Exit Misfeed

1 Remove the remaining documents from the DADF.

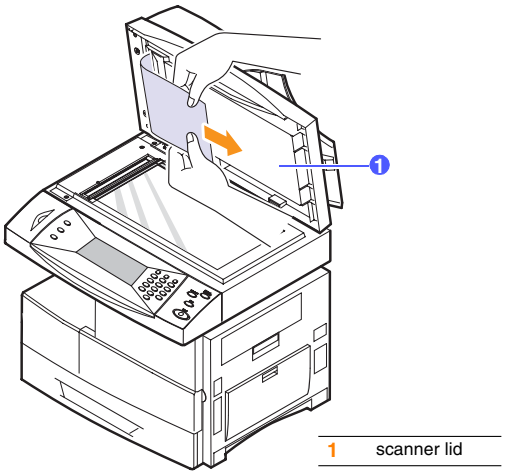
2 Open the document input tray upward and pull the document gently out of the DADF.

3 Close the document input tray. Then place the documents back into the DADF.

Roller misfeed

1 Open the scanner lid.

2 Seize the misfed paper, and remove the paper from the feed area by carefully pulling it to the right using both hands.



1 scanner lid

3 Close the scanner lid. Then load the removed pages back into the DADF.

Clearing paper jams

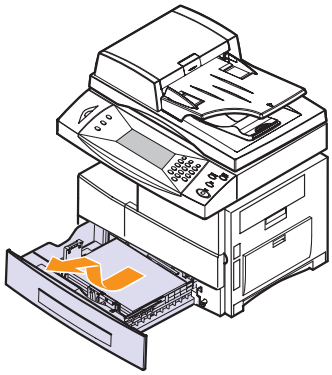
When a paper jam occurs, **Paper Jam** appears on the display. Refer to the table below to locate and clear the paper jam.

Message	Location of jam	Go to
[Paper Jam 0] Open/Close Door	In the paper feed area (tray 1, optional tray 2, or multi-purpose tray)	below and page 10.3, 10.4
[Paper Jam 1] Open/Close Door	In the fuser area or around the toner cartridge	page 10.5
[Paper Jam 2] Check Inside	In the paper exit area	page 10.5
Duplex Jam Open/Close Door	In the duplex unit	page 10.7

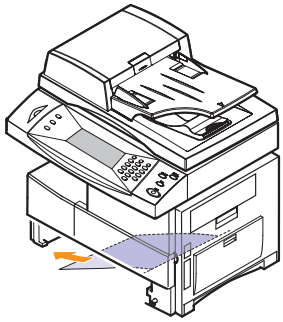
Caution
To avoid tearing the paper, pull out the jammed paper gently and slowly. Follow the instructions in the following sections to clear the jam.

In the tray 1

1 Pull out the paper Tray to open. After you pull it out completely, lift the front part of the Tray slightly up to release the Tray from the machine.



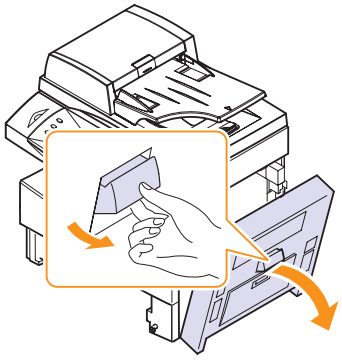
2 Remove the jammed paper by gently pulling it straight out.



Once you remove the jammed paper here, open the side cover and then close it to clear the “Paper Jam0” message on the display.

If there is any resistance, and the paper does not move immediately when you pull, stop pulling. Then:

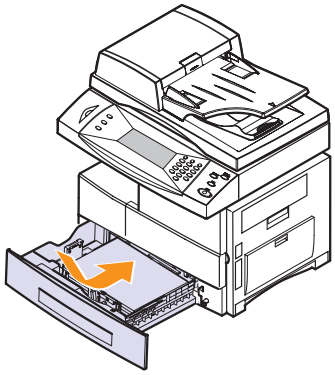
3 Open the side cover.



Note
Do not touch the shiny drum cartridge surface. Scratches or smudges will result in poor copy quality.

4 Carefully remove the misfed paper in the direction shown.

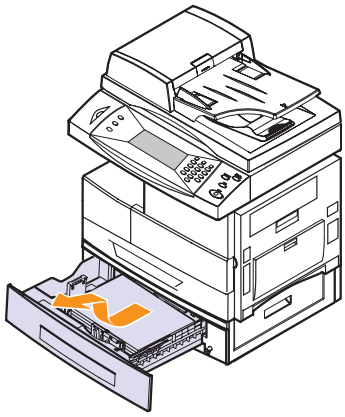
5 Close the cover and insert the paper Tray. Lower the rear part of the Tray to align the rear edge with the corresponding slot of the machine, then insert it completely.



In the optional tray 2

1 Pull the optional tray 2 open.

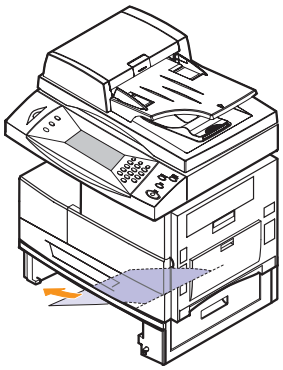
2 Pull the paper Tray to open. After you pull it out completely, lift the front part of the Tray slightly up to release the Tray from the machine.



If the paper does not move when you pull, or if you do not see the paper in this area, stop and go to step 3.

3 Pull the tray 1 half.

4 Remove the paper in the direction shown. To avoid the paper torn, pull it out gently and slowly.



If you cannot find the jammed paper, or if there is any resistance removing the paper, stop pulling and continue to step 5.

5 Open the outer jam cover in tray2.

6 Open the inner cover of tray2.

7 Pull the jammed paper out in the direction shown. To avoid tearing the paper, pull it out gently and slowly.

8 Close the two jam covers.

To clear paper jam in Tray 2, follow the instructions on page 10.3.

In the multi-purpose tray

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

2 Open and close the front cover to resume printing.

In the fuser area or around the toner cartridge

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

1 Open the side cover.

1 Open the side cover.

2 Pull down on the fuser lever as shown below.

This will release pressure on the paper.

If paper is not seen in this area, skip to the Exit Area.

Note
Do not pull paper up through the fusing unit. Unfused toner may adhere to the area, resulting in smudged copies.

3 Remove the jammed paper, in the direction shown.

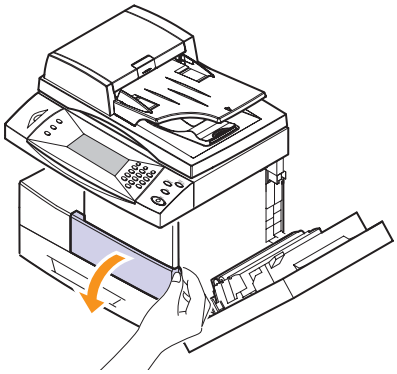
4 Push the fuser lever up, and then close the side cover.

5 Open and close the front cover to resume printing.

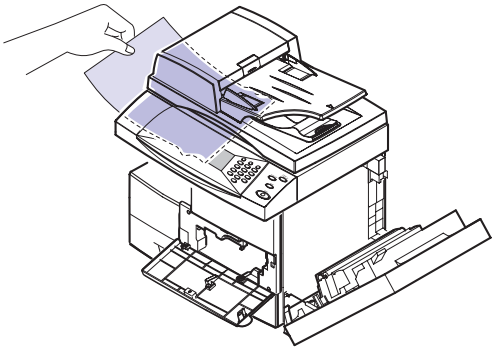
In the paper exit area

1 Open the side cover.

2 Open the front cover.

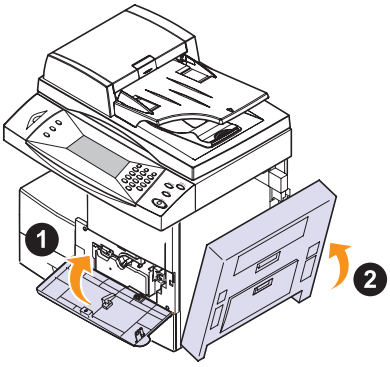


3 Turn the Jam Remove Lever in the direction of the arrow to move the paper to the exit area, then gently pull the paper out through the exit area.



4 Turn the Jam Remove Lever back to the original position.

5 Close the front cover ❶ and the side cover ❷. Printing automatically resumes.

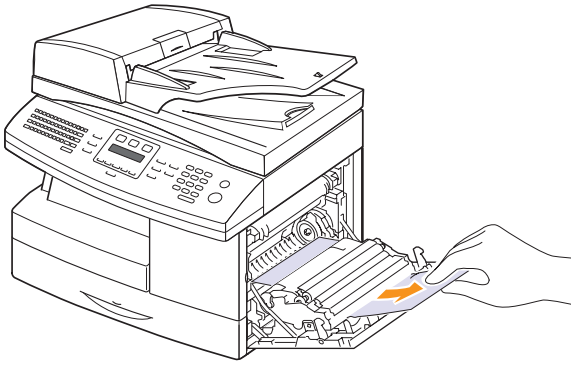


In the duplex unit area

If the duplex unit is not inserted correctly, paper jam may occur. Make sure that the duplex unit is inserted correctly.

1 Open the side cover.

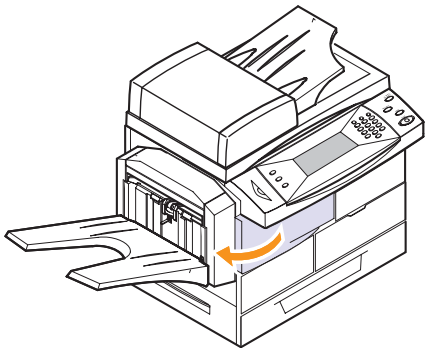
2 Remove the jammed paper.



3 Close the side cover.

In the stacker

1 Open the stacker cover.



2 Push the stacker lever up.

3 Remove the jammed paper.

4 Pull down on the stacker lever.

5 Close the stacker cover.

Tips for avoiding paper jams

By selecting the correct media types, most paper jams can be avoided. When a paper jam occurs, follow the steps outlined on page 10.2.

- Follow the procedures on page 3.5. Ensure that the adjustable guides are positioned correctly.
- Do not overload the tray. Ensure that the paper level is below the paper capacity mark on the inside wall of the tray.
- Do not remove paper from the tray while your machine is printing.
- Flex, fan, and straighten paper before loading.
- Do not use creased, damp, or highly curled paper.
- Do not mix paper types in a tray.
- Use only recommended print media. See page 3.8.
- Ensure that the recommended print side of print media is facing down in the tray, or facing down in the multi-purpose tray.

Understanding display messages

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

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

Message	Meaning	Suggested solutions
Feed Jam at MPT	Paper Misfed from multi-purpose tray	Clear the jam. See page 10.4.
Feed Jam at Tray 1	Paper Misfed from tray	Clear the jam. See page 10.2 and 10.3.
Feed Jam at Tray 2		
Feed Jam at Tray 3		
Feed Jam at Tray 4		
Registration Jam	Paper has jammed in the registration area	
Jam at Fuser	Paper has jammed in the fuser area.	Clear the jam. See page 10.5.
Jam at Tray 2	Paper has jammed in the feeding area of the tray.	Clear the jam. See page 10.2 and page 10.3.
Jam at Tray 3		
Jam at Tray 4		
Duplex Jam 0	Paper has jammed during duplex printing.	Clear the jam. See page 10.7.
Duplex Jam 1	Paper has jammed during duplex printing.	Clear the jam. See page 10.7.
Duplex Jam 2	Paper has jammed during duplex printing.	Clear the jam. See page 10.7.
Output Bin full	Printed papers are full on the finisher.	Remove printed papers from the finisher.

Message	Meaning	Suggested solutions
Check Tray 2 Feed Area	Paper has jammed in the tray feed area.	Clear the jam. See page 10.3.
Check Tray 3 Feed Area		
Check Tray 4 Feed Area		
Fuser error	There is a problem in the fuser unit.	Unplug the power cord and plug it back in. If the problem still persisters, please call for service.
Fuser Low Error		
Fuser High Error		
Fuser unit error		
Main motor failure	There is a problem in the motor unit.	Unplug the power cord and plug it back in. If the problem still persists, please call for service.
Duplex Fan 1 failure	There is a problem in the duplex Fan 1.	Unplug the power cord and plug it back in. If the problem still persists, please call for service.
SMPS Fan failure	There is a problem in the SMPW Fan failure.	Unplug the power cord and plug it back in. If the problem still persists, please call for service.
LSU Motor Error	A problem has occurred in the LSU (Laser Scanning Unit).	Unplug the power cord and plug it back inches. If the problem persists, please call for service.
LSU H sync Error		
Tray2 I/F Error	Tray is installed, but has problem in I/F	
Tray3 I/F Error		
Tray4 I/F Error		
Toner Low	The toner cartridge is almost empty.	Ensure a replacement cartridge is in stock.
Toner Empty	The toner in the cartridge has run out.	Install a new genuine toner cartridge. You can keep printing but the quality cannot be guaranteed, and the product support is no longer provided. ??

Message	Meaning	Suggested solutions
Invalid Toner Cartridge	The toner cartridge you have installed is not for your printer.	Install a Samsung-genuine toner cartridge, designed for your printer.
Toner Supply error	Not supplied toner to the developer before arriv	Remove the seal tape from the toner cartridge, and check the lever for the shutter on the toner cartridge. ??
Toner Page Count Reached	Toner Page Count is expired.	
Toner Cartridge Write Error	Writing the toner cartridge information to the crum has failed.	Replace the toner cartridge.
Toner Cartridge Communication Error	Communication between the toner cartridge and the machine has failed. The toner cartridge is invalid.	Install a Samsung-genuine toner cartridge, designed for your machine.
Drum Warning	The drum cartridge is near the end of its life.	Ensure a replacement cartridge in stock.
Replace Drum	The drum cartridge is at the end of its life.	Replace the drum cartridge. See page 9.5.
Install Developer-Drum Cartridge.	The developer-drum cartridge is not installed, or the CRUM in cartridge is not connected.	Install he developer-drum cartridge. When it is already installed, reinstall the cartridge again. If the problem persists, please call for service.
Toner Sensor Error	A toner cartridge is not installed.	Install a toner cartridge.
Drum Lock	The drum cartridge has some mechanical problem.	Replace the drum cartridge.
Drum Cartridge Write Error	Writing the drum cartridge information to the crum has failed.	Replace the drum cartridge.

Message	Meaning	Suggested solutions
Drum Communication Error	Communication between the drum cartridge and the machine has failed. The drum cartridge is invalid.	Install a Samsung-genuine drum cartridge, designed for your machine.
Invalid Drum cartridge	The drum cartridge is invalid.	Install a Samsung-genuine drum cartridge, designed for your machine.
Toner Cartridge Read Error		
Drum Cartridge Read Error		
Mix Installed Toner	For increase the mixing time when installing the new drum cru up to 120 sec	
Finisher Jam 0	Paper jammed in finisher.	Open the finisher door and remove jammed paper by lowering the guide 1 or 2.
Finisher Jam 1		
Finisher Jam 2	Paper jammed in finisher exit part.	Pull jammed paper from the finisher exit.
Finisher Duplex Jam	Paper jammed in finisher.	Open the finisher door and remove jammed paper by lowering the guide 1 or 2.
Finisher Bin Full	Printed papers are full on the finisher.	Remove printed papers from the finisher.
Install Staple Cartridge	The staple cartridge is not installed.	Install the staple cartridge following the steps explained on the back of the finisher door. ??
Finisher Interface Error	Communication error has occurred between the finisher and the machine.	Please, call for service.
Paddle Fault	Paddle unit is not operational	

Message	Meaning	Suggested solutions
Front Jogger Fault	Front Jogger unit is not operational	
Rear Jogger Fault	Rear Jogger unit is not operational	
Support Finger Fault	Support Finger unit is not operational	
Ejector Fault	Ejector unit is not operational	
Stapler Fault	Stapler is not operational	
Stacker Fault	Stacker unit is not operational	
DADF Registration Jam	The originals jammed in DADF.	Open DADF cover and remove jammed media. See page 10.1.
DADF Scan Sensor Jam	The lead edge of the document failed to actuate the scan sensor within the correct time after actuating the registration sensor.	
DADF Gate Sensor Jam	The lead edge of the document failed to actuate the gate sensor within the correct time after actuating the scan sensor.	
DADF Duplex Jam	The lead edge of the document failed to actuate the duplex sensor within the correct time from the document is feeding reversely.	
DADF Duplex Scan Jam	The lead edge of the document failed to actuate the scan sensor within the correct time after actuating the duplex sensor.	

