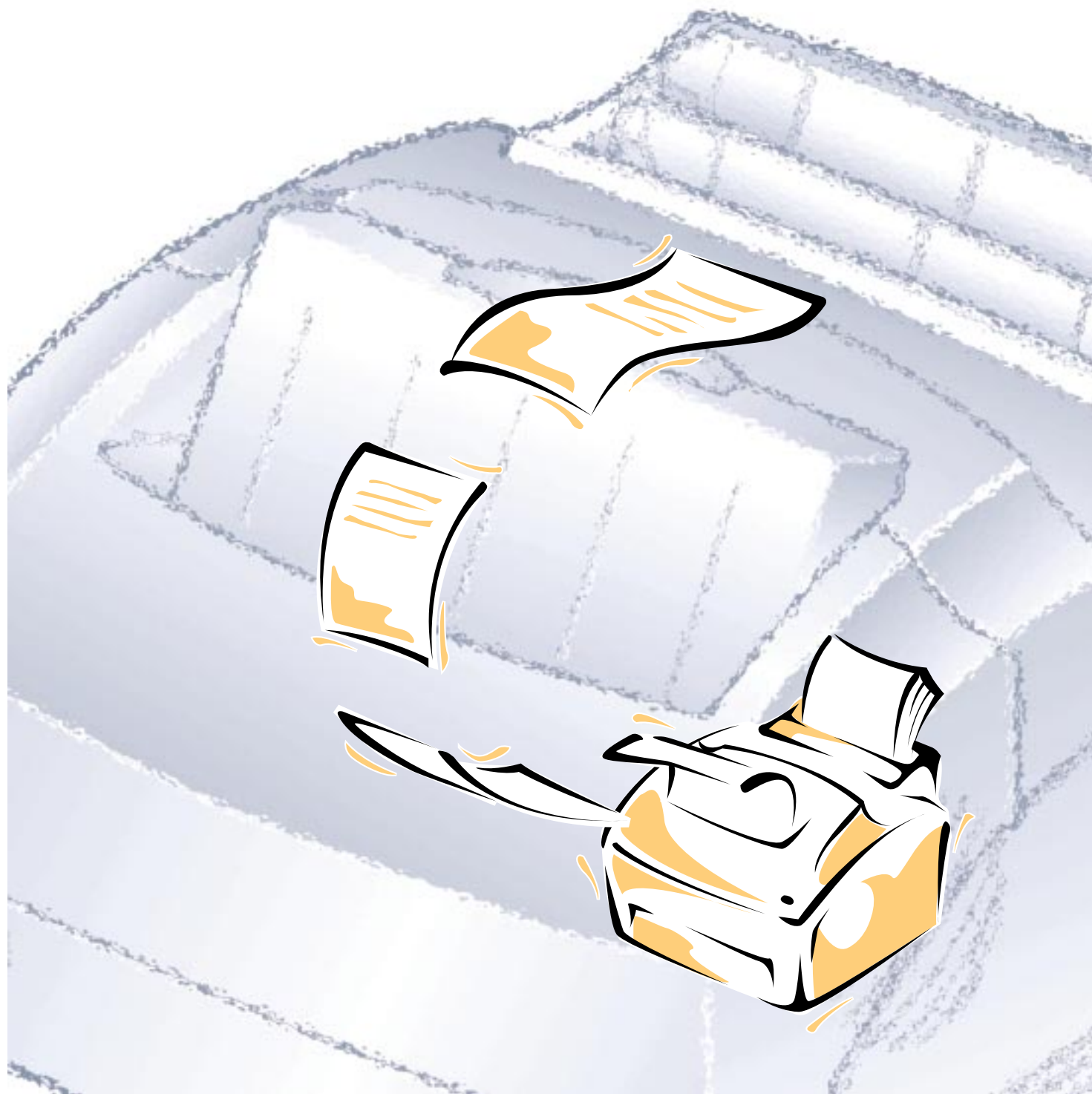


**SAMSUNG**

**LASER PRINTER  
ML-5100A**

User's Manual



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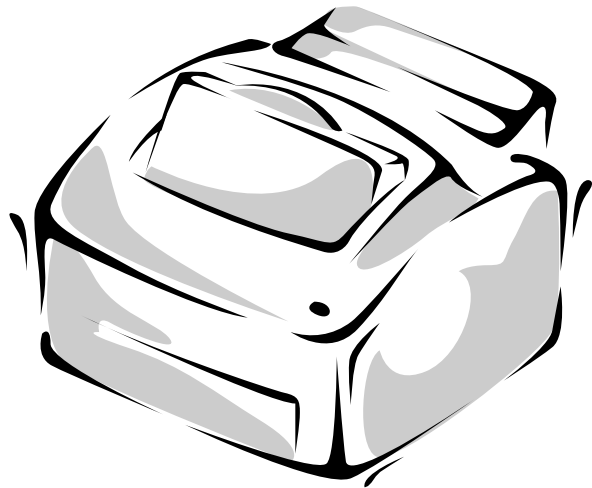
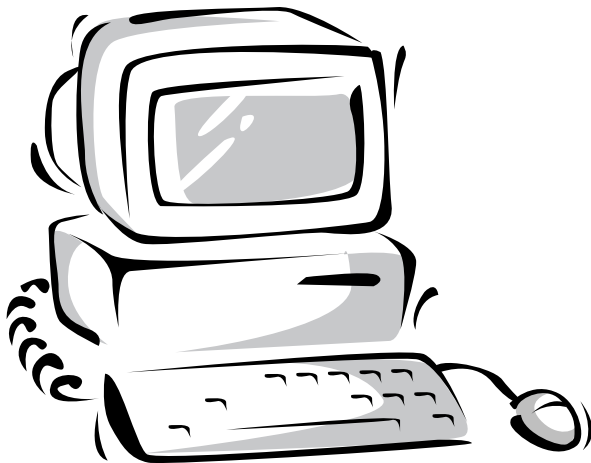
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# *Setting Up Your Printer*



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## Unpacking

Remove the printer and all accessories from the packing carton. Save the carton and packing materials in case you need to repack the printer.

Make sure you have the following items:

- Toner cartridge
- Power cord
- Setup CD-ROM
- This manual

### **Notes:**

- *If you need help during setup, or if any items are missing or damaged, notify your dealer immediately.*
- *You need a Centronics-compatible parallel printer cable. The cable is not shipped with your printer. You can purchase this cable from your dealer or retailer. Make sure the cable is IEEE 1284-compliant.*

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## Selecting a Location

Place your printer on a flat, stable surface near your workstation. Leave enough space around the printer, so that you can easily:

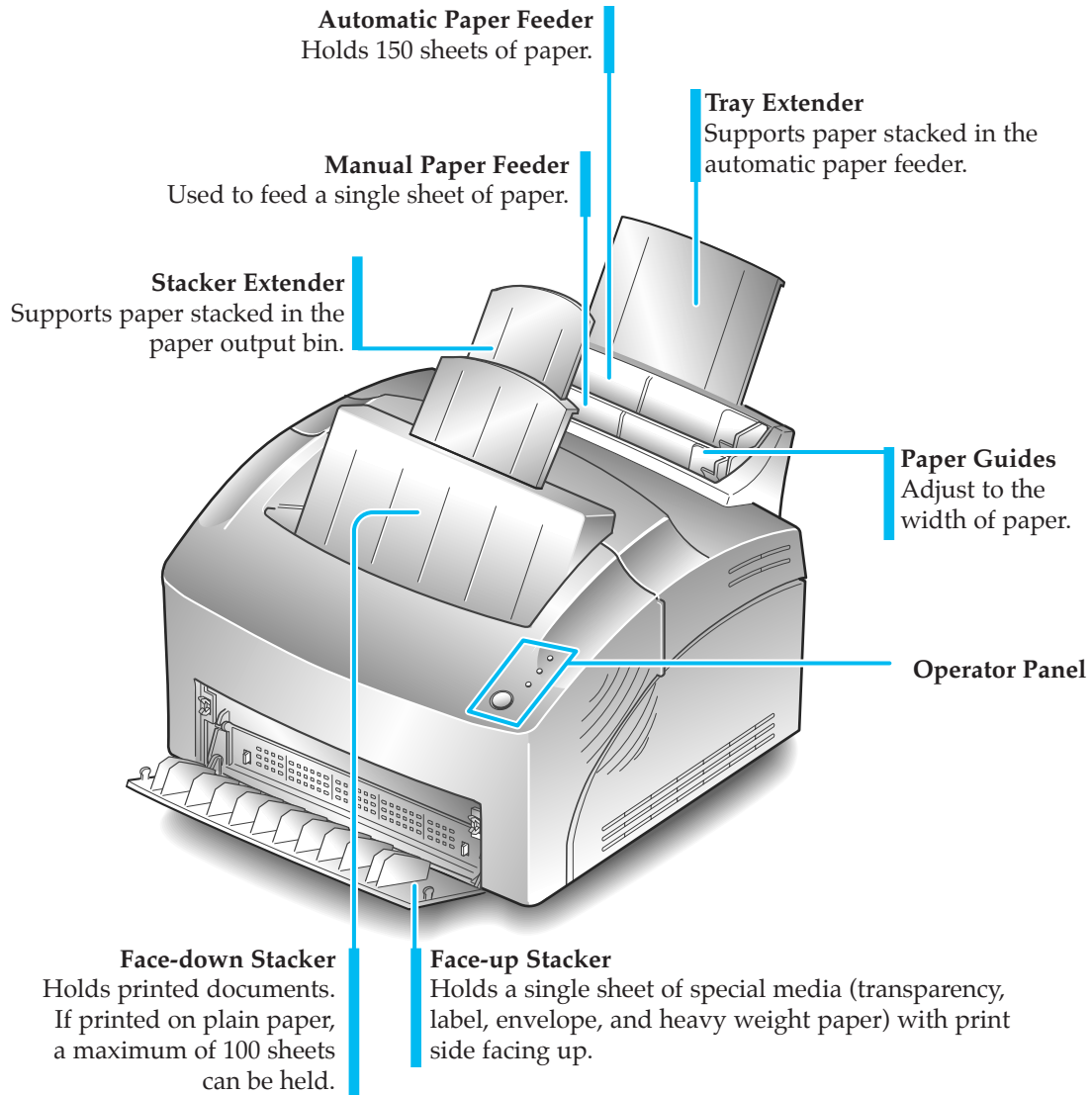
- open the printer cover
- load the paper
- retrieve the paper
- open the front output tray and retrieve the paper from the front output tray
- allow air circulation around the vents to prevent the printer from overheating

### **Do not place the printer:**

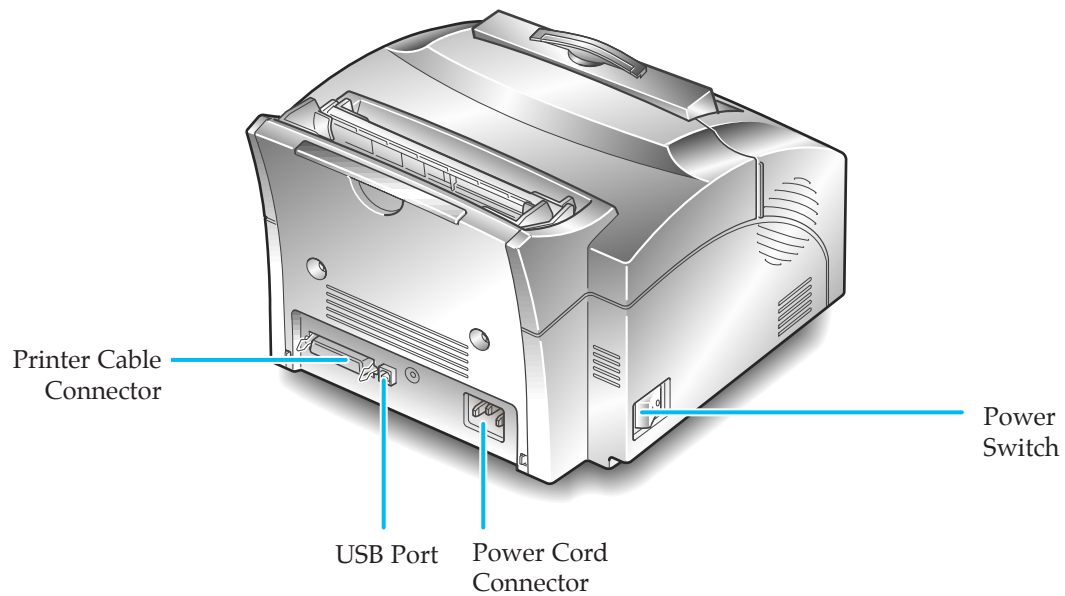
- In direct sunlight
- Near heat sources or air conditioners
- In dusty or dirty environments

## Control Locations and Functions

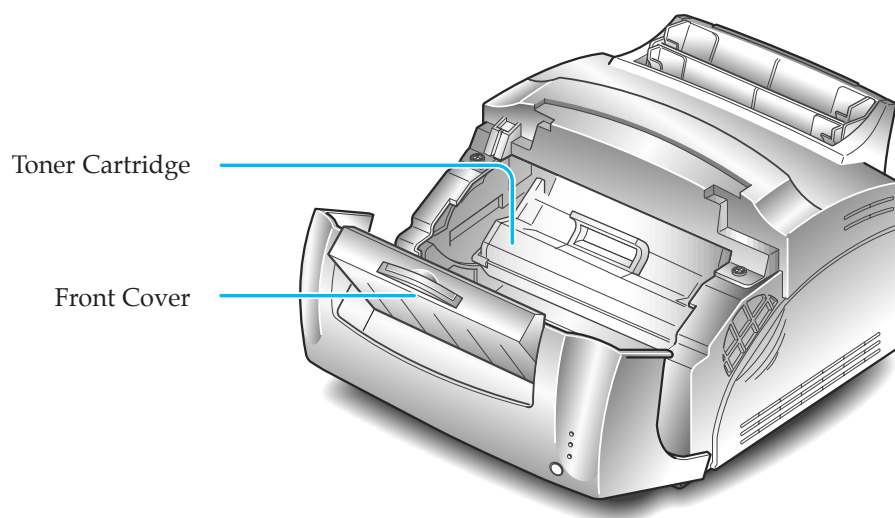
### Front View



## Rear View



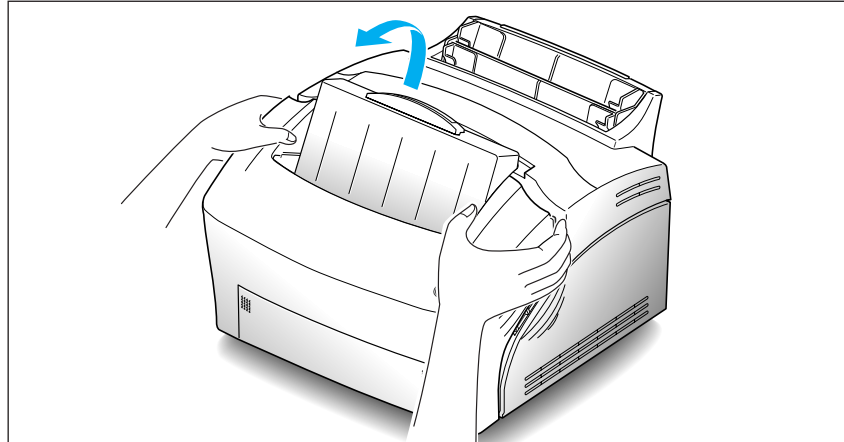
## Inside



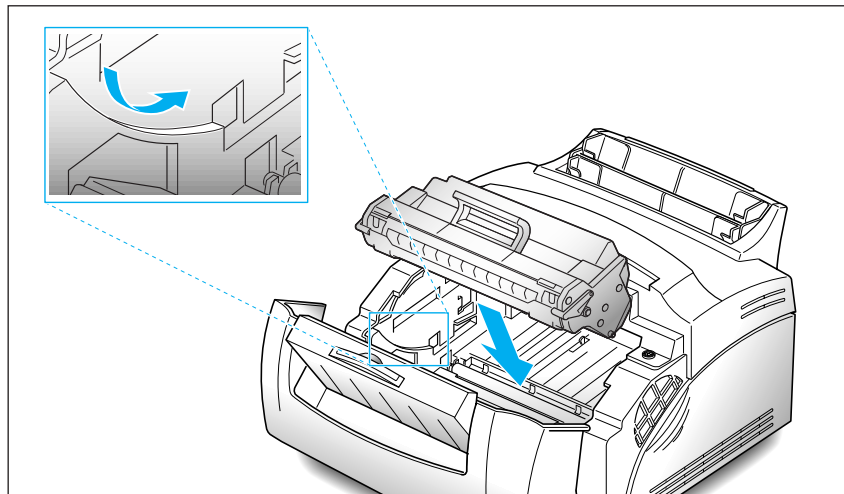
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## Installing the Toner Cartridge

