

SAMSUNG



SAMSUNG Laser Printer User's Guide

ML-2250 Series

For UK customers:

To reorder your consumables

Call 0800 3164060

For Technical Assistance

Call 0870 2420303

This manual is provided for information purposes only. All information included herein is subject to change without notice. Samsung Electronics is not responsible for any changes, direct or indirect, arising from or related to the use of this manual.

© 2004 Samsung Electronics Co., Ltd. All rights reserved.

- ML-2250, ML-2251N, ML-2252W and Samsung logo are trademarks of Samsung Electronics Co., Ltd.
- PCL and PCL 6 are trademarks of Hewlett-Packard company.
- IBM and IBM PC are trademarks of International Business Machines Corporation.
- Microsoft, Windows, Windows 9x, Windows Me, Windows 2000, Windows NT and Windows XP are registered trademarks of Microsoft Corporation.
- PostScript 3 is a trademark of Adobe System, Inc.
- All other brand or product names are trademarks of their respective companies or organisations.

CONTENTS

Chapter 1: **INTRODUCTION**

Special Features	1.2
Printer Components	1.5
Front View	1.5
Rear View	1.6
Understanding the Control Panel	1.7
On Line/Error and Toner Save LEDs	1.7
Cancel button	1.8

Chapter 2: **SETTING UP YOUR PRINTER**

Unpacking	2.2
Selecting a Location	2.3
Installing the Toner Cartridge	2.4
Loading Paper	2.7
Changing the Paper Size in the Paper Tray	2.9
Connecting a Printer Cable	2.11
For Local Printing	2.11
For Network Printing	2.13
Turning the Printer On	2.15
Printing a Demo Page	2.16
Installing Printer Software	2.17
Printer Driver Features	2.18
Installing Printer Software in Windows	2.19
Changing the Display Language	2.21
Reinstalling Printer Software	2.22
Removing Printer Software	2.23
Viewing the User's Guide	2.24

Chapter 3: USING PRINT MATERIALS

Choosing Paper and Other Materials	3.2
Sizes and Capacities	3.3
Guidelines for Paper and Special Materials	3.4
Selecting the Output Location	3.5
Printing to the Top Output Tray (Face down)	3.5
Printing to the Rear Output Tray (Face up)	3.6
Loading Paper	3.7
Using Tray1 or the Optional Tray2	3.8
Using the Multi-Purpose Tray	3.8
Using the Manual Feed Mode	3.12
Printing on Envelopes	3.14
Printing on Labels	3.17
Printing on Transparencies	3.19
Printing on Card Stock or Custom-sized Materials	3.21
Printing on Preprinted Paper	3.23

Chapter 4: PRINTING TASKS

Printing a Document	4.2
Cancelling a Print Job	4.5
Using a Favorite Setting	4.6
Using Help	4.6
Setting Paper Properties	4.7
Using the Toner Save Mode	4.9
Printing Multiple Pages on One Sheet of Paper (N-Up Printing)	4.11
Printing a Reduced or Enlarged Document	4.12
Fitting Your Document to a Selected Paper Size	4.13
Printing Posters	4.14
Using Watermarks	4.15
Using an Existing Watermark	4.15
Creating a Watermark	4.16
Editing a Watermark	4.17
Deleting a Watermark	4.17
Using Overlays	4.18
What is an Overlay?	4.18
Creating a New Page Overlay	4.18
Using a Page Overlay	4.20
Deleting a Page Overlay	4.21

Setting Graphic Properties	4.22
Using Output Options	4.25
Using the Status Monitor	4.26
Installing Status Monitor	4.26
Reinstalling Status Monitor	4.27
Removing Status Monitor	4.27
Opening the Troubleshooting Guide	4.27
Changing the Status Monitor Program Setting	4.28
About Sharing the Printer on a Network	4.29
Setting Up a Locally Shared Printer	4.30
In Windows 9x/Me	4.30
In Windows NT 4.0/2000/XP	4.31

Chapter 5: MAINTAINING YOUR PRINTER

Maintaining the Toner Cartridge	5.2
Redistributing Toner	5.3
Replacing the Toner Cartridge	5.5
Cleaning the Printer	5.5
Cleaning the Outside	5.5
Cleaning the Inside	5.5
Printing Configuration Pages	5.8
Consumables and Replacement Parts	5.9

Chapter 6: SOLVING PROBLEMS

Troubleshooting Checklist	6.2
Solving General Printing Problems	6.3
Clearing Paper Jams	6.7
In the Paper Feed Area	6.7
Around the Toner Cartridge	6.11
In the Paper Exit Area	6.12
Tips for Avoiding Paper Jams When Printing on the A5-sized Paper	6.13
Tips for Avoiding Paper Jams	6.14
Solving Print Quality Problems	6.15
Troubleshooting Error Messages	6.20
Common Windows Problems	6.21
Common Linux Problems	6.22

***Appendix A:* USING WINDOWS POSTSCRIPT DRIVER**

Installing PS Drivers	A.2
Installing PS Drivers	A.2
Reinstalling PS Drivers	A.3
Removing PS Drivers	A.3
Using PS Printer Driver Features	A.4
Accessing Printer Properties	A.4

***Appendix B:* USING YOUR PRINTER IN LINUX**

Installing the Printer Driver	B.2
System Requirements	B.2
Installing the Printer Driver	B.2
Changing the Printer Connection Method	B.6
Uninstalling the Printer Driver	B.7
Using the Configuration Tool	B.8
Changing LLPR Properties	B.10

***Appendix C:* PRINTING FROM DOS APPLICATIONS**

About the Remote Control Panel	C.2
Installing the Remote Control Panel	C.2
Reinstalling Remote Control Panel	C.3
Removing Remote Control Panel	C.3
Selecting Print Settings	C.4
Starting the Remote Control Panel	C.4
Using the Remote Control Panel Tabs	C.5

***Appendix D:* INSTALLING PRINTER OPTIONS**

Precautions When Installing Printer Options	D.2
Installing Memory and PostScript DIMMs	D.3
Removing the Memory or PS DIMM	D.6
Installing a Network Card	D.7
Installing an Optional Paper Tray	D.11

Appendix E: SPECIFICATIONS

Printer Specifications	E.2
Paper Specifications	E.3
Overview	E.3
Supported Sizes of Paper	E.4
Guidelines for Using Paper	E.5
Paper Specifications	E.6
Paper Output Capacity	E.6
Printer and Paper Storage Environment	E.7
Envelopes	E.8
Labels	E.10
Transparencies	E.10

Important Precautions and Safety Information

When using this machine, these basic safety precautions should always be followed to reduce risk of fire, electric shock, and injury to people:

- 1** Read and understand all instructions.
- 2** Use common sense whenever operating electrical appliances.
- 3** Follow all warnings and instructions marked on the machine and in the literature accompanying the machine.
- 4** If an operating instruction appears to conflict with safety information, heed the safety information. You may have misunderstood the operating instruction. If you cannot resolve the conflict, contact your sales or service representative for assistance.
- 5** Unplug the machine from the AC wall socket before cleaning. Do not use liquid or aerosol cleaners. Use only a damp cloth for cleaning.
- 6** Do not place the machine on an unstable cart, stand or table. It may fall, causing serious damage.
- 7** Your machine should never be placed on, near or over a radiator, heater, air conditioner or ventilation duct.
- 8** Do not allow anything to rest on the power cable. Do not locate your machine where the cords will be abused by persons walking on them.
- 9** Do not overload wall outlets and extension cords. This can diminish performance, and may result in the risk of fire or electric shock.
- 10** Do not allow pets to chew on the AC power or PC interface cords.
- 11** Never push objects of any kind into the machine through case or cabinet openings. They may touch dangerous voltage points, creating a risk of fire or shock. Never spill liquid of any kind onto or into the machine.
- 12** To reduce the risk of electric shock, do not disassemble the machine. Take it to a qualified service technician when repair work is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly could cause electric shock when the unit is subsequently used.

- 13** Unplug the machine from the PC and AC wall outlet, and refer servicing to qualified service personnel under the following conditions:
- When any part of the power cord, plug, or connecting cable is damaged or frayed.
 - If liquid has been spilled into the machine.
 - If the machine has been exposed to rain or water.
 - If the machine does not operate properly after instructions have been followed.
 - If the machine has been dropped, or the cabinet appears damaged.
 - If the machine exhibits a sudden and distinct change in performance.
- 14** Adjust only those controls covered by the operating instructions. Improper adjustment of other controls may result in damage, and may require extensive work by a qualified service technician to restore the machine to normal operation.
- 15** Avoid using this machine during a lightning storm. There may be a remote risk of electric shock from lightning. If possible, unplug the AC power for the duration of the lightning storm.
- 16** If you continuously print multiple pages, the surface of the output tray may become hot. Be careful not to touch the surface, and keep children away from the surface.
- 17** SAVE THESE INSTRUCTIONS.

Environmental and Safety Consideration

Laser Safety Statement

The printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR, chapter 1 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 Laser/Scanner assembly. The reflected beam, although invisible, can damage your eyes. When using this product, these basic safety precautions should always be followed to reduce risk of fire, electric shock, and injury to persons:



CAUTION - INVISIBLE LASER RADIATION
WHEN THIS COVER OPEN.
DO NOT OPEN THIS COVER.

VORSICHT - UNSICHTBARE LASERSTRAHLUNG,
WENN ABDECKUNG GEÖFFNET.
NICHT DEM STRAHL AUSSETZEN.

ATTENTION - RAYONNEMENT LASER INVISIBLE EN CAS
D'OUVERTURE. EXPOSITION DANGEREUSE
AU FAISCEAU.

ATTENZIONE - RADIAZIONE LASER INVISIBILE IN CASO DI
APERTURA. EVITARE L'ESPOSIZIONE AL FASCIO.

PRECAUCIÓN - RADIACIÓN LASER INVISIBLE CUANDO SE ABRE.
EVITAR EXPONERSE AL RAYO.

PERIGO - RADIAÇÃO LASER INVISÍVEL AO ABRIR. EVITE
EXPOSIÇÃO DIRECTA AO FEIXE.

GEVAAR - ONZICHTBARE LASERSTRALEN BIJ GEOPENDE
KLEP. DEZE KLEP NIET OPENEN.

ADVARSEL - USYNLIG LASERSTRÅLNING VED ÅBNING, NÅR
SIKKERHEDSBRYDERE ER UDE AF FUNKTION.
UNDGÅ UDSAETTELSE FOR STRÅLNING.

ADVARSEL - USYNLIG LASERSTRÅLNING NÅR DEKSEL
ÅPNES. STIRR IKKE INN I STRÅLEN. UNNGÅ
EKSPONERING FOR STRÅLEN.

VARNING - OSYNLIG LASERSTRÅLNING NÅR DENNA DEL
ÄR ÖPPEN OCH SPÅRREN ÄR URKOPPLAD.
BETRakta EJ STRÅLEN. STRÅLEN ÄR FARLIG.

VARO! - AVATTAESSA JA SUOJALUKITUS OHITETTAESSA
OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASER-
SÄTEILYLLE ÄLÄ KATSO SÄTEESEEN.

注意 - 严禁揭开此盖, 以免激光泄露灼伤

주의 - 이 덮개를 열면 레이저광에 노출될 수 있으므로
주의하십시오.

Ozone Safety



During normal operation, this machine produces ozone. The ozone produced does not present a hazard to the operator. However, it is advisable that the machine be operated in a well ventilated area.

If you need additional information about ozone, please contact your nearest Samsung dealer.

Power Saver



This printer contains advanced energy conservation technology that reduces power consumption when it is not in active use.

When the printer does not receive data for an extended period of time, power consumption is automatically lowered.

The energy star emblem does not represent EPA endorsement of any product or service.

Recycling



Please recycle or dispose of the packaging material for this product in an environmentally responsible manner.

Radio Frequency Emissions

FCC regulations

This device 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:

1. Reposition the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

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", ICES-003 édictée par l'Industrie et Sciences Canada.

United States of America

Federal Communications Commission (FCC)

Intentional emitter per FCC Part 15

Low power, Radio LAN type devices (radio frequency (RF) wireless communication devices), operating in the 2.4 GHz Band, may be present (embedded) in your printer system. This section is only applicable if these devices are present. Refer to the system label to verify the presence of wireless devices.

Wireless devices that may be in your system are only qualified for use in the United States of America if an FCC ID number is on the system label.

The FCC has set a general guideline of 20 cm (8 inches) separation between the device and the body, for use of a wireless device near the body (this does not include extremities). This device should be used more than 20 cm (8 inches) from the body when wireless devices are on. The power output of the wireless device (or devices), which may be embedded in your printer, is well below the RF exposure limits as set by the FCC.

This transmitter must not be collocated or operated in conjunction with any other antenna or transmitter.

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



Wireless devices are not user serviceable. Do not modify them in any way. Modification to a wireless device will void the authorization to use it. Contact manufacturer for service.



FCC Statement for Wireless LAN use:

"While installing and operating this transmitter and antenna combination the radio frequency exposure limit of 1mW/cm² may be exceeded at distances close to the antenna installed. Therefore, the user must maintain a minimum distance of 20cm from the antenna at all times. This device can not be collocated with another transmitter and transmitting antenna."

Declaration of Conformity (European Countries)

Approvals and Certifications



The CE marking applied to this product symbolises Samsung Electronics Co., Ltd. Declaration of Conformity with the following applicable 93/68/EEC Directives of the European Union as of the dates indicated:

January 1, 1995: Council Directive 73/23/EEC Approximation of the laws of the member states related to low voltage equipment.

January 1, 1996: Council Directive 89/336/EEC (92/31/EEC), approximation of the laws of the Member States related to electromagnetic compatibility.

March 9, 1999: Council Directive 1999/5/EC on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

A full declaration, defining the relevant Directives and referenced standards can be obtained from your Samsung Electronics Co., Ltd. representative.

EC Certification

Certification to 1999/5/EC Radio Equipment & Telecommunications Terminal Equipment Directive (FAX)

This Samsung product has been self-certified by Samsung for pan-European single terminal connection to the analogue public switched telephone network (PSTN) in accordance with Directive 1999/5/EC. The product has been designed to work with the national PSTNs and compatible PBXs of European countries.

In the event of problems, you should contact the Euro QA Lab of Samsung Electronics Co., Ltd. in the first instance.

The product has been tested against TBR21 and/or TBR 38. To assist in the use and application of terminal equipment which complies with this standard, the European Telecommunication Standards Institute (ETSI) has issued an advisory document (EG 201 121) which contains notes and additional requirements to ensure network compatibility of TBR21 terminals. The product has been designed against, and is fully compliant with, all of the relevant advisory notes contained in this document.

