

SAMSUNG LASER MFP User's Guide



For UK customers:

To reorder your consumables Call 0800 3164060 For Technical Assistance Call 0870 2420303

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U.S.A	1-800-SAMSUNG (7267864)	www.samsung.com
ARGENTINE	0800-333-3733	www.samsung.com/ar
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UKRAINE	8-800-502-0000	www.samsung.com/ur
AUSTRALIA	1300 362 603	www.samsung.com/au
CHINA	800-810-5858 010- 6475 1880	www.samsung.com.cn
HONG KONG	2862 6001	www.samsung.com/hk
INDIA	3030 8282 1600 1100 11	www.samsung.com/in
INDONESIA	0800-112-8888	www.samsung.com/id
JAPAN	0120-327-527	www.samsung.com/jp
MALAYSIA	1800-88-9999	www.samsung.com/my
PHILIPPINES	1800-10-SAMSUNG (7267864)	www.samsung.com/ph
SINGAPORE	1800-SAMSUNG (7267864)	www.samsung.com/sg
THAILAND	1800-29-3232 02-689-3232	www.samsung.com/th
TAIWAN	0800-329-999	www.samsung.com/tw
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SOUTH AFRICA	0860 7267864 (SAMSUNG)	www.samsung.com/za
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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.
- Unplug the machine from the AC wall socket and/or telephone jack 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. 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, telephone 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. Your machine may have a heavy cover for optimal pressure on the document for the best scanning and/or faxing (usually the flatbed-type machine). In this case, replace the cover after placing document on the scan glass, by holding and moving it down slowly until it seats on its location.
- 13. 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.
- 14. Unplug the machine from the telephone jack, 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.

- 15. 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.
- 16. 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 and telephone cord for the duration of the lightning storm.
- 17. SAVE THESE INSTRUCTIONS.
- 18. Use only No.26 AWG or larger telephone line cord.

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.



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 request your nearest Samsung dealer.

Recycling



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

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)



This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Radio Frequency Emissions

FCC Information to the User

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- •This device may not cause harmful interference, and
- •This device must accept any interference received, including interference that may cause undesired operation.

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

•Reorient or relocate the receiving antenna.

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

CAUTION: Change 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.

Fax Branding

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone facsimile machine unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission the following information:

(1) the date and time of transmission

 $\left(2\right)$ identification of either business, business entity or individual sending the message; and

(3) telephone number of either the sending machine, business, business entity or individual.

The Telephone Company may make changes in its communications facilities, equipment operations or procedures where such action is reasonably required in the operation of its business and is not inconsistent with the rules and regulations in FCC Part 68. If such changes can be reasonably expected to render any customer terminal equipment incompatible with telephone company communications facilities, or require modification or alteration of such terminal equipment, or otherwise materially affect its use or performance, the customer shall be given adequate notice in writing, to allow the customer an opportunity to maintain uninterrupted service.

Ringer Equivalence Number

The Ringer Equivalence Number and FCC Registration Number for this machine may be found on the label located on the bottom or rear of the machine. In some instances you may need to provide these numbers to the telephone company.

The Ringer Equivalence Number (REN) is a measure of the electrical load placed on the telephone line, and is useful for determining whether you have "overloaded" the line. Installing several types of equipment on the same telephone line may result in problems making and receiving telephone calls, especially ringing when your line is called. The sum of all Ringer Equivalence Numbers of the equipment on your telephone line should be less than five in order to assure proper service from the telephone company. In some cases, a sum of five may not be usable on your line. If any of your telephone equipment is not operating properly, you should immediately remove it from your telephone line, as it may cause harm to the telephone network.

WARNING:

FCC Regulations state that changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment. In the event that terminal equipment causes harm to the telephone network, the telephone company should notify the customer that service may be stopped. However, where prior notice is impractical, the company may temporarily cease service, providing that they:

a) promptly notify the customer.

b) give the customer an opportunity to correct the equipment problem.

c) inform the customer of the right to bring a complaint to the Federal Communication Commission pursuant to procedures set out in FCC Rules and Regulations Subpart E of Part 68.

You should also know that:

- Your machine is not designed to be connected to a digital PBX system.
- If you intend to use a computer modem or fax modem on the same phone line as your machine, you may experience transmission and reception problems with all the equipment. It is recommended that no other equipment, except for a regular telephone, share the line with your machine.
- If your area experiences a high incidence of lightning or power surges, we recommend that you install surge protectors for both the power and the telephone lines. Surge protectors can be purchased from your dealer or telephone and electronic specialty stores.
- When programming emergency numbers and/or making test calls to emergency numbers, use a non-emergency number to advise the emergency service dispatcher of your intentions. The dispatcher will give you further instructions on how to actually test the emergency number.
- This machine may not be used on coin service or party lines.
- This machine provides magnetic coupling to hearing aids.
- You may safely connect this equipment to the telephone network by means of a standard modular jack, USOC RJ-11C.

Declaration of Conformity (European Countries)

Approvals and Certifications

The CE marking applied to this product symbolizes 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 the 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. 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.

Replacing the Fitted Plug (for UK Only)

IMPORTANT

The mains lead for this machine is fitted with a standard (BS 1363) 13 amp plug and has a 13 amp fuse. When you change or examine the fuse, you must re-fit the correct 13 amp fuse. You then need to replace the fuse cover. If you have lost the fuse cover, do not use the plug until you have another fuse cover.

Please contact the people from you purchased the machine.

The 13 amp plug is the most widely used type in the UK and should be suitable. However, some buildings (mainly old ones) do not have normal 13 amp plug sockets. You need to buy a suitable plug adaptor. Do not remove the moulded plug.

WARNING

If you cut off the moulded plug, get rid of it straight away.

You cannot rewire the plug and you may receive an electric shock if you plug it into a socket.

IMPORTANT WARNING: You must earth this machine.

The wires in the mains lead have the following color code:

- Green and Yellow: Earth
- Blue: Neutral
- Brown: Live

If the wires in the mains lead do not match the colors marked in your plug, do the following:

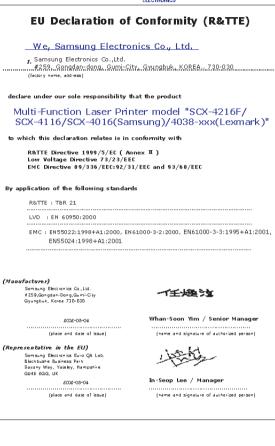
You must connect the green and yellow wire to the pin marked by the letter "E" or by the safety 'Earth symbol' or colored green and yellow or green.

You must connect the blue wire to the pin which is marked with the letter $\ensuremath{``N''}$ or colored black.

You must connect the brown wire to the pin which is marked with the letter ``L'' or colored red.

You must have a 13 amp fuse in the plug, adaptor, or at the distribution board.





1 Introduction

Thank you for purchasing this Samsung multifunctional product. Your machine provides printing, copying, and scanning functions!

This chapter includes:

- Special features
- Understanding component locations

Special features

Your new machine is equipped with special features that improve the print quality. You can:



Print with excellent quality and speed

- You can print up to 600 dpi X 600 dpi. See the Software Section.
- Your machine prints A4-sized paper at up to 18 ppm^a and letter-sized paper at up to 19 ppm.

Handle paper flexibly



- The manual feeder supports plain paper, letterhead, envelope, label, transparency, custom-sized material, postcard, and heavy paper.
- The **paper input tray** supports 250 sheets of A4/lettersized paper.

Create professional documents



- Print Watermarks. You can customize your documents with words, such as "Confidential." See the Software Section.
- Print **Posters**. The text and pictures of each page of your document are magnified and printed across the sheet of paper and taped together to form a poster. See the **Software Section**.

Save time and money

- You can print multiple pages on one single sheet of paper to save paper.
- You can use preprinted forms and letterhead on plain paper. See the **Software Section**
- This machine automatically conserves electricity by substantially reducing power consumption when not printing.

Print in various environments

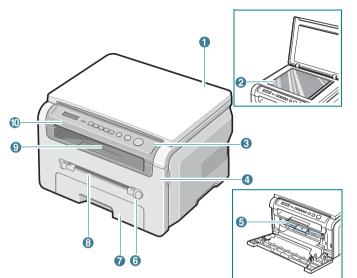
- You can print in Windows 98/Me/2000/XP.
- Your machine is compatible with various Linux.
- Your machine is compatible with various Macintosh.
- Your machine comes with the **USB** interface.

a. page per minute

Understanding component locations

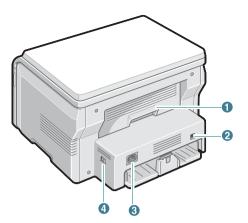
These are the main components of your machine:

Front view



1	document cover	6	manual feeder guides
2	document glass	7	paper input tray
3	control panel	8	manual feeder
4	front cover	9	output tray
5	toner cartridge	10	scan unit

Rear view



1	rear cover	3	power respectable
2	USB port	4	power switch

Control panel functions

SCX-4200

	1 2 3 5 6 7 8 9 () SCX-4200 SCX-4200
1	Displays the current status and prompts during an operation.
2	Status- Shows the status of your machine. See page 9.3.
3	Menu- Enters Menu mode and scrolls through the available menus.
4	Scroll through the options available in the selected menu.
5	OK- Confirms the selection on the display.
6	Back- Sends you back to the upper menu level.
7	Copies- Allows you to enter the number of copies.
8	Stop/Clear - Stops an operation at any time. In Standby mode, clears/cancels the copy options, such as the resolution, the document type setting, the copy size, and the number of copies.

9 Start- Starts a job.

2 Getting started

This chapter gives you step-by-step instructions for setting up your machine.

This chapter includes:

Setting up your machine

- Selecting a location
- Installing the toner cartridge
- Loading paper
- Making connections
- Turning the machine on

Setting up the machine system

- Overview of control panel menus
- Changing the display language
- Using the save modes

Printer software overview

- Supplied printer software
- Printer driver features
- System requirements

Setting up your machine

Finding more information

You can find information for setting up and using your machine from the following resources, either printed or onscreen.

