

# Laser Printer / Scanner / Copier MFC/HL-P2000

# **Quick Setup Guide**

Read this guidebook first to set up your machine and prepare your computer for the machine. Save all packing materials and outer carton. They are useful when shipping the machine.

## (For USA & CANADA Only)

For technical and operational assistance, please call:

1-877-284-3238 (outside California) / 949-859-9700 Ext. 329 (within California) 1-800-853-6660 / 514-685-6464 (within Montreal) In USA

In CANADA

If you have comments or suggestions, please write us at:

Printer Customer Support - Brother International Corporation In USA

15 Musick, Irvine, CA 92718

In CANADA Brother International Corporation (Canada), Ltd. - Marketing Dept. 1, rue Hôtel de Ville Dollard-des-Ormeaux, PQ, Canada H9B 3H6

For downloading drivers from our Bulletin Board Service, call:

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Please log on to our BBS with your first name, last name and a four digit number for your password. Our BBS supports modem speeds up to 14,400, 8 bits no parity, 1 stop bit.

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#### INTERNET ADDRESS

For technical questions and downloading drivers: http://www.brother.com

# **Definitions of Warnings, Cautions, and Notes**

The following conventions are used in this User's Guide:



Indicates warnings that must be observed to prevent possible personal injury.

#### Caution

Indicates cautions that must be observed to use the machine properly or prevent damage to the machine.

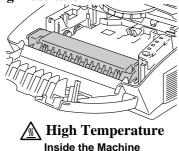
#### **✓** Note

Indicates notes and useful tips to remember when using the machine.

# To Use the Machine Safely

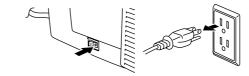


After you have just used the machine, some internal parts are extremely hot. When you open the machine top cover, never touch the shaded parts shown in the following illustration



# /<u>I</u>\ Warning

There are high voltage electrodes inside the machine. Before cleaning the machine, make sure you turn off the power switch and unplug the power cord from the power outlet.



Turning off the Switch and Unplugging the Machine

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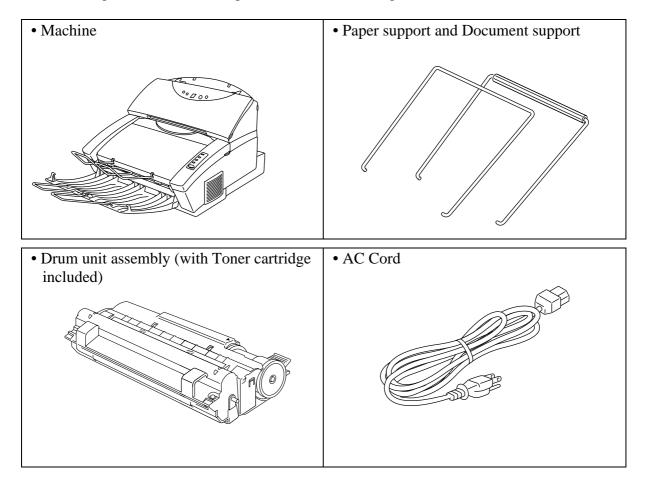
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# **Action 1: Check the Supplied Items**

After taking the printer out of the carton and removing the packing materials, make sure that the following items are not damaged and none are missing:



- 3.5" floppy disks for Windows® printer driver and fonts
- Quick setup guide (this guidebook)
- Plastic Bag
- CD-ROM

### **∦** NOTE

You may have additional parts not listed above depending on which country you live in.

# **∦** NOTE

You will need to purchase an interface cable that matches the bi-directional IEEE 1284 compliant interface of your computer. If you do not know what cable you need, consult your dealer.

# **Action 2: Position the Machine**

Please take note of the following before using the machine.

## **Power Supply**

• Use the machine within the specified power range.

AC power:  $\pm 10\%$  of the rated power voltage in your country Frequency: 50 Hz (220 V-240 V) or 50/60 Hz (110-120 V)

- The power cord, including extensions, should not exceed 5 meters (16.5 feet).
- Do not share the same power circuit with other high-power appliances, particularly an air conditioner, copier, shredder and so on. If it is unavoidable that you must use the machine with these appliances, it is recommended that you use an isolation transformer or a high-frequency noise filter.
- Use a voltage regulator if the power source is not stable.

## **Environment**

- The machine should be installed near a power outlet which is easily accessible.
- Use the machine only within the following ranges of temperature and humidity.

Ambient temperature: 10°C to 32.5°C (50°F to 90.5°F) Ambient humidity: 20% to 80% (without condensation)

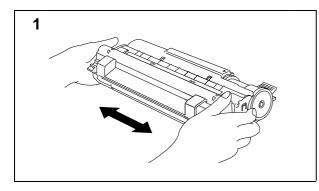
- The machine should be used in a well ventilation room.
- Place the machine on a flat, horizontal surface.
- Keep the machine clean. Do not place the machine in a dusty place.
- Do not place the machine where the ventilation hole of the machine can be blocked.
- Do not place the machine where it is exposed to direct sunlight. Use a blind or a heavy curtain to protect the machine from direct sunlight when it is unavoidably set up near a window.
- Do not place the machine near devices that contain magnets or generate magnetic fields.
- Do not subject the machine to strong physical shocks or vibrations.
- Do not expose the machine to open flames or salty or corrosive gasses.
- Do not place objects on top of the machine.
- Do not place the machine near an air conditioner.
- Keep the machine horizontal when carrying.
- Do not cover the slots in the top cover.

## System Requirements for the Brother Printing Solution for Windows

Check the following system requirements to setup and operate the machine in Brother Printing Solution for Windows:

- IBM PC or compatible with 80486 SX or higher microprocessor
- Parallel interface (or printer port)
- 8 MB or more of memory (for Windows® 95/98, 3.1/3.11), 16MB or more of memory (for Windows NT®4.0)
- $\bullet \quad 10 \text{ MB}$  of space available on your hard disk for the printer driver and all fonts
- 20 MB of space available on your hard disk for Visioneer PaperPort<sup>®</sup> LE Software
- Microsoft Windows® 95,98, 3.1/3.11 or Windows NT®4.0

# **Action 3: Install the Toner Cartridge/Drum Unit**

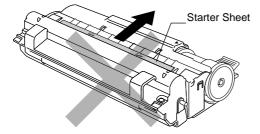


Unpack the drum unit assembly with the toner cartridge included. Gently shake it from side to side five or six times.



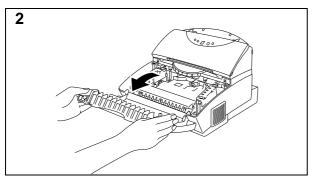
# Caution

Do not expose the drum unit to light for longer than a few minutes, as this will damage the drum.

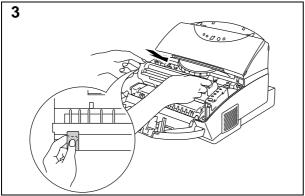




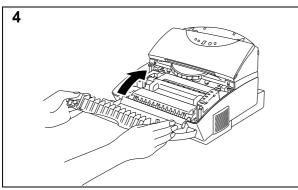
Do not remove the starter sheet. This sheet will be ejected while the machine is warming-up after installing a new drum unit. (See Action 6 Illustration 4)



Open the top cover of the machine by holding both sides of it.



Holding the drum by its handles, install it into the machine.

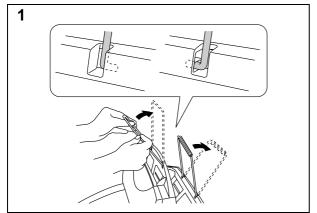


Close the top cover.

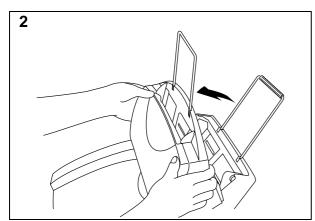
See "CHAPTER 6 MAINTENANCE" in the On-line User's Guide for more information about replacement of the toner cartridge.