1. To open the printer cover, hold the cover using hands and pull it toward you.



2. Unpack the Toner Cartridge. Carefully remove the sealing tape.
3. Rock the Cartridge 5 or 6 times to distribute the toner.
4. Find the cartridge slots inside the printer, one on each side.
5. Grasp the handle and slide the Cartridge down between the toner cartridge slots, until it drops into place.



6. Close the cover.

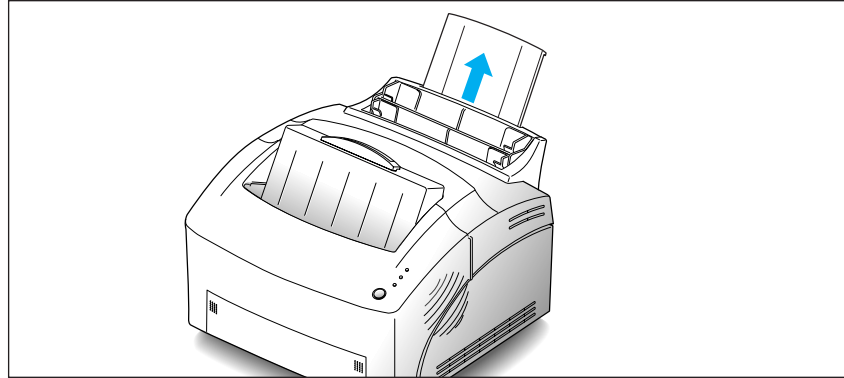
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## Loading Paper

For best results, use high quality 75g/m<sup>2</sup> (20 lb) xerographic paper.

*Note:* For more information on loading paper and other print material, refer to 'Loading Print Material' on page xx.

### 1. Pull the extender on the automatic paper feeder up, until it stops.

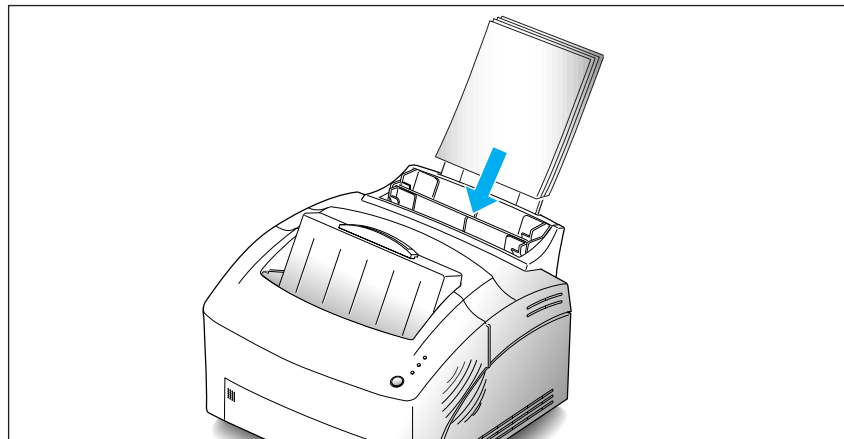


### 2. Before loading the paper, flex the sheets back and forth to loosen them, then fan them. Tap the edges on a table top to straighten them. Doing this before you load paper helps prevent paper jams.

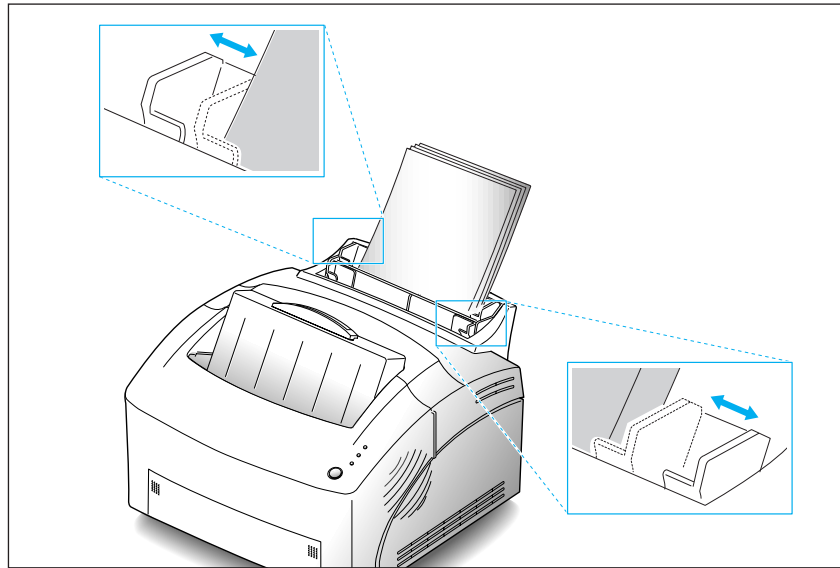
Don't load too much. This feeder holds up to 150 sheets.

### 3. Insert the paper in the paper feeder.

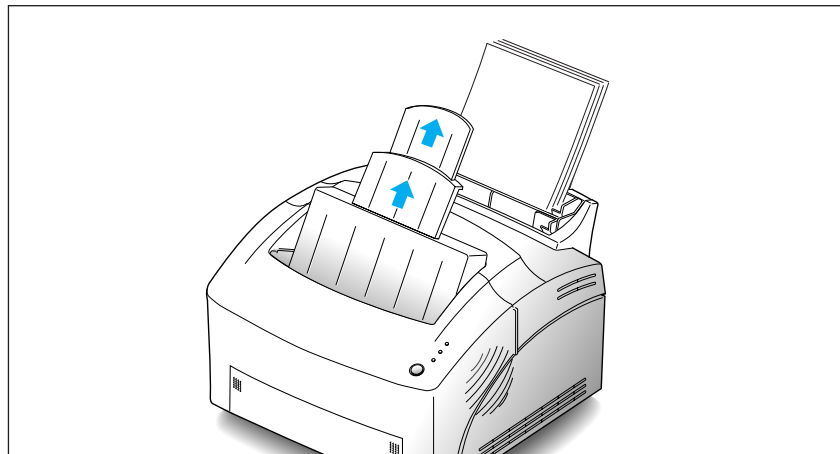
If the paper has a preferred print side, place the print side facing you. If you use letterhead paper, load the paper with the letter-head edge down and facing you.



**4. Adjust the paper guides to the width of the paper.**



**5. Pull up the extender on the face-down stacker.** The face-down stacker can hold up to 100 printed pages.



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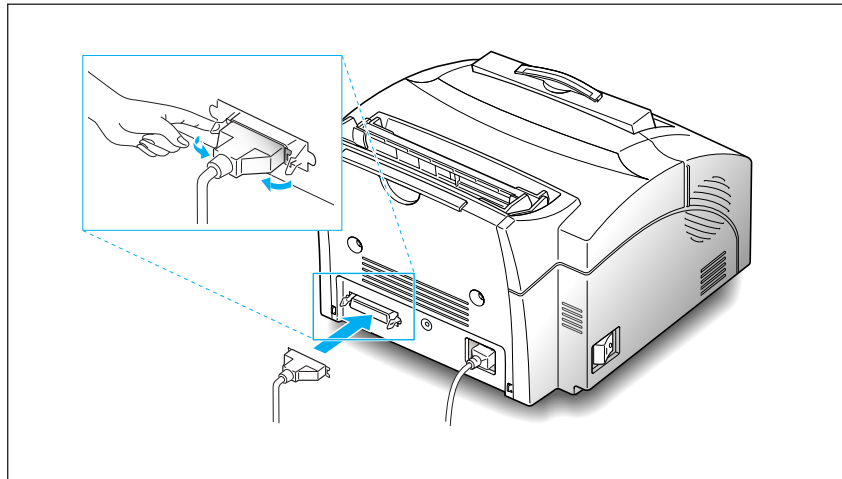
## Connecting to Your Computer

Your printer has parallel interface port, which allows you to use it with IBM PCs and compatible computers. You have to purchase a Centronics parallel interface cable that supports bi-directional communications (IEEE standard 1284). Ask your dealer for assistance if you need help selecting the right cable.

