



WorkCentre PE220

User Guide

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1 Welcome

Thank you for choosing the *Xerox PE220*. This product has been designed for ease of use, but to use your machine to its fullest potential take some time to read this *User Guide*.

- About This Guide – page 1-2
- Getting to know your machine – page 1-3
- Special Features – page 1-7
- Customer Support – page 1-8
- Safety Notes – page 1-9
- Regulatory Information – page 1-14

About This Guide

This User Guide provides information you need for setting up your machine. It also provides all the detailed instructions for using your machine as a printer, scanner, copier and facsimile and information for maintaining and troubleshooting the machine.

Throughout this *User Guide* some terms are used interchangeably:

- Paper is synonymous with media.
- Document is synonymous with original.
- Page is synonymous with sheet.
- *Xerox PE 220* is synonymous with the machine.

The following table offers further information about the conventions used within this Guide.

Convention	Description	Example
Italic Typeface	Used to emphasise a word or phrase. In addition, references to other publications are displayed in Italic typeface.	<i>Xerox PE220.</i>
Bold Typeface	Used to emphasise the selection of a feature mode or button.	Select the resolution required by pressing Resolution .
Notes	Provides additional information relating to the procedure.	NOTE: For instructions on loading paper, refer to <i>Loading Paper on page 2-6</i> .
Caution	Cautions are statements that may cause <i>mechanical</i> damage to the machine as a result of an action.	CAUTION: DO NOT use organic or strong chemical solvents or aerosol cleaners.
Warning	Used to alert users to the possibility of <i>personal</i> injury.	WARNING: This product must be connected to a protective earthing circuit.

Related Information Sources

Information available for the products consists of:

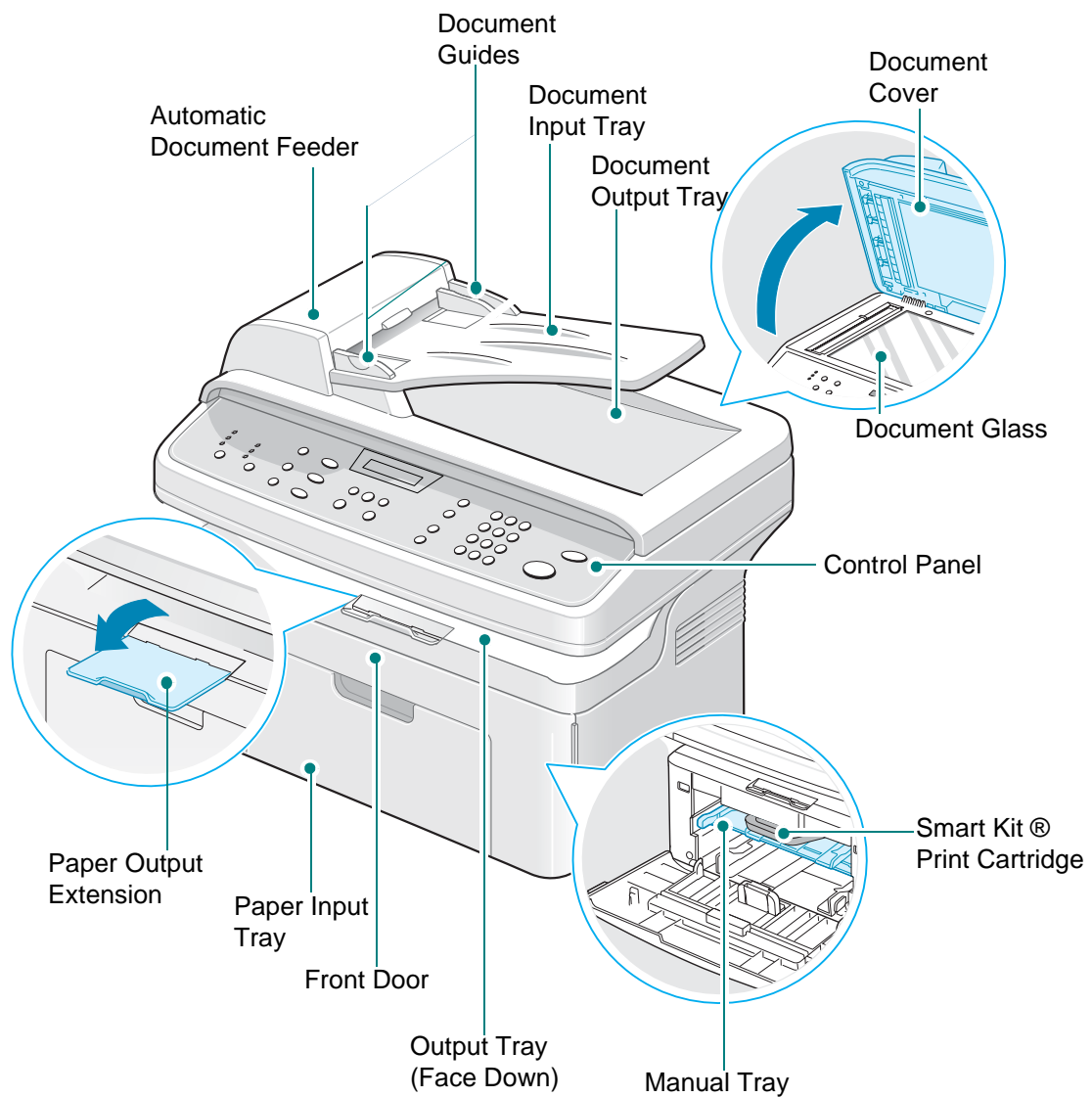
- This *User Guide*
- The *Quick Set Up Guide*
- The Xerox website <http://www.xerox.com>

Getting to know your machine

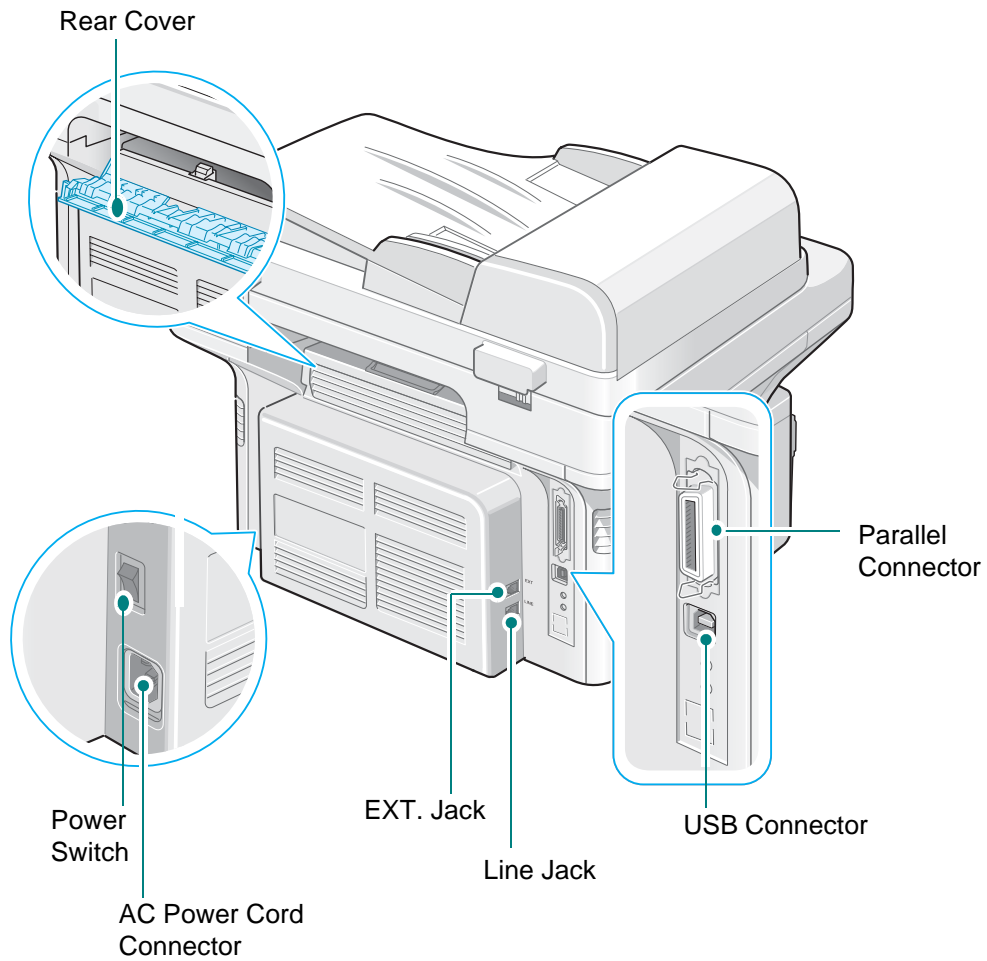
Component location

These are the main components of your machine:

Front View

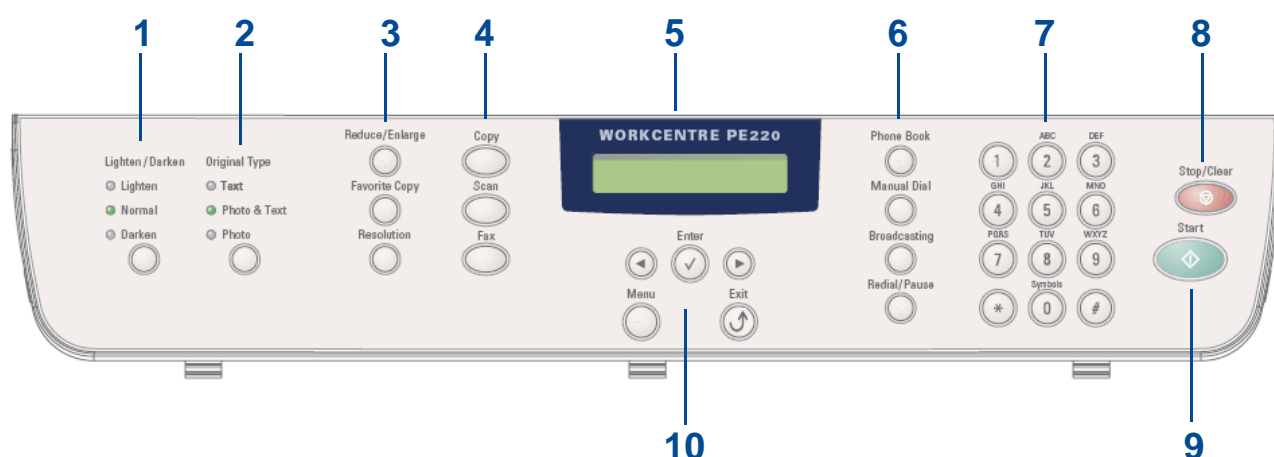



Rear View






NOTE: If your country has a different telephone connection system, this socket may be blocked.

Control Panel Functions



	Feature	Description
1	Lighten/ Darken	Adjusts the brightness of the image for the current copy job.
2	Original Type	Selects the document type for the current copy job.
3	Reduce/Enlarge	Makes the image on the copy smaller or larger than the original.
	Favorite Copy	Allows you to use one of the special copy features, such as Clone, Collation, Auto Fit, ID Card Copy, 2/4 Up (multiple pages on a sheet), and Poster copying after assigning it. For details see <i>Setting the Favorite Copy Option on page 4-12</i> .
	Resolution	Adjusts the resolution of the documents for the current fax job.
4	Copy	Select to Activate the Copy Mode.
	Scan	Allows you to access a list of your PC software programs that an image can be scanned to. You must create the scan list using the Xerox software (Printer Settings ControlCentre) provided with this machine. For details see <i>Using ControlCentre on page 5-26</i>
	Fax	Select to Activate the Fax Mode.
5		Displays the special features, current status and prompts during an operation.

	Feature	Description
6	Phone Book	Allows you to store frequently-dialed fax numbers as one or two-digit speed dial or group dial numbers for automatic dialing and edit the stored numbers. Also allows you to print a Phonebook list.
	Manual Dial	Engages the telephone line.
	Broadcasting	Allows you to send a fax to multiple destinations.
	Redial/Pause	In Standby mode, redials the last number or in Edit mode, inserts a pause into a fax number.
7	Number Keypad	Dials a number or enters alphanumeric characters for Fax and Copy functions.
8	Stop/Clear	Stops an operation at any time. In Standby mode, clears/cancels the copy options, such as the brightness, the document type setting, the copy size, and the number of copies.
9	Start	Starts a job.
10		Used to scroll through the available options for the selected menu items on the display.
	Enter 	Confirms the selection on the display.
	Menu	Enters Menu mode and scrolls through the menus available.
	Exit 	Sends you back to the upper menu level. Used to Exit menu functions.

Special Features

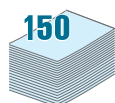
Your new machine is equipped with special features that improve the print quality. You can:

Print with excellent quality and high speed



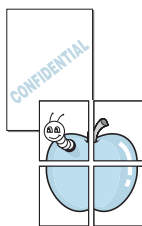
- You can print up to **600 dots per inch (dpi)**.
- Up to **20 pages per minute in A4** or **20 pages per minute in Letter**.

Paper tray capacity and media recommendations



- **Manual tray** supports one sheet of envelopes, labels, transparencies, custom-sized materials, postcards and heavy paper.
- **Standard 150-sheet tray** supports standard type and size of paper. Also, standard tray supports one sheet of special materials.
- 50-sheet output tray supports convenient access.

Create professional documents



- Print **Watermarks**. You can customize your documents with words, such as "Confidential". For details, see *Chapter 5, Printing*.
- Print **Posters**. The text and pictures of each page of your document are enlarged and printed across the sheet of paper and taped together to form a poster. For details, see *Chapter 5, Printing*.

Save time and money



- Allows you to use the **Toner Save** mode to save the toner. For details, see *Chapter 5, Printing*.
- You can print multiple pages on one single sheet of paper to save paper.
- You can use preprinted forms and letterhead on plain paper.
- This machine automatically **conserves electricity** by substantially reducing power consumption when not printing.
- This machine meets **Energy Star** guidelines for energy efficiency.

Print in various environments



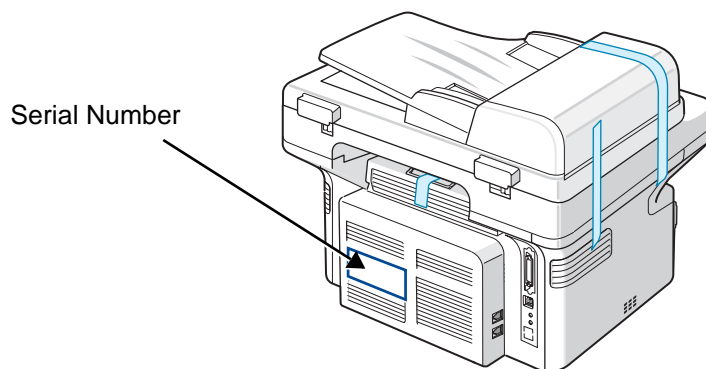
- You can print in **Windows 98/Me/NT 4.0/2000/XP**.
- Compatible with **Linux** and **Macintosh**.
- Both **USB** and **Parallel** interface.

Customer Support

If you need assistance during or after product installation, please visit the Xerox website for online solutions and support:

<http://www.xerox.com>

If you require further assistance, call our experts at the *Xerox Welcome Center*, or contact your local representative. When telephoning please quote the machine serial number. Use the space below to make a note of the machine serial number:



The *Xerox Welcome Center* or local representative telephone number is provided when the machine is installed. For convenience and future reference, please record the telephone number in the space below:

Xerox Welcome Center or local representative telephone number:

Xerox US Welcome Center: 1-800-821-2797

Xerox Canada Welcome Center: 1-800-93-XEROX (1-800-939-3769)

Safety Notes

Read these safety notes carefully before using this product to ensure you operate the equipment safely.

Your Xerox product and recommended supplies have been designed and tested to meet strict safety requirements. These include safety agency approval, and compliance to established environmental standards. Please read the following instructions carefully before operating the product and refer to them as needed to ensure the continued safe operation of your product.

The safety and environment testing and performance of this product have been verified using Xerox materials only.

WARNING: Any unauthorized alternation, which may include the addition of new functions or connection of external devices, may impact the product certification. Please contact your authorized local dealer for more information

Warning Markings

All warning instructions marked on or supplied with the product should be followed.



WARNING: This WARNING alerts users to areas of the product where there is the possibility of personal injury.



WARNING: This WARNING alerts users to areas of the product where there are heated surfaces, which should not be touched.

Electrical Supply

This product shall be operated from the type of electrical supply indicated on the product's data plate label. If you are not sure that your electrical supply meets the requirements, please consult your local power company for advice.



WARNING: This product must be connected to a protective earth circuit.

This product is supplied with a plug that has a protective earth pin. This plug will fit only into an earthed electrical outlet. This is a safety feature. To avoid risk of electric shock, contact your electrician to replace the electrical outlet if you are unable to insert the plug into it. Never use an earthed adapter plug to connect the product to an electrical outlet that lacks an earth connection terminal.

Operator Accessible Areas

This equipment has been designed to restrict operator access to safe areas only. Operator access to hazardous areas is restricted with covers or guards, which would require a tool to remove. Never remove these covers or guards.

Maintenance

Any operator product maintenance procedures will be described in the user documentation supplied with the product. Do not carry out any maintenance on this product, which is not described in the customer documentation.

Cleaning Your Product

Before cleaning this product, unplug the product from the electrical outlet. Always use materials specifically designated for this product, the use of other materials may result in poor performance and may create a hazardous situation. Do not use aerosol cleaners, they may be explosive and flammable under certain circumstances.

WARNING - Electrical Safety Information

- Use only power cord supplied with this equipment.
- Plug the power cord directly into a grounded electrical outlet. Do not use an extension cord. If you do not know whether or not an outlet is grounded, consult a qualified electrician.
- Improper connection of the equipment-grounding conductor can result in electrical shock.
- **Do not** place this equipment where people might step on or trip on the power cord.
- **Do not** place objects on the power cord.
- **Do not** override or disable electrical or mechanical interlocks.
- **Do not** obstruct the ventilation openings.
- **Never** push objects of any kind into slots or openings on this equipment
- If any of the following conditions occur, switch off the power to the machine immediately and disconnect the power cord from the electrical outlet. Call an authorized local service representative to correct the problem.
 - The equipment emits unusual noise or odors.
 - The power cord is damaged or frayed.
 - A wall panel circuit breaker, fuse, or other safety device has been tripped.
 - Liquid is spilled into the copier/printer.
 - The equipment is exposed to water.
 - Any part of the equipment is damaged.

Disconnect Device

The power cable is the disconnect device for this equipment. It is attached to the back of the machine as a plug-in device. To remove all electrical power from the equipment, disconnect the power cable from the electrical outlet.

Laser Safety Information

CAUTION: Use of controls, adjustments or performance of procedure other than those specified herein may result in hazardous light exposure.

With specific regard to laser safety, the equipment complies with performance standards for laser product set by government, national and international agencies as a Class 1 laser product. It does not emit hazardous light, as the beam is totally enclosed during all phases of customer operation and maintenance.

Operational Safety Information

To ensure the continued safe operation of your Xerox equipment, follow these safety guidelines at all times.

Do These:

- Always connect equipment to a correctly grounded power outlet. If in doubt, have the outlet checked by a qualified electrician.
- This equipment must be connected to a protective earth circuit.
This equipment is supplied with a plug that has a protective earth pin. This plug will fit only into an earthed electrical outlet. This is a safety feature. To avoid risk of electric shock, contact your electrician to replace the electrical outlet if you are unable to insert the plug into it. Never use a plug that lacks an earth connection terminal to connect the product to an electrical outlet.
- Always follow all warnings and instructions that are marked on or supplied with the equipment.
- Always exercise care when moving or relocating equipment. Please contact your local Xerox Service Department, or your local support organization to arrange relocation of the product to a location outside of your building.
- Always locate the equipment in an area that has adequate ventilation, and the room for servicing. For minimum dimensions see *Clearance Space on page 2-3*.
- Always use materials and supplies specifically designed for your Xerox equipment. Use of unsuitable materials may result in poor performance.
- Always unplug this equipment from the electrical outlet before cleaning.

Do Not Do These:

- Never use a plug that lacks an earth connection terminal to connect the product to an electrical outlet.
- Never attempt any maintenance function that is not specifically described in this documentation.
- This equipment should not be placed in a built-in installation unless proper ventilation is provided, please contact your Authorized local dealer for further information.
- Never remove covers or guards that are fastened with screws. There are no operator serviceable areas within these covers.
- Never locate the equipment near a radiator or any other heat source.
- Never push objects of any kind into the ventilation openings.
- Never override or "cheat" any of the electrical or mechanical interlock devices.
- Never operate the equipment if you notice unusual noises or odors. Disconnect the power cord from the electrical outlet and contact your local Xerox Service Representative or Service Provider immediately.

Maintenance Information

Do not attempt any maintenance procedure that is not specifically described in the documentation that is supplied with your copier/printer.

- Do not use aerosol cleaners. The use of cleaners that are not approved may cause poor performance of the equipment, and could create a dangerous condition.
- Use supplies and cleaning materials only as directed in this manual. Keep all of these materials out of the reach of children.
- Do not remove covers or guards that are fastened with screws. There are no parts behind these covers that you can maintain or service.
- Do not perform any maintenance procedures unless you have been trained to do them by an authorized local dealer or unless a procedure is specifically described in the user manuals.

Ozone Safety Information

This product will produce ozone during normal operation. The ozone produced is heavier than air and is dependent on copy volume. Providing the correct environmental parameters as specified in the Xerox installation procedure will ensure that the concentration levels meet safe limits.

If you need additional information about ozone, please request the Xerox publication Ozone by calling 1-800-828-6571 in the United States and Canada. In other markets please contact your authorized local dealer or Service Provider.

For Consumables

Store all consumables in accordance with the instructions given on the package or container.

- Keep all consumables away from the reach of children.
- Never throw toner, print cartridges or toner containers into an open flame.

Radio Frequency Emissions

United States, Canada, Europe, Australia/New Zealand

NOTE: This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment a residential area is likely to cause harmful interference in which case the user will required to correct the interference at his own expense.

Changes and modifications to this equipment not specifically approved by Xerox may void the user's authority to operate this equipment.

Shielded interface cables must be used with this equipment to maintain compliance with FCC regulations in the United States and the Radiocommunications Act 1992 in Australia/New Zealand as applicable.

Product Safety Certification

This product is certified by the following Agency using the Safety standards listed.

Agency	Standard
Underwriters Laboratories Inc.	UL60950-1 1st (2003) (USA/Canada)
Intertek ETL Semko	IEC60950-1 Edition 1 (2001)

This product was manufactured under a registered ISO9001 Quality system.

Regulatory Information

CE Mark

The CE mark applied to this product symbolizes Xerox's declaration of conformity with the following applicable Directives of the European Union as of the dates indicated:

January 1, 1995: Council Directive 72/23/EEC amended by Council directive 93/68/EEC, approximation of the laws of the member states related to low voltage equipment.

January 1, 1996: Council directive 89/336/EEC, approximation of the laws of the member states related to electromagnetic compatibility.

March 9, 1999: Council Directive 99/5/EC, on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

A full declaration of conformity, defining the relevant directives and referenced standards, can be obtained from your Authorized local dealer.

WARNING: In order to allow this equipment to operate in proximity to Industrial Scientific and Medical (ISM) equipment, the external radiation from the ISM equipment may have to be limited or special mitigation measures taken.

WARNING: This is a Class A product. In a domestic environment the product may cause radio frequency interference, in which case the user may be required to take adequate measures.

WARNING: Shielded interface cables must be used with this product to maintain compliance with Council Directive 89/336/EEC.

For Fax Function

USA

FAX Send Header Requirements:

The telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including a Fax machine, to send any message 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 date and time it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity or individual. (The telephone number provided may not be a 900 number or any other number for which charges exceed local or long distance transmission charges.)

In order to program this information into your FAX machine refer to Setting the Machine ID – page 2-14 and follow the steps provided. To enter the date and time, please refer Setting the Date and Time – page 2-16.

Data Coupler Information:

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the Administrative Council for Terminal Attachments (ACTA). On the rear of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the Telephone Company.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

You may safely connect the machine to the following standard modular jack: USOC RJ-11C using the compliant telephone line cord (with modular plugs) provided with the installation kit. See installation instructions for details.

The Ringer Equivalence Number (or REN) is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local Telephone Company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

If this Xerox equipment causes harm to the telephone network, the Telephone Company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the Telephone Company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The Telephone Company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the Telephone Company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this Xerox equipment, for repair or warranty information, please contact the appropriate service center; details of which are displayed either on the machine or contained within the user guide. If the equipment is causing harm to the telephone network, the Telephone Company may request that you disconnect the equipment until the problem is resolved.

Repairs to the machine should be made only by a Xerox representative or an authorized Xerox service agency. This applies at any time during or after the service warranty period. If unauthorized repair is performed, the remainder of

the warranty period is null and void. This equipment must not be used on party lines. Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

If your office has specially wired alarm equipment connected to the telephone line, ensure the installation of this Xerox equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your Telephone Company or a qualified installer.

CANADA

NOTE: The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the users satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe systems, if present, are connected together. This precaution may be particularly important in rural areas.

CAUTION: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

NOTE: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalent Numbers of all of the devices does not exceed 5.

Europe

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

This Xerox product has been self-certified by Xerox 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 following countries:

Austria	Germany	Luxembourg	Sweden
Belgium	Greece	Netherlands	Switzerland
Denmark	Iceland	Norway	United Kingdom
France	Ireland	Portugal	Finland
Italy	Spain	Czech Republic	Poland
Bulgaria	Romania	Hungary	

In the event of problems, you should contact your local Xerox representative in the first instance.

This product has been tested to and is compliant with TBR21, a technical specification for terminal equipment for use on analogue-switched telephone networks in the European Economic Area.

The product may be configured to be compatible with other country networks. Please contact your Xerox representative if it needs to be reconnected to another country's network.

NOTE: Although this product can use either loop disconnect (pulse) or DTMF (tone) signaling it is recommended that it is set to use DTMF signaling. DTMF signaling provides reliable and faster call setup.

Modification, connection to external control software or to external control apparatus not authorized by Xerox, will invalidate its certification.

Environmental Compliance

USA



Energy Star

As an ENERGY STAR® partner, Xerox Corporation has determined that (the basic configuration of) this product meets the ENERGY STAR guidelines for energy efficiency.

The ENERGY STAR and ENERGY STAR MARK are registered United States trademarks.

The ENERGY STAR Office Equipment Program is a team effort between U.S., European Union and Japanese governments and the office equipment industry to promote energy-efficient copiers, printers, fax, multifunction machine, personal computers, and monitors. Reducing product energy consumption helps combat smog, acid rain and long-term changes to the climate by decreasing the emissions that result from generating electricity.

Xerox ENERGY STAR equipment is preset at the factory to enter a "low power" state and/or shut off completely after a specified period of use. These energy-saving features can reduce product energy consumption in half when compared to conventional equipment.

Canada



Environmental Choice

Terra Choice Environmental Serviced, Inc. of Canada has verified that this product conforms to all applicable Environmental Choice EcoLogo requirements for minimized impact to the environment.

As a participant in the Environmental Choice program, Xerox Corporation has determined that this product meets the Environmental Choice guidelines for energy efficiency.

Environment Canada established the Environmental Choice program in 1988 to help consumers identify environmentally responsible products and services. Copier, printer, digital press and fax products must meet energy efficiency and emissions criteria, and exhibit compatibility with recycled supplies. Currently, Environmental Choice has more than 1600 approved products and 140 licensees. Xerox has been a leader in offering EcoLogo approved products.

Illegal Copies

USA

Congress, by statute, has forbidden the reproduction of the following subjects under certain circumstances. Penalties of fine or imprisonment may be imposed on those guilty of making such reproductions.

1. Obligations or Securities of the United States Government, such as:

Certificates of Indebtedness National Bank Currency

Coupons from Bonds Federal Reserve Bank Notes

Silver Certificates Gold Certificates

United States Bonds Treasury Notes

Federal Reserve Notes Fractional Notes

Certificates of Deposit Paper Money

Bonds and Obligations of certain agencies of the government, such as FHA, etc

Bonds. (U.S. Savings Bonds may be photographed only for publicity purposes in connection with the campaign for the sale of such bonds.)

Internal Revenue Stamps. (If it is necessary to reproduce a legal document on which there is a canceled revenue stamp, this may be done provided the reproduction of the document is performed for lawful purposes.)

Postage Stamps, canceled or uncanceled. (For philatelic purposes, Postage Stamps may be photographed, provided the reproduction is in black and white and is less than 75% or more than 150% of the linear dimensions of the original.)

Postal money Orders.

Bills, Checks, or Draft of money drawn by or upon authorized officers of the United States.

Stamps and other representatives of value, of whatever denomination, which have been or may be issued under any Act of Congress.

2. .Adjusted Compensation Certificates for Veterans of the World Wars.

3. Obligations or Securities of any Foreign Government, Bank, or Corporation.

4. Copyrighted materials, unless permission of the copyright owner has been obtained or the reproduction falls within the "fair use" or library reproduction rights provisions of the copyright law. Further information of these provisions may be obtained from the Copyright Office, Library of Congress, Washington, D.C. 20559. Ask for Circular R21.

5. Certificates of Citizenship or Naturalization. (Foreign Naturalization Certificates may be photographed.)

6. Passports. (Foreign Passports may be photographed.)

7. Immigration Papers.
 8. Draft Registration Cards.
 9. Selective Service Induction Papers that bear any of the following Registrant's information:
 - Earnings or Income
 - Dependency Status
 - Court Record
 - Previous military service
 - Physical or mental conditionException: United States military discharge certificates may be photographed.
 10. Badges, Identification Cards, Passes, or Insignia carried by military personnel, or by members of the various Federal Departments, such as FBI, Treasury, etc. (unless photograph is ordered by the head or such department or bureau.)
 - Reproducing the following is also prohibited in certain states:
 - Automobile Licenses - Drivers' Licenses - Automobile Certificates of Title.
- The above list is not all inclusive, and no liability is assumed for its completeness or accuracy. In case of doubt, consult your attorney.

Canada

Parliament, by statute, has forbidden the reproduction of the following subjects under certain circumstances. Penalties of fine or imprisonment may be imposed on those guilty of making such reproductions.

1. Current bank notes or current paper money.
2. Obligations or securities of a government or bank.
3. Exchequer bill paper or revenue paper.
4. The public seal of Canada or of a province, or the seal of a public body or authority in Canada, or of a court of law.
5. Proclamations, orders, regulations or appointments, or notices thereof (with intent to falsely cause same to purport to have been printed by the Queen's Printer for Canada, or the equivalent printer for a province).
6. Marks, brands, seals, wrappers or designs used by or on behalf of the Government of Canada or of a province, the government of a state other than Canada or a department, board, Commission or agency established by the Government of Canada or of a province or of a government of a state other than Canada.
7. Impressed or adhesive stamps used for the purpose of revenue by the Government of Canada or of a province or by the government of a state other than Canada.

8. Documents, registers or records kept by public officials charged with the duty of making or issuing certified copies thereof, where the copy falsely purports to be a certified copy thereof.
9. Copyrighted material or trademarks of any manner or kind without the consent of the copyright or trademark owner.

The above list is provided for your convenience and assistance, but it is not all-inclusive, and no liability is assumed for its completeness accuracy. In case of doubt, consult your solicitor.

Other countries

Copying certain documents may be illegal in your country. Penalties of fine or imprisonment may be imposed on those found guilty of making such reproductions.

Currency notes

Bank notes and cheques

Bank and government bonds and securities

Passports and identification cards

Copyright material or trademarks without the consent of the owner

Postage stamps and other negotiable instruments

This list is not inclusive and no liability is assumed for either its completeness or accuracy. In case of doubt, contact your legal counsel.

Product Recycling and Disposal

If you are managing the disposal of your Xerox product, please note that the product contains lead, mercury, and other materials whose disposal may be regulated due to environmental considerations in certain countries or states. The presence of lead and mercury is fully consistent with global regulations applicable at the time that the product was placed on the market.

European Union

WEEE Directive 2002/96/EC

Some equipment may be used in both a domestic/household and a professional/ business application.



Domestic/Household Environment

Application of this symbol on your equipment is confirmation that you should not dispose of the equipment in the normal household waste stream.

In accordance with European legislation, end of life electrical and electronic equipment subject to disposal must be segregated from household waste.

Private households within EU member states may return used electrical and electronic equipment to designated collection facilities free of charge. Please contact your local disposal authority for information.

In some member states, when you purchase new equipment, your local retailer may be required to take back your old equipment free of charge. Please ask your retailer for information.



Professional/Business Environment

Application of this symbol on your equipment is confirmation that you must dispose of this equipment in compliance with agreed national procedures.

In accordance with European legislation, end of life electrical and electronic equipment subject to disposal must be managed within agreed procedures.

Prior to disposal, please contact your local dealer or Xerox representative for end of life takeback information.



Mercury Safety

LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING LOCAL, STATE OR FEDERAL LAWS. For details see lamprecycle.org, eiaa.org or call 1-800-ASK-Xerox.

2 Getting Started

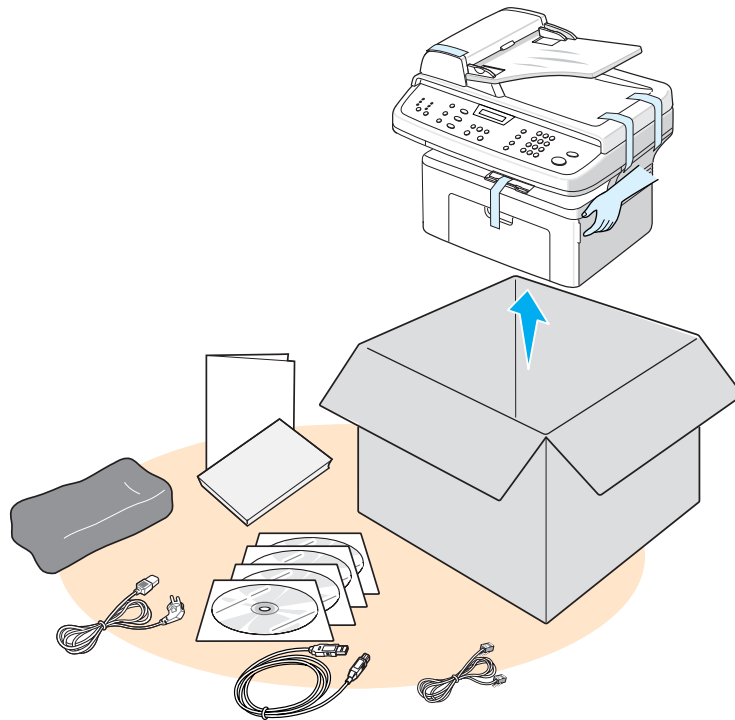
Before you start to use your machine, there are a number of tasks to perform. Using the instructions provided in this chapter, unpack and setup your machine.

