

CLX-6220 Series
CLX-6250 Series

Multi-Functional Printer

User's Guide

imagine the possibilities

Thank you for purchasing a Samsung product.

The Samsung logo, consisting of the word "SAMSUNG" in white, uppercase, sans-serif font, centered within a blue, horizontally-oriented oval shape.

SAMSUNG

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REV. 2.00

safety information

These warnings and precautions are included in order to prevent injury to you and others, as well as preventing any potential damage to your machine. Be sure to read and understand all of these instructions before using the machine.

Use common sense for operating any electrical appliance and whenever using your machine. Also, follow all warnings and instructions marked on the machine and in the accompanying literature. After reading this section, keep it in a safe place for future reference.

Important safety symbols

This section explains the meanings of all icons and signs in the user's guide. These safety symbols are in order, according to the degree of danger.

Explanation of all icons and signs used in the user's guide:

	Warning	Hazards or unsafe practices that may result in severe personal injury or death.
	Caution	Hazards or unsafe practices that may result in minor personal injury or property damage.
		Do not attempt.
		Do not disassemble.
		Do not touch.
		Unplug the power cord from the wall socket.
		Make sure the machine is grounded to prevent electric shock.
		Call the service center for help.
		Follow directions explicitly.

Operating environment

Warning



Do not use if the power cord is damaged or if the electrical outlet is not grounded.

► This could result in electric shock or fire.



Do not bend, or place heavy objects on the power cord.

► Stepping on or allowing the power cord to be crushed by a heavy object could result in electric shock or fire.



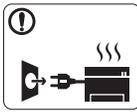
Do not place anything on top of the machine (water, small metal or heavy objects, candles, lit cigarettes, etc.).

► This could result in electric shock or fire.



Do not remove the plug by pulling on the cord; do not handle the plug with wet hands.

► This could result in electric shock or fire.



If the machine gets overheated, it releases smoke, makes strange noises, or generates an odd odor, immediately turn off the power switch and unplug the machine.

► This could result in electric shock or fire.

Caution



During an electrical storm or for a period of non-operation, remove the power plug from the electrical outlet.

► This could result in electric shock or fire.

-  Be careful, the paper output area is hot.
 - Burns could occur.

-  If the machine has been dropped, or if the cabinet appears damaged, unplug the machine from all interface connections and request assistance from qualified service personnel.
 - Otherwise, this could result in electric shock or fire.

-  If the machine exhibits a sudden and distinct change in performance, unplug the machine from all interface connections and request assistance from qualified service personnel.
 - Otherwise, this could result in electric shock or fire.

-  If the plug does not easily enter the electrical outlet, do not attempt to force it in.

► Call an electrician to change the electrical outlet, or this could result in electric shock.

-  Do not allow pets to chew on the AC power, telephone or PC interface cords.
 - This could result in electric shock or fire and/or injury to your pet.

-  If the machine does not operate properly after these instructions have been followed, unplug the machine from all interface connections and request assistance from qualified service personnel.
 - Otherwise, this could result in electric shock or fire.

Operating method

Caution



Do not forcefully pull the paper out during printing.

- It can cause damage to the machine.



Be careful not to put your hand between the machine and paper tray.

- You may get injured.

-  Do not block or push objects into the ventilation opening.
 - This could result in elevated component temperatures which can cause damage or fire.
-  Use care to avoid paper cuts when replacing paper or removing jammed paper.
 - You may get hurt.



When printing large quantities, the bottom part of the paper output area may get hot. Do not allow children to touch.

► Children may be burned.



When removing jammed paper, do not use tweezers or sharp metal objects.

► It can cause damage to the machine.

-  Do not allow too many papers to stack up in the paper output tray.
 - It could cause damage to the machine.
-  This machine's power interception device is the power cord.
 - To switch off the power supply, remove the power cord from the electrical outlet.

Installation / Moving

Warning



Do not place the machine in an area with dust, humidity or water leaks.