Message	Meaning	Suggested solutions
Paper Sensed in DADF.	When the machine is turned on, the jammed paper within DADF sensed.	Open DADF door and remove jammed paper.
DADF Oversize Document Detected	The originals is double fed, or rover sized document is fed.	Open DADF door and remove jammed paper.
Use Auxiliary Access	Will be used to instruct the user to connect with the Remote Copy. Meter or to insert credit into the Foreign Device. This will allow the user to use the machine to perform a print job, receive Fax jobs and also make a copy. The cost for each page will be set within the Foreign Device and not the Jungfrau.	
Memory Failure	Memory access is failed.	Turn the machine off and turn it on again. If the problem persists, please call for service and replace the DIMM.
Check Fax Kit	The fax kit is not installed, or the fax does not work properly.	Reinstall the fax kit. If the problem persists, please call for service.
Check Hard Drive	The hard disk drive does not work properly.	Turn the machine off and turn it on again. If the problem persists, please call for service.

Message	Meaning	Suggested solutions
GUI to MCB Communications Fault	The communication error has occurred.	Please, call for service.
MCB to NIC Communications Fault		
MCB to DADF Communications Fault		
MCB to Tray 2 Communications Fault		
MCB to Tray 3 Communications Fault		
MCB to Tray 4 Communications Fault		
MCB Watchdog Detects Software Failure	MCB software has stopped responding.	Turn the machine off and turn it on again. If the problem persists, please call for service.
Ambient Temperature Sensor Fault		
CCC Lock		
IP address conflict	The IP address is used in other place.	Check the IP address or obtain new IP address.
Network cable is disconnected	The network cable is disconnected.	Connect the network cable properly.
Network card is not installed	The network card is not installed.	Install the network card.
BOOTP server error.An Auto IP address has been established.	BOOTP server does not work. The machine is working on setting IP by auto IP setting function.	Set the network setting again or input the new static IP address.
BOOTP server error.An Auto IP is not working	The BOOTP server does not work, and the setting IP by auto IP setting function is failed.	Set the network setting again or input the new static IP address.

Message	Meaning	Suggested solutions
DHCP server error.An Auto IP address has been established.	DHCP server does not work. The machine is working on setting IP by auto IP setting function.	Set the network setting again or input the new static IP address.
DHCP server error.An Auto IP is not working	The DHCP server does not work, and the setting IP by auto IP setting function is failed.	Set the network setting again or input the new static IP address.
Maching cloning is in process. This will take a few minutes to complete		
Job will be blocked during Machine Cloning		
Cloning process is updating the system configuration		
Machine cloning completed successfully		
Cloning processing canceled by CRC checksum failure		
Cloning processing canceled by Firmware version check failure		
Fax Memory is low.		
Fax Memory is empty.		
Group Name has no assigned Email addresses		
Email Send Failed		
Invalid Recipient Email Address		

Message	Meaning	Suggested solutions
Network Controller Error	Connection with the SMTP server failed.	Check the server settings and the network cable.
Network Connection Failure	The protocol you have entered is not supported or server port is wrong.	Check the protocol or server port.
Authentication Failure	The ID or password you entered is incorrect.	Enter the correct ID or password.
Mail Server Connection Failure		
DNS Connection Failure		
Mail Too Large		
Invalid Email Address		
Group not available		
LDAP Connuniction Failure		
LDAP Search Failed		
LDAP Search Timeout Exceeded		
No Matching Entries in LDAP Directory		
Session Timeout		
Authentication Required		
Pop3 Error		
Pop3 Connection Failure		
Pop3 Authentication Failure		
Pop3 Authentication Required		

Message	Meaning	Suggested solutions
Mail exceed server support		
Scan Error		
Stop pressed from MFP		
Memory Full	The memory is full.	Delete unnecessary fax jobs and retransmit after more memory becomes available. Alternatively, split the transmission into more than one operation.
Communication Error		
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 Multiple Send operation.	Use a speed dial number or dial a number manually using the number keypad.
Incompatible		
Line Busy	The receiving fax machine did not answer or the line is already engaged.	Try again after a few minutes.
Line Error	Your machine cannot connect with the receiving fax machine or has lost contact because of a problem with the phone line.	Try again. If the problem persists, wait an hour or so for the line to clear and try again. Or, turn the ECM mode on. See page x.x.
Low Memory		
No Answer	The receiving fax machine has not answered after several redial attempts.	Try again. Make sure that the receiving machine is operational.

Message	Meaning	Suggested solutions
Number Not Assigned		
Power Failure	Power has turned off then on and the machine's memory has not been back up.	The job which you were trying to do before the power failure must be completely re-done.
Retry Redial?	The machine is waiting for a specified time interval to redial a previously busy station.	You can press **OK** to immediately redial, or **Stop/Clear** to cancel the redial operation.
Mailbox Error		
Scanning Error		

Solving other problems

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

Paper feeding problems

Condition	Suggested solutions
Paper is jammed during printing.	Clear the paper jam. See page 10.2.
Paper sticks together.	• Ensure that there is not too much paper in the tray. The tray can hold up to 550 sheets of paper, depending on the thickness of your paper. • Make sure that you are using the correct type of paper. See page 3.3. • 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 page 10.2.
Paper does not feed into the machine.	• Remove any obstructions from 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 page 3.3. • If an original does not feed into the machine, the DADF rubber pad may require to be replaced. Contact a service representative.
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 the multi-purpose tray. • An incorrect type of paper is being used. Use only paper that meets the specifications required by the machine. See page 3.3. • There may be debris inside the machine. Open the front cover and remove the debris. • If an original does not feed into the machine, the DADF rubber pad may require to be replaced. Contact a service representative.
Transparencies stick together in the paper exit.	Use only transparencies specifically designed for laser printers. Remove each transparency as it exits from the machine.
Envelopes skew or fail to feed correctly.	Ensure that the paper guides are against both sides of the envelopes.

Printing problems

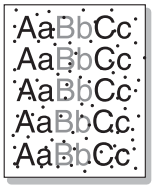
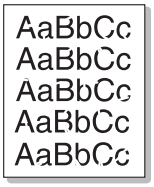
Condition	Possible cause	Suggested solutions
The machine does not print.	The machine is not receiving power.	Check the power cord connections. Check the power switch and the power source.
	The machine is not selected as the default printer.	Select **Samsung SCX-6x45 Series PCL 6** as your default printer in your Windows.
	Check the machine for the following: • The front cover is not closed. Close the cover. • Paper is jammed. Clear the paper jam. See page 10.2. • No paper is loaded. Load paper. See page 3.5. • The toner cartridge is not installed. Install the toner cartridge. If a 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. If the computer has more than one port, make sure that the machine is attached to the correct one.
	The machine may be configured incorrectly.	Check the printer properties to ensure that all of the print settings are correct.
	The printer driver may be incorrectly installed.	Repair the printer software. See the **Software Section**.
	The machine is malfunctioning.	Check the display message on the control panel to see if the machine is indicating a system error.

Condition	Possible cause	Suggested solutions
The machine selects print materials from the wrong paper source.	The paper source selection in the printer properties may be incorrect.	For many software applications, the paper source selection is found under the **Paper** tab within the printer properties. Select the correct paper source. See the printer driver help screen.
A print job is extremely slow.	The job may be very complex.	Reduce the complexity of the page or try adjusting the print quality settings.
	If you are using Windows 98/Me, the Spool Setting may be set incorrectly.	From the **Start** menu, choose **Settings** and then **Printers**. Right-click the **Samsung SCX-6x45 Series PCL 6** machine icon, choose **Properties**, click the **Details** tab, and then choose the **Spool Settings** button. Select the desired spool setting.
Half the page is blank.	The page orientation setting may be incorrect.	Change the page orientation in your application. See the printer driver help screen.
	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.

Condition	Possible cause	Suggested solutions
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.
Pages print, but are blank.	The toner cartridge is defective or out of toner.	Redistribute the toner, if necessary. See page 9.3. If necessary, replace the toner cartridge.
	The file may have blank pages.	Check the file to ensure that it does not contain blank pages.
	Some parts, such as the controller or the board, may be defective.	Contact a service representative.
When you are using Windows 98, the illustrations print incorrectly from Adobe Illustrator.	The setting in the software application is wrong.	Select **Download as Bit Image** in the **Advanced Options** window of the graphic properties and print the document again.
PDF file does not print correctly-some parts are missing in graphics, text or illustrations.	Incompatibility between the PDF file and the Acrobat products.	Printing the PDF file as an image may enable the file to print. Turn on **Print As Image** from the Acrobat printing options. **Note:** It Will take longer to print when you print a PDF file as an image.

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 	If a vertical white streak or faded area appears on the page: • The toner supply is low. You may be able to temporarily extend the toner cartridge life. See page 9.3. If this does not improve the print quality, install a new toner cartridge. • The paper may not meet paper specifications; for example, the paper is too moist or too rough. See page 3.3. • If the entire page is light, the print resolution setting is too low or the toner save mode is on. Adjust the print resolution and turn the toner save mode off. See the help screen of the printer driver and page x.x, respectively. • A combination of faded or smeared defects may indicate that the toner cartridge needs cleaning. Contact a service representative. • The surface of the LSU part inside the machine may be dirty. Clean the LSU, contact a service representative.
Toner specks 	• The paper may not meet specifications; for example, the paper is too moist or too rough. See page 3.3. • The transfer roller may be dirty. Clean the inside of your machine. Contact a service representative. • The paper path may need cleaning. Contact a service representative.
Dropouts 	If faded areas, generally rounded, occur randomly on the page: • A single sheet of paper may be defective. Try reprinting the job. • The moisture content of the paper is uneven or the paper has moist spots on its surface. Try a different brand of paper. See page 3.3. • The paper lot is bad. The manufacturing processes can cause some areas to reject toner. Try a different kind or brand of paper. • If these steps do not correct the problem, contact a service representative.

Condition	Suggested solutions
Vertical lines	If black vertical streaks appear on the page: • The drum inside the printer has probably been scratched. Remove the drum cartridge and install a new one. See page 9.5. If white vertical streaks appear on the page: • The surface of the LSU part inside the machine may be dirty. Clean the LSU. Contact a service representative.
Gray background	If the amount of background shading becomes unacceptable: • Change to a lighter weight paper. See page 3.3. • 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 drum and toner cartridge and then, install a new one. See page 9.4.
Toner smear	• Clean the inside of the machine. Contact a service representative. • Check the paper type and quality. See page 3.3. • Remove the drum and toner cartridge and then, install a new one. See page 9.4.
Vertical repetitive defects	If marks repeatedly appear on the printed side of the page at even intervals: • The drum and toner cartridge may be damaged. If a repetitive mark occurs on the page, print a cleaning sheet several times to clean the cartridge; contact a service representative. After the printout, if you still have the same problems, remove the drum and toner cartridge and then, install a new one. See page 9.4. • Parts of the machine may have toner on them. If the defects occur on the back of the page, the problem will likely correct itself after a few more pages. • The fusing assembly may be damaged. Contact a service representative.

Condition	Suggested solutions
Background scatter	Background scatter results from bits of toner randomly distributed on the printed page. • The paper may be too damp. Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture. • If background scatter occurs on an envelope, change the printing layout to avoid printing over areas that have overlapping seams on the reverse side. Printing on seams can cause problems. • If background scatter covers the entire surface area of a printed page, adjust the print resolution through your software application or the printer properties.
Misformed characters	• If characters are improperly formed and producing hollow images, the paper stock may be too slick. Try a different paper. See page 3.3. • If characters are improperly formed and producing a wavy effect, the scanner unit may need service. For service, contact a service representative.
Page skew	• Ensure that the paper is loaded properly. • Check the paper type and quality. See page 3.3. • Ensure that the paper or other material is loaded correctly and the guides are not too tight or too loose against the paper stack.
Curl or wave	• Ensure that the paper is loaded properly. • Check the paper type and quality. Both high temperature and humidity can cause paper curl. See page 3.3. • Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray.

Condition	Suggested solutions
Wrinkles or creases	• Ensure that the paper is loaded properly. • Check the paper type and quality. See page 3.3. • Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray.
Back of printouts are dirty	Check for leaking toner. Clean the inside of the machine. Contact a service representative.
Black pages	• The drum cartridge may not be installed properly. Remove the cartridge and reinsert it. • The drum cartridge may be defective and need replacing. Remove the drum cartridge and install a new one. See page 9.4. • The machine may require repair. Contact a service representative.
Loose toner	• Clean the inside of the machine. Contact a service representative. • Check the paper type and quality. See page 3.3. • Remove the drum and toner cartridge and then, install a new one. See page 9.4. • If the problem persists, the machine may require repair. Contact a service representative.
Character Voids	Character voids are white areas within parts of characters that should be solid black: • If you are using transparencies, try another type of transparency. Because of the composition of transparencies, some character voids are normal. • You may be printing on the wrong surface of the paper. Remove the paper and turn it around. • The paper may not meet paper specifications. See page 3.3.

Condition	Suggested solutions
Horizontal stripes	If horizontally aligned black streaks or smears appear: • The drum and toner cartridge may be installed improperly. Remove the cartridge and reinsert it. • The drum and toner cartridge may be defective. Remove the toner cartridge and install a new one. See page 9.4. • If the problem persists, the machine may require repair. Contact a service representative.
Curl	If the printed paper is curled or paper does not feed into the machine: • Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray.
An unknown image repetitively appears on a next few sheets or loose toner, light print, or contamination occurs.	You printer is probably being used at an altitude of 2,500 m(8,200 ft)or above. The high altitude may affect the print quality such as loose toner or light imaging. You can set this option through Printer Settings Utility or Printer Tab in printer driver's properties. Refer to the Software Section for detail.

Copying problems

Condition	Suggested solutions
Copies are too light or too dark.	Use **Darkness** to darken or lighten the background of the copies.
Smears, lines, marks, or spots appears on copies.	• If defects are on the original, press **Darkness** to lighten the background of your copies. • If no defects are on the original, clean the scan unit. See page 9.2.
Copy image is skewed.	• Ensure that the original is face down on the scanner glass or face up in the DADF. • Check that the copy paper is loaded correctly.
Blank copies print out.	Ensure that the original is face down on the scanner glass or face up in the DADF.

Condition	Suggested solutions
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. 75 g/m^2 bond paper is recommended. • Check for copy paper or pieces of copy paper remaining in the machine after a paper jam has been cleared.
Toner cartridge produces fewer copies than expected before running out of toner.	• Your originals may contain pictures, solids, or heavy lines. For example, your originals may be forms, newsletters, books, or other documents that use more toner. • The machine may be turned on and off frequently. • The scanner lid may be left open while copies are being made.