# **Action 4: Load Paper into Your Machine**

Before loading paper, make sure that the paper meets the specification described in the Online User's Guide Chapter 2. Using unsuitable paper might reduce the print quality.



Install the paper support (with a tube on it) onto the multi-purpose sheet feeder. And install document support onto the document feeder.

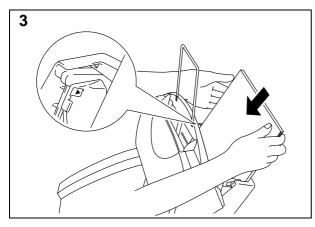


Open the multi-purpose sheet feeder cover.



# **Q** CAUTION

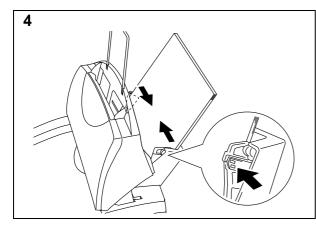
Be sure to open the sheet feeder cover whenever you insert paper into the sheet feeder otherwise you may get paper misfeeding or paper jam errors.



Load paper in the multi-purpose sheet feeder.

## **∦** NOTE

The feeder can hold up to 200 sheets of plain paper or up to 10 envelopes. Excessive sheets may cause paper jams. Make sure that the paper is stacked below the **\( \Lambda \)** mark.

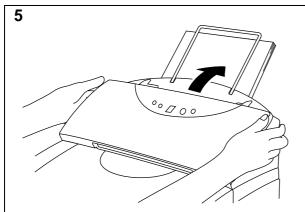


Hold the tab of the right hand paper guide and press the catch to release the guide lock. Move the paper guide to fit the paper width.

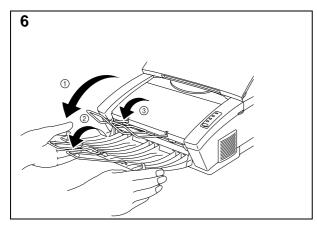


# Caution

Failure to set the paper guide to the paper width may cause paper skew and jam.



Close the multi-purpose sheet feeder cover.



Open the output tray. (1) Extend the extension support wire. (2) Extend the extension document support wire. (3)

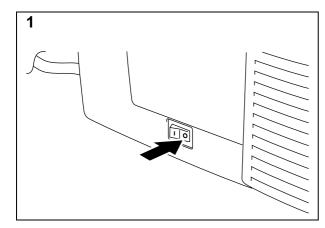
The machine can handle paper within the following specifications:

Paper Type	Paper Size
Cut sheets	A4, Letter, Legal, B5(JIS/ISO), A5, A6, 3"x 5", Executive,
	Custom size
	(70-216 x 127-356 mm)
Envelopes	DL, C5, COM-10, Monarch, 9" x 12"
Organizer	Day-Timer® J, K, L, 70-216 x 127-356 mm
Labels and	A4, Letter
Transparencies	70-216 x 127-356 mm

See "CHAPTER 2 PAPER HANDLING" in the On-line User's Guide for more information.

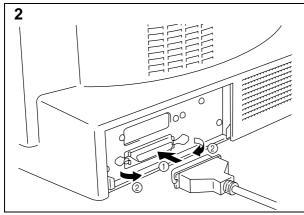
# Action 5: Connect Your Machine to Your Computers' Parallel Interface

You must connect the machine to your computer with a suitable interface cable. In most cases, a bi-directional IEEE 1284 compliant parallel cable is used for this connection.



Make sure that the machine **power** switch is off before connecting or disconnecting the interface cable.

Also, make sure that the computer is turned off.



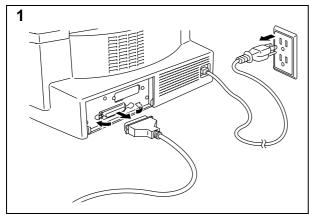
Connect the parallel interface cable to the parallel interface port of the machine. ( ① )

Secure the connection with the wire clips. (②)

Connect the interface cable to the printer port of the computer.

For the location of your computers parallel printer port, refer to the Users Guide of your computer.

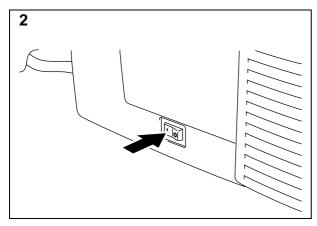
# **Action 6: Plug in and Turn on Your Machine**



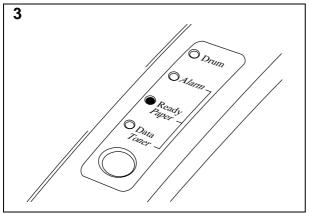
Plug the power cord into the AC power outlet and the machine power inlet.

### ✓ Note

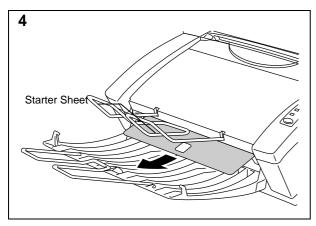
The shape of the power cord varies according to the country of destination.



Turn on the **power** switch that is located on the left side of your machine.



Make sure that the **Ready** lamp is lit after the machine has warmed up (approximately 30 seconds).



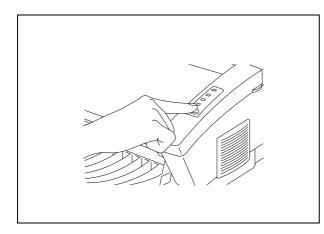
Make sure that the machine automatically ejects the starter sheet while the machine is warming-up immediately after installing a new drum unit.

# **Printing a Test Sample Page**

We recommend that you print a test page. Refer to the instructions below.

#### **✗** Note

- The following test page operation will be invalid after the machine has received any data from your computer.
- The test sample page can be printed by using the "Test Print Mode" procedure in Chapter 3 of the On-line User's Guide.



Press the control panel **switch**. The machine will start printing a test sample page.

#### **∦** Note

The machine can also print settings, fonts, and hexadecimal values of received data. For more information, see "Test Print Mode" in Chapter 3 of the On-line User's Guide.

#### **∦** Note

If the machine does not print a test sample page, see "CHAPTER 7 TROUBLESHOOTING, Q & A" of the On-line Users Guide. If you are still unable to print a test sample page after reviewing the information in the Users Guide, consult your dealer.

After printing the test sample page, you are ready to prepare your computer to work with the machine. The software setup varies depending upon your computer and operating system. Refer to the relevant following section:

Action 7-1: Installation from CD-ROM

Action 7-2: Prepare the Printer Driver and the Scanner Driver for the Machine

Action 7-3: Prepare DOS for the Machine from floppy disk

## **Action 7-1: Installation from CD-ROM**

The supplied CD-ROM contains the following items.

# Printer Driver & TrueType<sup>™</sup> fonts -

You need to configure your PC for the machine by installing the printer driver and TrueType  $^{\text{\tiny TM}}$ -compatible fonts.

#### • Soft PCL 5e -

To print documents at 600 dpi from the Windows DOS box you need to install this utility.

#### • TWAIN Driver -

To use the scanner function of this machine, you need to install this driver. This scanner driver is TWAIN compliant which is a defacto standard.

• Visioneer PaperPort® LE Software (MFC-P2000), WordCraft Unimessage™ Viewer software (HL-P2000 - Windows® 95/98/NT users only) -

This software is a document management application which contains a viewer, editor and filing system and calls links to other applications.

#### • Other useful utilities -

Several other useful utility software programs are available on the CD-ROM.

#### • Documentation -

This Setup guide, the User's Guide and an instructional video are available on the CD-ROM. You can view the On-Line guides with the Adobe Acrobat reader software included on the CD-ROM. The instruction video shows how to replace the consumables etc.

If your PC does not have a CD-ROM drive, you can install the printer driver, scanner driver or RPC from the supplied floppy disks. For the other software that is supplied on the CD-ROM, it is possible to make disk sets from the CD-ROM if you can get access temporarily to a PC with CD-ROM and Floppy disk drives.