▶ This could result in electric shock or fire.

Caution



When moving the machine, turn the power off and disconnect all cords; then lift the machine with at least two people.

▶ The machine could fall, causing human injury or machine damage.

-  Do not place the machine on an unstable surface.
▶ The machine could fall, causing human injury or machine damage.
-  The machine should be connected to the power level which is specified on the label.
▶ If you are unsure and want to check the power level you are using, contact the electrical utility company.
-  Use only No.26 AWG^a or larger, telephone line cord, if necessary.
▶ Otherwise, it can cause damage to the machine.

-  Do not put a cover over the machine or place it in an airtight location, such as a closet.
▶ If the machine is not well-ventilated, this could result in fire.

-  Make sure you plug the power cord into a grounded electrical outlet.
▶ Otherwise, this could result in electric shock or fire.

-  Do not overload wall outlets and extension cords.
▶ This can diminish performance, and could result in electric shock or fire.

-  Use the power cord supplied with your machine for safe operation. If you are using a cord which is longer than 2 meters (79") with a 140V machine, then the gauge should be 16 AWG or larger.
▶ Otherwise, it can cause damage to the machine, and could result in electric shock or fire.

a. AWG: American Wire Gauge

Maintenance / Checking

Caution



Unplug this product from the wall outlet before cleaning the inside of the machine. Do not clean the machine with benzene, paint thinner or alcohol; do not spray water directly into the machine.

▶ This could result in electric shock or fire.



Keep cleaning supplies away from children.

▶ Children may get hurt.



When you are working inside the machine replacing supplies or cleaning the inside, do not operate the machine.

▶ You may get injured.



Do not disassemble, repair or rebuild the machine by yourself.

▶ It can cause damage to the machine. Call a certified technician when the machine needs repair.

- ⓘ Keep the power cable and the contact surface of the plug clean from dust or water.
 - ▶ This could result in electric shock or fire.

- ⊘ Do not remove any covers or guards that are fastened with screws.
 - ▶ The machine should only be repaired by Samsung service technician.

- ⓘ To clean and operate the machine, strictly follow the user's guide provided with the machine.
 - ▶ Otherwise, it can cause damage to the machine.

Supply usage

Caution



- Do not disassemble the toner cartridge.
- ▶ Toner dust can be dangerous to humans.



- Do not burn any of the supplies such as toner cartridge or fuser unit.
- ▶ It can cause an explosion or fire.

- ⓘ When changing the toner cartridge or removing jammed paper, be careful not to let toner dust touch your body or clothes.
 - ▶ Toner dust can be dangerous to humans.



- When storing supplies such as toner cartridges, keep them away from children.
- ▶ Toner dust can be dangerous to humans.

- ⊘ Using recycled supplies, such as toner, can cause damage to the machine.
 - ▶ In case of damage due to the use of recycled supplies, a service fee will be charged.

regulatory information

This machine is certified with several regulatory statements.

Laser Safety Statement

The printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR, chapter 1 Subchapter J for Class I(1) laser products, and elsewhere is certified as a Class I laser product conforming to the requirements of IEC 60825-1:1993 + A1:1997 + A2:2001.

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

- **Wavelength:** 800 nm
- **Beam divergence**
 - **Paraller:** 11 degrees
 - **Perpendicular:** 35 degrees
- **Maximum power or energy output:** 12 mW

WARNING

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

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



CAUTION - CLASS 3B LASER RADIATION WHEN OPEN
AVOID EXPOSURE TO THE BEAM.

DANGER - LASER RADIATION AVOID DIRECT
EXPOSURE TO BEAM.

DANGER - RADIATIONS INVISIBLES DU LASER EN CAS
D'OUVERTURE. EVITER TOUTE EXPOSITION
DIRECTE AU FAISCEAU.

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

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

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

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

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

ADVARSEL - USYNLIG LASERSTRÅLNING VED ÅBNING.
UNNGÅ UDSÆTTELSE FOR STRÅLNING.