Quick Install Guide	Provides information on setting up your machine and, therefore, be sure to follow the instructions in the guide to get the machine ready.
Online User's Guide	Provides you with step-by-step instructions for using your machine's full features, and contains information for maintaining your machine, troubleshooting, and installing accessories.
	This user's guide also contains the Software Section providing you with information on how to print documents with your machine on various operating systems, and how to use the supplied software utilities. Note: You can access the user's guides in other languages from the Manual folder on the printer driver CD.
Printer Driver Help	Provides you with help information on printer driver properties and instructions for setting up the properties for printing. To access a printer driver help screen, click Help from the printer properties dialog box.
Samsung website	If you have Internet access, you can get help, support, printer drivers, manuals, and order information from the Samsung website, www.samsungprinter.com.

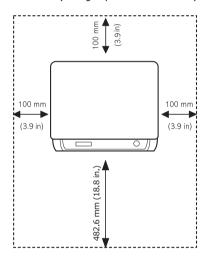
Selecting a location

Select a level, stable place with adequate space for air circulation. Allow extra space for opening covers and trays.

The area should be well-ventilated and away from direct sunlight or sources of heat, cold, and humidity. Do not set the machine close to the edge of your desk or table.

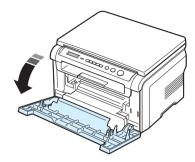
Clearance space

- Front: 482.6 mm (enough space so that the paper tray can be removed)
- Back: 100 mm (enough space for ventilation)
- Right: 100 mm (enough space for ventilation)
- Left: 100 mm (enough space for ventilation)



Installing the toner cartridge

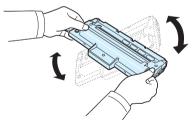
1 Open the front cover.



- 2 Remove the toner cartridge from its bag. Do not use a knife or other sharp object as it might scratch the drum of the toner cartridge.
- **3** Remove the paper protecting the toner cartridge.



4 Roll the toner cartridge 5 or 6 times to distribute the toner evenly inside the toner cartridge.

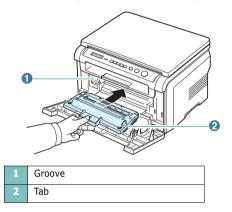


Thoroughly rolling the toner cartridge will assure maximum copies per toner cartridge.

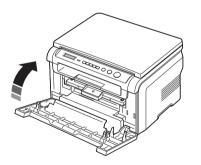
NOTE: If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.

CAUTION:

- 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.
- Do not touch the green underside of the toner cartridge. Use the handle on the toner cartridge to avoid touching this area.
- **5** Hold the toner cartridge by the handle. Slowly insert the toner cartridge into the opening in the machine.
- 6 Tabs on the sides of the toner cartridge and corresponding grooves within the machine will guide the toner cartridge into the correct position until it locks into place completely.



7 Close the front cover. Make sure that the front cover is securely closed.



NOTE: When printing text at 5% coverage, you can expect a toner cartridge life of approximately 3,000 pages. (1,000 pages for the toner cartridge that is shipped with the machine.)

Loading paper

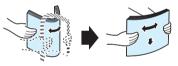
The paper input tray can hold a maximum of 250 sheets of 20 lb (75 $\mbox{g/m}^2)$ plain paper.

To load a stack of Letter-sized paper:

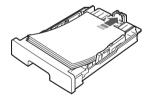
1 Pull open the paper input tray and remove it from the machine.



2 Fan the edges of the paper stack to separate the pages. Then tap the stack on a flat surface to even it up.

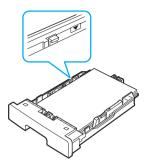


3 Insert the paper stack into the paper input tray with the side to be printed on facing down.



NOTE: If you want to load a different sized paper, you need to adjust the paper guides. For details, see page 2.4.

4 Pay attention to the paper limit mark on both inside walls of the paper input tray. Paper overloading may cause paper jams.



5 Insert and slide the paper input tray back into the machine.

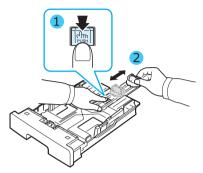


NOTE: After you load paper, you need to set up your machine for the paper type and size you loaded. See page 3.6 for copying, or the **Software Section** for PC-printing. The settings made from the printer driver override the settings on the control panel.

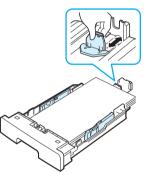
Changing the size of the paper in the paper input tray

To load longer sizes of paper, such as Legal-sized paper, you need to adjust the paper guides to extend the paper input tray.

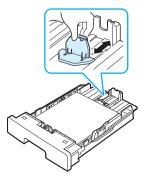
 After pressing and unlatching the guide lock, slide the paper length guide out completely to extend the paper input tray to its full length.



2 After inserting paper into the paper input tray, squeeze the front paper length guide and slide it until it lightly touches the end of the paper stack.



For paper smaller than Letter size, adjust the front paper length guide so that it lightly touches the paper stack.



3 Squeeze the paper width guide, as shown and slide it to the stack of paper until it lightly touches the side of the stack.



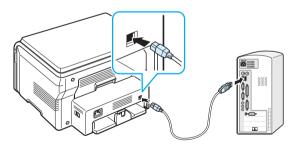
NOTES:

- 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.



Making connections

 Connect a USB cable to the USB connector on your machine. You need to buy a USB 2.0 compliant cable that is not longer than 3 m.



To the USB port on your computer

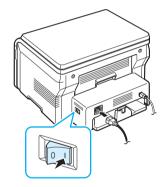
2 Connect the other end of the cable to the USB port on your computer.

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

NOTE: When using the USB connection, your machine provides two USB modes; Fast and Slow. Fast is the default mode. Some PC users may experience poor USB function in the default mode. If this occurs, select Slow mode to achieve successful results. For details about changing the USB mode, see page 9.6.

Turning the machine on

- 1 Plug one end of the supplied power cord into the power respectable on the machine and the other end into a properly grounded AC outlet.
- 2 Press the power switch to turn the machine on. warming up please wait appears on the display indicating that the machine is now on.



To view your display text in another language, see page 2.6.

CAUTION:

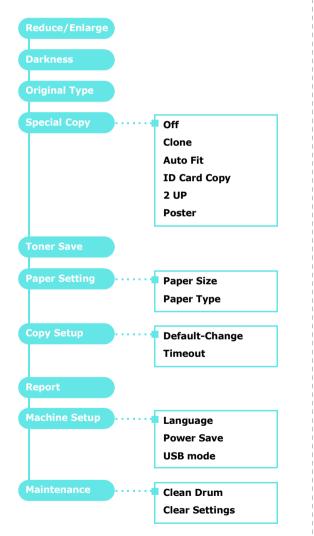
- The fuser area inside of the rear cover of your machine becomes very hot when in use. Take care not to burn your fingers when you access this area.
- Do not disassemble the machine with power on. If you do, you may receive an electric shock.

Setting up the machine system

Overview of control panel menus

The control panel provides access to various menus to set up the machine or use the machine's functions. They can be accessed by pressing **Menu**.

Refer to the following diagram.



Changing the display language

To change the language that appears on the control panel, follow these steps:

- 1 Press Menu until Machine Setup appears on the top line of the display.
- 2 Press **OK** when **Language** appears.
- 3 Press the scroll button (or) to select the language you want and press OK.
- 4 Press **Stop/Clear** to return to Standby mode.

Using the save modes

Toner save mode

Toner save mode allows your machine to use less toner on each page. Activating this mode extends the life of the toner cartridge beyond what one would experience in the normal mode, but it reduces print quality.

- 1 Press **Menu** until **Toner Save** appears on the top line of the display.
- 2 Press the scroll button (∢ or ▶) until On appears and press OK.

NOTE: When PC-printing, you can also turn on or off Toner Save mode in the printer properties. See the **Software Section**.

Power save mode

Power save mode allows your machine to reduce power consumption when it is not in actual use. You can turn this mode on and select a length of time for which the machine waits after a job is printed before it switches to a reduced power state.

- 1 Press Menu until Machine Setup appears on the top line of the display.
- 2 Press the scroll button (or) until Power Save appears and press OK.
- 3 Press the scroll button (∢ or ▶) until **On** appears and press **OK**.
- 4 Press the scroll button (∢ or ►) to select the time setting you want and press OK.
- 5 Press **Stop/Clear** to return to Standby mode.

Printer software overview

Supplied printer software

You must install the printer software using the supplied printer driver CD after you have set up your machine and connected it to your computer. For details, see the **Software Section**.

The printer driver CD provides you with the following software:

Programs for windows

To use your machine as a printer and scanner in Windows, you must install the MFP driver. You can install selectively or all the following components:

- **Printer driver** Use this driver to take full advantage of your printer's features.
- Scanner driver- TWAIN and Windows Image Acquisition (WIA) driver are available for scanning documents on your machine.
- **Smart Panel** This program allows you to monitor the machine's status and alerts you when an error occurs during printing.
- SmarThru- This is the accompanying Windows-based software for your multifunctional machine. Allows you to edit a scanned image in many ways using a powerful image editor and to send the image by email. You can also open another image editor program installed in your Windows, like Adobe PhotoShop, from SmarThru.

For details, please refer to the onscreen help supplied on the SmarThru program.

Linux driver

You can print and scan in Linux using your machine. For information about installing the MFP driver in Linux, see the **Software Section**.

Macintosh printer driver

You can print and scan in Macintosh using your machine. For information about installing the printer driver in Macintosh, see the **Software Section**.

Printer driver features

Your printer drivers support the following standard features:

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

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

	Printe	er Driver	
Feature	Win 98/Me/ 2000/XP	Macintosh	Linux
Toner save	Y	Ν	Y
Print quality option	Y	Y	Y
Poster printing	Y	Ν	Ν
Multiple pages per sheet (N-up)	Y	Y	Y(2,4)
Fit to page printing	Y	Ν	Y
Scale printing	Y	Y	Y
Watermark	Y	Ν	Ν
Overlay	Y	Ν	Ν
TrueType fonts option	Y	Ν	N

System requirements

Before you begin, ensure that your system meets the minimum requirements.

Item	Requ	irements	Recommended
Operating system	Windows 98/Me/2000/XP		
CPU	Windows 98/Me/2000	Pentium II 400 MHz or higher	Pentium III 933 MHz
	Windows XP	Pentium III 933 MHz or higher	Pentium IV 1 GHz
RAM	Windows 98/Me/2000	64 MB or more	128 MB
	Windows XP	128 MB or more	256 MB
Free disk space	Windows 98/Me/2000	300 MB or more	1 GB
	Windows XP	1 GB or more	5 GB
Internet Explorer	5.0 or higher	·	

Note: For Windows 2000/XP, users who have an administrator right can install the software.

