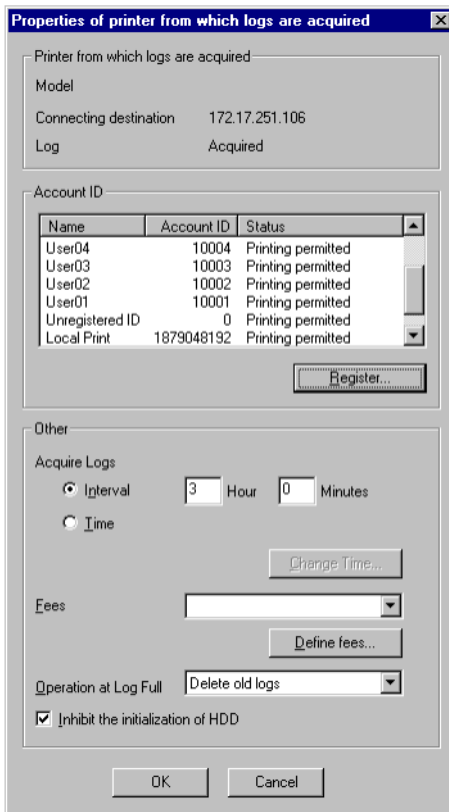
sheet in the edit box of color/mono. With this setting, a fixed fee is charged regardless of paper size, paper source tray or media type.

### Detailed settings

You can select the **Detailed settings** radio button, and set fees for Pages, Finisher, Printer use time, Paper size, Tray and Media. Only the items checked under each tab are valid, and the total fee for the valid items will be charged.

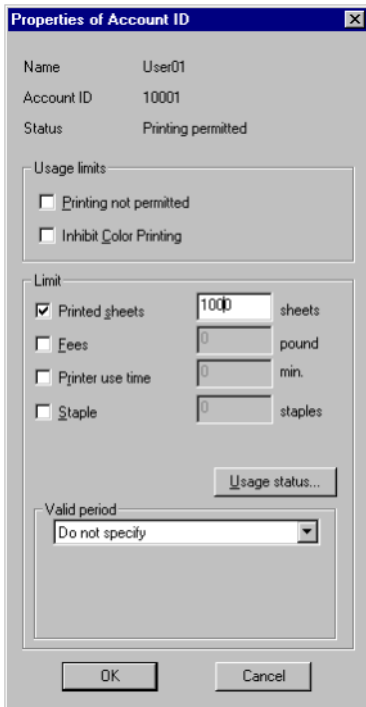
### How to change printer properties

To change the settings of a printer that you have already registered, select the subject printer from the “Printer Tree” on the Selection pane (left side of window) and then **Property** from the Printer menu; the following window displays.



## How to Change Account ID settings

To change the settings of an already registered Account ID, double-click the user listed in the **Account ID** list box; the following window displays.



### **Usage limits**

You can set usage limits for a Job Account ID. When "Printing not permitted" is selected, other settings cannot be changed. Printing not permitted: All printing is cancelled. Inhibit color printing: Color data printing is cancelled.

### **Limit**

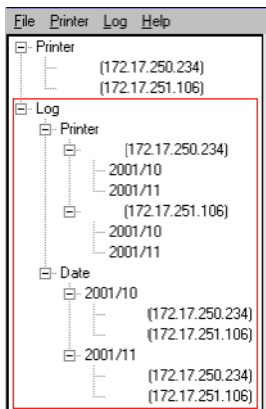
You can set a limit for the Job Account ID by total pages, total dollars or both. These limits will be checked at the selected interval or at the time setting for the log. When checked, the limit on the right side is valid.

### **Valid period**

You can set a validity period for the limit specified above.

## How to set up the Log Display

In order to display a log, select a log you want to display from the “LogTree” and select “Display Log” in Log menu. When you select Printer or Date in the “Log Tree”, all the logs are displayed. If you select a printer name from Printers in the “Log Tree”, all the logs for the printer are displayed. If you select Month from Date in the “Log Tree”, all the logs for the month are displayed. Double-clicking an item in the “Log Tree” also displays logs.



## How to Read Logs

The items that are displayed as print logs are as follows:

---

<b>Column</b>	<b>Description</b>
Log No.	The ID of the Job
Account ID	User Account ID
User	User Name
Document Name	Document Name
Total Sheets	Number of sheets of paper
Pages	Number of printed sides
Status	Result - Printed, Rejected etc.
Paper Size	Paper size used
Media <sup>a</sup>	Paper type used - Transparency etc.
Paper Type <sup>a</sup>	Paper type used - Light, Medium etc.
Duplex Print	Simplex or Duplex
Sheets	Number of sheets of paper
Color	Number of sides printed in color
Mono	Number of sides printed in Monochrome
Staple	Number of staples used
Time the log was acquired <sup>a</sup>	Time the log was acquired from the printer (completed)
Time the log acquisition started <sup>a</sup>	Time the log was acquired from the printer (started)
Time the process began <sup>a</sup>	Time the job processing started
Time the process ended <sup>a</sup>	Time the job processing ended