ADVARSEL - USYNLIG LASERSTRÅLNING NÅR DEKSEL
ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.

VARNING - OSYNLIG LASERSTRÅLNING NÅR DENNA DEL
ÄR ÖPPEN. STRÅLEN ÄR FARLIG.

VAROITUS - NÄKYMÄTÖNTÄ LASERSÄTEILYÄ AVATTAESSA.
VARO SUORAA ALTISTUMISTA SÄTEELLE.

注 意 - 严禁揭开此盖, 以免激光泄露灼伤

주 의 - 이 덮개를 열면 레이저광에 노출될 수 있으므로
주의하십시오.

Taiwan only

警告使用者：

此為甲類資訊技術設備，於居住環境中使用時，可能會造成射頻擾動，在此種情況下，使用者會被要求採取某此適當的對策。

Ozone Safety



During normal operation, this machine produces ozone. The ozone produced does not present a hazard to the operator. However, it is advisable that the machine be operated in a well ventilated area.
If you need additional information about ozone, request your nearest Samsung dealer.

Mercury Safety



Contains Mercury, Dispose According to Local, State or Federal Laws. (U.S.A. only)

Power Saver



This printer contains advanced energy conservation technology that reduces power consumption when it is not in active use. When the printer does not receive data for an extended period of time, power consumption is automatically lowered. ENERGY STAR and the ENERGY STAR mark are registered U.S. marks.
For more information on the ENERGY STAR program see <http://www.energystar.gov>.

Recycling



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

China only

回收和再循环

为了保护环境，我公司已经为废弃的产品建立了回收和再循环系统。
我们会为您无偿提供回收同类废旧产品的服务。
当您要废弃您正在使用的产品时，请您及时与工厂取得联系，
我们会及时为您提供服务。

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

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



This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

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

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

Correct disposal of batteries in this product

(Applicable in the European Union and other European countries with separate battery return systems.)



This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

Radio Frequency Emissions

FCC Information to the User

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

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

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

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



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

Canadian Radio Interference Regulations

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

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

UNITED STATES OF AMERICA

Federal Communications Commission (FCC)

Intentional emitter per FCC Part 15

Low power, Radio LAN type devices (radio frequency (RF) wireless communication devices), operating in the 2.4 GHz/5 GHz Band, may be present (embedded) in your printer system. This section is only applicable if these devices are present. Refer to the system label to verify the presence of wireless devices.

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

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

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

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

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

FCC Statement for Wireless LAN use:

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

Taiwan only

低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Turkey only

- RoHS

EEE Yönetmeliğine Uygundur.
This EEE is compliant with RoHS.

- Bu ürünün ortalama yaşam süresi 7 yıl, garanti süresi 2 yıldır.



Fax Branding

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

1. the date and time of transmission
2. identification of either business, business entity or individual sending the message; and
3. telephone number of either the sending machine, business, business entity or individual.

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

Ringer Equivalence Number

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

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

The equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the rear of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.

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

- a) promptly notify the customer.
- b) give the customer an opportunity to correct the equipment problem.
- c) inform the customer of the right to bring a complaint to the Federal Communication Commission pursuant to procedures set out in FCC Rules and Regulations Subpart E of Part 68.

You should also know that:

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

You may safely connect this equipment to the telephone network by means of a standard modular jack, USOC RJ-11C.

Replacing the Fitted Plug (for UK Only)

Important

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

Contact the people from you purchased the machine.

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



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

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

Important warning:



You must earth this machine.

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

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

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

You must connect the green and yellow wire to the pin marked by the letter “E” or by the safety ‘Earth symbol’ or colored green and yellow or green.

You must connect the blue wire to the pin which is marked with the letter “N” or colored black.