Scanning problems

Condition	Suggested solutions
The scanner does not work.	• Make sure that you place the original to be scanned face down on the scanner glass, or face up in the DADF. • There may not be enough available memory to hold the document you want to scan. Try the Prescan function to see if that works. Try lowering the scan resolution rate. • Check that the USB or parallel cable is connected properly. • Make sure that the USB or parallel cable is not defective. Switch the cable with a known good cable. If necessary, replace the cable. • If you are using a parallel cable, ensure that it is compliant with IEEE 1284 standards. • Check that the scanner is configured correctly. Check scan setting in the **SmarThru Configuration** or the application you want to use to make certain that the scanner job is being sent to the correct port.
The unit scans very slowly.	• Check if the machine is printing received data. If so, scan the document after the received data has been printed. • Graphics are scanned more slowly than text. • Communication speed slows in scan mode because of the large amount of memory required to analyze and reproduce the scanned image. Set your computer to the ECP printer mode through BIOS setting. It will help to increase the speed. For details about how to set BIOS, refer to your computer user's guide.
Message appears on your computer screen: • "Device can't be set to the H/W mode you want." • "Port is being used by another program." • "Port is Disabled." • "Scanner is busy receiving or printing data. When the current job is completed, try again." • "Invalid handle." • "Scanning has failed."	• There may be a copying or printing job in progress. When that job is complete, try your job again. • The Selected port is currently being used. Restart your computer and try again. • The printer cable may be improperly connected or the power may be off. You must use a parallel cable that supports IEEE 1284 bi-directional communications. • The scanner driver is not installed or the operating environment is not set up properly. • Ensure that the machine is properly connected and the power is on, Then restart your computer. • The USB cable may be improperly connected or the power may be off. • Do not use parallel and USB cables at the same time.

Network Scan problems

Condition	Suggested solutions
I cannot find a scanned image file.	You can check the scanned file's destination in the **Advanced** page in the **Network Scan** program's Properties screen.
I cannot find the scanned image file after scanning.	• Check if the scanned file's application is on your computer. • Check **Send image immediately to the specified folder using an associated default application** in the **Advanced** page in the **Network Scan** program's Properties screen to open the scanned image immediately after scanning.
I forgot my ID and PIN.	Check your ID and PIN in the **Server** page in the **Network Scan** program's Properties screen.
I cannot view the Help file.	To view the Help file, you need to have Internet Explorer 4 service pack 2 or above.
I cannot use the **Samsung Network Scan Manager**	Check your operating system. Supporting operating systems are Windows 98/Me/NT 4.0/ 2000/XP/2003.

Fax problems

Condition	Suggested solutions
The machine is not working, there is no display and the buttons are not working.	• Unplug the power cord and plug it in again. • Ensure that there is power to the electrical outlet.
No dial tone sounds.	• Check that the phone line is connected properly. • Check that the phone socket in the wall is working by plugging in another phone.
The numbers stored in memory do not dial correctly.	Make sure that the numbers are stored in memory correctly. Print a **Phone Book** list, referring to page x.x.
The original does not feed into the machine.	• Make sure that the paper is not wrinkled and you are putting it in correctly. Check that the original is the right size, not too thick or thin • Make sure that the DADF is firmly closed. • The DADF rubber pad may need to be replaced. Contact a service representative.
Faxes are not received automatically.	• The receiving mode should be set to **Fax**. • Make sure that there is paper in the tray. • Check to see if the display shows any error message. If it does, clear the problem.
The machine does not send.	• Make sure that the original is loaded in the DADF or on the scanner glass. • **Sending** 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 toner cartridge may be empty. Replace the toner cartridge, referring to page 9.4.
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 originals you send.	Check your scan unit for marks and clean it. See page 9.2.
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. Speak with the other machine operator and ask her/him to sort out the problem.
Faxes do not store in memory.	There may not be enough memory space to store the fax. If the display shows the **Memory Full** message, delete from memory any faxes you no longer need and then try again to store the fax.
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 page 3.8.

Common Windows problems

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

Note
Refer to Microsoft Windows 98/Me/NT 4.0/2000/XP User’s Guide that came with your PC for further information on Windows error messages.

Common PostScript problems

The following situations are PS language specific and may occur when several printer languages are being used.

Note
To receive a printed or screen-displayed message when PostScript errors occur, open the Print Options window and click the desired selection next to the PostScript errors section.

Problem	Possible Cause	Solution
PostScript file cannot be printed.	The PostScript driver may not be installed correctly.	• Install the PostScript driver, referring to the **Software Section**. • Print a configuration page and verify that the PS version is available for printing. • If the problem persists, contact a service representative.
“Limit Check Error” message appears.	The print job was too complex.	You might need to reduce the complexity of the page or install more memory.
A PostScript error page prints.	The print job may not be PostScript.	Make sure that the print job is a PostScript job. Check to see whether the software application expected a setup or PostScript header file to be sent to the machine.
The optional tray 2 is not selected in the driver.	The printer driver has not been configured to recognize the optional tray 2.	Open the PostScript driver properties, select the **Device Settings** tab, and set the **Tray2** option of the **Installable Options** section to **Installed**.
When print a document in Macintosh with Acrobat Reader 6.0 or higher, colors print incorrectly.	The resolution setting in the printer driver may not be matched with that in Acrobat Reader.	Make sure that the resolution setting in your printer driver matches that in Acrobat Reader.

Common Linux problems

Problem	Possible Cause and Solution
The machine does not print	• Check if the printer driver is installed in your system. Open Unified Driver configurator and switch to the Printers tab in Printers configuration window to look at the list of available printers. Make sure that your machine is displayed on the list. If not, please, invoke Add new printer wizard to set up your device. • Check if the printer is started. Open Printers configuration and select your machine on the printers list. Look at the description in the Selected printer pane. If its status contains “(stopped)” string, please, press the **Start** button. After that normal operation of the printer should be restored. The “stopped” status might be activated when some problems in printing occurred. For instance, this could be an attempt to print document when port is claimed by a scanning application. • Check if the port is not busy. Since functional components of MFP (printer and scanner) share the same I/O interface (port), the situation of simultaneous access of different “consumer” application to the same port is possible. To avoid possible conflicts, only one of them at a time is allowed to gain control over the device. The other “consumer” will encounter “device busy” response. You should open ports configuration and select the port assigned to your printer. In the Selected port pane you can see if the port is occupied by some other application. If this is the case, you should wait for completion of the current job or should press Release port button, if you are sure that the present owner is not functioning properly. • Check if your application has special print option such as “-oraw”. If “-oraw” is specified in the command line parameter then remove it to print properly. For Gimp front-end, select “print” -> “Setup printer” and edit command line parameter in the command item.

Problem	Possible Cause and Solution
The machine does not appear on the scanners list	• Check if your machine is attached to your computer. Make sure that it is connected properly via the USB port and is turned on. • Check if the scanner driver for your machine is installed in your system. Open Unified Driver 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. Check if the port is not busy. Since functional components of MFP (printer and scanner) share the same I/O interface (port), the situation of simultaneous access of different “consumer” application to the same port is possible. To avoid possible conflicts, only one of them at a time is allowed to gain control over the device. The other “consumer” will encounter “device busy” response. This can usually happen while starting scan procedure, and appropriate message box appears. • To identify the source of the problem, you should open ports configuration and select the port assigned to your scanner. 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 completion of the current job or should press Release port button, if you are sure that the present port's owner is not functioning properly.

Problem	Possible Cause and Solution
The machine does not scan	• Check if a document is loaded into the machine. • Check if your machine is connected to the computer. Make sure if it is connected properly if I/O error is reported while scanning. • Check if the port is not busy. Since functional components of MFP (printer and scanner) share the same I/O interface (port), the situation of simultaneous access of different “consumer” application to the same port is possible. To avoid possible conflicts, only one of them at a time is allowed to gain control over the device. The other “consumer” will encounter “device busy” response. This can usually happen while starting scan procedure, and appropriate message box will be displayed. To identify the source of the problem, you should open ports configuration and select the port assigned to your scanner. 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 completion of the current job or should press Release port button, if you are sure that the present port’s owner is not functioning properly.
I cannot scan via Gimp Front-end.	• Check if Gimp Front-end has “Xsane: Device dialog.” on the “Acquire” menu. If not, you should install Xsane plug-in for Gimp on the your computer. You can find Xsane plug-in package for Gimp on Linux distribution CD or Gimp home page. For the detail information, refer to the Help for Linux distribution CD or Gimp Front-end application. If you wish to use other kind of scan application, refer to the Help for application.

Problem	Possible Cause and Solution
I encounter error “Cannot open port device file” when printing a document.	Please avoid changing print job parameters (via LPR GUI, for example) while a print job is in progress. Known versions of CUPS server break the print job whenever print options are changed and then try to restart the job from the beginning. Since Unified Linux Driver locks 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 port.
PDF file does not print correctly-some parts are missing in graphics, text or illustrations.	Incompatibility between the PDF file and the Acrobat products. Printing the PDF file as an image may enable the file to print. Turn on **Print As Image** from the Acrobat printing options. **Note:** It Will take longer to print when you print a PDF file as an image.
The machine does not print.	The CUPS (Common Unix Printing System) version distributed with SuSE Linux 9.2 (cups-1.1.21) has a problem with ipp (Internet Printing Protocol) printing.

Common Macintosh problems

Problem	Suggested solutions
PDF file does not print correctly-some parts are missing in graphics, text or illustrations.	Incompatibility between the PDF file and the Acrobat products. Printing the PDF file as an image may enable the file to print. Turn on **Print As Image** from the Acrobat printing options. **Note:** It Will take longer to print when you print a PDF file as an image.
The document has printed, but the print job has not disappeared from the spooler in Mac OS 10.3.2.	Update your Mac OS to OS 10.3.3. or higher.
Some letters are not displayed normally during the **Cover page** printing.	This problem is caused because Mac OS can not create the font during the **Cover page** printing. English alphabet and numbers are displayed normally at the **Cover page**.

11 Ordering supplies and accessories

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

This chapter includes:

- **Toner cartridge**
- **Drum cartridge**
- **Accessories**
- **How to purchase**

Toner cartridge

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

Type	Yield[a]	Part number
Standard yield	20,000 pages	SCX-D6345A

a. ISO 19752 5% coverage

Drum cartridge

When the drum runs out, you can order the following type of drum cartridge for your machine:

Type	Yield[a]	Part number
Standard yield	60,000 pages	SCX-R6345A

a. ISO 19752 5% coverage

Accessories

You can purchase and install accessories to enhance your machine's performance and capacity.

The following accessories are available for your machine:

Accessory	Description	Part number
Optional tray 2/3/4	If you are experiencing frequent paper supply problems, you can attach an additional 550 sheet tray. You can print documents on various sizes and types of print materials.	SCX-S6345A
Paper Stand	You can place the machine on the cabinet in ergonomic design which lets you reach the machine conveniently. Also you can easily move the cabinet with its wheels in case of need and store miscellaneous stuffs like papers into the cabinet.	• Tall Stand: SCX-DSK10T • Short Stand: SCX-DSK10S
Stacker & Stapler	550 sheets	SCX-FIN105
Finishing Cartridge	3,000 staples per cartridge, 20 sheets maximun, 1staple position	SCX-STP000
Memory DIMM	Extends your machine's memory capacity.	ML-MEM140: 256 MB
Fax option kit		• Serial Type: SCX-FAX100 • Parallel Type: SCX-FAX101
Network Scan kit		SCX-KIT10S
SmarThru Worfflow	Windows 2000/XP/2003	SCX-KIT11S

How to purchase

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

12 Installing accessories

Your machine is a full-featured one that has been optimized to meet most of your printing needs. Recognizing that each user may have different requirements, however, Samsung makes several accessories available to enhance your machine's capabilities.

This chapter includes:

- **Precautions when installing accessories**
- **Installing a memory DIMM**

Precautions when installing accessories

Disconnect the power cord

Never remove the control board cover while the power is being supplied.

To avoid the possibility of an electrical shock, always disconnect the power cord when installing or removing ANY internal or external accessories.

Discharge static electricity

The control board and internal accessories (network interface card or memory DIMM) are sensitive to static electricity. Before installing or removing an internal accessories, discharge static electricity from your body by touching something metal, such as the metal back plate on any device plugged into a grounded power source. If you walk round before finishing installation, discharge any static electricity once again.

Installing a memory DIMM

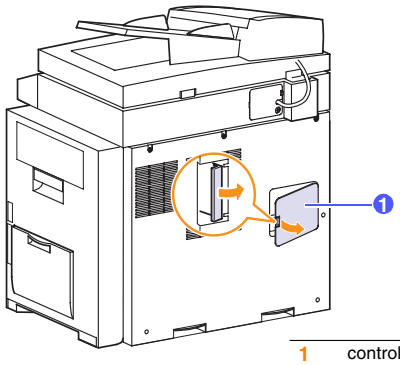
Your machine has a dual in-line memory module (DIMM) slot. Use this DIMM slot to install additional memory.

Your machine has 256 MB of memory. Both can be expanded to 256 MB. However, users must remove the preinstalled memory DIMM before upgrading the memory.

For order information for optional memory DIMMs, see page 11.1.

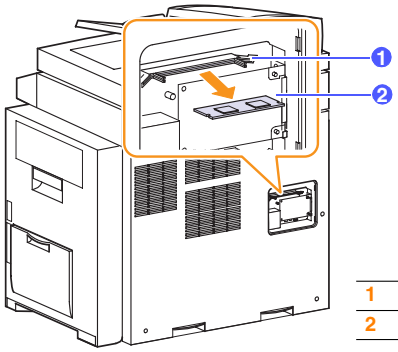
1 Turn the machine off and unplug all cables from the machine.

2 Grasp the control board cover and slide toward you to open it.



1	control board cover

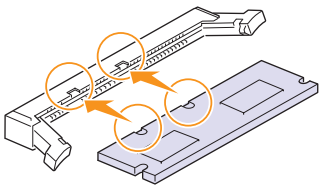
3 Completely open the latch on each side of the DIMM slot. Remove the preinstalled memory DIMM.



1	latch
2	memory DIMM

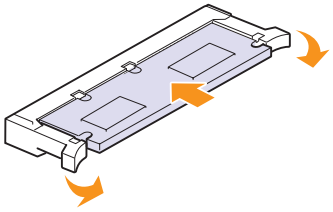
4 Take out a new memory DIMM from the plastic bag.

5 Holding the memory DIMM by the edges, align the notches on the memory DIMM with the grooves on the memory DIMM slot.

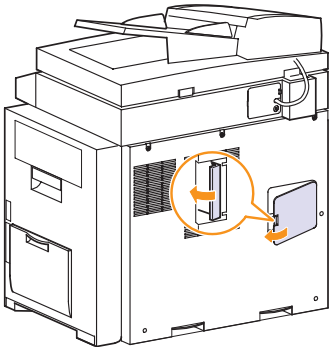


Note
The notches and grooves illustrated above may not match those on an actual DIMM and the slot.

6 Push the DIMM straight into the DIMM slot until it snaps into place. Make sure the latches fit over the notches located on either side of the DIMM.



7 Replace the control board cover.



8 Reconnect the power cord and printer cable, and turn the machine on.

Activating the added memory in the PS printer properties

After installing the memory DIMM, you need to select it in the printer properties of the PostScript printer driver so that you can use it.

1 Make sure that the PostScript printer driver is installed on your computer. For details about installing the PS printer driver, see the **Software Section**.

2 Click the Windows **Start** menu.

3 For Windows 98/Me/NT 4.0/2000, select **Settings** and then **Printers**.

For Windows XP/2003, select **Printers and Faxes**.