This chapter includes:

- Unpacking the machine – page 2-2
- Selecting a Location – page 2-3
- Installing the Smart Kit ® Print Cartridge – page 2-4
- Loading Paper – page 2-6
- Making Connections – page 2-8
- Switching On the Machine – page 2-11
- Installing Printer Software – page 2-12
- Changing the Display Language and Country – page 2-14
- Setting the Machine ID – page 2-14
- Setting the Date and Time – page 2-16
- Setting the Paper Size and Type – page 2-18
- Setting Sounds – page 2-18
- Using the Save Modes – page 2-20

Unpacking the machine

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

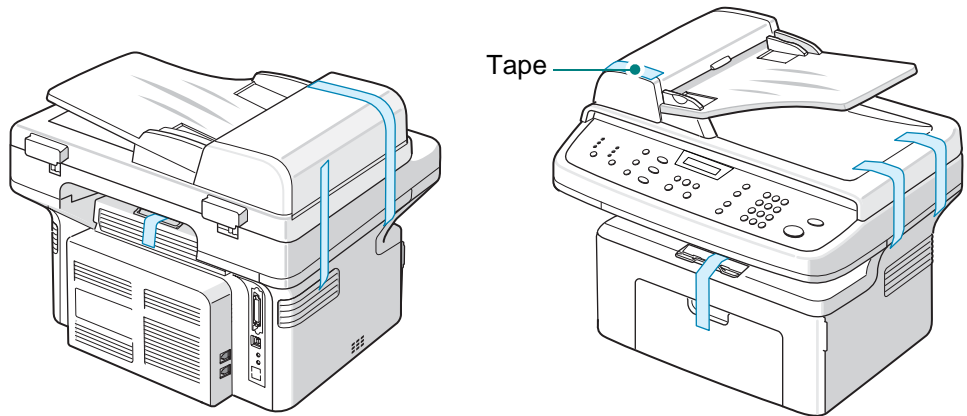


NOTE: The appearance of the power cord and the telephone line cord may differ depending on your country's specifications. The Power Cord must be plugged into a grounded power socket.

NOTE: The CD-ROMs contain the Xerox printer driver, scan drivers, software, User Guide, and ControlCentre.

NOTE: Components may differ from country to country. You should use the telephone line cord which is supplied with your machine. If you are replacing it with another vendor's, it should be AWG #26 or larger telephone line cord.

2. Remove the packing tape from the front, back, and sides of the machine.



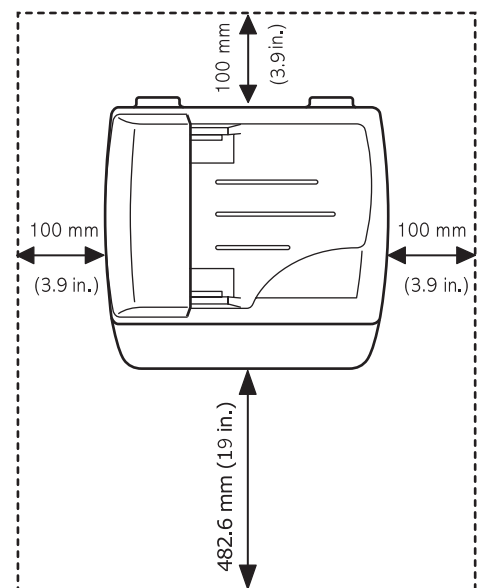
Selecting a Location

Select a level, stable place with adequate space for air circulation around the machine. Allow extra space for opening doors 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 a desk or table.

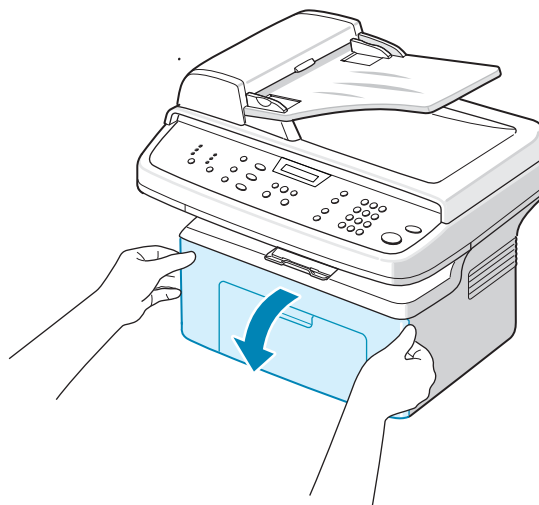
Clearance Space

The diagram shows the space that should be left around the machine for access and ventilation.

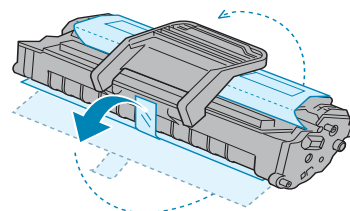


Installing the Smart Kit ® Print Cartridge

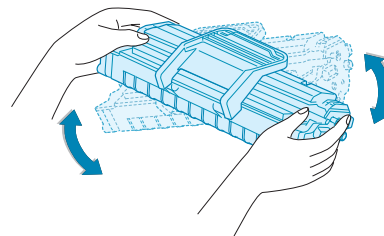
1. Open the front door.



2. Remove the Smart Kit ® Print Cartridge from its bag and remove the paper protecting the cartridge by pulling the packing tape.



3. Gently rock the cartridge 5 or 6 times to distribute the toner. This will loosen the toner and make sure that you get the maximum copies from the 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.

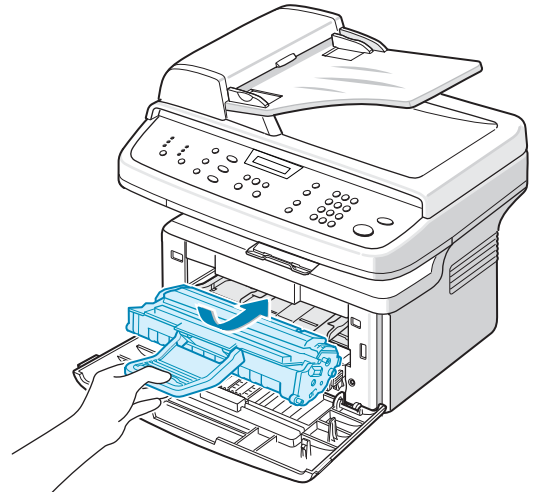


CAUTION: To prevent damage, do not expose the Smart Kit ® Print Cartridge to light for more than a few minutes. Cover it with a piece of paper if left exposed for more than a few minutes.

CAUTION: Do not touch the green underside of the Smart Kit ® Print Cartridge. Use the handle on the cartridge when lifting the cartridge to avoid touching this area.

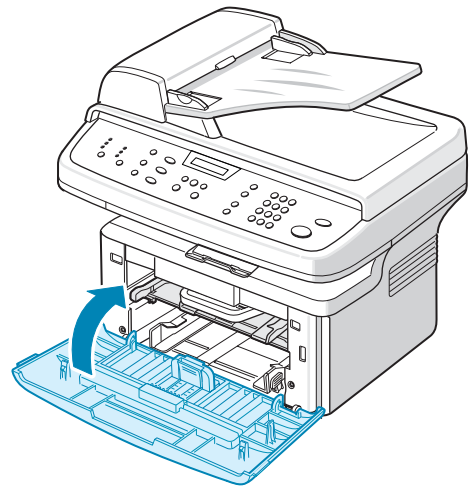
4. Unfold the Smart Kit ® Print Cartridge handle. Hold the handle and insert the cartridge into the machine until it snaps into place.

NOTE: When inserting or removing the Smart Kit ® Print Cartridge take care not to scratch it against the machine frame. This will damage the cartridge and may produce marks on the copies.



5. Close the front door. If the door is not firmly closed, printing errors may occur.

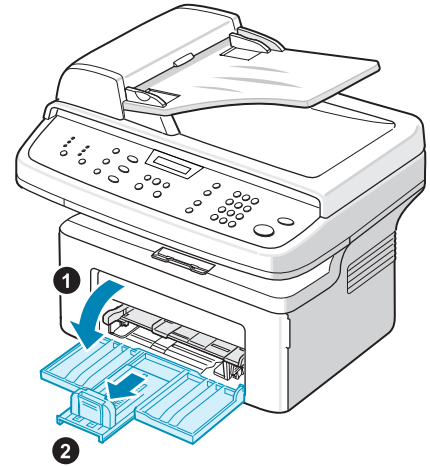
NOTE: When printing text at 5% coverage, you can expect a print cartridge life of approximately 3,000 pages. (1,000 pages for the print cartridge that is shipped with the machine.)



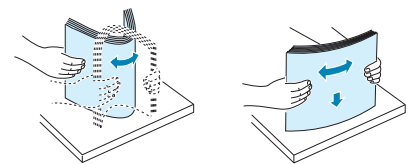
Loading Paper

The tray can hold a maximum of 150 sheets of 20 lb (75 g/m²) plain paper.

1. Pull the tray toward you to open.
2. Squeeze the rear guide and pull it out to extend the tray.

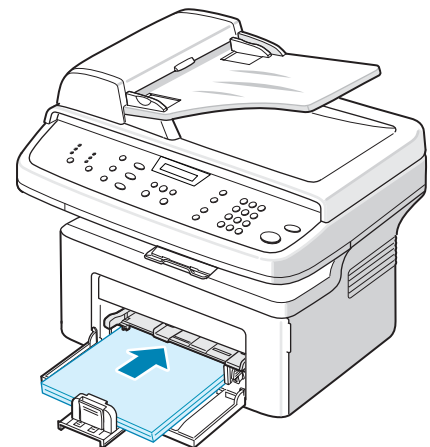


3. Fan the edges of the paper stack to separate the pages. Gently tap the stack on a flat surface to even up the edges.

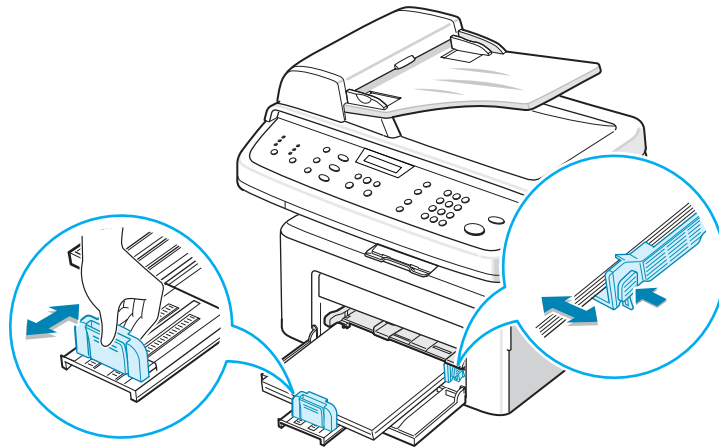


4. Load paper into the tray to register at the rear, left corner of the tray. Make sure that all four corners lay flat in the tray.

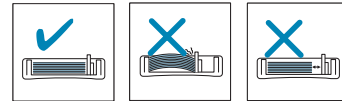
NOTE: Do not put too much paper in the tray. Over filling the tray may cause paper jams.



5. Squeeze the rear guide and side guide and move them so that they just touch the edge of the paper stack.



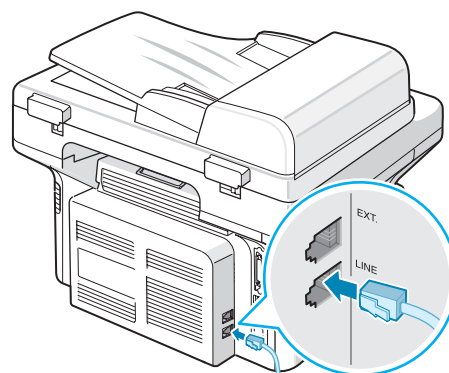
NOTE: Do not push the guides hard against the paper stack to cause the stack to bend. If you do not adjust the paper side guide correctly, paper jams may occur.



Making Connections

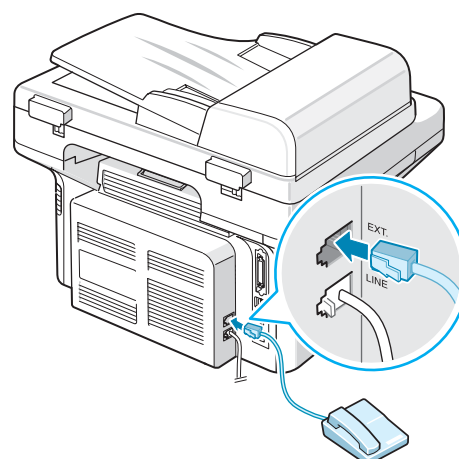
1. Plug one end of the supplied telephone line cord into the **LINE** jack on the machine and the other end into the telephone wall socket.

NOTE: If you want to use your machine to receive both faxes and voice calls, you will need to connect a telephone and/or answering machine to your machine.



To the wall socket

2. Plug the cord of your extension phone or answering machine into the **EXT.** jack.



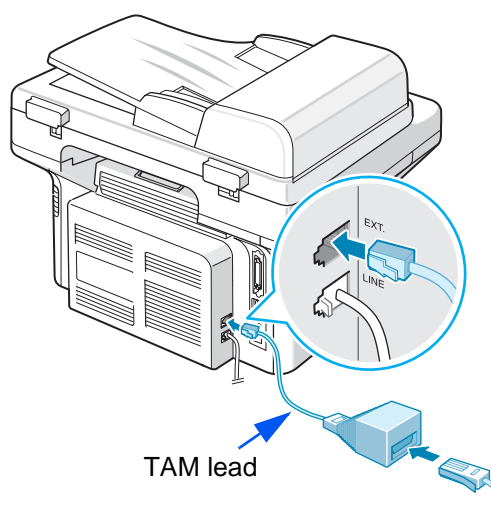
To an extension phone or answering machine

For Users in the UK:

UK users should plug the cord of the extension phone into the supplied TAM lead and plug the cord of the TAM lead into the **EXT.** jack on the back of the machine.

NOTE: Use the TAM lead and the telephone line cord supplied with your machine.

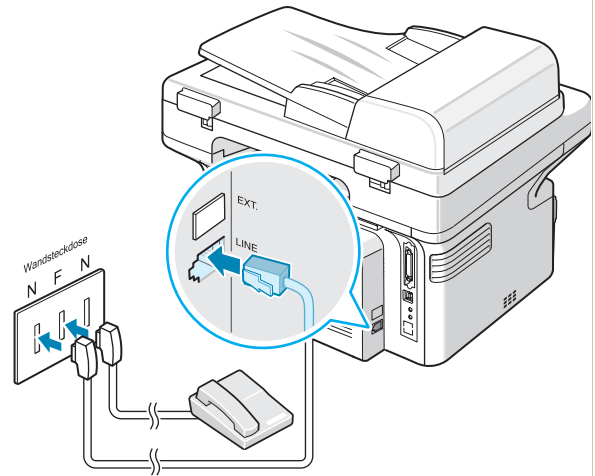
In the United Kingdom, if a three-wire type (SHUNT-wire, older equipment) telephone or answering machine is



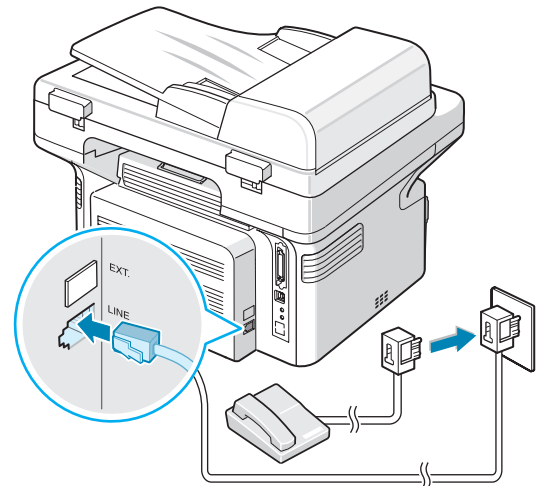
TAM lead

connected to the **EXT.** jack on the machine, the external equipment will fail to ring when receiving an incoming call as the machine is designed to operate with the latest technology. To prevent this incompatibility, use two-wire (newer equipment) telephones or answering machines.

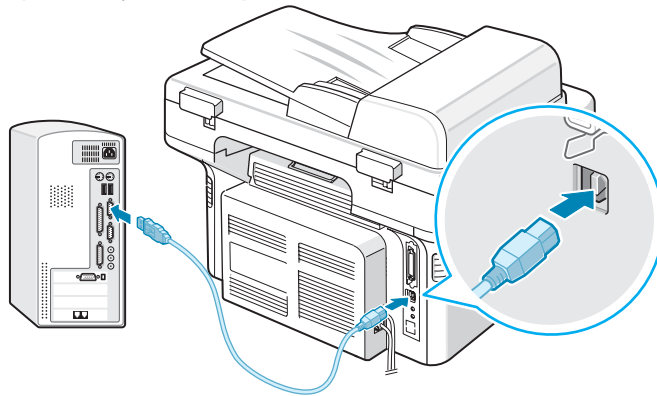
For Users in Germany



For Users in France

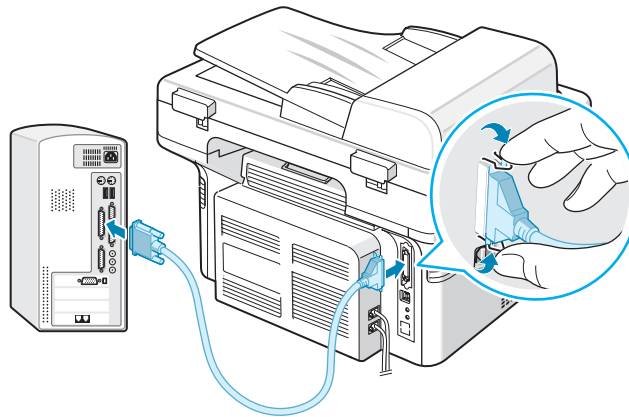


3. Connect a USB cable to the USB port on your machine. Connect to the USB port on your computer.



4. If you want to use a parallel printer cable, purchase only an IEEE-1284 compliant parallel cable and connect it to the parallel connector on your machine.

Push the metal clips down to fit inside the notches on the cable plug and then to the parallel port on your computer.



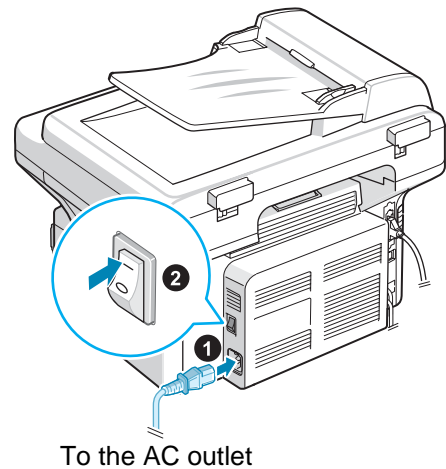
NOTE: You only need to connect one of the cables mentioned above. Do not use the parallel and the USB cables at the same time.

If you are using a USB cable, you must be running Windows 98/Me/2000/XP, Macintosh 10.3 or later, or Linux.

Switching On the Machine

1. Plug one end of the supplied power cord into the AC socket 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 Changing the Display Language and Country on page 14.



WARNING: The fusing area inside the machine is hot. Be careful not to touch hot surfaces when accessing this area.

CAUTION: Do not disassemble the machine with power on. If you do, you may receive an electric shock.

Installing Printer Software

NOTE: You must install software using the supplied CD-ROM after you have set up your machine and connected it to your computer. For details, see **Chapter 5, Printing**.

The CD-ROM 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 some or all the following components:

- **Printer driver-** Use this driver to take full advantage of your printer's features.
- **Scan driver-** TWAIN and Windows Image Acquisition (WIA) driver is available for scanning documents on your machine.
- **ControlCentre-** Use this program to create phonebook entries and configure the destination of the scan button. You can also update the firmware of the machine.

Macintosh Driver

You can print and scan to and from Macintosh operating systems using your machine.

Linux Driver

You can print and scan to and from Linux operating systems using your machine.

System Requirements

Your machine supports following operating system.

Windows 98/Me/NT 4.0/2000/XP

The following table shows Windows requirements.

Item	Requirements		Recommended
CPU	Windows 98/Me/NT 4.0/2000	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/NT 4.0/2000	64 MB or higher	128 MB
	Windows XP	128 MB or higher	256 MB

Item	Requirements		Recommended
Free disk space	Windows 98/Me/NT 4.0/2000	300 MB or higher	1 GB
	Windows XP	1 GB or higher	5 GB
Internet Explorer	5.0 or higher		5.5

Macintosh 10.3 or later - See *Chapter 5, Printing*

Various Linux - See *Chapter 5, Printing*.

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 the features supported by your printer drivers.

Feature	Printer Driver		
	Win 98/Me/NT4.0/2000/XP	Linux	Macintosh
Toner Save	Y	Y	N
Print quality option	Y	Y	Y
Poster printing	Y	N	N
Multiple pages per sheet (N-up)	Y	Y(2,4)	Y
Fit to page printing	Y	Y	N
Scale printing	Y	Y	Y
Watermark	Y	N	N
Overlay	Y	N	N
Print order	Y	N	N

NOTE: For details about installing software and using its features, see *Chapter 5, Printing*.

Changing the Display Language and Country

Setting Language

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

1. Press **Menu** until “Machine Setup” appears on the top line of the display.
2. Press the scroll button (◀ or ▶) until “Language” appears on the bottom line of the display.
3. Press **Enter**. The current setting appears on the bottom line of the display.
4. Press the scroll button (◀ or ▶) until the language you want appears on the display.
5. Press **Enter** to save the selection.
6. To return to Standby mode, press **Stop/Clear**.

Setting Country

1. Press **Menu** until “Machine Setup” appears on the top line of the display.
2. Press the scroll button (◀ or ▶) until “Select Country” appears on the bottom line of the display.
3. Press **Enter**. The current setting appears on the bottom line of the display.
4. Press the scroll button (◀ or ▶) until your country appears on the display.
5. Press **Enter** to save the selection.
6. To return to Standby mode, press **Stop/Clear**.

NOTE: Changing the country clears the memory.

Setting the Machine ID

In some countries, you are required by law to indicate your fax number on any fax you send. The Machine ID, containing your telephone number and name (or company name), will be printed at the top of each page sent from your machine.

1. Press **Menu** until “Machine Setup” appears on the top line of the display. The first available menu item, “Machine ID”, displays on the bottom line.
2. Press **Enter**. The display asks you to enter the fax number.
3. If there is a number already set, the number appears.
4. Enter your fax number using the number keypad.

NOTE: If you make a mistake while entering numbers, press the ◀ button to delete the last digit.

5. Press **Enter** when the number on the display is correct. The display asks you to enter an ID.
6. Enter your name or the company name using the number keypad.
7. You can enter alphanumeric characters using the number keypad, and include special symbols by pressing the **0** button.
8. For details on how to use the number keypad to enter alphanumeric characters, see Entering Characters Using the Number Keypad on page 15.
9. If you want to enter the same letter or number in succession (e.g. SS, AA, 777), enter one digit, move the cursor by pressing the ▶ button and enter the next digit.
10. If you want to insert a space in the name, you can also use the ▶ button to move the cursor to skip the position.
11. Press **Enter** when the name on the display is correct.
12. To return to Standby mode, press **Stop/Clear**.

Entering Characters Using the Number Keypad

As you perform various tasks, you need to enter names and numbers. For example, when you set up your machine, you enter your name (or your company's name) and telephone number. When you store one or two digit speed dial or group dial numbers, you may also enter the corresponding names.

To enter alphanumeric characters:

1. When you are prompted to enter a letter, locate the button labeled with the character you want. Press the button until the correct letter appears on the display.

For example, to enter the letter O, press **6**, labeled with "MNO".

Each time you press **6**, the display shows a different letter, **M**, **N**, **O**, and finally **6**.

You can enter special characters, such as space, plus sign, and etc. For details, see Keypad Letters and Numbers on page 16.

2. To enter additional letters, repeat step 1.

If the next letter is printed on the same button, move the cursor by pressing the ▶ button and then press the button labeled with the letter you want. The cursor will move to the right and the next letter will appear on the display.

You can enter a space by pressing **1** twice, and by using the cursor button.

3. When you finish entering letters, press **Enter**.



Keypad Letters and Numbers

Key	Assigned numbers, letters, or characters
1	1 Space
2	A B C 2
3	D E F 3
4	G H I 4
5	J K L 5
6	M N O 6
7	P Q R S 7
8	T U V 8
9	W X Y Z 9
0	+ - , . ' / * # & 0

Changing Numbers or Names

If you make a mistake while entering a number or name, press the ◀ button to delete the last digit or character. Then enter the correct number or character.

Inserting a Pause

With some telephone systems, you must dial an access code (9, for example) and listen for a second dial tone. In such cases, you must insert a pause in the telephone number.

To insert a pause, press **Redial/Pause** at the appropriate place while entering the telephone number. A “–” appears on the display at the corresponding location.

Setting the Date and Time

When you turn the machine on for the first time, the display prompts you to enter the current date and time. After entering, it will not appear again.

NOTE: When turning on the machine after it has been off for a long time, you need to reset date and time.

1. Press **Menu** until “Machine Setup” appears on the top line of the display.
2. Press the scroll button (◀ or ▶) to display “Date & Time” on the bottom line and press **Enter**.

3. Enter the correct time and date using the number keypad.

Unit	Range
Month	01 - 12
Day	01 - 31
Year	Required four digits
Hour	01 - 12 (12 hour mode) 00 - 23 (24 hour mode)
Minute	00 - 59

NOTE: The date format may differ from country to country.

You can also use the scroll button (◀ or ▶) to move the cursor under the digit you want to correct and enter a new number.

4. To select “AM” or “PM” for 12-hour format, press the ✕ or # button.
5. When the cursor is not under the AM or PM indicator, pressing the ✕ or # button immediately moves the cursor to the indicator.
6. You can change the clock mode to 24-hour format (e.g. 01:00 PM as 13:00). For details, see Changing the Clock Mode on page 17.
7. Press **Enter** when the time and date on the display is correct.
8. To return to Standby mode, press **Stop/Clear**.

Changing the Clock Mode

You can set your machine to display the current time using either a 12-hour or 24-hour format.

1. Press **Menu** until “Machine Setup” appears on the top line of the display.
2. Press the scroll button (◀ or ▶) until you see “Clock Mode” on the bottom line and press **Enter**.
3. The clock mode currently set for the machine displays.
4. Press the scroll button (◀ or ▶) to select the other mode and then press **Enter** to save the selection.
5. To return to Standby mode, press **Stop/Clear**.

Setting the Paper Size and Type

After loading paper in the tray, you need to set the paper size and type using the control panel buttons. These settings will apply to copy and fax modes. For PC-printing, you need to select the paper size and type in the print driver you use on your PC.

1. Press **Menu**. The display shows “Paper Setting” on the top line of the display.
2. Press the scroll button (◀ or ▶) to display “Paper Size” on the bottom line and press **Enter** to access the menu item.
3. Use the scroll button (◀ or ▶) to find the paper size you are using and press **Enter** to save it.
4. Press the ▶ button to scroll to “Paper Type” and press **Enter** to access the menu item.
5. Use the scroll button (◀ or ▶) to find the paper type you are using and press **Enter** to save it.
6. To return to Standby mode, press **Stop/Clear**.

Setting Sounds

You can control the following sounds:

- **Speaker:** You can turn on or off the sounds from the telephone line through the speaker, such as the dial tone or a fax tone. With this option set to “Comm.” the speaker is on until the remote machine answers.
- **Ringer:** You can adjust the ringer volume.
- **Key Sound:** With this option set to “On” a key tone sounds each time a key is pressed.
- **Alarm Sound:** You can turn the alarm sound on or off. With this option set to “On” an alarm tone sounds when an error occurs or fax communication ends.
- You can adjust the volume level using the **Manual Dial** button.

Speaker, Ringer, Key Sound, and Alarm Sound

1. Press **Menu** until “Sound/Volume” appears on the top line of the display.
2. Press the scroll button (◀ or ▶) to scroll through the options. Press **Enter** when you see the desired sound option.
3. Press the scroll button (◀ or ▶) to display the desired status or volume for the option you have selected.

You will see the selection on the bottom line of the display.

For the ringer volume, you can select “Off”, “Low”, “Med”, and “High”. Setting “Off” means that the ringer does not sound. The machine works normally even if the ringer is turned off.

4. Press **Enter** to save the selection. The next sound option appears.
5. If necessary, repeat steps 2 through 4.
6. To return to Standby mode, press **Stop/Clear**.

Speaker Volume

1. Press **Manual Dial**. A dial tone sounds from the speaker.
2. Press the scroll button (◀ or ▶) until you hear the volume you want. The display shows the current volume level.
3. Press **Manual Dial** to save the change and return to Standby mode.

NOTE: You can adjust the speaker volume only when the telephone line is connected.

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 Smart Kit® Print Cartridge beyond what one would experience in the normal mode, but it reduces print quality.

NOTE: When PC-printing, you can also turn on or off the toner save mode in the printer properties. For details, see *Chapter 5, Printing*.

Power Save Mode

Power Save mode allows your machine to reduce power consumption when it is not in 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 top line of the display.
2. Press the scroll button (◀ or ▶) until “Power Save” appears on the bottom line. Press **Enter**.
3. Press the scroll button (◀ or ▶) to display “On” on the bottom line and press **Enter**.
Selecting “Off” means that the power save mode is deactivated.
4. Press the scroll button (◀ or ▶) until the time setting you want appears.
The available options are 5, 15, 30, 60 and 120 (minutes).
5. Press **Enter** to save the selection.
6. To return to Standby mode, press **Stop/Clear**.

3 Paper Handling

This chapter explains how to select print materials and load them into your machine.

This chapter includes:

- Selecting Print Materials – page 3-2
- Loading Paper – page 3-5
- Copy Output Tray – page 3-6

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 this machine. See *Paper Specifications on page 10-6*. To get the best possible print quality, use only high-quality copier-grade paper.

When you choose print materials, consider the following:

- **Size:** You can use any size paper that fits easily within the paper adjusters of the tray.
- **Weight:** 16 ~ 24 lb (60 to 90 g/m²) for the tray when feeding multiple pages, and 16 ~ 43 lb (60 to 165 g/m²) for the manual tray and the tray when feeding a single page.
- **Brightness:** Some papers are whiter than others and produce sharper, more vibrant images.
- **Surface smoothness:** The smoothness of the paper affects how crisp the printing looks on the paper.



CAUTION: Using print materials that do not conform to the specifications listed on page 10-6 may cause problems that may require service. This service is not covered by the warranty or service agreements.

Paper Type, Input Sources, and Capacities

Paper Type	Input Tray/Capacity	
	Tray	Manual Tray
Plain paper	150	1
Envelopes	1	1
Labels	1	1
Transparencies	1	1
Card stock	1	1

NOTE: If you experience excessive jamming, load one sheet at a time through the tray or manual tray.

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

Guidelines for Paper and Special Materials

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

- Always use paper and other materials that conform with the specifications listed under *Paper Specifications on page 10-6*.
- Attempting to print on damp, curled, wrinkled, or torn paper can cause paper jams and poor print quality.
- Use only high quality copier grade paper for the best print quality.
- Avoid paper with embossed lettering, perforations, or a texture that is too smooth or too rough. Paper jams may occur.
- Store paper in its 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 °C and 30 °C (59 °F to 86 °F). The relative humidity should be between 10 % and 70 %.
- During storage, you should use 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 tray or the paper tray to avoid paper jams.
- Only use materials specifically recommended for use in laser printers.
- To prevent special materials, such as transparencies and label sheets from sticking together, remove them as they print out.
- For envelopes:
 - Use only well-constructed envelopes with sharp and well creased folds.
 - Do not use envelopes with clasps and snaps.
 - Do not use envelopes with windows, coated lining, self-adhesive seals, or other synthetic materials.
 - Do not use damaged or poorly made envelopes.
 - Only use envelopes recommended for laser printers.
 - Do not feed stamped envelopes.
- For transparencies:
 - Place them on a flat surface after removing them from the machine.
 - Do not leave a transparency in the tray for long periods of time. Dust and dirt may accumulate, resulting in spotty printing.
 - To avoid smudging caused by fingerprints, handle them carefully.
 - To avoid fading, do not expose printed transparencies to prolonged sunlight.
 - Only use transparencies recommended for use in laser printers.
 - Ensure that transparencies are not wrinkled, curled, or have any torn edges.

- For labels:
 - Verify that their adhesive material can tolerate a fusing temperature of 200 °C (392 °F) for 0.1 second.
 - Make sure that there is no exposed adhesive material between them. Exposed areas can cause labels to peel off during printing, which can cause paper jams. Exposed adhesive can also cause damage to machine components.
 - Do not load a sheet of labels through the machine more than once. The adhesive backing is designed for one pass through the machine.
 - Do not use labels that are separating from the backing sheet or are wrinkled, bubbled or otherwise damaged.
 - Only use labels recommended for laser printers.
- For Card Stock or Custom-sized materials:
 - Postcards, 3.5 x 5.8 in. (89 x 148 mm) cards and other custom-sized materials can be printed with this printer. The minimum size is 3 x 5 in. (76 x 127 mm) and the maximum size is 8.5 x 14 in. (216 x 356 mm)
 - Always insert the short-edge into the tray first. If you want to print in landscape mode, make this selection through your software. Inserting paper long-edge first may cause a paper jam.
 - Do not print on media smaller than 3 in. (76 mm) wide or 5 in. (127 mm) long.
- For preprinted paper:
 - Letterheads must be printed with heat-resistant ink that will not melt, vaporize, or release hazardous emissions when subjected to the printer's fusing temperature of 200 °C (392 °F) for 0.1 second.
 - Ink on letterheads must be non-flammable and should not adversely affect any printer rollers.
 - Forms and letterheads should be sealed in a moisture-proof wrapping to prevent changes during storage.
 - Before you load preprinted paper as forms and letterheads, verify that the ink on the paper is dry. During the fusing process, wet ink can come off preprinted paper.
- Do not use **Carbonless** paper and **Tracing** paper. Use of these types of paper could result in chemical smells and could damage your machine.

Loading Paper

Proper paper loading helps prevent paper jams and ensure trouble-free printing. Do not remove the paper in the tray while a job is printing. Doing so may cause a paper jam. See *Paper Type, Input Sources, and Capacities on page 3-2* for acceptable paper size and capacity for the tray.

Using the Paper Tray

The paper tray holds 150 sheets of paper.

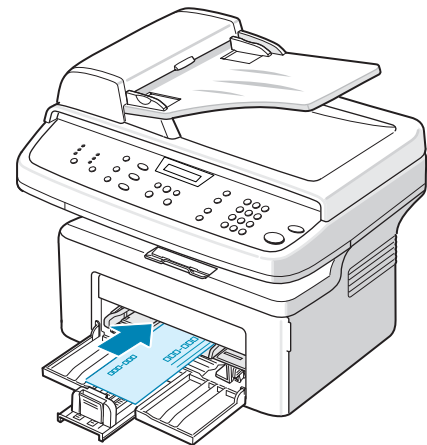
For details about loading paper in the tray, see *Loading Paper on page 2-6*.

To use the special material like envelope, label or card, remove the stack of plain paper and load one sheet of special material into the tray.

Using the Manual Tray

When you print a document using your PC and want to check the print quality after each page is printed, load the paper in the manual tray and select **Manual Feed** for **Source** from the print driver.