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

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

Declaration of Conformity (European Countries)



Approvals and Certifications

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

Hereby, Samsung Electronics declare that this product is in compliance with the essential requirements and other relevant provisions of: R&TTE Directive (1999/5/EC)

The declaration of conformity may be consulted at www.samsung.com/printer, go to Support > Download center and enter your printer (MFP) name to browse the EuDoC.

January 1, 1995: Council Directive 2006/95/EC Approximation of the laws of the member states related to low voltage equipment.

January 1, 1996: Council Directive 2004/108/EC (92/31/EEC), approximation of the laws of the Member States related to electromagnetic compatibility.

March 9, 1999: Council Directive 1999/5/EC on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity. A full declaration, defining the relevant Directives and referenced standards can be obtained from your Samsung Electronics Co., Ltd. representative.

EC Certification

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

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

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

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

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

Low power, Radio LAN type devices (radio frequency (RF) wireless communication devices), operating in the 2.4 GHz/5 GHz band, may be present (embedded) in your printer system which is intended for home or office use. This section is only applicable if these devices are present. Refer to the system label to verify the presence of wireless devices.

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

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

European States qualified under wireless approvals:

EU Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France (with frequency restrictions), Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden and the U.K.

EEA/EFTA countries Iceland, Liechtenstein, Norway and Switzerland

European States with restrictions on use:

EU In France, the frequency range is restricted to 2446.5-2483.5 MHz for devices above 10 mW transmitting power such as wireless
In Italy, if used outside of own premises, general authorization is required
In Russian, only for indoor applications

EEA/EFTA countries No limitations at this time.

REGULATORY COMPLIANCE STATEMENTS

Wireless Guidance

Low power, Radio LAN type devices (radio frequency (RF) wireless communication devices), operating in the 2.4 GHz/5 GHz Band, may be present (embedded) in your printer system. The following section is a general overview of considerations while operating a wireless device. Additional limitations, cautions, and concerns for specific countries are listed in the specific country sections (or country group sections). The wireless devices in your system are only qualified for use in the countries identified by the Radio Approval Marks on the system rating label. If the country you will be using the wireless device in, is not listed, contact your local Radio Approval agency for requirements. Wireless devices are closely regulated and use may not be allowed.

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

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

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

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

-  Radio frequency wireless communication can interfere with equipment on commercial aircraft. Current aviation regulations require wireless devices to be turned off while traveling in an airplane. IEEE 802.11 (also known as wireless Ethernet) and Bluetooth communication devices are examples of devices that provide wireless communication.
-  In environments where the risk of interference to other devices or services is harmful or perceived as harmful, the option to use a wireless device may be restricted or eliminated. Airports, Hospitals, and Oxygen or flammable gas laden atmospheres are limited examples where use of wireless devices may be restricted or eliminated. When in environments where you are uncertain of the sanction to use wireless devices, ask the applicable authority for authorization prior to use or turning on the wireless device.
-  Every country has different restrictions on the use of wireless devices. Since your system is equipped with a wireless device, when traveling between countries with your system, check with the local Radio Approval authorities prior to any move or trip for any restrictions on the use of a wireless device in the destination country.
-  If your system came equipped with an internal embedded wireless device, do not operate the wireless device unless all covers and shields are in place and the system is fully assembled.
-  Wireless devices are not user serviceable. Do not modify them in any way. Modification to a wireless device will void the authorization to use it. Contact manufacturer for service.
-  Only use drivers approved for the country in which the device will be used. See the manufacturer System Restoration Kit, or contact manufacturer Technical Support for additional information.