Your printer also has Universal Serial Bus (USB) port. The Universal Serial Bus is an interface which allows the printer to be connected to multiple peripheral devices. If your PC has USB port, you can connect your printer to your PC by using USB interface.

### Using Parallel Port

1. **Plug the parallel interface cable into the connector on the back of the printer.** Push the clips at each end of the connector into the notches on the printer cable. The clips snap when pushed into the notches.



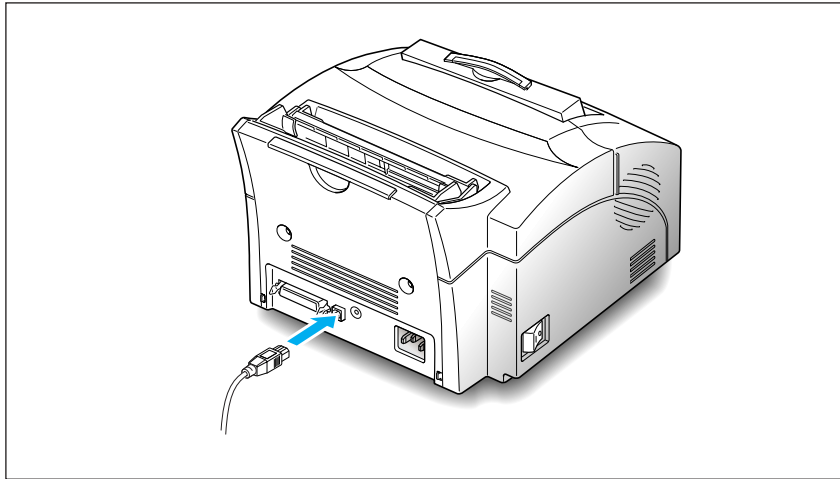
2. **Attach the other end of the parallel cable to your computer.**

*Note:* Make sure the printer power is off when you connect it to the computer.

## Using The USB Port

The USB port requires USB v1.0-compliant cable. Ask your dealer for assistance if you need help selecting the right cable.

1. **Make sure that both the printer and computer are turned off.**
2. **Plug the USB cable into the connector on the back of the printer.**



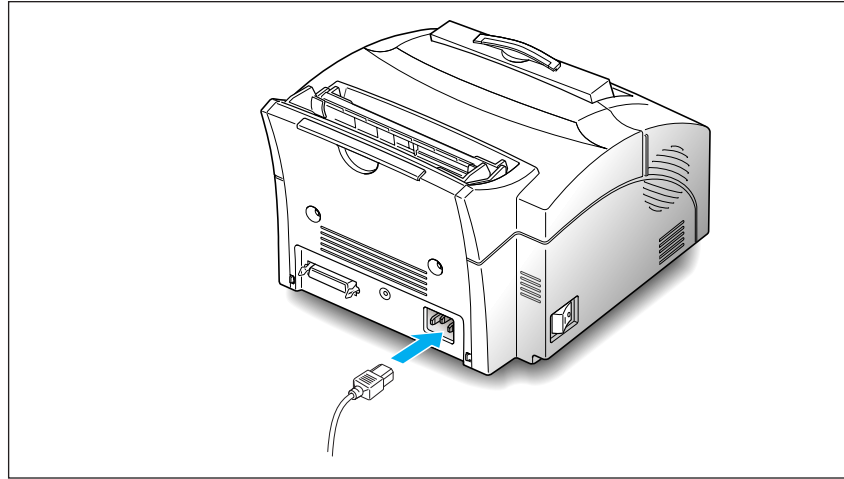
3. **Connect the other end of the cable to the USB port on your computer.** See your computer documentation if you need help.

***Note:** To print using USB interface, you must install the USB driver. See page xx.*

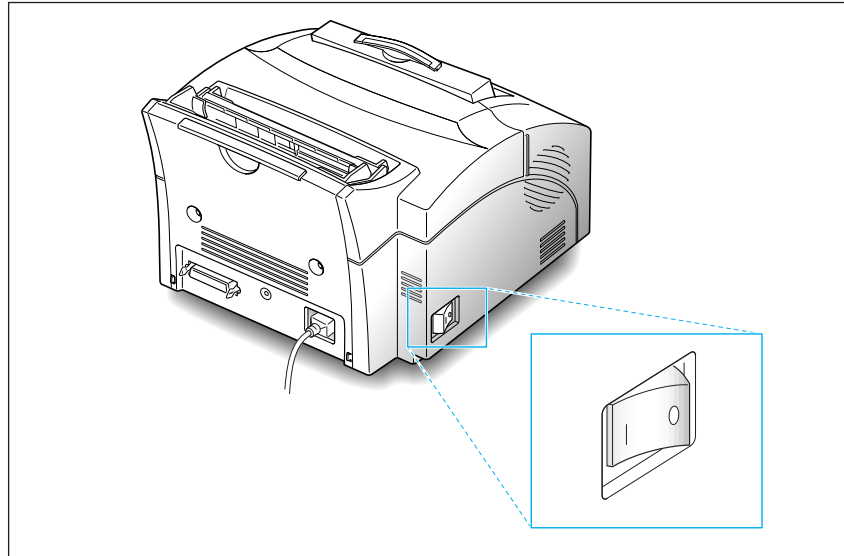
---

## Powering On the Printer

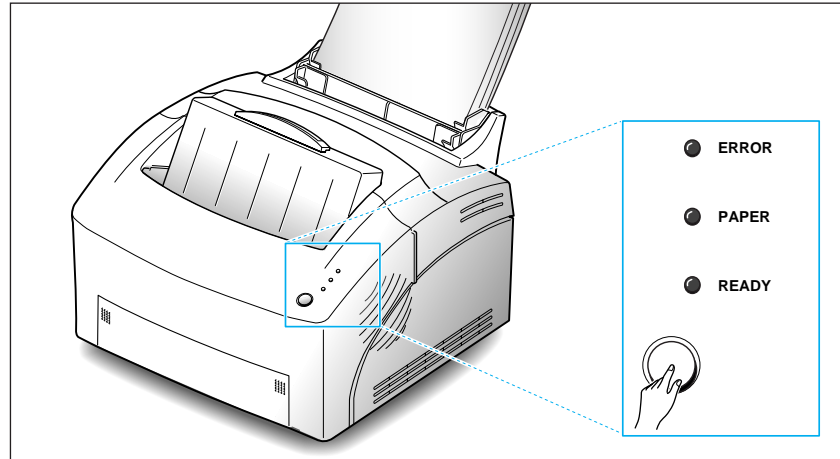
1. Plug one end of the power cord into the connector at the back of the printer, and the other end into a wall outlet.



2. **Turn the printer on.** As the printer powers up, all control panel lights turn on briefly.



3. When only the READY light is steadily on, press and hold the button for about 3 seconds. All the indicators blink. Then let it go when each indicator starts to blink in turn. A test page should print out.



---

## Installing Software

Included with your printer is a CD-ROM containing printer drivers for some of the most popular Windows software applications. To operate your printer, you must install a printer driver, which translates data from your application into data the printer understands. (Installation procedures follow this section.)

The CD-ROM shipped with your printer contains the following printer drivers and utilities.