### For Windows® 95/98/NT 4.0

- 1. Close all the applications running on your PC.
- 2. Insert the supplied compact disc into the CD-ROM drive.

#### **∦** NOTE

Depending on the computer configuration, the installation program may automatically start. In this case, skip the following steps 3 to 5.

- 3. Click Start.
- 4. Choose **Run**.
- 5. Type D:\START32 (or the appropriate drive and directory letter) in the command line box and click **OK**.

After the installer starts, simply follow the instructions that appear on the screen.

#### For Windows® 3.1/3.11

- 1. Close all the applications running on your PC.
- 2. Insert the supplied compact disc into the CD-ROM drive.
- 3. In the Windows<sup>®</sup> Program Manager screen, click the File menu.
- 4. Choose Run.
- 5. Type D:\START16 (or the appropriate drive and directory letter) in the command line box and click **OK**.

After the installer starts, simply follow the instructions that appear on the screen.

# Action 7-2: Prepare the Printer Driver and the Scanner Driver for the Machine

# For Windows® 3.1

You need to configure Windows<sup>®</sup> 3.1 for the machine by installing the scanner driver from the supplied disk into Windows<sup>®</sup> 3.1.

Because the supplied scanner driver is compressed on the disk, be sure to use the supplied installer program to install it. These instructions assume you will install the driver and fonts from the disk drive A.

- 1. Start Windows<sup>®</sup> 3.1.
- 2. Insert the supplied disk for Windows® into your floppy disk drive.
- 3. Choose **Run** from the **File** menu in the *Program Manager*.
- 4. Type the drive name where you inserted the supplied disk and "SETUP" in the box: for example, A:\SETUP. Click the **OK** button or press the **Enter** key.



5. The installer program will begin. Follow the instructions on the computer screen. (Be sure to restart Windows when the installation process is completed.)

## For Windows® 95 / 98

You need to configure Windows<sup>®</sup> 95/98 for the machine by installing the scanner driver from the supplied disk into Windows<sup>®</sup> 95/98.

- 1. Insert the supplied floppy disk labeled "disk1" into your floppy disk drive.
- 2. Click the **Start** button and select **Run**.
- 3. Select "Setup.exe" and follow the instructions on the computer screen.

# **Action 7-3: Prepare DOS for the Machine**

# How to Use the Machine in your DOS Application Software (without using the Windows system)

Before working with application software that runs in DOS, if you do not already have a suitable driver installed, you will need to install a printer driver that matches one of the following supported emulations:

HP LaserJet IIP, EPSON FX-850 or IBM Proprinter XL printers

The following table shows combinations of printer drivers and printer emulation modes. To get the most out of this machine, you should install an HP printer driver in your application software.

Printer driver supported in your application software	Emulation mode to be selected with the remote printer console program
<b>HP</b> LaserJet IIP <sup>™</sup>	HP LaserJet IIP emulation mode
HP LaserJet II <sup>™</sup>	Auto emulation selection
Epson® FX-850 <sup>™</sup>	Epson FX-850 emulation mode
Epson FX-80 <sup>™</sup>	Auto emulation selection
IBM® Proprinter® XL	IBM Proprinter XL emulation mode
IBM Proprinter	Auto emulation selection

#### 

- The best or recommended printer driver is indicated in bold.
- Be sure to choose the correct printer driver in your application software. Failure to do so may cause poor or inconsistent results.
- Ensure that the printing resolution is set to 300 dpi in your DOS application software.

#### What Does Remote Printer Console Do?

The Remote Printer Console (RPC) is a utility program which runs in the DOS environment and comprises the following two programs:

# ☐ Remote Printer Console Main Program

This program allows you to change various machine settings such as emulation, print quality, fonts, page setup and so on from your computer screen. Since most DOS applications have a machine settings menu which overrides the settings made by the RPC, you may not need to use this utility program. This utility program is useful for application software which does not control the machine's settings and features.

## **☐** Machine Status Monitor Program

This utility program can monitor your machine's status using bi-directional parallel communications. If your machine has no paper, this utility program displays "Paper Empty" error status and instructions for corrective action on your computer screen. This utility program stays resident in your computer memory (Terminate-and-Stay Resident program) and runs in the background.

## **Installing the Remote Printer Console**

Before you install the program, make sure that you have the following hardware and software:

DOS Version 3.3 or later
Monitor EGA/VGA or compatible

Option Mouse; the mouse driver must be installed.

(You can also operate the program with the keyboard.)

Follow these steps to install the remote printer console program:

- 1. Make sure your machine is connected to your computer and is ready (On-line).
- 2. Start your computer. If you are in Windows, exit and return to the DOS prompt. You must be in the DOS prompt to proceed with installation.
- 3. Insert the supplied disk into your floppy disk drive (A: or B:).
- 4. Select drive A or B to be used by typing A: or B: after the DOS prompt and pressing the **Enter** key.

C:\>A:

5. Type RPCSETUP and press the **Enter** key.

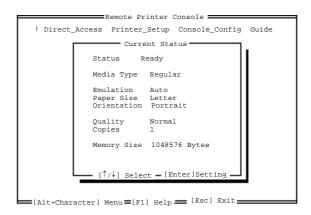
A:\>RPCSETUP

6. Follow the instructions on the screen.

# **Using the Remote Printer Console Main Program**

Type C:\RPCX>RPCX and press the **Enter** key to start the Remote Printer Console main program.

The Main Screen will appear on your computer screen as shown on the right.



The RPC gets the current settings information from your machine when it starts if bidirectional communication is enabled between your computer and machine. Otherwise, the RPC shows its default settings. If you want to change settings, move the cursor to the desired item and select the desired setting by using the **Enter** and **cursor** keys. Then, press the **Enter** key to make the selected setting valid. If you use a mouse, click the desired item to change the setting.

Additionally, there are four sub-menus as shown in the table below. Select a sub-menu by clicking the desired sub-menu with the mouse, by using the **cursor** key and the **Enter** key, or by using the keys shown below to switch the screen to the sub menus.

Menu	Press the keys	Functions		
Direct Access	Alt + D	You can directly control printer functions such as Print		
		Form, Self Print, Reset Printer, Sleep Control.		
Machine Setup	Alt + P	You can enter the setting mode to change further		
		machine settings, such as, margin settings, continue		
		mode, reprint function, font, and sleep mode.		
Console Config	Alt + C	You can change the environment settings for the RPC		
		program: color, Status Monitor configuration, etc.		
Guide	Alt + G	You can get into the Guide mode.		
Help	F1	You can get On-Line help about the current highlighted		
		item by pressing F1.		

# **Using the Machine Status Monitor Program**

Type C:\RPCX>STMX and press the **Enter** key to make the Machine Status Monitor Program stay resident in your computer memory. If there are any changes to the machine status, it displays a message on your computer screen.

If the machine status monitor program stays resident in your computer, you can monitor the machine status on your computer screen immediately using the hot-key sequence (**Ctrl+Alt+R**).

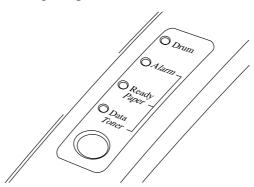
To remove the Machine Status Monitor program from your computer memory, type C:\RPCX>STMX/R and press the **Enter** key.

C:	\RPCX>STMX/R and press the <b>Enter</b> key.
	The RPC works in the environment where your machine is directly connected to your computer. If you are using any printer buffer switches which do not support bi-directional communication between the machine and computer, the program works only in the PC to machine direction and cannot receive machine status information.
	The program does not work with printers on a network.
	If the RPC conflicts with some application software, exit your application software and then run the RPC.
	The RPC may work in the DOS-compatible box screen mode of Windows, however, it is recommended that you completely exit from Windows to the DOS prompt before using the RPC.
	The Machine Status Monitor and some other Terminate-and-Stay programs cannot coexist in the computer's memory. If they do not work properly together, use them one at a time. You can suspend the Machine Status monitor with any of the following methods or commands.
	• Type C:\RPCX>STMX/R and press the <b>Enter</b> key.
	• Hold the space bar down while executing the AUTOEXEC. BAT file at DOS startup to

Hold the space bar down while executing the AUTOEXEC. BAT file at DOS startup to
prevent the status monitor being loaded as a TSR program.