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3. All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)."
4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
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部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr ⁶⁺)	多溴联苯 (PBB)	多溴联苯醚 (PBDE)
塑料	○	○	○	○	○	○
金属 (机箱)	X	○	○	○	○	○
印刷电路部件 (PCA)	X	○	○	○	○	○
电缆 / 连接器	X	○	○	○	○	○
电源设备	X	○	○	○	○	○
电源线	X	○	○	○	○	○
机械部件	X	○	○	○	○	○
卡盒部件	X	○	○	○	○	○
定影部件	X	○	○	○	○	○
扫描仪部件 - CCD (如果有)	X	X	○	○	○	○
扫描仪部件 - 其它 (如果有)	X	○	○	○	○	○
印刷电路板部件 (PBA)	X	○	○	○	○	○
墨粉	○	○	○	○	○	○
滚筒	○	○	○	○	○	○

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about this user's guide

This user's guide provides information about how to use the machine. Both novice and professional users can refer to this as a guide for installing and using the machine.



- Read the safety information before using the machine.
- If you have a problem using the machine, refer to the troubleshooting chapter (See "Troubleshooting" on page 1).
- Terms used in this user's guide are explained in the glossary chapter (See "Glossary" on page 1).
- All illustrations in this user's guide may differ from your machine depending on its options or models.
- The procedures in this user's guide are mainly based on Windows XP.

Convention

Some terms in this guide are used interchangeably, as below:

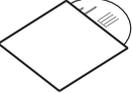
- Document is synonymous with original.
- Paper is synonymous with media, or print media.
- Machine refers to printer or MFP.

The following table offers the conventions of this guide:

Convention	Description	Example
Bold	For texts on the display or button names on the machine.	Start
Note	Provides additional information or detailed specification of the machine function and feature.	 The date format may differ from country to country.
Caution	Gives users information to protect the machine from possible mechanical damage or malfunction.	 Do not touch the green surface of the toner cartridge.
Footnote	Provides additional more detailed information on certain words or a phrase.	a. pages per minute
("Cross-reference")	Guides users to a reference page for the additional detailed information.	(See Finding more information)

Finding more information

You can find information for setting up and using your machine from the following resources, either as a print-out or on screen.

Material name	Description
Quick Install Guide 	This guide provides basic information on setting up your machine.
User's Guide 	This guide provides you with step-by-step instructions for using your machine's full features, and contains information for maintaining your machine, troubleshooting and replacing supplies.
Driver Help 	This help provides you with help information on printer driver and instructions for setting up the options for printing (See "Using help" on page 3).
Samsung website	If you have Internet access, you can get help, support, machine drivers, manuals, and order information from the Samsung website, www.samsung.com/printer .
Downloadable software	You can download useful software from the Samsung website. <ul style="list-style-type: none">• SyncThru™ Web Admin Service: convenient for network administrators who need to manage many machines simultaneously. This program is for network model only. (http://solution.samsungprinter.com)• Samsung AnyWeb Print: helps personal users to screen-capture the website screen in Windows Internet Explorer easily. (http://solution.samsungprinter.com/personal/anywebprint)• Samsung Easy Color Manager: helps Samsung color laser printer users to adjust color as they like. (http://solution.samsungprinter.com/personal/colormanager)• XPS printer driver: used to print documents in XPS print path. XPS printer driver can be installed only on Windows Vista or higher. (http://www.samsung.com/printer)

features of your new product

Your new machine is equipped with a number of special features that improve the quality of the documents you print.

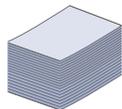
Special Features

Print with excellent quality and speed



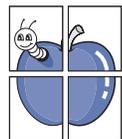
- You can print in a full range of colors using cyan, magenta, yellow, and black.
- You can print with a resolution of up to 9,600 x 600 dpi effective output.
- CLX-6220 Series prints up to 20 ppm, A4-sized paper or up to 21 ppm, letter sized paper.
- CLX-6250 Series prints up to 24 ppm, A4-sized paper or up to 25 ppm, letter sized paper.

Handle many different types of printable material



- The multi-purpose tray supports envelopes, labels, custom-sized media, postcards, and heavy paper.
- The tray 1 and optional tray support plain paper in various sizes (See "Print media specifications" on page 3).