4 Select the **Samsung SCX-6x45 Series PS** printer.

5 Click the right mouse button on the machine icon and select **Properties**.

6 For Windows 98/Me, select **Device Options**.

For Windows NT 4.0/2000/XP/2003, select **Device Settings**.

7 Select the amount of memory you installed from **Printer Memory** in the **Installable Options** section.

For Windows 98, select **Installable Options** > **VMOption** > **change setting for:VMOption** > **change memory**.

8 Click **OK**.

13 Specifications

This chapter includes:

- **General specifications**
- **Printer specifications**
- **Copier specifications**
- **Scanner specifications**
- **Facsimile specifications (optional)**

General specifications

Item	Description
DADF	Up to 50 sheets (75 g/m^2 bond)
DADF document size	Width:174 to 216 mm Length: 128 to 356 mm for single page scan 128 to 356 mm for multi pages scan
Paper input capacity	• Tray 1: 520 multi-pages for plain paper (75 g/m^2 bond), 30 pages for transparencies, labels, card stock, and envelopes (60 to 90 g/m^2 bond) • Multi-purpose tray: 100 multi-pages for plain paper (75 g/m^2 bond), 10 pages for transparencies, labels, card stock, and envelopes (60 to 90 g/m^2 bond) • optional tray 2/3/4: 550 multi-pages for plain paper (75 g/m^2 bond), 30 pages for transparencies, labels, and card stock
Paper output capacity	• 500 sheet (face down) • 500 sheet (optional stacker)
Consumables	2-piece toner/drum cartridge system
Power rating	110 - 127 VAC, 50/60 Hz, 9 A or 220 - 240 VAC, 50/60 Hz, 4.5 A
Power consumption	Average operation mode: Less than 900 W Power save mode: Less than 50 W Stand by mode: Less than 170 W
Noise level[a]	Standby mode: Less than 43 dBA Printing mode: Less than 60 dBA Copying mode: Less than 62 dBA
Warm-up time	Less than 30 seconds (from sleep mode)
Operating environment	Temperature: 10 °C to 32 °C Humidity: 20% to 80% RH
Display	1/2 VGA (640 x 240)
Toner cartridge life[b]	20,000 pages at ISO 19752 5% coverage
Drum cartridge life[b]	60,000 pages at ISO 19752 5% coverage
Memory	256 MB (max. 384 MB)
External dimension (W x D x H)	606 x 443 x 610mm (without tray 2/3/4), 22 x 17x 19.5 inches
Weight	45 Kg (including consumables)
Package weight	Paper: 2.8 Kg, Plastic: 0.7 Kg
Duty cycle	Monthly print: Up to 100,000 pages

a. Sound Pressure Level, ISO 7779
b. The number of pages may be affected by operating environment, printing interval, media type, and media size.

Printer specifications

Item	Description
Printing method	Laser Beam Printing
Printing speed[a]	Up to 43 ppm in A4 (45 ppm in Letter)
Duplex printing speed	Up to 41 ipm in A4 (42.7 ipm in Letter)
First print out time	8 seconds (from ready)
Print resolution	Up to 600 x 600 dpi
Printer language	PCL 6, PS 3
OS Compatibility[b]	• PCL Driver: Windows 98/Me/NT 4.0/2000/XP/2003 • PS Driver: Windows 98/Me/NT 4.0/2000/XP/2003, Various Linux OS (USB only), Macintosh 8.6 ~ 9.2/10.1 ~ 10.4
Interface	High Speed USB 2.0 Ethernet 10/100 Base TX

a. Print speed will be affected by operating system used, computing performance, application software, connecting method, media type, media size, and job complexity.
b. Please visit www.samsungprinter.com to download the latest software version.

Copier specifications

Item	Description
Copy speed[a]	Up to 43 ppm in A4 (45 cpm in Letter)
Duplex Copy speed	• Simplex to Duplex(1-2): Approx. 41 ipm[b] in A4 (43 ipm in Letter) • Duplex to Duplex(2-2): 14 ipm in A4 (17 ipm in Letter)
Copy resolution	Scan: up to 600 x 300 (text, text/photo) up to 600 x 600 (photo using platen) up to 600 x 300 (photo using DADF) Print: up to 600 x 600 (text, text/photo, photo)
Zoom rate	Scanner glass: 25 to 200% DADF: 25 to 100%
Multiple copies	1 to 999 pages

a. Copy Speed is based on Single Document Multiple Copy.
b. images per minute

Scanner specifications

Item	Description
Compatibility	TWAIN standard / WIA standard
Scanning method	DADF and Flat-bed Color CCD (Charge Coupled Device) module
Resolution	Optical: 600 x 600 dpi (mono and color) Enhanced: 4,800 x 4,800 dpi
Effective scanning length	Scanner glass: 348 mm DADF: 348 mm
Effective scanning width	Max 208 mm
Color bit depth	Internal: 36 bit External: 24 bit
Mono bit depth	1 bit for Black & White mode 8 bit for Gray mode
Grayscale	256 levels

Facsimile specifications (optional)

Item	Description
Compatibility	ITU-T Group 3
Applicable line	Public Switched Telephone Network (PSTN) or behind PABX
Data coding	MH/MR/MMR/JBIG/JPEG (Tx only)
Modem speed	33.6 Kbps
Transmission speed	Approx. 3 seconds/page[a]
Maximum document length	Scanner glass: 356 mm Duplex automatic document glass: 356 mm
Resolution	• Standard: 203 x 98 dpi • Fine: 203 x 196 dpi • Super Fine: 300 x 300 dpi, 406 x 392 dpi, 203 x 392 dpi (Rx only)
Memory	16 MB
Halftone	256 levels
Auto dialer	up to 200 numbers

a. Transmission time applies to memory transmission of text data with ECM compression using only ITU-T No.1 Chart.

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Software section

SOFTWARE SECTION

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1 Installing Printer Software in Windows

This chapter includes:

- **Installing Printer Software**
- **Reinstalling Printer Software**
- **Removing Printer Software**

Installing Printer Software

You can install the printer software for local printing or network printing. To install the printer software on the computer, perform the appropriate installation procedure depending on the printer in use.

A printer driver is software that lets your computer communicate with your printer. The procedure to install drivers may differ depending on the operating system you are using.

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

Installing Software for Local Printing

A local printer is a printer directly attached to your computer using the printer cable supplied with your printer, such as a USB or parallel cable. If your printer is attached to a network, skip this step and go to "Installing Software for Network Printing" on page 7.

You can install the printer software using the typical or custom method.

NOTE: If the "New Hardware Wizard" window appears during the installation procedure, click ☒ in the upper right corner of the box to close the window, or click **Cancel**.

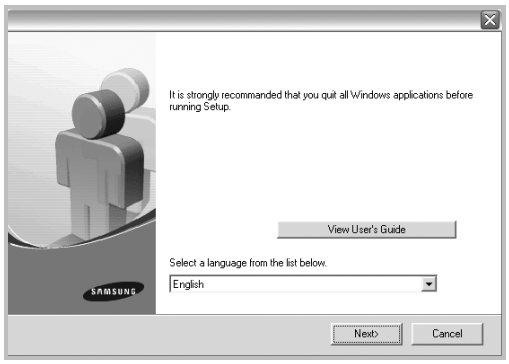
Typical Installation

This is recommended for most users. All components necessary for printer operations will be installed.

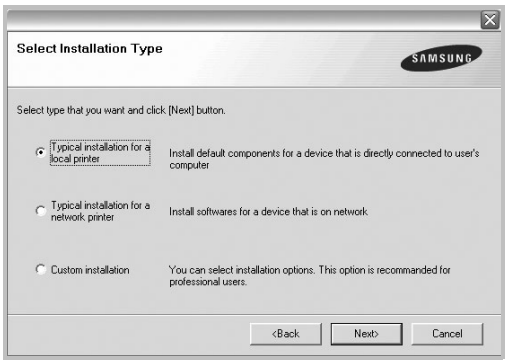
1. Make sure that the printer is connected to your computer and powered on.
2. Insert the supplied CD-ROM into your CD-ROM drive.

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

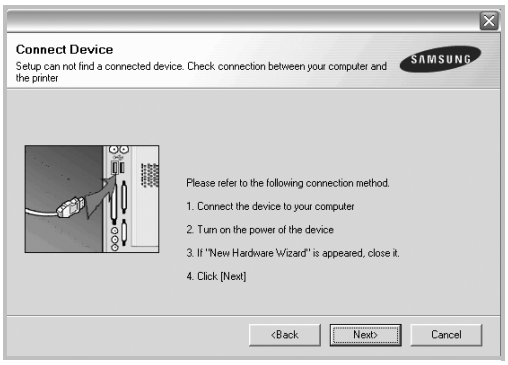
   If the installation window does not appear, click **Start** and then **Run**. Type **X:\Setup.exe**, replacing "**X**" with the letter which represents your drive and click **OK**.



3. Click **Next**.
   - If necessary, select a language from the drop-down list.
   - **View User's Guide**: Allows you to view the User's Guide. If your computer doesn't have Adobe Acrobat, click on this option and it will automatically install Adobe Acrobat Reader for you.
4. Select **Typical installation for a local printer**. Click **Next**.



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



- After connecting the printer, click **Next**.
- If you don't want to connect the printer at this time, click **Next**, and **No** on the following screen. Then the installation will start and a test page will not be printed at the end of the installation.
- ***The installation window that appears in this User's Guide may differ depending on the printer and interface in use.***

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

Otherwise, just click **Next** and skip to step 7.

6 If the test page prints out correctly, click **Yes**.

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

7 To register yourself as a user of Samsung Printers in order to receive information from Samsung, select the checkbox and click **Finish**. You are now sent to the Samsung web site.

Otherwise, just click **Finish**.

NOTE: After setup is complete, if your printer driver doesn't work properly, reinstall the printer driver. See "Reinstalling Printer Software" on page 10.

Custom Installation

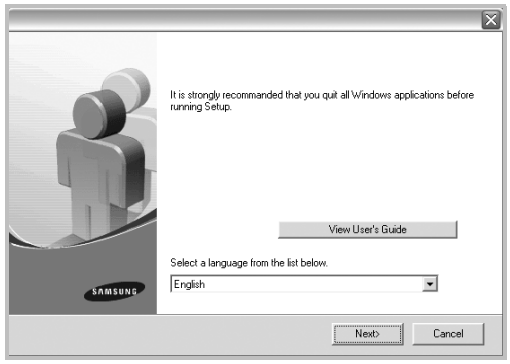
You can choose individual components to install.

1 Make sure that the printer is connected to your computer and powered on.

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

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

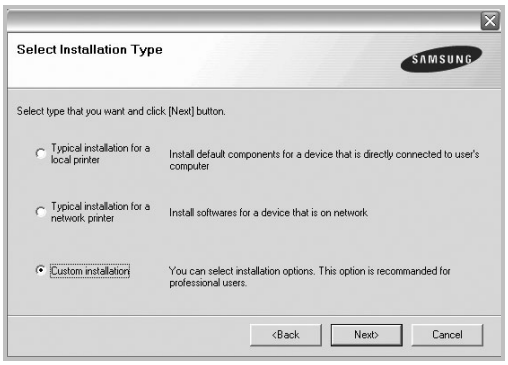
If the installation window does not appear, click **Start** and then **Run**. Type **X:\Setup.exe**, replacing "**X**" with the letter which represents your drive and click **OK**.



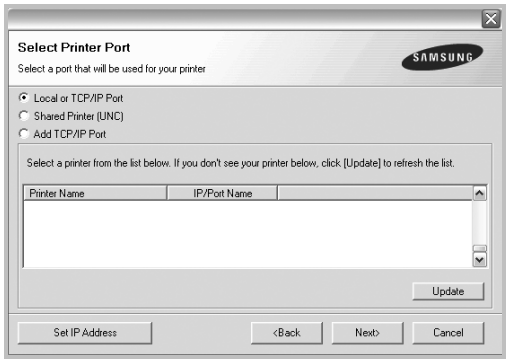
3 Click **Next**.

- If necessary, select a language from the drop-down list.
- **View User's Guide**: Allows you to view the User's Guide. If your computer doesn't have Adobe Acrobat, click on this option and it will automatically install Adobe Acrobat Reader for you.

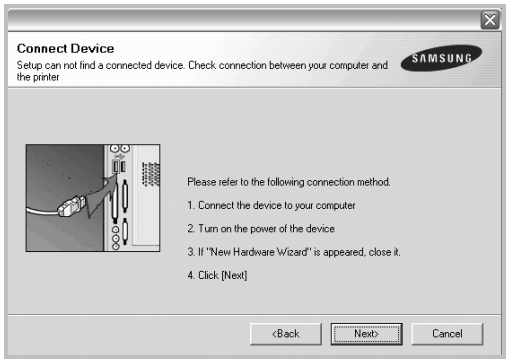
4 Select **Custom installation**. Click **Next**.



5 Select your printer and click **Next**.

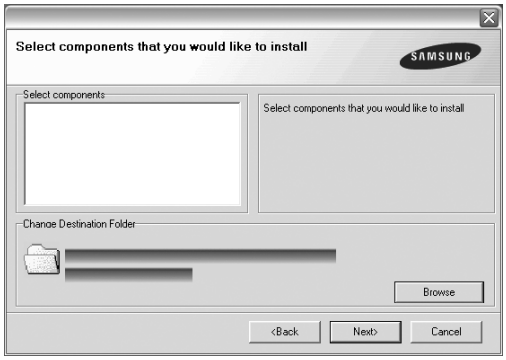


NOTE: If your printer is not already connected to the computer, the following window will appear.



- After connecting the printer, click **Next**.
- If you don't want to connect the printer at this time, click **Next**, and **No** on the following screen. Then the installation will start and a test page will not be printed at the end of the installation.
- ***The installation window that appears in this User's Guide may differ depending on the printer and interface in use.***

6 Select the components to be installed and click **Next**.



NOTE: You can change the desired installation folder by clicking [**Browse**].

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

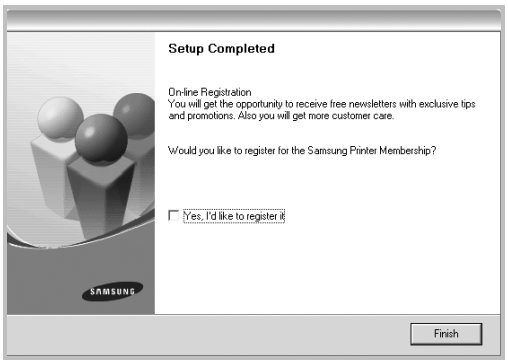
Otherwise, just click **Next** and skip to step 9.

8 If the test page prints out correctly, click **Yes**.

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

9 To register yourself as a user of Samsung Printers in order to receive information from Samsung, select the checkbox and click **Finish**. You are now sent to the Samsung web site.

Otherwise, just click **Finish**.



Installing Software for Network Printing

When you connect your printer to a network, you must first configure the TCP/IP settings for the printer. After you have assigned and verified the TCP/IP settings, you are ready to install the software on each computer on the network.

You can install the printer software using the typical or custom method.

Typical Installation

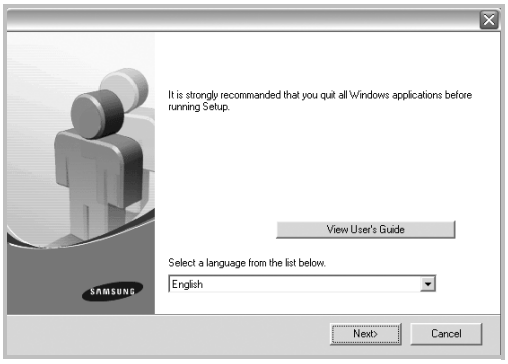
This is recommended for most users. All components necessary for printer operations will be installed.