Time printing began <sup>a</sup>	Time the printing process started
Time printing ended <sup>a</sup>	Time the printing process ended
Off-line time during processing <sup>a</sup>	Offline time during processing (if any)
Off-line time during printing <sup>a</sup>	Offline time during printing (if any)
Tray1 <sup>a</sup>	Number of sheets fed from Tray1
Tray2 <sup>a</sup>	Number of sheets fed from Tray2
Tray3 <sup>a</sup>	Number of sheets fed from Tray3
Tray4 <sup>a</sup>	Number of sheets fed from Tray4
Tray5 <sup>a</sup>	Number of sheets fed from Tray5
Multi-Purpose Tray <sup>a</sup>	Number of sheets fed from Multi-Purpose Tray
Envelope Feeder <sup>a</sup>	Number of sheets fed from Envelope Feeder
600dpi <sup>a</sup>	Number of sides printed in 600 dpi
1200x600dpi <sup>a</sup>	Number of sheets printed in 1200 x 600 dpi
1200dpi <sup>a</sup>	Number of sheets printed in 1200 dpi

- a. This item is not displayed by default. To display it, run the “Log-Display Details menu or select the Item that is displayed on the “Log-Display/Export Item Settings” menu and run “Log-Display logs.”

# Using the Client Software

## Starting the Client Software

Click **Start** → **Programs** → **Okidata** → **Print Job Accounting Client** → **Change Job Accounting Mode**.

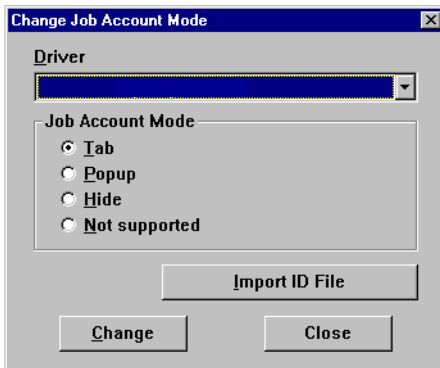
## Setting Account ID on the Client Computers

First, start up the Client Software on the Client computer, then set the Job Account Mode.

There are four Job Account Modes:

- Tab
- Popup
- Hide
- Not Supported

Decide which mode you wish to use.



### Tab mode

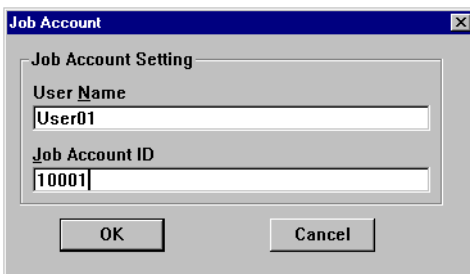
In this mode, the tab for setting the User Name and Job Account ID will be displayed under Job Account Printer Driver Property.

This mode should be selected when the computer is used by one person.



### Popup mode

In this mode, the dialogue box for entering the User Name and Job Account ID will be displayed every time printing is run. A printer user enters their assigned User Name and Account ID to print, This mode is useful if several people share the same computer.



### Hide mode

In this mode, a System administrator creates an ID file that describes the information on all users. Next, the user clicks on the

**Import ID File** button in the Client Software on each Client PC, and then specifies this file.

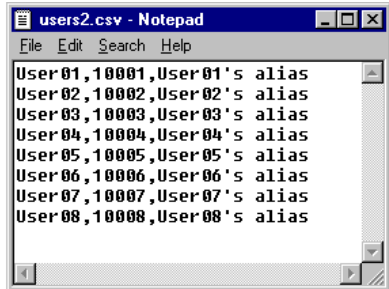
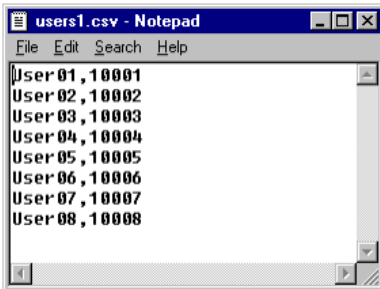
Printer users need not know anything about their own Account ID.

This ID file describes the information on each and every user in one line, using the following format. Use the extension “.” to save the file.

```

Login User Name,Account ID {,User Name}
    
```

Login User Name	User name entered when logging onto Windows.
Account ID	Account ID corresponding to the user name.
{User Name}	User name displayed in this System. This is optional. If this is unspecified, the Login User Name will be used as the User Name.



[Not supported] mode

In this mode, all jobs to be printed will be recognized as Unregistered ID(0).