Create professional documents (Windows only)



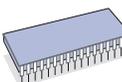
- Print Watermarks. You can customize your documents with words, such as "Confidential" (See "Using watermarks" on page 5).
- Print Posters. The text and pictures of each page of your document are magnified and printed across the sheet of paper and can then be taped together to form a poster (See "Printing posters" on page 3).
- You can use preprinted forms with plain paper (See "Using overlay (PCL driver only)" on page 5).

Save time and money



- To save paper, you can print multiple pages on one single sheet of paper (See "Printing multiple pages on one sheet of paper" on page 3).
- This machine automatically conserves electricity by substantially reducing power consumption when not in use.
- To save paper, you can print on both sides of the paper (double-sided printing) (See "Printing on both sides of paper" on page 4).

Expand your machine's capacity



- Your machine has an extra memory slot to expand the memory (See "Available accessories" on page 2).
- Zoran IPS Emulation* compatible with PostScript 3 (PS) enables PS printing.

ZORAN* Zoran IPS Emulation compatible with PostScript 3:

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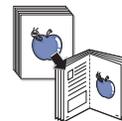
136 PS3 fonts: Contains UFST and MicroType from Monotype Imaging Inc.

Print in various environments



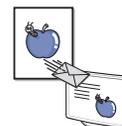
- You can print with various operating system such as Windows, Linux, Macintosh and UNIX systems (See "System requirements" on page 2).
- Your machine is equipped with a USB interface and a network interface.

Copy originals in several formats



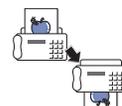
- Your machine can copy multiple image copies from the original document on a single page (See "2-up or 4-up copying (N-up)" on page 3).
- The print quality and image size may be adjusted and enhance at the same time.

Scan the originals and send it right away



- Scan in color and use the precise compressions of JPEG, TIFF and PDF formats.
- Quickly scan and send files to multiple destinations using Networks scanning (See "Sending a scanned image to several destinations as an email attachment" on page 2).

Set a specific time to transmit a Fax



- You can specify a certain time to transmit the fax and also send the fax to several stored destinations.
- After the transmission, the machine may print out the fax reports according to the setting.

Use USB flash memory devices



If you have a USB memory device, you can use it in various ways with your machine.

- You can scan documents and save them to the device.
- You can directly print data stored to the device.

IPv6



This machine supports IPv6.

Features by Models

The machine is designed to support all of your document needs from printing and copying to more advanced networking solutions for your business. **Some features and optional goods may not be available depending on models or countries.**

Features by models include:

FEATURES	CLX-6220 Series	CLX-6250 Series
USB 2.0	●	●
USB Memory Interface	●	●
Document Feeder	●	●
Hard Disk		○
Network Interface Ethernet 10/100 BaseTX wired LAN	●	●
Network Interface 802.11 b/g wireless LAN ^a		○
Duplex (2-sided) printing	●	●
FAX	●	●
Optional Tray 2	○	○

a. Depending on your country, wireless LAN cards may not be available. Contact your local Samsung dealer or the retailer where you bought your printer.

(●: Included, ○: Optional, Blank: Not available)