- **PCL 5e printer driver** for Windows 95/98, Windows 3.1x and Windows NT 4.0
- **PCLXL printer driver** for Windows 95/98 and Windows NT 4.0.
- **Status Monitor** enables you to monitor the status of print jobs.
- **Remote Control Panel**, which allows you to set up your printer to work properly with DOS applications run inside a Windows MS-DOS command prompt window, or NT Windows.
- **USB driver**, which allows your printer to connect USB peripheral.

---

# Installing Printer Driver

## System Requirement

Before you start, make sure you have the following computer setup. (These are the minimum requirements.)

- IBM or compatible with a 386 or higher processor
- Windows 95, Windows 98, Windows 3.1x, or Windows NT
- 4 MB of available hard disk space
- 4 MB of RAM
- Centronics-compatible parallel cable (IEEE 1284-compliant)

## Windows 95/98/NT4.0 Installation

### 1. Turn on the computer and start Windows.

If Windows 95/98 recognizes the new printer, go to the section *"Windows 95/98 Plug and Play"* on page xx.

### 2. Insert the setup CD-ROM into your CD-ROM drive.

If Windows does not automatically run the CD-ROM, go to the section *"If Windows Does Not Run the CD-ROM"* on page xx.

### 3. Type in your user name and company. Then click on the **Next** button.

### 4. The driver will be installed in the directory c:\5100util. If you want to change this, type in the directory you want. Then click on the **Next** button.

### 5. Follow the instructions on the screen.

## **Windows 95/98 Plug and Play**

1. At the 'New Hardware Found' dialog box, click on the **OK** button.
2. Insert the setup CD-ROM into your CD-ROM drive.
3. Follow the instructions on the screen.

## **If Windows Does Not Run the CD-ROM**

1. Select **Run** from the **Start** menu.
2. Type **d:\setup.exe** on the command line (where "d" is your CD-ROM drive letter), then click **OK**.
3. Follow the instructions on the screen.

## Windows 3.1x Installation

1. Make sure the printer is plugged and connected to your computer. Turn on your printer and computer.
2. Insert the CD-ROM disk into your CD-ROM drive.
3. From the Program Manager window, double-click **Main**, and **File Manager**.
4. From the File Manager window, select your CD-ROM drive, double-click the language you want.



5. Double-click **setup.exe**.



6. Follow the instructions on the screen.

## Uninstalling the Printer Driver

An uninstall utility is supplied with the printer driver to enable you to remove the driver and all associated files from your hard disk, if so required.

To uninstall the driver, proceed as follows:

**Windows 95/98/NT 4.0:** From the **Start** menu, select **Programs, Samsung ML-5100A, Uninstall Samsung ML-5100A Driver**.

---

## Installing Printer Utilities (USB & Remote Control Panel)

### Windows 95/98/NT 4.0 Installation

1. Select **Run** from the **Start** menu.
2. Type **d:\setup.exe** on the command line (where 'd' is your CD-ROM drive letter), and click **OK**.
3. Select the language you want.
4. Select the **USB&RCP**.
5. Follow the instructions on the screen.

### Windows 3.x Installation

*Note: USB driver is not available on Windows 3.1x.*

1. From the **Program Manager** window, double-click **Main, and File Manager**.
2. From the **File Manager**, select your CD-ROM drive, and double-click the language you want, select the language you want.
3. Select **RCP**, then double-click **setup.exe**.

---

## Printing on Network Printer

### Setting Up Host PC Printer

1. Start Windows.
2. Click **Start**, select **Control Panel**, and double-click on the **Network** icon.
3. Click **File and Print Sharing**, check box(es), then click **OK**.  
Close the window.
4. Click **Start** and select **Printers** from **Settings**, then double-click your printer name (**ML-5100A**).
5. Select **Properties** in **Printer** menu.
6. Click the **Sharing** tab, then check **Shared As**, fill in the **Shared Name** field, and click **OK**.

### Client PC Sharing Setup

1. Right-click the **Start** button, and select **Explore**.
2. Open your network folder in the left column.
3. Right-click the shared name, and select **Capture Printer Port**.
4. Select the port you want, click **Reconnect at log on** check box, the click **OK** button.
5. From the **Start** menu, select **Settings**, then **Printers**.
6. Double-click your printer icon (**ML-5100A**).
7. From the **Printer** menu, select **Properties**.
8. Press the **Details** tab, select the printer port, then press **OK** button.

# *Paper Handling*



## Selecting Paper Types and Feed Source

One of the most important things you can do to assure the best possible print quality from your printer is to select the correct paper. Your printer produces letter quality output on most plain bond papers, including cotton bond and photocopying papers; it does not require special papers. However, the print quality varies with different paper types. Be sure to test a small quantity of paper before you purchase a large quantity.

You can print on any of the following paper types:

Type	Size	Feed Source	Capacity
Plain paper (20 to 30 lb)	Letter: 8 1/2 x 11" Legal: 8 1/2 x 14" Executive: 7 1/4 x 10 1/2" A4: 210 x 297 mm A5: 148 x 210 mm B5: 182 x 257 mm Folio: 8 1/2 x 13" Custom size	Automatic feeder	150 sheets (Approx.)
		Manual feeder	1 sheet
Envelopes	COM-10: 4 1/8 x 9 1/2" Monarch: 3 7/8 x 7 1/2" C5: 162 x 229 mm C6: 114 x 162 mm DL: 110 x 220 mm	Automatic feeder	10 envelopes (Approx.)
		Manual feeder	1 envelope
Transparency		Automatic feeder	10 items (Approx.)
Film Paper Labels		Manual feeder	1 item

### Notes:

- When you print, select the correct paper size and source in your application.
- Depending on paper thickness, the maximum capacity may be reduced.

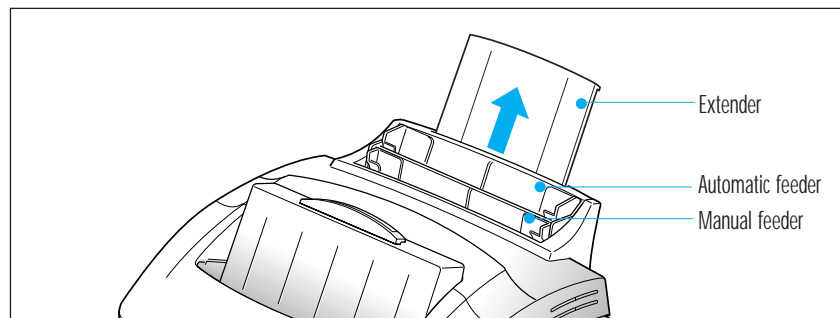
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## Loading Print Material

You can stack paper, envelopes, card stocks, labels, or transparencies in the automatic paper feeder to feed automatically. The automatic feeder can hold a maximum of 150 sheets of plain paper, and 10 envelopes or other print media. The maximum capacity may reduce, depending on the thickness.

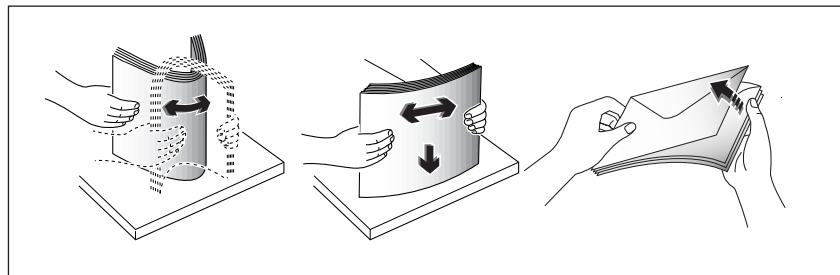
**Note:** If you experience feeding problems, try printing one at a time from the manual feeder. See page xx.

### 1. Pull the extender on the automatic feeder up until it stops.



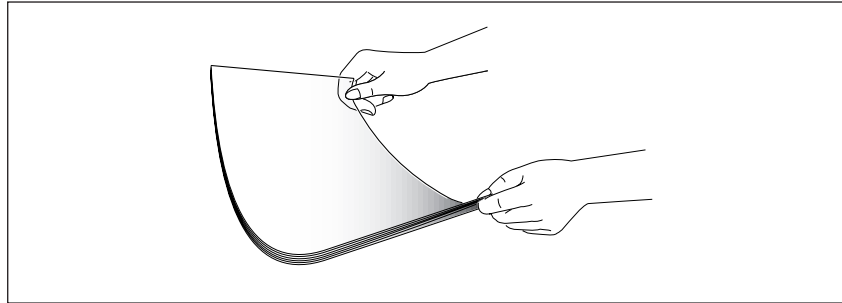
### 2. Prepare the print material for loading.