1. Load the print material into the tray. If there is a print side to the paper it should be face up.
Push the print material firmly into the manual tray.
2. Adjust the paper guide against the print material without bending the material.
3. Select **Manual Feed** for **Source** from the software application, and then select the correct paper size and type. For details, see *Chapter 5, Printing*.
4. Send the job to the printer.
5. On the machine the display shows "Add Paper & Press Start". Press **Start** on the machine to start feeding. Printing is started.
6. If you have multiple pages to be printed, the display shows "Add Paper & Press Start" again. Load the next sheet and press **Start**.
Repeat this step for every page to be printed.



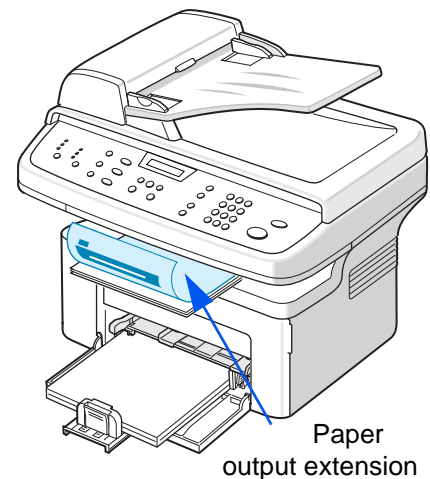
NOTE:

- If you experience jams with card stock feeding, turn the paper over and try again.
- Manually loading paper and pressing **Start** to start feeding is only available with PC printing.
- Because the Manual Feed mode does not print jobs automatically and continuously, incoming faxes are stored in memory instead of printing immediately.
- When you press **Stop/Clear** in the Manual Feed mode, the print job in progress is canceled.

Copy Output Tray

The machine has a paper output tray that holds 50 sheets of 20lb (75 g/m²) paper. The output tray collects printed paper face down, in the order in which the sheets were printed.

NOTE: Pull the paper output extension out so that the output does not drop out of the tray.



4 Copying

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

NOTE: You need to press **Copy** to activate Copy mode.

- Making Copies – page 4-2
- Selecting Copy Options – page 4-5
- Copy Setup – page 4-11

Making Copies

Loading Paper for Copying

The instructions for loading copy materials are the same whether you are printing, faxing, or copying. For further details, see *Loading Paper on page 2-6*

NOTE: For copying, you can only use Letter, A4, Legal, Folio, Executive, B5, A5, or A6 sized print materials.

Preparing a Document

You can use the document glass or the Automatic Document Feeder (ADF) to load an original document for copying, scanning, and sending a fax. Using the ADF, you can load up to 30 documents (20 lb, 75 g/m²) for one job. You can, of course, place only one sheet at a time on the document glass.

When you use the ADF:

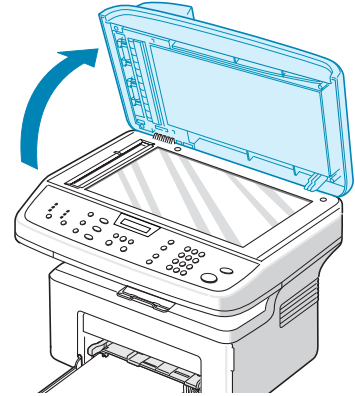
NOTE:

- Do not load documents smaller than 5.6 x 5.8 inches (142 x 148 mm) or larger than 8.5 x 14 inches (216 x 356 mm).
- Do not attempt to feed the following types of documents:
 - carbon-paper or carbon-backed paper
 - coated paper
 - onion skin or thin paper
 - wrinkled or creased paper
 - curled or rolled paper
 - torn paper
- Remove all staples and paper clips before loading documents.
- Make sure any glue, ink, or correction fluid on the paper is completely dry before loading documents.
- Do not load documents that include different sizes or weights of paper.
- Do not load booklets, pamphlets, transparencies, or documents having other unusual characteristics.

If you wish to copy any of the documents listed here, use the Document Glass.

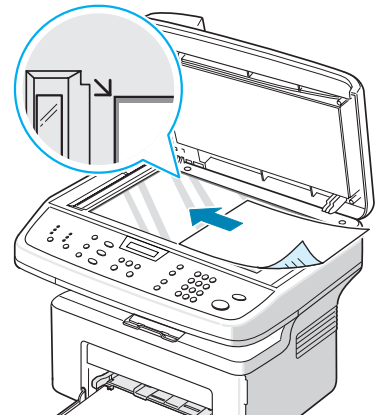
Making Copies on the Document Glass

1. Lift and open the document cover.



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

NOTE: Make sure that no documents are in the ADF (Automatic Document Feeder). If a document is detected in the ADF, the machine gives it priority over the document on the document glass.



3. Close the document cover.

NOTE:

- Lower the document cover gently to avoid damage to the machine or personal injury.
- If you leave the cover open while copying you may affect copy quality and toner consumption.
- If you are copying a page from a book or magazine, leave the cover open.

4. Press the **Copy** button to enter the copy mode.

5. Select the copy settings including number of copies, copy size, brightness, and original type, by using the control panel buttons. See *Selecting Copy Options on page 4-5*.

To clear the settings, use the **Stop/Clear** button.

6. If necessary, you can use special copy features, such as Poster, Auto Fit, Clone, and ID Card copying.

7. Press **Start** to begin copying. The display shows the copy processing.

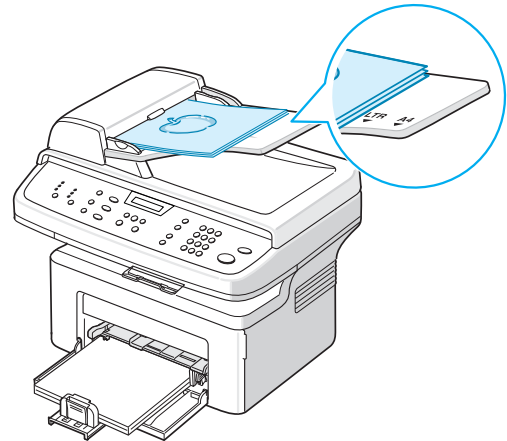
NOTE:

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

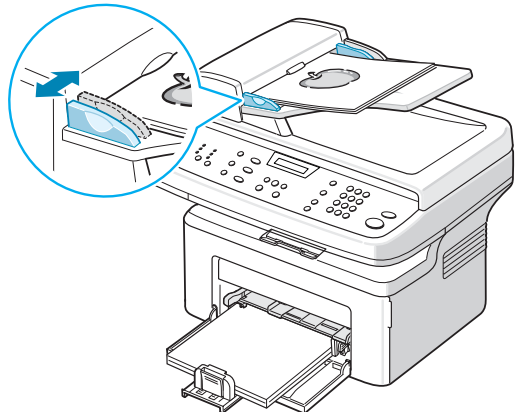
- Dust on the document glass may cause black spots on the printout. Always keep it clean. See *Cleaning the Scan Unit* on page 8-5.
- To get the best scan quality, especially for colored or gray-scaled images, use the document glass.

Making Copies from the Automatic Document Feeder

1. Load the document **face up** into the ADF (Automatic Document Feeder). You can insert up to 30 sheets at a time. Make sure that the bottom of the document stack matches the paper size marked on the document tray.



2. Adjust the document guides to the document size.
3. Select the copy settings including number of copies, copy size, brightness, and original type, by using the control panel buttons. See *Selecting Copy Options* on page 4-5.
4. To clear the settings, use the **Stop/Clear** button.
5. If necessary, you can use special copy features, such as Collate and 2 or 4 Up copying.
6. Press **Start** to begin copying.



The display shows the copy processing.

NOTE: Dust on the ADF glass may cause black lines on the printout. Always keep the ADF glass clean. See *Cleaning the Scan Unit* on page 8-5.

Selecting Copy Options

Basic Copy Features

The buttons on the control panel let you select all basic copy options: brightness, document type, copy size, and copy quantity. 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. The settings will automatically return to their default status after the machine completes the copy job in progress.

Lighten/Darken

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

To adjust the brightness, press **Lighten/Darken**.

You can choose from the following contrast modes:

- **Lighten:** will make the copies lighter than the original document. This works well with dark print.
- **Normal:** will make the copies look the same as the original document. This works well with standard typed or printed documents.
- **Darken:** will make the copies darker than the original document. This works well with light print or faint pencil markings.

Original Type

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

To select the document type, press **Original Type**.

You can choose from the following image modes:

- **Text:** Use for documents containing mostly text.
- **Photo & Text:** Use for documents with mixed text and photographs.
- **Photo:** Use when the originals are photographs.

NOTE: When you copy a document containing color on the background, such as a newspaper or a catalog, the background will appear on your copy. If you want to reduce the background, change the **Lighten/Darken** setting to **Lighten** and/or the **Original Type** setting to **Text**.

Reduce/Enlarge

Using the **Reduce/Enlarge** button will reduce or enlarge the size of a copied image from 25% to 400% when you copying from the document glass or from 25% to 100% from the ADF.

To select from the predefined copy sizes:

1. Press **Reduce/Enlarge**.
The default setting appears on the bottom line of the display.
2. Press **Reduce/Enlarge** or the scroll buttons (◀ or ▶) to find the size setting you want.
3. Press **Enter** to save the selection.

To fine-tune the size of copies:

1. Press **Reduce/Enlarge**.
2. Press **Reduce/Enlarge** or the scroll buttons (◀ or ▶) until "Custom:25-100%" or "Custom:25-400%" displays on the bottom line. Press **Enter**.
3. Press the scroll button (◀ or ▶) until the copy size you want appears on the display.
Pressing and holding the button allows you to quickly scroll to the number you want.
You can also enter the value using the number keypad.
4. Press **Enter** to save the selection.

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

Copy Quantity

You can select the number of copies from 1 to 99.

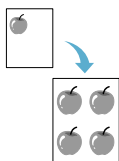
1. Press Menu on the control panel until "Copy Setup" appears on the top line of the display.
The first menu item, "Default-Change", appears on the bottom line.
2. Press the scroll button (◀ or ▶) to access the menu item, "Copy Quantity". It appears on the bottom line, then press **Enter**.
3. Press the number you want to enter on the display:
You can press and hold the button to quickly scroll the number you want to enter.
You can also enter the value using the number keypad.
4. Press **Enter** to save the selection.

Special Copy Features

You can use the following copy features:

- **Off:** Prints in normal mode.
- **Clone:** 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. See *Clone Copying on page 4-7*
- **Copy Collate:** Sorts the copy job. For example, if you make 2 copies of a 3 page document, one complete 3 page document will print followed by the second complete document. See *Collation Copying on page 4-8*.
- **Auto Fit:** Automatically reduces or enlarges the original image to fit on the paper currently loaded in the machine. See *Auto Fit Copying on page 4-8*
- **ID Card Copy:** Prints 2-sided ID cards on one sheet of paper. See *ID Card Copying on page 4-8*
- **2/4 Up:** Prints 2 or 4 original images reduced to fit onto one sheet of paper. See *2 Up or 4 Up Copying on page 4-9*.
- **Poster:** Prints an image onto 9 sheets of paper (3x3). You can paste the printed pages together to make one poster-sized document. See *Poster Copying on page 4-9*.

NOTE: Some features may not be available depending on where you loaded the document, on the document glass or in the Automatic Document Feeder.

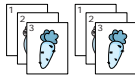


Clone Copying

This special copy feature can be applied only when you place a document on the document glass. If a document is detected in the ADF, Clone copying feature does not work.

1. Place the document to be copied on the document glass, and close the cover.
2. Press **Menu** until "Copy Feature" appears on the top line of the display.
3. Press the scroll button (◀ or ▶) until "Clone" displays on the bottom line.
4. Press **Enter** to make your selection.
5. If necessary, customize the copy settings, including Lighten/Darken and original type, by using the control panel buttons. See *"Selecting Copy Options" on page 4-5*.
6. Press **Start** to begin copying.

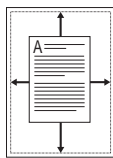
NOTE: You cannot adjust the copy size using the **Reduce/Enlarge** button while making a clone copy.



Collation Copying

This special copy feature is available only when you load documents in the ADF.

1. Load the documents to be copied in the ADF.
2. Press **Menu** until “Copy Feature” appears on the top line of the display.
3. Press the scroll button (◀ or ▶) until “Copy Collate” displays on the bottom line.
4. Press **Enter** to make your selection.
5. If necessary, customize the copy settings, including Lighten/Darken and original type, by using the control panel buttons. See “*Selecting Copy Options*” on page 4-5.
6. Press **Start** to begin copying.



Auto Fit Copying

This special copy feature can be applied only when you place a document on the document glass. If a document is detected in the ADF, Auto Fit copying does not work.

1. Place the document to be copied on the document glass, and close the cover.
2. Press **Menu** until “Copy Feature” appears on the top line of the display.
3. Press the scroll button (◀ or ▶) until “Auto Fit” appears on the bottom line.
4. Press **Enter** to make your selection.
5. If necessary, customize the copy settings, including Lighten/Darken and original type, by using the control panel buttons. See “*Selecting Copy Options*” on page 4-5.
6. Press **Start** to begin copying.

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



ID Card Copying

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



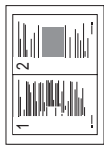
When you copy using this feature, the machine prints one side of the card on the upper half of the paper and the other side on the lower half without reducing the size of the original.

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

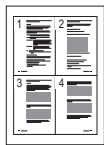
This special copy feature can be applied only when you place a document on the document glass. If a document is detected in the ADF, ID Card copying feature does not work.

1. Place the ID Card to be copied on the document glass and close the cover.
2. Press **Menu** until "Copy Feature" appears on the top line of the display.
3. Press the scroll button (◀ or ▶) until "ID Card Copy" displays on the bottom line.
4. Press **Enter** to confirm your selection.
5. If necessary, customize the copy settings, including Lighten/Darken and original type, by using the control panel buttons. See "Selecting Copy Options" on page 4-5.
6. Press **Start** to begin copying.
Your machine begins scanning the front side.
7. When "Set Backside" displays on the bottom line, open the document cover and turn the card over. Close the cover.
8. Press **Start** again.

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



▲ 2-up copying



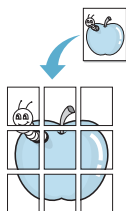
▲ 4-up copying

2 Up or 4 Up Copying

This copy feature is available only when you load documents in the ADF.

1. Load the documents to be copied in the ADF.
2. Press **Menu** until "Copy Feature" appears on the top line of the display.
3. Press the scroll button (◀ or ▶) until "2 UP" or "4 UP" displays on the bottom line.
4. Press **Enter** to make your selection.
5. If necessary, customize the copy settings, including Lighten/Darken and original type, by using the control panel buttons. See "Selecting Copy Options" on page 4-5.
6. Press **Start** to begin copying.

NOTE: You cannot adjust the copy size using the **Reduce/Enlarge** button for making a 2 or 4 Up copy.



Poster Copying

This special copy feature can be applied only when you place a document on the document glass. If a document is detected in the ADF, the Poster copying feature does not work.

1. Place the document to be copied on the document glass and close the cover.
2. Press **Menu** until “Copy Feature” appears on the top line of the display.
3. Press the scroll button (◀ or ▶) until “Poster” displays on the bottom line.
4. Press **Enter** to make your selection.
5. If necessary, customize the copy settings, including Lighten/Darken and original type, by using the control panel buttons. See “*Selecting Copy Options*” on page 4-5.
6. Press **Start** to begin copying.

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

1	2	3
4	5	6
7	8	9

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

Copy Setup

The copy settings on the machine can be customised to suit your copying requirements.

Changing the Default Settings

The copy options, including lighten/darken, original type, copy size and copy quantity, 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 corresponding buttons on the control panel.

To create your own default settings:

1. Press **Menu** on the control panel until “Copy Setup” appears on the top line of the display.
The first menu item, “Default-Change”, appears on the bottom line.
2. Press **Enter** to access the menu item. The first setup option, “Lighten/Darken”, appears on the bottom line.
3. Press the scroll button (◀ or ▶) to scroll through the setup options.
4. When the option you want to set appears, press **Enter** to access the option.
5. Change the setting using the scroll button (◀ or ▶).
Values can be entered using the number keypad.
6. Press **Enter** to save the selection.
7. Repeat steps 3 through 6, as needed.
8. To return to Standby mode, press **Stop/Clear**.

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

Setting the Time Out Option

You can set the time the machine waits before it restores the default copy settings after a selection has been made.

1. Press **Menu** on the control panel until “Copy Setup” appears on the top line of the display.
2. Press the scroll button (◀ or ▶) to display “Timeout” on the bottom line.
3. Press **Enter** to access the menu item.
4. Press the scroll button (◀ or ▶) until the status you want appears on the display.
You can select from 15, 30, 60, and 180 (seconds). Selecting “Off” means that the machine does not restore the default settings until you press **Start** to begin copying, or **Stop/Clear** to cancel.
5. Press **Enter** to make your selection.
6. To return to Standby mode, press **Stop/Clear**.

Setting the Favorite Copy Option

A copy feature can be assigned to the **Favorite Copy** button for quick access to that feature.

1. Press **Menu** on the control panel until “Copy Setup” appears on the top line of the display.
2. Press the scroll button (◀ or ▶) to display “Favorite Copy” on the bottom line.
3. Press **Enter** to access the menu item.
4. Press the scroll button (◀ or ▶) until the feature you want appears on the display.

You can select from Clone, Copy Collate, Auto fit, ID Card Copy, 2 Up, 4 Up, and Poster. See *Special Copy Features on page 4-7* for details about each feature.

5. Press **Enter** to make your selection.

To use the special copy feature quickly, press **Favorite Copy** then you will see the assigned special copy feature on the display.

5 Printing

This chapter includes:

- Printing a Document – page 5-2
- Canceling a Print Job – page 5-2
- Installing Printer Software in Windows – page 5-3
- Advanced Printing – page 5-17
- Sharing the Printer Locally – page 5-26
- Using ControlCentre – page 5-27
- Using Your Printer in Linux – page 5-31
- Using Your Machine with a Macintosh – page 5-45

Printing a Document

This machine allows you to print in 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.

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/NT4.0/2000/Me, select **Settings** and then **Printers**.
For Windows XP, select **Printers and Faxes**.
3. Double-click the printer driver for this printer.
4. From the **Document** menu, select **Cancel Printing** (Windows 98/Me) or **Cancel** (Windows NT 4.0/2000/XP).

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

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

Installing Printer Software in Windows

This chapter includes:

- Installing Printer Software – page 5-3

NOTE: For Windows NT 4.0/2000/XP, the system administrator should install the software.

Installing Printer Software

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

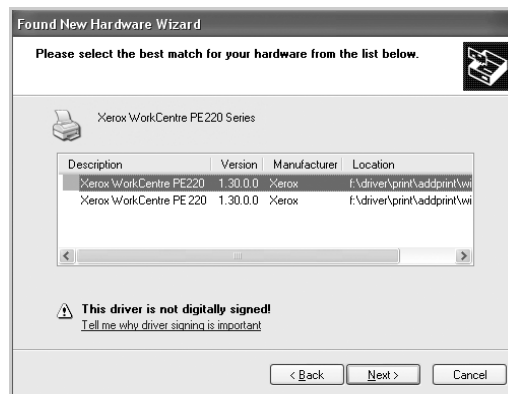
Installing Xerox Drivers in Microsoft Windows XP or Windows 2000 using the USB port

1. Plug the USB cable into the PE220 and connect it to your Personal Computer (PC). Start your PC and turn on the PE220.
2. Insert the Xerox Drivers CD into the CD-ROM drive.
3. The "Found New Hardware Wizard" will display. Confirm that the radio button "Install the software automatically" is chosen. Click **Next**.



4. The Wizard will begin to install the scan driver for the PE220.
5. When the "Completing the Found New Hardware Wizard" screen displays click **Finish**. The scan driver for the PE220 is now loaded.
6. The "Found New Hardware Wizard" will display. Confirm that the radio button "Install the software automatically" is chosen. Click **Next**.
7. The Wizard will begin to install the Print driver for the PE220.

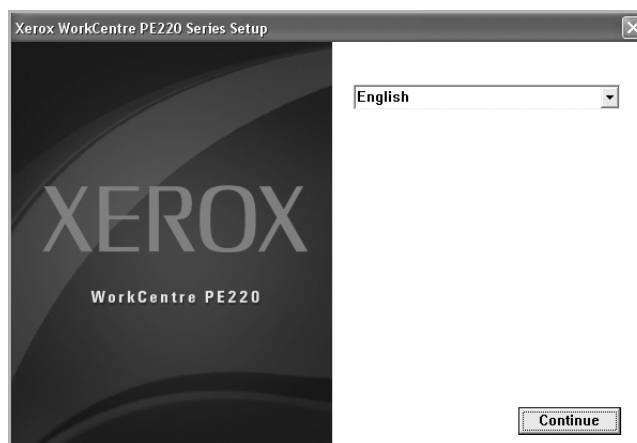
8. The Hardware Wizard will search the CD-ROM drive for the print driver and will display the following screen.



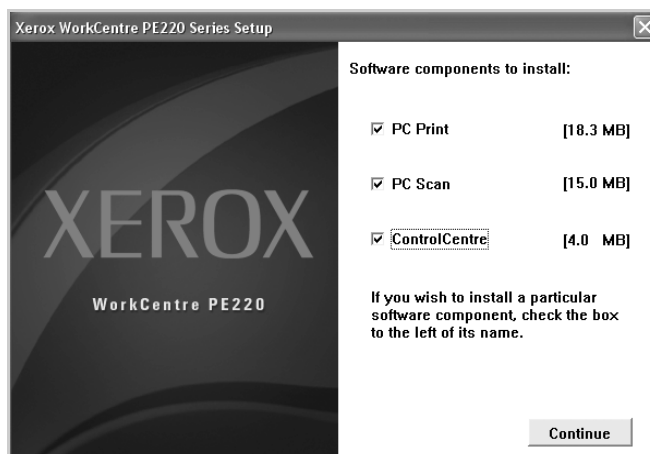
9. When the "Completing the Found New Hardware Wizard" screen displays click **Finish**. The print driver for the PE220 is now loaded.

Installing Xerox Drivers in Microsoft Windows XP, 2000 or Windows 98/ME using the Parallel port

1. Plug the Parallel cable into the PE220 and connect it to your Personal Computer (PC). Start your PC and turn on the PE220.
2. Insert the Xerox Drivers CD into the CD-ROM drive. In Microsoft Windows click **Start** and then **Run**. Type **E: Xinstall.exe**, replacing "E" with the letter of your CD-ROM drive and click **OK**.
3. When the language selection window appears, select the appropriate language and then click **Continue**.



4. Choose the components you want to install and then click **Continue**.



5. Click **Continue**.
6. Click **Finish**. The driver installation is now complete.

Installing Xerox Drivers in Microsoft Windows 98 or Windows Millennium using the USB port

1. Plug the USB cable into the PE220 and connect it to your Personal Computer (PC). Start your PC and turn on the PE220.
2. Insert the Xerox Drivers CD into the CD-ROM drive.
3. The "Add New Hardware Wizard" will display. Click **Next**.
4. Confirm that the radio button "Search for the best driver for your device" is chosen. Click **Next**.
 - i) In Windows Millennium (ME) the add Hardware Wizard will search and find the scan driver. Click **Finish** when this process is complete. Windows ME will then display the "Add New Hardware Wizard" for the print driver, click **Next**. Click **Finish** when this process is complete. The drivers are installed and you can skip to step 9.

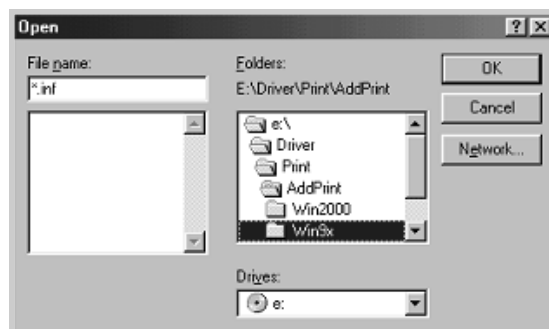
ii) In Windows 98 you must specify the location. Browse to the CD-ROM drive and the "Usb" folder on the CD and click OK. Click Next when prompted then Finish. The USB composite driver is then loaded.



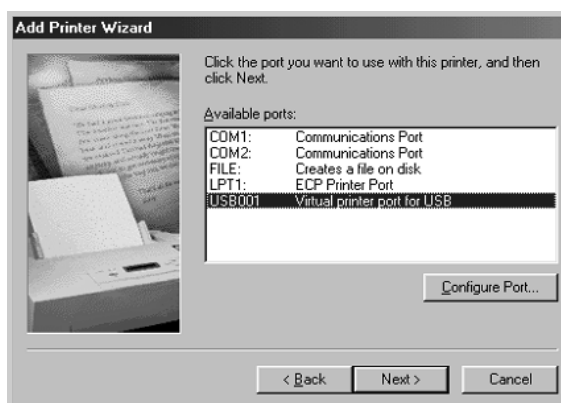
5. The "Add New Hardware Wizard" will display. Click **Next** to install the USB hardware driver for the PE220.
6. You must specify the location. Browse to the CD-ROM drive and the "Usb" folder on the CD and click **OK**. Click **Next** when prompted then click **Finish**. The USB hardware driver for the PE220 is now loaded.
7. The "Add New Hardware Wizard" will display. Click **Next** to install the Scan driver for the PE220.
8. Again, you must specify the location. Browse to the CD-ROM drive and the "Driver" folder on the CD. Then click the scan directory and then the Win98me directory and click **OK**. Click **Next** when prompted then click **Finish**. The scan driver for the PE220 is now loaded.
9. In Microsoft Windows click **Start** and then **Settings** and then **Printers**. Double-click the Add Printer icon.
10. The Add Printer Wizard will begin. Click **Next**. Choose "Local Printer" and click **Next**.



11. At the next screen click **Have Disk**, and browse to your CD-ROM drive. Open the "driver" directory, then open the "Print" directory, then open the "AddPrint" directory and then choose "Win9x" directory and click **OK**.



12. The next screen will display the "Xerox WorkCentre PE220 Series " driver, click **Next**.
13. Click the port that the printer cable is attached to, in this case USB and click **Next**.



14. You can type in a name for your new printer or accept the default then click **Next**.
15. Choose "Yes" to print a test page and click **Finish**. The PE220 driver will now be installed and a test page should print.

Basic Printing

Printing a Document

NOTE: Your printer driver **Properties** window that appears in this User Guide may differ depending on the printer in use. However the composition of the printer properties window is similar.

NOTE: Check the Operating System(s) that are compatible with your printer. Please refer to the OS Compatibility section of Printer Specifications in your Printer User Guide.

NOTE: If you need to know the exact name of your printer, you can check the supplied CD-ROM.

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

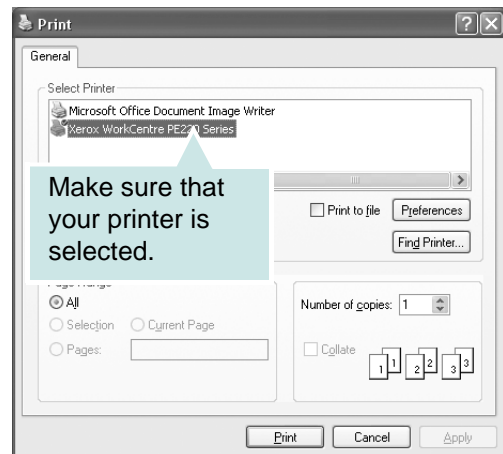
1. Open the document you want to print.
2. Select **Print** from the **File** menu. The Print window is displayed. It may look slightly different depending on your application.

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

3. Select **your printer driver** from the **Name** drop-down list.
4. To take advantage of the printer features provided by your printer driver, click **Properties** or **Preferences** in the application's Print window. For details, see *Printer Settings* on page 5-9.

If you do not have **Properties** or **Preferences**, select either **Setup**, **Printer**, or **Options** in your Print window. Then click **Properties** on the next screen.

5. Click **OK** to close the printer properties window.
6. To start the print job, click **OK** or **Print** in the Print window.



Printer Settings

You can use the printer properties window, which allows you to access all of the printer options you need when using your printer. When the printer properties are displayed, you can review and change the settings needed for your print job.

Your printer properties window may differ, depending on your operating system. This User Guide shows the Properties window for Windows XP.

Your printer driver **Properties** window that appears in this User Guide may differ depending on the printer in use.

If you access printer properties through the Printers folder, you can view additional Windows-based tabs (refer to your Windows User Guide) and the Printer tab (see *Printer Tab* on page 5-15).

NOTE: Most Windows applications will override settings you specify in the printer driver. Change all print settings available in the software application first, and change any remaining settings using the printer driver.

NOTE: The settings you change remain in effect only while you are using the current program. **To make your changes permanent**, make them in the Printers folder.

NOTE: The following procedure is for Windows XP. For other Windows OS, refer to the corresponding Windows User's Guide or online help.

1. Click the Windows **Start** button.
2. Select **Printers and Faxes**.
3. Select **your printer driver icon**.
4. Right-click on the printer driver icon and select **Printing Preferences**.
5. Change the settings on each tab, click OK.

Layout Tab

The **Layout** tab provides options to adjust how the document appears on the printed page. The **Layout Options** includes **Multiple Pages per Side** and **Poster**. See *Printing a Document on page 5-8* for more information on accessing printer properties.

1

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

Portrait prints across the width of the page, letter style.

Landscape prints across the length of the page, spreadsheet style.

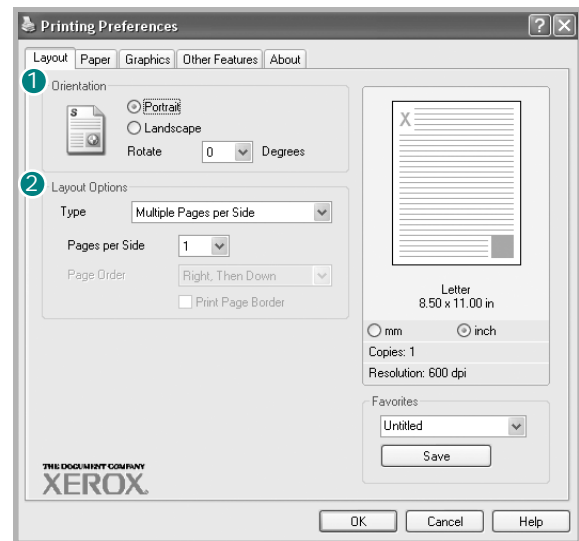
Rotate allows you to rotate the page the selected degrees.

2

Layout Options allows you to select advanced printing options. You can choose **Multiple Pages per Side** and **Poster**.

For details, see *Printing Multiple Pages on One Sheet of Paper (N-Up Printing)* on page 5-17.

For details, see *Printing Posters on page 5-18*.



▲ Portrait

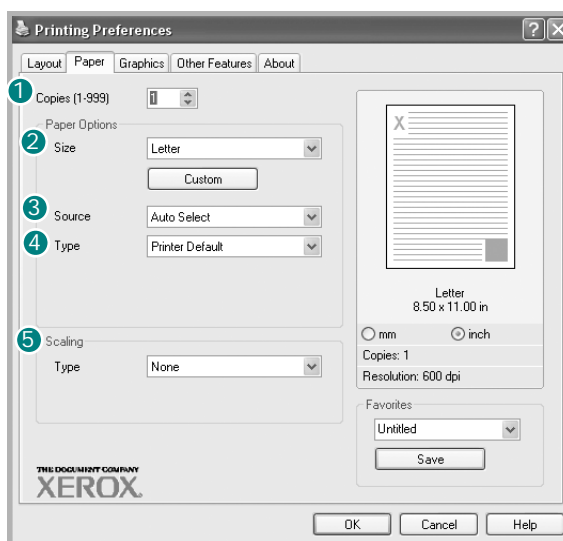


▲ Landscape

Paper Tab

Use the following options to set the basic paper handling specifications when you access the printer properties. See *Printing a Document on page 5-8* for more information on accessing printer properties.

Click the **Paper** tab to access various paper properties.

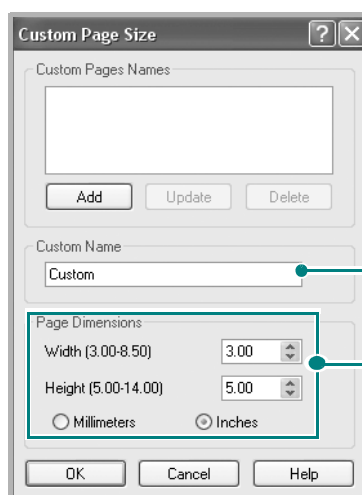


1

Copies allows you to choose the number of copies to be printed. You can select 1 to 999 copies.

2

Size allows you to set the size of paper you loaded in the tray. If the required size is not listed in the **Size** box, click **Custom**. When the **Custom Page Size** window appears, set the paper size and click **OK**. The setting appears in the list so that you can select it.



Enter the custom name you want to use.

Enter the paper size.

3

Make sure that **Source** is set to the corresponding paper tray.

Use the **Manual Feed** source when printing to special material. You need to load one sheet at a time into the manual tray.

If the paper source is set to **Auto Select**, the machine automatically picks up print material in the following order: the manual tray and the paper tray.

4

Make sure that **Type** is set to **Printer Default**. If you load a different type of print material, select the corresponding paper type. If you use cotton paper, set the paper type to **Thick** for best printing. To use recycled paper, with weighs from 20lb to 24lb (75~90g/m²), or colored paper, select **Color Paper**.

5

Scaling allows you to automatically or manually scale your print job on a page. You can choose from **None**, **Reduce/Enlarge**, and **Fit to Page**.

- For details, see *Printing a Reduced or Enlarged Document* on page 5-19.
- For details, see *Fitting Your Document to a Selected Paper Size* on page 5-20.

Graphics Tab

Use the following Graphic options to adjust the print quality for your specific printing needs. See *Printing a Document* on page 5-8 for more information on accessing printer properties.

Click the **Graphics** tab to display the properties shown below.

1

The Resolution options you can select may vary depending on your printer model. The higher the setting, the sharper the clarity of printed characters and graphics. The higher setting also may increase the time it takes to print a document.

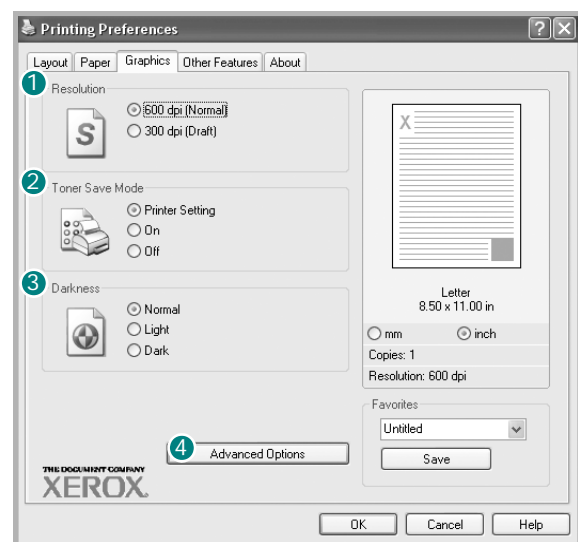
2

Selecting this option extends the life of your print cartridge and reduces your cost per page without a significant reduction in print quality.

Printer Setting: If you select this option, this feature is determined by the setting you've made on the control panel of the printer.

On: Select this option to allow the printer to use less toner on each page.

Off: If you don't need to save toner when printing a document, select this option.



③ Darkness

Use this option to lighten or darken your print job.