introduction

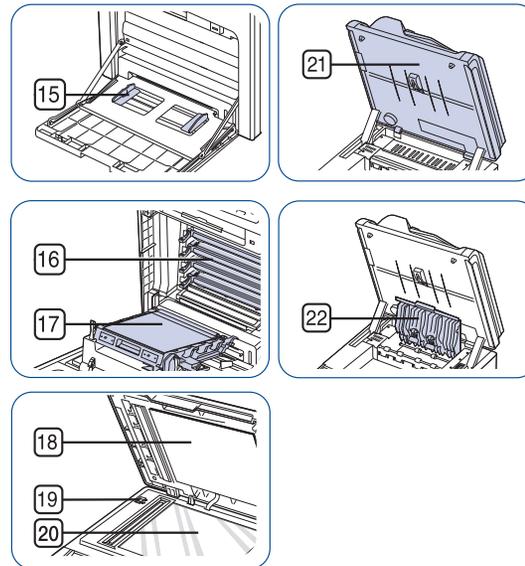
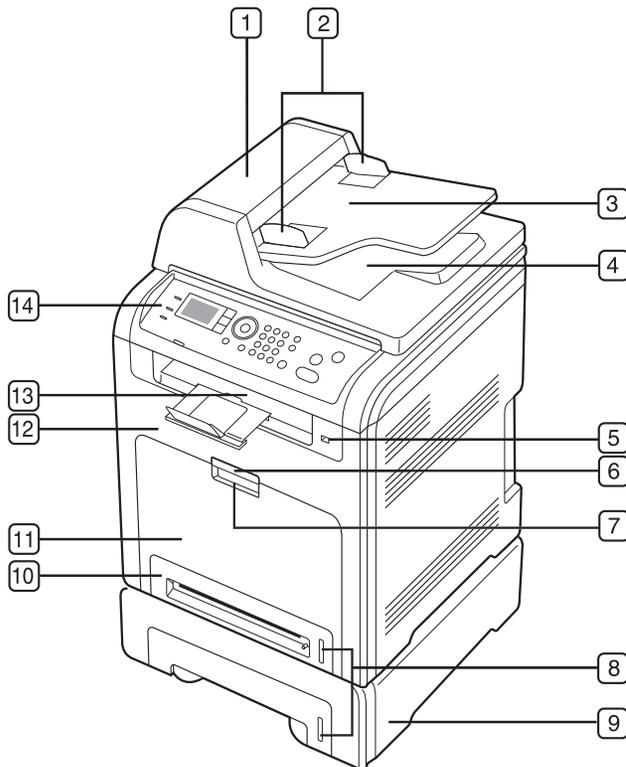
This chapter gives you an overview of your machine:

This chapter includes:

- Machine overview
- Control panel overview
- Understanding the Status LED
- Introducing the useful buttons