- For paper and envelopes:
  - Flex paper or fan envelopes back and forth. Do not fold or crease the paper. Straighten the edges on a level surface.

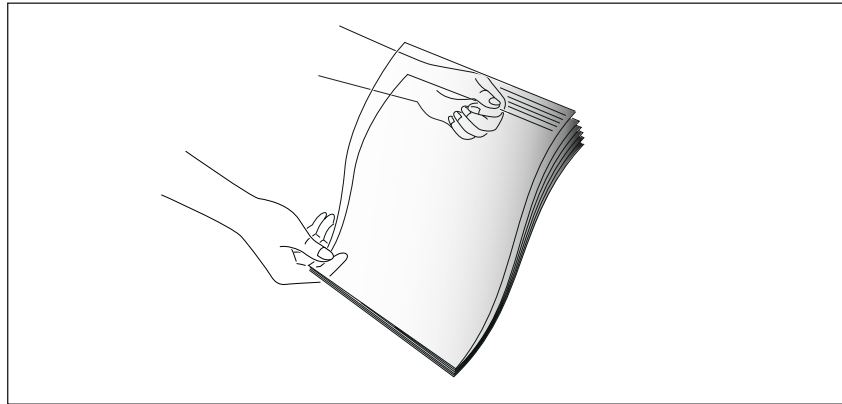


**Note:** If envelopes jam while printing, try reducing the number of envelopes in the automatic feeder.

- For transparencies:
  - Hold the transparencies by the edges and avoid touching the print side.

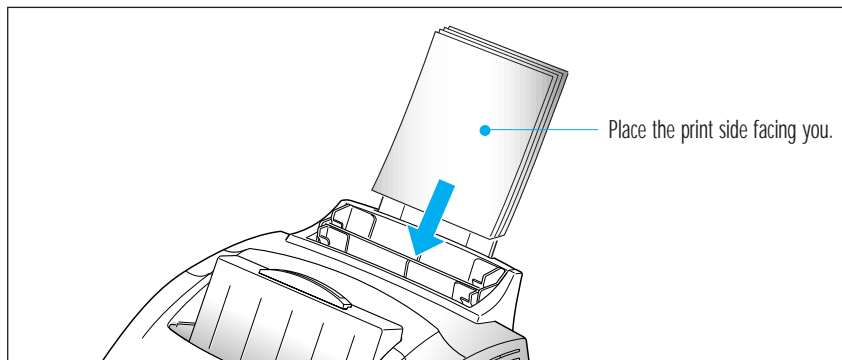


- Fan the stack of transparencies to prevent feeding failures. Be careful not to scratch or leave fingerprints on the print sides.

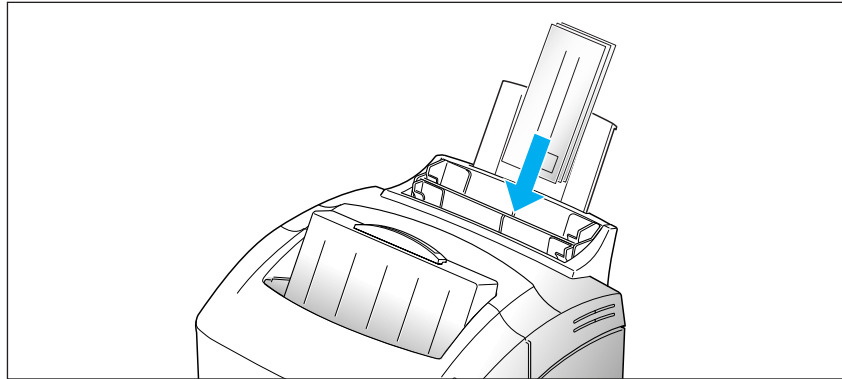


**3. Load the print material in the automatic feeder.** Do not load too much print material. Do not mix types. See the following directions to load each type of print material.

- Load paper or transparencies with the print side facing you.



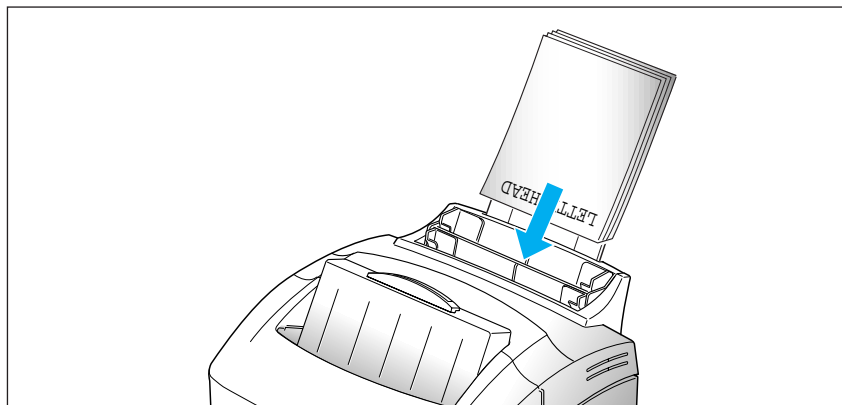
- Load envelopes with the flap side facing away from you. The stamp area is on the right side. The end of the envelope with the stamp area enters the feeder first.



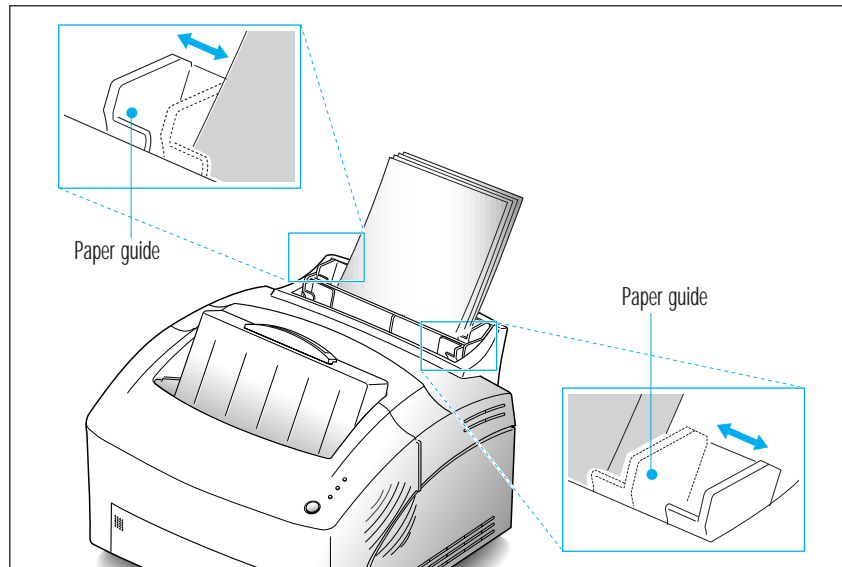
**Notes:**

- Do not feed stamped envelopes. The stamp is shown for placement only.
- Never use envelopes with clasps, snaps, windows, coated lining, or self-stick adhesives.
- These envelopes may severely damage the printer.

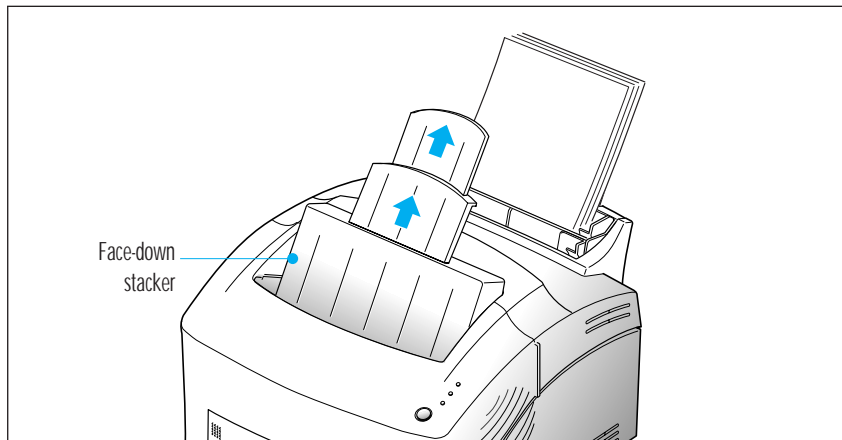
- Load letterhead paper with the design facing you. The top edge of the sheet with the logo should enter the printer first.