Normal: This setting is for normal documents.

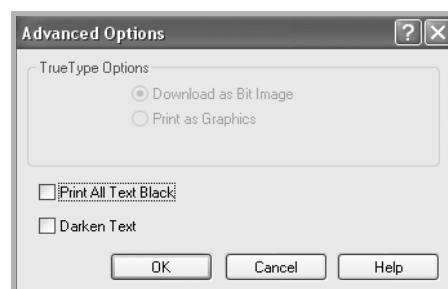
Light: This setting is for bolder line widths or darker gray-scale images.

Dark: This setting is for finer line width, higher definition in graphics, and lighter gray-scale images.

④

You can set advanced settings by clicking the **Advanced Options** button.

TrueType Options: This option determines what the driver tells the printer about how to image the text in your document. Select the appropriate setting according to the status of your document. This option is available only when you use Windows 9x/Me.



Download as Bit Image: When this option is selected, the driver will download the font data as bitmap images. Documents with complicated fonts, such as Korean or Chinese, or various other fonts, will print faster in this setting.

Print as Graphics: When this option is selected, the driver will download any fonts as graphics. When printing documents with high graphic content and relatively few TrueType fonts, printing performance (speed) may be enhanced in this setting.

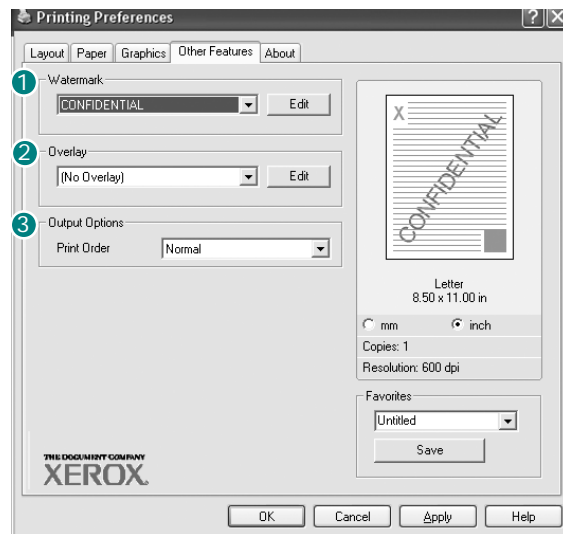
Print All Text Black: When the **Print All Text Black** option is selected, all text in your document prints solid black, regardless of the color it appears on the screen.

Darken Text: When the **Darken Text** option is selected, all text in your document is allowed to print darker than on a normal document.

Other Features Tab

You can select output options for your document. See *Printing a Document on page 5-8* for more information about accessing the printer properties.

Click the **Other Features** tab to access the following feature:



1

You can create a background text image to be printed on each page of your document. For details, see *Using Watermarks on page 5-20*

2

Overlays are often used to take the place of preprinted forms and letterhead paper. For details, see *Using Overlays on page 5-23*

3

Print Order: You can set the sequence in which the pages print. Select the print order from the drop-down list.

Normal: Your printer prints all pages from the first page to the last page.

Reverse All Pages: Your printer prints all pages from the last page to the first page.

Print Odd Pages: Your printer prints only the odd numbered pages of the document.

Print Even Pages: Your printer prints only the even numbered pages of the document.

About Tab

Use the **About** tab to display the copyright notice and the version number of the driver. If you have an Internet browser, you can connect to the Internet by clicking on the web site icon. See *Printing a Document on page 5-8* for more information about accessing printer properties.

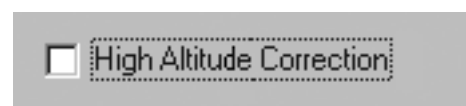
Printer Tab

If you access printer properties through the **Printers** folder, you can view the **Printer** tab. You can set the printer configuration.

The following procedure is for Windows XP. For other Windows Operating Systems, refer to the corresponding Windows User's Guide or online help.

1. Click the Windows **Start** menu.
2. Select **Printers and Faxes**.
3. Select **your printer driver** icon.
4. Right-click on the printer driver icon and select **Properties**.
5. Click the **Printer** tab and set the options.

If your printer is going to be used at a high altitude, selecting this option will optimize the print quality for those circumstances.



Using a Favorite Setting

The **Favorites** option, which is visible on each properties tab, allows you to save the current properties settings for future use.

To save a **Favorites** item:

1. Change the settings as needed on each tab.
2. Enter a name for the item in the **Favorites** input box.

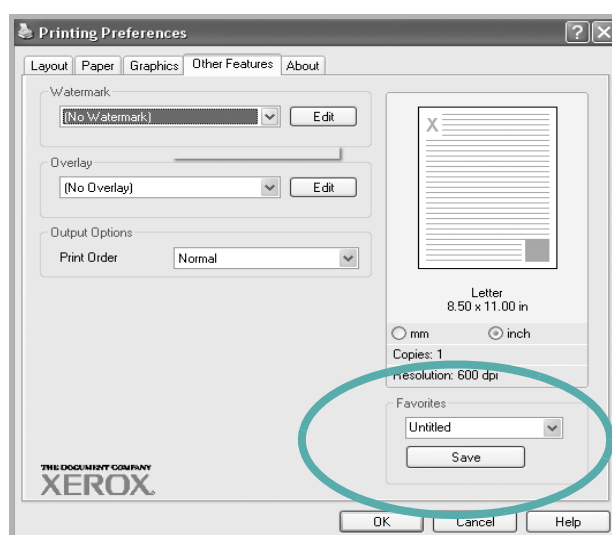
3. Click **Save**.

When you save **Favorites**, all current driver settings are saved.

To use a saved setting, select the item from the **Favorites** drop down list. The printer is now set to print according to the Favorites setting you selected.


To delete a Favorites item, select it from the list and click **Delete**.

You can also restore the printer driver's default settings by selecting **Printer Default** from the list.



Using Help

Your printer has a help screen that can be activated by clicking the **Help** button in the printer properties window. These help screens give detailed information about the printer features provided by the printer driver.

You can also click  from the upper right corner of the window, and then click on any setting.

Advanced Printing

This section explains printing options and advanced printing tasks.

NOTE: Your printer driver **Properties** window that appears in this User Guide may differ depending on the printer in use. However the composition of the printer properties window is similar.

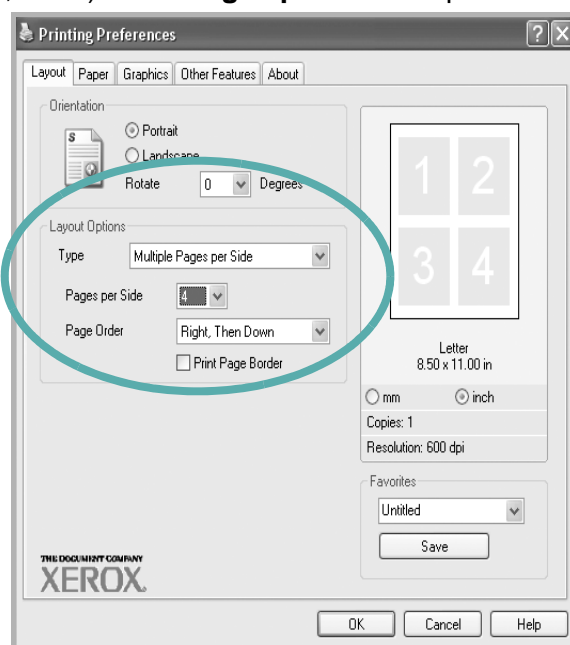
NOTE: If you need to know the exact name of your printer, you can check the supplied CD-ROM.

Printing Multiple Pages on One Sheet of Paper (N-Up Printing)



You can select the number of pages to print on a single sheet of paper. To print more than one page per sheet, the pages will be reduced in size and arranged in the order you specify. You can print up to 16 pages on one sheet.

1. To change the print settings from your software application, access printer properties. See *Printing a Document* on page 5-8
2. From the **Layout** tab, choose **Multiple Pages per Side** in the **Type** drop-down list.
3. Select the number of pages you want to print per sheet (1, 2, 4, 6, 9, or 16) in the **Pages per Side** drop-down list.

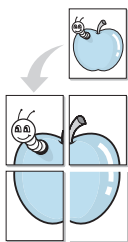


4. If necessary, select the page order from the **Page Order** drop-down list.

Select **Print Page Border** to print a border around each page on the sheet.

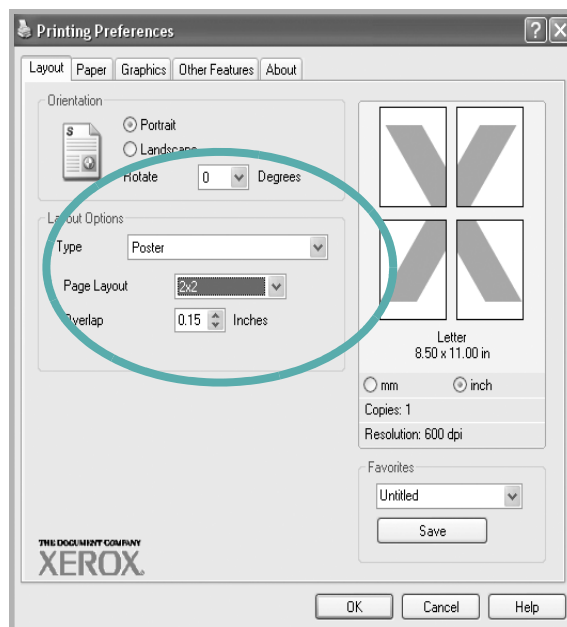
5. Click the **Paper** tab, select the paper source, size, and type.
6. Click **OK** and print the document.

Printing Posters



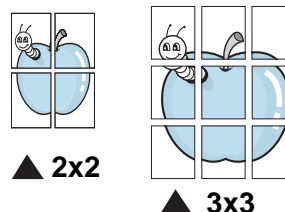
This feature allows you to print a single-page document onto 4, 9, or 16 sheets of paper, for the purpose of pasting the sheets together to form one poster-size document.

1. To change the print settings from your software application, access printer properties. See *Printing a Document* on page 5-8.
2. Click the **Layout** tab, select **Poster** in the **Type** drop-down list.

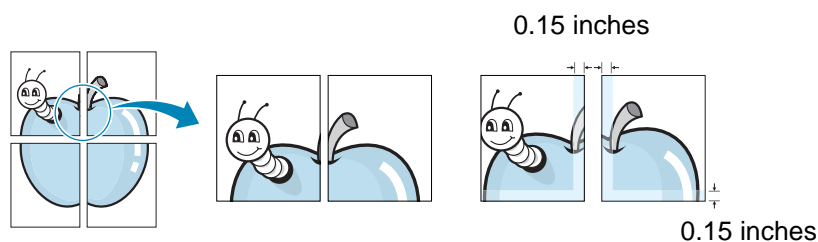


3. Configure the poster option:

You can select the page layout from **2x2**, **3x3**, or **4x4**. If you select **2x2**, the output will be automatically stretched to cover 4 physical pages.

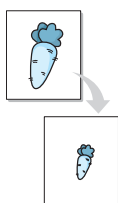


Specify an overlap in millimeters or inches to make it easier to paste the sheets together.



4. Click the **Paper** tab, select the paper source, size, and type.
5. Click **OK** and print the document. You can complete the poster by pasting the sheets together.

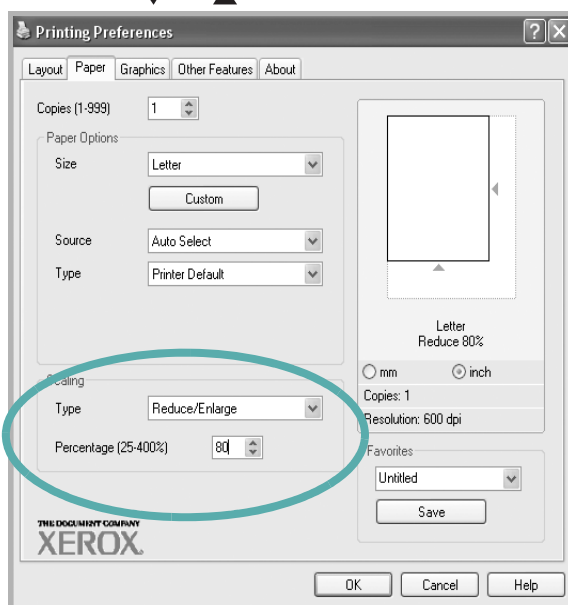
Printing a Reduced or Enlarged Document



You can change the size of a page's content to appear larger or smaller on the printed page.

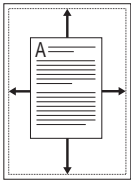
1. To change the print settings from your software application, access printer properties. See *Printing a Document* on page 5-8.
2. From the **Paper** tab, select **Reduce/Enlarge** in the **Type** drop-down list.
3. Enter the scaling rate in the **Percentage** input box.

You can also click the ▼ or ▲ button.



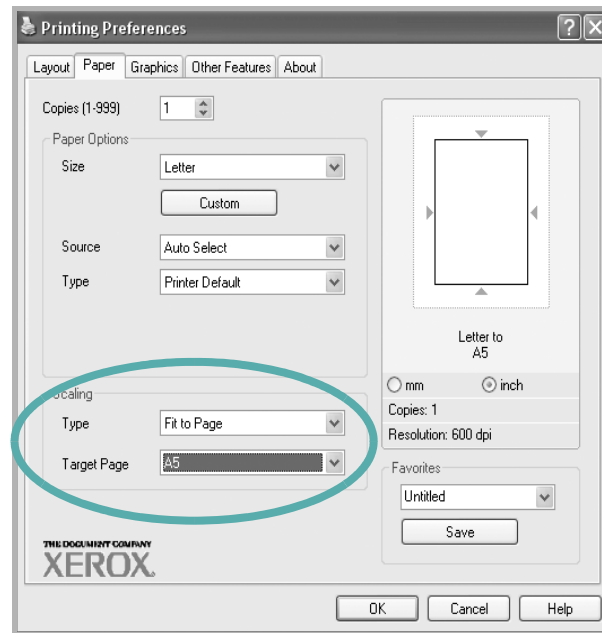
4. Select the paper source, size and type in the **Paper Options** section.
5. Click **OK** and print the document.

Fitting Your Document to a Selected Paper Size



This printer feature allows you to scale your print job to any selected paper size regardless of the digital document size. This can be useful when you want to check fine details on a small document.

1. To change the print settings from your software application, access printer properties. See *Printing a Document on page 5-8*.
2. From the **Paper** tab, select **Fit to Page** in the **Type** drop-down list.
3. Select the correct size from the **Target Page** drop-down list.



4. Select the paper source, size, and type in **Paper Options**.
5. Click **OK** and print the document.

Using Watermarks

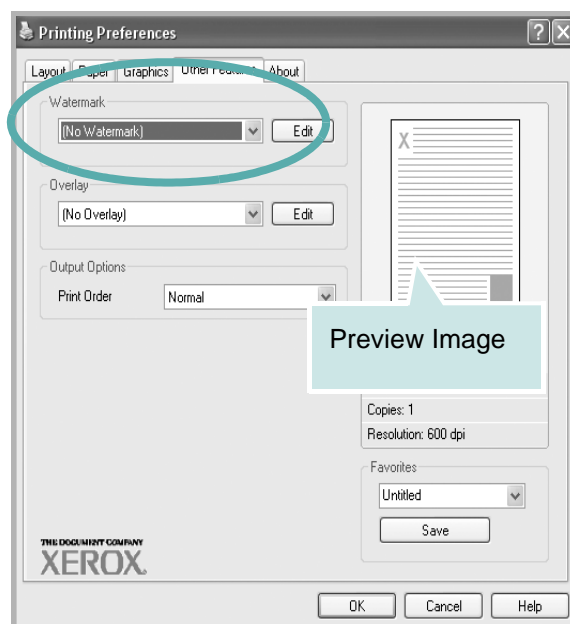
The Watermark option allows you to print text over an existing document.

There are several predefined watermarks that come with the printer, and they can be modified, or you can add new ones to the list. See *Creating a Watermark on page 5-21*.

Using an Existing Watermark

1. To change the print settings from your software application, access printer properties. See *Printing a Document on page 5-8*.

- Click the **Other Features** tab, and select the desired watermark from the **Watermark** drop-down list. You will see the selected watermark in the preview image.

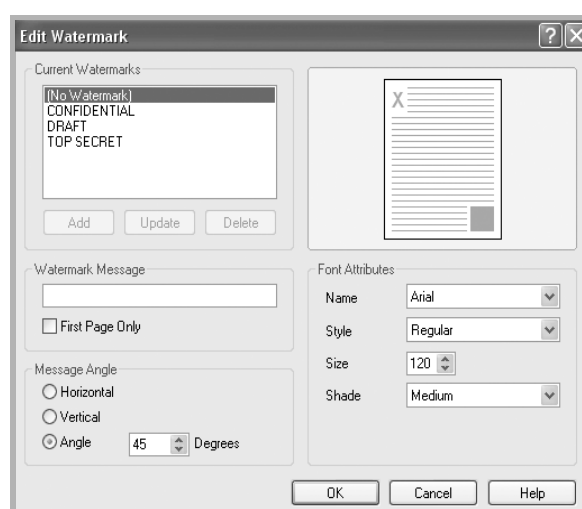


- Click **OK** and start printing.

NOTE: The preview image shows how the page will look when it is printed.

Creating a Watermark

- To change the print settings from your software application, access printer properties. See *Printing a Document on page 5-8*.
- Click the **Other Features** tab, and click the **Edit** button in the **Watermark** section. The **Edit Watermark** window appears.



3. Enter a text message in the **Watermark Message** box. You can enter up to 40 characters. The message displays in the preview window.

When the **First Page Only** box is selected, the watermark prints on the first page only.

4. Select watermark options.

You can select the font name, style, size, or grayscale level from the **Font Attributes** section and set the angle of the watermark from the **Message Angle** section.

5. Click **Add** to add a new watermark to the list.

6. When you have finished editing, click **OK** and start printing.

To stop printing the watermark, select **<No Watermark>** from the **Watermark** drop-down list.

Editing a Watermark

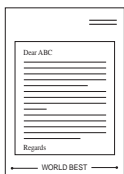
1. To change the print settings from your software application, access printer properties. See *Printing a Document on page 5-8*.
2. Click the **Other Features** tab and click the **Edit** button in the **Watermark** section. The **Edit Watermark** window appears.
3. Select the watermark you want to edit from the **Current Watermarks** list and change the watermark message and options.
4. Click **Update** to save the changes.
5. Click **OK** until you exit the Print window.

Deleting a Watermark

1. To change the print settings from your software application, access printer properties. See *Printing a Document on page 5-8*.
2. From the **Other Features** tab, click the **Edit** button in the Watermark section. The **Edit Watermark** window appears.
3. Select the watermark you want to delete from the **Current Watermarks** list and click **Delete**.
4. Click **OK** until you exit the Print window.

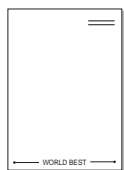
Using Overlays

What is an Overlay?



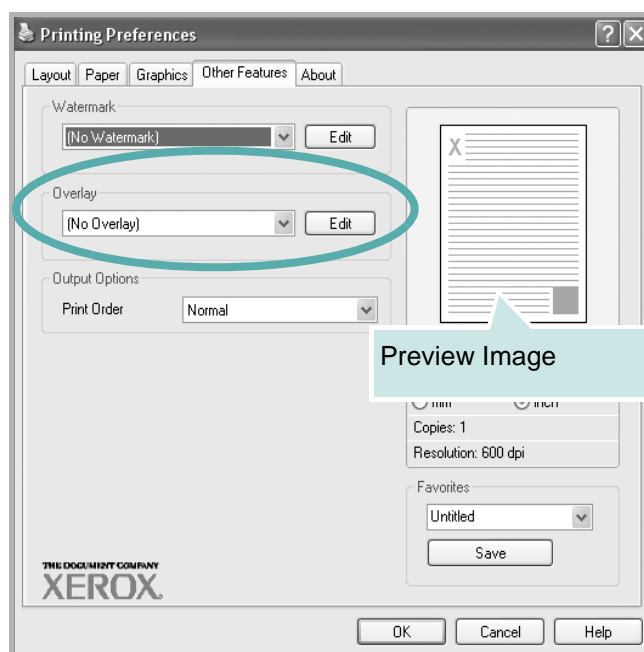
An overlay is text and/or images stored in the computer hard disk drive (HDD) as a special file format that can be printed on any document. Overlays are often used to take the place of preprinted forms and letterhead paper. You can create an overlay containing the exact same information that is currently on your letterhead.

Creating a New Page Overlay

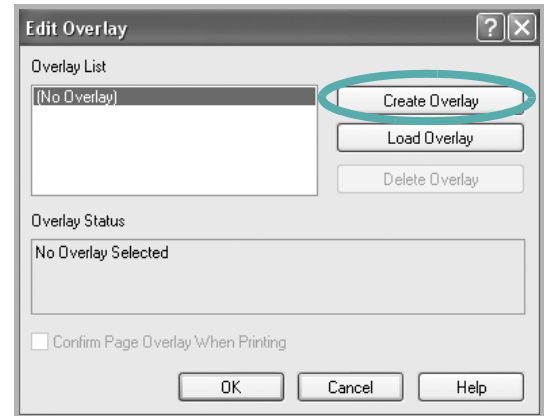


To use a page overlay, you must create a new page overlay containing your logo or image.

1. Create or open a document containing text or an image for use in a new page overlay. Position the items exactly as you wish them to appear when printed as an overlay.
2. To save the document as an overlay, access printer properties. See *Printing a Document* on page 5-8.
3. Click the **Other Features** tab, and click **Edit** button in the **Overlay** section.



4. In the Edit Overlay window, click **Create Overlay**.



5. In the Create Overlay window, type a name of up to eight characters in the **File name** box. Select the destination path, if necessary. (The default is C:\Formover).



6. Click **Save**. The name appears on the **Overlay List** box.

7. Click **OK** or **Yes** to finish creating.

The file is not printed. Instead it is stored on your computer hard disk drive.

NOTE: The overlay document size must be the same as the documents you print with the overlay. Do not create an overlay with a watermark.

Using a Page Overlay

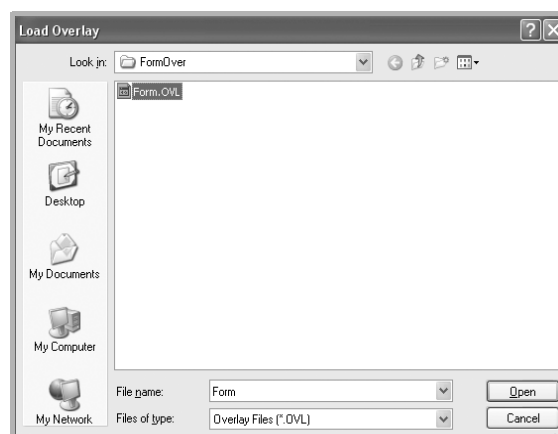
After an overlay has been created, it is ready to be printed with your document. To print an overlay with a document:

1. Create or open the document you want to print.
2. To change the print settings from your software application, access printer properties. See *Printing a Document on page 5-8*.
3. Click the **Other Features** tab.
4. Select the desired overlay from the **Overlay** drop-down list box.

5. If the overlay file you want does not appear in the **Overlay** list, click **Edit** button and **Load Overlay**, and select the overlay file.

If you have stored the overlay file in an external source, you can also load the file when you access the **Load Overlay** window.

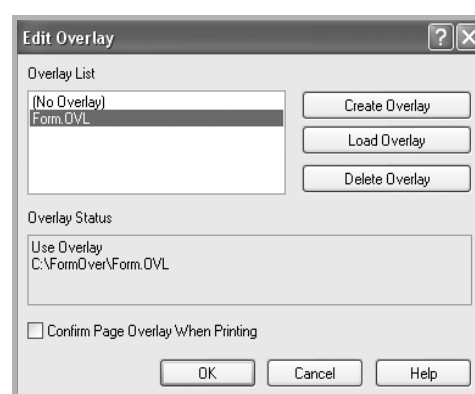
Select the file and click **Open**. The file appears in the **Overlay List** box and is available for printing. Select the overlay from the **Overlay List** box.



6. If necessary, click **Confirm Page Overlay When Printing**. If this box is selected, a message window

appears each time you submit a document for printing, asking you to confirm your instruction to print an overlay on your document.

If this box is not selected and an overlay has been selected, the overlay automatically prints with your document.



7. Click **OK** or **Yes** until printing begins.

The selected overlay downloads with your print job and prints on your document.

NOTE: The resolution of the overlay document must be the same as the document you want to print.

Deleting a Page Overlay

You can delete page overlays that you no longer use.

1. In the printer Properties window, click the **Other Features** tab.
2. Click the **Edit** button in the **Overlay** section.
3. Select the overlay you want to delete from the **Overlay List** box.
4. Click **Delete Overlay**.
5. When a confirming message window appears, click **Yes**.
6. Click **OK** to exit the Print window.

Sharing the Printer Locally

You can connect the printer directly to a selected computer, which is called “host computer,” on the network.

The following procedure is for Windows XP. For other Windows OS, refer to the corresponding Windows User's Guide or online help.

NOTE:

- Check the Operating System(s) that are compatible with your printer. Please refer to the OS Compatibility section of Printer Specifications in your Printer User Guide.
- If you need to know the exact name of your printer, you can check the supplied CD-ROM.

Setting Up a Host Computer

1. Start Windows.
2. From the **Start** menu select **Printers and Faxes**.
3. Double-click **your printer driver icon**.
4. From the **Printer** menu, select **Sharing**.
5. Check the **Share this printer** box.
6. Fill in the **Shared Name** field, and then click **OK**.

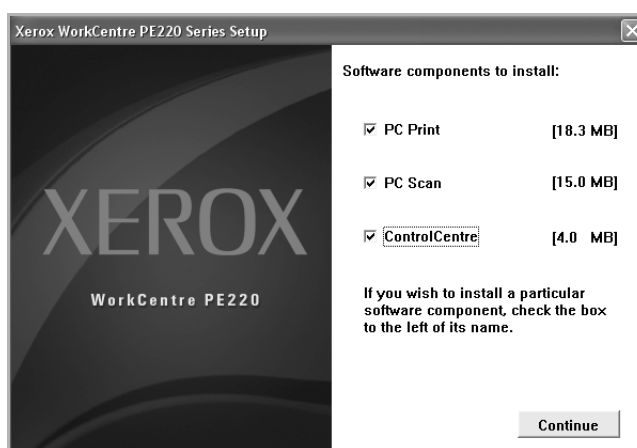
Setting Up a Client Computer

1. Right-click the Windows **Start** button and select **Explorer**.
2. Open your network folder in the left column.
3. Click the shared name.
4. From the **Start** menu select **Printers and Faxes**.
5. Double-click **your printer driver icon**.
6. From the **Printer** menu, select **Properties**.
7. From the **Ports** tab, click **Add Port**.
8. Select **Local Port** and click **New Port**.
9. Fill in the **Enter a Port Name** field with the shared name.
10. Click **OK** and click **Close**.
11. Click **Apply** and click **OK**.

Using ControlCentre

Using ControlCentre, you can create and edit Phonebook entries from your computer and configure the destination launches when you use the corresponding button on the control panel. You can also update the firmware of the machine.

1. To install the Xerox ControlCentre, insert the supplied **Xerox Drivers CD**.
2. From within Windows click **Start** and then **Run**. Type **E: Xinstall.exe**, replacing "E" with the letter of your CD-ROM drive.
3. When the language selection window appears, select the appropriate language and then click **Continue**.
4. Choose **ControlCentre** (if not already selected) and then click **Continue**.



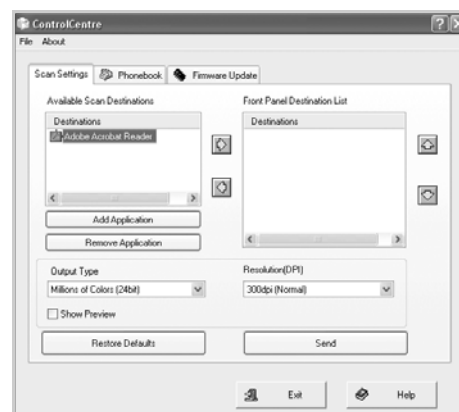
5. At the next screen accept your choice by clicking Continue and then click **Finish**. ControlCentre is now installed.

To open ControlCentre:

1. Start your Windows.
2. Click the **Start** button on your desktop computer.
3. From the **Programs** or **All Programs**, select your printer driver name and then **Control Centre**. The ControlCentre window opens.

The ControlCentre window provides the following tabs: **Scan Settings**, **Phonebook** (only available for the fax model), and **Firmware Update**.

4. To exit, click the **Exit** button at the bottom of each tab.





NOTE: Use the help feature by referring to the window which appears when you click the **Help** button.

The Scan Settings Tab

Click the **Scan Settings** tab to configure the scan destination list. Scan the image to any of the software programs in the destination list.

You can also configure the scan settings, such as the output type and resolution.

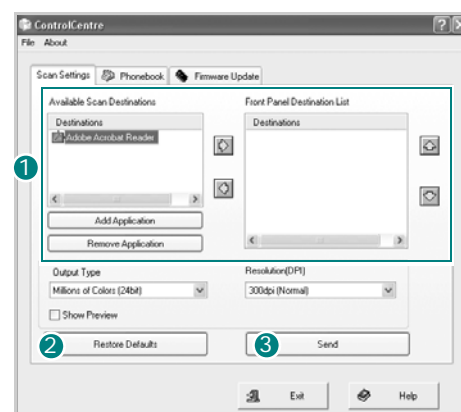
① Select the program from the Available Scan Destinations and click  to add it to the Front Panel Destination List. To delete the selected program, click .

② Restore Defaults

Click to restore the default settings.

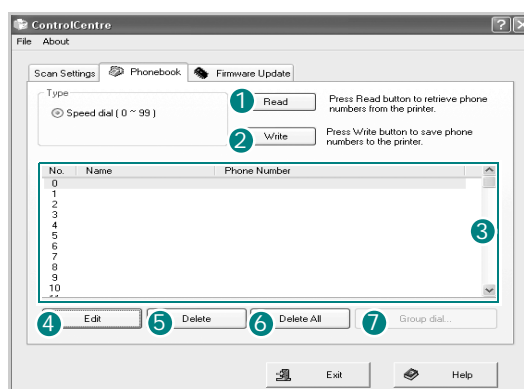
③ Send

Downloads the settings made in the ControlCentre to your machine.



The Phonebook Tab *(fax available model only)*

Click the **Phonebook** tab to create and edit Phonebook entries.



① Read.

Reads the Phonebook entries from the machine for use in the ControlCentre.

② Write

Downloads the Phonebook entries from the ControlCentre to the machine.

③ Phonebook entries.

④ Edit

Allows you to edit a selected Phonebook entry in a separate Edit window.

⑤ Delete

Deletes a selected Phonebook entry.

⑥ Delete All

Deletes all Phonebook entries.

7 Group dial...

Allows you to set up group dial numbers.

When you click **Group dial**, the following window opens.

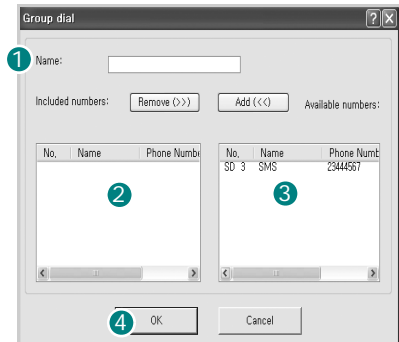
① Enter a name for the group.

② Shows the numbers included in the group. To remove a number, select it and click **Remove**.

③ Shows the Phonebook entries you can include in the group. Select a number and click **Add** to move it to the Included numbers list.

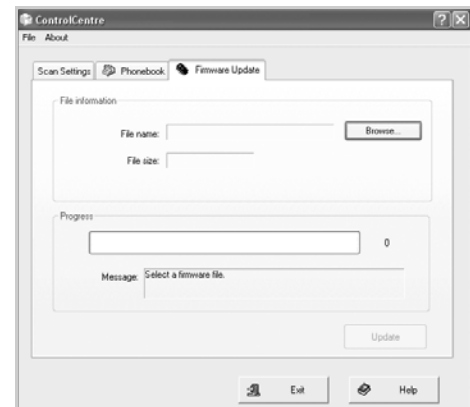
④ **OK**

Click to save the group dial number after adding or removing numbers for the group.



The Firmware Update Tab

Click the **Firmware Update** tab to update the firmware of your machine. This feature should be used by an authorized technician. Please consult with the purchase point.



Using Your Printer in Linux

You can use your machine in a Linux environment.

Getting Started

The supplied CD-ROM provides you with the Xerox MFP driver package for using your machine with a Linux computer.

The Xerox MFP driver package contains printer and scanner drivers, providing the ability to print documents and scan images. The package also delivers powerful applications for configuring your machine and further processing the scanned documents.

After the driver is installed on your Linux system, the driver package allows you to monitor a number of MFP devices via fast ECP parallel ports and USB simultaneously. The acquired documents can then be edited, printed on the same local MFP or network printers, sent by e-mail, uploaded to an FTP site, or transferred to an external OCR system.

The MFP driver package is supplied with a smart and flexible installation program. You don't need to search for additional components that might be necessary for the MFP software: all required packages will be carried onto your system and installed automatically; this is possible on a wide set of the most popular Linux clones.

Installing the MFP Driver

System Requirements

Supported OS

- Redhat 7.1 and above
- Linux Mandrake 8.0 and above
- SuSE 7.1 and above
- Caldera OpenLinux 3.1 and above
- Turbo Linux 7.0 and above
- Slackware 8.1 and above

Recommended Hardware Requirements

- Pentium IV 1 GHz or higher
- RAM 256 MB or higher
- HDD 1 GB or higher

NOTE:

- It is necessary to claim swap partition of 300 MB or larger when working with large scanned images.
- The Linux scanner driver supports the optical resolution at maximum. Please refer to the scanner and copy section of Specifications in your Printer User Guide.
- You can check your printer name in the supplied CD-ROM.


Software

- Linux Kernel 2.4 or higher
- Glibc 2.2 or higher
- CUPS
- SANE

Installing the MFP Driver

1. Make sure that you connect your machine to your computer. Turn both the computer and the machine on.
2. When the Administrator Login window appears, type in *root* in the Login field and enter the system password.

NOTE: You must log in as a super user (*root*) to install the printer software. If you are not a super user, ask your system administrator.

3. Insert the printer software CD-ROM. The CD-ROM will automatically run. If the CD-ROM does not automatically run, click the  icon at the bottom of the desktop. When the Terminal screen appears, type in:

```
[root@localhost root]#cd /mnt/cdrom/Linux
```

```
[root@localhost root]#./install.sh
```

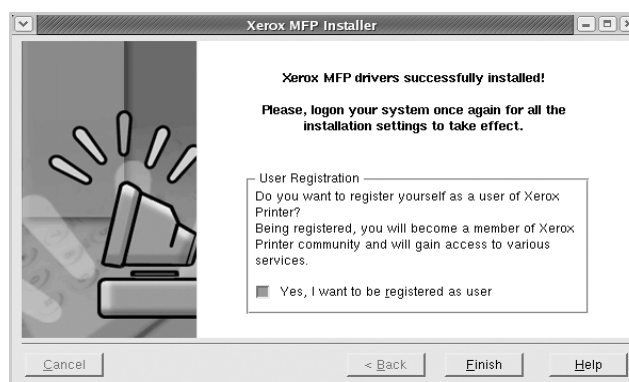
NOTE: The installation program runs automatically if you have an autorun software package installed and configured.