2.8 Getting started

3 Loading original documents and paper

This chapter introduces you to how to load documents and print materials into your machine.

This chapter includes:

- Loading document
- Selecting print materials
- Loading paper
- Setting the paper size and type
- Selecting an output location

Loading document

You can use the document glass to load an original document for copying and scanning.

1 Lift and open the document cover.



2 Place the document **face down** on the **document glass** and align it with the registration guide at the top left corner of the glass.



3 Close the document cover. Be careful not to move the document.

NOTES:

- Leaving the document cover open while copying may affect copy quality and toner consumption.
- Dust on the document glass may cause black spots on the printout. Always keep it clean.
- If you are copying a page from a book or magazine, lift the document cover until its hinges are caught by the stopper and then close the cover. If the book or magazine is thicker than 30 mm, start copying with the cover open.

Selecting print materials

You can print on a variety of print materials, such as plain paper, envelopes, labels, and transparencies. Always use print materials that meet the guidelines for use with your machine. Paper that does not meet the guidelines outlined in this user's guide may cause the following problems:

- Poor print quality
- Increased paper jams
- Premature wear on the machine.

Properties, such as weight, composition, grain, and moisture content, are important factors that affect the machine's performance and the output quality. When you choose print materials, consider the following:

- Desired outcome: The paper you choose should be appropriate for your project.
- Size: You can use any size paper that fits easily within the paper adjusters of the paper input tray.
- Weight: Your machine supports paper weights as follows:
 - 16 to 24 lb (60 to 90 g/m²) bond for the paper input tray
 - 16 to 43 lb (60 to 165 g/m^2) bond for the manual feeder.
- 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.

NOTES:

- Some paper may meet all of the guidelines in this section and still not produce satisfactory results. This may be the result of improper handling, unacceptable temperature and humidity levels, or other variables over which Samsung has no control.
- Before purchasing large quantities of paper, ensure that the paper meets the requirements specified in this user's guide.

CAUTION: Using paper that does not meet these specifications may cause problems, requiring repairs. Such repairs are not covered by the Samsung warranty or service agreements.

Supported paper types and sizes

	••	,.												
Туре	Size	Dimensions	Weight ^a	Capacity ^b										
Plain paper	Letter	215.9 x 279 mm (8.5 x 11 inches)	g/m ² (16 sh to 24 lb 75 bond) for (24 the paper bo input tray pa • 60 to 165 the g/m ² (16 inp to 43 lb • 1 s bond) for the manual ma	g/m ² (16	• 250 sheets of 75 g/m ²									
	Legal	215.9 x 355.6 mm (8.5 x 14 inches)		(20 lb bond) paper for										
	Folio	216 x 330.2 mm (8.5 x 13 inches)		g/m ² (16 in to 43 lb • 1 bond) for pa the th manual m	g/m ² (16 in to 43 lb • 1 bond) for pa the th manual m	g/m ² (16 in to 43 lb • 1 s bond) for pa the th manual ma	g/m ² (16 inp to 43 lb • 1 s bond) for the the manual ma	g/m ² (16 in to 43 lb • 1 bond) for pa the th manual m	g/m ² (16 in to 43 lb • 1 bond) for the th manual m	g/m ² (16 to 43 lb bond) for the manual	g/m ² (16 to 43 lb bond) for the manual	g/m ² (16 to 43 lb bond) for the manual	g/m ² (16 inp to 43 lb • 1 s bond) for the the manual ma	the paper input tray • 1 sheet of
	A4	210 x 297 mm (8.27 x 11.69 inches)												the t manual r
	Oficio	216 x 343 mm (8.5 x 13.5 inches)												
	JIS B5	182 x 257 mm (7.18 x 10.12 inches)												
	ISO B5	176 x 250 mm (6.93 x 9.84 inches)												
	Executive	184.2 x 266.7 mm (7.25 x 10.5 inches)												
	A5	148.5 x 210 mm (5.85 x 8.27 inches)												
	A6	105 x 148.5 mm (4.13 x 5.85 inches)												
Envelope	Envelope B5	176 x 250 mm (6.92 x 9.48 inches)	60 to 90 g/m ² (16 to 24 lb)	1 sheet of paper for the manual feeder										
	Envelope Monarch	98.4 x 190.5 mm (3.88 x 7.5 inches)		leeder										
	Envelope COM-10	105 x 241 mm (4.12 x 9.5 inches)												
	Envelope DL	110 x 220 mm (4.33 x 8.66 inches)												
	Envelope C5	162 x 229 mm (6.38 x 9.02 inches)												

Туре	Size	Dimensions	Weight ^a	Capacity ^b
Envelope (continued)	Envelope C6	114 x 162 mm (4.48 x 6.37 inches)	60 to 90 g/m ² (16 to 24 lb)	1 sheet of paper for the manual feeder
Transparency	Letter, A4	Refer to the Plain paper section	138 to 148 g/m ²	1 sheet of paper for the manual feeder
Labels	Letter, Legal, Folio, A4, JIS B5, ISO B5, Executive, A5, A6	Refer to the Plain paper section	120 to 150 g/m ² (32 to 40 lb)	1 sheet of paper for the manual feeder
Card stock	Letter, Legal, Folio, A4, JIS B5, ISO B5, Executive, A5, A6	Refer to the Plain paper section	60 to 165 g/m ² (16 to 43 lb)	1 sheet of paper for the manual feeder
Minimum size (custom)	98 x 148 mm (3.86 x 5.83 inches)	60 to 165 g/m ² (16 to 43 lb bond)	1 sheet of paper for the manual feeder
Maximum size (custom)		215.9 x 356 mm (8.5 x 14 inches)	1	leeder

a If paper weight is over 90 g/m², load one sheet of paper in the manual feeder.

b Maximum capacity may differ depending on media weight, thickness, and environmental conditions.

Paper size supported in each mode

Mode	Size	Source
Copy mode	Letter, A4, Legal, Folio, Executive, ISO B5, JIS B5, A5, A6	 paper input tray manual feeder
Single side printing	All sizes supported by the machine	 paper input tray manual feeder

Guidelines for selecting and storing print materials

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

- Always use paper and other materials that conform with the specifications listed on page 3.2.
- Attempting to print on damp, curled, wrinkled, or torn paper can cause paper jams and poor print quality.
- For the best print quality, use only high quality copier grade paper specifically recommended for use in laser printers.
- Avoid using the following paper types:
 - Paper with embossed lettering, perforations, or a texture that is too smooth or too rough
 - Erasable bond paper
 - Multi-paged paper
 - Synthetic paper and thermally reactive paper
 - Carbonless paper and Tracing paper.
- Use of these types of paper could result in paper jams, chemical smells, and damage to your machine.
- Store paper in its ream wrapper until you are ready to use it. 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.
- Store unused materials at temperatures between $15^{o}\,C$ and $30^{o}\,C$ (59° F to 86° F). The relative humidity should be between 10% and 70%.
- Store unused paper in a moisture-proof wrap, such as a plastic container or bag, to prevent dust and moisture from contaminating your paper.
- Load special paper types one sheet at a time through the manual feeder to avoid paper jams.
- To prevent materials such as transparencies and label sheets from sticking together, remove them as they print out.

Guidelines for special materials

	-	, i	
Paper Type	Guidelines		Т
Envelopes	 Successful printing on envelopes depends upon the quality of the envelopes. When selecting envelopes, consider the following factors: Weight: The weight of the envelope paper should not exceed 90 g/m² (24 lb) or jamming may occur. Construction: Prior to printing, envelopes should lie flat with less than 6 mm (0.25 inches) curl, and should not contain air. Condition: Envelopes should not be wrinkled, nicked, or otherwise damaged. Temperature: You should use envelopes that are compatible with the heat and pressure of the machine during operation. Use only well-constructed envelopes with sharp and 		
	 well creased folds. Do not use stamped envelopes. Do not use envelopes with clasps, snaps, windows, coated lining, self-adhesive seals, or other synthetic materials. Do not use damaged or poorly made envelopes. Be sure the seam at both ends of the envelope extends all the way to the corner of the envelope. 		L
	Acceptable		
	Unacceptable		
	 Envelopes with a peel-off adhesive strip or with more than one flap that folds over to seal must use adhesives compatible with the machine's fusing temperature of 208° C (406.4° F) for 0.1 second. The extra flaps and strips might cause wrinkling, creasing, or jams, and may even damage the fuser. For the best print quality, position margins no closer than 15 mm (0.6 inches) from the edges of the envelope. 		
	 Avoid printing over the area where the envelope's seams meet. 		C

Paper Type	Guidelines
Transparencies	 To avoid damaging the machine, use only transparencies designed for use in laser printers. Transparencies used in the machine must be able to withstand 208° C (406.4° F), the machine's fusing temperature. Place them on a flat surface after removing them from the machine. Do not leave them in the paper tray for long periods of time. Dust and dirt may accumulate on them, resulting in spotty printing. To avoid smudging caused by fingerprints, handle them carefully. To avoid fading, do not expose printed transparencies to prolonged sunlight. Ensure that transparencies are not wrinkled, curled or have any torn edges.
Labels	 To avoid damaging the machine, use only labels designed for use in laser printers. When selecting labels, consider the following factors: Adhesives: The adhesive material should be stable at 208° C (406.4° F), the machine's fusing temperature. Arrangement: Only use labels with no exposed backing between them. Labels can peel off sheets that have spaces between the labels, causing serious jams. Curl: Prior to printing, labels must lie flat with no more than 13 mm (5 inches) of curl in any direction. Condition: Do not use labels with wrinkles, bubbles, or other indications of separation. Make sure that there is no exposed adhesive material between labels. Exposed areas can cause labels to peel off during printing, which can cause damage to machine components. Do not run a sheet of labels through the machine. Do not use labels that are separating from the backing sheet or are wrinkled, bubbled, or otherwise damaged.
Card stock or custom-sized materials	 Do not print on media smaller than 76 mm (3 inches) wide or 127 mm (5 inches) long. In the software application, set margins at least 6.4 mm (0.25 inches) away from the edges of the material.