European Radio Approval Information (for products fitted with EU-approved radio devices)

This Product is a printer; low power, Radio LAN type devices (radio frequency (RF) wireless communication devices), operating in the 2.4 GHz band, may be present (embedded) in your printer system which is intended for home or office use. This section is only applicable if these devices are present. Refer to the system label to verify the presence of wireless devices.

Wireless devices that may be in your system are only qualified for use in the European Union or associated areas if a CE mark **CE** with a Notified Body Registration Number and the Alert Symbol is on the system label.

The power output of the wireless device or devices that may be embedded in your printer is well below the RF exposure limits as set by the European Commission through the R&TTE directive.

European States qualified under wireless approvals:

EU Austria, Belgium, Denmark, Finland, France (with frequency restrictions), Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, and the United Kingdom

Accept EU Iceland, Liechtenstein, Norway, and Switzerland

European States with restrictions on use:

EU In France, the frequency range is restricted to 2446.5-2483.5 MHz for devices above 10 mW transmitting power such as wireless

Accept EU No limitations at this time.

Regulatory Compliance Statements

Wireless Guidance

Low power, Radio LAN type devices (radio frequency (RF) wireless communication devices), operating in the 2.4 GHz Band, may be present (embedded) in your printer system. The following section is a general overview of considerations while operating a wireless device.

Additional limitations, cautions, and concerns for specific countries are listed in the specific country sections (or country group sections). The wireless devices in your system are only qualified for use in the countries identified by the Radio Approval Marks on the system rating label. If the country you will be using the wireless device in, is not listed, please contact your local Radio Approval agency for requirements. Wireless devices are closely regulated and use may not be allowed.

The power output of the wireless device or devices that may be embedded in your printer is well below the RF exposure limits as known at this time. Because the wireless devices (which may be embedded your printer) emit less energy than is allowed in radio frequency safety standards and recommendations, the manufacturer believes these devices are safe for use. Regardless of the power levels, care should be taken to minimize human contact during normal operation.

As a general guideline, a separation of 20 cm (8 inches) between the wireless device and the body, for use of a wireless device near the body (this does not include extremities) is typical. This device should be used more than 20 cm (8 inches) from the body when wireless devices are on and transmitting.

This transmitter must not be collocated or operated in conjunction with any other antenna or transmitter.

Some circumstances require restrictions in wireless devices. Examples of common restrictions are listed below:



Radio frequency wireless communication can interfere with equipment on commercial aircraft. Current aviation regulations require wireless devices to be turned off while traveling in an airplane. 802.11B (also known as wireless Ethernet) and Bluetooth communication devices are examples of devices that provide wireless communication.



In environments where the risk of interference to other devices or services is harmful or perceived as harmful, the option to use a wireless device may be restricted or eliminated. Airports, Hospitals, and Oxygen or flammable gas-laden atmospheres are limited examples where use of wireless devices may be restricted or eliminated. When in environments where you are uncertain of the sanction to use wireless devices, ask the applicable authority for authorization prior to use or turning on the wireless device.



Every country has different restrictions on the use of wireless devices. Since your system is equipped with a wireless device, when traveling between countries with your system, check with the local Radio Approval authorities prior to any move or trip for any restrictions on the use of a wireless device in the destination country.



If your system came equipped with an internal embedded wireless device, do not operate the wireless device unless all covers and shields are in place and the system is fully assembled.



Wireless devices are not user serviceable. Do not modify them in any way. Modification to a wireless device will void the authorization to use it. Please contact manufacturer for service.



Only use drivers approved for the country in which the device will be used. See the manufacturer System Restoration Kit, or contact manufacturer Technical Support for additional information.



ELECTRONICS

EU Declaration of Conformity (RTTE)

We, Samsung Electronics Co., Ltd.

of #259, GongDan-Dong, Gumi-Si, GyungBuk, KOREA 730-030

(factory name, address)

declare under our sole responsibility that the product

Laser Beam Printer

model "ML-2250, ML-2251N, ML-2252W"

to which this declaration relates is in conformity with

RTTE Directive 1999/5/EC (Annex II)

Low Voltage Directive 73/23/EEC

EMC Directive 89/336/EEC:92/31/EEC

By application of the following standards

RTTE : ETSI EN 300 328, , ETSI EN 301 489

LVD : EN 60950:1992 +A1+A2+A3+A4+A11

EMC : EN55022:1998, EN61000-3-2:1995+A1+A2:1998, EN61000-3-3:1995, EN55024:1998

(Manufacturer)

Samsung Electronics co.,ltd
#259, GongDan-Dong, Gumi-Si
KyungBuk, Korea 730-030

2003-03-17

(place and date of issue)

任煥強

Whan-Soon Yim / Senior Manager

(name and signature of authorized person)

(Representative in the EU)

Samsung Electronics Euro QA Lab.
Blackbushe Business Park
Saxony Way, Yateley, Hampshire
GU46 6GG, UK

2003-03-17

(place and date of issue)

任煥強

In-Seop Lee / Manager

(name and signature of authorized person)

1

INTRODUCTION

Congratulations on the purchase of your printer!

This chapter includes:

- **Special Features**
- **Printer Components**
- **Understanding the Control Panel**

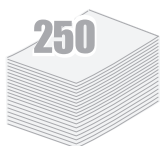
Special Features

Your new printer is equipped with special features that improve the print quality, giving you a competitive edge. You can:



Print with excellent quality and high speed

- You can print at up to **1200 dpi** effective output. See page 4.22.
- Your printer prints up to **22 pages-per-minute (Letter size)**, up to **20 pages-per-minute (A4 size)**.



Handle paper flexibly

- A 50-sheet **Multi-Purpose Tray** supports letterhead, envelopes, labels, transparencies, custom-sized materials, postcards, and heavy paper.
- **Standard 250-sheet input tray (Tray1)** and **optional 250-sheet input tray (Tray2)** supports all standard sizes of paper.
- Two output tray; select either **the top output (face-down)** or **the rear output tray (face-up)** for the most convenient access.
- **Straight-through paper path** capability from the Multi-Purpose Tray to the rear output tray.



Create professional documents

- You can customise your documents using **Watermarks**, such as "Confidential". See page 4.15.
- Print **Posters**. The text and pictures of each page of your document are magnified and printed across the selected sheet of paper. After the document has printed, trim off the white edges of each sheet. Tape the sheets together to form a poster. See page 4.14.



Save time and money

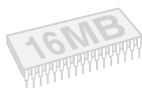
- This printer allows you to use **Toner Save mode** to save toner. See page 4.9.
- You can print multiple pages on one single sheet of paper to save paper (**N-Up printing**). See page 4.11.
- Preprinted forms and letterheads can be printed on plain paper. See "Using Overlays" on page 4.18.
- This printer automatically **conserves electricity** by substantially reducing power consumption when not printing.
- This printer meets **Energy Star** guidelines for energy efficiency.

1



Print in various environments

- You can print in **Windows 95/98/Me/NT 4.0/2000/XP**.
- Your printer is compatible with **Linux**.
- Your printer comes with both **Parallel** and **USB** interfaces.
- You can print in a network environment. The ML-2251N and ML-2252W come with a built-in network interface, 10/100 Base TX. The ML-2252W also has a wireless network interface. However, you need to add the optional network interface card to the ML-2250 for network printing.



Expand printer capacity

- This printer has 16 MB of memory which can be expanded to **144 MB**.
- An optional **PostScript 3 Emulation with 136 fonts** (PS) DIMM adds PS printing.
- **Network interface** enables network printing. You can add the optional network interface card to the ML-2250.

The ML-2251N and ML-2252W come with a built-in network interface, 10/100 Base TX. The ML-2252W also has a wireless network interface.

* PostScript 3 Emulation



(c) Copyright 1998-2003 Zoran Corporation. All rights reserved. Zoran, the Zoran logo, IPS/PS3 and OneImage are trademarks of Zoran Corporation.

* 136 PS3 fonts

Contains UFST and MicroType from Agfa Monotype Corporation.

Printer Features

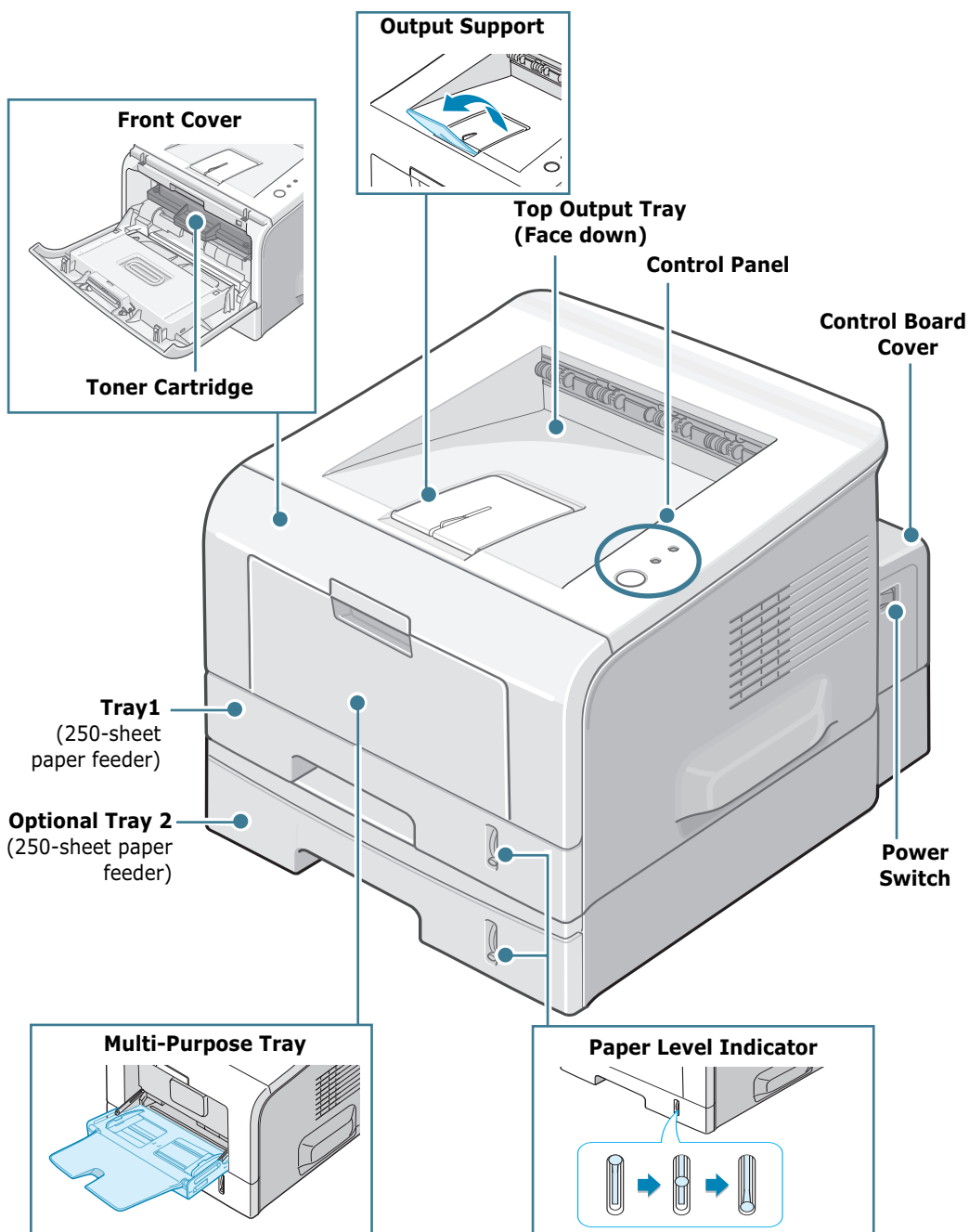
The table below lists a general overview of features supported by your printer.

(S: Standard, O: Option)

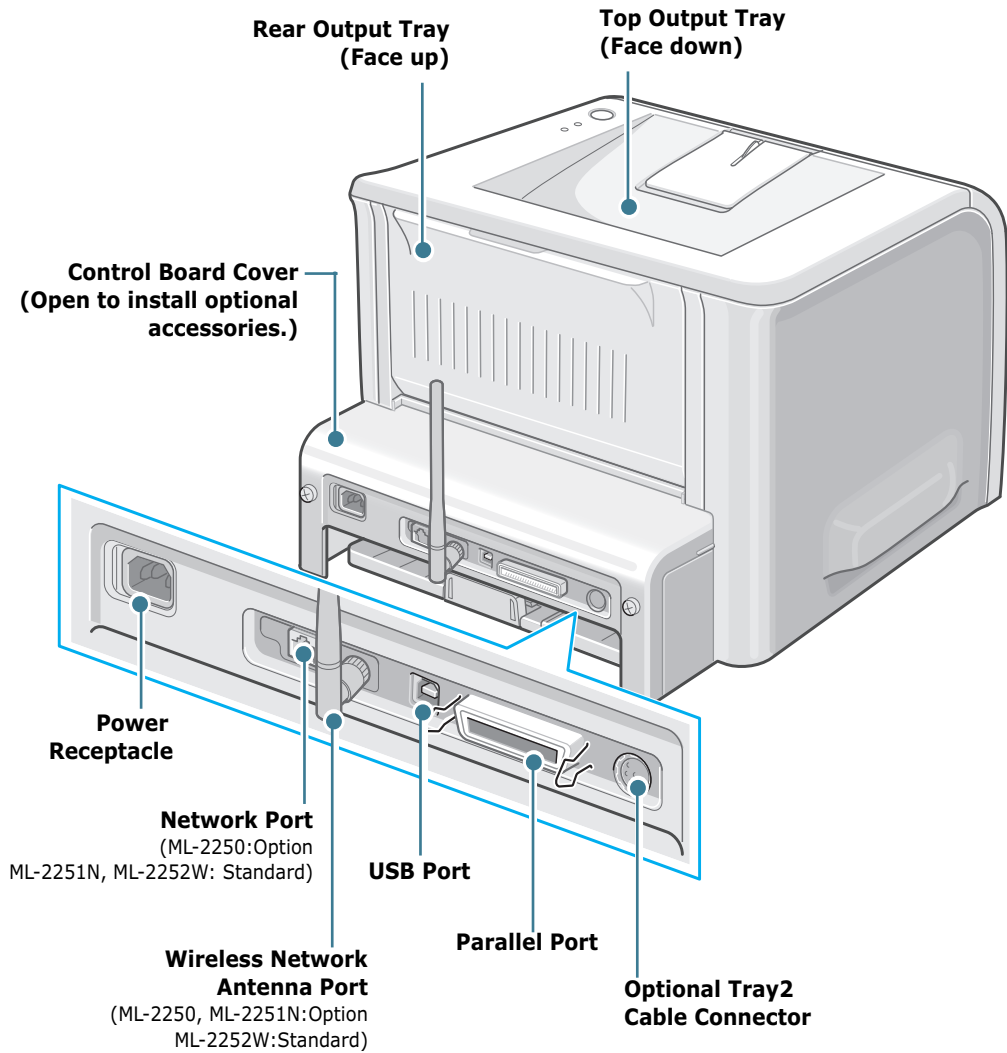
Features	ML-2250	ML-2251N	ML-2252W
IEEE 1284 Parallel	S	S	S
USB 2.0	S	S	S
Network Interface (Ethernet 10/100 Base TX)	O	S	S
Wireless LAN (802.11b Wireless LAN)	O	O	S
PostScript Emulation	O	O	O

Printer Components

Front View

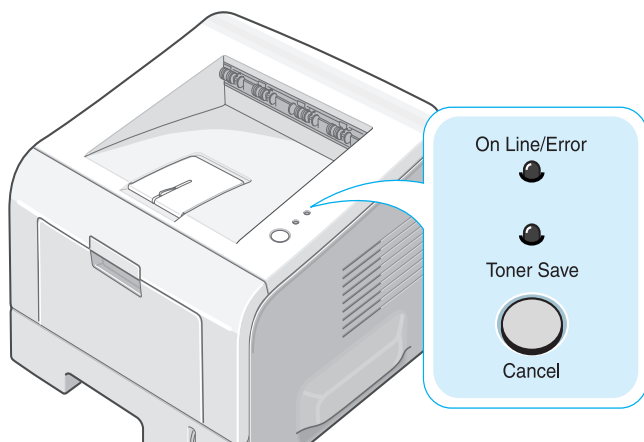


Rear View



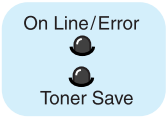
*The figure above shows a ML-2252W.