# LAMPS AND SWITCH FOR THE PRINTING FUNCTION

This section refers to the following lamps and switch on the machine control panel.



#### **✗** Note

When the **power** switch is off or the machine is in sleep mode, all lamps including the **Ready** lamp are off.

# Ready (Paper) Lamp

The **Ready** lamp indicates the current status of the machine.

Lamp	Machine status
Off O	The <b>power</b> switch is off or the machine is in sleep mode. If the machine is in sleep mode, it will wake up automatically when it receives data or you press the control panel switch.
Blinking ○↔●	The machine is warming up. (Blinking at 1 second intervals)
Blinking ○↔●	The machine is cooling down and has stopped printing until the machines internal temperature lowers. (Blinking at 2 seconds intervals)
On •	The machine is ready to print.

This lamp also works as the **Paper** lamp with the **Alarm** lamp. They blink simultaneously to indicate a paper error. See "Operator Calls" section of this manual.

## **Data (Toner) Lamp**

The **Data** lamp indicates the current status of the print data process.

Lamp	Machine status
Off O	The machine has no print data.
Blinking	The machine is receiving data from the computer or the machine is
$\bigcirc \leftrightarrow \bullet$	processing data in memory.
On ●	Print data remains in the machine memory. If the <b>Data</b> lamp is on for a
long period of time and nothing has printed, you need to press the	
	switch to print the remaining data.

This lamp also works as the **Toner** lamp with the **Alarm** lamp. They blink simultaneously to indicate a toner error. See "REPLACING THE TONER CARTRIDGE" in Chapter 6 of the On-line manual and "Operator Calls" section in this manual.

## **Drum Lamp**

The **Drum** lamp indicates the drum unit is nearly at the end of its life.

Lamp	Machine status
Off O	The drum unit can be used.
On ●	The drum unit is nearly at the end of its life. Installing a new drum unit
	turns off this lamp. See "REPLACING THE DRUM UNIT" in Chapter
	6 of the On-line manual.

# **Alarm Lamp**

The **Alarm** lamp blinks to indicate a machine error status such as "Cover Open" and "Memory Full." If any other error occurs, the machine indicates the error by blinking the **Alarm** lamp with another lamp or by printing an error report.

### **✗** Note

The **Ready**, **Data** and **Drum** lamps are used to indicate machine errors with the **Alarm** lamp. See "ALARM INDICATIONS AT A GLANCE" in this manual and take corrective action for the error.

### **Switch**

This switch will be used for the following purposes depending on the situation.

#### **Cancel printing**

If you press the **switch** during printing, the machine immediately stops printing and ejects the paper.

### Wake-up

If the machine is in sleep mode, pressing the **switch** wakes it up into the ready state.

#### Form Feed

If the **Data** lamp is on, press the **switch**. The machine prints any data remaining in the machine memory: this operation is called "Form Feed."

### **Error Recovery**

If an error occurs, the machine will recover from some errors automatically. If the error does not clear automatically, press the **switch** to clear the error and continue machine operation.

#### **Other Control Features**

## **Sleep Mode**

When the machine does not receive data for a certain period of time (time-out), it enters sleep mode. Sleep mode acts as though the machine was turned off. The default time-out is 5 minutes. While the machine is in sleep mode, all the **lamps** are off and it is as if it was turned off, but the machine can still receive data from the computer. Receiving a print file or document automatically wakes up the machine to start printing. Pressing the **switch** also wakes up the machine.

#### 

- When the machine goes into sleep mode, the fan will not stop until the print engine has cooled down.
- Sleep mode allows the print engine to cool, so the temperature of your room and how long the machine has been in sleep mode affects the warm-up time. This warm-up time can take up to 30 seconds. The **Ready** lamp blinks to indicate that the machine is warming up.
- You can change the timeout for sleep mode with the supplied machine driver or Remote Printer Console program. Refer to the Help section in the printer driver or RPC program for more information about the sleep mode setting.

#### **Test Print Mode**

The machine has the following test print mode. Follow these steps:

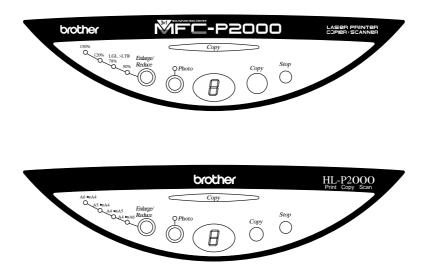
- 1. Make sure that the top cover is closed.
- 2. Hold down the switch and turn on the **power** switch. Keep the switch depressed until the **Drum** lamp comes on.
  - The **Drum** lamp lights to indicate that the machine is in the test print mode.
- 3. Press the switch again to execute the test print or hold down the switch to select another option and release the switch to execute the selected option. The test print modes are as follows:

Lamp Lit	Choice	Function	
Drum	rum Test sample The machine prints a test sample page.		
	page	The machine returns to the ready status after printing.	
Alarm	Print Config	The machine prints the current configuration of the	
	& Print Fonts I	machine and a list of the internal fonts.	
		The machine returns to the ready status after printing.	
<b>Ready</b> Factory Reset The machine is restored to the factory setting and		The machine is restored to the factory setting and	
		permanent fonts and macros are cleared.	
		The machine returns to the ready status after printing.	
<b>Data</b> Hex Dump The machine can print data as hexad		The machine can print data as hexadecimal values, so that	
	Print	you can check data errors and problems. To exit from this	
		mode, you have to turn off the machine.	

### **COPYING FUNCTION**

The machine allows you to make high-quality photocopies. Always make sure that paper is loaded in the Sheet Feeder before making copies.

This section refers to the following lamps and switch on the machine control panel.



# **Copying in Standard Mode**

- 1. Insert the original document face down in the Document Feeder.
- 2. Press the **Copy** button.

To stop copying, press the **Stop** button. The machie shows "E" on the display. Press the **Stop** button again to eject the original document.

## To Make Settings for Each Copy

You can make various settings. These settings are effective only for the next copy and after that the settings are cleared. The number of copies should be set after Enlarge/Reduce and Quality settings.

- **Enlarge/Reduce** Enlargement / Reduction ratio
- **Photo/Text** -Copy output mode
- **Copies** the number of copies

#### **Photo / Text Button**

Select the copy mode from Photo or Text

- 1. Insert the original document face down in the Document Feeder. When you select Photo mode, the **Photo** lamp comes on.
- 2. Press the **Copy** button to start copying.

## **Enlarge/Reduce Button**

You can make an enlarged or reduced size of copy from 50% to 150% (for USA and Canada), 50% to 200% (for other countries).

- 1. Insert the original document face down in the Document Feeder.
- 2. Press the **Enlarge/Reduce** button.

For USA and Canada: 50%, 78%, 120% and 150% For other countries: 50%, 71%, 141% and 200% When Enlarge/Reduce is 100%, all the lamps are off.

3. Press the **Copy** button to start the copy.

#### Note

If the enlarged size is bigger than the copy paper, you may lost some portion of the original document. In that case, reduce the enlargement ratio.

## **The Number of Copies**

You can make multiple copies.

- 1. Insert the original document face down in the Document Feeder.
- 2. Press the **Copy** button.
- 3. Press the **Copy** button again within one second if you want to increase the number of copies.

#### 

The maximum number of copies is 9.

### **Error**

If an error ocurrs, the machine shows "E" on the display.

To clear the error, press the **Stop** button.

Errors occur when the following happens;

- \*When the document causes a paper jam in the document feeder when the machine is feeding the document.
- \*When the machine is busy. (When the machine is used as a scanner or printer.)
- \*When there is no paper in the sheet feeder.
- \*When memory full happens and the machine prints out an error message.

When there is no document in the Document Feeder when you try to copying, the machine shows the number of copies and the letter "P" alternately on the display. When you see this, insert the document in the Document Feeder.