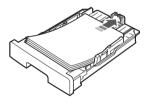
Paper Type	Guidelines
Preprinted paper	 Letterhead must be printed with heat-resistant ink that will not melt, vaporize, or release hazardous emissions when subjected to the machine's fusing temperature of 208° C (406.4° F) for 0.1 second. Letterhead ink must be non-flammable and should not adversely affect printer rollers. Forms and letterhead should be sealed in a moisture-proof wrapping to prevent changes during storage. Before you load preprinted paper, such as forms and letterhead, verify that the ink on the paper is dry. During the fusing process, wet ink can come off preprinted paper, reducing print quality.

Loading paper

In the paper input tray

Load the print material you use for the majority of your print jobs in the paper input tray. The paper input tray can hold a maximum of 250 sheets of 20 lb (75 g/m²) plain paper.

To load paper, pull open the paper input tray and load paper with the side to be printed on face down.



You can load letterhead paper with the design side face down. The top edge of the sheet with the logo should be placed at the front of the paper input tray.

For details about loading paper in the tray, see page 2.3.

NOTES:

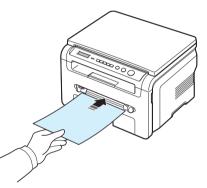
- If you experience problems with paper feed, place one sheet at a time in the manual feeder.
- You can load previously printed paper. The printed side should be facing up with an uncurled edge at the front. If you experience problems with paper feed, turn the paper around. Note that the print quality is not guaranteed.

In the manual feeder

Use the manual feeder to print transparencies, labels, envelopes or postcards in addition to making quick runs of paper types or sizes that are not currently loaded in the paper input tray.

To load print material in the manual feeder:

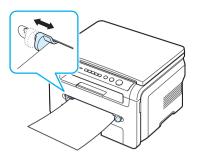
 Load a sheet of the print material with the side to be printed on facing up into the center of the manual feeder.



Depending on the paper type you are using, keep the following loading method:

- Envelopes: load a sheet with the flap side down and with the stamp area on the top left side.
- Transparencies: load a sheet with the print side up and the top with the adhesive strip entering the machine first.
- Labels: load a sheet with the print size up and top short edge entering the machine first.
- Preprinted paper: load a sheet with the design face up, top edge toward the machine.
- Card: load a sheet with the print side up and the short edge entering the machine first.
- Pre printed paper: load a sheet with the printed side down and an uncurled edge toward the machine.

2 Adjust the manual feeder guides to the width of the print material without bending it.



3 After loading paper, you need to set the paper type and size for the manual feeder. See page 3.6 for copying or the **Software Section** for PC-printing.

NOTE: The settings made from the printer driver override the settings on the control panel.

4 If you want to use the rear cover, open the rear cover.

Tips on using the manual feeder

- Print materials should be loaded face up with the top edge going into the manual feeder first and be placed in the center of the tray.
- Always load only the print materials specified in the Specifications on page 3.2 to avoid paper jams and print quality problems.
- When you print on 76 x 127 mm (3 x 5 inches) sized media on the manual feeder, open the rear cover to use the rear cover.
- Make sure to open the rear cover when you print on transparencies. If not, they may tear while exiting the machine.

Setting the paper size and type

After loading paper in the paper tray, you need to set the paper size and type using the control panel buttons. These settings will apply to Copy mode. For PC-printing, you need to select the paper size and type in the application program you use on your PC.

- 1 Press Menu until Paper Setting appears on the top line of the display.
- 2 Press **OK** when **Paper Size** appears.
- 3 Press the scroll button (< or ▶) to select the paper tray you want to use and press OK.</p>

- 4 Press the scroll button (∢ or ►) to find the paper size you are using and press **OK**.
- **5** Press **Back** to return to the upper level.
- 6 Press the scroll button (∢ or ►) to select **Paper Type** and press **OK**.
- 7 Press the scroll button (∢ or ►) to find the paper type you are using and press **OK**.
- 8 Press **Stop/Clear** to return to Standby mode.

Selecting an output location

The machine has two output locations: the rear cover (face up) and the output tray (face down).

To use the output tray, make sure that the rear cover is closed. To use the rear cover, open the rear cover.

NOTES:

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

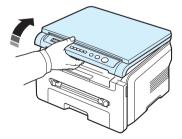
Printing to the output tray (Face down)

The output tray collects printed paper face down, in the order in which the sheets were printed. The tray should be used for most print jobs.

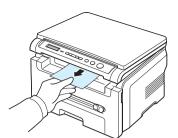
If you use paper which is not long enough to reach the output tray, use the scan unit.

To use the scan unit:

1 Lift the scan unit. A tab automatically springs up to support the cover.

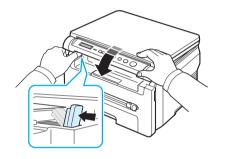


2 Take the paper out manually.



3 Close the scan unit. In order to close the cover, push the tab to the left and hold it down. Then lower the cover carefully until the cover is holding down the tab. Then you can move your hand and finish lowering the cover.

Be careful not to pinch your fingers!



NOTES:

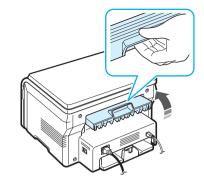
- If you continuously print many pages, the surface of the output tray may become hot. Be careful not to touch the surface, and especially keep children away from the surface.
- The output tray can hold up to 50 sheets of paper. Remove the pages so that tray is not overloaded.

Printing to the rear cover (Face up)

Using the rear cover, paper comes out of the machine face up.

Printing from the manual feeder to the rear cover provides a **straight paper path**. Using the rear cover might improve the output quality with special materials.

To use the rear cover, open the rear cover by pulling it up.



<u>/</u>

CAUTION: The fuser area inside the rear cover of your machine becomes very hot when in use. Take care when you access this area.

4 Copying

This chapter gives you step-by-step instructions for copying documents.

This chapter includes:

- Copying
- Changing the settings for each copy
- Using special copy features
- Changing the default settings
- Setting the time out option

Copying

- **1** Place a document on the document glass.
- 2 Customize the copy settings including copy size, darkness, and original type, by using the control panel buttons. See page 4.1.

If necessary, you can use special copy features, such as Poster copying or 2 Up copying. See page 4.3.

- 3 Press **Copies** and enter the number of copies using the scroll button (∢ or ▶), if necessary.
- 4 Press Start to begin copying.

The display shows the copy processing.

NOTE: You can cancel the copy job during an operation. Press **Stop/Clear**, and the copying will stop.

Changing the settings for each copy

The buttons on the control panel let you select all basic copy options: darkness, document type and copy size. Set the following options for the current copy job before pressing **Start** to make copies.

NOTE: If you press **Stop/Clear** while setting the copy options, all of the options you have set for the current copy job will be canceled and returned to their default status.

Reduced/Enlarged copy

You can reduce or enlarge the size of a copied image from 50% to 200% when you copy original documents from the document glass.

To select from the predefined copy sizes:

- 1 Press Menu then Reduce/Enlarge appears.
- 2 Press the scroll button (∢or ►) to select the size setting you want and press **OK**.

To fine-tune the size of copies:

- 1 Press Menu then Reduce/Enlarge appears.
- 2 Press the scroll button (∢ or ►) until Custom:50-200% appears and press OK.
- 3 Press the scroll button (∢ or ►) to enter the copy size you want. Pressing and holding the button allows you to quickly scroll to the number you want.
- 4 Press **OK** to save the selection.

NOTE: When you make a reduced copy, black lines may appear at the bottom of your copy.

Darkness

If you have an original document containing faint markings and dark images, you can adjust the brightness to make a copy that is easier to read.

- 1 Press **Menu** until **Darkness** appears on the top line of the display.
- 2 Press the scroll button (∢ or ▶) to select the contrast mode you want.
 - Light: works well with dark print.
 - Normal: works well with standard typed or printed documents.
 - **Dark**: works well with light print or faint pencil markings.
- 3 Press **OK** to save the selection.

Original type

The original type setting is used to improve the copy quality by selecting the document type for the current copy job.

- Press Menu until Original Type appears on the top line of the display.
- 2 Press the scroll button (or) to select the image mode you want.
 - Text: Use for documents containing mostly text.
 - **Text/Photo**: Use for documents with mixed text and photographs.
 - Photo: Use when the originals are photographs.

Auto Fit copying



The copy options, including darkness, original type, copy size and number of copies, can be set to the most frequently used modes. When you copy a document, the default settings are used unless they are changed by using the menus on the control panel.

To create your own default settings:

- 1 Press **Menu** until **Copy Setup** appears on the top line of the display.
- 2 Press OK when Default-Change appears.
- 3 Press the scroll button (∢ or ▶) to select a setup option and press OK.
- 4 Press the scroll button (< or >) to change the setting or enter the value and press OK.
- 5 Repeat steps 3 through 4, as needed.
- 6 Press **Stop/Clear** to return to Standby mode.

NOTE: While you are setting copy options, pressing **Stop/ Clear** cancels the changed settings and restores their default status.

Using special copy features

Clone copying



This feature prints multiple image copies from the original document on a single page. The number of images is automatically determined by the original image and paper size.

- 1 Place the document to be copied on the document glass, and close the cover.
 - Press **Menu** until **Special Copy** appears on the top line of the display.
- 3 Press the scroll button (∢ or ►) until **Clone** appears and press **OK**.
- 4 Customize the copy settings including copy size, darkness, and original type, by using the control panel buttons. See page 4.1.

NOTE: You cannot adjust the copy size using the **Reduce/ Enlarge** menu while making a clone copy.

5 Press Start to begin copying.



This feature automatically reduces or enlarges the original image to fit on the paper currently loaded in the machine.

NOTE: When the size of the document you want to copy is not same as the size of the paper loaded, this function automatically adjusts the size of the document to fit the paper. You can not adjust the copy size manually.

- Load the document to be copied on the document glass, and close the cover.
- 2 Press Menu until Special Copy appears on the top line of the display.
- 3 Press the scroll button (∢ or ▶) until **Auto Fit** appears and press **OK**.
- 4 Customize the copy settings including copy size, darkness, and original type, by using the control panel buttons. See page 4.1.

NOTE: You cannot adjust the copy size using the **Reduce**/ **Enlarge** menu while Auto Fit copying is enabled.

5 Press **Start** to begin copying.

ID Card copying

You can copy both sides of the ID Card like a drivers licence to a single side of paper.

When you copy using this feature, the machine prints one side of the card on the upper half of the paper and the other side on the lower half without reducing the size of the original.

If the loaded card is larger than the printable area, some portions may not be printed.