Understanding the Control Panel



On Line/Error and Toner Save LEDs

LED	Description
	If the On Line/Error lights green, the printer is ready to print.
	If the On Line/Error lights red, the printer is experiencing an error, such as jammed paper, no paper, open cover, or uninstalled toner cartridge. See "Troubleshooting Error Messages" on page 6.20.
	If you press the Cancel button while the printer is receiving data, the On Line/Error LED blinks red to cancel printing.
	In Manual Feed mode, if there is no paper in the Multi-purpose tray, the On Line/Error LED blinks red. Load paper into the Multi-purpose tray and the LED stops blinking.
	If the printer is receiving data, the On Line/Error LED slowly blinks green. If the printer is printing the received data, the On Line/Error LED blinks green fast.
	If you press the Cancel button while in Ready mode, this LED lights and the Toner Save mode is enabled. If you press this button once again, this LED turns off and the Toner Save mode is disabled.

LED	Description
	If the On Line/Error and Toner Save LEDs blink, your system has some problem. To solve the problem, see "Troubleshooting Error Messages" on page 6.20.

Cancel button

Function	Description
Printing demo page	In Ready mode, press and hold this button for about 2 seconds until all LEDs blink slowly, and release.
Printing configuration sheets	In Ready mode, press and hold this button for about 6 seconds until all LEDs blink fast, and release. If your printer has a network card, the network configuration sheet prints out with a printer configuration sheet.
Network card Default Setting (When you use the Network card)	In Ready mode, press and hold this button for about 20 seconds until all LEDs blink slowly, and release. This item restores the factory default of the network configuration. This setting will only take effect after you have reset the printer.
Manual Feeding	Press this button each time you load paper in the Multi-purpose tray, when you have selected Manual Feed for Source from your software application. For detailed information, see "Using the Manual Feed Mode" on page 3.12.
Cleaning inside printer	In Ready mode, press and hold this button for about 10 seconds until all LEDs turn on, and release. After cleaning the printer, one "cleaning sheet" (see page 5.7) is printed.
Canceling print job	Press this button during printing. The On Line/Error LED blinks while the print job is cleared from both the printer and the computer, and then the printer returns to Ready mode. This may take some time depending on the size of the print job.
Toner Save mode on/off	In Ready mode, press this button to turn the Toner Save mode on or off. For detailed information, see "Using the Toner Save Mode" on page 4.9.



2

SETTING UP YOUR PRINTER

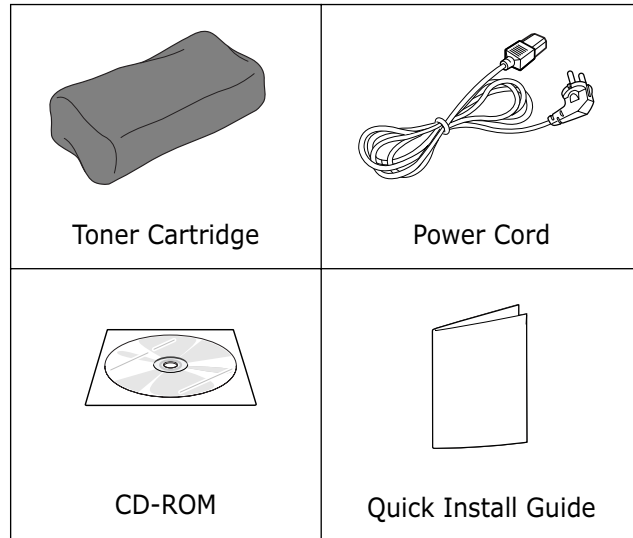
This chapter provides step by step information on setting up your printer.

This chapter includes:

- **Unpacking**
- **Installing the Toner Cartridge**
- **Loading Paper**
- **Connecting a Printer Cable**
- **Turning the Printer On**
- **Printing a Demo Page**
- **Installing Printer Software**
- **Viewing the User's Guide**

Unpacking

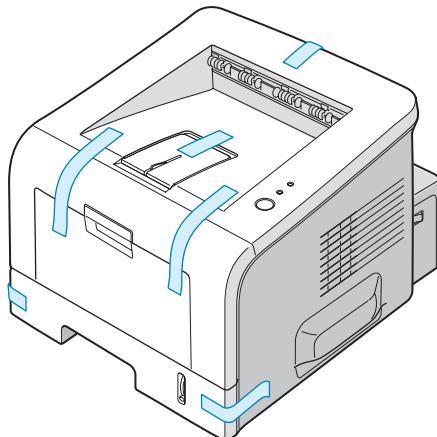
- 1 Remove the Printer and all accessories from the packing carton. Make sure that the printer has been packed with the following items:



NOTES:

- If any items are missing or damaged, notify your dealer immediately.
- **Components may differ from one country to another.**
- The CD-ROM contains the printer driver, the User's Guide, and the Adobe Acrobat Reader programme.

- 2 Carefully remove all of the packing tape from the printer.

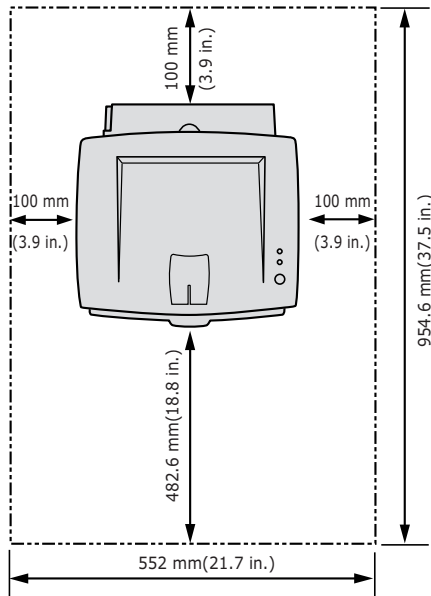


Selecting a Location

Select a level, stable place with adequate space for air circulation. Allow extra space for opening covers and tray(s). The area should be well-ventilated and away from direct sunlight or sources of heat, cold, and humidity. See the image below for clearance space. Do not place the printer close to the edge of your desk or table.

2

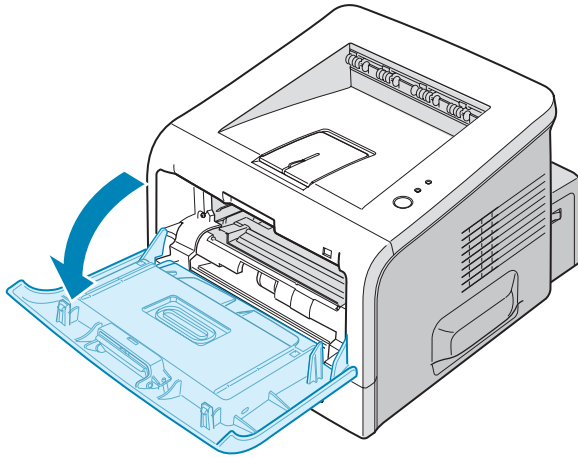
Clearance Space



- **Front:** 482.6 mm (enough space so that tray(s) can be removed)
- **Back:** 100 mm (enough space to allow opening of the rear out tray)
- **Right:** 100 mm (enough space for ventilation)
- **Left:** 100 mm

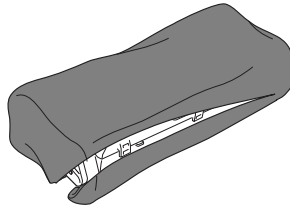
Installing the Toner Cartridge

- 1 Grasp the front cover and pull it toward you to open.



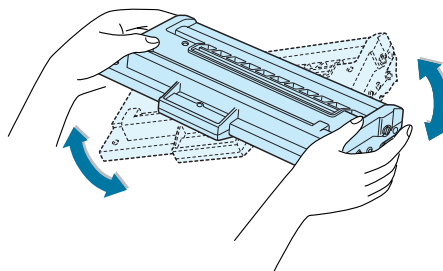
NOTE: Because the printer is very light, it may move when you use it; for example, when opening/closing the tray or installing/removing the toner cartridge. Be careful not to move the printer.

- 2 Remove the toner cartridge from its bag and remove the paper covering the cartridge.



Don't use a knife or other sharp object as it might scratch the drum of the cartridge.

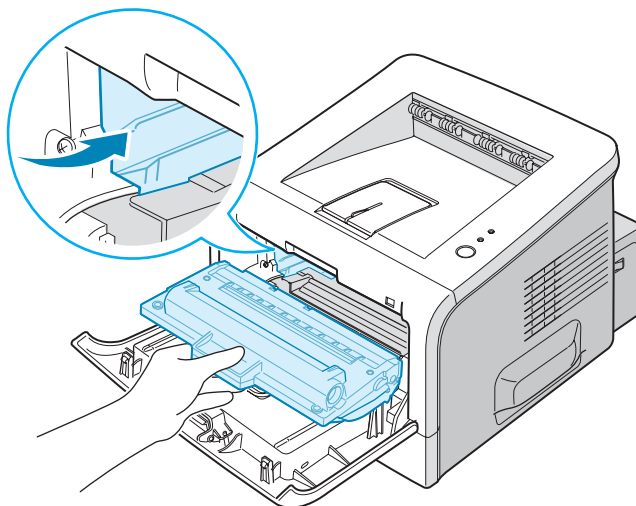
- 3** Gently shake the cartridge from side to side to distribute the toner evenly inside the cartridge.



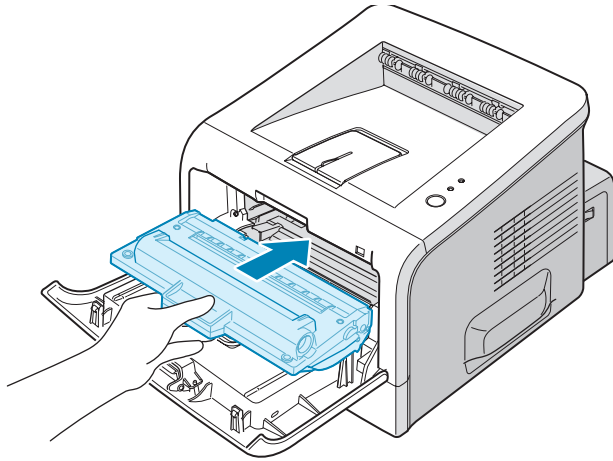
CAUTIONS:

- To prevent damage, do not expose the toner cartridge to light for more than a few minutes. Cover it with a piece of paper if left exposed for more than a few minutes and keep it in a flat and clean place.
- If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.

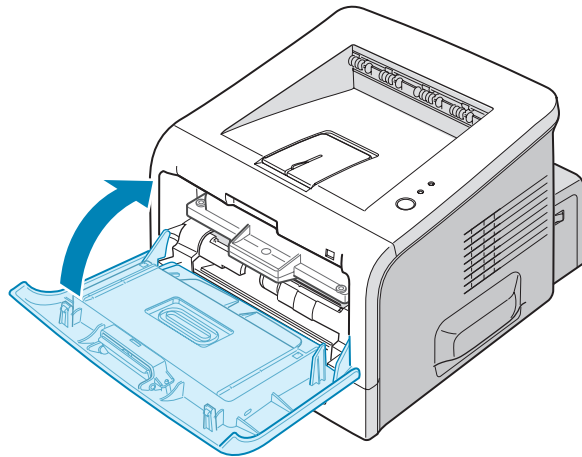
- 4** Locate the cartridge slots inside the printer, one on each side.



- 5** Grasp the handle and insert the cartridge into the printer until it snaps into place.



- 6** Close the front cover. Make sure that the cover is securely closed.

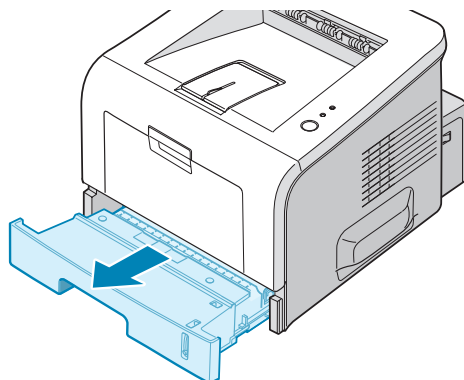


NOTE: When printing text at 5% coverage, you can expect a toner cartridge life of approximately 5,000 pages (3,000 pages for the toner cartridge that is shipped with the printer).

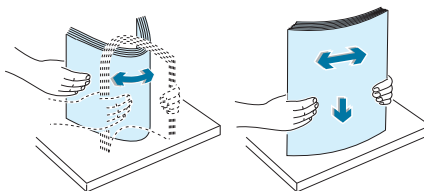
Loading Paper

You can load approximately 250 sheets of paper in the tray.

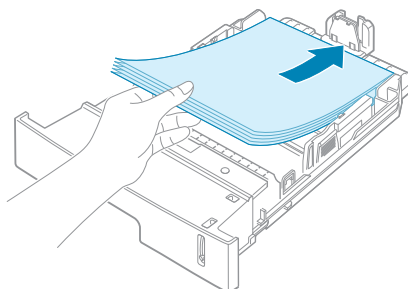
- 1 Pull the tray out of the printer.