#### **✗** Note

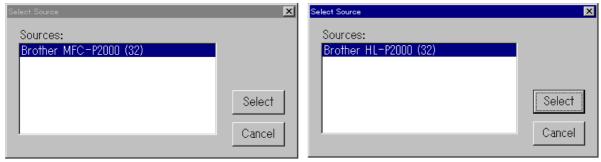
When memory full error is likely to happen, the machine change the vertical reslotion from 600 dpi to 300 dpi and copy a document automatically. In this case, the machine displays "F" on the display.

# **SCANNING FUNCTION**

The machine provides you with a TWAIN compliant scanner driver. This allows you to use the machine as scanner from any TWAIN compliant application such as Adobe Photoshop.

## **Scanning from TWAIN compliant applications**

- 1. Launch the application you use.
- 2. Select the 'Select Source' menu.



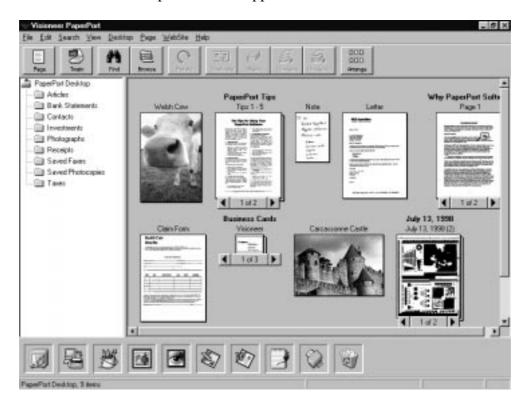
- 3. Select the "Brother MFC-P2000" or "Brother HL-P2000" and click Select.
- 4. Select the "Acquire" menu.
- 5. Make the appropriate settings such as; Scanning Resolution, Text/Photo, Scanning Area, etc......
- 6. Click the Start button.

## Note

- Selecting the scanning area exactly reduces the scanning data so that you can save transfer time and memory.
- Generally, scanning resolution is set according to the final output device. For example, when the output device is a monitor screen, 150 dpi scanning is enough. If a higher resolution is chosen, the displayed output may not have any particular improvement.

# Scanning from the VISIONEER PaperPort® LE Software (MFC-P2000)

1. Launch the Visioneer PaperPort® LE application.



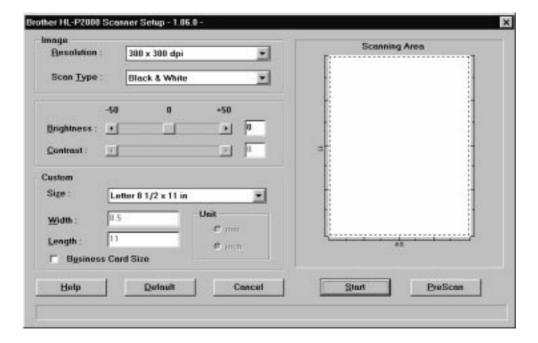
- 2. Click the Scan icon.
  The scanner driver dialog is launched.
- 3. Make the necessary settings.
- 4. Press the Start button.

The scanned image will be shown on the desktop with the name 'Untitled-x.'

For further information about 'PaperPort', refer to the On-line Help in the application.

# Scanning from the Unimessage™ Viewer Software (HL-P2000 - Windows® 95/98/NT users)

- 1. Launch the Unimessage<sup>TM</sup> Viewer application.
- 2. Select "Scan".
- 3. After inserting the original document in the document feeder, click the "Start" button.



- 4. After the document has scanned completely, the "Collate Dialog" appears. Select the data you have just scanned and press "Add" button.
- 5. Click the "OK" button.

The scanned image will be shown on the desktop.

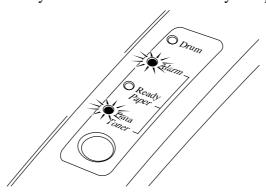
For further informtion about 'Unimessage<sup>TM</sup> Viewer', refer to the On-line Help in the application.

## REPLACING THE TONER CARTRIDGE

The machine can print approximately 2,400 pages (5% coverage: A4/Letter) with one toner cartridge. When the toner cartridge is running low, the **Alarm** and **Data** (Toner) lamps blink once every 5 seconds to indicate toner low. **Initially, some models are supplied with a starter toner cartridge which must be replaced after 1,000 pages.** 

#### **✗** Note

- Actual page count will vary depending on your average document type. (i.e.: standard letter, detailed graphics, etc.)
- It is recommended that you always keep a new toner cartridge ready for use for when you get the toner low warning.
- Discard the used toner cartridge according to local regulations. If you are not sure of them, consult your local dealer. Be sure to seal up the toner cartridge tightly so that toner powder does not spill out of the cartridge. Do not discard used toner cartridges together with domestic rubbish.
- It is recommended that you clean the machine when you replace the toner cartridge.

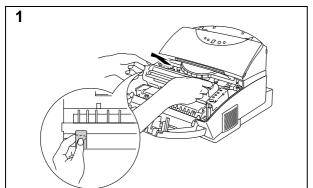


**Toner Low and Empty Indication** 

# Caution

- You may print approximately 100 pages after the first toner low indication. Both **Alarm** and **Data** (Toner) lamps will blink continuously to indicate that the toner is empty. Once this indication appears, your machine cannot resume printing until you have installed a new toner cartridge.
- Keep the drum unit level after removing the toner cartridge, to avoid possible toner spill or scatter.

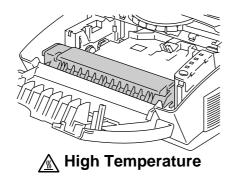
Follow these steps to replace the toner cartridge:



Open the top cover towards you. Remove the drum unit by holding each side of the drum and gently lifting the drum forwards towards you.

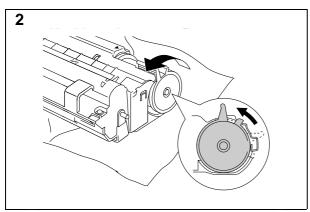
### ✓ Note

It is recommended to put the drum unit on a piece of disposable paper or cloth in case of accidental toner spill or scatter.



# **⚠** Warning

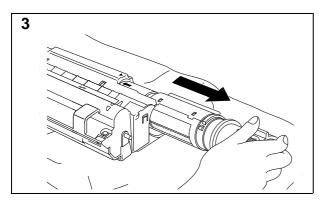
After you have just used the machine, some internal parts of the machine are extremely hot. When you open the top cover, never touch the shaded parts shown in the illustration.



Gently turn the lever on the toner cartridge forward until it stops.

#### Note

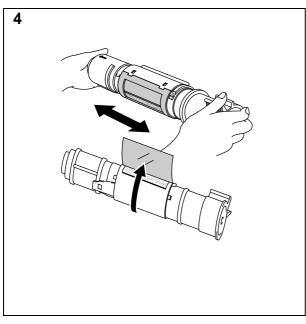
The toner cartridge cannot be removed unless the shutter is completely closed by turning the lever fully to the front.



Remove the old toner cartridge from the drum unit by pulling it out gently.

# Caution

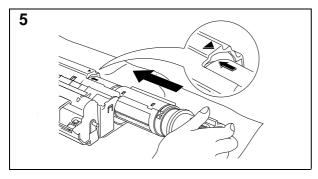
Handle the toner cartridge carefully. If toner scatters on your hands or clothes, wipe or wash it off with cold water immediately.



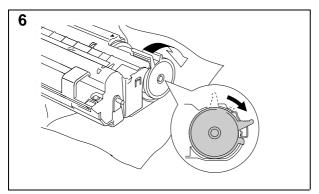
Unpack the new toner cartridge, gently shake it five or six times and then remove the protective part.