4. Click **Install**.

5. When the welcome screen appears, click **Next**.



6. When the installation is complete, click **Finish**.




The installation program has added the MFP Configurator desktop icon and Xerox MFP group to the system menu for your convenience. If you have any difficulties, consult the onscreen help that is available through your system menu or can otherwise be called from the driver package windows applications, such as MFP Configurator or Image Editor.

Uninstalling the MFP Driver

1. When the Administrator Login window appears, type in *root* in the Login field and enter the system password.

NOTE: You must log in as a super user (*root*) to install the printer software. If you are not a super user, ask your system administrator.

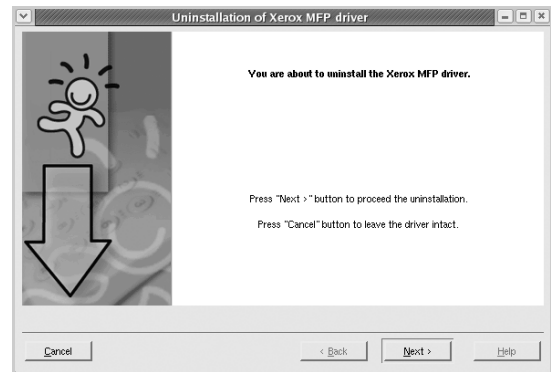
2. Insert the printer software CD-ROM. The CD-ROM will automatically run.
3. If the CD-ROM does not automatically run, click the  icon at the bottom of the desktop. When the Terminal screen appears, type in:

```
[root@localhost root]#cd /mnt/cdrom/Linux
```

```
[root@localhost root]#./install.sh
```

NOTE: The installation program runs automatically if you have an autorun software package installed and configured.

4. Click **Uninstall**.
5. Click **Next**.
6. Click **Finish**.



Using the MFP Configurator

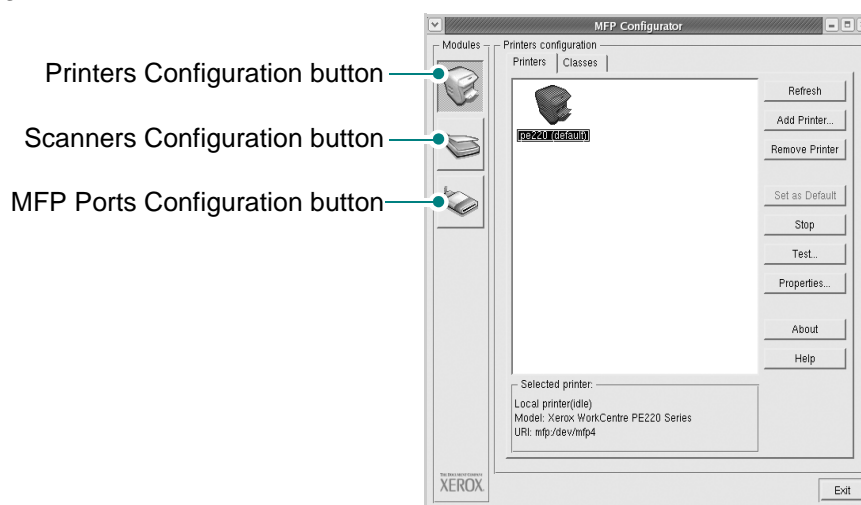
MFP Configurator is a tool primarily intended for configuring MFP devices. Since an MFP device combines the printer and scanner, the MFP Configurator provides options logically grouped for printer and scanner functions. There is also a special MFP port option responsible for the regulation of access to an MFP printer and scanner via a single I/O channel.

After installing the MFP driver (see *Installing the MFP Driver on page 5-31*), the MFP Configurator icon will automatically be created on your desktop.

Opening the MFP Configurator

1. Double-click **MFP Configurator** on the desktop.
You can also click the Startup Menu icon and select the **MFP Configurator**.

2. Press each button on the Modules pane to switch to the corresponding configuration window.



You can use the onscreen help by clicking **Help**.

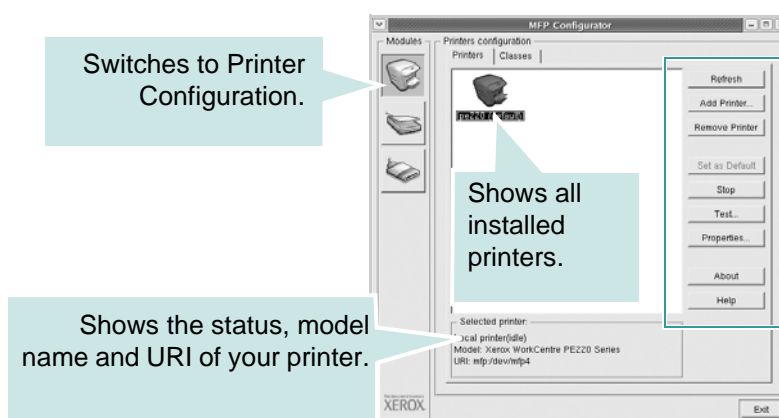
3. After changing the configurations, click **Exit** to close the MFP Configurator.

Printers Configuration

Printers configuration has the two tabs; **Printers** and **Classes**.

Printers Tab

You can see the current system's printer configuration by clicking on the printer icon button on the left side of the MFP Configurator window.



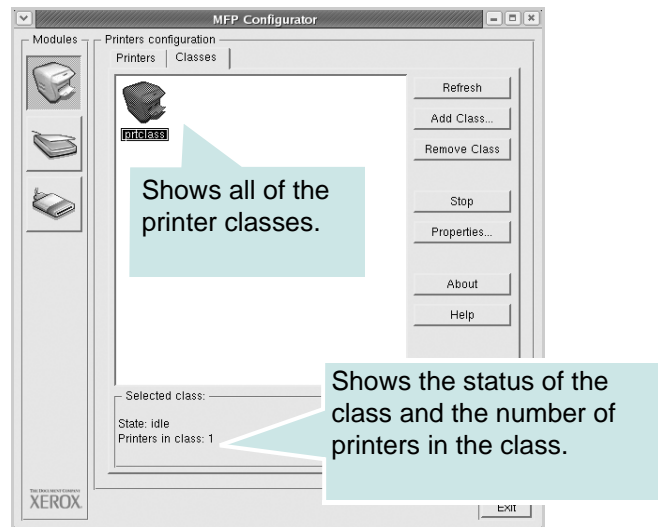
You can use the following printer control buttons:

- **Refresh:** renews the available printers list.
- **Add Printer:** allows you to add a new printer.

- **Remove Printer:** removes the selected printer.
- **Set as Default:** sets the current printer as a default printer.
- **Stop:** stops the printer.
- **Test:** allows you to print a test page to check if the machine is working properly.
- **Properties:** allows you to view and change the printer properties. For details, see *Configuring Printer Properties on page 5-38*.

Classes Tab

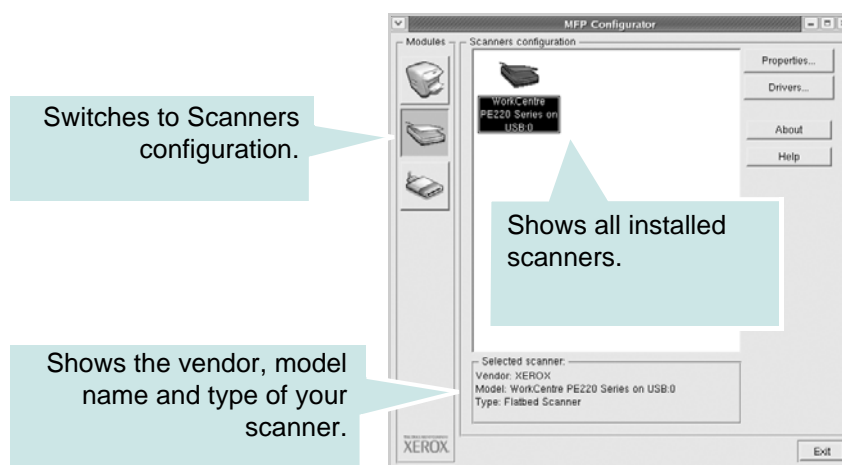
The Classes tab shows a list of available printer classes.



- **Refresh :** Renews the classes list.
- **Add Class...** : Allows you to add a new printer class.
- **Remove Class :** Removes the selected printer class.

Scanners Configuration

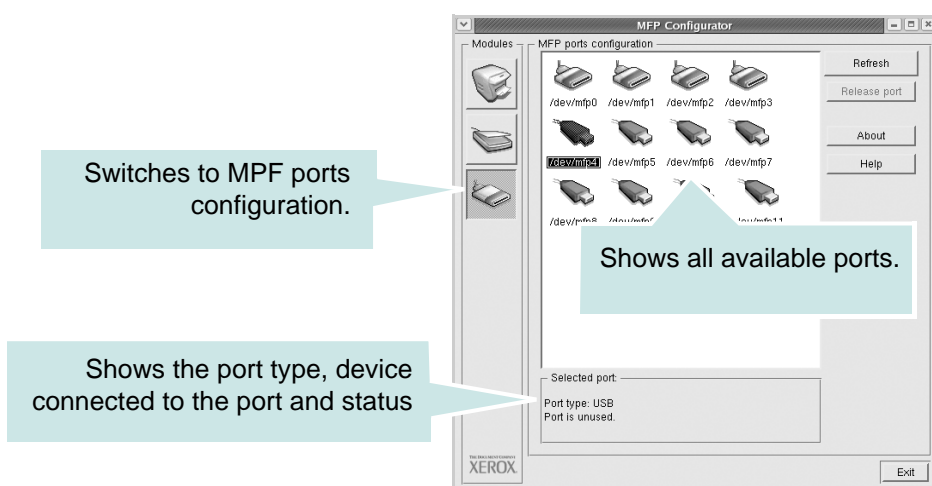
In this window, you can monitor the activity of scanner devices, view a list of installed Xerox MFP devices, change device properties, and scan images.



- **Properties...** : Allows you to change the scan properties and scan a document. See *Scanning a Document* on page 5-41.
- **Drivers...** : Allows you to monitor the activity of the scan drivers.

MFP Ports Configuration

In this window, you can view the list of available MFP ports, check the status of each port and release a port in busy state.



- **Refresh** : Renews the available ports list.
- **Release port** : Releases the selected port.

Sharing Ports Between Printers and Scanners

Your machine can be connected to a host computer via the parallel port or USB port. Since the MFP device contains more than one device (printer and scanner), it is necessary to organize proper access of “consumer” applications to these devices via the single I/O port.

The Xerox MFP driver package provides an appropriate port sharing mechanism that is used by the Xerox printer and scanner drivers. The drivers address their devices via so-called MFP ports. The current status of any MFP port can be viewed via the MFP Ports Configuration. The port sharing prevents you from accessing one functional block of the MFP device, while another block is in use.

When you install a new MFP printer onto your system, it is strongly recommended you do this with the assistance of an MFP Configurator. In this case you will be asked to choose I/O port for the new device. This choice will provide the most suitable configuration for MFP's functionality. For MFP scanners I/O ports are being chosen by scanner drivers automatically, so proper settings are applied by default.

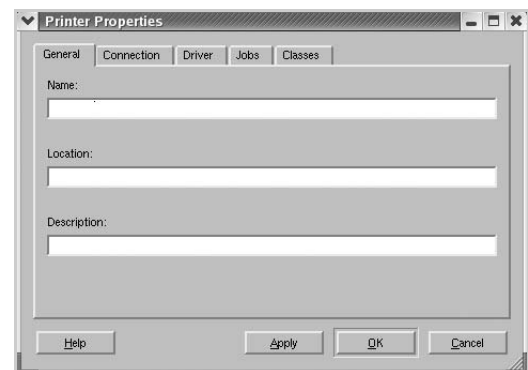
Configuring Printer Properties

You can change the various properties for your machine as a printer using the properties window provided by the Printers configuration.

1. Open the MFP Configurator.
2. If necessary, switch to Printers configuration.
3. Select your machine on the available printers list and click **Properties**.
4. The Printer Properties window opens.

The following five tabs display at the top of the window:

- **General:** allows you to change the printer location and name. The name entered in this tab displays on the printer list in Printers configuration.
- **Connection:** allows you to view or select another port. If you change the printer port from USB to parallel or vice versa while in use, you must re-configure the printer port in this tab.
- **Driver:** allows you to view or select another printer driver. Click **Options** to set the default device options.



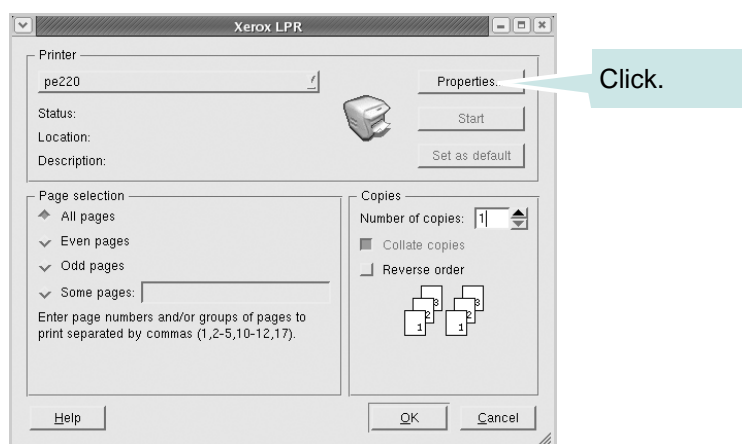
- **Jobs:** shows the list of print jobs. Click **Cancel job** to cancel the selected job and select the **Show completed jobs** check box to see previous jobs on the job list.
 - **Classes:** shows the class that your printer is in. Click **Add to Class** to add your printer to a specific class or click **Remove from Class** to remove the printer from the selected class.
5. Click **OK** to apply the changes and close the Printer Properties Window.

Printing a Document

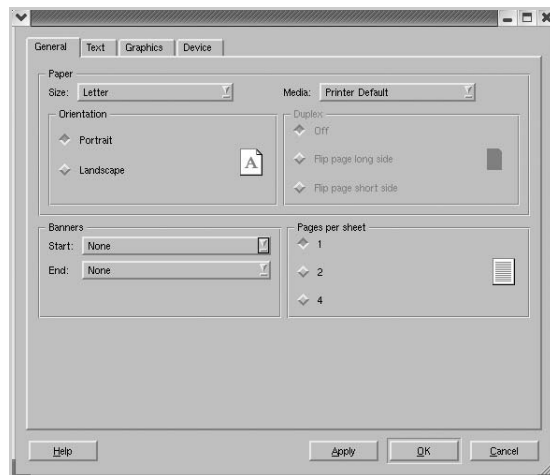
Printing from Applications

You can print from your machine from any Linux application using Common UNIX Printing System (CUPS).

1. From the application you are using, select **Print** from the **File** menu.
2. Select **Print** directly using **lpr**.
3. In the LPR window, select the model name of your machine from the Printer list and click **Properties**.



4. Change the printer and print job properties.



The following four tabs display at the top of the window.

- **General** - allows you to change the paper size, the paper type, and the orientation of the documents, enables the duplex feature, adds start and end banners, and changes the number of pages per sheet.
 - **Text** - allows you to specify the page margins and set the text options, such as spacing or columns.
 - **Graphics** - allows you to set image options that are used when printing images/files, such as color options, image size, or image position.
 - **Device** - allows you to set the print resolution, paper source, and destination.
5. Click **OK** to apply the changes and close the PE220 Properties window.
 6. Click **OK** in the Xerox LPR window to start printing.
 7. The Printing window appears, allowing you to monitor the status of your print job.
 8. To abort the current job, click **Cancel**.

Printing Files

You can print many different types of files on the Xerox MFP device using the standard CUPS way - directly from the command line interface. The CUPS `lpr` utility allows you to do that. But the drivers package replaces the standard `lpr` tool by a much more user-friendly Xerox LPR program.

To print any document file:

1. Type `lpr <file_name>` from the Linux shell command line and press **Enter**. The Xerox LPR window appears.

When you type only *lpr* and press **Enter**, the Select file(s) to print window appears first. Select any files you want to print and click **Open**.


2. In the LPR window, select your printer from the list, and change the printer and print job properties.

For details about the Properties window, see *Printing a Document on page 5-39*.

3. Click **OK** to start printing.

Scanning a Document

You can scan a document using the MFP Configurator window.

1. Double-click the MFP Configurator on your desktop.
2. Click the  button to switch to Scanners Configuration.
3. Select the scanner on the list.

When you have only one MFP device and it is connected to the computer and turned on, your scanner appears on the list and is automatically selected.

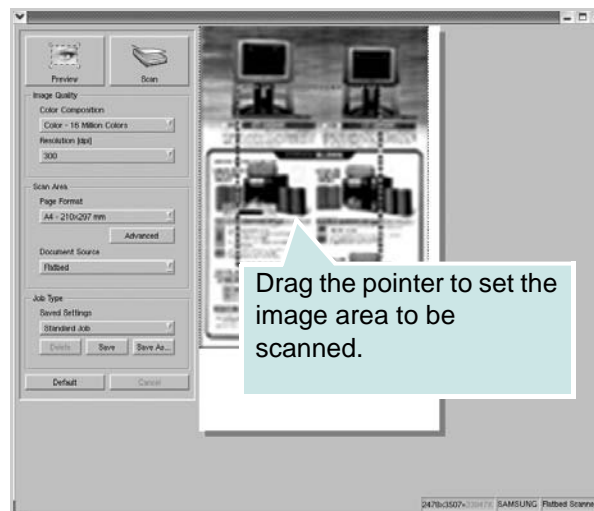
If you have two or more scanners attached to your computer, you can select any scanner to work at any time. For example, while acquisition is in progress on the first scanner, you may select the second scanner, set the device options and start the image acquisition simultaneously.



NOTE: The scanner name shown in Scanners configuration can be different from the device name.

4. Click **Properties**.
5. Load the document to be scanned face up into the ADF (Automatic Document Feeder) or face down on the document glass.
6. Click **Preview** in the Scanner Properties window.

The document is scanned and the image preview appears in the Preview Pane.



7. Change the scan options in the Image Quality and Scan Area sections.
 - **Image Quality:** allows you to select the color composition and the scan resolution for the image.
 - **Scan Area:** allows you to select the page size. The **Advanced** button enables you to set the page size manually.

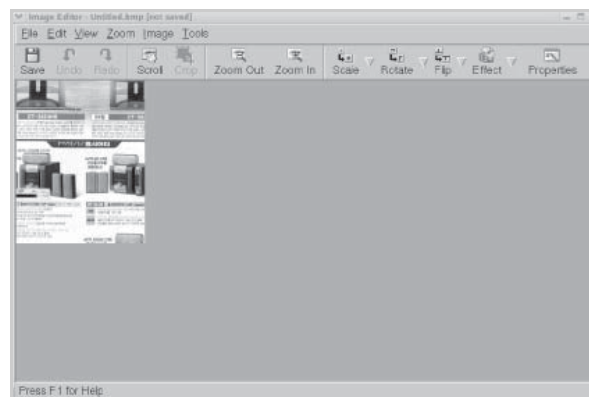
If you want to use one of the preset scan option settings, select from the Job Type drop-down list. For details about the preset Job Type settings, see *Adding Job Type Settings on page 5-43*.

You can restore the default setting for the scan options by clicking **Default**.

8. When you have finished, click **Scan** to start scanning.

The status bar appears on the bottom left of the window to show the progress of the scan. To cancel scanning, click **Cancel**.

9. The scanned image appears in the new Image Editor window.



If you want to edit the scanned image, use the toolbar. For further details about editing an image, see *Using the Image Editor on page 5-43*.

10. When you are finished, click **Save** on the toolbar.
11. Select the file directory where you want to save the image and enter the file name.
12. Click **Save**.

Adding Job Type Settings

You can save your scan option settings to retrieve for a later scanning.

To save a new Job Type setting:

1. Change the options from the Scanner Properties window.
2. Click **Save As**.
3. Enter the name for your setting.
4. Click **OK** to add your setting to the Saved Settings drop-down list.

To save a Job Type setting for the next scan job:

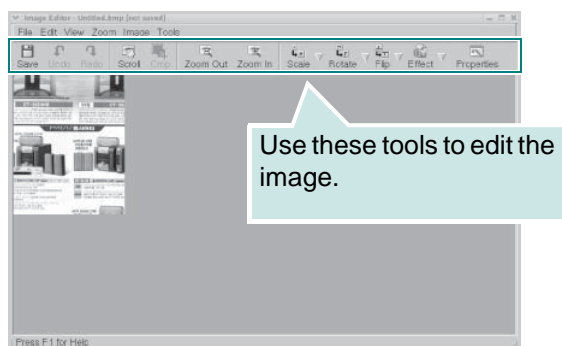
1. Select the setting you want to use from the Job Type drop-down list.
2. Click **Save**. The next time you open the Scanner Properties window, the saved setting is automatically selected for the scan job.

To delete a Job Type setting:













1. Select the setting to delete from the Job Type drop-down list.
2. Click **Delete**. The setting is deleted from the list

Using the Image Editor

The Image Editor window provides you with menu commands and tools to edit your scanned image.



You can use the following tools to edit the image:

Tools	Function
 Save	Saves the image.
 Undo	Cancels your last action.
 Redo	Restores the action you canceled.
 Scroll	Allows you to scroll through the image.
 Crop	Crops the selected image area.
 Zoom Out	Zooms the image out.
 Zoom In	Zooms the image in.
 Scale	Allows you to scale the image size; you can enter the size manually, or set the rate to scale proportionally, vertically, or horizontally.
 Rotate	Allows you to rotate the image; you can select the number of degrees from the drop-down list.
 Flip	Allows you to flip the image vertically or horizontally.
 Effect	Allows you to adjust the brightness or contrast of the image, or to invert the image.
 Properties	Shows the properties of the image.

For further details about the Image Editor program, refer to the onscreen help.

Using Your Machine with a Macintosh

Your machine supports Macintosh systems with a built-in USB interface. When you print a file from a Macintosh computer, you can use the CUPS driver by installing the PPD file.

Installing Software for Macintosh

The CD-ROM that came with your printer provides you with the PPD file that allows you to use the CUPS driver or Apple LaserWriter driver (only available when you use a printer which supports the PostScript driver), for printing on a Macintosh computer.

Also, it provides you with the TWAIN driver for scanning on a Macintosh computer.

Verify the following before you install the printer software:

Item	Requirements
Operating System	Mac OS 10.3 or later
RAM	128 MB
Free Disk Space	200 MB

Install the Printer driver

1. Make sure that you connect your printer to the computer. Turn on your computer and printer.
2. Insert the CD-ROM which came with your printer into the CD-ROM drive.
3. Double-click **CD-ROM icon** that appears on your Macintosh desktop.
4. Double-click the **Installer** folder.
5. Double-click the **Printer** folder.
6. Double-click the **Xerox MFP Installer_OS X** icon.
7. Enter the password and click **OK**.
8. Select **Easy Install** and click **Install**.
9. After the installation is complete, click **Quit**.

Uninstalling the Printer driver

Uninstall is required if you are upgrading the software, or if installation fails.

1. Insert the CD-ROM which came with your printer into the CD-ROM drive.
2. Double-click **CD-ROM icon** that appears on your Macintosh desktop.
3. Double-click the **Installer** folder.
4. Double-click the **Printer** folder.
5. Double-click the **Xerox MFP Installer_OS X** icon.
6. Enter the password and click **OK**.
7. Select **Uninstall** and then click **Uninstall**.
8. When the uninstallation is complete, click **Quit**.

Uninstalling the Scan driver

1. Insert the CD-ROM which came with your printer into the CD-ROM drive.
2. Double-click **CD-ROM icon** that appears on your Macintosh desktop.
3. Double-click the **Installer** folder.
4. Double-click the **TWAIN** folder.
5. Double-click the **Xerox ScanThru Installer** icon.
6. Enter the password and click **OK**.
7. Click **Continue**.
8. Select **Uninstall** from the Installation Type and then Click **Uninstall**.
9. When the uninstallation is complete, click **Quit**.

Setting Up the Printer

For a USB-connected Macintosh

1. Follow the instructions on *Installing Software for Macintosh* on page 5-45 to install the PPD and Filter files on your computer.
2. Open **Print Setup Utility** from the **Utilities** folder.
3. Click **Add** on the **Printer List**.
4. Select the **USB** tab.
5. Select **Xerox** in **Printer Model** and your printer in **Model Name**.
6. Click **Add**.

Your printer appears on the **Printer List**, and is set as the default printer.

Printing

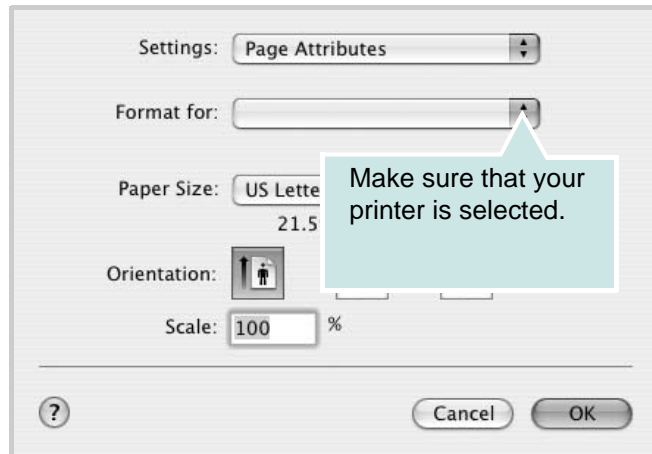
NOTE: The Macintosh printer's properties window that appears in this User Guide may differ depending on the printer in use. However the composition of the printer properties window is similar.

NOTE: You can check your printer name in the supplied CD-ROM.

Printing a Document

When you print with a Macintosh, you need to check the printer software setting in each application you use. Follow these steps to print from a Macintosh.

1. Open a Macintosh application and select the file you want to print.
2. Open the **File** menu and click **Page Setup** (**Document Setup** in some applications).
3. Choose your paper size, orientation, scaling, and other options and click **OK**.
4. Open the **File** menu and click **Print**.
5. Choose the number of copies you want and indicate which pages you want to print.
6. Click **Print** when you finish setting the options.



▲ Mac OS 10.3 or later

Changing Printer Settings

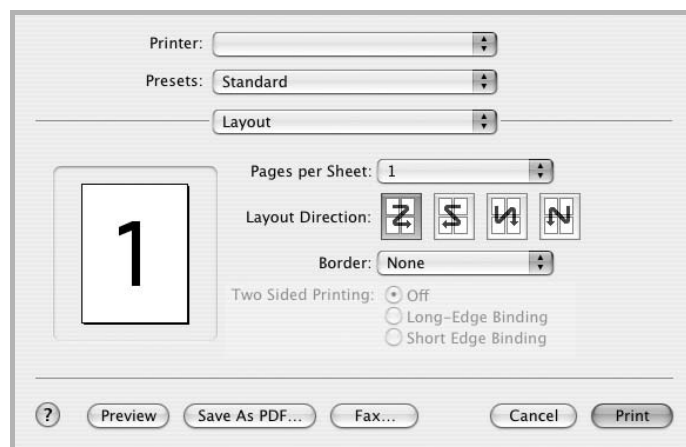
You can use advanced printing features when using your printer.

From your Macintosh application, select **Print** from the **File** menu. The printer name which appears in the printer properties window may differ depending on the printer in use.

Layout Setting

The **Layout** tab provides options to adjust how the document appears on the printed page. You can print multiple pages on one sheet of paper.

Select **Layout** from the **Presets** drop-down list to access the following features. For details, see "Printing Multiple Pages on One Sheet of Paper" on the next column.



▲ Mac OS 10.3 or later

Printer Features Setting

The **Printer Features** tab provides options for selecting the paper type and adjusting print quality.

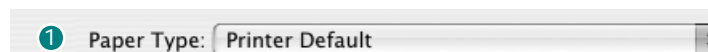
Select **Printer Features** from the **Presets** drop-down list to access the following features:



▲ Mac OS 10.3 or later

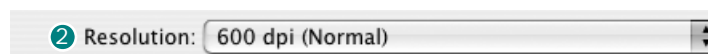
①

Make sure that **Paper Type** is set to **Printer Default**. If you load a different type of print material, select the corresponding paper type.



②

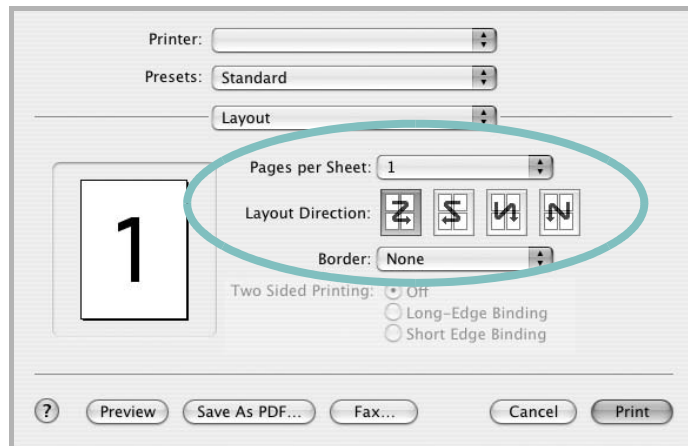
The Resolution options you can select may vary depending on your printer model. You can select the printing resolution. The higher the setting, the sharper the clarity of printed characters and graphics. The higher setting also may increase the time it takes to print a document.



Printing Multiple Pages on One Sheet of Paper

You can print more than one page on a single sheet of paper. This feature provides a cost-effective way to print draft pages.

1. From your Macintosh application, select **Print** from the **File** menu.
2. Select **Layout**.



▲ Mac OS 10.3 or later

3. Select the number of pages you want to print on one sheet of paper on the **Pages per Sheet** drop-down list.
4. Select the page order from the **Layout Direction** option.
To print a border around each page on the sheet, select the option you want from the **Border** drop-down list.
5. Click **Print**, and the printer prints the selected number of pages on one side of each page.

Scanning

If you want to scan documents using other software, you will need to use TWAIN-compliant software, such as Adobe PhotoDeluxe or Adobe Photoshop. The first time you scan with your machine, select it as your TWAIN source in the application you use.

The basic scanning process consists of the following steps:

- Place your photograph or page on the document glass or ADF.
- Open an application, such as PhotoDeluxe or Photoshop.
- Open the TWAIN window and set the scan options.
- Scan and save your scanned image.

NOTE: You need to follow the program's instructions for acquiring an image. Please refer to the User Guide of the application.

6 Scanning

Scanning with your machine lets you turn pictures and text into digital files on your computer. Then you can fax or e-mail the files, display them on your web site or use them to create projects that you can print using the WIA driver. This chapter includes:

- Scanning Basics – page 6-2.
- Scanning From the Control Panel to an Application – page 6-2.
- Scanning Process with TWAIN-enabled Software – page 6-3.
- Scanning Using the WIA Driver – page 6-4.

NOTE: Check the Operating System(s) that are compatible with your printer. Please refer to the OS Compatibility section of Printer Specifications in your Printer User Guide.

You can check your printer name in the supplied CD-ROM.

The maximum resolution that can be achieved depends upon various factors, including computer speed, available disk space, memory, the size of the image being scanned, and bit depth settings. Thus, depending on your system and what you are scanning, you may not be able to scan at certain resolutions, especially using enhanced dpi.

You need to press **Scan** to activate Scan mode.

Scanning Basics

Your WorkCentre PE220 offers three ways to scan. These are:

- From the control panel on your machine to an application:
Use the **Scan** button on the control panel to initiate scanning. Assign the TWAIN-compliant software, such as Adobe Photo Deluxe or Adobe Photoshop, to the machine by selecting it from a list of available applications via the **Scan** button. To compose the list of available applications, you must configure it in the scan settings tab of the Printer Settings ControlCentre program. For details, see *Chapter 5, Printing*.
- From TWAIN-compliant software:
You can use other software including Adobe PhotoDeluxe and Adobe Photoshop. For details, see *Chapter 5, Printing*.
- From the Windows Images Acquisition (WIA) driver:
Your machine also supports the WIA driver for scanning images. For details, see *Chapter 5, Printing*.

NOTE: To scan with your machine, you must install the software.

1. Insert the Xerox Drivers CD into the CD-ROM drive. In Microsoft Windows click **Start** and then **Run**. Type **E: Xinstall.exe**, replacing "E" with the letter of your CD-ROM drive and click **OK**.
2. When the language selection window appears, select the appropriate language and then click **Continue**.
3. Choose the components you want to install and then click **Continue**.
4. Click **Continue**.
5. Click **Finish**. The driver installation is now complete.

Scanning From the Control Panel to an Application

1. Make sure that your machine and computer are turned on and properly connected to each other.
2. Load the document(s) face up into the ADF, or place a single document face down on the document glass.
For details about loading a document, see *Loading Paper on page 2-6*.
3. Press **Scan**. The first available menu item, for example "Microsoft Paint", appears on the display.

4. Press the scroll button (◀ or ▶) to select an application to receive the scanned image.
5. Press **Start** to start scanning. The selected application window opens with the scanned image.

Scanning Process with TWAIN-enabled Software

If you want to scan documents using other software, you will need to use TWAIN-compliant software, such as Adobe PhotoDeluxe or Adobe Photoshop. The first time you scan with your machine, select it as your TWAIN source in the application you use.

The basic scanning process involves a number of steps:

1. Make sure that your machine and computer are turned on and properly connected to each other.
2. Load the document(s) face up into the ADF.
OR
Place a single document face down on the document glass.
3. Open an application, such as PhotoDeluxe or Photoshop.
4. Open the TWAIN window and set the scan options.
5. Scan and save your scanned image.

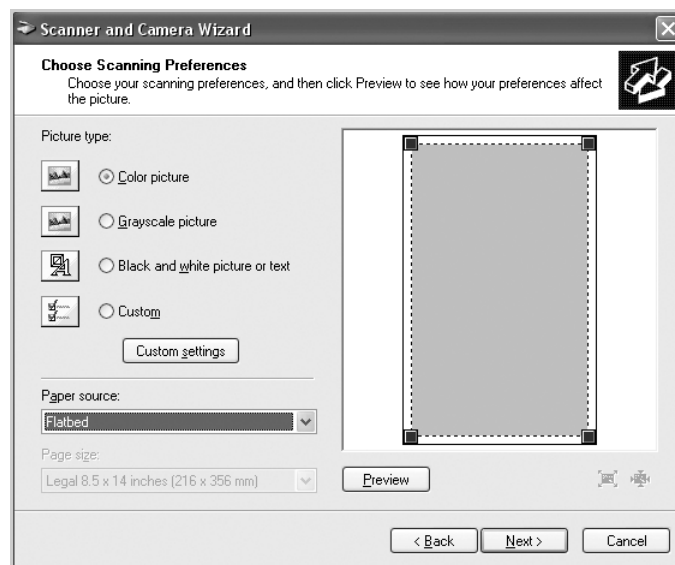
NOTE: You need to follow the program's instructions for acquiring an image. Please refer to the User Guide of the application.