- 1 Place the ID Card to be copied on the document glass and close the cover.
- Press Menu until Special Copy appears on the top line of the display.
- 3 Press the scroll button (∢ or ►) until **ID Card copy** appears and press **OK**.
- 4 Customize the copy settings including copy size, darkness, and original type, by using the control panel buttons. See page 4.1.
- 5 Press **Start** to begin copying.

Your machine begins scanning the front side and display **Set Backside**.

6 Open the document cover and flip the document over. Close the cover.

NOTE: If you press **Stop/Clear** or no buttons are pressed for approximately 30 seconds, the machine cancels the copy job and returns to Standby mode.

7 Press **Start** to begin copying.

2-UP copying



This feature prints 2 original images reduced to fit onto one sheet of paper.

- 1 Place the document to be copied on the document glass and close the cover.
- 2 Press **Menu** until **Special Copy** appears on the top line of the display.
- 3 Press the scroll button (∢ or ▶) until 2-UP appears and press OK.
- 4 Customize the copy settings including copy size, darkness, and original type, by using the control panel buttons. See page 4.1.

NOTE: You cannot adjust the copying size using the **Reduce**/ **Enlarge** menu while making a 2-UP copying.

5 Press **Start** to begin copying.

Your machine begins scanning the front side and display **Set Next Page Press Start**.

- 6 Place the second document to be copied on the document glass.
- 7 Press Start to begin copying.

NOTE: 2-UP copying reduces your original document by 50%.

Poster copying



This feature prints an image onto 9 sheets of paper (3x3). You can paste the printed pages together to make one poster-sized document.

- 1 Place the document to be copied on the document glass and close the cover.
- 2 Press **Menu** until **Special Copy** appears on the top line of the display.
- 3 Press the scroll button (∢ or ►) until **Poster** appears and press **OK**.
- 4 Customize the copy settings including copy size, darkness, and original type, by using the control panel buttons. See page 4.1.
- 5 Press **Start** to begin copying.

NOTE: You cannot adjust the copy size using the **Reduce/ Enlarge** menu while making a poster.

Your original document is divided into 9 portions. Each portion is scanned and printed one by one in the following order:

1	2	з
4	5	6
7	8	9

Setting the time out option

You can set the time the machine waits before it restores the default copy settings, if you do not start copying after changing them on the control panel.

- 1 Press **Menu** until **Copy Setup** appears on the top line of the display.
- 2 Press the scroll button (∢ or ▶) until **Timeout** appears and press **OK**.
- 3 Press the scroll button (∢ or ►) to select the time setting you want.

Selecting **Off** means that the machine does not restore the default settings until you press **Start** to begin copying, or **Stop/Clear** to cancel.

- 4 Press OK to save your selection.
- 5 press **Stop/Clear** to return to Standby mode.

5 Basic printing

This chapter explains common printing tasks.

Printing a document

This printer allows you to print from various Windows applications, a Macintosh computer, or a Linux system. The exact steps for printing a document may vary depending on the application you use.

For details about printing, see the **Software Section**.

Canceling a print job

If the print job is waiting in a print queue or print spooler, such as the printer group in Windows, delete the job as follows:

- 1 Click the Windows Start button.
- 2 For Windows 98/2000/Me, select Settings and then Printers.

For Windows XP, select Printers and Faxes.

- 3 Double-click the Samsung SCX-4200 Series icon.
- 4 From the Document menu, select Cancel Printing (Windows 98/Me) or Cancel (Windows 2000/XP).

NOTE: You can also access this window by simply doubleclicking the printer icon at the bottom right corner of the Windows desktop.

You can also cancel the current job by pressing **Stop/Clear** on the **control panel** of your machine.

6 Scanning

Scanning with your machine lets you turn pictures and text into digital files on your computer. Then you can upload them on your web site or use them to create projects that you can print using Samsung SmarThru program or the WIA driver.

Scanning basics

Your machine offers the following ways to scan an image:

- From TWAIN-compliant software: You can use other software including Adobe Photoshop Deluxe and Adobe Photoshop.
- From the Windows Images Acquisition (WIA) driver: Your machine supports the WIA driver for scanning images.
- From the Samsung SmarThru software: Launch Samsung SmarThru and open Scan To to begin scanning.

NOTE: To scan with your machine, you must install the software. For details about installing the software, see the **Software Section**.

7 Ordering toner cartridge

This chapter provides information on purchasing toner cartridges available for your machine.

Toner cartridges

When the toner runs out, you can order the following type of toner cartridges for your machine:

Туре	Yield ^a	Part number
Standard	3,000 pages	SCX-D4200A

a. ISO 19752 5% coverage

How to purchase

To order Samsung-authorized toner cartridges, contact your local Samsung dealer or the retailer where you purchased your machine, or visit www.samsungprinter.com and select your country/region for information on calling for technical support.

8 Maintenance

This chapter provides information for maintaining your machine and the toner cartridge.

This chapter includes:

- Printing reports
- Clearing memory
- Cleaning your machine
- Maintaining the toner cartridge
- Consumable and replacement parts

Printing reports

Your machine can print report containing system data information.

- Press Menu until Report appears on the top line of the display.
- 2 Press OK when System Data appears.

The system data information prints out.

Clearing memory

You can selectively clear information stored in your machine's memory.

- Press Menu until Maintenance appears on the top line of the display.
- 2 Press the scroll button (∢ or ▶) until Clear Settings appears and press OK.
- 3 Press the scroll button (∢ or ►) to select the item you want to clear.
 - **Paper Setting**: Resets all of the Paper Setting options to the factory default.
 - **Copy Setup**: Resets all of the Copy Setup options to the factory default.
 - All Settings: Resets all of your settings to the factory default.
 - Machine Setup: Resets all of the system settings, such as the display language and save mode, to the factory default.
- 4 Press **OK** to confirm clearing. The selected setting is cleared.
- 5 Repeat steps 3 through 4 to clear another setting.
- 6 Press **Stop/Clear** to return to Standby mode.

Cleaning your machine

To maintain print and scan quality, follow the cleaning procedures below each time the toner cartridge is replaced or if print and scan quality problems occur.

CAUTION: Cleaning the cabinet of the machine with cleaning materials containing large amounts of alcohol, solvent, or other strong substances can discolor or crack the cabinet.

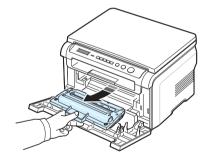
Cleaning the outside

Clean the cabinet of the machine with a soft lint-free cloth. You can dampen the cloth slightly with water, but be careful not to let any water drip onto or into the machine.

Cleaning the inside

During the printing process, paper, toner, and dust particles can accumulate inside the machine. This buildup can cause print quality problems, such as toner specks or smearing. Cleaning the inside of the machine clears or reduces these problems.

- 1 Turn the machine off and unplug the power cord. Wait for the machine to cool down.
- 2 Open the front cover and pull the toner cartridge out. Set it on a clean flat surface.

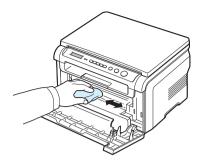




CAUTION:

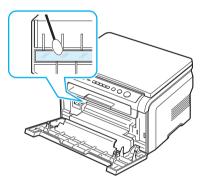
- To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
- Do not touch the green surface underside of the toner cartridge. Use the handle on the toner cartridge to avoid touching this area.

3 With a dry lint-free cloth, wipe away any dust and spilled toner from the toner cartridge area and the toner cartridge cavity.



CAUTION: While cleaning the inside of the machine, be careful not to touch the transfer roller, located underneath the toner cartridge. Oil from your fingers can cause print scan quality problems.

4 Locate the long strip of glass (LSU) inside the top of the toner cartridge compartment, and gently swab the glass to see if dirt turns the white cotton black.



- **5** Reinsert the toner cartridge and close the front cover.
- 6 Plug in the power cord and turn the machine on.

Cleaning the drum

If there are streaks or spots on your print, the OPC drum of the toner cartridge may require cleaning.

- **1** Before starting the cleaning procedure, make sure that paper is loaded in the machine.
- Press Menu until Maintenance appears on the top line of the display.
- 3 Press OK when Clean Drum appears.

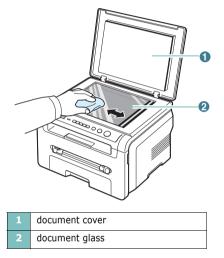
The machine prints out a cleaning page. Toner particles on the drum surface are affixed to the paper.

4 If the problem remains, repeat steps 1 through 3.

Cleaning the scan unit

Keeping the scan unit clean helps ensure the best possible copies. We suggest that you clean the scan unit at the start of each day and during the day, as needed.

- Slightly dampen a soft lint-free cloth or paper towel with water.
- 2 Open the document cover.
- **3** Wipe the surface of the document glass until it is clean and dry.



- 4 Wipe the underside of the document cover until it is clean and dry.
- 5 Close the document cover.

Maintaining the toner cartridge

Toner cartridge storage

To get the most from the toner cartridge, keep the following guidelines in mind:

- Do not remove the toner cartridge from its package until ready for use.
- Do not refill the toner cartridge. The machine warranty does not cover damage caused by using a refilled toner cartridge.
- Store toner cartridges in the same environment as your machine.
- To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes.

Saving toner

To save toner, press **Menu** until **Toner Save** appears and then press **OK** when **On** appears. Using this feature extends the life of the toner cartridge and reduces your cost per page, but it also reduces print quality.

Expected toner cartridge life

The life of the toner cartridge depends on the amount of toner that print jobs require. When printing text at ISO 19752 5% coverage, a new toner cartridge lasts an average of 3,000 pages. (The original toner cartridge supplied with the machine lasts an average of 1,000 pages.) The actual number may be different depending on the print density of the page you print. If you print a lot of graphics, you may need to change the toner cartridge more often.

NOTE: The 1,000 pages and 3,000 pages toner cartridge have different shapes.

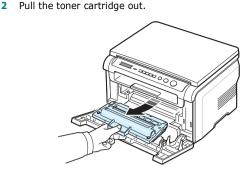
Redistributing the toner cartridge

When the toner cartridge is near the end of its life:

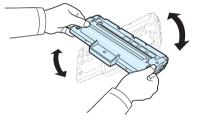
- White streaks or light printing occurs.
- The warning message, **Toner Low** displays on the control panel.
- The Smart Panel program window appears on the computer telling you that the toner cartridge is low on toner.
- The Status LED blinks red.