# **Q** Caution

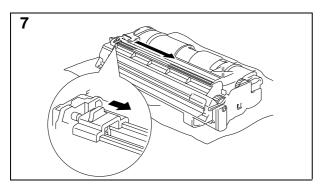
- Only unpack the toner cartridge immediately before installing it into the machine. If toner cartridges are left unpacked for a long period of time, the toner life is shortened.
- You can only use a Brother genuine toner cartridge (TN-300 series) which is specially formulated to ensure top print quality. Damage caused by using toner cartridges other than Brother original is not covered under any warranty or service agreement.



Install the new toner cartridge into the right hand side of the drum unit. Make sure that the toner cartridge guide bar is exactly aligned with the guide slot in the drum unit and pushed fully home into the drum unit to ensure that the toner cartridge and the drum unit fit together correctly.

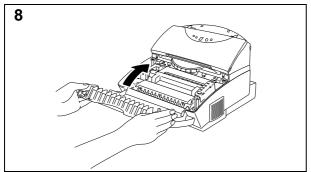


Gently turn the lever on the toner cartridge backward until it stops.



Turn the drum unit upside down gently.

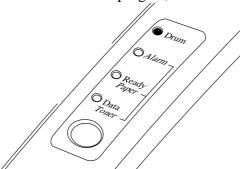
Clean the primary corona wire inside the drum unit by gently sliding the blue tab to the right and left several times.



Re-install the drum unit into the machine and close the top cover.

## REPLACING THE DRUM UNIT

The machine uses a drum unit to create the print images on paper. If the **Drum** lamp is on, it indicates the drum unit is nearly at the end of its life. We recommend you prepare a new drum unit to replace the current one. Even if the **Drum** lamp is on, you may be able to continue to print without replacing the drum unit for a while. If there is a noticeable deterioration in the output print quality even before the **Drum** lamp lights, then the drum unit should be replaced.



# Caution

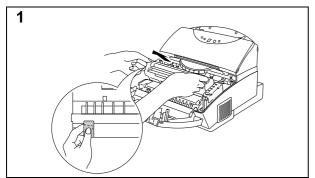
- When removing the drum unit, handle it carefully as it may contain toner.
- You should clean the machine when you replace the drum unit.

#### Note

The drum unit is a consumable, and it is necessary to replace it periodically. There are many factors that determine the actual drum life, such as temperature, humidity, type of paper and toner that you use, the number of pages per print job, etc.. The drum life is estimated at approximately 20,000 pages at 20 pages per job and 8,000 pages at 1 page per job. The actual number of pages that your drum will print may be significantly less than these estimates. Because we have no control over the many factors that determine the actual drum life, we cannot guarantee a minimum number of pages that will be printed by your drum.

For best performance, use only genuine Brother toner. The machine should only be used in a clean, dust-free environment with adequate ventilation.

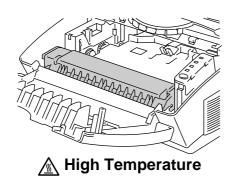
Follow these steps to replace the drum unit:



Open the top cover towards you. Remove the drum unit by holding each side of the drum and gently lifting the drum forwards towards you.

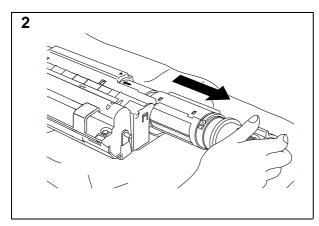
#### 

It is recommended to put the drum unit on a piece of disposable paper or cloth in case of accidental toner spill or scatter.



# **⚠** Warning

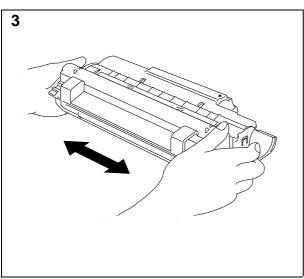
After you have just used the machine, some internal parts of the machine are extremely hot. When you open the top cover, never touch the shaded parts shown in the illustration.



Remove the toner cartridge from the drum unit and keep it in a safe place.

#### Note

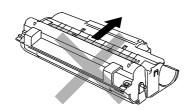
- Discard the used drum unit according to local regulations. If you are not sure of them, consult your local dealer/retailer. Be sure to seal up the drum unit tightly so that toner powder does not spill out of the unit. Do not discard used drum units together with domestic rubbish.
- It is recommended to put the drum unit on a piece of disposable paper or cloth in case of accidental toner spill or scatter.



Unpack the drum unit and gently shake it five or six times horizontally.

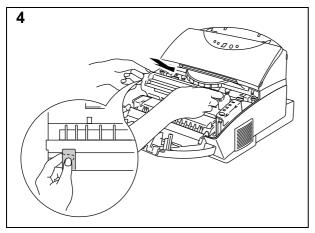
# Caution

- Only unpack a drum unit immediately before installing it into the machine. If an unpacked drum unit is subjected to excessive direct sunlight or room light, the unit may be damaged.
- Handle the toner cartridge and the drum unit carefully as it contains toner. If toner scatters and your hands or clothes get dirty, wipe or wash it off with cold water immediately.



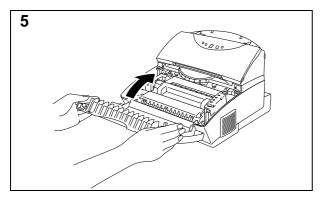
# Caution

Do not remove the starter sheet.



Install the toner cartridge into the new drum unit.

Install the new drum unit into the machine.



Close the top cover.

The machine automatically ejects the starter sheet. Ejecting this sheet resets the drum life alarm.

# **ALARM INDICATIONS AT A GLANCE**

# **Operator Calls for Printing Function**

If a recoverable error occurs, the machine indicates an 'operator call' by blinking the **Alarm** lamp and any of the following lamps.

Find the error and take the proper action to correct it. The machine automatically recovers from most errors, but you may need to reset the machine with the panel switch as described below.

Blinking Lamp	Error	Action	
Paper ○ → ● Paper jam Alarm ○ → ●		Clear the paper jam referring to the "PAPER JAMS" section of the On-line user's guide and press the panel <b>switch</b> if the machine does not automatically resume printing.	
	Paper empty	Load paper in the machine referring to the On-Line user's guide Chapter 2 and press the panel <b>switch</b> .	
	Misfeed	Reinstall the paper and press the panel <b>switch</b> .	
<b>Toner</b> ○ ← ● Toner low		Indicates that the machine has approximately 100 pages of	
Alarm ○ ← ● (every 5 seconds)		printing left before the toner cartridge is empty. Prepare a new toner cartridge.	
Toner ○↔● Alarm○↔● (Fast blinking)	Toner Empty	Replace the toner cartridge with a new one referring to the On-line user's guide Chapter 6.	

For errors shown below, the machine indicates an operator call by blinking the **Alarm** lamp. If you use the machine with the supplied Windows driver, the status monitor will appear to indicate the error on your computer screen. The machine also prints some error messages on paper.

Error	Action
Cover Open	Close the top cover of the machine.
Print Overrun	<ul> <li>Press the panel <b>switch</b> to print the data remaining in the machine.</li> <li>If you use the supplied Windows<sup>®</sup> driver, try again after turning on Error Recovery in the PRINT menu of your application software, (Refer to Help section in the Windows<sup>®</sup> printer driver for the details.)</li> <li>If this does not clear the error, reduce the complexity of your document or reduce the print resolution.</li> </ul>
Memory Full This error can occur only when using DOS or Macintosh.	<ul> <li>Press the panel <b>switch</b> to print the data remaining in the machine.</li> <li>Reduce the print resolution or reduce the complexity of your document.</li> </ul>
Parallel Interface Line Error	<ul> <li>Press the panel <b>switch</b> to resume printing.</li> <li>Check that the connection between your computer and machine is secure and correct, and check the interface cable.</li> </ul>

#### **✗** Note

If the machine does not operate as you expect it to, it is recommended that you turn off the power switch, wait a few seconds and then turn it on again. If you still have problems, consult your dealer or our authorized service representative.

# **Operator Calls for Copying and Scanning Functions**

If a recoverable error occurs, the machine shows "E" on the display.

To clear the error, press the Stop Button.

When there is no document in the feeder, inserting a document in the document feeder clears the error.