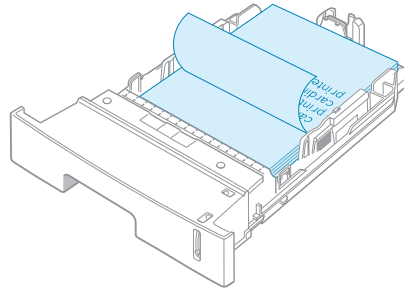
- 2 Prepare a stack of paper for loading by flexing or fanning the paper back and forth. Straighten the edges on a level surface.



- 3 Load paper **with the print side facing down**.



You can load previously printed paper. The printed side should be facing up with an uncurled edge on top. If you experience problems with paper feed, turn the paper around.

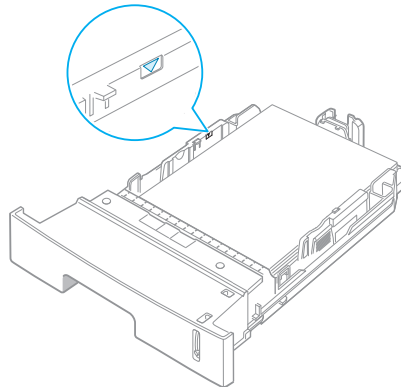


Make sure that all four corners are flat in the tray.

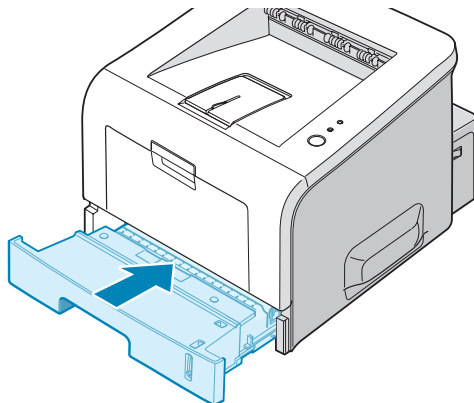


NOTE: If you want to change the paper size in the tray, see "Changing the Paper Size in the Paper Tray" on page 2.9.

- 4 Pay attention to the paper limit mark on the left inside wall of the tray. Paper overloading may cause paper jams.



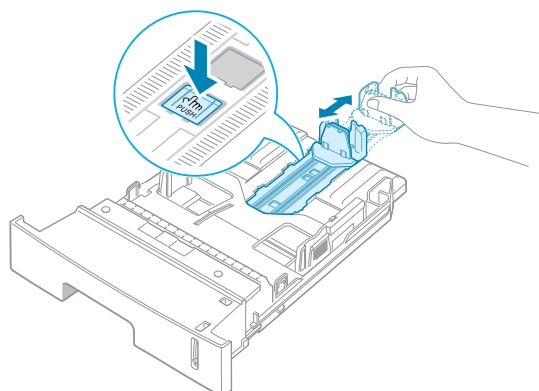
- 5 Slide the tray back into the printer.



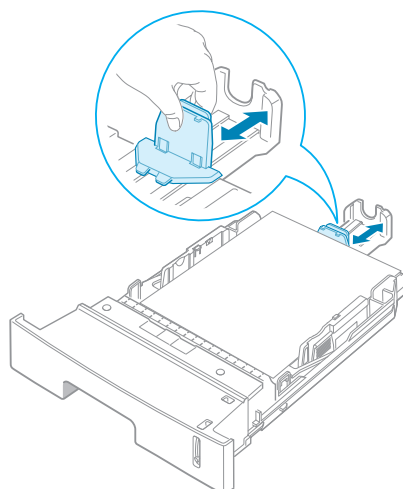
Changing the Paper Size in the Paper Tray

To load longer sizes of paper, you need to adjust the paper guides to extend the paper tray.

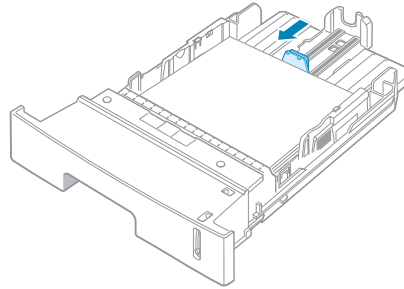
- 1 Pressing and unlatching the guide lock, slide the paper length guide out completely to extend the paper tray to its full length.



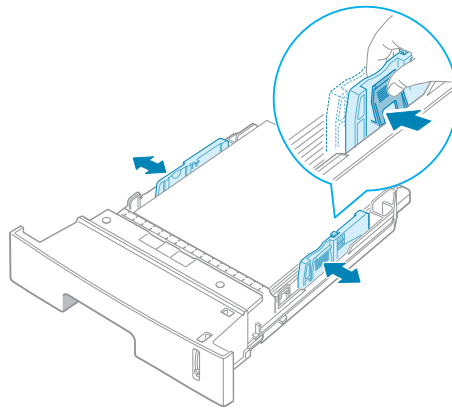
- 2 After inserting paper into the tray, slide in the guide until it lightly touches the end of the paper stack.



For the paper smaller than Letter, adjust the front paper length guide.

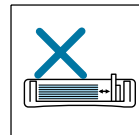
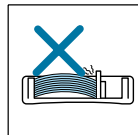
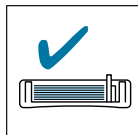


- 3** Pinching the paper width guide as shown, move it toward the stack of paper until it lightly touches the side of the stack.



NOTES:

- Do not push the paper width guide far enough to cause the materials to warp.
- If you do not adjust the paper width guide, it may cause paper jams.



Connecting a Printer Cable

For Local Printing

To print from your computer in a local environment, you need to connect your printer to the computer with either a parallel interface cable or a Universal Serial Bus (USB) cable.

2

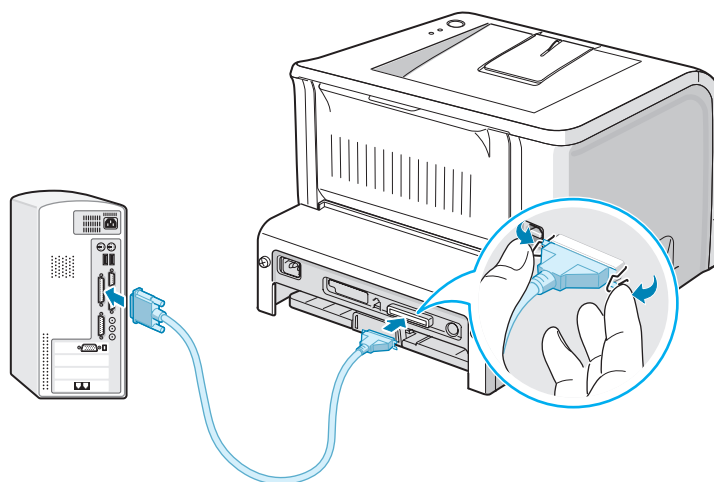
Using a Parallel Cable



NOTE: To connect the printer to the parallel port of the computer requires a certified parallel cable. You will need to buy an IEEE1284 compliant cable.

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

Push the metal clips down to fit inside the notches on the cable plug.



- 3 Connect the other end of the cable to the parallel interface port on your computer, and tighten the screws.

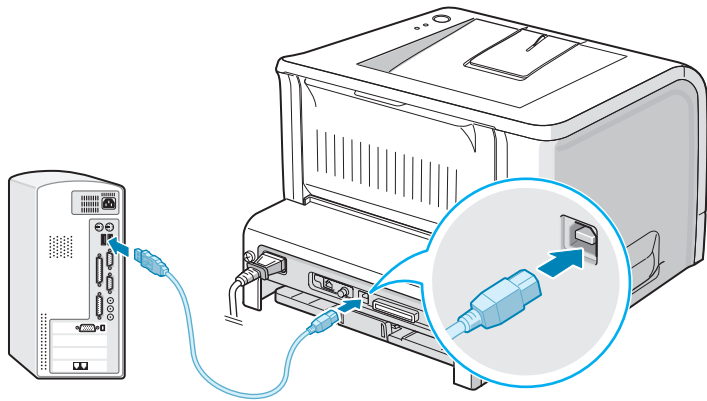
See your computer User's Guide, if you need help.

Using a USB Cable



NOTE: Connecting the printer to the USB port of the computer requires a certified USB cable. You will need to buy a USB 2.0 compliant cable that is at least 3 m in length.

- 1 Make sure that both the printer and the computer are turned off.
- 2 Plug the USB printer 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 User's Guide, if you need help.



NOTE: For using a USB cable, you must be running Windows 98/Me/2000/XP.

For Network Printing

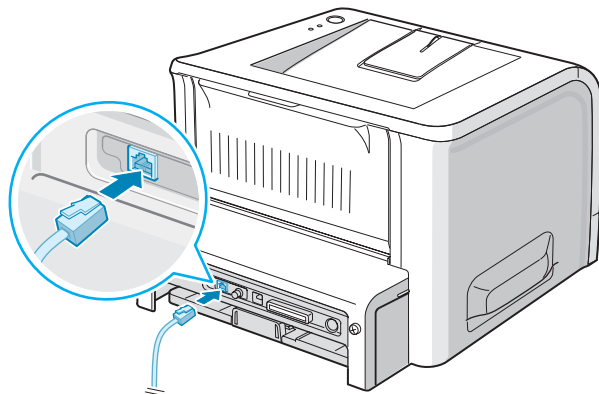
You can attach your ML-2251N or ML-2252W printer to a network using an Ethernet cable (UTP cable with RJ.45 connector).

The ML-2252W also has a network antenna which allows you to use a wireless LAN interface.

If you are an ML-2250 user, you need to install the optional network interface card. For an ML-2251N printer, you can replace the network interface card with one supporting the wireless LAN interface. For details about installing the card, see page D.7.

2

- 1 Make sure that both the printer and the computer are turned off.
- 2 Plug one end of the Ethernet cable into the Ethernet network port on the Printer.



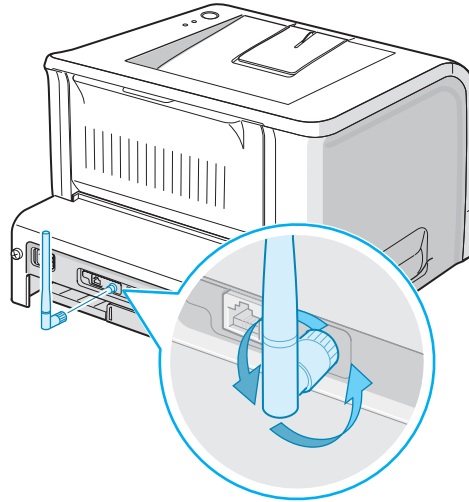
To the network LAN connection

- 3 Plug the other end of the cable into a network LAN connection.

See your computer User's Guide, if you need help.

Using a Network Antenna

- 1 Screw the wireless network antenna counterclockwise into the port.
- 2 Set the antenna upright.

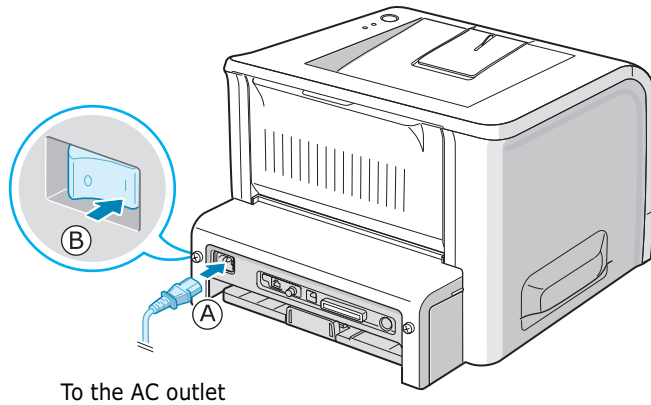


NOTE: After connecting the printer, you need to configure the network parameters. For information about configuring and using the printer in a network environment, refer to the User's Guide provided with the network interface card.

Turning the Printer On

- 1 Plug the power cord into the power receptacle on the back of the printer.
- 2 Plug the other end into a properly grounded AC outlet and turn on the printer using the power switch.

2



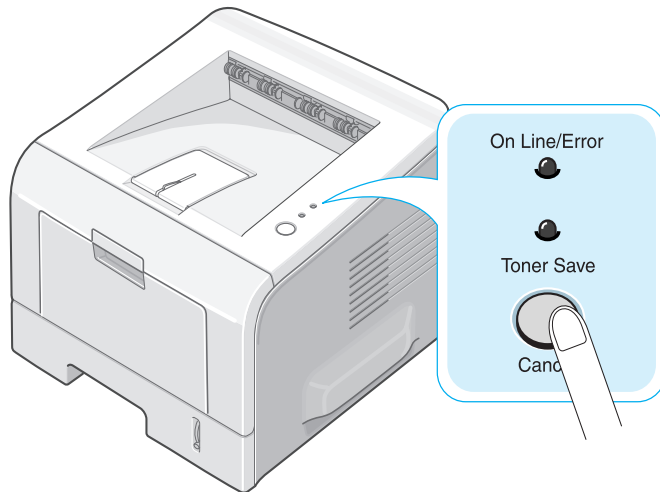
CAUTIONS:

- The fusing area at the rear portion of the inside of your printer is hot when powered. Be careful not to be burned when accessing this area.
- Do not disassemble the printer when it is powered. Doing so may give you an electric shock.

Printing a Demo Page

Print a demo page to make sure that the printer is operating correctly.

- 1 Hold down the **Cancel** button for about 2 seconds to print a demo page.



- 2 A demo page showing the printer's features and capabilities prints out.

Installing Printer Software

The supplied CD-ROM contains Windows printing software, Linux printing software, DOS RCP, an on-line User's Guide and Acrobat Reader to view the User's Guide.

If you are printing from Windows:

You can install the following printer software using the CD-ROM.

- **Samsung Proprietary printer driver** for Windows. Use this driver to take full advantage of your printer's features. See page 2.19.
- **PostScript** Printer Description (PPD) file for Windows to allow installation of the PostScript driver. For information about installing the PostScript driver, refer to Appendix B in the User's Guide.
- **Status Monitor** appears when printing error occurs. See page 4.26.
- **Remote Control Panel** for DOS applications. This Windows-based program is automatically installed when you install the printer driver. For information about using the program, refer to Appendix D in the User's Guide.

If you are printing in Linux:

For information about installing the Linux driver, refer to Appendix C in the User's Guide. To view the User's Guide, see page B.2.

Printer Driver Features

Your printer drivers will support the following standard features:

- Paper source selection
- Paper size, orientation and media type
- number of copies

The table below lists a general overview of features supported by your printer drivers.