If this happens, you can temporarily reestablish print quality by redistributing the remaining toner in the toner cartridge. In some cases, white streaks or light printing will still occur even after you have redistributed the toner.

1 Open the front cover.



3 Thoroughly roll the toner cartridge 5 or 6 times to distribute the toner evenly inside the toner cartridge.

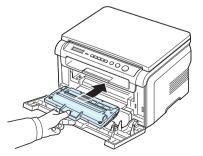


NOTE: If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.



CAUTION: Do not touch the green underside of the toner cartridge. Use the handle on the toner cartridge to avoid touching this area.

- 4 Hold the toner cartridge by the handle and slowly insert the toner cartridge into the opening in the machine.
- 5 Tabs on the sides of the toner cartridge and corresponding grooves within the machine will guide the toner cartridge into the correct position until it locks into place completely.



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

Replacing the toner cartridge

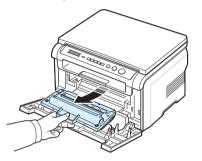
When the toner cartridge is completely empty:

- The warning message, **Toner Empty** or **[Toner Empty] Replace Toner** displays on the control panel.
- The Smart Panel program window appears on the computer telling you that the toner cartridge is empty.
- The Status LED lights red.

At this stage, the **toner cartridge** needs to be replaced. For order information for toner cartridges, see page 7.1.

NOTE: This feature does not work for the **[Toner Empty] Replace Toner** message.

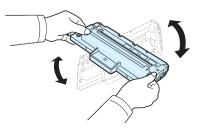
7 Pull the toner cartridge out.



- 8 Remove the new toner cartridge from its bag.
- 9 Remove the paper protecting the toner cartridge.



10 Roll the toner cartridge 5 or 6 items to distribute the toner evenly inside the toner cartridge.



Thoroughly rolling the toner cartridge will assure maximum copies per toner cartridge.

NOTE: 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.

CAUTION: Do not touch the green underside of the toner cartridge. Use the handle on the toner cartridge to avoid touching this area.

- **11** Hold the toner cartridge by the handle and slowly insert the toner cartridge into the opening in the machine.
- 12 Tabs on the sides of the toner cartridge and corresponding grooves within the machine will guide the toner cartridge into the correct position until it locks into place completely.
- **13** Close the front cover. Make sure that the cover is securely closed.

Consumable and replacement parts

From time to time, you needs to replace the toner cartridge, roller, and fuser unit to maintain top performance and to avoid print quality problems and paper feed problems resulting from worn parts. The Smart Panel program window will appear on the computer, indicating which item needs to be replaced.

The following items should be replaced after you have printed the specified number of pages, or when the life span of each item has expired. The Smart Panel program window will appear on the computer, indicating which item needs to be replaced.

Items	Yield (Average)
Transfer roller	Approx. 50,000 pages
Fuser unit	Approx. 50,000 pages
Paper feeding roller	Approx. 50,000 pages

To purchase consumable and replacement parts, contact your Samsung dealer or the retailer where you bought your machine. We strongly recommend that these items be installed by a trained service professional, except for the toner cartridge (see page 8.4).

9 Troubleshooting

This chapter gives helpful information for what to do if you encounter an error.

This chapter includes:

- Clearing paper jams
- Understanding the Status LED
- Understanding display messages
- Solving other problems

Clearing paper jams

When a paper jam occurs, **Paper Jam** appears on the display. Refer to the table below to locate and clear the paper jam.

Message	Location of Jam	Go to
[Paper Jam 0] Open/Close Door	In the paper input tray	below and page 9.1
[Paper Jam 1] Open/Close Door	In the fuser area or around the toner cartridge In the manual feeder	page 9.2
[Paper Jam 2] Check Inside	In the paper exit area	page 9.2

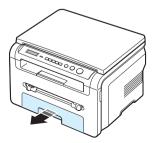
To avoid tearing the paper, pull out the jammed paper gently and slowly. Follow the instructions in the following sections to clear the jam.

In the paper input tray

1 Open and close the front cover. The jammed paper automatically exits the machine.

If the paper does not exit, continue to step 2.

2 Pull the paper input tray out.



3 Remove the jammed paper by gently pulling it straight out.

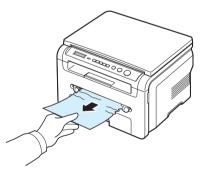


If there is any resistance and the paper does not move when you pull, or if you cannot see the paper in this area, check the fuser area around the toner cartridge. See page 9.2.

- 4 Insert the paper input tray into the machine until it snaps into place.
- **5** Open and close the front cover to resume printing.

In the manual feeder

1 If the paper is not feeding properly, pull the paper out of the machine.

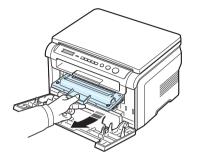


2 To resume printing, open and close the front cover.

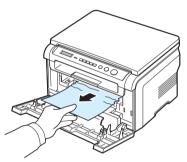
In the fuser area or around the toner cartridge

NOTE: The fuser area is hot. Take care when removing paper from the machine.

1 Open the front cover and pull the toner cartridge out.



 Remove the jammed paper by gently pulling it straight out.



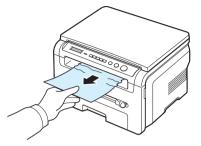
3 Replace the toner cartridge and close the front cover. Printing automatically resumes.

In the paper exit area

1 Open and close the front cover. The jammed paper automatically exits the machine.

If the paper does not exit, continue to step 2.

2 Gently pull the paper out of the output tray. Skip to step 9.

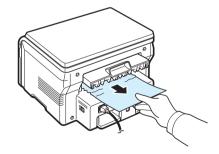


If you cannot see the jammed paper in the output tray, continue to the next step.

- 3 Lift the scan unit.
- 4 Pull the jammed paper out gently.
- 5 Close the scan unit by pushing a tab to the left and hold it down and lowering the cover carefully until the cover is holding down the tab.

If there is any resistance and the paper does not move when you pull or if you cannot see the paper under the scan unit, continue to the next step.

- 6 Open the rear cover.
- 7 Remove the jammed paper by gently pulling it straight out.



- 8 Close the rear cover.
- 9 Open and close the front cover to resume printing.

Tips for avoiding paper jams

By selecting the correct paper types, most paper jams can be avoided. When a paper jam occurs, follow the steps outlined in page 9.1.

- Follow the procedures in page 2.3. Ensure that the adjustable guides are positioned correctly.
- Do not overload the paper input tray. Ensure that the paper is below the paper capacity mark on the inside wall of the paper input tray.
- Do not remove paper from the paper input tray while your machine is printing.
- Flex, fan, and straighten the paper before loading.
- Do not use creased, damp, or highly curled paper.
- Do not mix paper types in the paper input tray.
- Use only recommended print materials. See page 3.2.
- Ensure that the recommended print side of print materials is facing down in the paper input tray and facing up in the manual feeder.

Understanding the Status LED

The **Status** LED on the control panel shows the status of your machine. See the table below to know your machine's status.

St	atus	Description	
Off		 The machine is off-line. The machine is in Power Save mode. When data is received, or any button is pressed, it switches to on-line automatically. 	
Green	On	The machine is on-line and can be used.	
	Blinking	 When the backlight slowly blinks, the machine is receiving data from the computer. When the backlight normally blinks, the machine is scanning the loaded document. When the backlight fast blinks, the machine is printing data. 	
Red	On	 The toner cartridge is totally exhausted. Remove the old toner cartridge and install a new one. See page 8.4. A paper jam has occurred. To solve the problem, see page 9.1. The front cover is open. Close the front cover. There is no paper in the paper input tray. Load paper in the paper input tray. The machine has stopped due to a major error. Check the display message. See page 9.4 for details on the meaning of the error message. 	
	Blinking	 A minor error occurs and the machine is waiting an error to be cleared. Check the display message. When the problem is cleared, the machine resumes. The toner cartridge is low. Order a new toner cartridge. You can temporarily improve print quality by redistributing the toner. See page 8.4. 	

Understanding display messages

Messages appear on the Smart Panel program window or the control panel display to indicate the machine's status or errors. Refer to the tables below to understand the messages' meaning and correct the problem if necessary. Messages and their meanings are listed in alphabetical order.

NOTE: When you call for service, it is very convenient to tell the service representative the display message.

Display	Meaning	Suggested solutions
Door Open	The front cover or rear cover is not securely latched.	Close the cover until it locks into place.
Hsync Error	A problem has occurred in the LSU (Laser Scanning Unit).	Unplug the power cord and plug it back in. If the problem persists, please call for service.
Invalid Cartridge	You have used an unauthorized cartridge.	You must use a Samsung approved cartridge.
No Cartridge	 You have used an unauthorized cartridge. The toner cartridge you have installled is not for your machine. 	 You must use a Samsung approved cartridge. Install a Samsung genuine toner cartridge, designed for your machine.
[Jam 1] or [No Cartridge]	The toner cartridge is not installed.	Install the toner cartridge. See page 2.2.
Low Heat Error	There is a problem in the fuser unit.	Unplug the power cord and plug it back in. If the problem persists, please call for service.
[LSU Error]	A problem has occurred in the LSU (Laser Scanning Unit).	Unplug the power cord and plug it back in. If the problem persists, please call for service.
[No Paper] Add Paper	The paper in the paper input tray has run out.	Load paper in the paper input tray. See page 2.3.
Open Heat Error	There is a problem in the fuser unit.	Unplug the power cord and plug it back in. If the problem persists, please call for service.
[Over Heat]	There is a problem in the fuser unit.	Unplug the power cord and plug it back in. If the problem persists, please call for service.

Display	Meaning	Suggested solutions
[Paper Jam 0] Open/Close Door	Paper has jammed in the feeding area of the paper input tray.	Clear the jam. See page 9.1.
[Paper Jam 1] Open/Close Door	Paper has jammed in the fuser area or in the manual feeder.	Clear the jam. See page 9.2.
[Paper Jam 2] Check Inside	Paper has jammed in the paper exit area.	Clear the jam. See page 9.2.
Power Failure Power has turned off then on and the machine's memory has not been back up.		The job which you were trying to do before the power failure must be completely re-done.
Scanner Error	There is a problem in the scanner unit.	Unplug the power cord and plug it back in. If the problem persists, please call for service.
Toner Empty	The toner cartridge has run out.	Replace the toner cartridge with a new one. See page 8.4.
[Toner Empty] Replace Toner	The toner cartridge has run out. The printer stops printing.	Replace the toner cartridge with a new one. See page 8.4.
Toner Low	The toner is almost empty.	Take out the toner cartridge and gently shake it. By doing this, you can temporarily reestablish printing operations.