Scanning Using the WIA Driver

Your machine also supports the Windows Image Acquisition (WIA) driver for scanning images. WIA is one of the standard components provided by Microsoft® Windows® XP and works with digital cameras and scanners. Unlike the TWAIN driver, the WIA driver allows you to scan and easily manipulate images without using additional software.

NOTE: The WIA driver works only on Windows XP with USB port.

1. Load the document(s) face up into the ADF.
OR
Place a single document face down on the document glass.
2. From the **Start** menu on your desktop window, select **Settings, Control Panel**, and then **Scanners and Cameras**.
3. Double click your scanner driver icon. The Scanner and Camera Wizard launches.
4. Choose your scanning preferences and click **Preview** to see how your preferences affect the picture.



5. Click **Next**.
6. Enter a picture name, and select a file format and destination to save the picture.
7. Follow the on-screen instructions to edit the picture after it is copied to your computer.

NOTE: If you want to cancel the scan job, press the Cancel button on the Scanner and Camera Wizard.

7 Faxing

This chapter gives you information about using your machine as a fax machine.

This chapter includes:

- Setting Up the Fax System – page 7-2
- Sending a Fax – page 7-5
- Receiving a Fax – page 7-10
- Automatic Dialing – page 7-14
- Other Ways to Fax – page 7-19
- Additional Features – page 7-24

NOTE: You need to press **Fax** to activate Fax mode.

Setting Up the Fax System

Changing the Fax Setup options

1. Press **Menu** until "Fax Setup" appears on the top line of the display.
The first available menu item, "Default-Change", displays on the bottom line.
2. Press the scroll button (◀ or ▶) until you see the desired menu item on the bottom line and press **Enter**.
3. If you select "Default-Change", you will see "Resolution". Press **Enter** again.
4. Use the scroll button (◀ or ▶) to find the desired status or use the number keypad to enter the value for the option you have selected.
5. Press **Enter** to make your selection. The next Fax Setup option appears.
6. If necessary, repeat steps 2 through 4.
7. To return to Standby mode, press **Stop/Clear**.

Available Fax Setup Options

Option	Description
Default-Change	<p>You can change the default resolution value.</p> <p>Standard for documents with normal sized characters.</p> <p>Fine for documents containing small characters or thin lines, or for sending documents printed using a dot-matrix printer.</p> <p>Super Fine for documents containing extremely fine detail. Super Fine mode is enabled only if the remote machine also supports Super Fine resolution.</p> <p>Photo for documents containing shades of gray or photographs.</p> <p>Color for documents with colors. Sending a color fax is only possible if the receiving machine supports color fax reception and you send the fax manually. In this mode, memory transmission is not available.</p>
Ring To Answer	<p>You can specify the number of times the machine rings, from 1 to 7, before answering an incoming call.</p>
Lighten/Darken	<p>You can select the default contrast mode to fax your documents lighter or darker.</p> <p>Lighten works well with dark print.</p> <p>Normal works well with standard typed or printed documents.</p> <p>Darken works well with light print or faint pencil markings.</p>

Option	Description
Redial Term	Your machine can automatically redial a remote fax machine if it was busy. Intervals from 1 to 15 minutes can be entered.
Redials	You can specify the number of redial attempts, from 1 to 13.
MSG Confirm	You can set your machine to print a report showing whether a transmission was successful, how many pages were sent, and more. The available options are On , Off , and On-Err , which prints only when a transmission is not successful.
Image TCR	You can prevent the Image TCR (Transmission Confirmation Report) from being included in the confirmation report for privacy or security protection. The available options are On or Off .
Auto Report	This produces a report with detailed information about the previous 50 communications operations, including time and dates. The available options are On or Off .
Auto Reduction	When receiving a document containing pages as long as or longer than the paper loaded in the tray, the machine can reduce the size of the document to fit the size of the paper loaded in the machine. Select On if you want to automatically reduce an incoming page. With this feature set to Off , the machine cannot reduce the document to fit onto one page. The document will be divided and printed in actual size on two or more pages.
Discard Size	When receiving a document containing pages as long as or longer than the paper installed in your machine, you can set the machine to discard any excess at the bottom of the page. If the received page is outside the margin you set, it will print in actual size on two or more sheets of paper. When the document is outside the margin and the Auto Reduction feature is turned on, the machine reduces the document to fit it onto the appropriately-sized paper and discard does not occur. If the Auto Reduction feature is turned off or fails, data outside the margin will be discarded. Settings range from 0 to 30 mm.
Receive Code	The Receive Start Code allows you to initiate fax reception from an extension phone plugged into the EXT. jack on the back of the machine. If you pick up the extension phone and hear fax tones, enter the Receive Start Code. The Receive Start Code is preset to *9* at the factory. Settings range from 0 to 9. See <i>Receiving Manually Using an Extension Telephone</i> on page 7-12 for more information about using the code.

Option	Description
DRPD Mode	You can receive a call using the Distinctive Ring Pattern Detection (DRPD) feature, which enables a user to use a single telephone line to answer several different telephone numbers. In this menu, you can set the machine to recognize which ring patterns to answer. For details about this feature, see <i>Receiving Faxes Using the DRPD Mode on page 7-12</i> .
Receive Mode	<p>You can select the default fax receiving mode.</p> <p>In Tel mode, you can receive a fax by picking up the handset of the extension phone and then pressing the remote receive code (see <i>Receive Code on page 7-3</i>). Alternatively, you can press Manual Dial (you can hear a fax tone from the remote machine) and then press Start on the control panel of your machine.</p> <p>In the Fax mode, the machine answers an incoming call and immediately goes into fax reception mode.</p> <p>In Ans/Fax mode, the answering machine answers an incoming call, and the caller can leave a message on the answering machine. If the fax machine senses a fax tone on the line, the call automatically switches to Fax mode.</p> <p>In DRPD mode, you can receive a call using the Distinctive Ring Pattern Detection (DRPD) feature. This option is available only when you set up the DRPD Mode. For further details, see <i>Receiving Faxes Using the DRPD Mode on page 7-12</i>.</p>

Sending a Fax

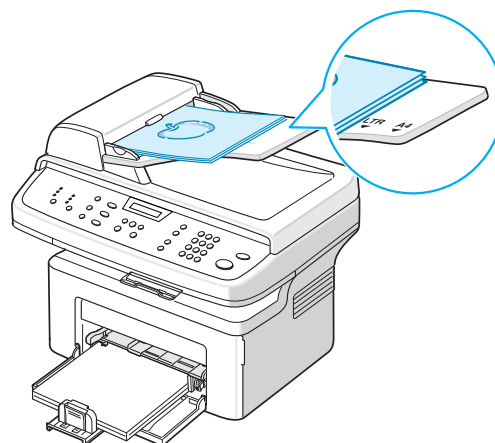
Loading a Document

You can use the Automatic Document Feeder (ADF) or the document glass to load an original document for faxing. Using the ADF, you can load up to 30 sheets of 20 lb (75 g/m² bond) paper at a time. You can, of course, place only one sheet at a time on the document glass. For details about preparing a document, see *Making Copies* on page 4-2.

To fax a document using the Automatic Document Feeder (ADF):

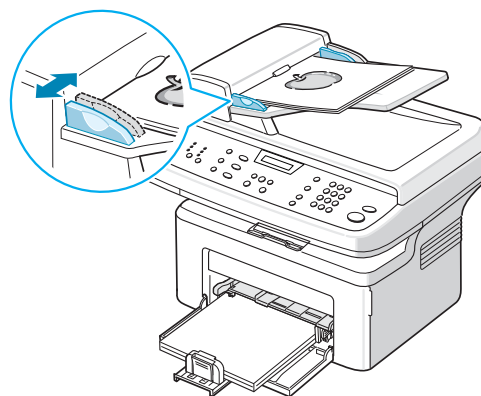
1. Load the document **face up** into the ADF. You can insert up to 30 sheets at a time.

Make sure that the bottom of the document stack matches the paper size marked on the document tray.



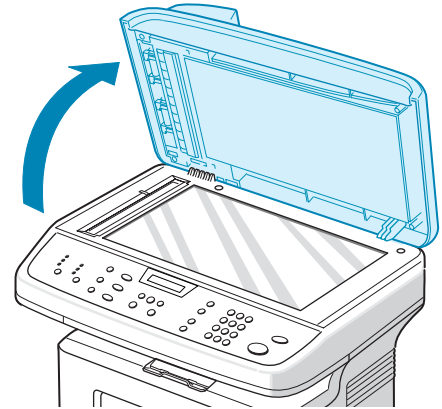
2. Adjust the document guide on the ADF to match the width of the document.

NOTE: Dust on the ADF glass may cause black lines on the printout. Use the recommend materials to keep the ADF glass clean. Refer to *Cleaning the Scan Unit* on page 8-5.



To fax a document from the document glass:

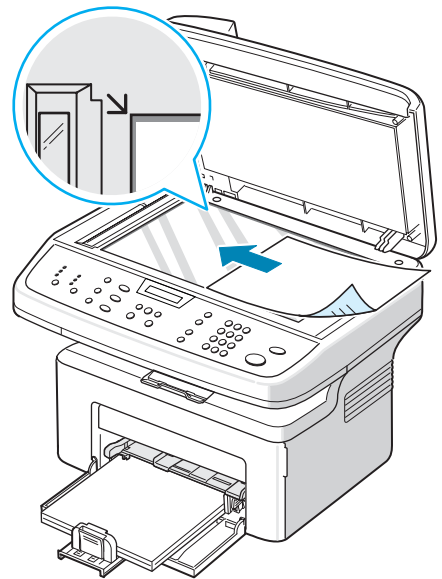
1. Lift and open the document cover.



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

NOTE: Make sure that no other documents are in the ADF (Automatic Document Feeder). A document in the ADF has priority over a document on the document glass.

3. Close the document cover.



Adjusting the Document Resolution

The default document settings produce good results when using typical text-based documents.

If you send documents that are of a poor quality, or contain photographs, you can adjust the resolution to produce a higher quality fax.

1. Press **Resolution** on the control panel.
2. By pressing **Resolution** or the scroll button (◀ or ▶), you can choose from **Standard**, **Fine**, **Super Fine**, **Photo**, and **Color**.
3. When the mode you want to use displays, press **Enter** to make your selection.

The document types recommended for the resolution settings are described in the table below:

Mode	Recommended for:
Standard	Documents with normal sized characters.
Fine	Documents containing small characters or thin lines or documents printed using a dot-matrix printer.
Super Fine	Documents containing extremely fine detail. Super Fine mode is enabled only if the machine with which you are communicating also supports the Super Fine resolution. See the notes below.
Photo	Documents containing shades of gray or photographs.
Color	Documents with colors. Sending a color fax is only possible if the receiving machine supports color fax reception and you send the fax manually. In this mode, memory transmission is not available.

NOTE: For memory transmission, **Super Fine** mode is not available. The resolution setting is automatically changed to Fine.

When your machine is set to **Super Fine** resolution and the receiving fax machine does not support **Super Fine** resolution, the machine transmits using the highest resolution mode supported by the other fax machine.

Sending a Fax Automatically

1. Load the document(s) face up into the ADF, or place a single document face down on the document glass.
For details about loading a document, see *Loading a Document on page 7-5*.
2. Press the **Fax** button.
3. Adjust the document resolution to suit your fax needs (see *Adjusting the Document Resolution on page 7-6*).
If you need to change the brightness, see *Lighten/Darken on page 7-2*.
4. Enter the remote fax phone number using the number keypad.
You can also press and hold the digit button of the speed dial number if you have assigned one. To store the speed dial number, see *Storing a Number for Speed Dialing on page 7-14*.
5. Press **Start**.
6. When a document is placed on the document glass, the display shows "Another Page?" on the top line after the document is scanned into the memory. If you have the next page, remove the scanned page and place the next page on the glass. Press the scroll button (◀ or ▶) to display "Yes" and press **Enter**. Repeat as necessary.

After all of the pages are scanned, press the scroll button (◀ or ▶) to display "No" and press **Enter** when the display shows "Another Page?".

7. The number is dialed and then the machine begins sending the fax when the receiving fax machine is ready.

NOTE: When you want to cancel a fax job, press **Stop/Clear** at any time while sending.

Sending a Fax Manually

1. Load the document(s) face up into the ADF, or place a single document face down on the document glass.
For details about loading a document, see *Loading a Document on page 7-5*.
2. Press the **Fax** button
3. Adjust the document resolution to suit your fax needs, see *Adjusting the Document Resolution on page 7-6*.
If you need to change the brightness, see *Lighten/Darken on page 7-2*.
4. Press **Manual Dial**. You hear a dial tone.
5. Enter the receiving fax machine's number using the number keypad.
You can also press and hold the digit button of the speed dial number if you have assigned one. To store the speed dial number, see *Storing a Number for Speed Dialing on page 7.14*.
6. When you hear a high-pitched fax signal from the remote fax machine, press **Start**.

NOTE: When you want to cancel a fax job, press **Stop/Clear** at any time while sending.

Redialing the Last Number

To redial the number you last called:

Press **Redial/Pause**.

When a document is loaded in the ADF (Automatic Document Feeder; see *To fax a document using the Automatic Document Feeder (ADF): on page 7-5*), the machine automatically begins to send.

For a document placed on the document glass, the display asks if you want to load another page. To add more documents, press the scroll button (◀ or ▶) to display "Yes" and press **Enter**. To send the fax immediately, press the scroll button (◀ or ▶) to display "No" and press **Enter**.

Confirming Transmission

When the last page of your document has been sent successfully, the machine beeps and returns to Standby mode.

If your fax fails, an error message appears on the display. For a list of error messages and their meanings, see *Clearing LCD Error Messages on page 9-8*.

If you receive an error message, press **Stop/Clear** to clear the message and try to send the document again.

You can set your machine to print a confirmation report automatically each time sending a fax is completed. For further details, see the MSG Confirm item on *MSG Confirm on page 7-3*.

Automatic Redialing

When the number you have dialed is busy or there is no answer when you send a fax, the machine automatically redials the number every three minutes, up to seven times according to the factory default settings.

When the display shows "Retry Redial?", press **Enter** to redial the number without waiting. To cancel the automatic redialing, press **Stop/Clear**.

To change the time interval between redials and the number of redial attempts. See *Redial Term on page 7-3*.

Receiving a Fax

About Receiving Modes

- In **Fax** mode, the machine answers an incoming fax call and immediately goes into the fax reception mode.
- In **Tel** mode, you can receive a fax by pressing **Manual Dial** (you can hear a fax tone from the sending machine) and then pressing **Start** on the control panel of your machine. You can also pick up the handset of the extension phone and then press the remote receive code (see *Receive Code on page 7-3*).
- In **Ans/Fax** mode, the answering machine answers an incoming call, and the caller can leave a message on the answering machine. If the fax machine senses a fax tone on the line, the call automatically switches to Fax mode.
- In **DRPD** mode, you can receive a call using the Distinctive Ring Pattern Detection (DRPD) feature. “Distinctive Ring” is a telephone company service which enables a user to use a single telephone line to answer several different telephone numbers. For further details, see *Receiving Faxes Using the DRPD Mode on page 7-12*.

When your machine's memory is full, the receiving mode automatically switches to Tel.

For details about changing the receiving mode, see *Receive Mode on page 7-4*.

NOTE:

- To use the **Ans/Fax** mode, attach an answering machine to the EXT. jack on the back of your machine.
- If you do not want other people to view your received documents, you can use Secure Receiving mode. In this mode, all of the received faxes are stored in memory. For further details, see *Using Secure Receiving Mode on page 7-24*.

Loading Paper for Receiving Faxes

Faxes can only be printed on Letter-, A4-, Legal-, Folio-, Executive-, or B5-sized paper. For details about loading paper and setting the paper size in the tray, see *Loading Paper on page 2-6* and *Setting the Paper Size and Type on page 2-18*.

Receiving Automatically in Fax Mode

Your machine is preset to **Fax** mode at the factory.

When you receive a fax, the machine answers the call on a specified number of rings and automatically receives the fax.

To change the number of rings, see *Ring To Answer* on page 7-2.

If you want to adjust the ringer volume, see *Setting Sounds* on page 2.18.

Receiving Manually in Tel Mode

You can receive a fax call by picking up the handset of the extension phone and then pressing the remote receive code (see *Receive Code* on page 7-3), or by pressing Fax, **Manual Dial**, and then **Start** when you hear a fax tone from the sending machine.

The machine begins receiving a fax and returns to Standby mode when the reception is completed.

Receiving Automatically in Ans/Fax Mode

To use this mode, you must attach an answering machine to the EXT. jack on the back of your machine. See *Making Connections* on page 2-8.

If the caller leaves a message, the answering machine stores the message as it would normally. If your machine detects a fax tone on the line, it automatically starts to receive the fax.

NOTE: If you have set your machine to Ans/Fax mode and your answering machine is switched off, or no answering machine is connected to EXT. jack, your machine automatically goes into Fax mode after a predefined number of rings.

If your answering machine has a 'user-selectable ring counter', set the machine to answer incoming calls within 1 ring.

If you are in Tel mode (manual reception) when the answering machine is connected to your machine, you must switch off the answering machine, or the outgoing message from the answering machine will interrupt your phone conversation.

Receiving Manually Using an Extension Telephone

This feature works best when you are using an extension telephone connected to the EXT. jack on the back of your machine. You can receive a fax from someone you are talking to on the extension telephone without going to the fax machine.

When you receive a call on the extension phone and hear fax tones, press the keys ***9*** on the extension telephone. The machine receives the document.

Press the buttons slowly in sequence. If you still hear the fax tone from the remote machine, press ***9*** again.

9 is the remote receive code preset at the factory. The first and the last asterisks are fixed, but you can change the middle number to any number. For details about changing the code, see *Receive Code on page 7-3*.

Receiving Faxes Using the DRPD Mode

“Distinctive Ring” is a telephone company service which enables a user to use a single telephone line to answer several different telephone numbers. The particular number someone uses to call you is identified by different ringing patterns, which consist of various combinations of long and short ringing sounds.

Using the Distinctive Ring Pattern Detection feature, your fax machine can “learn” the ring pattern you designate to be answered by the fax machine. Unless you change it, this ringing pattern will continue to be recognized and answered as a fax call, and all other ringing patterns will be forwarded to the extension telephone or answering machine plugged into the EXT. jack. You can easily suspend or change Distinctive Ring Pattern Detection at any time.

Before using the Distinctive Ring Pattern Detection option, Distinctive Ring service must be installed on your telephone line by the telephone company. To set up Distinctive Ring Pattern Detection, you will need another telephone line at your location, or someone available to dial your fax number from outside.

To set up the DRPD mode:

1. Press **Menu** until “Fax Setup” appears on the top line of the display.
2. Press the scroll button (◀ or ▶) until you see “Receive Mode” on the bottom line and press **Enter**.
3. Press the scroll button (◀ or ▶) until you see “DRPD Mode” on the bottom line and press **Enter**.
4. When “Set” displays on the bottom line, press **Enter**.
“Waiting Ring” appears on the display.
5. Call your fax number from another telephone. It is not necessary to place the call from a fax machine.
6. When your machine begins to ring, do not answer the call. The machine requires several rings to learn the pattern.

When the machine completes learning, the LCD displays “End DRPD Setup”.

If the DRPD setup fails, “DRPD Ring Error” appears. Press **Enter** when “DRPD Mode” displays and retry from step 3.

7. To return to Standby mode, press **Stop/Clear**.

When the DRPD feature is set up, the DRPD option is available in the Receive Mode menu. To receive faxes in the DRPD mode, you need to set the menu to **DRPD**; see *DRPD Mode on page 7-4*.

NOTE: DRPD must be set up again if you re-assign your fax number, or connect the machine to another telephone line.

After DRPD has been set up, call your fax number again to verify that the machine answers with a fax tone. Then have a call placed to a different number assigned to that same line to be sure the call is forwarded to the extension telephone or answering machine plugged into the EXT. jack.

Receiving Faxes in the Memory

Since your machine is a multi-tasking device, it can receive faxes while you are making copies or printing. If you receive a fax while you are copying or printing, your machine stores incoming faxes in memory. Then, as soon as you finish copying or printing, the machine automatically prints the fax.

Automatic Dialing

Speed Dialing

You can store up to 100 frequently dialed numbers in one or two-digit speed dial locations (0-99).

Storing a Number for Speed Dialing

1. Press the **Fax** button.
2. Press **Phone Book** on the control panel.
3. Press **Phone Book** or the scroll button (◀ or ▶) to display “Store&Edit” on the bottom line of the display. Press **Enter**.
4. Press **Enter** when “Speed Dials” appears on the display.

The display prompts you to enter a location number, showing the first available number.

5. Enter a speed dial number between 0 and 99, using the number keypad or the scroll button (◀ or ▶) and press **Enter**.

If a number is already stored in the location you chose, the display shows the number to allow you to change it. To start over with another speed-dial number, press **Exit**.

6. Enter the number you want to store using the number keypad and press **Enter**.

To insert a pause between numbers, press **Redial/Pause**. The symbol “–” appears on the display.

7. To assign a name to the number, enter the name you want. For details about entering characters, see *Entering Characters Using the Number Keypad* on page 2-15.

OR

If you do not want to assign a name, skip this step.

8. Press **Enter** when the name appears correctly or without entering a name.

9. To store more fax numbers, repeat steps 4 through 7.

OR

To return to Standby mode, press **Stop/Clear**.

Sending a Fax using a Speed Dial Number

1. Feed the document(s) face up into the ADF, or place a single document face down on the document glass.

For details about loading a document, see *Loading a Document on page 7-5*

2. Press the **Fax** button.
3. Adjust the document resolution to suit your fax needs (see *Adjusting the Document Resolution on page 7-6*).

If you need to change the brightness, see *Lighten/Darken on page 7-2*.

4. Enter the speed dial number.
 - For a one-digit speed dial number, press and hold the appropriate digit button.
 - For a two-digit speed dial number, press the first digit button and press and hold the last digit button.
5. The corresponding entry's name briefly displays.
6. The document scans into memory.

When a document is placed on the document glass, the LCD display asks if you want to send another page. To add more documents, press the scroll button (◀ or ▶) to display "Yes" and press **Enter**. To send the fax immediately, press the scroll button (◀ or ▶) to display "No" and press **Enter**.

7. The fax number stored in the speed dial location is automatically dialed. The document is sent when the receiving fax machine answers.

Group Dialing

If you frequently send the same document to several destinations, you can create a group of these destinations and set them under a group dial location. This enables you to use a group dial number setting to send the same document to all the destinations in the group.

Setting a Group Dial Number

1. Press **Phone Book** on the control panel.
2. Press **Phone Book** or the scroll button (◀ or ▶) to display "Store&Edit" on the bottom line of the display. Press **Enter**.
3. Press the scroll button (◀ or ▶) to display "Group Dials" on the bottom line and press **Enter**.
4. Press **Enter** when "New" displays on the bottom line.

The display prompts you to enter a location number, showing the first available number.
5. Enter a group number between 0 and 99 using the number keypad or the scroll button (◀ or ▶) and press **Enter**.
6. Enter a speed dial number you want to include in the group and press **Enter**.

You can also select the speed dial number stored in the machine by pressing the scroll button (◀ or ▶) and then press **Enter**.

7. When the display confirms the number to be added to the group, press **Enter**.
8. Repeat steps 6 and 7 to enter other speed dial numbers into the group.
9. Press the **Exit** button when you have entered all of the desired numbers. The display prompts you to enter a group ID.
10. To assign a name to the group, enter the name you want. For details about entering characters, see *Entering Characters Using the Number Keypad on page 2-15*.

OR

If you do not want to assign a name, skip this step.

11. Press **Enter** when the name appears correctly or without entering a name.
12. If you want to assign another group, press **Enter** and repeat from step 5.

OR

To return to Standby mode, press **Stop/Clear**.

NOTE: You cannot include one group dial number in another group dial number.

Editing Group Dial Numbers

You can delete a specific speed dial number from a selected group or add a new number to the selected group.

1. Press the **Fax** button.
2. Press **Phone Book** on the control panel.
3. Press **Phone Book** or the scroll button (◀ or ▶) to display “Store&Edit” on the bottom line of the display. Press **Enter**.
4. Press the scroll button (◀ or ▶) to display “Group Dials” on the bottom line and press **Enter**.
5. Press the scroll button (◀ or ▶) to display “Edit” on the bottom line and press **Enter**.
6. Enter the group number you want to edit or select the group number by pressing the scroll button (◀ or ▶) and press **Enter**.
7. Enter the speed dial number you want to add or delete.

You can also select the speed dial number you want to delete by pressing the scroll button (◀ or ▶).

8. Press **Enter**.

9. When you enter the specific number in the group, the display shows "Delete?".

When you enter a new number, the display shows "Add?".

10. Press **Enter** to add or delete the number.
11. To change the group name, press **Exit**.
12. Enter a new group name and press **Enter**.
13. If you want to edit another group, press **Enter** and repeat from step 5.

Or

To return to Standby mode, press **Stop/Clear**.

Sending a Fax Using Group Dialing (Multi-address Transmission)

You can use group dialing for Broadcast or Delayed transmissions.

Follow the procedure of the operation (Broadcast fax: see *Sending Broadcast Faxes on page 7-19*, Delayed fax: see *Sending a Delayed Fax on page 7-20*, Priority fax: see *Sending a Priority Fax on page 7-21*). When you come to a step in which the display asks you to enter the receiving fax number:

- For a one-digit group number, press and hold the appropriate digit button.
- For a two-digit group number, press the first digit button and press and hold the last digit button.

You can use only one group number for one operation. Then continue the procedure to complete the desired operation.

Your machine automatically scans a document loaded in the Automatic Document Feeder or on the document glass into memory. The machine dials each of the numbers included in the group.

Searching for a Number in Memory

You can either scan from A to Z sequentially, or you can search using the first letter of the name associated with the number.

Searching Sequentially through the Memory

1. Press the **Fax** button.
2. Press **Phone Book**.
3. Press **Enter** when "Search&Dial" appears on the display.
4. Press the scroll button (◀ or ▶) to scroll through the machine's memory until the name and number you want to dial display. You can search upwards or downwards through the entire memory in alphabetical order, from A to Z.

While searching through the machine's memory, each entry is preceded by either "S" for speed dial or "G" for group dial numbers. These letters tell you how the number is stored.

5. When the name and/or the number you want displays, press **Start** or **Enter** to dial.

Searching with a Particular First Letter

1. Press the **Fax** button.
2. Press **Phone Book**.
3. Press **Enter** when "Search&Dial" appears on the display.
4. Press the button labeled with the letter you want to search for. A name beginning with the letter displays.
For example, if you want to find the name "MOBILE" press the number 6 button, which is labeled with "MNO".
5. Press the scroll button (◀ or ▶) to display the next name.
6. When the name and/or the number you want displays, press **Start** or **Enter** to dial.

Printing a Phonebook List

You can check your automatic dial setting by printing a Phonebook list.

1. Press the **Fax** button.
2. Press **Phone Book**.
3. Press **Phone Book** or the scroll button (◀ or ▶) until "Print" appears on the bottom line and press **Enter**.

A list showing your speed dial, and group dial entries prints out.

Other Ways to Fax

Sending Broadcast Faxes

Using the **Broadcasting** button on the control panel, you can use the broadcast fax feature, which allows you to send a document to multiple locations. Documents are automatically stored in memory and sent to a remote station. After transmission, the documents are automatically erased from memory.

1. Load the document(s) face up into the ADF, or place a single document face down on the document glass.
For details about loading a document, see *Loading a Document on page 7-5*.
2. Press the **Fax** button.
3. Adjust the document resolution to suit your fax needs (see *Adjusting the Document Resolution on page 7-6*).
If you need to change the brightness, see *Lighten/Darken on page 7-2*.
4. Press **Broadcasting** on the control panel.
5. Enter the number of the first receiving machine using the number keypad.
You can also press and hold the digit button of the speed dial number if you have assigned one. To store the speed dial number, see *Storing a Number for Speed Dialing on page 7.14*.
6. Press **Enter** to confirm the number. The display asks you to enter another fax number to send the document.

NOTE: The Another No. prompt does not appear if you have added numbers for another broadcast or delay fax job. You must wait until the job is completed.

7. To enter more fax numbers, press the scroll button (◀ or ▶) to display "Yes" and press **Enter**. Repeat steps 5 and 6. You can add up to 10 destinations.
Note that you can input group dial numbers only once at first.
8. When you finish entering fax numbers, press the scroll button (◀ or ▶) to display "No" and press **Enter**.

The document is scanned into memory before transmission. The display shows memory capacity and the number of pages being stored in memory.

For a document placed on the document glass, the display asks if you want to load another page. To add more documents, press the scroll button (◀ or ▶) to display "Yes" and press **Enter**.

To send the fax immediately, press the scroll button (◀ or ▶) to display "No" and press **Enter**.

9. The machine begins sending the document to the numbers you entered in the order in which you entered them.

Sending a Delayed Fax

You can set your machine to send a fax at a later time when you will not be present. This allows a user to take advantage of lower phone rates.

1. Load the document(s) face up into the ADF, or place a single document face down on the document glass.
For details about loading a document, see *Loading a Document on page 7-5*.
2. Adjust the document resolution to suit your fax needs (see *Adjusting the Document Resolution on page 7-6*).
If you need to change the brightness, see *Lighten/Darken on page 7-2*.
3. Press **Menu** until "Fax Feature" appears on the top line of the display. The first available menu item, "DelayFax" displays on the bottom line.
4. Press **Enter**.
5. Enter the number of the receiving machine using the number keypad.
You can also press and hold the digit button of the speed dial number if you have assigned one. To store the speed dial number, see *Storing a Number for Speed Dialing on page 7.14*.
6. Press **Enter** to confirm the number on the display. The display asks you to enter another fax number to which to send the document.

NOTE: The Another No. prompt does not appear if you have added numbers for another broadcast or delay fax job. You must wait until the job is completed.

7. To enter more fax numbers, press the scroll button (◀ or ▶) to display "Yes" and press **Enter**. Repeat steps 5 and 6. You can add up to 10 destinations.
Note that you can input group dial numbers only once at first.
8. When you finish entering fax numbers, press the scroll button (◀ or ▶) to display "No" and press **Enter**.
The display asks you to enter a name.
9. To assign a name to the transmission, enter the name you want. For details about entering characters, see *Entering Characters Using the Number Keypad on page 2-15*.
If you do not want to assign a name, skip this step.

10. Press **Enter**. The display shows the current time and asks you to enter the starting time when the fax is to be sent.
11. Enter the time using the number keypad.
To select "AM" or "PM" for 12-hour format, press the * or # button or any number button.
If you set a time earlier than the current time, the document will be sent at that time on the following day.
12. Press **Enter** when the starting time displays correctly.
13. The document is scanned into memory before transmission. The display shows memory capacity and the number of pages being stored in memory.
For a document placed on the document glass, the display asks if you want to load another page. To add more documents, press the scroll button (◀ or ▶) to display "Yes" and press **Enter**. Or, press the scroll button (◀ or ▶) to display "No" and press **Enter**.
14. The machine returns to Standby mode. The display reminds you that you are in Standby mode and that a delayed fax is set.

NOTE: If you want to cancel the delayed transmission, see *Canceling a Scheduled Fax* on page 7.23.

Sending a Priority Fax

Using the Priority Fax feature, a high priority document can be sent ahead of reserved operations. The document is scanned into memory and transmitted when the current operation is finished. In addition, priority transmission will interrupt a broadcast operation between stations (i.e., when the transmission to station A ends, before transmission to station B begins) or between redial attempts.

1. Load the document(s) face up into the ADF, or place a single document face down on the document glass.
For details about loading a document, see *Loading a Document* on page 7-5.
2. Adjust the document resolution to suit your fax needs (see *Adjusting the Document Resolution* on page 7-6).
If you need to change the brightness, see *Lighten/Darken* on page 7-2.
3. Press **Menu** until "Fax Feature" appears on the top line of the display.
4. Press the scroll button (◀ or ▶) to display "Priority Fax" on the bottom line and press **Enter**.
5. Enter the number of the receiving machine using the number keypad.

You can also press and hold the digit button of the speed dial number if you have assigned one. To store the speed dial number, see *Storing a Number for Speed Dialing on page 7.14*.

6. Press **Enter** to confirm the number. The display asks you to enter a name.
7. To assign a name to the transmission, enter the name you want. For details about entering characters, see *Entering Characters Using the Number Keypad on page 2-15*.

If you do not want to assign a name, skip this step.

8. Press **Enter**.

The document is scanned into memory before transmission. The display shows memory capacity and the number of pages being stored in memory.

For a document placed on the document glass, the display asks if you want to load another page. To add more documents, press the scroll button (◀ or ▶) to display "Yes" and press **Enter**. To send the fax immediately, press the scroll button (◀ or ▶) to display "No" and press **Enter**.

9. The machine shows the number being dialed and begins sending the document.

Adding Documents To a Scheduled Fax

You can add documents to a delayed transmission previously reserved in your machine's memory.

1. Load the document(s) face up into the ADF, or place a single document face down on the document glass.

For details about loading a document, see *Loading a Document on page 7-5*.

2. Adjust the document resolution to suit your fax needs (see *Adjusting the Document Resolution on page 7-6*).

If you need to change the brightness, see *Lighten/Darken on page 7-2*.

3. Press **Menu** until "Fax Feature" appears on the top line of the display.
4. Press the scroll button (◀ or ▶) to display "Add Page" on the bottom line and press **Enter**.

The display shows the last job reserved in memory.

5. Press the scroll button (◀ or ▶) until you see the fax job to which you want to add documents and press **Enter**.

The machine automatically stores the documents in memory, and the display shows memory capacity and the number of pages.

For a document placed on the document glass, the display asks if you want to load another page. To add more documents, press the scroll button (◀ or ▶) to display "Yes" and press **Enter**. Or, press the scroll button (◀ or ▶) to display "No" and press **Enter**.

6. After storing, the machine displays the numbers of total pages and added pages and then returns to Standby mode.

Canceling a Scheduled Fax

1. Press **Menu** until "Fax Feature" appears on the top line of the display.
2. Press the scroll button (◀ or ▶) to display "Cancel Job" on the bottom line and press **Enter**.

The display shows the last job reserved in memory.

3. Press the scroll button (◀ or ▶) until you see the fax job you want to cancel, and press **Enter**.
4. When the display confirms your selection, press the scroll button (◀ or ▶) to display "Yes" and press **Enter**. The selected job is canceled and the machine returns to Standby mode.
To cancel your selection, press the scroll button (◀ or ▶) to display "No" and press **Enter**.

Additional Features

Using Secure Receiving Mode

To prevent your received faxes from being accessed by unauthorized people. You can turn on Secure Receiving mode to restrict printing of received faxes when the machine is unattended. In Secure Receiving mode, all incoming faxes go into memory. When the mode is deactivated, any stored faxes are printed.

To turn Secure Receiving mode on:

1. Press **Menu** until “Advanced Fax” appears on the top line of the display.
2. Press the scroll button (◀ or ▶) until “Secure Receive” appears on the bottom line and press **Enter**.
3. Press the scroll button (◀ or ▶) to display “On” on the bottom line and press **Enter**.
4. Enter a four-digit password you want to use, using the number keypad and press **Enter**.