1 Make sure that the printer is connected to your network and powered on. For details about connecting to the network, see the supplied printer's User's Guide.

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

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

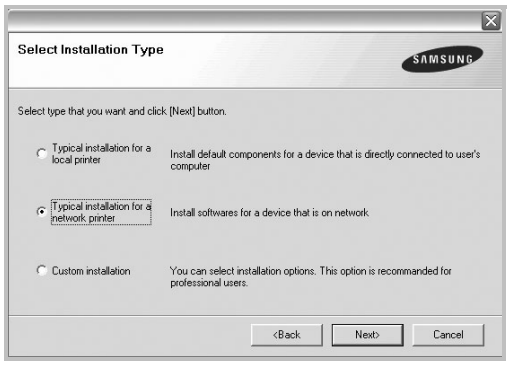
If the installation window does not appear, click **Start** and then **Run**. Type **X:\Setup.exe**, replacing "**X**" with the letter which represents your drive and click **OK**.



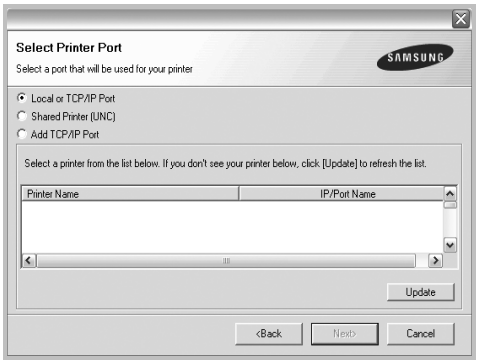
3 Click **Next**.

- If necessary, select a language from the drop-down list.
- **View User's Guide**: Allows you to view the User's Guide. If your computer doesn't have Adobe Acrobat, click on this option and it will automatically install Adobe Acrobat Reader for you.

4 Select **Typical installation for a network printer**. Click **Next**.



5 The list of printers available on the network appears. Select the printer you want to install from the list and then click **Next**.



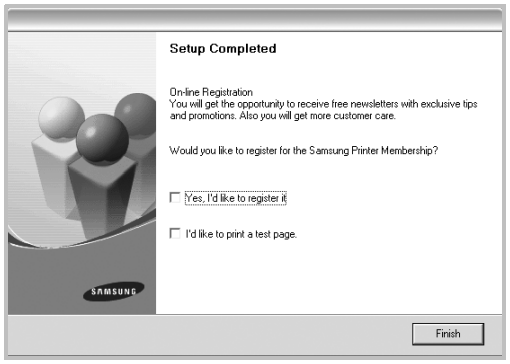
- If you do not see your printer on the list, click **Update** to refresh the list, or select **Add TCP/IP Port** to add your printer to the network. To add the printer to the network, enter the port name and the IP address for the printer.

  To verify your printer's IP address or the MAC address, print a Network Configuration page.

- To find a shared network printer (UNC Path), select **Shared Printer [UNC]** and enter the shared name manually or find a shared printer by clicking the **Browse** button.

6 After the installation is finished, a window appears asking you to print a test page and to register yourself as a user of Samsung Printers in order to receive information from Samsung. If you so desire, select the corresponding checkbox(es) and click **Finish**.

Otherwise, just click **Finish**.



NOTE: After setup is complete, if your printer driver doesn't work properly, reinstall the printer driver. See "Reinstalling Printer Software" on page 10.

Custom Installation

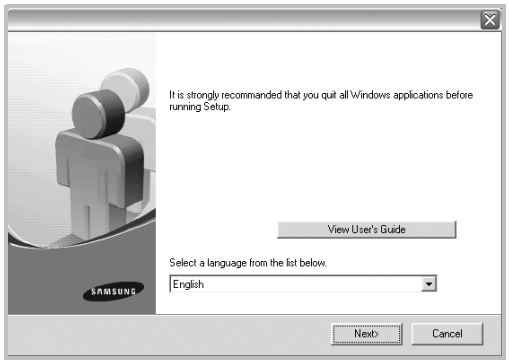
You can choose individual components to install and set a specific IP address.

1 Make sure that the printer is connected to your network and powered on. For details about connecting to the network, see the supplied printer's User's Guide.

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

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

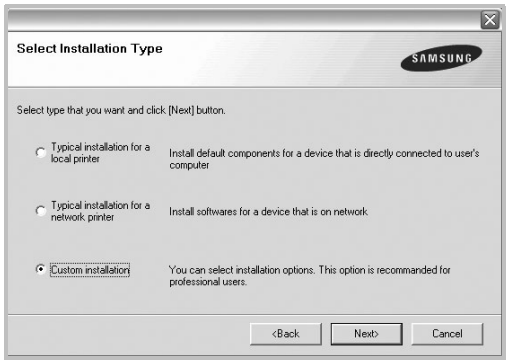
If the installation window does not appear, click **Start** and then **Run**. Type **X:\Setup.exe**, replacing "**X**" with the letter which represents your drive and click **OK**.



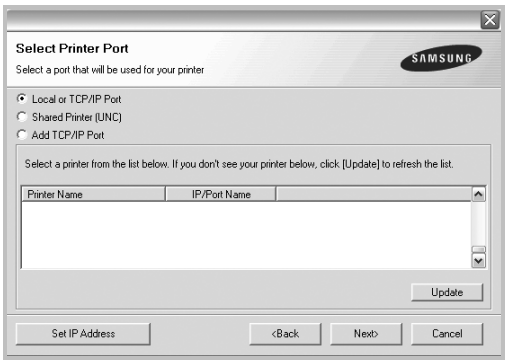
3 Click **Next**.

- If necessary, select a language from the drop-down list.
- **View User's Guide**: Allows you to view the User's Guide. If your computer doesn't have Adobe Acrobat, click on this option and it will automatically install Adobe Acrobat Reader for you.

4 Select **Custom installation**. Click **Next**.



5 The list of printers available on the network appears. Select the printer you want to install from the list and then click **Next**.



- If you do not see your printer on the list, click **Update** to refresh the list, or select **Add TCP/IP Port** to add your printer to the network. To add the printer to the network, enter the port name and the IP address for the printer.

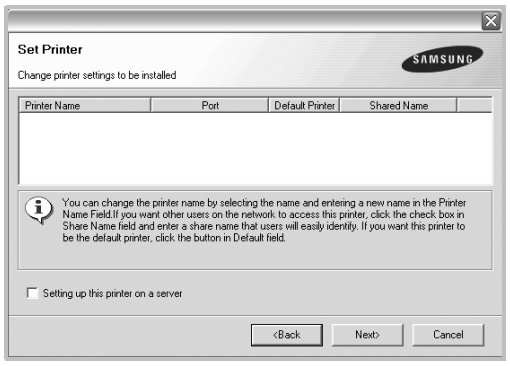
  To verify your printer's IP address or the MAC address, print a Network Configuration page.

- To find a shared network printer (UNC Path), select **Shared Printer [UNC]** and enter the shared name manually or find a shared printer by clicking the **Browse** button.

TIP: If you want to set a specific IP address on a specific network printer, click the **Set IP Address** button. The Set IP Address window appears. Do as follows:

a. Select a printer to be set with a specific IP address from the list.
b. Configure an IP address, subnet mask, and gateway for the printer manually and click **Configure** to set the specific IP address for the network printer.
c. Click **Next**.

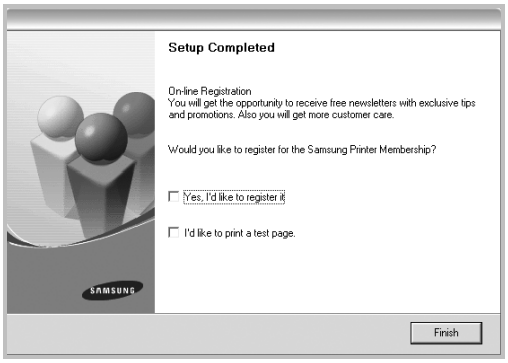
6 Select the components to be installed. After selecting the components, the following window appears. You can also change the printer name, set the printer to be shared on the network, set the printer as the default printer, and change the port name of each printer. Click **Next**.



To install this software on a server, select the **Setting up this printer on a server** checkbox.

7 After the installation is finished, a window appears asking you to print a test page and to register yourself as a user of Samsung Printers in order to receive information from Samsung. If you so desire, select the corresponding checkbox(es) and click **Finish**.

Otherwise, just click **Finish**.



NOTE: After setup is complete, if your printer driver doesn't work properly, reinstall the printer driver. See "Reinstalling Printer Software" on page 10.

Reinstalling Printer Software

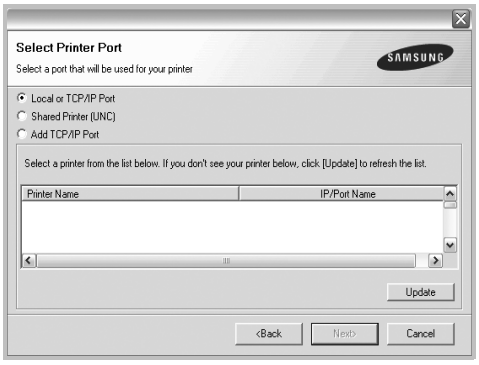
You can reinstall the software if installation fails.

1 Start Windows.

2 From the **Start** menu select **Programs** or **All Programs** → **your printer driver name** → **Maintenance**.

3 Select **Repair** and click **Next**.

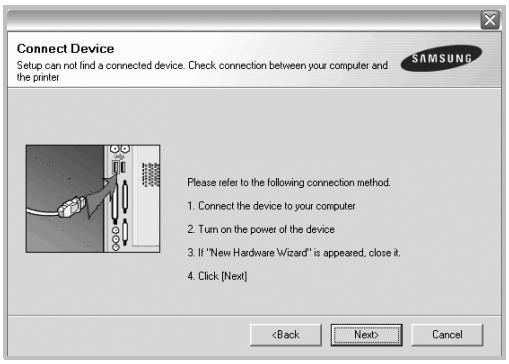
4 The list of printers available on the network appears. Select the printer you want to install from the list and then click **Next**.



- If you do not see your printer on the list, click **Update** to refresh the list, or select **Add TCP/IP Port** to add your printer to the network. To add the printer to the network, enter the port name and the IP address for the printer.
- To find a shared network printer (UNC Path), select **Shared Printer [UNC]** and enter the shared name manually or find a shared printer by clicking the **Browse** button.

You will see a component list so that you can reinstall any item individually.

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



- After connecting the printer, click **Next**.
- If you don't want to connect the printer at this time, click **Next**, and **No** on the following screen. Then the installation will start and a test page will not be printed at the end of the installation.
- ***The reinstallation window that appears in this User's Guide may differ depending on the printer and interface in use.***

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

If you installed the printer software for local printing and you select **your printer driver name**, the window asking you to print a test page appears. Do as follows:

a. To print a test page, select the check box and click **Next**.

b. If the test page prints out correctly, click **Yes**.

If it doesn't, click **No** to reprint it.

6 When the reinstallation is done, click **Finish**.

Removing Printer Software

1. Start Windows.
2. From the **Start** menu select **Programs** or **All Programs** → **your printer driver name** → **Maintenance**.
3. Select **Remove** and click **Next**.

   You will see a component list so that you can remove any item individually.
4. Select the components you want to remove and then click **Next**.
5. When your computer asks you to confirm your selection, click **Yes**.

   The selected driver and all of its components are removed from your computer.
6. After the software is removed, click **Finish**.

2 Basic Printing

This chapter explains the printing options and common printing tasks in Windows.

This chapter includes:

- **Printing a Document**
- **Printing to a file (PRN)**
- **Printer Settings**
  - **Layout Tab**
  - **Paper Tab**
  - **Graphics Tab**
  - **Extras Tab**
  - **About Tab**
  - **Printer Tab**
  - **Using a Favorite Setting**
  - **Using Help**

Printing a Document

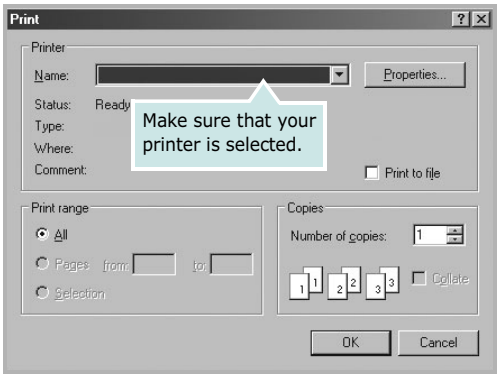
NOTES:

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

   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 13.

   If you see **Setup**, **Printer**, or **Options** in your Print window, click it instead. Then click **Properties** on the next screen.

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

Printing to a file (PRN)

You will sometimes need to save the print data as a file for your purpose.

To create a file:

1. Check the **Print to file** box at the **Print** window.
2. Select the folder and assign a name of the file and then click OK.

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 Software User's Guide shows the Properties window for Windows XP.

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

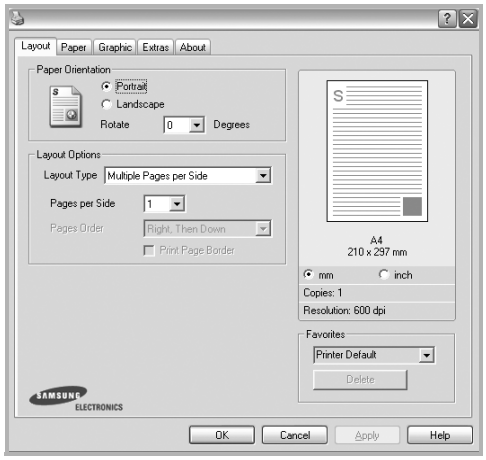
If you access printer properties through the Printers folder, you can view additional Windows-based tabs (refer to your Windows User's Guide) and the Printer tab (see "Printer Tab" on page 16).

NOTES:

- Most Windows applications will override settings you specify in the printer driver. Change all print settings available in the software application first, and change any remaining settings using the printer driver.
- The settings you change remain in effect only while you are using the current program. **To make your changes permanent**, make them in the Printers folder.
- 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 Printing**. See "Printing a Document" on page 12 for more information on accessing printer properties.



Paper Orientation

Paper 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.

▲ Portrait

▲ Landscape

Layout Options

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

- For details, see "Printing Multiple Pages on One Sheet of Paper (N-Up Printing)" on page 18.
- For details, see "Printing Posters" on page 19

Double-sided Printing

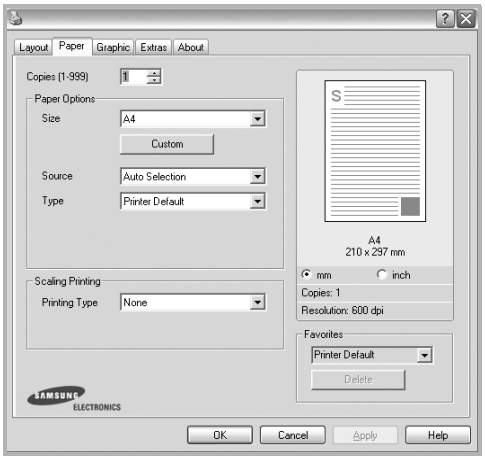
Double-sided Printing allows you to print on both sides of paper. ***If this option does not appear, your printer does not have this feature.***

- For details, see "Printing on Both Sides of Paper" on page 20.

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 12 for more information on accessing printer properties.