Errors occur when the following happens;

- \* When the document causes a paper jam in the document feeder while the mahine is feeding the document.
- \* When the machine is busy. (When the machine is being used as a scanner.)
- \* When there is no paper in the sheet feeder.
- \*When memory full happens. (The mahine will prints out an error message.)

# **Service Calls for the Printing Function**

If an unrecoverable error occurs, the machine indicates the need for a service call by lighting all the lamps and then the following combination of lamps alternately:

Service Call	Fuser	Laser BD	Scanner	ROM	D-RAM
	malfunction	malfunction	malfunction	error	error
Drum	•	0	•	0	•
Alarm	0	•	•	0	0
Ready	0	0	О	•	•
Data	0	О	О	0	0
Service Call	Service A	Service B	Service C	Service D	Service E0
Drum	0	•	0	•	0
Alarm	•	•	О	0	•
Ready	•	•	0	0	0
Data	0	O	•	•	•
Service Call	Service E1	Service P	NV-RAM	CPU runtime	<u> </u>
Service cum	Service Er	Service 1	error	error	•
Drum	•	0	•	•	
Alarm	•	0	O	•	
Ready	0	•	•	•	O OFF
Data	•	•	•	•	• ON

If you see any of these service call indications, turn off the power switch, wait a few seconds and then turn it on again and try to print again.

If you cannot clear the error and see the same service call indication after turning on the machine, consult your dealer or our authorized service representative. Report the error status and situation referring to the above table.

#### **∦** Note

Be sure that the top cover and the main controller board are firmly installed.

#### **∦** Note

If you have any problems other than described in this section, see "CHAPTER 7 TROUBLESHOOTING, Q & A" of the On-line Users Guide. If you are still unable to clear the problem after reviewing the information in the Users Guide, consult your dealer.

## **Service Calls for Copying and Scanning Functions**

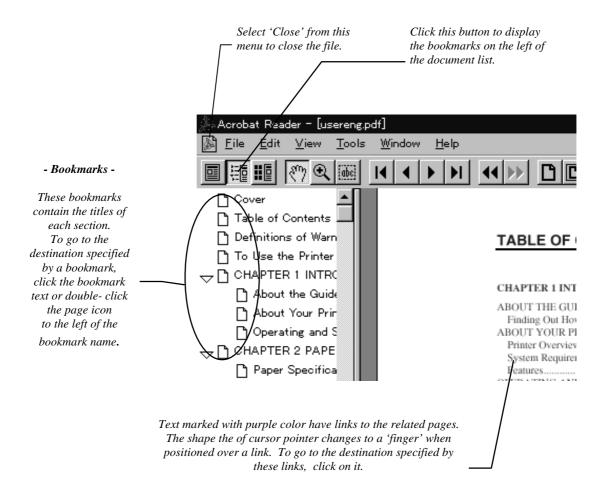
If an unrecoverable error occurs, the machine shows "E" and "0", "1" or "2" on the display alternately. When this happens, turn off the power switch, wait a few seconds and then turn it on again and try again.

If you cannot clear the error and see the same service call indication after turning on the machine, consult your dealer or our authorized service representative.

## **HOW TO VIEW THE ON-LINE SETUP GUIDE & USER GUIDE**

The Quick Setup guide and User guide for this printer are prepared as PDF files. You need to install the 'Adobe<sup>®</sup> Acrobat<sup>®</sup> Reader software to view these manuals.

Click the **Open** button in the '**View Setup Guide**' or '**View User Guide**' menu on the CD-ROM and 'Adobe<sup>®</sup> Acrobat<sup>®</sup> Reader' will be automatically installed first if your Windows<sup>®</sup> does not have it installed. Thereafter, the On-line manual will be opened automatically as illustrated below.



## **MACHINE SPECIFICATIONS**

## **Printing**

Print Method Electrophotography by semiconductor laser beam scanning

Laser Wavelength: 780 nm / Output: 5 mW max.

Resolution 600 dots/inch (under Brother Printing Solution for Windows® /

under Brother Software PCL5e for DOS box in

Windows<sup>®</sup> )

300 dots/inch (under DOS operating system)

Print Quality Normal printing mode

Economy printing mode (up to 25% and 50% toner saving)

Print Speed Up to 10 pages/minute

(when loading A4 or letter-size paper from the multi-purpose sheet

feeder)

**NOTE**: Maximum print speed is obtained by printing several copies of the same page. Print speed may vary depending on interface type, emulation, processing power of the computer, memory allocated to the

print job, paper size and graphic quality.

Max. 30 seconds at 23°C (73.4°F) (The warm up time depends on the

Warm-Up ambient temperature and humidity.)

First Print 15 seconds (when loading A4 or letter-size paper from the multi-purpose

sheet feeder)

Print Media Toner cartridge:

Life Expectancy: 2,400 pages/new toner cartridge

1,000 pages/starter toner cartridge

(when printing A4- or letter-size paper at 5% print coverage)

**NOTE**: Toner life expectancy will vary depending on the type of

average print job printed.

Drum Unit:

Life Expectancy: 20,000 pages at 20 pages per job

8,000 pages at 1 page per job

**NOTE**: There are many factors that determine the actual drum life, such as temperature, humidity, type of paper and toner that you use, the number of pages per print job, etc..

## Copying

**Type** Auto Document Feeder

Resolution 300 x 300 dpi class: Photo mode, 200 x 600 dpi: Text mode

Enlarge/Reduce For USA and Canada: 50%, 78%, 120%, 150%

For other countries :50%, 71%, 141%, 200%

Input 10 documents

Multi-copy ves

# **Scanning**

600 x 600 dpi class with 256 levels of gray Scanner

Resolution

TWAIN driver Software

> Visioneer PaperPort LE® Software WordCraft Unimessage<sup>TM</sup> Viewer

#### **Functions**

TrueType Fonts

TrueType-compatible soft-fonts for Windows® on the supplied disk

on disks **Emulation** 

Brother Printing Solution for Windows® / Automatic emulation

selection among HP LaserJet IIP (PCL level 4), EPSON FX-850, or

IBM Proprinter XL

Windows<sup>®</sup> 3.1/3.11, Windows<sup>®</sup> 95/98 and Windows NT<sup>®</sup> 4.0 driver, **Printer Driver** 

supporting Brother Native Compression mode and bi-directional

capability

Interface Bi-directional parallel

2 MB Memory

**Diagnostics** Self-diagnostic program

### **Electrical and Mechanical**

Noise

**Power Source** U.S.A. and Canada: AC 110 to 120 V, 50 / 60 Hz

Europe and Australia: AC 220 to 240 V, 50 /60 Hz

Power Printing: 280 W or less Consumption Stand-by: 60 W or less

> 13 W or less Sleep: Copying: 180W or less Printing: 49 dB A or less

Sleep: 33 dB A or less

Temperature Operating: 10 to 32.5°C (50 to 90.5°F)

> Storage: 0 to 40°C (38 to 104°F)

20 to 80% (without condensation) Humidity Operating:

> Storage: 20 to 80% (without condensation)

390 x 282 x 371 mm (14.4 x 11 x 14.5 inches) **Dimensions** 

 $(W \times H \times D)$ (when the output tray is closed.)

Approx. 8.5 kg (18.7 lb.) including the drum unit Weight

### REGULATIONS

#### Federal Communications Commission Compliance Notice (For USA Only)

Responsible party: Brother International Corporation

100 Somerset Corporate Boulevard Bridgewater, NJ 08807-0911, USA

TEL: (908) 704-1700

declares, that the products

Product Name: Brother Laser Printer / Scanner / Copier

MFC-P2000, MC-P2000

Product Options: ALL

complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interface, and (2) this device must accept any interface received, including interface that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

☐ Reorient or relocate the receiving antenna.

- ☐ Increase the separation between the equipment and receiver.
- ☐ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### **Important**

A shielded interface cable should be used in order to ensure compliance with the limits for a Class B digital device. Changes or modifications not expressly approved by Brother Industries, Ltd. could void the user's authority to operate the equipment.