NOTE: You can activate Secure Receiving mode without setting a password, but cannot protect your faxes.

5. Re-enter the password to confirm it and press **Enter**.
6. To return to Standby mode, press **Stop/Clear**.

When a fax is received in Secure Receiving mode, your machine stores it in memory and displays “Secure Receive” to let you know that there is a fax stored.

To print received documents:

1. Press **Menu** until “Advanced Fax” appears on the top line of the display.
2. Press the scroll button (◀ or ▶) until “Secure Receive” appears on the bottom line and press **Enter**.
3. Press the scroll button (◀ or ▶) to display “Print” on the bottom line and press **Enter**.
4. Enter the four-digit password and press **Enter**.

The machine prints all of the faxes stored in memory.

To turn Secure Receiving mode off:

1. Press **Menu** until “Advanced Fax” appears on the top line of the display.
2. Press the scroll button (◀ or ▶) until “Secure Receive” appears on the bottom line and press **Enter**.

3. Press the scroll button (◀ or ▶) to display "Off" on the bottom line and press **Enter**.
4. Enter the four-digit password and press **Enter**.
The mode is deactivated and the machine prints all faxes stored in memory.
5. To return to Standby mode, press **Stop/Clear**.

Printing Reports

Your machine can print reports the following reports:

Phonebook List

This list shows all of the numbers currently stored in the machine's memory as speed dial and group dial numbers.

NOTE: You can print this Phonebook list using the **Phone Book** button: see *Printing a Phonebook List on page 7-18*.

Sent Fax Report

This report shows information on the faxes you have recently sent.

Received Fax Report

This report shows information on the faxes you have recently received.

System Data List

This list shows the status of the user-selectable options.

NOTE: You may print this list to confirm your changes after changing any settings.

Scheduled Job Information

This list shows the document(s) currently stored for Delayed faxes. You may print this list to check the delayed faxes and the starting times.

Message Confirmation

This report shows the fax number, the number of pages, the elapsed time of the job, the communication mode, and the communication results for a particular fax job.

You can set up your machine to automatically print a message confirmation report after each fax job. See *MSG Confirm on page 7-3*.

Junk Fax Number List

This list shows up to 10 fax numbers specified as junk fax numbers. To add or delete numbers to or from this list, access the Junk Fax Setup menu: see *Junk Fax Setup* on page 7-28. When the Junk Fax Barrier feature is turned on, incoming faxes from those numbers are blocked.

This feature recognize the last 6 digits of the fax number set as a remote fax machine's ID.

Multi-communication Report

This report is printed automatically after sending documents from more than one location.

Power Failure Report

This report is printed out automatically when power is restored after a power failure, if any data loss occurs due to the power failure.

NOTE: The lists you have set to print out automatically don't print out when there is no paper loaded or a paper jam has occurred.

Printing a Report

1. Press **Menu** until "Reports" appears on the top line of the display.
2. Press the scroll button (◀ or ▶) to display the report or list you want to print on the bottom line.
 - Phone Book: Phonebook list
 - Sent Report: Sent fax report
 - RCV Report: Received fax report
 - System Data: System data list
 - Scheduled Jobs: Scheduled job information
 - MSG Confirm: Message confirmation
 - Junk Fax List: Junk fax number list
3. Press **Enter**.

The selected information prints out.

Using Advanced Fax Settings

Your machine has various user-selectable setting options for sending or receiving faxes. These options are preset at the factory, but you may need to change them. To find out how the options are currently set, print the System Data list. For details about printing the list, see above.

Changing Setting Options

1. Press **Menu** until “Advanced Fax” appears on the top line of the display.
2. Press the scroll button (◀ or ▶) until you see the menu item you want on the bottom line and press **Enter**.
3. When the option you want appears on the display, choose a status by pressing the scroll button (◀ or ▶) or enter a value using the number keypad.
4. Press **Enter** to save the selection.
5. You can exit from Setup mode at any time by pressing **Stop/Clear**.

Advanced Fax Setting Options

Option	Description
Send Forward	You can set the machine to send a copy of all outgoing faxes to a specified destination, in addition to the fax numbers you entered. Select Off to turn this feature off. Select On to turn this feature on. You can set the number of the fax machine to which faxes are to be sent.
RCV Forward	You can set your machine to forward incoming faxes to another fax number during a specified time period. When a fax arrives at your machine, it is stored in memory. Then, the machine dials the fax number that you have specified and sends the fax. Select Off to turn this feature off. Select On to turn this feature on. You can set the fax number to which faxes are forwarded. Then, you can enter the starting time and date, and/or the ending time and date. The Local Copy option allows you to set the machine to print the fax on your machine, if fax forwarding is completed without any error.

Option	Description
Junk Fax Setup	<p>Using the Junk Fax Barrier feature, the system will not accept faxes sent from remote stations whose numbers are stored in the memory as junk fax numbers. This feature is useful for blocking any unwanted faxes.</p> <p>Select Off to turn the feature off. Your machine accepts all faxes.</p> <p>Select On to turn the feature on. You can set up to 10 fax numbers as junk fax numbers using the Set option. After storing numbers, your machine will not accept faxes from the registered stations. To delete all junk fax numbers, use the All Delete option.</p>
Secure Receive	<p>You can keep your received faxes from being accessed by unauthorized people.</p> <p>For further details about setting this mode, see <i>Using Secure Receiving Mode on page 7-24</i>.</p>
Prefix Dial	<p>You can set a prefix dial number of up to five digits. This number dials before any automatic dial number is started. It is useful for accessing a PABX exchange.</p>
Stamp RCV Name	<p>This option allows the machine to automatically print the page number, and the date and time of reception at the bottom of each page of a received document.</p> <p>Select Off to turn this feature off.</p> <p>Select On to turn this feature on.</p>
ECM Mode (Error Correction Mode)	<p>Error Correction Mode helps with poor line quality and makes sure any faxes you send are sent smoothly to any other ECM-equipped fax machine. If the line quality is poor, it takes more time to send a fax when you are using ECM.</p> <p>Select Off to turn this feature off.</p> <p>Select On to turn this feature on.</p>

8 Maintenance

This chapter provides information for maintaining the machine and replacing the print cartridge.

This chapter includes:

- Clearing the Memory – page 8-2.
- Cleaning Your Machine – page 8-3.
- Maintaining the Smart Kit® Print Cartridge – page 8-6.
- Consumables and Replacement Parts – page 8-9.
- Replacing the ADF Rubber Pad – page 8-10.

Clearing the Memory

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



CAUTION: Before clearing the memory, make sure that all fax jobs have been completed.

1. Press **Menu** on the control panel until "Maintenance" appears on the top line of the display.
2. Press the scroll button (◀ or ▶) until you see "Clear Memory" on the bottom line and press **Enter**.

The first available menu item, "Clear All Mem.", displays on the bottom line.

3. Press the scroll button (◀ or ▶) until you see the item you want to clear.

Feature	Description
Clear All Mem.	Clears all of the data stored in the memory.
Paper Setting	Restores all of the Paper Setting options to the factory default.
Machine Setup	Resets all of your settings to the factory default.
Copy Setup	Restores all of the Copy Setup options to the factory default.
Fax Setup	Restores all of the Fax Setup options to the factory default.
Fax Feature	Cancels all of the scheduled fax jobs in the machine's memory.
Advanced Fax	Restores all of the Advanced Fax setting options to the factory default.
Sound/Volume	Restores all of the Sound/Volume settings to the factory default.
Sent Report	Clears all records of sent faxes.
RCV Report	Clears all records of received faxes.
Phone Book	Clears the speed dial and group dial numbers stored in the memory.

4. Press **Enter**. The selected memory is cleared and the display asks you to continue clearing the next item.
5. To clear another item, repeat steps 3 and 4.

OR

To return to Standby mode, press **Stop/Clear**.

Cleaning Your Machine

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



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

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

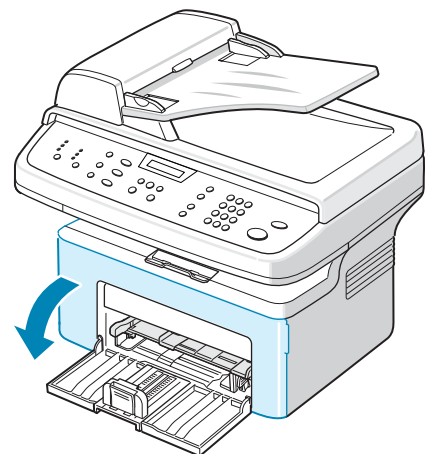
Cleaning the Outside

Clean the covers 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 door.



3. Pull the print cartridge out, lightly pushing it down. Set it on a clean flat surface.



CAUTION: To prevent damage to the print cartridge, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.

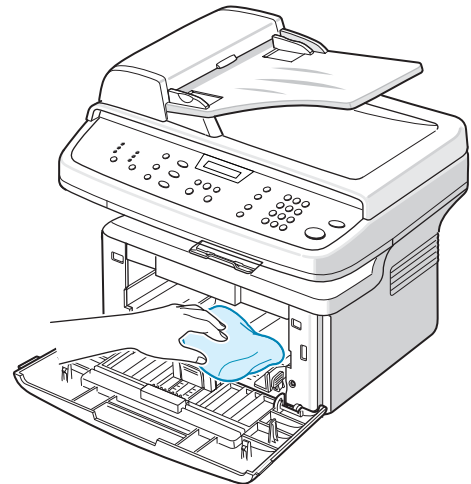
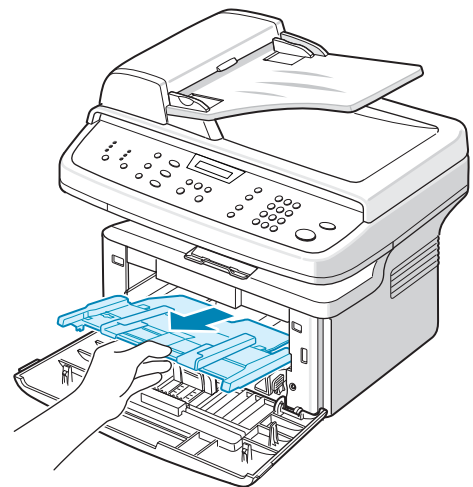
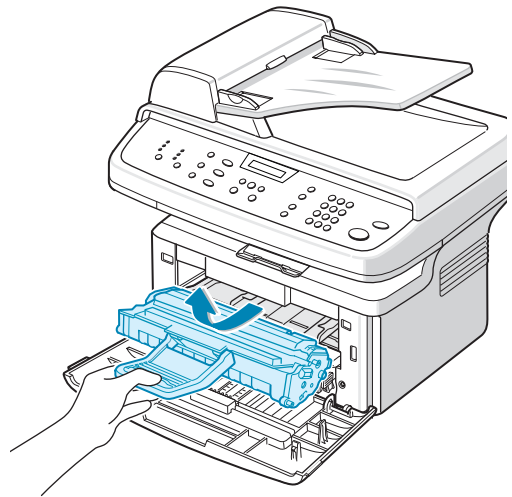
CAUTION: Do not touch the green underside of the print cartridge. Hold the cartridge using the handle on the cartridge to avoid touching this area.

4. Pull out and remove the Manual Tray.

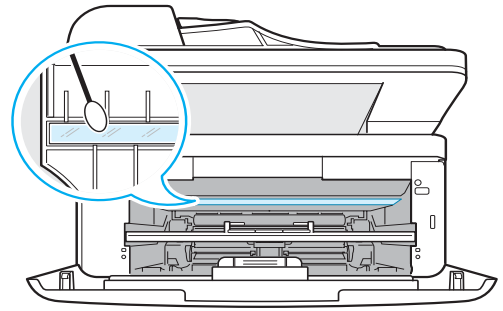
5. With a slightly damp lint-free cloth, wipe away any dust and spilled toner from the print cartridge area and the print cartridge cavity.



CAUTION: Do not touch the black transfer roller inside the machine.



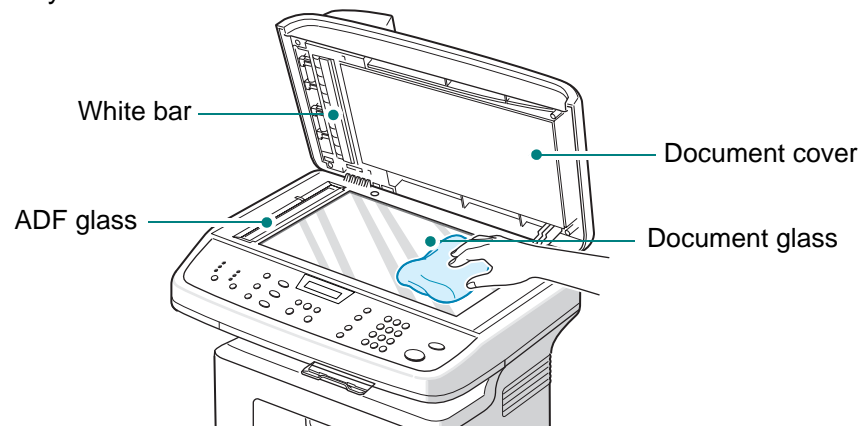
6. Locate the long strip of glass (LSU) inside the top of the cartridge compartment. Gently wipe the glass to remove any toner.
7. Re-insert the manual tray, print cartridge and close the door.
8. Plug in the power cord and switch on the machine.



Cleaning the Scan Unit

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

1. 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 and ADF glass until it is clean and dry.



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

Maintaining the Smart Kit ® Print Cartridge

Smart Kit ® Print Cartridge Storage

To get the most from the print cartridge, follow these guidelines:

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

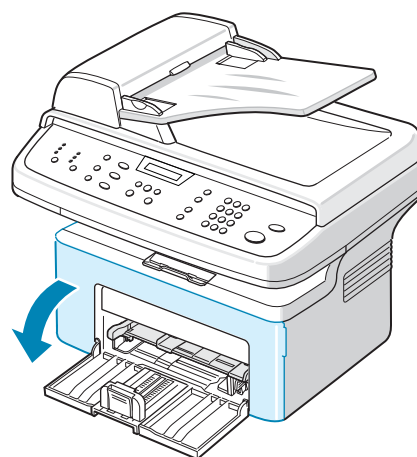
Expected Cartridge Life

The life of the Smart Kit ® Print Cartridge depends on the amount of toner that print jobs require. When printing text at ISO 19752 5% coverage, a new print cartridge lasts an average of 3,000 pages. (The original print 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 cartridge more often.

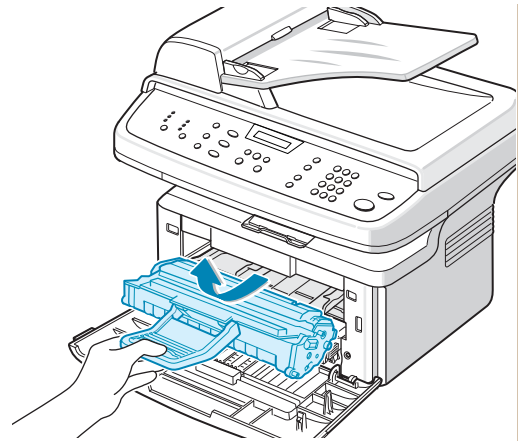
Redistributing Print Cartridge Toner

When the print cartridge is near the end of its life, white streaks or light printing may occur. The LCD displays the warning message, "Toner Low". You can temporarily recover print quality by redistributing the remaining toner in the cartridge. In some case, white streaks or light printing still occurs even after you have redistributed the toner.

1. Open the front door.

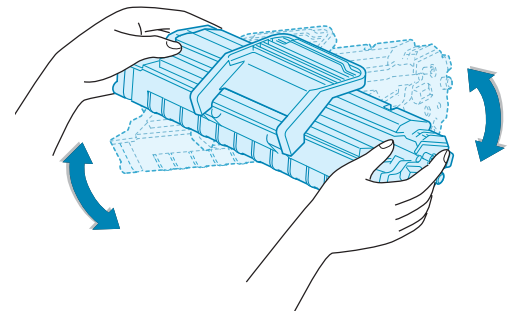


2. Pull the print cartridge out and remove it from the printer.



3. Gently shake the print cartridge from side to side five or six times to redistribute the toner.

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 print cartridge. Use the handle on the cartridge to avoid touching this area.

4. Reinstall the cartridge and close the front door. Make sure that the cover is securely closed. If it is not firmly closed, printing error may occur.

Replacing the Smart Kit ® Print Cartridge

When the display on the control panel shows the warning message, "Toner Empty" the print cartridge has run and the machine stops printing. At this stage, the print cartridges needs to be replaced.

Remove the old print cartridge and install a new print cartridge. See *Installing the Smart Kit ® Print Cartridge* on page 2-4.

Setting the Notify Toner Option

If you set the Notify Toner menu option to "On", your machine automatically sends a fax to your service agent or the dealer to notify them. The fax number can be preset by your service agent or dealer when the machine is installed.

The machine sends out a notification when:

- The print cartridge is low.
- A critical error occurred at your machine.
(Error cases: CRU Fuse Error, Low Heat Error, LSU Error.)
- Notification day and notification pages that are preset by your dealer have passed.

1. Press **Menu** on the control panel until "Maintenance" appears on the top line of the display.
2. Press the scroll button (◀ or ▶) to display "Notify Toner " on the bottom line and press **Enter**.
3. **Enter** a four-digit password you want to use, using the number keypad and press **Enter**.
(If you select this menu, for the first time after purchasing or after clearing all memory, re-enter the password to confirm it and press **Enter**.)
4. Press the scroll button (◀ or ▶) to change the setting.
Select "On" to enable this feature.
Selecting "Off" disables this feature.
5. Press **Enter** to save the selection.
6. To return to Standby mode, press **Stop/Clear**.

Cleaning the Drum

You can clean the OPC drum in the print cartridge manually or automatically. If there are streaks or spots on your prints, the OPC drum in the print cartridge may require manual cleaning.

1. Before starting the cleaning procedure, make sure that paper is loaded in the machine.
2. Press **Menu** on the control panel until "Maintenance" appears on the top line of the display. The first available menu item, "Clean Drum", displays on the bottom line.
3. Press **Enter**. The first available menu item, "Yes" displays on the bottom line.
4. Press **Enter**. The machine prints out a cleaning page. Toner particles on the drum surface adhere to the paper.
5. If the problem remains, repeat steps 1 through 4.
6. To return to Standby mode, press **Stop/Clear**.

Consumables and Replacement Parts

From time to time, you need to replace the Smart Kit ® Print Cartridge and ADF Rubber Pad to maintain optimum performance and to avoid print quality problems and paper feed problems resulting from worn parts.

The following items should be replaced after you have printed the specified number of pages:

Items	Yield (Average)
Smart Kit ® Print Cartridge (initial)	Approx. 1,000 pages
Smart Kit ® Print Cartridge (replacement)	Approx. 3,000 pages
ADF rubber pad	Approx. 20,000 pages

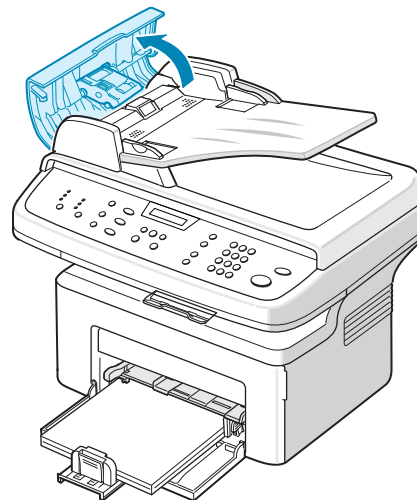
To purchase consumables and replacement parts, contact your Dealer or Service Agent or the Retailer where you bought your machine. We strongly recommend that these items are installed by a trained service professional, except for the print cartridge and the ADF rubber pad.

For the print cartridge refer to *Replacing the Smart Kit ® Print Cartridge on page 8-7* and for the ADF rubber pad refer to *Replacing the ADF Rubber Pad on page 8-10*.

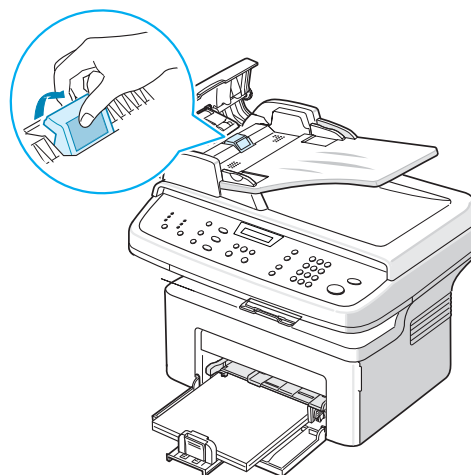
Replacing the ADF Rubber Pad

You can purchase an ADF rubber pad from your Service Agent or the Retailer where you bought your machine.

1. Open the ADF cover.



2. Remove the ADF rubber pad from the ADF, as shown.
3. Install a new ADF rubber pad.
4. Close the ADF cover.



9 Troubleshooting

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

This chapter includes:

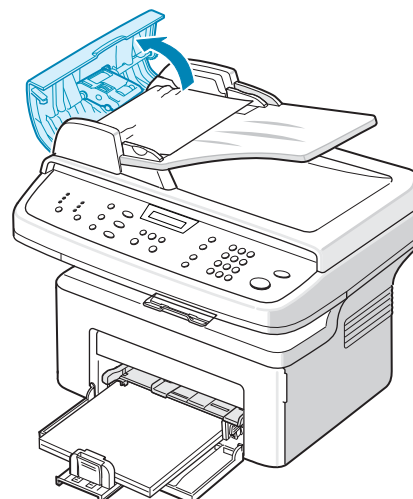
- Clearing Document Jams – page 9-2
- Clearing Paper Jams – page 9-4
- Clearing LCD Error Messages – page 9-8
- Solving Other Problems – page 9-12
- Common Linux Problems – page 9-23
- Common Macintosh Problems – page 9-26

Clearing Document Jams

When a document jams while passing through the ADF (Automatic Document Feeder), “Document Jam/Remove&Reload” appears on the display.

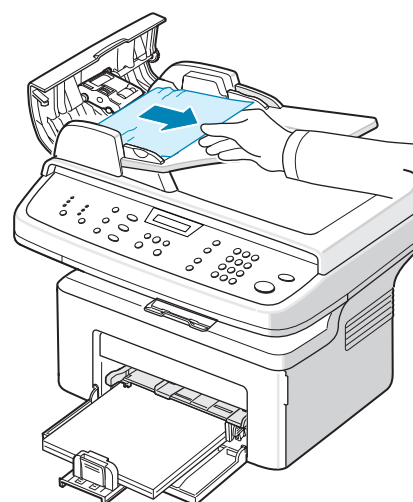
Input Misfeed

1. Remove any remaining page(s) from the ADF and input tray.
2. Open the ADF cover.



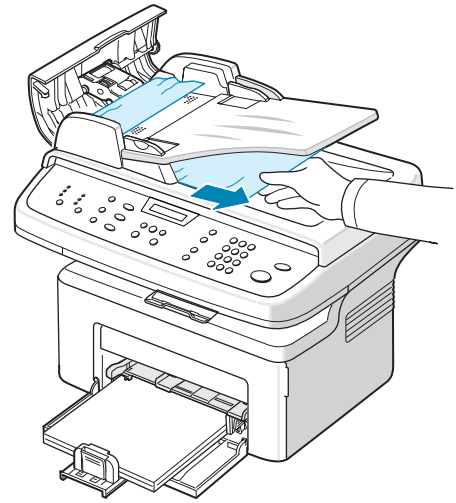
3. Pull the document gently out of the ADF.
4. Close the ADF cover. Then load the removed page(s), if any, back into the ADF.

NOTE: To prevent document jams, use the document glass for thick, thin, or mixed paper-type documents.



Exit Misfeed

1. Remove any remaining page(s) from the ADF.
2. Open the ADF cover.
3. Remove the misfed documents from the document output tray
4. Close the ADF cover. Then load the removed page(s), if any, back into the ADF.



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.

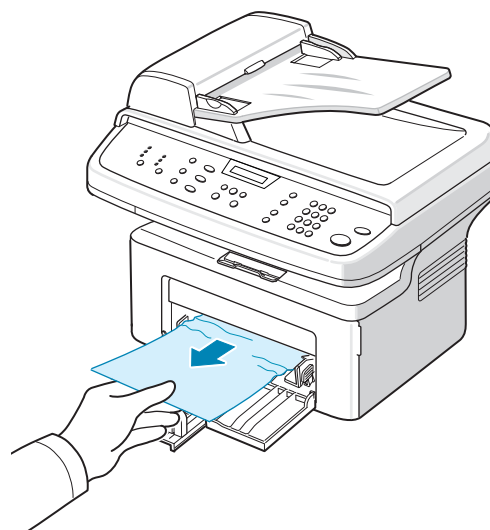
Message	Location of Jam	Go to
Open Front Door Remove Paper	In the tray or manual tray In the fuser area or around the print cartridge	page 9-4 page 9-5
Open Rear Cover Remove Paper	In the paper exit area	page 9-6

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 Tray

1. Remove the jammed paper in the tray 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 print cartridge. See *In the Fuser Area or Around the Print Cartridge* – page 9-5.
2. Open and close the front door to resume printing.

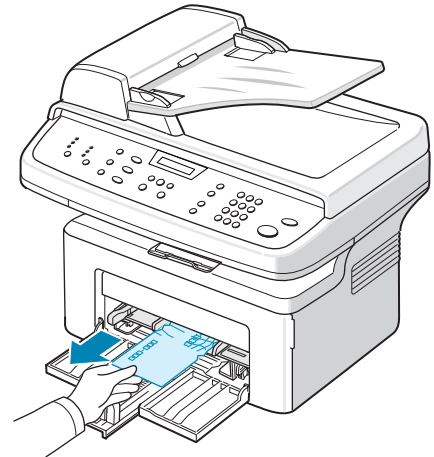


In the Manual Tray

1. Remove the jammed paper in the tray 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 print cartridge. See In the Fuser Area or Around the Print Cartridge – page 9-5.

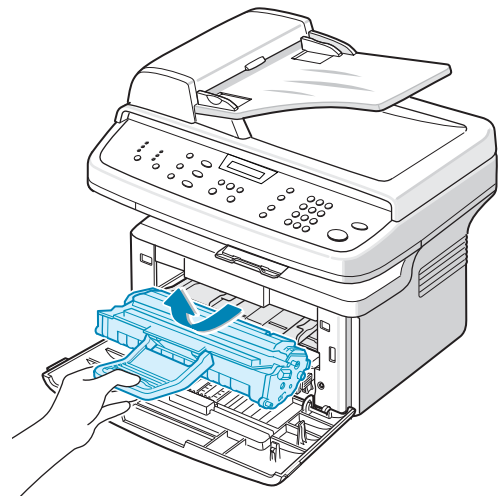
2. Open and close the front door to resume printing.



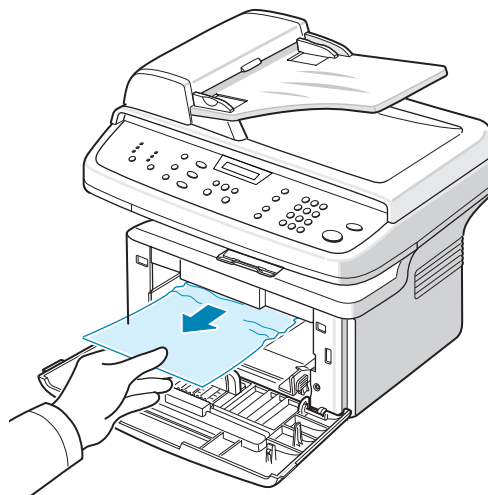
In the Fuser Area or Around the Print Cartridge

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

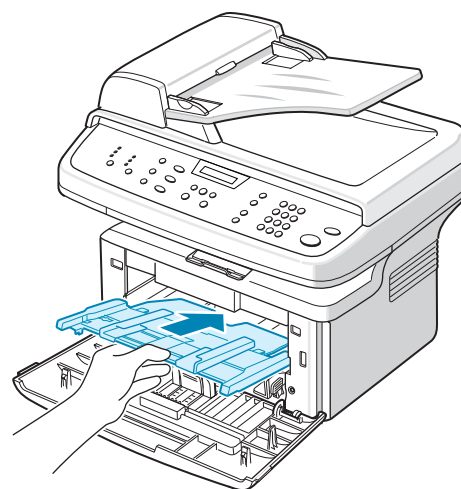
1. Open the front door.
2. Pull the print cartridge out, lightly pushing it down.
3. If necessary, pull the manual tray out.



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

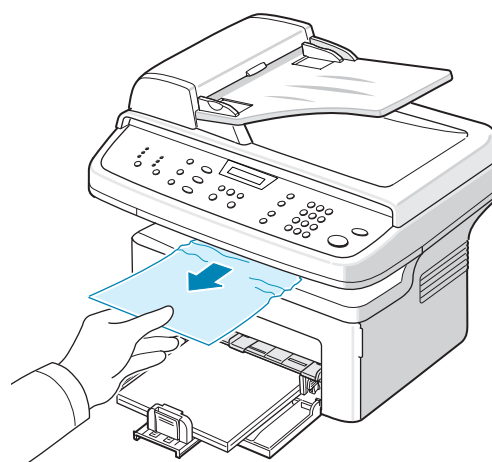


5. If necessary, push the manual tray back into the machine.
6. Reinstall the print cartridge and close the front door. Printing automatically resumes.

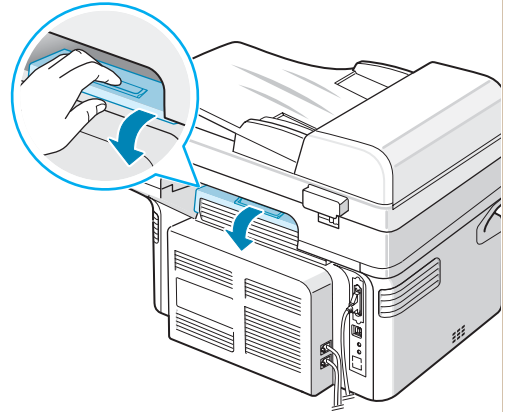


In the Paper Exit Area.

1. Open and close the front door. 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



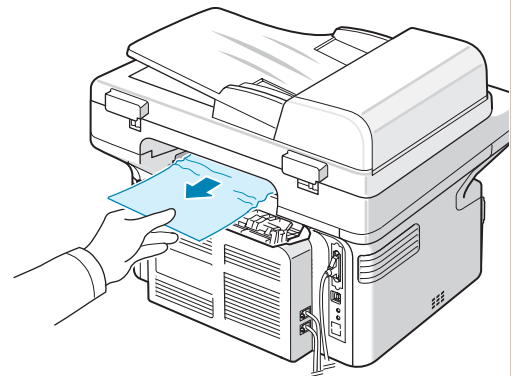
3. If there is any resistance and the paper does not move when you pull, or if you cannot see the paper in the output tray, open the rear cover by pulling the tab on it.



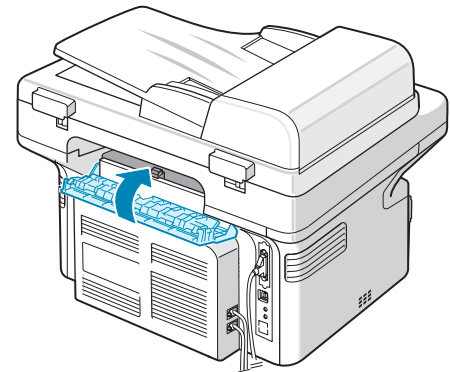
4. Remove the jammed paper by gently pulling it straight out.



WARNING: It is hot inside the machine. Take care when removing paper.



5. Close the rear cover.
6. Open and close the front door 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 *Clearing Paper Jams* on page 9-4.

- Follow the procedures in *Loading Paper* on page 2-6. Ensure that the adjustable guides are positioned correctly.
- Do not overload the tray.
- Do not remove paper from the 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 tray.
- Use only recommended print materials. *Paper Specifications on page 10-6.*
- Ensure that the recommended print side of print materials is facing up in the tray.

Clearing LCD Error Messages

Display	Meaning	Suggested Solutions
Cancel? 1:Yes 2:No	Your machine's memory has become full while trying to store a document into memory.	To cancel the fax job, press the 1 button to accept "Yes". If you want to send the pages that have been successfully stored, press the 2 button to accept "No". You should send the remaining pages later, when memory is available.
Comm. Error	The machine has a communication problem.	Ask the sender to try again.
CRU Fuse Error	The print cartridge is not installed correctly.	Install the print cartridge correctly. See <i>Installing the Smart Kit® Print Cartridge on page 2-4.</i>
Document Jam Remove&Reload	The loaded document has jammed in the ADF (Automatic Document Feeder).	Clear the document jam. See <i>Clearing Document Jams on page 9-2.</i>
Front or Rear Cover Open	The front door or rear cover is not securely latched.	Close the door until it locks into place.
Enter Again	You entered an unavailable item.	Enter the correct item again.
Low Heat Error	There is a problem in the fuser unit.	Turn power off and wait 10 seconds. Turn power on. If the problem persists, call for service.
Open Heat Error		
Over Heat		

Display	Meaning	Suggested Solutions
Group Not Available	You have tried to select a group location number where only a single location number can be used, such as when adding locations for a broadcast operation.	Use a speed dial number or dial a number manually using the number keypad.
Incompatible	The remote machine did not have the requested feature, such as a delayed transmission. This message also occurs if the remote machine does not have enough memory space to complete the operation you are attempting.	Reconfirm the remote machine's features.
Line Busy	The receiving party did not answer or the line is already engaged.	Try again after a few minutes.
Line Error	Your machine cannot connect with the remote machine or has lost contact because of a problem with the phone line.	Try again. If the problem persists, wait approximately one hour for the line to clear and try again. Or, turn the ECM mode on. See <i>ECM Mode (Error Correction Mode)</i> on page 7-28.
Load Document	You have attempted to set up a copy or fax operation with no document loaded into the ADF.	Load a document into the ADF and try again.
LSU Error	A problem has occurred in the LSU (Laser Scanning Unit).	Turn power off and wait 10 seconds. Turn power on. If the problem persists, call for service.
Memory Dial Full	The fax jobs queue in the memory is full.	Cancel unnecessary fax jobs in the memory.

Display	Meaning	Suggested Solutions
Memory Full	The memory is full.	Delete unnecessary documents and retransmit after more memory becomes available. Alternatively, split the transmission into more than one operation.
No Answer	The receiving fax machine has not answered after several redial attempts.	Try again. Make sure that the receiving machine is operational.
No Cartridge Detected	The print cartridge is not installed.	Install the print cartridge. See <i>Installing the Smart Kit® Print Cartridge</i> on page 2-4.
Not Assigned	The speed dial location you tried to use has no number assigned to it. The ID you entered is not assigned.	Dial the number manually using the number keypad or assign the number. For storing a number, see <i>Automatic Dialing</i> on page 7-14. Enter the correct ID. .
No Paper Add Paper	The paper in the tray has run out.	Load paper in the tray. See <i>Loading Paper</i> on page 2-6.
Operation Not Assigned	You are doing the Add/Cancel operation, but there are no jobs waiting.	Check the display to see if there are any scheduled jobs. The display should indicate them in Standby mode; for example, Delay Fax.
Out of Range	The current date and time you entered is not correct.	Enter the correct date and time.
Open Front Door Remove Paper	Paper has jammed in the feeding area of the tray Paper has jammed in the fuser area or around the print cartridge.	Clear the jam. See <i>In the Tray</i> on page 9-4. Clear the jam. See <i>In the Fuser Area or Around the Print Cartridge</i> on page 9-5.
Open Rear Cover Remove paper	Paper has jammed in the paper exit area.	Clear the jam. See <i>In the Paper Exit Area</i> on page 9-6.
Power Failure	Power has turned off then on and the machine's memory has not been saved.	The job which you were trying to do before the power failure must be completely re-done.