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



Copies

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

Size

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 Paper Setting** window appears, set the paper size and click **OK**. The setting appears in the list so that you can select it.

Source

Make sure that **Source** is set to the corresponding paper tray. Use **Manual Feeder** when printing on special materials like envelopes and transparencies. You have to load one sheet at a time into the Manual Tray or Multi-Purpose Tray.
If the paper source is set to **Auto Selection**, the printer automatically picks up print material in the following tray order: Manual Tray or Multi-Purpose Tray, Tray n.

Type

Set **Type** to correspond to the paper loaded in the tray from which you want to print. This will let you get the best quality printout. If not, print quality may not be acheived as you want.
Cotton: 20 lb to 24 lb (75~90 g/m2) cotton paper such as Gilbert 25 % and Gilbert 100 %.
Plain Paper: Normal plain paper. Select this type if your printer is monochrome and printing on the 16 lb (60 g/m2) cotton paper.
Recycled Paper: 20 lb to 24 lb (75~90 g/m2) recycled paper.
Color Paper: 20 lb to 24 lb (75~90 g/m2) color-backgrounded paper.

First Page

This property allows you to print the first page using a different paper type from the rest of the document. You can select the paper source for the first page.
For example, load thick stock for the first page into the Multi-purpose Tray, and plain paper into Tray n. Then, select **Tray n** in the **Source** option and **Multi-Purpose Tray** in the **First Page** option.

Scaling Printing

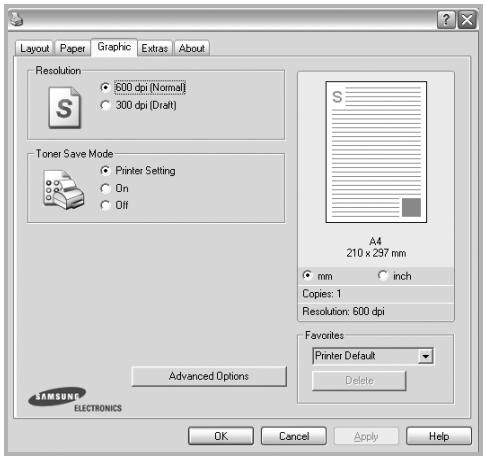
Scaling Printing allows you to automatically or manually scale your print job on a page. You can choose from **None**, **Reduce/ Enlarge**, and **Fit to Page**.

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

Graphics Tab

Use the following Graphic options to adjust the print quality for your specific printing needs. See "Printing a Document" on page 12 for more information on accessing printer properties.

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



Resolution

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.

Image Mode

The available options are Normal and Text Enhance. ***Some printers do not support this feature.***

- **Printer Setting**: If you select this option, this feature is determined by the setting you've made on the control panel of the printer.
- **Normal**: This setting is for normal documents.
- **Text Enhancement**: Image Mode allows the user to enhance printouts.

Toner Save Mode

Selecting this option extends the life of your toner cartridge and reduces your cost per page without a significant reduction in print quality. ***Some printers do not support this feature.***

- **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.

Advanced Options

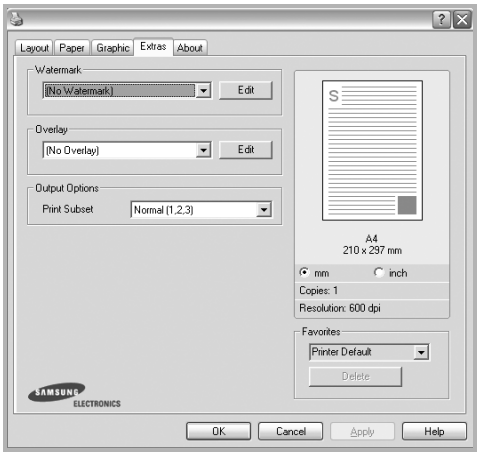
You can set advanced settings by clicking the **Advanced Options** button.

- **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 may be available only in Windows 9x/Me, depending on your particular printer model.***
  - **Download as Outline**: When this option is selected, the driver will download any TrueType fonts that are used in your document not already stored (resident) on your printer. If, after printing a document, you find that the fonts did not print correctly, choose Download as bit image and resubmit your print job. The Download as bit image setting is often useful when printing Adobe. ***This feature is available only when you use the PCL printer driver.***
  - **Download as Bitmap**: 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 To Black**: When the **Print All Text To Black** option is checked, all text in your document prints solid black, regardless of the color it appears on the screen.

Extras Tab

You can select output options for your document. See "Printing a Document" on page 12 for more information about accessing the printer properties.

Click the **Extras** tab to access the following feature:



Watermark

You can create a background text image to be printed on each page of your document. For details, see "Using Watermarks" on page 21.

Overlay

Overlays are often used to take the place of preprinted forms and letterhead paper. For details, see "Using Overlays" on page 22.

Output Options

- **Print Subset**: You can set the sequence in which the pages print. Select the print order from the drop-down list.
  - **Normal (1,2,3)**: Your printer prints all pages from the first page to the last page.
  - **Reverse All Pages (3,2,1)**: 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.
- **Use Printer Fonts**: When Use Printer Fonts is checked, the printer uses the fonts that are stored in its memory (resident fonts) to print your document, rather than downloading the fonts used in your document. Because downloading fonts takes time, selecting this option can speed up your printing time. When using Printer fonts, the printer will try to match the fonts used in your document to those stored in its memory. If, however, you use fonts in your document that are very different from those resident in the printer, your printed output will appear very different from what it looks like on the screen. ***This feature is available only when you use the PCL printer driver.***

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 12 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 OS, refer to the corresponding Windows User's Guide or online help.

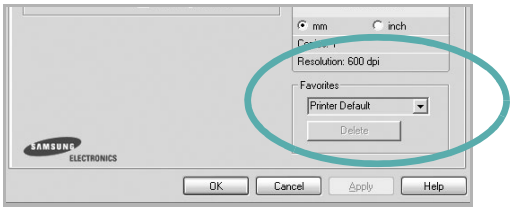
1. Click the Windows **Start** menu.
2. Select **Printers and Faxes**.
3. Select **your printer driver** icon.
4. Right-click on the printer driver icon and select **Properties**.
5. Click the **Printer** tab and set the options.

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.

3 Advanced Printing

This chapter explains printing options and advanced printing tasks.

NOTE:

- Your printer driver **Properties** window that appears in this User's Guide may differ depending on the printer in use. However the composition of the printer properties window is similar.
- If you need to know the exact name of your printer, you can check the supplied CD-ROM.

This chapter includes:

- **Printing Multiple Pages on One Sheet of Paper (N-Up Printing)**
- **Printing Posters**
- **Printing Booklets**
- **Printing on Both Sides of Paper**
- **Printing a Reduced or Enlarged Document**
- **Fitting Your Document to a Selected Paper Size**
- **Using Watermarks**
- **Using Overlays**

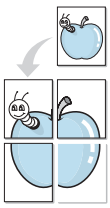
Printing Multiple Pages on One Sheet of Paper (N-Up Printing)

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 12.
2. From the **Layout** tab, choose **Multiple Pages per Side** in the **Layout 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. Select the page order from the **Pages Order** drop-down list, if necessary.

   Check **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

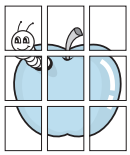


This feature allows you to print a single-page document onto 4, 9, or 16 sheets of paper, for the purpose of pasting the sheets together to form one poster-size document.

1. To change the print settings from your software application, access printer properties. See "Printing a Document" on page 12.
2. Click the **Layout** tab, select **Poster Printing** in the **Layout Type** drop-down list.
3. Configure the poster option:

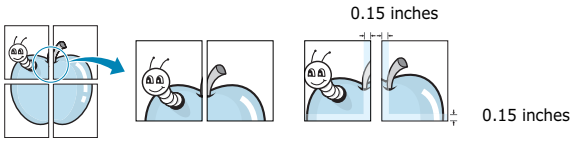
   You can select the page layout from **Poster<2x2>**, **Poster<3x3>**, or **Poster<4x4>**. If you select **Poster<2x2>**, the output will be automatically stretched to cover 4 physical pages.

▲ 2x2



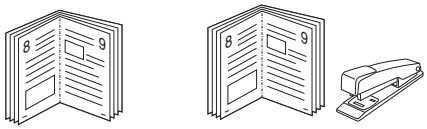
▲ 3x3

   Specify an overlap in millimeters or inches to make it easier to pasting 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 Booklets



This printer feature allows you to print your document on both sides of the paper and arranges the pages so that the paper can be folded in half after printing to produce a booklet.

1. To change the print settings from your software application, access the printer properties. See "Printing a Document" on page 12.
2. From the **Layout** tab, choose **Booklet Printing** from the **Type** drop-down list.

NOTE: The booklet printing option is available when A4, Letter, Legal, Oficio, or Folio size is selected in the **Size** option on the **Paper** tab.

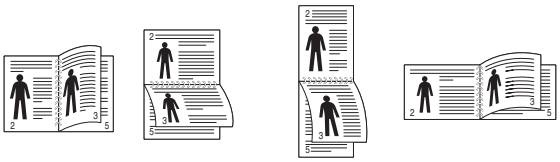
3. Click the **Paper** tab, and select the paper source, size, and type.
4. Click **OK** and print the document.
5. After printing, fold and staple the pages.

Printing on Both Sides of Paper

You can print on both sides of a sheet of paper. Before printing, decide how you want your document oriented.

The options are:

- **Printer Setting**, if you select this option, this feature is determined by the setting you've made on the control panel of the printer. ***If this option does not appear, your printer does not have this feature.***
- **None**
- **Long Edge**, which is the conventional layout used in book binding.
- **Short Edge**, which is the type often used with calendars.



▲ Long Edge ▲ Short Edge

- **Reverse Duplex Printing**, allows you to select general print order compare to duplex print order. ***If this option does not appear, your printer does not have this feature.***

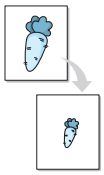
NOTE:

- Do not print on both sides of labels, transparencies, envelopes, or thick paper. Paper jamming and damage to the printer may result.
- To use double-sided printing, you can use only the following paper sizes: A4, Letter, Legal, Oficio, and Folio, with a weight of 20~24 lbs (75~90 g/m²).

1. To change the print settings from your software application, access printer properties. "Printing a Document" on page 12.
2. From the **Layout** tab, select the paper orientation.
3. From the **Double-sided Printing** section, select the binding option you want.
4. Click the **Paper** tab and select the paper source, size, and type.
5. Click **OK** and print the document.

NOTE: If your printer does not have a duplex unit, you should complete the printing job manually. The printer prints every other page of the document first. After printing the first side of your job, the Printing Tip window appears. Follow the on-screen instructions to complete the printing job.

Printing a Reduced or Enlarged Document

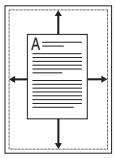


You can change the size of a page's content to appear larger or smaller on the printed page.

1. To change the print settings from your software application, access printer properties. See "Printing a Document" on page 12.
2. From the **Paper** tab, select **Reduce/Enlarge** in the **Printing 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 **Paper Options**.
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 12.
2. From the **Paper** tab, select **Fit to Page** in the **Printing Type** drop-down list.
3. Select the correct size from the **Output size** 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. For example, you may want to have large gray letters reading "DRAFT" or "CONFIDENTIAL" printed diagonally across the first page or all pages of a 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.

Using an Existing Watermark

1. To change the print settings from your software application, access printer properties. See "Printing a Document" on page 12.
2. Click the **Extras** tab, and select the desired watermark from the **Watermark** drop-down list. You will see the selected watermark in the preview image.
3. Click **OK** and start printing.

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

Creating a Watermark

1. To change the print settings from your software application, access printer properties. See "Printing a Document" on page 12.
2. Click the **Extras** tab, and click the **Edit** button in the **Watermark** section. The **Edit Watermarks** 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 checked, 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 12.
2. Click the **Extras** tab and click the **Edit** button in the **Watermark** section. The **Edit Watermarks** 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

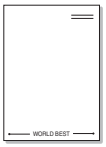
1. To change the print settings from your software application, access printer properties. See "Printing a Document" on page 12.
2. From the **Extras** tab, click the **Edit** button in the Watermark section. The **Edit Watermarks** window appears.
3. Select the watermark you want to delete from the **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. Rather than using preprinted letterhead, you can create an overlay containing the exact same information that is currently on your letterhead. To print a letter with your company's letterhead, you do not need to load preprinted letterhead paper in the printer. You need only tell the printer to print the letterhead overlay on your document.

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 12.
3. Click the **Extras** 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 12.
3. Click the **Extras** 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 you want to use in an external source, you can also load the file when you access the **Load Overlay** window.

   After you select the file, 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 checked, a message window appears each time you submit a document for printing, asking you to confirm your wish to print an overlay on your document.

   If this box is not checked 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 that of the document you will print with the overlay.

Deleting a Page Overlay

You can delete page overlays that you no longer use.

1. In the printer properties window, click the **Extras** 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** until you exit the Print window.

4 Using Windows PostScript Driver

If you want to use the PostScript driver provided with your system CD-ROM to print a document.

PPDs, in combination with the PostScript driver, access printer features and allow the computer to communicate with the printer. An installation program for the PPDs is provided on the supplied software CD-ROM.

This chapter includes:

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 Software User's Guide shows the Properties window for Windows XP.

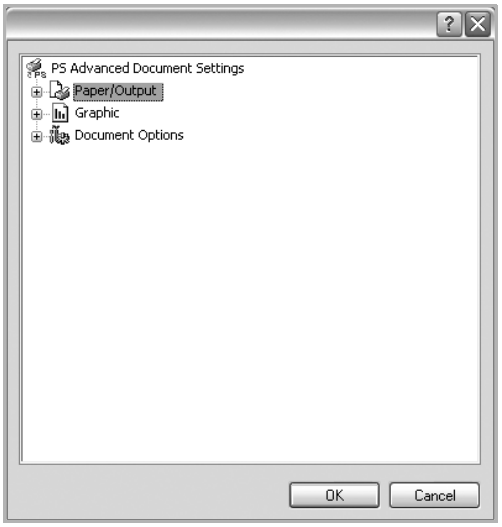
Your printer driver **Properties** window that appears in this User's Guide may differ depending on the printer in use.

NOTES:

- Most Windows applications will override settings you specify in the printer driver. Change all print settings available in the software application first, and change any remaining settings using the printer driver.
- The settings you change remain in effect only while you are using the current program. **To make your changes permanent**, make them in the Printers folder.
- 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.

Advanced

You can use advanced settings by clicking the **Advanced** button.



- **Paper/Output** this option allows you to select the size of the paper loaded in the tray.
- **Graphic** this option allows you to adjust the print quality for your specific printing needs.
- **Document Options** this options allow you to set the PostScript options or printer features.

Using Help

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

5 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.

NOTES:
- 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's 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**.

6 Using Smart Panel

Smart Panel is a program that monitors and informs you of the status of the printer, and allows you to customize the printer's settings. Smart Panel is installed automatically when you install the printer software.

NOTES:

- To use this program, you need:
  - Windows 98 or higher (Windows NT 4.0 can be used only for network-supported printers.) To check for Operating System(s) that are compatible with your printer, refer to Printer Specifications in your Printer User's Guide.
  - Mac OS X 10.3 or higher
  - Linux. To check for Linux systems that are compatible with your printer, refer to Printer Specifications in your Printer User's Guide.
  - Internet Explorer version 5.0 or higher for flash animation in HTML Help.
- If you need to know the exact name of your printer, you can check the supplied CD-ROM.

Understanding Smart Panel

If an error occurs while printing, Smart Panel appears automatically, showing the error.