#### FDA Regulations (For 110-120 V Model Only)

U.S. Food and Drug Administration (FDA) has implemented regulations for laser products manufactured on and after August 2, 1976. Compliance is mandatory for products marketed in the United States. One of the following labels on the back of the printer indicates compliance with the FDA regulations and must be attached to laser products marketed in the United States.

#### MANUFACTURED:

Brother Corporation (Asia) Ltd. Brother Buji Nan Ling Factory Gold Garden Ind., Nan Ling Village, Buji, Rong Gang, Shenzhen, CHINA

This product complies with FDA radiation performance standards, 21 CFR Subchapter J

#### MANUFACTURED:

BROTHER INDUSTRIES (USA) INC.

2950 Brother Blvd., Bartlett, TN 38133, U.S.A.

This product complies with FDA radiation performance standards,  $21\ CFR\ Subchapter\ J$ 

#### MANUFACTURED:

BROTHER INDUSTRIES LTD.

15-1 Naeshiro-cho Mizuho-ku Nagoya, 467 Japan This product complies with FDA radiation performance standards, 21 CFR Subchapter J

# Industry Canada Compliance Statement (For Canada Only)

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

## **International Energy Star Compliance Statement**

The purpose of the International Energy Star Program is to promote the development and popularization of energy-efficient office equipments, which includes computers, monitors, printers, facsimile receivers and copy machines world-wide.

As an International ENERGY STAR partner, Brother Industries, Ltd. has decided that this product meets the guideline of the program.



#### Laser Safety (For 110-120 V Model Only)

This machine is certified as a Class I laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968. This means that the machine does not produce hazardous laser radiation.

Since radiation emitted inside the machine is completely confined within protective housings and external covers, the laser beam cannot escape from the machine during any phase of user operation.

#### Caution

Use of controls, adjustments or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

#### Radio Interference (220-240 V Model Only)

This machine complies with EN55022(CISPR Publication 22)/Class B.

Before this product is used, ensure that you use a doubleshielded interface cable with twisted-pair conductors and that it is marked "IEEE 1284 compliant". The cable must not exceed 1.8 metres in length.

#### **Declaration of Conformity (For Europe)**

We, Brother International Europe Ltd.,

Brother House 1 Tame Street, Guide Bridge, Audenshaw, Manchester M34 5JE, UK.

declare that this product is in conformity with the following normative documents.

Safety: EN 60950, EN 60825 EMC: EN 55022 Class B, EN 50082-1

following the provisions of the Low Voltage Directive 73/23/EEC and the Electromagnetic Compatibility Directive 89/336/EEC (as amended by 91/263/EEC and 92/31/EEC).

Issued by:

Brother International Europe Ltd. European Technical Services Division

#### IEC 825 Specification (For 220-240 V Model Only)

This machine is a Class 1 laser product as defined in IEC 825 specifications. The label shown below is attached in countries where required.



This machine has a Class 3B Laser Diode which emits invisible laser radiation in the Scanner Unit. The Scanner Unit should not be opened under any circumstances.

#### Caution

Use of controls, adjustments or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

The following caution label is attached near the scanner unit.

CAUTION

AVOID DIRECT EXPOSURE TO BEAM. CLASS 38 LASER PRODUCT.

ADVARSEL

USYNLIG LASER STRALING NAR RABINETLÄGET STAR ABENT.

UNGOAD DIRECTE UDSCRITELSE FOR STRALING, KLASSE 38 LASER.

VARNING

OSYNLIG LASERSTRALING WAR DEINN DEL AR OPENAD OLI SPABRAR AR URKOPPLADE. STRALEN AR FARLIG, KLASS 38 LASER APPARAT.

AVATTAESSA JA SUOJALUKTUS OHIETTELSS SO LET ALTIMIA

NAKYMATTOMALLE LASERSTRELIYLE ALA KATSO SATEESEEN LUOKAN

38 LASERLAITE.

ADVARSEL

ATTENTION

RADATIONS LASER INVISIBLES QUANDOUVERT ET VERROUILLAGE ENLEVE.

EVENTICE EXPOSITION DIRECTES AU FARCECAU, PRODUIT LASER CLASSE 38.

ATENCIÓN

ANACIONAL SER STRALING UNDO SE ABBE

LA TARA Y EL INTERRUPTOR INTERNO ESTA

DE LOS QUOS. PRODUCTO LASER CLASE 38.

# For Finland and Sweden LUOKAN 1 LASERLAITE KLASS 1 LASER APPARAT

Varoitus! Laitteen käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

Varning – Om apparaten används på annat sätt än i denna Bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass1.

# Geräuschemission / Acoustic Noise Emission (For Germany Only)

Lpa < 70 dB (A) DIN 45635-19-01-KL2

This product is designed for use in a professional environment.

#### **IMPORTANT - For Your Safety**

To ensure safe operation the three-pin electrical plug supplied must be inserted only into a standard three-pin power point which is properly grounded through normal household wiring.

Extension cords used with the equipment must be three-pin plug type and correctly wired to provide proper grounding. Incorrectly wired extension cords may cause personal injury and equipment damage.

The fact that the equipment operates satisfactorily does not imply that the power is grounded and that the installation is completely safe. For your safety, if in any doubt about the effective grounding of the power, consult a qualified electrician.

#### Disconnect device

This machine must be installed near a power outlet, which is easily accessible. In case of emergencies, you must disconnect the power cord from the power outlet in order to shut off power completely.

#### **IMPORTANT - Wiring Information** (For U.K. only)

If the power cord supplied with this machine is not suitable for your electrical outlet, remove the plug from the mains cord and fit an appropriate three pin plug. If the replacement plug is intended to take a fuse then fit the same fuse as the original.

If a moulded plug is severed from the power cord then it should be destroyed because a plug with cut wires is dangerous if plugged into a live socket outlet. Do not leave it where a child might find it.

In the event of replacing the plug fuse, fit a fuse approved by ASTA to BS1362 with the same rating as the original fuse. Always replace the fuse cover. Never use a plug with the cover omitted

# WARNING - THIS MACHINE MUST BE PROPERLY EARTHED.

The wires in the mains cord are coloured in accordance with the following code:

Green and yellow: Ground
Blue: Neutral
Brown: Live

The colours of the wiring in the power lead of this machine may not correspond with the markings which identify the terminals in your plug. If you need to fit a different plug, proceed as follows.

Remove a length of the cord outer sheath, taking care not to damage the coloured insulation of the wires inside.

Cut each of the three wires to the appropriate length. If the construction of the plug permits, leave the green and yellow wire longer than the others so that, in the event that the cord is pulled out of the plug, the green and yellow wire will be the last to disconnect.

Remove a short section of the coloured insulation to expose the wires.

The wire which is coloured green and yellow must be connected to the terminal in the plug which is marked with the letter "E" or by the earth symbol or coloured green or green and yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter "N" or coloured black or blue

The wire which is coloured brown must be connected to the terminal which is marked with the letter "L" or coloured red or brown.

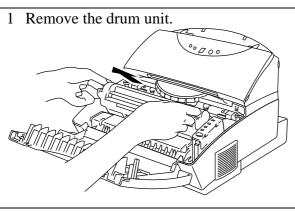
The outer sheath of the cord must be secured inside the plug. The coloured wires should not hang out of the plug.

# **Shipment of the Machine**

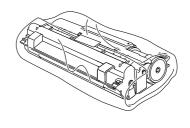
If for any reason you must ship your Machine, carefully package the Machine to avoid any damage during transit. It is recommended that you save and use the original packaging. The Machine should also be adequately insured with the carrier.

# Warning

When shipping the Machine, the DRUM UNIT assembly including the TONER CARTRIDGE must be removed from the Machine and placed in the plastic bag. Failure to remove and place it in the plastic bag during shipping will cause severe damage to the Machine and will VOID THE WARRANTY.



2 Place it in the plastic bag and seal the bag completely.



3 Remove the AC cord, the paper tray extension wire and the document support from the machine.

Re-pack the machine.