4. **Adjust the guides to the width of the print material.** Slide the guides until they lightly touch the stack of print material. Do not bend the print material.



5. **Pull up the extender on the face-down stacker.** The face-down stacker can hold a maximum of 100 printed pages.

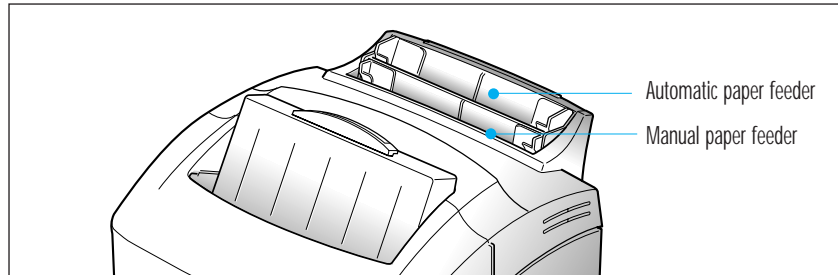


6. Before starting your print job, make sure you select the correct paper size and feed source in your application.

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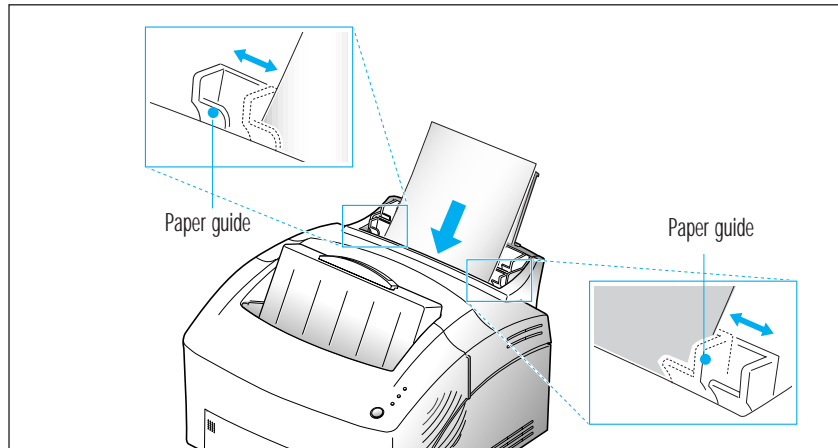
## Feeding Manually

Use the manual feeder to feed one sheet at a time into your printer. The manual feeder is in front of the automatic feeder.



1. If necessary, open the face-up stacker. See page xx.
2. Load the print material in the manual feeder and adjust the paper guides to the width of the print material.


See the instructions to load each type of material on page xx.

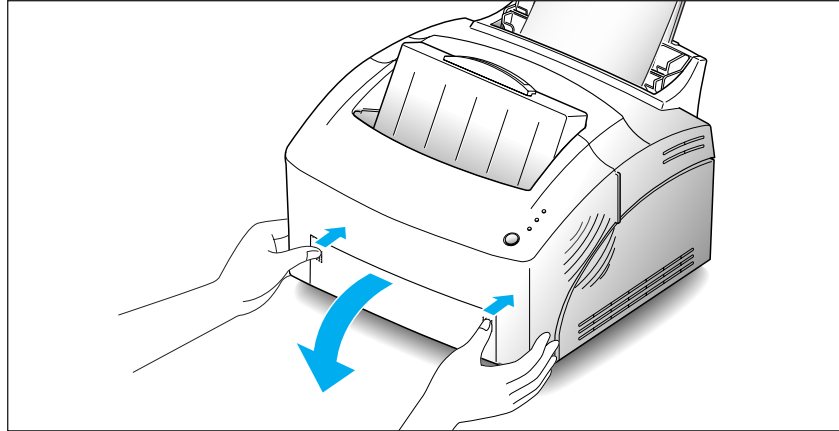


3. Push it all the way in.
4. Before starting your print job, make sure you select the correct paper size and feed source in your application.
5. Press the button on the operator panel. Printing starts.
6. If you have more than one page to print, the PAPER indicator blinks to alert you to feed the next sheet each time the printer is ready to print the next page. Press and hold the button for about 2 seconds until the printer pulls in the paper, and starts printing.

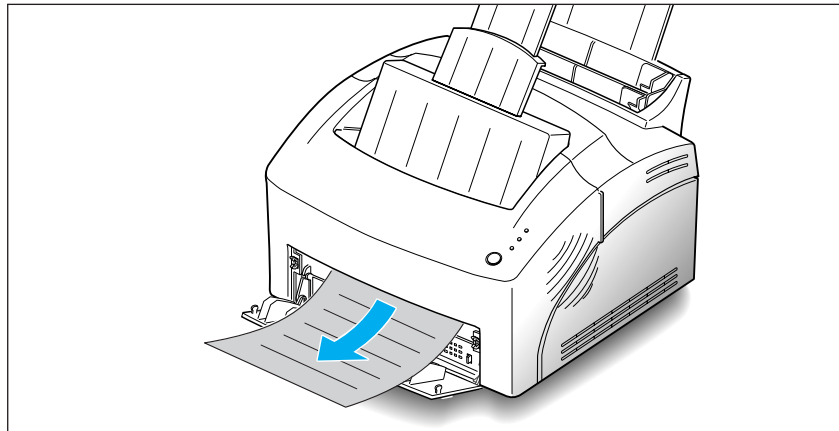
**Note:** If you press the button without paper in the manual feeder, the printer will automatically use paper into the automatic paper feeder.

## Using Face-up Stacker

1. Push both sides of the stacker marked  , and the stacker will open.



2. If you use the face-up stacker, printed pages exit through the front output path, with the printed side up.



### Notes:

- The face-up stacker may not hold the printed materials properly.
- The printed pages will not stack in the standard face-down stacker unless you close the face-up stacker. The face-down stacker can hold up to 100 printed pages. When you finish using the face-up stacker, you must close the face-up stacker.

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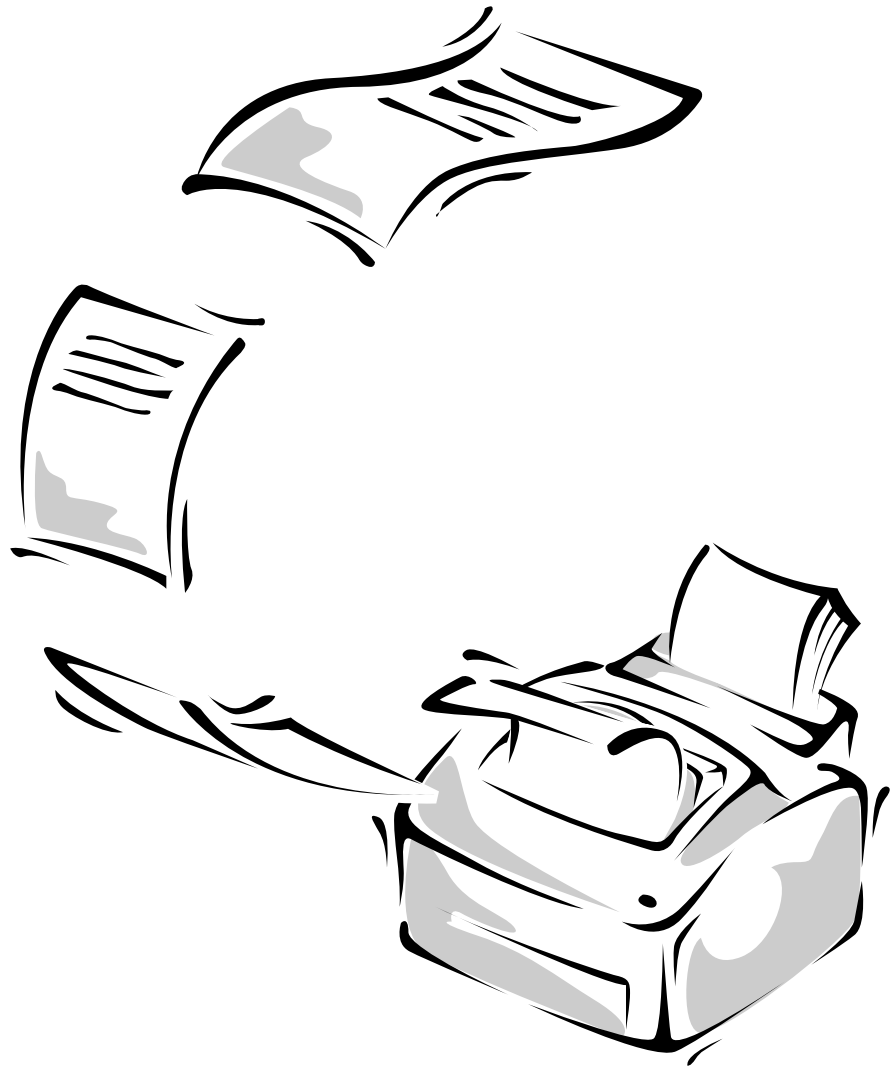
## Paper Guidelines