You can also launch Smart Panel manually. Double-click the Smart Panel icon on the Windows task bar (in Windows), or Notification Area (in Linux). You can also click it on the status bar (in Mac OS X).

Double-click this icon in Windows.

Click this icon in Mac OS X.

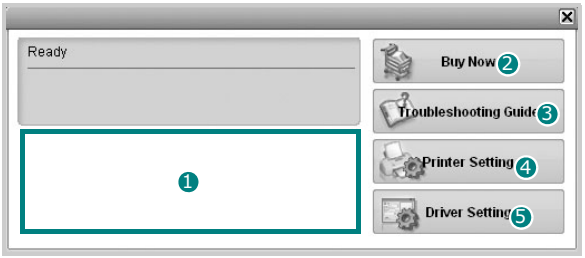
Click this icon in Linux.

If you are a Windows user, from the **Start** menu, select **Programs** or **All Programs** → **your printer driver name** → **Smart Panel**.

NOTES:

- If you have already installed more than one Samsung printer, first select the printer model you want in order to use the corresponding Smart Panel. Right-click (in Windows or Linux) or click (in Mac OS X) the Smart Panel icon and select **your printer name**.
- The Smart Panel window and its contents shown in this Software User's Guide may differ depending on the printer or Operating System in use.

The Smart Panel program displays the current status of the printer, the level of toner remaining in the toner cartridge(s) and various other information. You can also change settings.



❶ Toner Level

You can view the level of toner remaining in the toner cartridge(s). The printer and the number of toner cartridge(s) shown in the above window may differ depending on the printer in use. Any printers do not have this feature.

❷ Buy Now

You can order replacement toner cartridge(s) online.

❸ Troubleshooting Guide

You can view Help to solve problems.

❹ Printer Setting

You can configure various printer settings in the Printer Settings Utility window. Any printers do not have this feature.

NOTE: If your printer is connected to a network and you are a Windows user, the **SyncThru Web Service** window appears instead of the Printer Settings Utility window. Mac OS X and Linux do not support network environments.

❺ **Driver Setting (Only for Windows)**
You can use the printer properties window, which allows you to access all of the printer options you need for using your printer. For details, See "Printer Settings" on page 13.

Opening the Troubleshooting Guide

Using the troubleshooting guide, you can view solutions for error status problems.

Right-click (in Windows or Linux) or click (in Mac OS X) the Smart Panel icon and select **Troubleshooting Guide**.

Using Printer Settings Utility

Using the Printer Settings Utility, you can configure and check print settings.

1. Right-click (in Windows or Linux) or click (in Mac OS X) the Smart Panel icon and select **Printer Setting**.
2. Change the settings.
3. To send the changes to the printer, click the **Apply** button.

NOTES: If your printer is connected to a network, the **SyncThru Web Service** window appears instead of the Printer Settings Utility window.

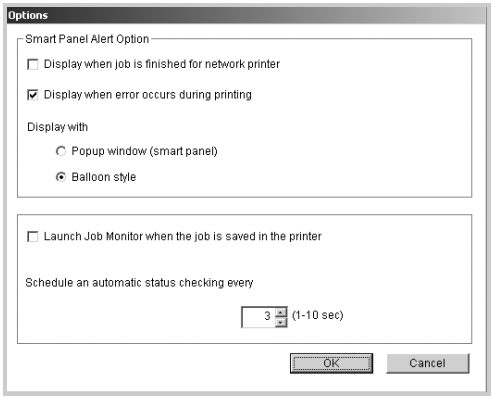
Using Onscreen Help File

For more information about **Printer Settings Utility**, click ? .

Changing the Smart Panel Program Settings

Right-click (in Windows or Linux) or click (in Mac OS X) the Smart Panel icon and select **Options**.

The following window opens.



- **Display when job is finished for network printer**: The computer shows the Smart Panel popup window or balloon when your job is complete in Windows. ***(Only for Windows network-supported printers.)***
- **Display when error occurs during printing**: The computer shows the Smart Panel popup window or balloon when an error occurs during printing.
- **Display with**: You can select how the computer shows you a message. If you select **Popup window (smart panel)**, the message appears in the Smart Panel popup window in Windows and Mac OS X.
- **Launch Job Monitor when the job is saved in the printer**: If you store print jobs on the printer's hard disk, the computer opens the Job Monitor window in Windows. ***(Only for Windows network-supported printers with built-in hard disks.)***
- **Schedule an automatic status checking every**: The computer updates the printer status regularly. Setting the value close to 1 second causes the computer to check the printer status more frequently, thereby allowing a faster response to any printer error.

7 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 Samsung SmarThru software or the WIA driver.

This chapter includes:

- **Scanning Using Samsung SmarThru Office**
- **Scanning Process with TWAIN-enabled Software**
- **Scanning Using the WIA**

NOTES:

- ***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's 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.***

Scanning Using Samsung SmarThru Office

Samsung SmarThru Office is the accompanying software for your machine. You can use SmarThru Office to scan images or documents from local or network scanners.

NOTE: You can use indexing and searching functions using SmarThru Office supported by Microsoft Indexing Service. This service is supported in Windows 2000 or above, so that Windows 98/ Me/ NT user can not use these functions.

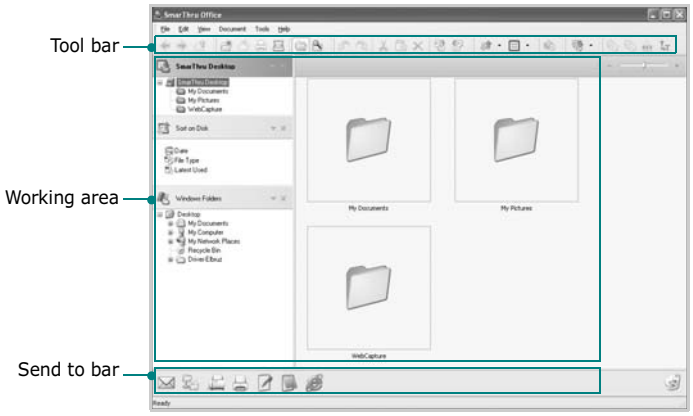
Using Samsung SmarThru Office

Follow these steps to start scanning using the SmarThru Office:

1. Make sure that your machine and computer are turned on and properly connected to each other.
2. Place your photograph or page on the document glass or ADF.
3. Once you have installed Samsung SmarThru, you will see the **SmarThru Office** icon on your desktop. Double-click the **SmarThru Office** icon.

Double-click this icon.

The **SmarThru Office** window opens.



- **Tool bar**: Allows you to use shortcut icons which activate the certain functions such as **Scan**, **Search**, etc.

•**Working area**

- **SmarThru Desktop**: Created within the standard Windows folder My Documents.

- **Sort on Disk**: Files of the folders which are not indexed will not be displayed in the Sort on Disk section. Sort type are Date, File Types, Latest Used.

To add a folder for indexing, press **Edit** menu → **Preferences** → **Index**.

NOTE: It may take longer time to show the added file folders according to the computer performance and the number of added file folders.

- **Windows Folders**: Allow user to navigate through all the user's files and folders.

- The right panel: Reflects the content of a selected folder.

•**Send to bar:** Run the corresponding application directly. Drag and drop selected files to the appropriate application button.

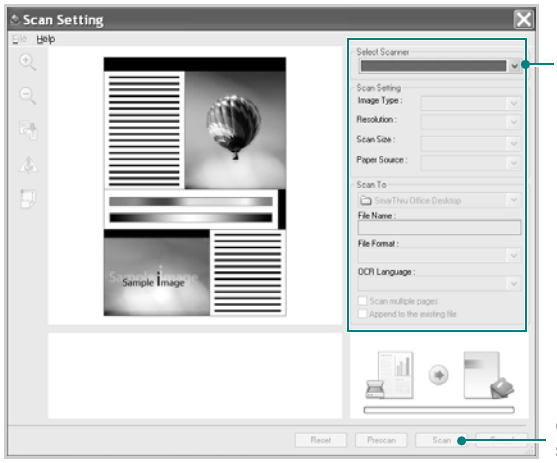
- **Send by E-mail**: To send documents by E-mail while working within the SmarThru Office.

NOTE: To send scanned images or documents by e-mail, you must have a mail client program, like Outlook Express, which has been set up with your e-mail account.

- **Send by FTP**: To upload a document file to server while working within the SmarThru Office.

- **Send by Fax**: To send documents by Local or Network fax machine while working within the SmarThru Office.

4 Click **Scan** on the tool bar of **SmarThru Office** window.



Adjust the scan settings.

Click to start scanning.

NOTES:

- In Windows XP operating system, you can use SmarThru Office launcher, which is on the right end of taskbar, to open the **Scan Setting** window easily.

- In other operating systems beside Windows XP, click the SmarThru icon in the tray area of the windows taskbar to activate the SmarThru Office launcher.

Scan Setting lets you use the following services:

•**Select Scanner:** Select the Local or Network scanner.

- Local Scan: After scanning with parallel port or USB port, you can store the scanned output in image or document file.

- Network Scan: After scanning via network, you can store the scanned output in jpeg, tiff, or pdf file.

NOTE: To use network scanner, your computer should install the **Network Scan Manager** and register the scanner within that program. Refer to Scanning chapter in user's guide.

•**Scan Setting**

Allows you to customize settings for Image type, Resolution, Scan Size, Paper Source.

•**Scan To**

Allows you to customize settings for File Name, File Format, OCR Language.

5 To start scanning, click **Scan**.

NOTE: If you want to cancel the scan job, click **Cancel**.

Uninstalling Samsung SmarThru Office

NOTE: Before beginning uninstallation, ensure that all applications are closed on your computer.

1. From the **Start** menu, select **Programs**.
2. Select **SmarThru Office**, and then select **Uninstall SmarThru Office**.
3. When your computer asks you to confirm, read the statement and click **OK**.
4. Click **Finish**.

Using Onscreen Help File

For more information about SmarThru, click Help menu at the top right corner of the window. The SmarThru Help window opens and allows you to view onscreen help supplied on the SmarThru program.

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 originals face up into the ADF, or place a single original face down on the scanner 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's guide of the application.

Scanning Using the WIA

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.

8 Using Your Printer in Linux

You can use your machine in a Linux environment.

This chapter includes:

- **Getting Started**
- **Installing the Unified Linux Driver**
- **Using the Unified Driver Configurator**
- **Configuring Printer Properties**
- **Printing a Document**
- **Scanning a Document**

Getting Started

The supplied CD-ROM provides you with Samsung's Unified Linux Driver package for using your machine with a Linux computer.

Samsung's Unified Linux 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 of the scanned documents.

After the driver is installed on your Linux system, the driver package allows you to monitor a number of machine devices via fast ECP parallel ports and USB simultaneously.

The acquired documents can then be edited, printed on the same local or network machine devices, sent by e-mail, uploaded to an FTP site, or transferred to an external OCR system.

The Unified Linux 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 Unified Linux Driver 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 Unified Linux Driver

Installing the Unified Linux 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:

   If the CD-ROM is secondary master and the location to mount is /mnt/cdrom,

   [root@localhost root]#mount -t iso9660 /dev/hdc /mnt/cdrom

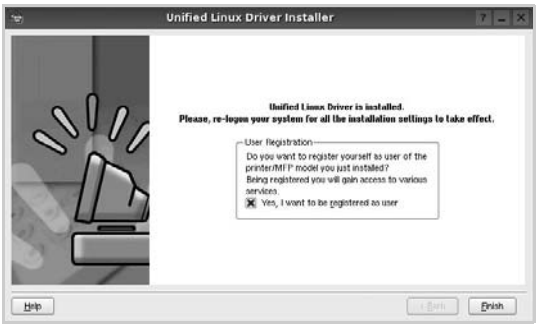
   [root@localhost root]#cd /mnt/cdrom/Linux

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

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

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

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



The installation program has added the Unified Driver Configurator desktop icon and Samsung Unified Driver 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 **Unified Driver Configurator** or **Image Manager**.

Uninstalling the Unified Linux 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.

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

If the CD-ROM is secondary master and the location to mount is /mnt/cdrom,

[root@localhost root]#mount -t iso9660 /dev/hdc /mnt/cdrom

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

[root@localhost root]#./uninstall.sh

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

3 Click **Uninstall**.

4 Click **Next**.

5 Click **Finish**.

Using the Unified Driver Configurator

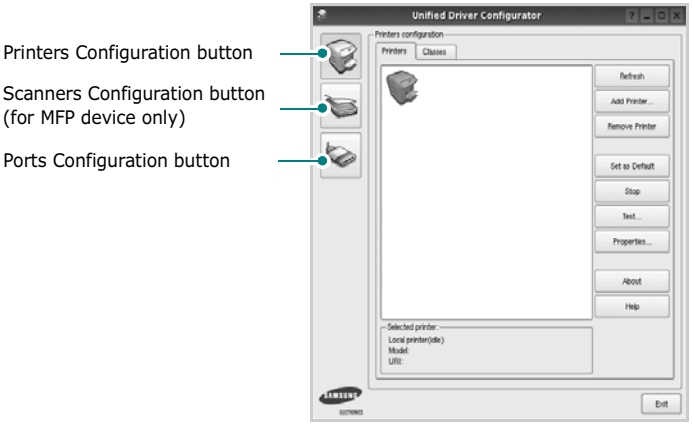
Unified Linux Driver Configurator is a tool primarily intended for configuring Printer or MFP devices. Since an MFP device combines the printer and scanner, the Unified Linux Driver Configurator provides options logically grouped for printer and scanner functions. There is also a special MFP port option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

After installing the Unified Linux driver, the Unified Linux Driver Configurator icon will automatically be created on your desktop.

Opening the Unified Driver Configurator

1. Double-click **Unified Driver Configurator** on the desktop.

   You can also click the Startup Menu icon and select **Samsung Unified Driver** and then **Unified Driver Configurator**.
2. Press each button on the Modules pane to switch to the corresponding configuration window.



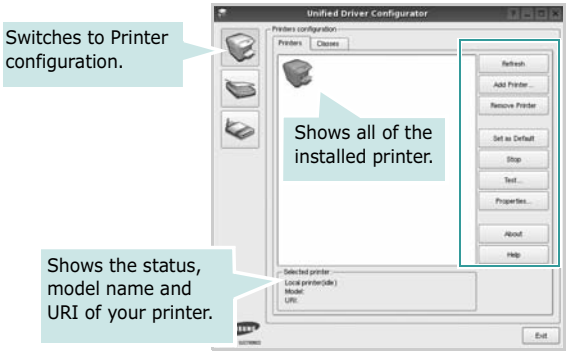
   You can use the onscreen help by clicking **Help**.
3. After changing the configurations, click **Exit** to close the Unified Driver Configurator.

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 Unified Driver Configurator window.

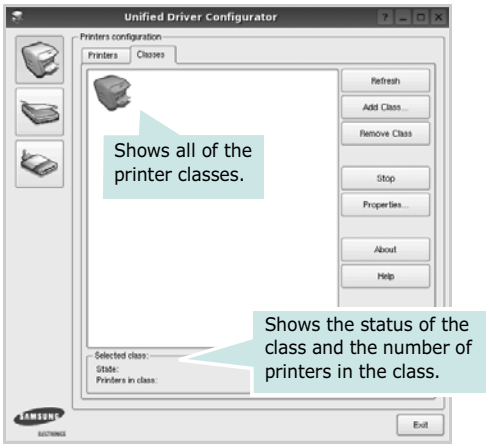


You can use the following printer control buttons:

- **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**/**Start**: stops/starts 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 page 34.