Solving other problems

The following chart lists some conditions that may occur and the recommended solutions. Follow the suggested solutions until the problem is corrected. If the problem persists, please call for service.

Paper feeding problems

Condition	Suggested solutions
Paper is jammed during printing.	Clear the paper jam. See page 9.1.

Condition	Suggested solutions
Paper sticks together.	 Ensure that there is not too much paper in the paper input tray. The paper input tray can hold up to 250 sheets of paper, depending on the thickness of your paper. Make sure that you are using the correct type of paper. See page 3.2. Remove paper from the paper input tray and flex or fan the paper. Humid conditions may cause some paper to stick together.
Multiple sheets of paper do not feed.	 Different types of paper may be stacked in the paper input tray. Load paper of only one type, size, and weight. If multiple sheets have caused a paper jam, clear the paper jam. See page 9.1.
Paper does not feed into the machine.	 Remove any obstructions inside the machine. Paper has not been loaded correctly. Remove paper from the paper input tray and reload it correctly. There is too much paper in the paper input tray. Remove excess paper from the paper input tray. The paper is too thick. Use only paper that meets the specifications required by the machine. See page 3.2.
The paper keeps jamming.	 There is too much paper in the paper input tray. Remove excess paper from the tray. If you are printing on special materials, use the manual feeder. An incorrect type of paper is being used. Use only paper that meets the specifications required by the machine. See page 3.2. There may be debris inside the machine. Open the front cover and remove the debris.
Transparencies stick together in the paper exit.	Use only transparencies specifically designed for laser printers. Remove each transparency as it exits from the machine.
Envelopes skew or fail to feed correctly.	Ensure that the paper guides are against both sides of the envelopes.

Printing problems

Condition	Possible cause	Suggested solutions	
The machine does not print.	The machine is not receiving power.	Check the power cord connections. Check the power switch and the power source.	
princ.	The machine is not selected as the default printer.	Select Samsung SCX-4200 Series as your default printer in your Windows.	
	 Check the machine for the following: The front cover is not closed Close the front cover. Paper is jammed Clear the paper jam. See page 9.1. No paper is loaded Load paper. See page 2.3. The toner cartridge is not installed Install the toner cartridge. See page 2.2. If a printer system error occurs, contact your service representative. 		
	The connection cable between the computer and the machine is not connected properly.	Disconnect the printer cable and reconnect it.	
	The connection cable between the computer and the machine is defective.	If possible, attach the cable to another computer that is working properly and print a job. You can also try using a different printer cable.	
The machine does not print. (Continued)	The port setting is incorrect.	Check the Windows printer setting to make sure that the print job is sent to the correct port, for example, LPT1. If the computer has more than one port, make sure that the machine is attached to the correct one.	
	The machine may be configured incorrectly.	Check the printer properties to ensure that all of the print settings are correct.	
	The printer driver may be incorrectly installed.	Repair the printer software. See the Software Section .	
	The machine is malfunctioning.	Check the display message on the control panel to see if the machine is indicating a system error.	

Condition	Possible cause	Suggested solutions
The machine selects print materials from the wrong paper source.	The paper source selection in the printer properties may be incorrect.	For many software applications, the paper source selection is found under the Paper tab within the printer properties. Select the correct paper source. See the Software Section .
A print job is extremely slow.	The job may be very complex.	Reduce the complexity of the page or try adjusting the print quality settings. The maximum print speed of your machine is 19 PPM for Letter-sized paper and 18 PPM for A4-sized paper.
	If you are using Windows 98/Me, the Spooling Setting may be set incorrectly.	From the Start menu, choose Settings and Printers . Right-click the Samsung SCX-4200 Series machine icon, choose Properties , click the Details tab, and then choose the Spool Settings button. Select the desired spool setting.
Half the page is blank.	The page orientation setting may be incorrect.	Change the page orientation in your application. See the Software Section .
	The paper size and the paper size settings do not match.	Ensure that the paper size in the printer driver settings matches the paper in the paper input tray. Or, ensure that the paper size in the printer driver settings matches the paper selection in the software application settings you use.
The machine prints, but the text is wrong, garbled, or incomplete.	The printer cable is loose or defective.	Disconnect the printer cable and reconnect. Try a print job that you have already printed successfully. If possible, attach the cable and the machine to another computer and try a print job that you know works. Finally, try a new printer cable.
	The wrong printer driver was selected.	Check the application's printer selection menu to ensure that your machine is selected.
	The software application is malfunctioning.	Try printing a job from another application.
	The operating system is malfunctioning.	Exit Windows and reboot the computer. Turn the machine off and then back on again.

Condition	Possible cause	Suggested solutions
Pages print, but are blank.	The toner cartridge is defective or out of toner.	Redistribute the toner, if necessary. See page 8.3. If necessary, replace the toner cartridge.
	The file may have blank pages.	Check the file to ensure that it does not contain blank pages.
	Some parts, such as the controller or the board, may be defective.	Contact a service representative.
The illustrations print incorrectly in Adobe Illustrator.	The setting in the software application is wrong.	Select Download as Bit Image in the TrueType Options window of the Graphic properties and print the document again.
An error occurs	When the USB mode is set to	Change the USB mode to Slow . To do so, follow these step:
repeatedly when you are printing with the USB connection.	Fast, some PC users may experience poor USB communication.	1 Press Menu until Machine Setup appears on the top line of the display.
		2 Press the scroll button (∢ or ▶) until USB mode appears and press Ok.
		3 Press the scroll button (∢ or ►) until Slow appears and press Ok.
		4 Press Stop/Clear to return to standby mode.

Printing quality problems

If the inside of the machine is dirty or paper has been loaded improperly, you may notice a reduction in print quality. See the table below to clear the problem.

Condition	Suggested solutions	
Light or faded print AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	 If a vertical white streak or faded area appears on the page: The toner supply is low. You may be able to temporarily extend the toner cartridge life. See page 8.3. If this does not improve the print quality, install a new toner cartridge. The paper may not meet paper specifications; for example, the paper is too moist or too rough. See page 3.2. If the entire page is light, the print resolution setting is too low or the toner save mode is on. Adjust the print resolution and turn the toner save mode off. See the Software Section and page 2.6, respectively. A combination of faded or smeared defects may indicate that the toner cartridge needs cleaning. See page 8.2. The surface of the LSU part inside the machine may be dirty. Clean the LSU. See page 8.2. 	
Toner specks AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	 The paper may not meet specifications; for example, the paper is too moist or too rough. See page 3.2. The transfer roller may be dirty. Clean the inside of your machine. See page 8.1. The paper path may need cleaning. See page 8.2. 	
Dropouts AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	 If faded areas, generally rounded, occur randomly on the page: A single sheet of paper may be defective. Try reprinting the job. The moisture content of the paper is uneven or the paper has moist spots on its surface. Try a different brand of paper. See page 3.2. The paper lot is bad. The manufacturing processes can cause some areas to reject toner. Try a different kind or brand of paper. If these steps do not correct the problem, contact a service representative. 	

Condition	Suggested solutions	
Vertical lines AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	 If black vertical streaks appear on the page: The drum inside the toner cartridge has probably been scratched. Remove the toner cartridge and install a new one. See page 8.4. If white vertical streaks appear on the page: The surface of the LSU part inside the machine may be dirty. Clean the LSU (see page 8.2). 	
Gray background AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	 If the amount of background shading becomes unacceptable: Change to a lighter weight paper. See page 3.2. Check the machine's environment: very dry (low humidity) or high humidity (higher than 80% RH) conditions can increase the amount of background shading. Remove the old toner cartridge and install a new one. See page 8.4. 	
AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	 Clean the inside of the machine. See page 8.1. Check the paper type and quality. See page 3.2. Remove the toner cartridge and install a new one. See page 8.4. 	
Vertical repetitive defects AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	 If marks repeatedly appear on the printed side of the page at even intervals: The toner cartridge may be damaged. If a repetitive mark occurs on the page, print a cleaning sheet several times to clean the toner cartridge; see page 8.2. After the printout, if you still have the same problems, remove the toner cartridge and install a new one. See page 8.4. Parts of the machine may have toner on them. If the defects occur on the back of the page, the problem will likely correct itself after a few more pages. The fusing assembly may be damaged. Contact a service representative. If you use inferior quality paper; see page 8.2. 	

Condition	Suggested solutions	Condition	Suggested solutions
Background scatter	 Background scatter results from bits of toner randomly distributed on the printed page. The paper may be too damp. Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture. If background scatter occurs on an envelope, change the printing layout to avoid printing over areas that have overlapping seams on the reverse side. Printing on seams can cause problems. If background scatter covers the entire surface 	Wrinkles or creases AabbCc AabbCc AabbCc AabbCc AabbCc AabbCc	 Ensure that the paper is loaded properly. Check the paper type and quality. See page 3.2. Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray. Try printing to the rear cover.
	area of a printed page, adjust the print resolution through your software application or the printer properties.	Back of printouts are dirty	Check for leaking toner. Clean the inside of the machine. See page 8.1.
Misformed characters AaBbCc AaBbCc AaBbCc AaBbCc	 If characters are improperly formed and producing hollow images, the paper stock may be too slick. Try a different paper. See page 3.2. If characters are improperly formed and producing a wavy effect, the scanner unit may need service. For service, contact a service representative. 	AaBbCc AaBbCc AaBbCc IBbCc	
AaBbCc AaBbCc		Black pages	 The toner cartridge may not be installed properly. Remove the toner cartridge and reinsert it. The toner cartridge may be defective and need replacing. Remove the toner cartridge and install
Page skew AaBbCc AaBbCc AaBbCc	 Ensure that the paper is loaded properly. Check the paper type and quality. See page 3.2. Ensure that the paper or other material is loaded correctly and the guides are not too tight or too loose against the paper stack. 		 a new one. See page 8.4. The machine may require repair. Contact a service representative.
AaBbCc AaBbCc AaBbCc		Loose toner	 Clean the inside of the machine. See page 8.1. Check the paper type and quality. See page 3.2. Remove the toner cartridge and install a new one.
Curl or wave AaBbCC AaBbCC AaBbCC	 Ensure that the paper is loaded properly. Check the paper type and quality. Both high temperature and humidity can cause paper curl. See page 3.2. Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray. 	AaBbĆc AaBbĆc AcbĆc Aa	 See page 8.4. If the problem persists, the machine may require repair. Contact a service representative.
AabbCc AabbCc	Try printing to the rear cover.	Character Voids	 Character voids are white areas within parts of characters that should be solid black: If you are using transparencies, try another type of transparency. Because of the composition of transparencies, some character voids are normal. You may be printing on the wrong surface of the
			 The paper may not meet paper specifications. See

• The paper may not meet paper specifications. See page 3.2.