Driver Feature	Samsung Proprietary printer driver			PostScript		
	Win 2000/XP	Win 9x	Win NT4.0	Win 2000/XP	Win 9x	Win NT4.0
Toner Save	Y	Y	Y	Y	Y	Y
Print quality option	Y	Y	Y	Y	Y	Y
Poster printing	Y	Y	Y	N	N	N
Multiple pages per sheet (N-up)	Y	Y	Y	Y	Y	Y
Scale printing	Y	Y	Y	Y	Y	Y
Fit to page printing	Y	Y	Y	Y	Y	Y
Different source for first page	Y	Y	Y	N	N	N
Watermark	Y	Y	Y	N	N	N
Overlay	Y	Y	Y	N	N	N
Print order	Y	Y	Y	Y	Y	Y

Installing Printer Software in Windows

System Requirements

Verify the following:

- At least **32 MB** (Windows 9x/Me), **64 MB** (Windows 2000/NT), **128 MB** (Windows XP) or more of RAM is installed on your PC.
- There is at least **300 MB** of free disk space on your PC.
- All applications are closed on your PC before beginning installation.
- You are using Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, or Windows XP.
- You are using at least Internet Explorer 5.0.

2

Installing Printer Software

All applications should be closed on your PC before beginning installation.



NOTE: Cancel the "New Hardware Found" window when your computer boots up.

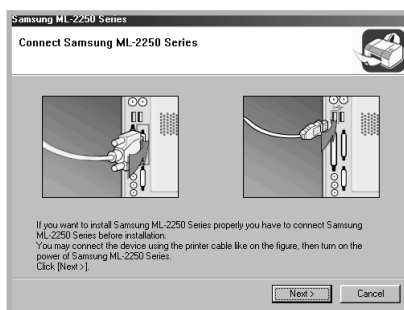
- 1 Insert the supplied CD-ROM into your CD-ROM drive.

The CD-ROM should automatically run and an maintenance window appears.

If the maintenance window does not appear, click **Start** and then **Run**. Type **X:\Setup.exe**, replacing "**X**" with the letter of your drive and click **OK**.

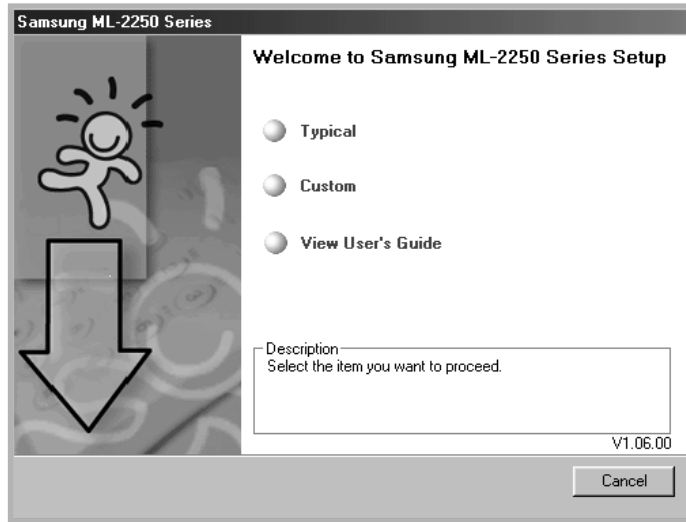


NOTE: If your machine is not connected to the computer, the following window will appear.

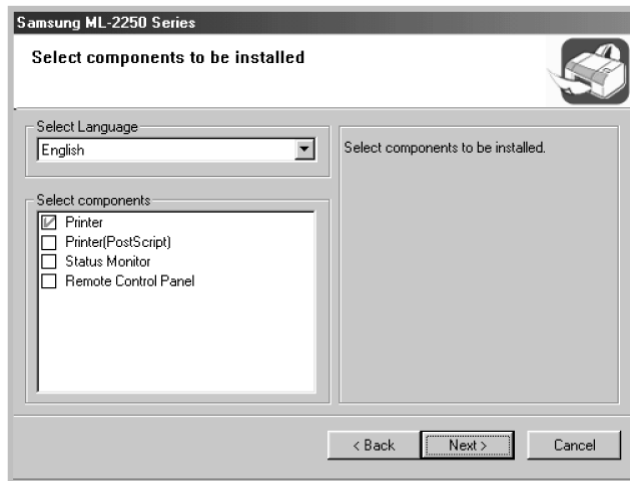


- After connecting the machine, click **Next**.
- If you want to skip the connection status, click **Next**, and **No** to the following screen. Then the installation will start and the test page will not be printed at the end of the installation.

2 Choose the installation type.



- **Typical:** Installs the common software for your printer, such as printer driver, and User's Guide. This is recommended for most users.
- **Custom:** Allows you to choose the language of the software and the components you want to install. After selecting the language and the component(s), click **Next**.



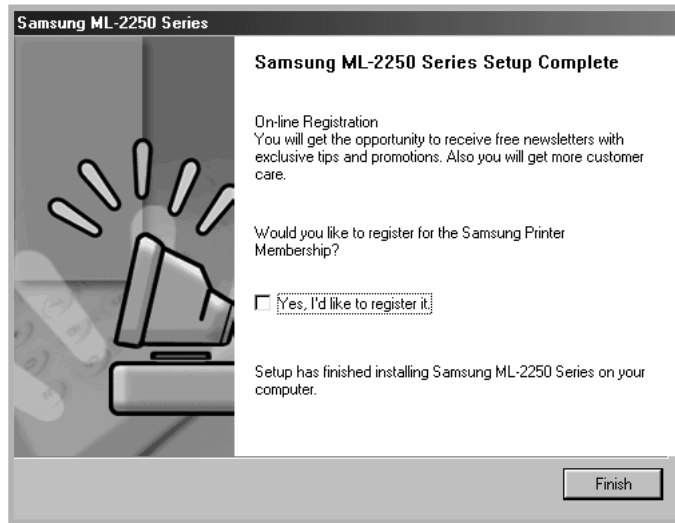
- **View User's Guide:** Opens Samsung ML-2250 Series User's Guide. If your computer doesn't have Adobe Acrobat, click on this option and it will automatically install Adobe Acrobat Reader for you.

3 After the installation is finished, the window asking you to print a test page appears. If you choose to print a test page, select the check box and click **Next**.

4 When the test page prints out correctly, click **Yes**.

If not, click **No** to reprint it.

- 5 To register yourself as a user of Samsung Printers, select the checkbox and click **Finish**. You are now accessed to the Samsung web site.



2



NOTES:

- When you want to use your machine with the parallel cable, remove the USB cable and connect the parallel cable. Then reinstall the printer driver; select **Start → Programs → Samsung ML-2250 Series → Maintenance → Repair → Printer**. If you have replaced the parallel cable with the USB cable, do the same to reinstall the driver.
- If your printer doesn't work properly, reinstall the printer driver.

Changing the Display Language

After installation of the software, you can change the display language.

- 1 From the **Start** menu, select **Programs**.
- 2 Select **Samsung ML-2250 Series**, and **Language Selection**.
- 3 Select the desired language from the language selection window, and click **OK**.

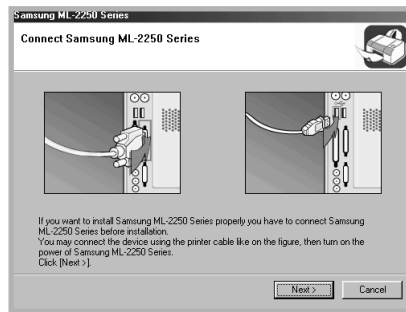
Reinstalling Printer Software

Repair is required if your installation fails.

- 1 From the **Start** menu, select **Programs**.
- 2 Select **Samsung ML-2250 Series**, and then **Maintenance**.
- 3 Select **Repair**.

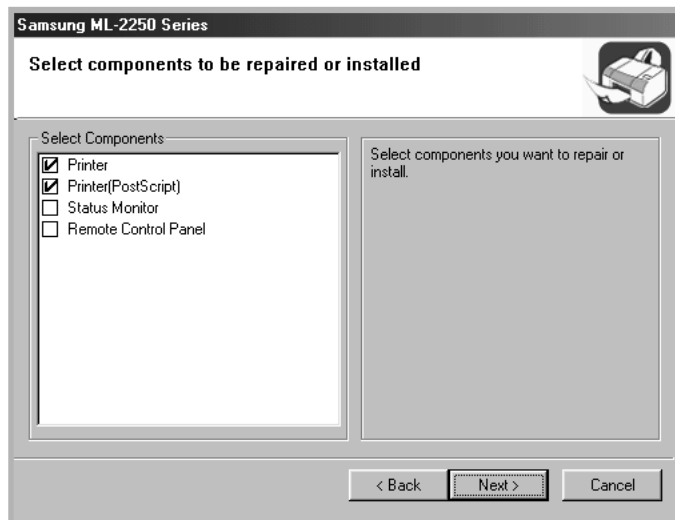


NOTE: If your machine is not connected to the computer, the following window will appear.



- After connecting the machine, click **Next**.
- If you want to skip the connection status, click **Next**, and **No** to the following screen. Then the installation will start and the test page will not be printed at the end of the installation.

- 4 Select the components you want to reinstall and click **Next**.



If you choose to repair the printer software, the window asking you to print a test page appears. do as follows:

- a. To print a test page, select the check box and click **Next**.
- b. When the test page prints out correctly, click **Yes**. If not, click **No** to reprint it.

- 5 When the reinstallation is done, click **Finish**.

Removing Printer Software

- 1 From the **Start** menu, select **Programs**.

- 2 Select **Samsung ML-2250 Series**, and then **Maintenance**.

- 3 Select **Remove**.

Then you will see a component list so that you can remove any of them individually.

If you want to uninstall the printer driver (SPL), check **Printer**.

If you want to uninstall the printer (PostScript) driver, check **Printer(PostScript)**.

If you want to uninstall the Status Monitor, check **Status Monitor**.

If you want to uninstall the Remote Control Panel, check **Remote Control Panel**.

- 4 Select the components you want to remove and then click **Next**.

- 5 When your computer asks you to confirm your selection. click **Yes**.

The selected driver and all of its components are removed from your computer.

- 6 After the software is removed, click **Finish**.

Viewing the User's Guide

After installing the printer software, you can view User's Guide in PDF format at any time from your Windows desktop.

- 1 From the **Start** menu, select **Programs**.
- 2 Select **Samsung ML-2250 Series** and **View User's Guide**.

Adobe Acrobat automatically runs and then the User's Guide opens.



NOTE: If your computer doesn't have Adobe Acrobat, selecting the **View User's Guide** option automatically installs Adobe acrobat for you. After installing is complete, repeats step 1 and 2.



3

USING PRINT MATERIALS

This chapter will help you understand types of paper you can use with your printer and how to properly load paper in the different paper trays for the best print quality.

This chapter includes:

- **Choosing Paper and Other Materials**
- **Selecting the Output Location**
- **Loading Paper**
- **Printing on Envelopes**
- **Printing on Labels**
- **Printing on Transparencies**
- **Printing on Preprinted Paper**
- **Printing on Card Stock or Custom-sized Materials**

Choosing Paper and Other Materials

You can print on a variety of print materials, such as plain paper, envelopes, labels, transparencies, and so on. See “Paper Specifications” on page E.3. To get the best possible print quality, use only high-quality copier-grade paper.

When you choose print materials, consider the following:

- **Desired outcome:** The paper you choose should be appropriate for the project.
- **Size:** You can use any size paper that fits easily within the paper adjusters of the paper tray.
- **Weight :** Your printer supports paper weight as follows:
 - 16~24 lbs (60~90 g/m²) bond for the Tray1 or optional Tray2
 - 16~43 lbs (60~163 g/m²) bond for the Multi-Purpose Tray
- **Brightness:** Some papers are whiter than others and produce sharper, more vibrant images.
- **Surface smoothness:** The smoothness of the paper affects how crisp the printing looks on the paper.



CAUTION: Using a material that does not conform to the specifications listed in the paper specification can cause problems that may require service. This service is not covered by the warranty or service agreements.

Sizes and Capacities

Size	Input Source/Capacity ^{*a}	
	Tray1 or optional Tray2	Multi-Purpose Tray
Plain Paper Letter (216 x 279 mm) Legal (216 x 356 mm) Executive (184 x 267 mm) Oficio (216 x 343 mm) Folio (216 x 330 mm) A4 (210 x 297 mm) JIS B5 (182 x 257 mm) ISO B5 (176 x 250 mm) A5 (148 x 210 mm) A6 (105 x 148 mm)	250 250 250 250 250 250 250 250 250 250	50 50 50 50 50 50 50 50 50 50
Envelopes No.10 (105 x 241 mm) Monarch (98 x 191 mm) C5 (162 x 229 mm) DL (110 x 220 mm) C6 (114 x 162 mm)	- - - - -	5 5 5 5 5
Labels^{*b} Letter (216 x 279 mm) A4 (210 x 297 mm)	- -	5 5
Transparencies^{*b} Letter (216 x 279 mm) A4 (210 x 297 mm)	- -	5 5
Card stocks^{*b}	-	5
Bond^{*b}	-	5

^{*a} Depending on paper thickness, the maximum capacity may be reduced.

^{*b} If you are experiencing excessive jamming, feed one sheet at a time through the Multi-Purpose Tray.

Guidelines for Paper and Special Materials

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

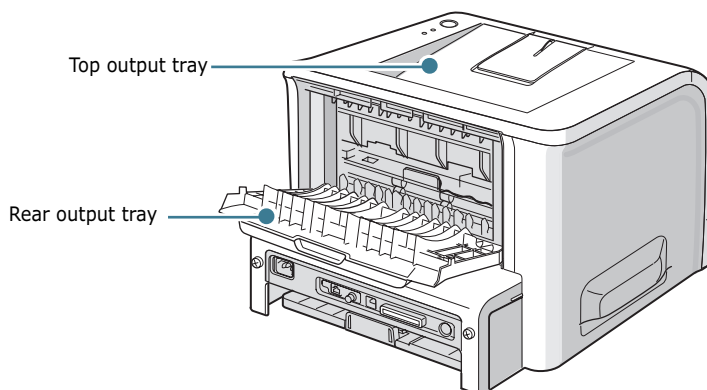
- Attempting to print on damp, curled, wrinkled, or torn paper can cause paper jams and poor print quality.
- Use cut-sheet paper only. You cannot use multi-part paper.
- Use only high-quality, copier grade paper for the best print quality.
- Do not use paper that has already been printed on or that has been fed through a photocopier.
- Do not use paper with irregularities, such as tabs or staples.
- Do not attempt to load any tray during printing and never overfill the tray. This could cause a paper jam.
- Avoid paper with embossed lettering, perforations, or texture that is too smooth or too rough.
- Coloured paper should be of the same high quality as white photocopy paper. The pigments must withstand the printer's fusing temperature of 400°F (205°C) for 0.1 second without deterioration. Do not use paper with a coloured coating that was added after the paper was produced.
- Preprinted forms must be printed with nonflammable, heat-resistant inks that do not melt, vaporize, or release hazardous emissions when subject to the printer's approximately 400°F (205°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 paper away from moisture, direct sunlight, or other conditions that can cause it to wrinkle or curl.