When selecting or loading paper, envelopes, or other special media, keep these guidelines in mind:

- Attempting to print on damp, curled, wrinkled, or torn paper can cause paper jams and poor print quality.
- Use cut-sheet paper only. You cannot use multipart paper.
- Use only high quality, copier grade paper. Avoid paper with embossed lettering, perforations, or texture that is too smooth or too rough.
- Colored paper should be of the same high quality as white photocopy paper. The pigments must withstand the printer's fusing temperature of 392 °F (200 °C) for 0.1 second without deterioration. Do not use paper with a colored coating that was added after the paper was produced.
- Pre-printed forms must be printed with non-flammable, heat-resistant inks that do not melt, vaporize, or release hazardous emissions when subject to the printer's approximately 392 °F (200 °C) fusing temperature for 0.1 second.
- Store paper in its ream wrapper until ready to use. Place cartons on pallets or shelves, not on the floor. Do not place heavy objects on top of the paper, whether it is packaged or unpackaged. Keep it away from moisture, or other conditions that can cause it to wrinkle or curl.
- During storage, moisture-proof wrap (any plastic container or bag) should be used to prevent dust and moisture from contaminating your paper.
- Always use paper and other media that conform with those listed under 'Specifications' on page xx.
- When you choose envelopes, use only well-constructed envelopes with sharp, and well creased folds.
  - DO NOT use envelopes with clasps and snaps.
  - DO NOT use envelopes with windows, coated lining, self-stick adhesives, or other synthetic materials.
  - DO NOT use damaged or poorly made envelopes.

# MEMO

# *Operating Your Printer*



## FCC Regulations

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 to 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.

Do not make any changes or modifications to the equipment unless specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of FCC Rules.

## Canadian Radio Interference Regulations

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled “Digital Apparatus”, ICES-003 of the Industry and Science Canada.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: “Appareils Numériques”, NMB-003 édictée par l’Industrie et Sciences Canada.

## EC Declaration of Conformity

We,

SAMSUNG ELECTRONICS CO.,LTD  
#259, Gong Dan-Dong, Gumi-City, Kyung Buk, Korea

declare sole responsibility that the

ML-5100A Laser printer

meets the intent of Directive 89/336/EEC for Electromagnetic Compatibility and Low Voltage Directive 73/23/EEC.

Compliance was demonstrated to the following specifications as listed in the official journal of the European Communities:

EN 50081-Emissions:

EN 55022 Radiated, Class B  
EN 55022 Conducted, Class B  
EN 60555-2 Power Harmonics

EN 50082-Immunity:

IEC 801-2 Electrostatic Discharge  
IEC 801-3 RF Radiated  
IEC 801-4 Fast Transient/Burst

EN 60950-Safety

# Laser Safety Statement

The printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR Subchapter J for Class I(1) laser products, and elsewhere is certified as a Class I laser product conforming to the requirements of IEC 825.

Class I laser products are not considered to be hazardous. The laser system and printer are designed so there is never any human access to laser radiation above a Class I level during normal operation, user maintenance, or prescribed service condition.

**WARNING** Never operate or service the printer with the protective cover removed from the Laser/Scanner assembly. The reflected beam, although invisible, can damage your eyes.



CAUTION	-INVISIBLE LASER RADIATION WHEN THIS COVER IS OPEN. DO NOT OPEN THIS COVER
VORSICHT	-UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSETZEN.
ATTENTION	-RAYONNEMENT LASER INVISIBLE EN CAS D'OVERTURE. DANGEREUSE AU FAISCEAU.
ATTENZIONE	-RADIAZIONE LASER INVISIBLE IN CASO DIAPERTURA. EVITARE L'ESPOSIZIONE AL FASCIO.
PRECAUCION	-RADIACION LASER IVISIBLE CUANDO SE ABRE. EVITAR EXPONERSE AL RAYO.
ADVARSEL	-USYNLIG LASERSTRÅLNING VED ÅBNING NÅR SIKKERHEDSBRYDERE ER UDE AF FUNKTION UNDGÅ UDSAETTELSE FOR STRÅLNING.
ADVARSER	-USYNLIG LASERSTRÅLNING NÅR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN. UNNGÅ EKSPONERING FOR STRÅLEN.
VARNING	-OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPAND OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN STRÅLEN ÄR FARLIG.
VARO	-AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE ÄLÄ KATSO SÄTEESEEN.

CAUTION

- Avoid exposure to invisible laser radiation when the development unit is not installed.

Laser product labels are located above the print cartridge.

CLASS 1 LASER PRODUCT  
LASER KLASSE 1  
LUOKAN 1 LASERLAITE  
APPAREL À LASER DE CLASSE 1  
TO IEC 825

Figure will be added

Safety Information

PRODUCT SAFETY

USA	UL 1950 (UL LISTING)
CANADA	CSA C22.2 No. 950 & UL 1950 (CSA Certification)
EEC (Europe)	IEC 60950/EN 60950 (TÜV GS Certification)
CB	IEC 60950

LASER SAFETY

EEC (Europe)	HD 194. & EN 60825
USA	21 CFR, Chapter 1, Subchapter J (CDRH Certified)

# Specifications

Engineer's Check Required

Item		Description	Remarks
Engine	Speed	8 PPM	
	Resolution	600 DPI	
	Developing method / Toner	Eletrophotography Non-mag monocomponent	
	Warm up time	Less than 30 sec.	at normal condition
	First print time	Less than 15 sec.	from idle mode
	Duty cycle	Maximum 30,000 pages per month	
	Size (w x d x h)	13.6 x 14 x 8.8 in (345 x 358 x 222.4 mm)	
	Weight	Less than 16.5 lb (7.5 Kg)	
	Power consumption	Printing: 150 W avg./450 W max. Sleep mode: Less than 30 W	USA: 100~127 VAC, 47~63 Hz EUROPE: 220~240 VAC, 47~63 Hz
	Noise level	Printing: <47 dB	
		Sleep mode: Background noise	
Paper Handling	Input capacity	150 sheets (automatic feeder) 1 sheet (manual feeder)	Multi-Page Feeding
	Output capacity	100 sheets in face-down stacker 1 sheet in face-up stacker	
	Paper size	A4, Letter, Legal, Executive, B5 COM-10, Monarch, DL, C5, C6, A5, Custom paper size	
Toner Cartridge	Type	Cartridge	
	Life time	5,000 pages at 5 % density	
	Charging / Transfer	Contact roller Charging & Transfer	
	Econo mode	Yes	
Controller	CPU	32 bit RISC CPU 33 MHz	By Controller
	Emulation	PCL5e	
	Memory	4 Mb Standard Max up to 32 Mb	
	Interface	IEEE1284 B type 1	