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Condition	Suggested solutions
Horizontal stripes AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	 If horizontally aligned black streaks or smears appear: The toner cartridge may be installed improperly. Remove the toner cartridge and reinsert it. The toner cartridge may be defective. Remove the toner cartridge and install a new one. See page 8.4. If the problem persists, the machine may require repair. Contact a service representative.
Curl AaBbCc AaBbCc AaBbCc	If the printed paper is curled or paper does not feed into the machine:Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray.Try printing to the rear cover.

Copying problems

Condition	Suggested solutions
Copies are too light or too dark.	Use Darkness to darken or lighten the background of the copies.
Smears, lines, marks, or spots appears on copies.	 If defects are on the original, use Darkness to lighten the background of your copies. If no defects are on the original, clean the scan unit. See page 8.2.
Copy image is skewed.	Ensure that the original is face down on the document glass.Check that the paper is loaded correctly.
Blank copies print out.	Ensure that the original is face down on the document glass.
Image rubs off the copy easily.	 Replace the paper in the paper input tray with paper from a new package. In high humidity areas, do not leave paper in the machine for extended periods of time.
Frequent copy paper jams occur.	 Fan the stack of paper, then turn it over in the paper input tray. Replace the paper in the paper input tray with a fresh supply. Check/adjust the paper guides, if necessary. Ensure that the paper is the proper paper weight 75 g/m² (20 lb bond) paper is recommended. Check for copy paper or pieces of copy paper remaining in the machine after a paper jam has been cleared.

Condition	Suggested solutions
Toner cartridge produces fewer copies than expected before running out of toner.	 Your originals may contain pictures, solids, or heavy lines. For example, your originals may be forms, newsletters, books, or other documents that use more toner. The machine may be turned on and off frequently. The document cover may be left open while copies are being made.

Scanning problems

Condition	Suggested solutions
The scanner does not work.	 Make sure that you place the document to be scanned face down on the document glass. There may not be enough available memory to hold the document you want to scan. Try the Prescan function to see if that works. Try lowering the scan resolution rate. Check that the USB cable is connected properly. Make sure that the USB cable is not defective. Switch the cable with a known good cable. If necessary, replace the cable. Check that the scanner is configured correctly. Check scan setting in the SmarThru Configuration or the application you want to use to make certain that the scanner job is being sent to the correct port, for example, LPT1.
The unit scans very slowly.	 Check if the machine is printing received data. If so, scan the document after the received data has been printed. Graphics are scanned more slowly than text. Communication speed slows in scan mode because of the large amount of memory required to analyze and reproduce the scanned image. Set your computer to the ECP printer mode through BIOS setting. It will help to increase the speed. For details about how to set BIOS, refer to your computer User's Guide.

Condition	Suggested solutions
 Message appears on your computer screen: "Device can't be set to the H/W mode you want." "Port is being used by another program." "Port is disabled." "Scanner is busy receiving or printing data. When the current job is completed, try again." "Invalid handle." "Scanning has failed." 	 There may be a copying or printing job in progress. When that job is complete, try your job again. The Selected port is currently being used. Restart your computer and try again. The printer cable may be improperly connected or the power may be off. The scanner driver is not installed or the operating environment is not set up properly. Ensure that the machine is properly connected and the power is on, Then restart your computer. The USB cable may be improperly connected or the power may be off.

Common windows problems

Condition	Suggested solutions
"File in Use" message appears during installation.	Exit all software applications. Remove all software from the StartUp Group, then restart Windows. Reinstall the printer driver.
"Error Writing to LPTx" message appears.	 Ensure that the cables are connected correctly, the machine is on. If bi-directional communication is not turned on in the driver, it will also cause this message.
"General Protection Fault", "Exception OE", "Spool32", or "Illegal Operation" messages appear.	Close all other applications, reboot Windows and try printing again.
"Fail To Print", "A printer timeout error occurred." messages appear.	These messages may appear during printing. Just keep waiting until the machine finishes printing. If the message appears in standby mode or after printing has been completed, check the connection and/or whether an error has occurred.

Note: Refer to Microsoft Windows 98/Me/2000/XP User's Guide that came with your PC for further information on Windows error messages.

Common Linux Problems

Condition	Suggested solutions	
The machine doesn't print.	 Check if the printer driver is installed in your system. Open MFP configurator and switch to the Printers tab in Printers configuration window to look at the list of available printers. Make sure that your machine is displayed on the list. If not, please, invoke Add new printer wizard to set up your device. Check if the printer is started. Open Printers configuration and select your machine on the printers list. Look at the description in the Selected printer pane. If its status contains "(stopped)" string, please, press the Start button. After that normal operation of the printer should be restored. The "stopped" status might be activated when some problems in printing occurred. For instance, this could be an attempt to print document when MFP port is claimed by a scanning application. Check if the MFP port is not busy. Since functional components of MFP (printer and scanner) share the same I/O interface (MFP port), the situation of simultaneous access of different "consumer" application to the same MFP port is possible. To avoid possible conflicts, only one of them at a time is allowed to gain control over the device. The other "consumer" will encounter "device busy" response. You should open MFP port is configuration and select the port asplication. If this is the case, you should wait for completion of the current job or should press Release port button, if you are sure that the present owner is not functioning properly. Check if your application has special print option such as "-oraw". If "-oraw" is specified in the command line parameter then remove it to print properly. For Gimp front-end, select "print" -> "Setup printer" and edit command line parameter in the command item. 	
The machine does not appear on the scanners list.	 Check if your machine is attached to your computer. Make sure that it is connected properly via the USB port and is turned on. Check if the scanner driver for your machine is installed in your system. Open MFP Configurator, switch to Scanners configuration, then press Drivers. Make sure that driver with a name corresponding to your machine's name is listed in the window. 	

Condition	Suggested solutions	Conditi
The machine does not appear on the scanners list (continued).	 Check if the MFP port is not busy. Since functional components of MFP (printer and scanner) share the same I/O interface (MFP port), the situation of simultaneous access of different "consumer" application to the same MFP port is possible. To avoid possible conflicts, only one of them at a time is allowed to gain control over the device. The other "consumer" will encounter "device busy" response. This can usually happen while starting scan procedure, and appropriate message box appears. To identify the source of the problem, you should open MFP ports configuration and select the port assigned to your scanner. MFP port's symbol /dev/mfp0 corresponds to LP:0 designation displayed in the scanners' options, /dev/mfp1 relates to LP:1 and so on. USB ports start at /dev/mfp4 respectively and so forth sequentially. In the Selected port pane you can see if the port is occupied by some other application. If this is the case, you should wait for completion of the current job or should press Release port button, if you are sure that the present port's owner is not functioning properly. 	I can't print w installed both Print Package and MFP drive the same mac simultaneousl Can't scan via Front-end.
The machine doesn't scan.	 Check if a document is loaded into the machine. Check if your machine is connected to the computer. Make sure if it is connected properly if I/ O error is reported while scanning. Check if MFP port is not busy. Since functional components of MFP (printer and scanner) share the same I/O interface (MFP port), the situation of simultaneous access of different "consumer" application to the same MFP port is possible. To avoid possible conflicts, only one of them at a time is allowed to gain control over the device. The other "consumer" will encounter "device busy" response. This can usually happen while starting scan procedure, and appropriate message box will be displayed. To identify the source of the problem, you should open MFP ports configuration and select the port assigned to your scanner. MFP port's symbol /dev/mfp0 corresponds to LP:0 designation displayed in the scanners' options, /dev/mfp1 relates to LP:1 and so on. USB ports start at /dev/mfp4 respectively and so forth sequentially. In the Selected port pane you can see if the port is occupied by some other application. If this is the case, you should wait for completion of the current job or should press Release port button, if you are sure that the present port's owner is not functioning properly. 	I encounter en "Unable to op port device fil when printing document.

Condition	Suggested solutions
I can't print when I installed both Linux Print Package (LPP) and MFP driver on the same machine simultaneously.	 Since both Linux Printer Package and MFP driver make a symbolic link to "lpr" printing command, which is commonly used on Unix clones, it is not recommended to use both package on the same machine. If you still want to use both packages simultaneously, please install the LPP first. If you want to uninstall only one of them, please uninstall both packages and install that one you want to use again. If you don't want to uninstall MFP driver and install it again, you may make the necessary symbolic link yourself. Please, log in as root user and invoke the following command: In -sf /usr/local/bin/samsung/slpr /usr/bin/lpr
Can't scan via Gimp Front-end.	 Check if Gimp Front-end has "Xsane:Device dialog." on the "Acquire" menu. If not, you should install Xsane plug-in for Gimp on the your computer. You can find Xsane plug-in package for Gimp on Linux distribution CD or Gimp home page. For the detail information, refer to the Help for Linux distribution CD or Gimp Front-end application. If you wish to use other kind of scan application, refer to the Help for application.
I encounter error "Unable to open MFP port device file!" when printing a document.	Please avoid changing print job parameters (via SLPR utility, for example) while a print job is in progress. Known versions of CUPS server break the print job whenever print options are changed and then try to restart the job from the beginning. Since Linux MFP driver locks MFP port while printing, the abrupt termination of the driver keeps the port locked and therefore unavailable for subsequent print jobs. If this situation occurred, please, try to release the MFP port.

Common macintosh problems

Problems in printer setup utility

Condition	Suggested solutions
There is described "driver not installed" at Product List Window after you click Add and Select USB.	 Software is not installed correctly. Reinstall the software. See Software Section. Make sure that you are using a high-quality cable.
Your product not listed at Product List Window after you click Add and Select USB.	 Make sure that the cables are connected correctly and the machine is turned on. Check if "Ready" appears on the display of the control panel. If not, clear the problem depending on the error message; see "Understanding display messages" on page 9.4. Make sure that the correct printer driver has been selected at Product List Window after you click Add and Select USB.