NOTE: Do not use carbonless paper or tracing paper. They are unstable at the fusing temperature and can give off fumes, or cause damage to the paper.

Selecting the Output Location

The printer has two output locations; the rear output tray and the top output tray.



3

To use the top output tray, be sure that the rear output tray is closed. To use the rear output tray, open it.

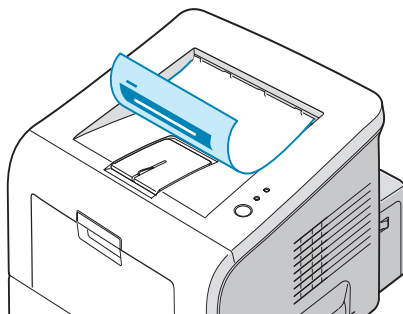


NOTES:

- If paper coming out of the top output tray has problems, such as excessive curl, try printing to the rear output tray.
- To avoid paper jams, do not open or close the rear output tray while the printer is printing.

Printing to the Top Output Tray *(Face down)*

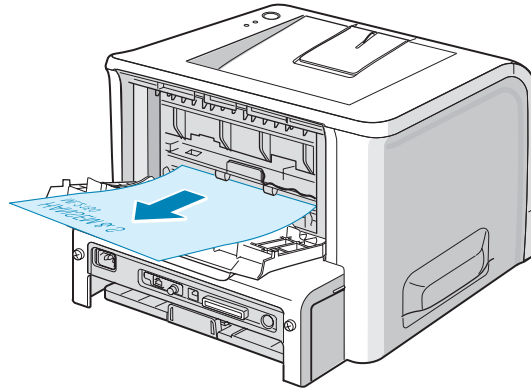
The top output tray collects paper face-down, in the order in which it was printed. The top output tray should be used for most print jobs.



NOTE: If you continuously print many pages, the surface of the output tray may become hot. Be careful not to touch the surface, and especially keep children away from the surface.

Printing to the Rear Output Tray *(Face up)*

The printer always prints to the rear output tray if it is open. Paper comes out of the printer face-up, and each time a sheet of paper comes out, it falls down from the printer.

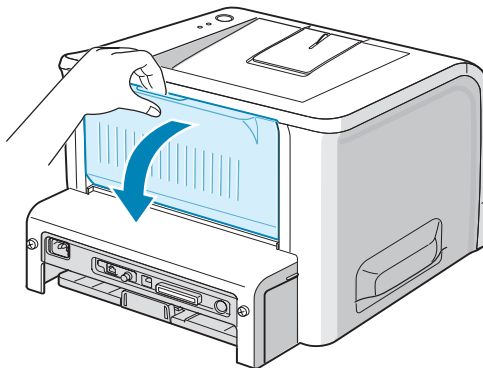


Printing from the Multi-Purpose Tray to the rear output tray provides a **straight paper path**. Opening the rear output tray might improve the output quality with the following:

- envelopes
- labels
- transparencies

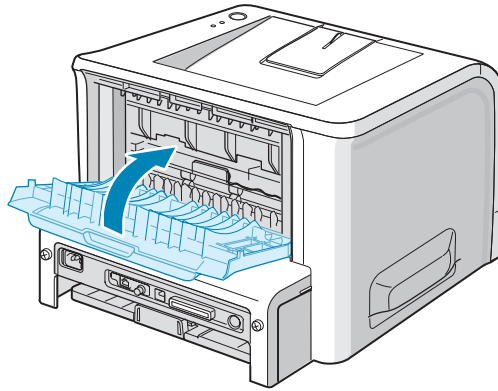
To open the rear output tray:

- 1 Open the rear door by pulling it down. The cover functions as the output tray.



CAUTION: The fusing area at the rear portion of the inside of your printer is hot when powered. Be careful not to be burned when accessing this area.

- 2** If you do not want to use the rear output tray, close the tray. The pages will stack on the top output tray.

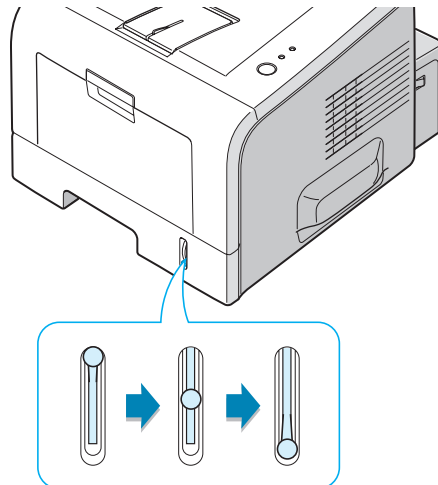


3

Loading Paper

Proper paper loading helps prevent paper jams and ensure trouble-free printing. Do not remove the paper tray while a job is printing. Doing so may cause a paper jam. See “Sizes and Capacities” on page 3.3 for acceptable paper size and capacities for each tray.

The paper level bar on the front of the paper tray(s) shows the amount of paper currently left in the tray. When the tray is empty, the indicator drops to the bottom.

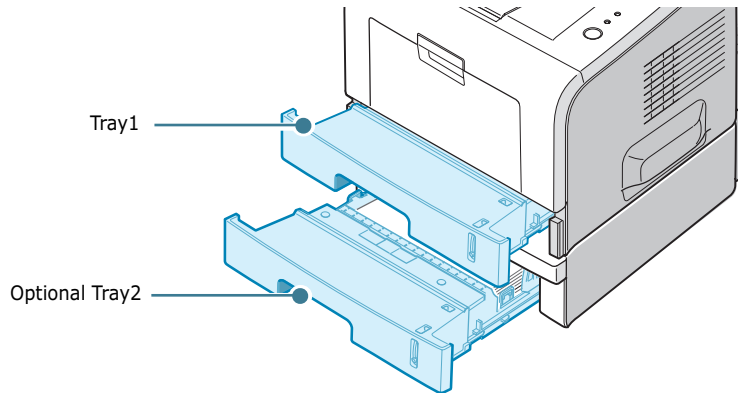


Paper full ▲

▲ Paper empty

Using Tray1 or the Optional Tray2

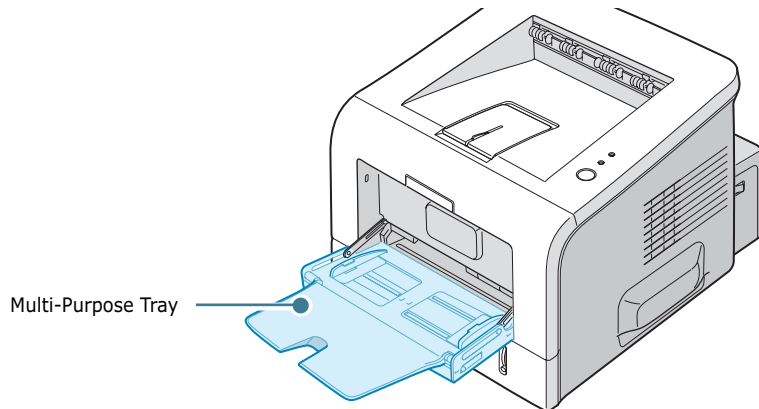
Tray1 and the optional Tray2 can hold up to 250 sheets of paper. See “Sizes and Capacities” on page 3.3 for acceptable paper size and capacities of each tray.



Load a stack of paper into the tray and print. For details about loading paper in Tray1 or the optional Tray2, see “Loading Paper” on page 2.7.

Using the Multi-Purpose Tray

The multi-Purpose Tray is located in the front of your printer. It can be closed when you are not using it, making the printer more compact.

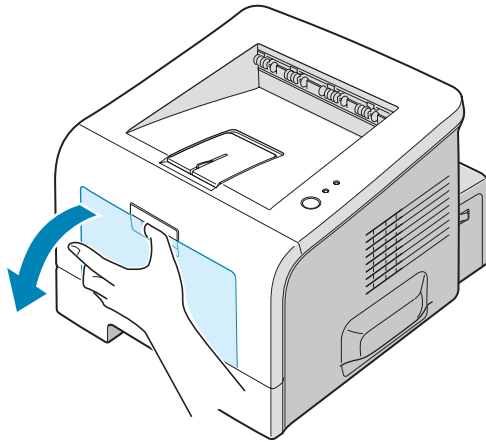


The Multi-Purpose Tray can hold several sizes and types of paper, such as transparencies, cards, and envelopes. You may also want to use the Multi-Purpose Tray for single page print jobs on letterhead, coloured paper for use as separator sheets, or other special materials that you do not normally keep in the paper tray. You can load approximately 50 sheets of plain paper, 5 envelopes, 5 transparencies, 5 sheets of card stock or 5 labels at a time.

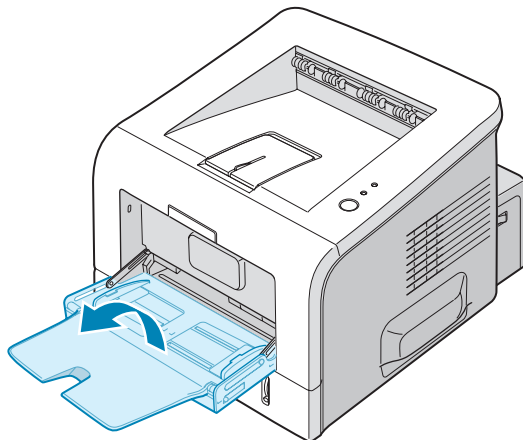
- Load only one size of print material at a time in the Multi-Purpose Tray.
- To prevent paper jams, do not add paper when there is still paper in the Multi-Purpose Tray. This also applies to other types of print materials.
- Print materials should be loaded face up with the top edge going into the Multi-Purpose Tray first and be placed on the centre of the tray.
- Do not place objects on the Multi-Purpose Tray. Also avoid pressing down or applying excessive force on it. The tray may fall from the printer.

To load paper in the Multi-Purpose Tray:

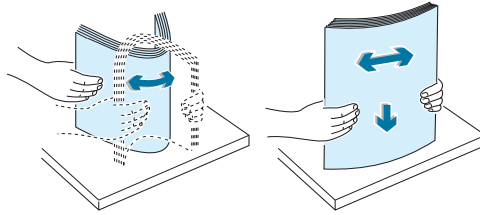
- 1 Pull the Multi-Purpose Tray down towards you.



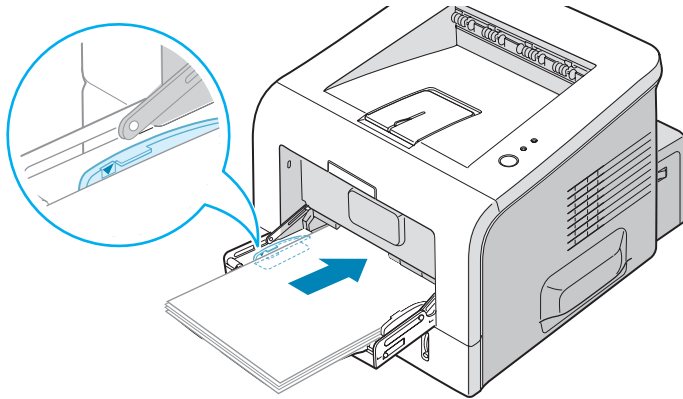
- 2 Unfold the extender to extend the tray to its full-length to hold longer paper.



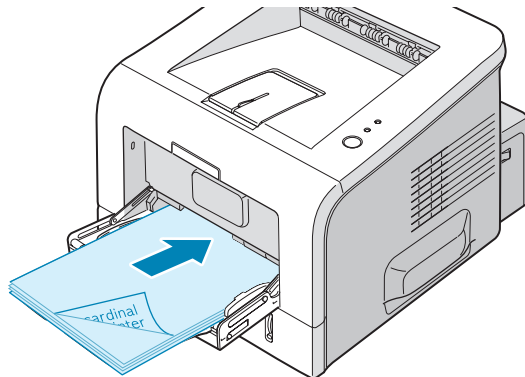
- 3** Prepare a stack of paper for loading by flexing or fanning the paper back and forth. Straighten the edges on a level surface.



- 4** Place paper on the centre of the tray **with the print side face up**. Pay attention to the paper limit mark on the left inside wall of the tray. Paper overloading may cause paper jams.

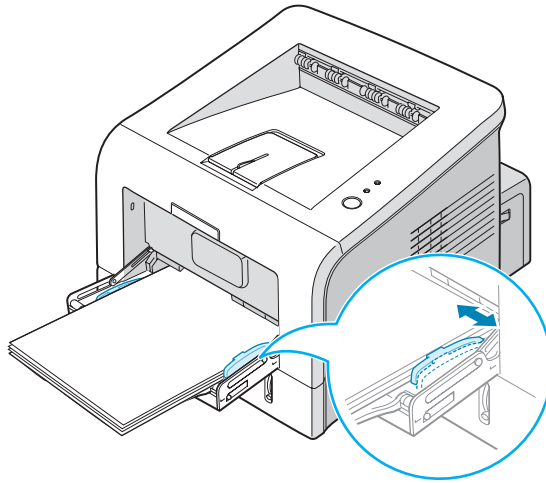


If you want to print on previously printed paper from the Multi-Purpose Tray, the printed side should be facing down with an uncurled edge to the printer. If you experience problems with paper feed, turn the paper around.



NOTE: Make sure that you have not loaded too much print material. The print material buckles if you load a stack that is too deep or push it in too far.

- 5 Slide the paper width guide and adjust it against the stack of print material without bending.

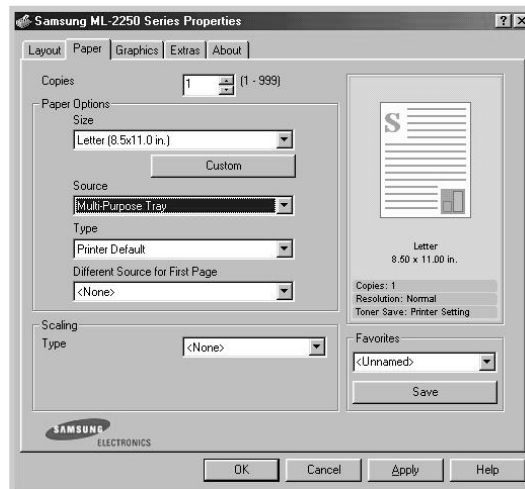


3



NOTE: Your printer cannot automatically detect the size of paper loaded in the Multi-Purpose Tray. Loading the Multi-Purpose Tray with the correct paper size allows you to select paper by size rather than paper source when you print from your software application. You do not have to check which paper is loaded in the Multi-purpose Tray before printing.

- 6 When you print a document, select the paper source and type in the software application.