Classes Tab

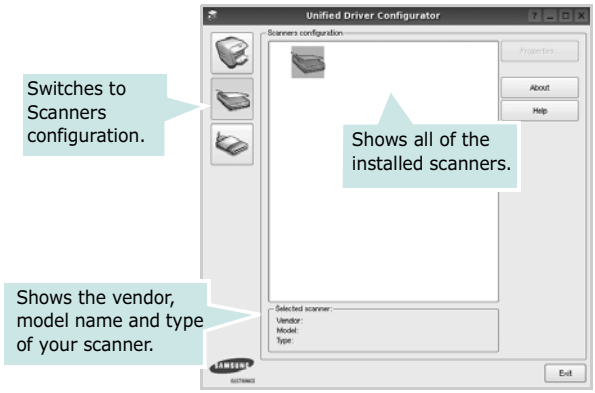
The Classes tab shows a list of available printer classes.



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

Scanners Configuration

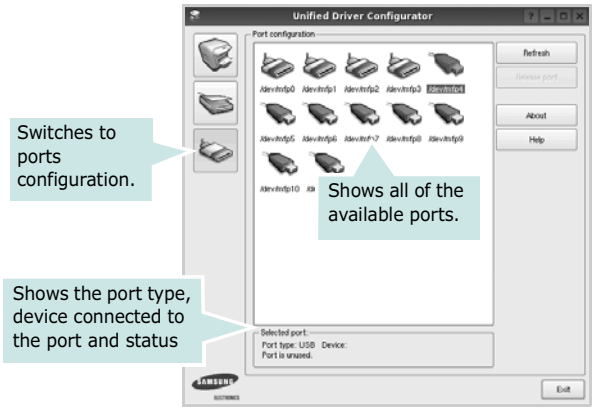
In this window, you can monitor the activity of scanner devices, view a list of installed Samsung MFP devices, change device properties, and scan images.



- **Properties...** : Allows you to change the scan properties and scan a document. See page 35.
- **Drivers... :** Allows you to monitor the activity of the scan drivers.

Ports Configuration

In this window, you can view the list of available ports, check the status of each port and release a port that is stalled in busy state when its owner is terminated for any reason.



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

Sharing Ports Between Printers and Scanners

Your machine may 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 Samsung Unified Linux Driver package provides an appropriate port sharing mechanism that is used by Samsung 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 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 device onto your system, it is strongly recommended you do this with the assistance of an Unified Driver 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

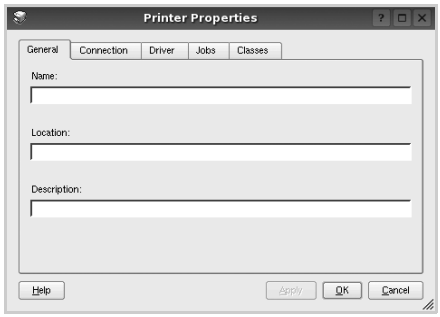
Using the properties window provided by the Printers configuration, you can change the various properties for your machine as a printer.

1 Open the Unified Driver Configurator.

If necessary, switch to Printers configuration.

2 Select your machine on the available printers list and click **Properties**.

3 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. By clicking **Options**, you can 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.

4 Click **OK** to apply the changes and close the Printer Properties Window.

Printing a Document

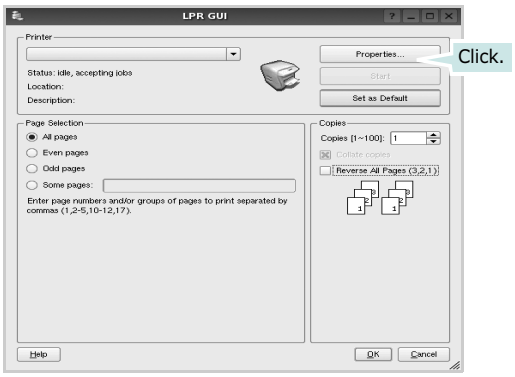
Printing from Applications

There are a lot of Linux applications that you are allowed to print from using Common UNIX Printing System (CUPS). You can print on your machine from any such application.

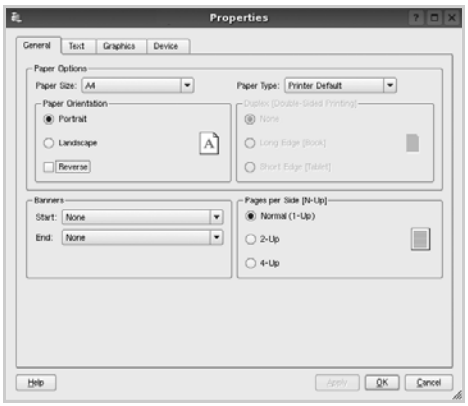
1 From the application you are using, select **Print** from the **File** menu.

2 Select **Print** directly using **lpr**.

3 In the LPR GUI 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 **Apply** to apply the changes and close the Properties window.

6 Click **OK** in the LPR GUI window to start printing.

7 The Printing window appears, allowing you to monitor the status of your print job.

To abort the current job, click **Cancel**.

Printing Files

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

To print any document file:

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

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

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

For details about the properties window, see page 34.

3 Click **OK** to start printing.

Scanning a Document

You can scan a document using the Unified Driver Configurator window.

1 Double-click the Unified Driver 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.

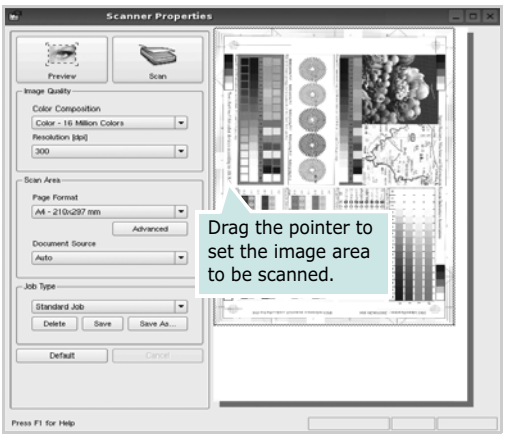
If you have two or more scanners attached to your computer, you can select any scanner to work at any time. For example, while acquisition is in progress on the first scanner, you may select the second scanner, set the device options and start the image acquisition simultaneously.

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.

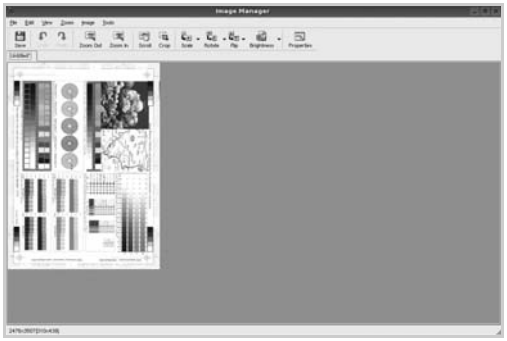
If you want to use one of the preset scan option settings, select from the Job Type drop-down list. For details about the preset Job Type settings, see page 36.

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 you the progress of the scan. To cancel scanning, click **Cancel**.

9 The scanned image appears in the new Image Manager tab.



If you want to edit the scanned image, use the toolbar. For further details about editing an image, see page 36.

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**.

Your setting is added 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 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:

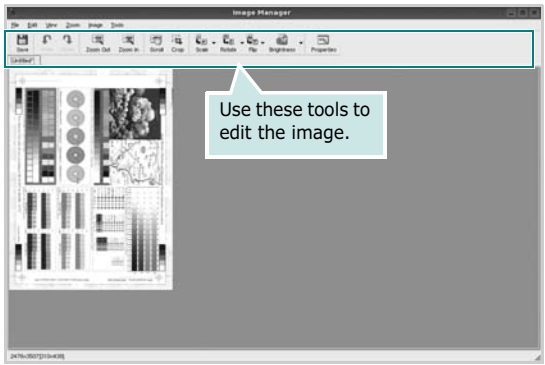
1 Select the setting you want to delete from the Job Type drop-down list.

2 Click **Delete**.

The setting is deleted from the list

Using the Image Manager

The Image Manager application 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 Manager application, refer to the onscreen help.

9 Using Your Printer with a Macintosh

Your machine supports Macintosh systems with a built-in USB interface or a 10/100 Base-TX network interface card. When you print a file from a Macintosh computer, you can use the PostScript driver by installing the PPD file.

NOTE: ***Some printers do not support a network interface. Make sure that your printer supports a network interface by referring to Printer Specifications in your Printer User's Guide.***

This chapter includes:

- **Installing Software for Macintosh**
- **Setting Up the Printer**
- **Printing**
- **Scanning**

Installing Software for Macintosh

The PostScript driver CD-ROM that came with your machine provides you with the PPD file to use the PS driver, Apple LaserWriter driver, for printing on a Macintosh computer.

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

1. Connect your machine to the computer using the USB cable or the Ethernet cable.
2. Turn on your computer and the machine.
3. Insert the CD-ROM which came with your printer into the CD-ROM drive.
4. Double-click the **Samsung MFP** on your Macintosh desktop.
5. Double-click the **MAC_Installer** folder.
6. Double-click the **MAC_Printer** folder.
7. For Mac OS 10.3 or higher, double-click the **Samsung MFP Installer OSX** icon.
8. Click **Continue**.
9. Click **Install**.
10. After the installation is finished, click **Quit**.

Uninstalling the printer 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 **Samsung MFP** on your Macintosh desktop.
4. Double-click the **MAC_Installer** folder.
5. Double-click the **MAC_Printer** folder.
6. Double-click the **Samsung MFP Installer OSX** icon.
7. Select **Uninstall** from the Installation Type and then Click **Uninstall**.
8. Click **Continue**.
9. When the uninstallation is done, click **Quit**.

Install the Scan 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 **MAC_Installer** folder.
5. Double-click the **MAC_Twain** folder.
6. Double-click the **Samsung ScanThru Installer** icon.
7. Enter the password and click **OK**.
8. Click **Continue**.
9. Click **Install**.
10. Click **Continue**.
11. After the installation is finished, 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 **MAC_Installer** folder.
4. Double-click the **MAC_Twain** folder.
5. Double-click the **Samsung 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. Click **Continue**.
10. When the uninstallation is done, click **Quit**.

Setting Up the Printer

Set up for your printer will be different depending on which cable you use to connect the printer to your computer—the network cable or the USB cable.

For a Network-connected Macintosh

NOTE: ***Some printers do not support a network interface. Before connecting your printer, make sure that your printer supports a network interface by referring to Printer Specifications in your Printer User's Guide.***

1. Follow the instructions on "Installing Software for Macintosh" on page 38 to install the PPD file on your computer.
2. Open **Print Center** or **Printer Setup Utility** from the Utilities folder.
3. Click **Add** on the Printer List.
4. Select the **AppleTalk** tab.

   The name of your machine appears on the list. Select **SEC000xxxxxxxxx** from the printer box, where the **xxxxxxxxx** varies depending on your machine.
5. Click **Add**.
6. If Auto Select does not work properly, select **Samsung** in **Printer Model** and **your printer name** in **Model Name**.

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

For a USB-connected Macintosh

1. Follow the instructions on "Installing Software for Macintosh" on page 38 to install the PPD file on your computer.
2. Open **Print Center** or **Printer Setup Utility** from the Utilities folder.
3. Click **Add** on the Printer List.
4. Select the **USB** tab.
5. Select **your printer name** and click **Add**.
6. If Auto Select does not work properly, select **Samsung** in **Printer Model** and **your printer name** in **Model Name**.

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

Printing

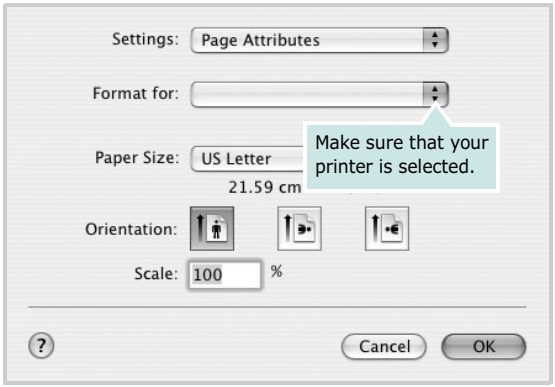
NOTES:

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



▲ Mac OS 10.3

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.

Changing Printer Settings

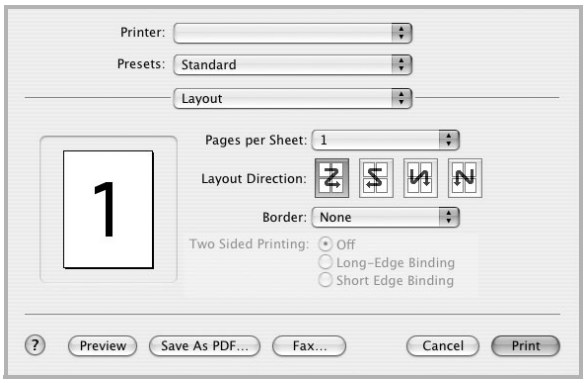
You can use advanced printing features when using your printer.

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. Except for the name, the composition of the printer properties window is similar.

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

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

Image Mode

Image Mode allows the user to enhance printouts. The available options are Normal and Text Enhance.

Fit to Page

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.

Paper Type

Set **Type** to correspond to the paper loaded in the tray from which you want to print. This will let you get the best quality printout. If you load a different type of print material, select the corresponding paper type.

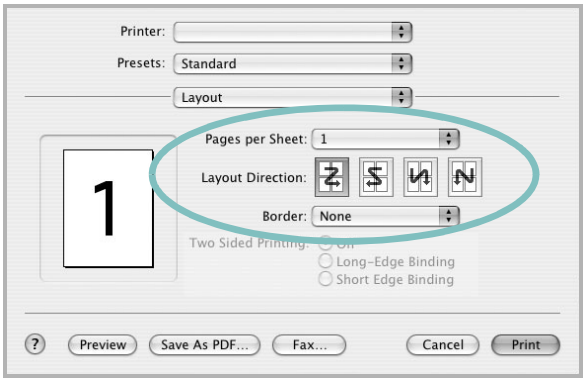
Resolution(Quality)

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

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.

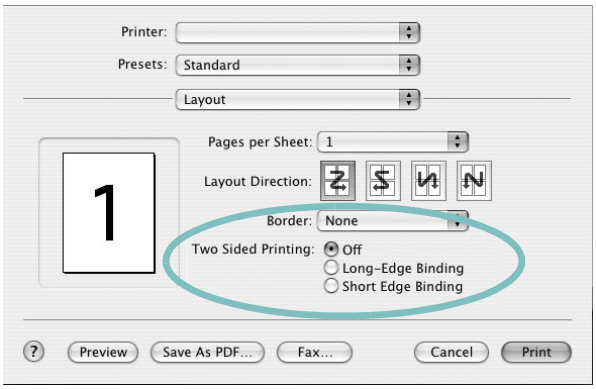
Duplex Printing

You can print on both sides of the paper. Before printing in the duplex mode, decide on which edge you will be binding your finished document. The binding options are:

Long-Edge Binding: Which is the conventional layout used in book binding.

Short-Edge Binding: Which is the type often used with calendars.

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



▲ Mac OS 10.3

3. Select a binding orientation from **Two Sided Printing** option.
4. Click **Print** and the printer prints on both sides of the paper.

CAUTION: If you have selected duplex printing and then try to print multiple copies of a document, the printer may not print the document in the way you want. In case of "Collated copy" , if your document has odd pages, the last page of the first copy and the first page of the next copy will be printed on the front and back of one sheet. In case of "Uncollated copy", the same page will be printed on the front and back of one sheet. Therefore, if you need multiple copies of a document and you want those copies on both sides of the paper, you must print them one at a time, as separate print jobs.

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 involves a number of 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's Guide of the application.

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