**NOTE**

**For print jobs recognized as Unregistered ID, you can set it so they are permitted or refused for printing, but document names will not be displayed on the print logs.**

## Troubleshooting

**Q. The printer I selected is not shown in the “Printer - Add a printer” menu.**

A. If it is offline, the printer will not be shown. Check to see that the printer is not offline. There are times the printer is not shown during printing. Wait for a while and try again. If it is still not shown, specify that printer's IP address.

**Q. The content of Log Pane (right side of window) is not updated.**

A. Run the “Log - Update to the latest status” menu.

**Q. The following message was displayed: “Cannot connect to the printer. Wait for a while and try again.”**

A. Check that the printer is not offline. This message is sometimes displayed during printing. Wait for a while and try again.

**Q. The following message was displayed in the “Printer - Delete a Printer” menu. “Cannot delete while log is being acquired.”**

A. Run the “Printer - Start/End Log” menu first to cancel the process by which print logs are acquired from the printer at the set interval time, and then run the “Printer - Delete a Printer” menu.

**Q. The following message was displayed in the “Printer - Acquire a Log” menu. “This processing cannot do between acquisition of a Log.”**

A. Print log is already being acquired from the printer at this time.

## Known Problems/Solutions

1. When using PS Duplex printing, if the reverse side is blank it is not counted as a page.
2. Installer installs a file for the currency unit according to the system's standard Regional Setting. If the correct file is not installed, please check the Regional Setting. If you wish to set to the system standard, check "Set as system default local" under "Regional Setting."
3. Printing with Network Menu's "PRINT SETTING" is handled as an unregistered user job, and will not be recognized as a local print job.
4. PostScript printer drivers (Macintosh) do not store document names in log.
5. In applications that create their own PS codes when using the Windows PS driver, the Job Accounting command (Job Account ID, user name) will not be output. Examples of such applications include: Adobe PageMaker and CorelDraw (when the "Use PPD" check box is checked in the Print dialog box.)
6. If you print from Win2000 (Client) to Win2000 (Shared Printer Job Account Mode already set), you have to remove the check from the "Enable advanced printing features" under the "Advanced" tab in the shared printer's Properties. Removing the check, however, will disable both the Booklet (PCL) and Page Order (PS) features.

# Uninstalling the Job Accounting Software

## To Uninstall the Server Software

*First, delete all printers:*

1. Select a printer in the left pane of Server Software.
2. Select **Start/end log** from the Printer menu.

### NOTE

At this stage the Server Software stops acquiring print logs from the printer at the set interval time, but the printer will continue logging until deleted. Therefore, be sure to run "Delete a printer" without fail before uninstalling the Server Software.

3. Select **Delete a printer** from the Printer menu.

### NOTE

If you run Delete a printer from the Printer menu, you will be asked if you want to delete the print log for the jobs that have been printed by that printer. Even if you select "No" at this point, unless you register the printer again, the print log for those jobs cannot be referenced. If you need the log even after deletion of the printer, be sure to select Export Logs from the Log menu, then save them in the file before deleting the printer.

*Then, Uninstall the Server Software:*

Click **Start** → **Programs** → **Okidata** → **OKI Print Job Accounting**  
→ **Delete OKI Print Job Accounting**.

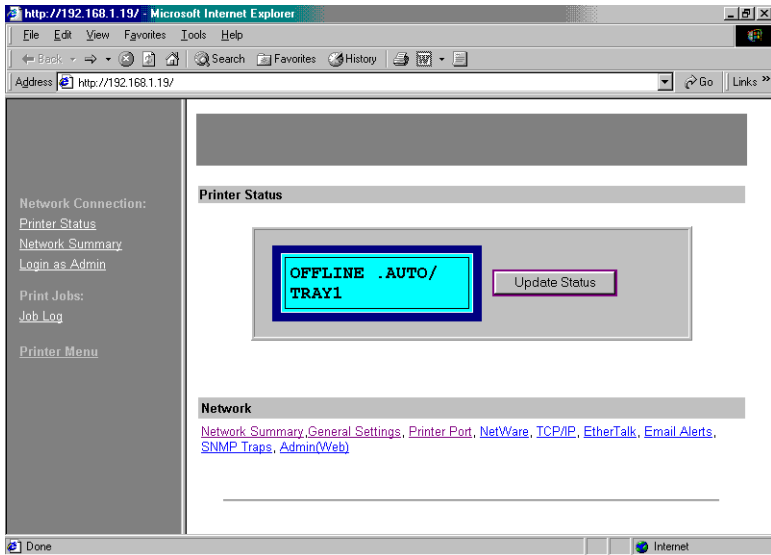


## To Uninstall the Client Software

On each Client computer, click **Start** → **Programs** → **Okidata** → **OKI Print Job Accounting Client** → **Delete OKI Print Job Accounting client**.

## Checking the Printer Status

Click the WEB SETTING button. The following window displays:



Click on the items listed on the left to see:

- Network Summary
- Login for Administrators
- Job Log
- Printer Menu

To see real-time printer status, click the **UPDATE STATUS** button.

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