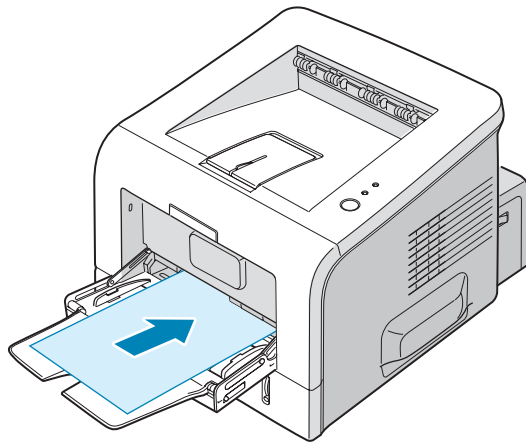
- 7 After printing, push the extender back to its place and close the Multi-Purpose Tray.

Using the Manual Feed Mode

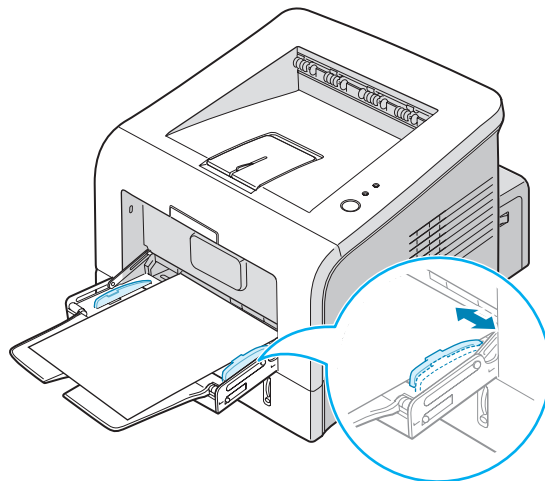
If you select **Manual Feed** in the **Source** option when changing print settings, you can manually load a sheet of print material in the Multi-Purpose Tray. Manually loading paper can be helpful when you want to check the print quality after each page is printed.

This loading procedure is almost the same as the procedure for loading in the Multi-Purpose Tray, except you load paper sheet-by-sheet in the Tray, send print data to print the first page, and press the **Cancel** button on the control panel to print each following page.

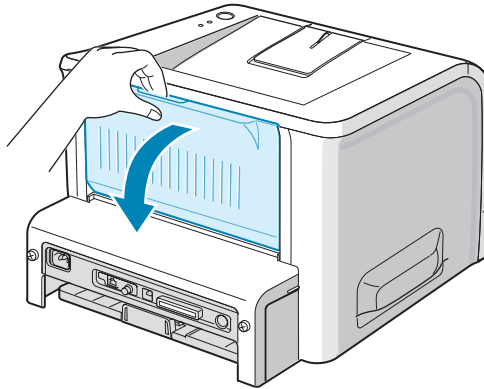
- 1 Load a sheet of print material on the centre of the Multi-Purpose Tray **with the print side up**.



- 2 Slide the paper width guide and adjust it against the material without bending.

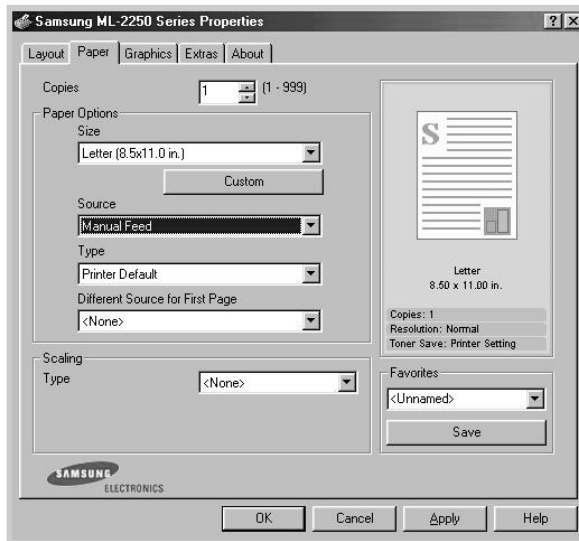


- 3 Open the rear output tray.



- 4 When you print a document, you must select **Manual Feed** for **Source** from the software application, and then select the correct paper size and type.

3



- 5 Press the **Cancel** button on the printer to start feeding.
- 6 Printing is started.
- 7 If you are printing multiple pages, load the next sheet after the first page prints out, and press the **Cancel** button.

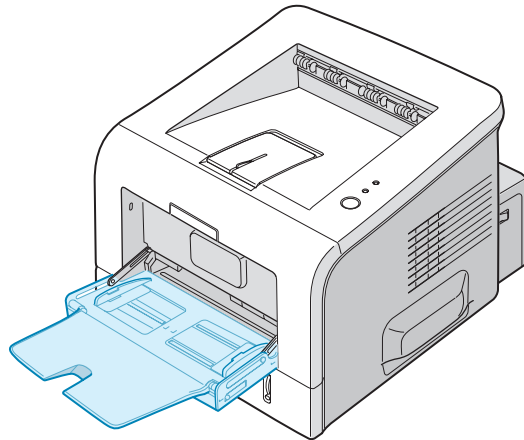
Repeat this step for every page to be printed.

Printing on Envelopes

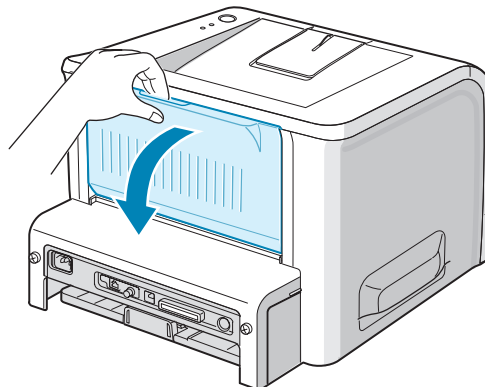
Guidelines

- Only use envelopes recommended for laser printers. Before loading envelopes into the Multi-Purpose Tray, make sure that they are undamaged and are not stuck together.
- Do not feed stamped envelopes.
- Never use envelopes with clasps, snaps, windows, coated lining, or self-stick adhesives. These envelopes may severely damage the printer.

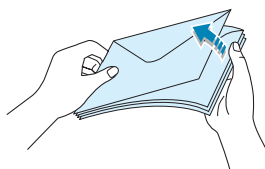
- 1 Open the Multi-Purpose Tray and unfold the extender to its full-length position.



- 2 Open the rear output tray.

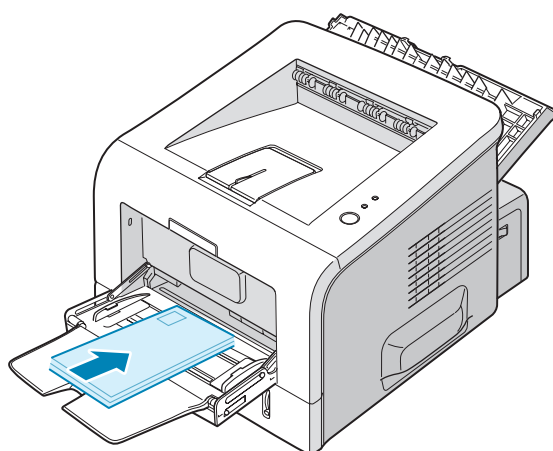


- 3** Flex or fan the edge of the envelope stack to separate the pages before loading.

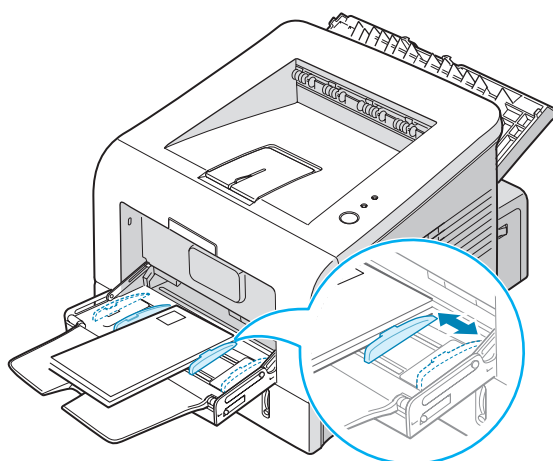


- 4** Load the envelopes onto the Multi-Purpose Tray **with the flap side down**.

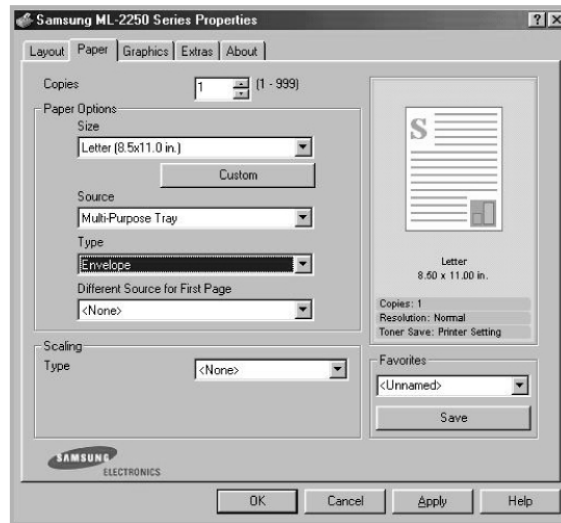
The stamp area is **on the left side** and the end of the envelope **with the stamp area enters the tray first**.



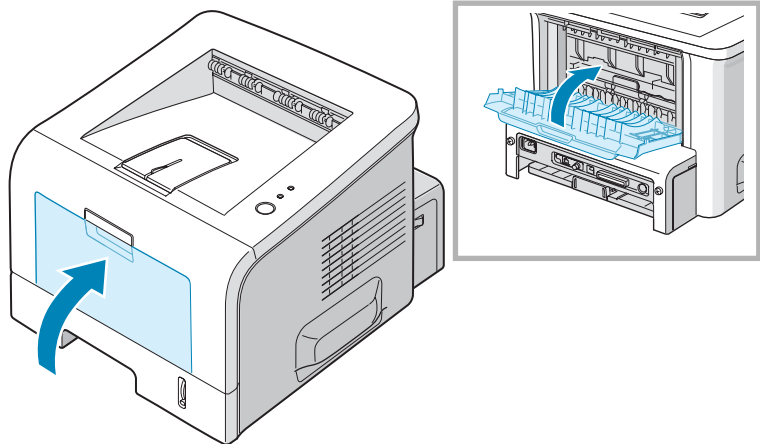
- 5** Adjust the guide to the edge of the envelope stack.



- 6** When you print on envelopes, select the appropriate paper source, type, and size in the software application. For details, see page 4.7.



- 7** After printing, close the Multi-Purpose Tray and the rear output tray.



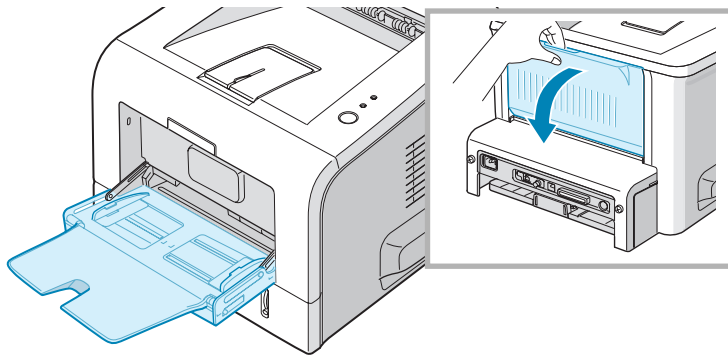
Printing on Labels

Guidelines

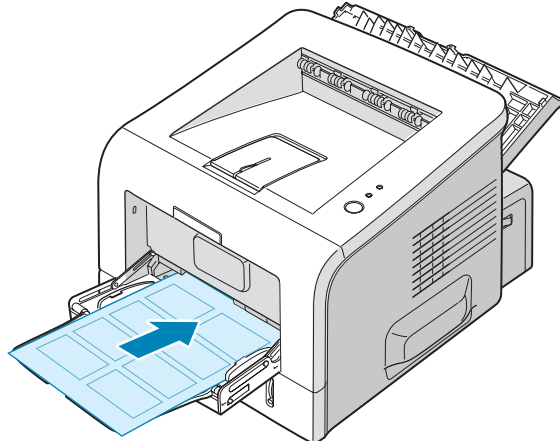
- Only use labels recommended for laser printers.
- Verify that the labels' adhesive material can tolerate fusing temperature of 200°C (392°F) for 0.1 second.
- Make sure that there is no exposed adhesive material between the labels. Exposed areas can cause labels to peel off during printing, which can cause paper jams. Exposed adhesive can also cause damage to printer components.
- Do not feed a sheet of labels through the printer more than once. The adhesive backing is designed for one pass through the printer.
- Do not use labels that are separating from the backing sheet or are wrinkled, bubbled, or otherwise damaged.

3

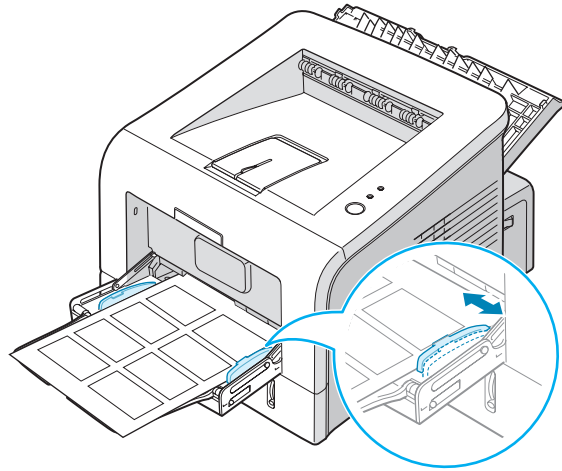
- 1 Open the Multi-Purpose Tray and the rear output tray.



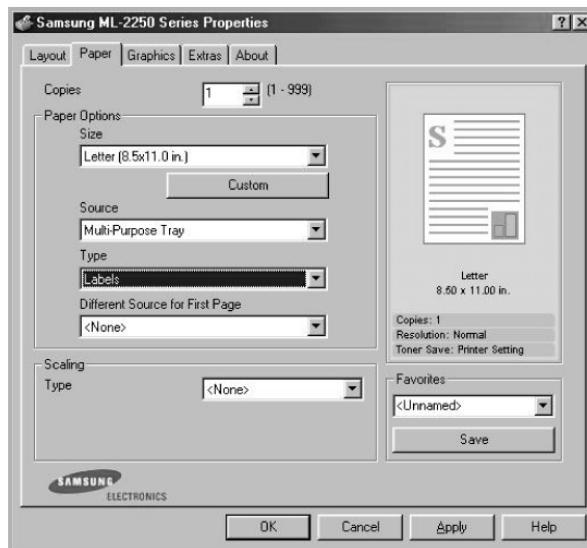
- 2 Load labels **with the print side up**.



- 3 Adjust the guide to fit the width of the sheet of labels.