Display	Meaning	Suggested Solutions
Remove Documents from ADF	The Favorite Copy button is set to Clone, Autofit, ID Card Copy or Poster and you press the button.	The Clone, Autofit, ID Card Copy or Poster feature does not work with ADF. Remove the documents in the ADF.
Retry Redial?	The machine is waiting for a specified time interval to redial a previously busy station.	You can press Enter to immediately redial, or Stop/Clear to cancel the redial operation.
Scanner Locked Unlock Scanner	The scanner module is locked.	Unplug the power cord and plug it back in.
Stop Pressed	The Stop/Clear button has been pressed during a copy or fax operation.	Try again.
Toner Empty	The print cartridge has run out.	Replace the print cartridge with a new one. See <i>Replacing the Smart Kit® Print Cartridge on page 8-7</i> . Note: A used cartridge will not reset this message.
Toner Low	The toner is almost empty.	Take out the print cartridge and gently shake it. By doing this, you can temporarily re-establish printing operations. See <i>Redistributing Print Cartridge Toner on page 8-6</i> .
Non-Xerox Cartridge	You have used an unauthorized cartridge. If you use a non-Xerox cartridge, the machine does not print.	You must use a Xerox approved cartridge.

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 <i>Clearing Paper Jams on page 9-4</i> .
Paper sticks together.	Ensure that there is not too much paper in the tray. The tray can hold up to 150 sheets of paper, depending on the thickness of your paper. Make sure that you are using the correct type of paper. See <i>Paper Specifications on page 10-6</i> . Remove paper from the 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 tray. Load paper of only one type, size, and weight. If multiple sheets have caused a paper jam, clear the paper jam. See <i>Clearing Paper Jams on page 9-4</i> .
Paper does not feed into the machine.	Remove any obstructions inside the machine. Paper has not been loaded correctly. Remove paper from the tray and reload it correctly. There is too much paper in the tray. Remove excess paper from the tray. The paper is too thick. Use only paper that meets the specifications required by the machine. See <i>Paper Specifications on page 10-6</i> .
The paper keeps jamming.	There is too much paper in the tray. Remove excess paper from the tray. If you are printing on special materials, use one sheet of paper at a time. An incorrect type of paper is being used. Use only paper that meets the specifications required by the machine. See <i>Paper Specifications on page 10-6</i> . There may be debris inside the machine. Open the front door 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 envelope.

Printing Problems



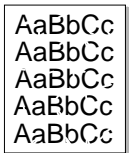
Condition	Possible cause	Suggested solutions
The machine does not print.	The machine is not receiving power.	Check the power cord connections. Check the power switch and the power source.
	The machine is not selected as the default printer.	Select your printer as your default printer in your Windows.
	Check the machine for the following: The front door is not closed. Paper is jammed. No paper is loaded. The print cartridge is not installed.	After locating the problem, clear it. Close the door. Clear the paper jam. See <i>Clearing Paper Jams on page 9-4</i> . Load paper. See <i>Loading Paper on page 3-5</i> . Install the print cartridge. See <i>Installing the Smart Kit® Print Cartridge on page 2-4</i> . 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 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. For details, refer to <i>Printing chapter on page 5-1</i> .
	The machine is malfunctioning.	Check the display message on the control panel to see if the machine is indicating a system error.

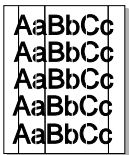
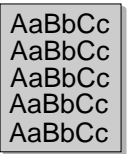
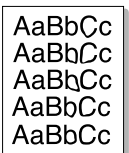
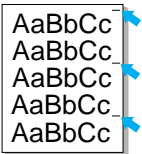
Condition	Possible cause	Suggested solutions
The machine selects print materials from the wrong paper source.	The paper source selection in the printer properties may be incorrect.	For many software applications, the paper source selection is found under the Paper tab within the printer properties. Select the correct paper source. For details, refer to <i>Printing chapter on page 5-1</i> .
A print job is extremely slow.	The job may be very complex.	Reduce the complexity of the page or adjust the print quality settings. The maximum print speed of your machine is 20 PPM for Letter and 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 your printer 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. For details, refer to <i>Printing chapter on page 5-1</i> .
	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 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.


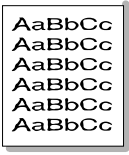
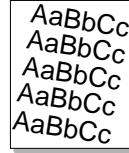
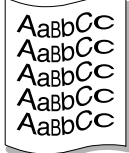
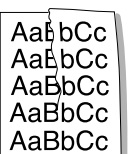
Condition	Possible cause	Suggested solutions
Pages print, but are blank.	The print cartridge is defective or out of toner.	Redistribute the toner, if necessary. See <i>Redistributing Print Cartridge Toner</i> on page 8-6. If necessary, replace the print cartridge.
	The file may have blank pages.	Check 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.
An error occurs repeatedly when you are printing with the USB connection.	When the USB mode is set to "Fast", some PC user may experience poor USB communication.	Change the USB mode to "Slow". To do so, follow these steps: 1. Press Menu until "Machine Setup" appears on the display. 2. Press the scroll button (◀ or ▶) until "USB Mode" appears on the bottom line and press Enter . 3. Press the scroll button (◀ or ▶) to select "Slow". 4. Press Enter to save the selection. 5. Press Stop/Clear to return to Standby Mode.

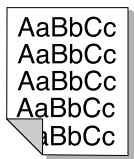
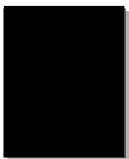
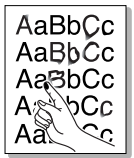

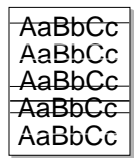
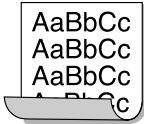
Printing Quality Problems

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 	<p>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 print cartridge life. <i>Redistributing Print Cartridge Toner on page 8-6</i> If this does not improve the print quality, install a new print cartridge.</p> <p>The paper may not meet paper specifications; for example, the paper is too moist or too rough. <i>Paper Specifications on page 10-6</i>.</p> <p>If the entire page is light, the print resolution setting is too low. Adjust the print resolution. For details, see <i>Printing on page 5-1</i>.</p> <p>A combination of faded or smeared defects may indicate that the print cartridge needs cleaning. <i>Cleaning the Drum on page 8-8</i>.</p> <p>The surface of the LSU part inside the machine may be dirty. Clean the LSU (<i>Cleaning the Inside on page 8-3</i>).</p> <p>Contact a service representative.</p>
Toner specks 	<p>The paper may not meet specifications; for example, the paper is too moist or too rough. <i>Paper Specifications on page 10-6</i>.</p> <p>Parts of the machine may have toner on them. If defects occur, the problem will likely correct itself after running five (5) blank sheets.</p> <p>The transfer roller may be dirty. Clean the inside of your machine. <i>Cleaning the Inside on page 8-3</i>.</p> <p>The paper path may need cleaning. <i>Cleaning the Drum on page 8-8</i>.</p>
Dropouts 	<p>If faded areas, generally rounded, occur randomly on the page:</p> <p>A single sheet of paper may be defective. Try reprinting the job.</p> <p>The moisture content of the paper is uneven or the paper has moist spots on its surface. Try a different brand of paper. <i>Paper Specifications on page 10-6</i>.</p> <p>The paper lot is bad. The manufacturing processes can cause some areas to reject toner. Try a different kind or brand of paper.</p> <p>The print cartridge may be defective. <i>Vertical repetitive defects on page 9-17</i>.</p> <p>If these steps do not correct the problem, contact a service representative.</p>

Condition	Suggested solutions
Vertical lines 	<p>If black vertical streaks appear on the page: The drum inside the print cartridge has probably been scratched. Remove the print cartridge and install a new one. <i>Replacing the Smart Kit ® Print Cartridge on page 8-7.</i></p> <p>If white vertical streaks appear on the page: The surface of the LSU part inside the machine may be dirty. Clean the LSU (<i>Cleaning the Inside on page 8-3</i>). Contact a service representative.</p>
Gray background 	<p>If the amount of background shading becomes unacceptable: Change to a lighter weight paper. <i>Paper Specifications on page 10-6.</i> 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 print cartridge and install a new one. <i>Replacing the Smart Kit ® Print Cartridge on page 8-7.</i></p>
Toner smear 	<p>Clean the inside of the machine. <i>Cleaning the Inside on page 8-3.</i> Check the paper type and quality. <i>Paper Specifications on page 10-6.</i> Parts of the machine may have toner on them. If defects occur, the problem will likely correct itself after running five (5) blank sheets. Remove the print cartridge and install a new one. <i>Replacing the Smart Kit ® Print Cartridge on page 8-7.</i></p>
Vertical repetitive defects 	<p>If marks repeatedly appear on the printed side of the page at even intervals: The print cartridge may be damaged. If a repetitive mark occurs on the page, print a cleaning sheet several times to clean the cartridge; <i>Cleaning the Drum on page 8-8</i>. After the printout, if you still have the same problems, remove the print cartridge and install a new one. <i>Replacing the Smart Kit ® Print Cartridge on page 8-7.</i> Parts of the machine may have toner on them. If defects occur, the problem will likely correct itself after running five (5) blank sheets. The fusing assembly may be damaged. Contact a service representative. If you use inferior quality paper; <i>Cleaning the Drum on page 8-8.</i></p>

Condition	Suggested solutions
Background scatter 	<p>Background scatter results from bits of toner randomly distributed on the printed page.</p> <p>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.</p> <p>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.</p> <p>If background scatter covers the entire surface area of a printed page, adjust the print resolution through your software application or the printer properties.</p>
Misformed characters 	<p>If characters are improperly formed and producing hollow images, the paper stock may be too slick. Try a different paper. <i>Paper Specifications on page 10-6.</i></p> <p>If characters are improperly formed and producing a wavy effect, the scanner unit may need service. For service, contact a service representative.</p>
Page skew 	<p>Ensure that the paper is loaded properly.</p> <p>Check the paper type and quality. <i>Paper Specifications on page 10-6.</i></p> <p>Ensure that the paper or other material is loaded correctly and the guides are not too tight or too loose against the paper stack.</p>
Curl or wave 	<p>Ensure that the paper is loaded properly.</p> <p>Check the paper type and quality. Both high temperature and humidity can cause paper curl. <i>Paper Specifications on page 10-6.</i></p> <p>Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray.</p>
Wrinkles or creases 	<p>Ensure that the paper is loaded properly.</p> <p>Check the paper type and quality. <i>Paper Specifications on page 10-6.</i></p> <p>Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray.</p>

Condition	Suggested solutions
Back of printouts are dirty 	<p>Check for leaking toner. Clean the inside of the machine. <i>Cleaning the Inside on page 8-3.</i></p> <p>Parts of the machine may have toner on them. If defects occur, the problem will likely correct itself after running five (5) blank sheets.</p>
Black pages 	<p>The print cartridge may not be installed properly. Remove the cartridge and re-insert it.</p> <p>The print cartridge may be defective and need replacing. Remove the print cartridge and install a new one. <i>Replacing the Smart Kit® Print Cartridge on page 8-7.</i></p> <p>The machine may require repair. Contact a service representative.</p>
Loose toner 	<p>Clean the inside of the machine. <i>Cleaning the Inside on page 8-3.</i></p> <p>Check the paper type and quality. <i>Paper Specifications on page 10-6.</i></p> <p>Parts of the machine may have toner on them. If defects occur, the problem will likely correct itself after running five (5) blank sheets.</p> <p>Remove the print cartridge and install a new one. <i>Replacing the Smart Kit® Print Cartridge on page 8-7</i></p> <p>If the problem persists, the machine may require repair. Contact a service representative.</p>
Character Voids 	<p>Character voids are white areas within parts of characters that should be solid black:</p> <p>If you are using transparencies, try another type of transparency. Because of the composition of transparencies, some character voids are normal.</p> <p>You may be printing on the wrong surface of the paper. Remove the paper and turn it around.</p> <p>The paper may not meet paper specifications. <i>Paper Specifications on page 10-6.</i></p>
Horizontal stripes 	<p>If horizontally aligned black streaks or smears appear:</p> <p>The print cartridge may be installed improperly. Remove the cartridge and re-insert it.</p> <p>The print cartridge may be defective. Remove the print cartridge and install a new one. <i>Replacing the Smart Kit® Print Cartridge on page 8-7.</i></p> <p>If the problem persists, the machine may require repair. Contact a service representative.</p>
Curl 	<p>If the printed paper is curled or paper does not feed into the machine:</p> <p>Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray.</p>

Copying Problems

Condition	Suggested solutions
Copies are too light or too dark.	Use the Lighten/Darken button to darken or lighten the background of the copies.
Smears, lines, marks, or spots appears on copies.	If defects are on the original, press the Lighten/Darken button to lighten the background of your copies. If no defects are on the original, clean the scan unit. See <i>Cleaning the Scan Unit</i> on page 8-5.
Copy image is skewed.	Ensure that the original is face down on the document glass or face up in the ADF (Automatic Document Feeder). Check that the copy paper is loaded correctly.
Blank copies print out.	Ensure that the original is face down on the document glass or face up in the ADF.
Image rubs off the copy easily.	Replace the paper in the 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 tray. Replace the paper in the tray with a fresh supply. Check/adjust the paper guides, if necessary. Ensure that the paper is the proper paper weight. 20 lb (75 g/m ²) paper is recommended. Check for copy paper or pieces of copy paper remaining in the machine after a paper jam has been cleared.
Print 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.	<p>Make sure that you place the document to be scanned face down on the document glass, or face up in the Automatic Document Feeder.</p> <p>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.</p> <p>Check that the USB or parallel cable is connected properly.</p> <p>Make sure that the USB or parallel cable is not defective. Switch the cable with a known good cable. If necessary, replace the cable.</p> <p>If you are using a parallel cable, ensure that it is compliant with IEEE 1284 standards.</p> <p>Check that the scanner is configured correctly. Check scan setting to make certain that the scanner job is being sent to the correct port, for example, LPT1.</p>
The unit scans very slowly.	<p>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.</p> <p>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 Guide.</p>

Fax Problems

Condition	Suggested solutions
The machine is not working, there is no display and the buttons are not working.	<p>Turn the power off and unplug the power cord. Plug the power cord in and turn the power on.</p> <p>Ensure that there is power to the electrical outlet.</p>
No dial tone sounds.	<p>Check that the phone line is connected properly.</p> <p>Check that the phone socket in the wall is working by plugging in another phone.</p>
The numbers stored in memory do not dial correctly.	<p>Make sure that the numbers are stored in memory correctly. Print a Phonebook list, referring to <i>Phonebook List on page 7-25</i>.</p>
The document does not feed into the machine.	<p>Make sure that the document is not wrinkled and you are putting it in correctly. Check that the document is the right size, not too thick or thin.</p> <p>Make sure that the ADF (Automatic Document Feeder) cover is firmly closed.</p>

Condition	Suggested solutions
Faxes are not received automatically.	Fax mode should be selected. Make sure that there is paper in the tray. Check to see if the display shows "Memory Full".
The machine does not send.	Make sure that the document is loaded in the ADF or on the document glass. "TX" should show up on the display. Check the fax machine you are sending to, to see if it can receive your fax.
The incoming fax has blank spaces or is of poor-quality.	The fax machine sending you the fax may be faulty. A noisy phone line can cause line errors. Check your machine by making a copy. The print cartridge may be empty. Replace the print cartridge, referring to <i>Replacing the Smart Kit® Print Cartridge on page 8-7</i> .
Some of the words on an incoming fax are stretched.	The fax machine sending you the fax had a temporary document jam.
There are lines on the documents you send.	Check your scanning glass for marks and clean it. See <i>Cleaning the Scan Unit on page 8-5</i> .
The machine dials a number, but a connection with the other fax machine fails.	The other fax machine may be turned off, out of paper, or cannot answer incoming calls. Contact the other machine operator to resolve the problem.
Documents are not stored in memory.	There may not be enough memory to store the document. If the display shows a "Memory Full" message, delete from memory any documents you no longer need and then try again to store the document.
Blank areas appear at the bottom of each page or on other pages, with a small strip of text at the top.	You may have chosen the wrong paper settings in the user option setting. For details about paper settings, see <i>Selecting Print Materials on page 3-2</i> .

Common Linux Problems

Problem	Possible Cause and Solution
The machine doesn't print.	<p>Check if the printer driver is installed in your system.</p> <ul style="list-style-type: none"> • 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, use the Add New Printer wizard to set up your device. <p>Check if the printer is started.</p> <ul style="list-style-type: none"> • Open Printers configuration and select your machine on the printers list. Look at the description in the Selected printer pane. If the printer status contains the word "stopped", press the Start button. 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 a document when the MFP port is already used by a scanning application. <p>Check the MFP port is not busy. Functional components of MFP (printer and scanner) share the same I/O interface (MFP port) and multiple components may be trying to use the MFP port at the same time. Only one component at a time is allowed to control the MFP. Any other component attempting to use the MFP will receive the "device busy" message.</p> <ul style="list-style-type: none"> • Open MFP ports configuration and select the port assigned to your printer. In the Selected port pane you can see if the port is occupied by another component. If this is the case, you should wait for current job to finish or press the Release port button to cancel the current job. <p>Check if your application has special print option such as "-oraw".</p> <ul style="list-style-type: none"> • 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 the command line parameter in the command item.

Problem	Possible Cause and Solution
The machine doesn't appear on the scanners list.	<p>Check if your machine is attached to your computer. Make sure that it is connected properly via the USB port and is turned on.</p> <p>Check if the scanner driver for your machine is installed in your system.</p> <ul style="list-style-type: none"> • 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. <p>Check the MFP port is not busy. Functional components of MFP (printer and scanner) share the same I/O interface (MFP port) and multiple components may be trying to use the MFP port at the same time. Only one component at a time is allowed to control the MFP. Any other component attempting to use the MFP will receive the "device busy" message. This can usually happen while starting scan procedure, and appropriate message box displays.</p> <ul style="list-style-type: none"> • To identify the source of the problem, you should open MFP ports configuration and select the port assigned to your scanner. The 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, so scanner on USB:0 relates to /dev/mfp4 respectively and so forth sequentially. In the Selected port pane you can see if the port is occupied by another component. If this is the case, you should wait for current job to finish or press the Release port button to cancel the current job.
The machine doesn't scan.	<p>Check if a document is loaded into the machine.</p> <p>Check if your machine is connected to the computer. Make sure if it is connected properly if I/O error is reported while scanning.</p> <p>Check the MFP port is not busy. Functional components of MFP (printer and scanner) share the same I/O interface (MFP port) and multiple components may be trying to use the MFP port at the same time. Only one component at a time is allowed to control the MFP. Any other component attempting to use the MFP will receive the "device busy" message.</p>
The machine doesn't scan. (continued)	<p>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, so scanner on USB:0 relates to /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 current job to finish or press the Release port button to cancel the current job.</p>

Problem	Possible Cause and Solution
I can't print when I installed both Linux Print Package (LPP) and MFP driver on the same machine simultaneously.	<p>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.</p> <p>If you still want to use both packages simultaneously, please install the LPP first.</p> <p>If you want to uninstall only one of them, please uninstall both packages and install that one you want to use again.</p> <p>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:</p> <pre>In -sf /usr/local/bin/xerox/slpr /usr/bin/lpr</pre>
Can't scan via Gimp Front-end.	<p>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.</p> <p>If you wish to use other kind of scan application, refer to the Help for application.</p>
I encounter the error "Cannot open the MFP port device file" when printing a document.	<p>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.</p> <p>Since Linux MFP driver locks the 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.</p>

Common Macintosh Problems

Problems in Printer Setup Utility

Problem	Possible Cause and Solution
After you click Add and Select USB, the error message "driver not installed" is displayed in the Product List Window.	Software is not installed correctly. Uninstall and then reinstall the software. See <i>Printing on page 5-1</i> . Make sure that you are using a USB cable.
Your product is not listed in the Product List Window after you click Add and Select USB.	Make sure that the cables are connected correctly and the printer is turned on. Check if "Ready" appears on the control panel display. If not, clear the problem depending on the error message; see <i>Clearing LCD Error Messages on page 9-8</i> . Make sure that the correct printer driver has been selected from the Product List Window after you click Add and Select USB.

10 Specifications

This chapter includes:

- General Specifications – page 10-2
- Scanner and Copier Specifications – page 10-3
- Printer Specifications – page 10-4
- Facsimile Specifications – page 10-5
- Paper Specifications – page 10-6

General Specifications

Item	Description
Model	PE 220
Automatic document feeder	Up to 30 sheets (20 lb, 75 g/m ²)
ADF document size	Width: 5.6 to 8.5 inches (142 to 216 mm) Length: 5.8 to 14 inches (148 to 356 mm)
Paper input capacity	Paper Tray: 150 sheets for plain paper (20 lb, 75 g/m ²) Manual Tray: 1 sheet of plain paper, card stock, labels, transparencies, and envelopes (16 ~43 lb, 60 ~ 165 g/m ²)
Paper output capacity	50 sheets
Paper type	Plain paper, Transparencies, Labels, Card stock, Envelopes
Consumables	1-piece print cartridge system
Power requirements	110 - 127 VAC, 50/60 Hz, 4.5 A 220 - 240 VAC, 50/60 Hz, 2.5 A
Power consumption	Sleep mode: Under 10 W Average: 350 W
Noise ^a	Standby mode: Less than 35 dBA Warm up: Less than 49 dBA Copying: Less than 55 dBA Printing: Less than 53 dBA
Warm-up time	Less than 35 seconds
Operating conditions	Temperature: 50 °F to 89 °F (10 °C to 32 °C) Humidity: 20 % to 80 % RH
LCD	16 characters x 2 lines
Smart Kit ® Print Cartridge life ^b	3,000 pages (for starter, 1,000 pages) @ ISO 19752 5 % coverage
SET dimension (W x D x H)	17.2 x 14.7x 14.5 in. (438 x 374 x 368 mm)
Weight	10.4 Kg (including consumables)
Package weight	Paper: 1.2 Kg Plastic: 0.5 Kg
Duty cycle (Monthly)	Print: Up to 4,200 pages

a. Sound Pressure Level, ISO7779

b. The number of pages may be affected by operating environment, printing interval, media type, and media size.

Scanner and Copier Specifications

Item	Description
Compatibility	TWAIN standard / WIA standard
Scanning method	ADF and Flat-bed CIS (Contact Image Sensor) module
Resolution	Optical: 600 x 600 dpi (Mono and color) Enhanced: 4,800 x 4,800 dpi
Effective scanning length	Platen: 11.7 inches (297 mm) ADF: 14 inches (356 mm)
Effective scanning width	Max. 8.2 inches (208 mm)
Color bit depth	24 bit
Mono bit depth	1 bit for Black & White mode 8 bit for Gray mode
Copy speed ^a	Up to 20 ppm in A4 (20 ppm in Letter)
First copy out time	Standby mode: 11 seconds Power save mode: 41 seconds
Copy resolution	Scan: 600 x 300 (Text, Text/Photo) 600 x 600 (Photo using Platen) 600 x 300 (Photo using ADF) Print: 600 x 600 (Text, Text/Photo, Photo)
Zoom rate	Platen: 25 ~ 400 % ADF: 25 ~ 100 %
Multiple copies	1-99 pages
Gray scale	256 levels

a.Copy Speed is based on Single Document Multiple Copy.

Printer Specifications

Item	Description
Printing method	Laser Beam Printing
Printing speed ^a	Up to 20 ppm in A4 (20 ppm in Letter)
First print out time	Standby mode: 11 seconds Power save mode: 41 seconds
Paper size	Letter, Legal, A4, Folio, Executive, A5, A6 card, Envelope 10, Envelope DL, Envelope C5, Envelope C6, Envelope 7-3/4 (Monarch), JIS B5, ISO B5 * Min.: 3 x 5 in. (76 x 127 mm) Max.: 8.5 x 14 in. (216 x 356 mm)
Printer resolution	600 x 600 dpi
Emulation	SPL (GDI)
OS Compatibility	Windows 98/2000/NT 4.0/Me/XP, Various Linux OS (USB only), Macintosh 10.3 or later
Memory	10 MB (Non-extendable)
Interface	IEEE 1284 Parallel, USB 1.1 (Compatible with USB 2.0)

a. Print speed will be affected by operating system used, computing performance, application software, connecting method, media type, media size, and job complexity.

Facsimile Specifications

Item	Description
Compatibility	ITU-T Group 3
Applicable line ^a	Public Switched Telephone Network (PSTN) or behind PABX
Data coding	MH/MR/MMR (ECM Mode)/JPEG
Modem speed	33.6 Kbps
Transmission speed	Approx. 3 seconds/page * Transmission time applies to memory transmission of text data with ECM compression using only ITU-T No.1 Chart.
Maximum document length	Platen: 11.7 in. (297 mm) ADF: 14 in. (356 mm)
Paper size	Letter, A4, Legal, Folio, Executive, B5
Resolution	Standard: 203 x 98 dpi Fine: 203 x 196 dpi Super Fine: 300 x 300 dpi Photo: 203 x 196 dpi Color: 200 x 200 dpi
Memory	2 MB
Halftone	256 levels
Auto dialer	Speed dialing (up to 100 numbers)

a.DSL, Voice Over IP and Digitac converters (convert digital to analogue) are not supported applications.

Paper Specifications

Overview

Your machine accepts a variety of print materials, such as cut-sheet paper (including up to 100% recycled fiber content paper), envelopes, labels, transparencies and custom-size paper. Properties, such as weight, composition, grain and moisture content, are important factors affecting the machine's performance and the output quality. Paper that does not meet the guidelines outlined in this User Guide can cause the following problems:

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

NOTE:

- Some paper may meet all of the guidelines in this guide and still not produce satisfactory results. This may be the result of improper handling, unacceptable temperature and humidity levels, or other variables over which Xerox has no control.
- Before purchasing large quantities of paper, make sure the paper meets the requirements specified in this User Guide.



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

Supported Sizes of Paper

Paper	Dimensions ^a	Weight	Capacity ^b
Letter	8.5 x 11 inches (216 x 279 mm)	16 to 24 lb (60 to 90 g/m ²) for the tray with multi- pages feeding 16 to 43 lb (60 to 165 g/m ²) for the tray with single page feeding and the manual tray	150 sheets of 20 lb (75 g/m ²) paper for the tray 1 sheet of paper for the tray or manual tray
A4	8.3 x 11.7 in. (210 x 297 mm)		
Executive	7.3 x 10.5 inches (184 x 267 mm)		
Legal	8.5 x 14 inches (216 x 356 mm)		
A5	5.8 x 8.2 inches (148 x 210 mm)		
A6	4.1 x 5.8 inches (105 x 148 mm)		
ISO B5	6.9 x 9.8 inches (176 x 250 mm)		
JIS B5	7.2 x 10.1 inches (182 x 257 mm)		
Folio	8.5 x 13 inches (216 x 330 mm)		
Minimum size (custom)	3 x 5 inches (76 x 127 mm)	16 to 43 lb (60 to 165 g/m ²) for the tray with single page feeding and the manual tray	1 sheet of paper for the tray or manual tray
Maximum size (custom)	8.5 x 14 inches (216 x 356 mm)		
Transparency	Same minimum and maximum paper sizes as listed above.	138 to 146 g/m ²	
Labels		120 to 150 g/m ²	
Cards		90 to 163 g/m ²	
Envelopes		75 to 90 g/m ²	

a. The machine supports a wide range of media sizes. See *Paper Type, Input Sources, and Capacities* on page 3-2.

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

NOTE: You may experience jams when using print materials with a length of less than 5 inches (127 mm). For optimum performance, ensure that you are storing and handling the paper correctly. Please refer to *Paper Storage Environment* on page 10-9..

Guidelines for Using Paper

For the best result, use conventional 20 lb (75 g/m²) paper. Ensure that the paper is of good quality, and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, and curled or bent edges.

If you are unsure of what type of paper you are loading, such as bond or recycled paper, check the label on the package.

The following problems may cause print quality deviations, jamming or even damage to the machine:

Symptom	Problem with Paper	Solution
Poor print quality or toner adhesion, problems with feeding	Too moist, too rough, too smooth or embossed; faulty paper lot	Try another kind of paper, between 100 ~ 400 Sheffield, 4 ~ 5 % moisture content.
Dropout, jamming, curl	Stored improperly	Store paper flat in its moisture-proof wrapping.
Increased gray background shading/ printer wear	Too heavy	Use lighter paper.
Excessive curl problems with feeding	Too moist, wrong grain direction or short-grain construction	Use long-grain paper.
Jamming, damage to machine	Cutouts or perforations	Do not use paper with cutouts or perforations.
Problems with feeding	Ragged edges	Use good quality paper.

NOTE:

- Do not use letterhead paper printed with low-temperature inks, such as those used in some types of thermography.
- Do not use raised or embossed letterhead.
- The machine uses heat and pressure to fuse toner to the paper. Make sure that any colored paper or preprinted forms use inks that are compatible with this fusing temperature (200 °C or 392 °F for 0.1 second).

Paper Specifications

Category	Specifications
Acid content	5.5 pH or lower
Caliper	3.0 ~ 7.0 mils (0.094 ~ 0.18 mm)

Category	Specifications
Curl in ream	Flat within 0.02 in. (5 mm)
Cut edge conditions	Cut with sharp blades with no visible fray.
Fusing compatibility	Must not scorch, melt, offset or release hazardous emissions when heated to 200 °C (392 °F) for 0.1 second.
Grain	Long grain
Moisture content	4 % ~ 6 % by weight
Smoothness	100 ~ 400 Sheffield

Paper Output Capacity

Output Location	Capacity
Face-down output tray	50 sheets of 20 lb (75 g/m ² bond) paper

Paper Storage Environment

Paper storage environmental conditions directly affect the feed operation.

Ideally, the machine and paper storage environment should be at or near room temperature, and not too dry or humid. Remember that paper is hygroscopic; it absorbs and loses moisture rapidly.

Heat works with humidity to damage paper. Heat causes the moisture in paper to evaporate, while cold causes it to condense on the sheets. Heating systems and air conditioners remove most of the humidity from a room. As paper is opened and used, it loses moisture, causing streaks and smudging. Humid weather or water coolers can cause the humidity to increase in a room. As paper is opened and used it absorbs any excess moisture, causing light print and dropouts. Also, as paper loses and gains moisture it can become distorted. This can cause paper jams.

Care should be taken not to purchase more paper than can be used in a short time (about 3 months). Paper stored for long periods may experience heat and moisture extremes, which can cause damage. Planning is important to prevent damage to large supplies of paper.

Unopened paper in sealed reams can remain stable for several months before use. Opened packages of paper have more potential for environment damage, especially if they are not wrapped with a moisture-proof barrier.

The paper storage environment should be properly maintained to ensure optimum performance. The required condition is 20 to 24 °C (68 to 75 °F), with a relative humidity of 45 % to 55 %. The following guidelines should be considered when evaluating the paper's storage environment:

- Paper should be stored at or near room temperature.
- The air should not be too dry or too humid.
- The best way to store an opened ream of paper is to rewrap it tightly in its moisture-proof wrapping. If the machine environment is subject to extremes, unwrap only the amount of paper to be used during the day's operation to prevent unwanted moisture changes.

Envelopes

Envelope construction is critical. Envelope fold lines can vary considerably, not only between manufacturers, but also within a box from the same manufacturer. Successful printing on envelopes depends upon the quality of the envelopes. When selecting envelopes, consider the following components:

- **Weight:** The weight of the envelope paper should not exceed 20 lb (75 g/m²) or jamming may occur.
- **Construction:** Prior to printing, envelopes should lie flat with less than 0.25 inches (6 mm) 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.
- **Size:** You should only use envelopes within the following size ranges.

Minimum	Maximum
3 x 5 in. (76 x 127 mm)	8.5 x 14 in. (216 x 356 mm)

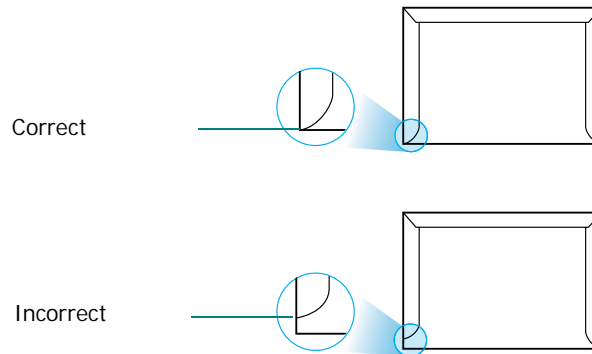
NOTE:

- Load only one envelope at a time to print envelopes.
- You may experience some paper jams when using any media with a length less than 5.5 in. (140 mm). This may be caused by paper that has been affected by environmental conditions. For optimum performance, make sure you are storing and handling the paper correctly. Please refer to *Paper Storage Environment* on page 10-9..

Envelopes with Double Side Seams

Double side-seams construction has vertical seams at both ends of the envelope rather than diagonal seams. This style may be more likely to wrinkle.

Be sure the seam extends all the way to the corner of the envelope as illustrated below.



Envelopes with Adhesive Strips or Flaps

Envelopes with a peel-off adhesive strip or with more than one flap that folds over to seal must use adhesives compatible with the heat and pressure in the machine. The extra flaps and strips might cause wrinkling, creasing or even jams and may even damage the fuser.

Envelope Margins

The following gives typical address margins for a commercial #10 or DL envelope.

Type of Address	Minimum	Maximum
Return address	0.6 in. (15 mm)	2 in. (51 mm)
Delivery address	2 in. (51 mm)	3.5 in. (90 mm)

NOTE:

- For the best print quality, position margins no closer than 0.6 in. (15 mm) from the edges of the envelope.
- Avoid printing over the area where the envelope's seams meet.

Envelope Storage

Proper storage of envelopes helps contribute to print quality. Envelopes should be stored flat. If air is trapped in an envelope, creating an air bubble, then the envelope may wrinkle during printing.

Labels



CAUTION:

- To avoid damaging the machine, use only labels recommended for laser printers.

- To prevent serious jams, always load one sheet of paper at a time to print labels.
- Never print on the same sheet of labels more than once and never print on a partial sheet of labels.

When selecting labels, consider the quality of each component:

- Adhesives: The adhesive material should be stable at 180°C (356°F), the machine's fusing temperature.
- Arrangement: Only use labels with no exposed backing between them. Labels can peel off sheets with spaces between the labels, causing serious jams.
- Curl: Prior to printing, labels must lie flat with no more than 5 in. (13 mm) of curl in any direction.
- Condition: Do not use labels with wrinkles, bubbles or other indications of separation.

Transparencies

Transparencies used in the machine must be able to withstand 180°C (356°F), the machine's fusing temperature.+

NOTE: Load only 1 transparency at a time.



CAUTION: To avoid damaging the machine, use only transparencies recommended for use in laser printers.

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