- 4 When you print on labels, select the appropriate paper source, type, and size in the software application. For details, see page 4.7.



- 5 After printing, close the Multi-Purpose Tray and the rear output tray.



NOTE: To prevent labels from sticking, do not let the printed label sheets stack up as they are printed out.

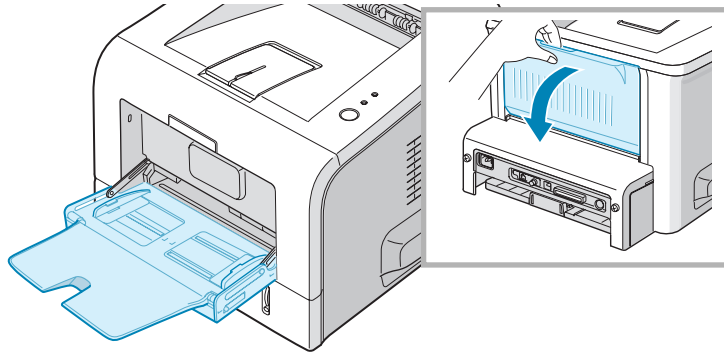
Printing on Transparencies

Guidelines

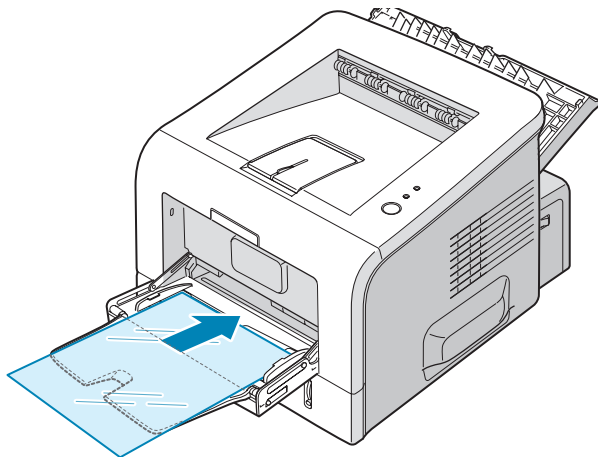
- Only use transparencies recommended for use in laser printers.
- Ensure that transparencies are not wrinkled, curled, or have any torn edges.
- Hold the transparencies by the edges and avoid touching the print side. Oils deposited on the transparency can cause print quality problems.
- Be careful not to scratch or leave fingerprints on the print side.

3

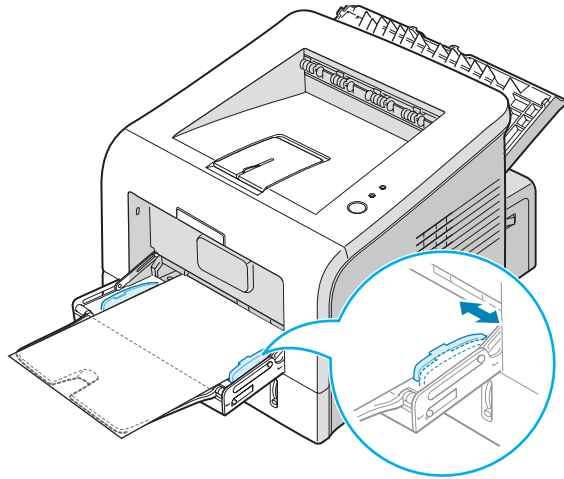
- 1 Open the Multi-Purpose Tray and the rear output tray.



- 2 Load transparencies **with the print side up**, and **the top with the adhesive strip entering the printer first**.



- 3 Adjust the guide to fit the width of the transparencies.



- 4 When you print on transparencies, select the appropriate paper source, type, and size in the software application. For details, see page 4.7.



- 5 After printing, close the Multi-Purpose Tray and the rear output tray.



NOTES:

- If you print on thin transparencies to the rear output tray, they can curl. In this case, use the top output tray. If the problem persists, check if your transparencies meet the printer's specifications.
- To prevent transparencies from sticking, do not let the printed sheets stack up as they are printed out.
- Place transparencies on a flat surface after removing them from the printer.

Printing on Card Stock or Custom-sized Materials

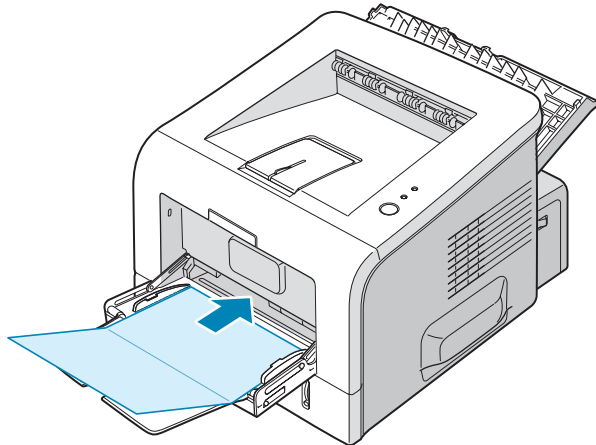
Postcards, 3.5 by 5.83 in. (index) cards and other custom-sized materials can be printed with your printer. The minimum size is 76 by 127 mm (3 by 5 in.) and the maximum size is 216 by 356 mm (8.5 by 14 in.).

Guidelines

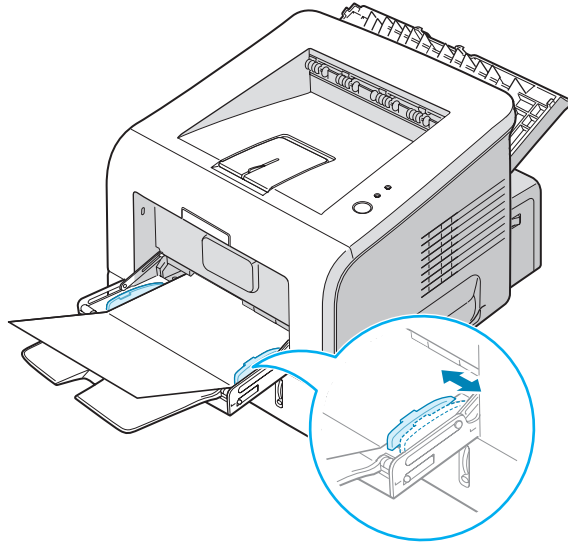
- Always insert the short-edge into the Multi-Purpose Tray first. If you want to print in landscape mode, make this selection through your software. Inserting paper long-edge first may cause a paper jam.
- Do not load more than 5 cards into the Multi-Purpose Tray at a time.
- Do not print on media smaller than 76 mm (3 in.) wide or 127 mm (5 in.) long.
- Set margins at least 6.4 mm (0.25 in.) away from the edges of the material in the software application

3

- 1 Open the Multi-Purpose Tray and the rear output tray.
- 2 Load print material with print side up and short edge first.



- 3 Adjust the guide to fit the width of the material stack.



- 4 When you print, select the appropriate paper source, type, and size in the software application. For details, see page 4.7.



NOTE: If the size of your print material is not listed in the **Size** box in the **Paper** tab of the printer driver properties, click the **Custom** button and set the size manually. See page 4.7.



CAUTION: When you use 76 by 127 mm (3 by 5 in.) paper and it is too thin, a paper jam may occur. Use card stock heavier than 105g/m²

- 5 After printing, close the Multi-Purpose Tray and the rear output tray.

Printing on Preprinted Paper

Preprinted paper is paper that has some type of printing placed on it before it is sent through the printer (paper that has a preprinted logo at the top of the page, for example).

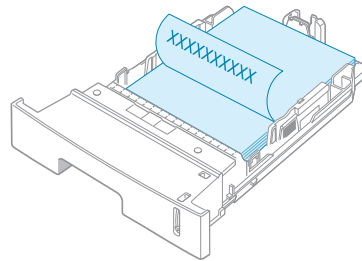
Guidelines

- Letterheads must be printed with heat-resistant ink that will not melt, vaporize, or release hazardous emissions when subjected to the printer's fusing temperature of 400 °F (205 °C) for 0.1 second.
- Ink on letterheads must be non-flammable and should not adversely affect any printer rollers.
- Forms and letterhead should be sealed in a moisture-proof wrapping to prevent changes during storage.
- Before you load preprinted paper as forms and letterhead, verify that the ink on the paper is dry. During the fusing process, wet ink can come off preprinted paper.

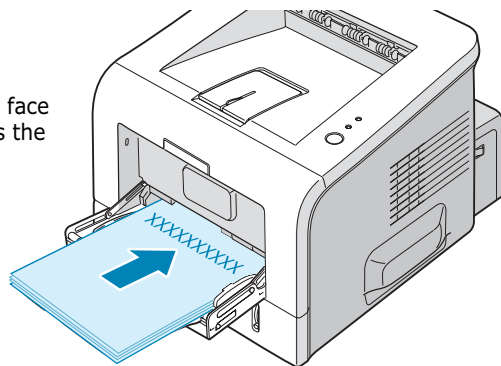
3

- 1 Load letterhead into the tray you want to use, as shown in the figures below. Adjust the guides to fit the width of the paper stack.

Load with the design face down, bottom edge towards the printer.



Load with the design face up, top edge towards the printer.



- 2 When you print, select the appropriate paper source, type, and size in the software application. For details, see page 4.7.



4

PRINTING TASKS

This chapter explains printing options and common printing tasks. This chapter includes:

- **Printing a Document**
- **Setting Paper Properties**
- **Using the Toner Save Mode**
- **Printing Multiple Pages on One Sheet of Paper (N-Up Printing)**
- **Printing a Reduced or Enlarged Document**
- **Fitting Your Document to a Selected Paper Size**
- **Printing Posters**
- **Using Watermarks**
- **Using Overlays**
- **Setting Graphic Properties**
- **Using Output Options**
- **Using the Status Monitor**
- **About Sharing the Printer on a Network**
- **Setting Up a Locally Shared Printer**

Printing a Document

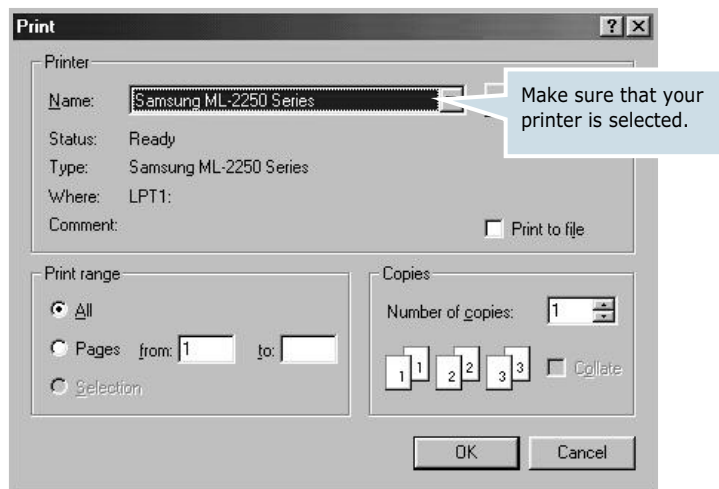
The following procedure describes the general steps required for printing from various Windows applications. The exact steps for printing a document may vary depending on the application programme you are using. Refer to the User's Guide of your software application for the exact printing procedure.



NOTE: For detailed information about printing from a Linux system, see Appendix B, "Using Your Printer in Linux."

- 1 Open the document you want to print.
- 2 Select **Print** from the **File** menu. The Print window is displayed (It may look slightly different depending on your application).

The basic print settings are selected within the Print window. These settings include the number of copies and print range.



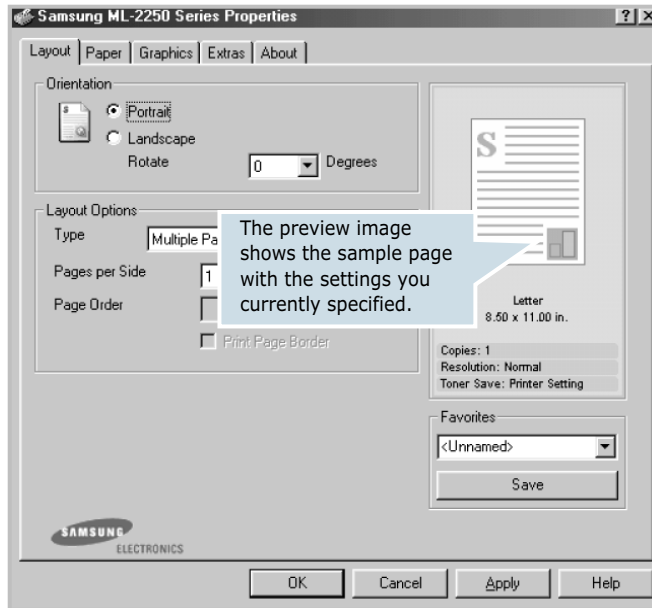
▲ Windows 98

- 3 To take advantage of the printer features provided by your printer, click **Properties** in the application's print window and go to Step 4.

If you see **Setup**, **Printer**, or **Options**, click that button instead. Then click **Properties** in the next screen.

- 4 Now you see the Samsung ML-2250 Series Properties window, which allows you to access all the information you will need when using your printer.

The **Layout** tab is first displayed.

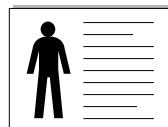


4

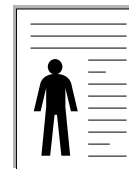
If necessary, select the **Orientation** option.

The **Orientation** option allows you to select the direction in which information is printed on a page.

- **Portrait** prints across the width of the page, letter style.
- **Landscape** prints across the length of the page, spreadsheet style.
- If you want to turn the page upside down, select **180** from the **Rotate** drop-down list.



▲ Landscape



▲ Portrait

- 5 From the **Paper** tab, select the paper source, size and type. For further details, see page 4.7.

- 6 Click other tabs on the top of the Samsung ML-2250 Series Properties window to access other features, if needed.

- 7 When you complete setting the properties, click **OK** until the Print window is displayed.
- 8 Click **OK** to start printing.



NOTES:

- Most Windows applications will override settings you specify in the printer driver. Change all print settings available in the software application first, and change any remaining settings using the printer driver.
 - The settings you change remain in effect only while you are using the current programme. To make your changes permanent, make them in the **Printers** folder. Follows this procedure:
 1. Click the Windows **Start** menu.
 2. For Windows 95/98/Me/NT 4.0/2000, select **Settings** and then **Printers**.
For Windows XP, select **Printers and Faxes**.
 3. Select the **Samsung ML-2250 Series** printer.
 4. Click the right mouse button on the printer icon and:
 - In Window 95/98/Me, select **Properties**.
 - In Windows 2000/XP, select **Print Setup** or select **Properties** and click **Printing Preferences**.
 - In Windows NT 4.0, select **Document Default**.
 5. Change the settings on each tab, and click **OK**.
-