Machine overview

Front view

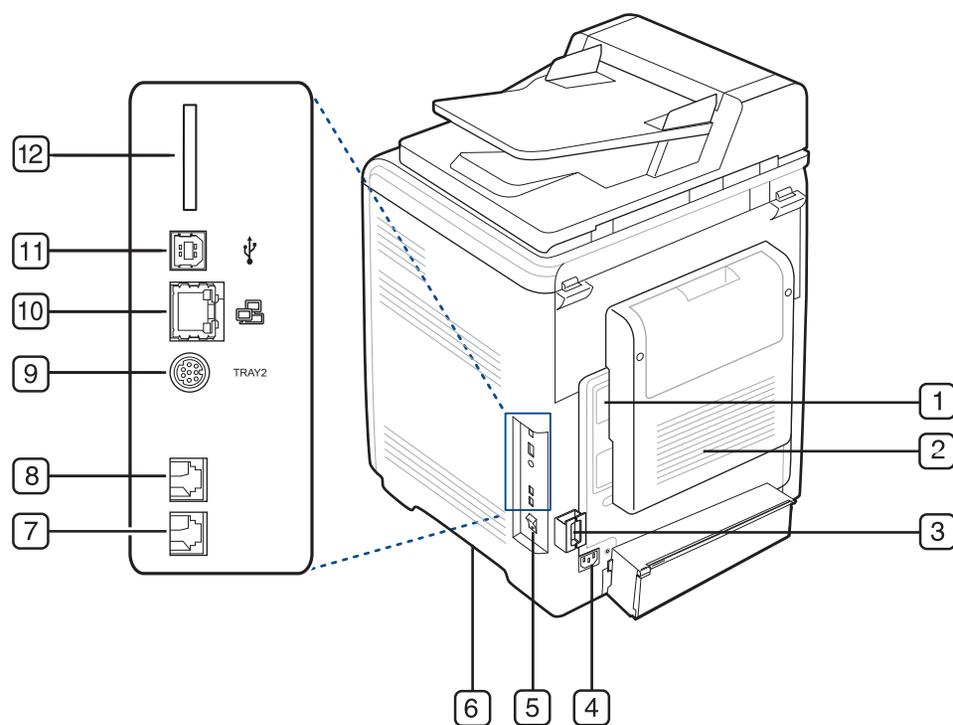


1 Document feeder cover	12 Front door
2 Document feeder width guides	13 Document output tray guides
3 Document feeder input tray	14 Control panel
4 Document feeder output tray	15 Multi-purpose tray paper width guides
5 USB memory port	16 Toner cartridges
6 Front door handle	17 Paper transfer belt
7 Multi-purpose tray handle	18 Scanner lid
8 Paper level indicator	19 Scanner lock switch

9 Optional tray 2 ^a	20 Scanner glass
10 Tray 1	21 Scan unit
11 Multi-purpose tray	22 Inner cover of the reverse unit.

a. Optional device.

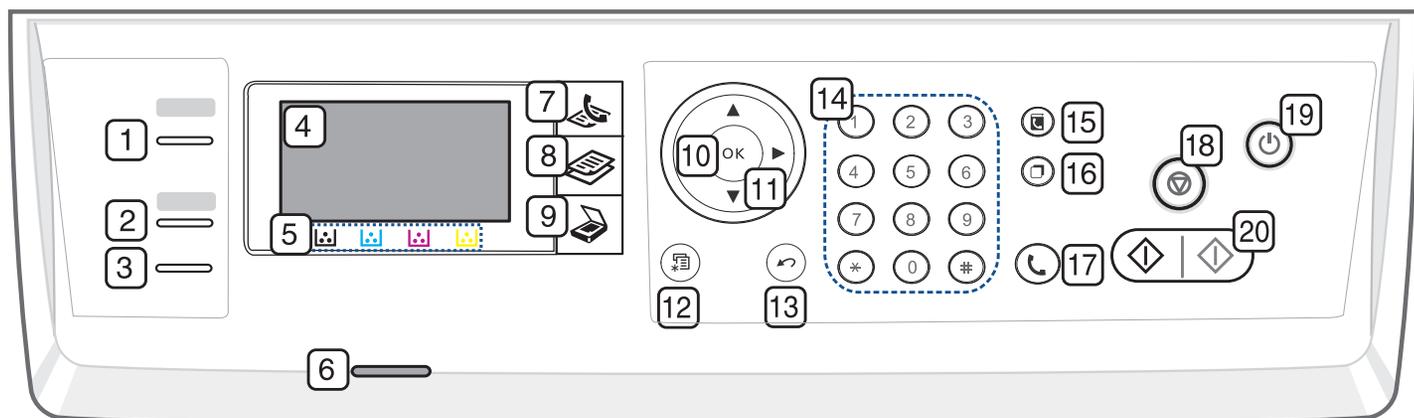
Rear view



1	Control board cover	7	Extension telephone socket (EXT)
2	Rear door	8	Telephone line socket
3	Cable organizer	9	Optional tray 2 cable connector
4	Power receptacle	10	Network port
5	Power-switch	11	USB port
6	Handle	12	IEEE 802.11 b/g Wireless LAN ^a

a. Optional device.

Control panel overview



1	ID Copy		You can copy both sides of an ID Card such as a driver's license to a single side of paper (See "ID card copying" on page 2).
2	Direct USB		Allows you to directly print files stores on a USB memory device when it is inserted into the USB memory port on your machine (See "About USB memory device" on page 1).
3	Duplex		Allows you to print documents on both sides of the paper.
4	Display screen		Shows the current status and prompts during an operation.
5	Toner colors		Show the status of each toner cartridge.
6	Status		Shows the status of your machine (See "Understanding the Status LED" on page 5).
7	Fax		Activates fax mode.
8	Copy		Activates copy mode.
9	Scan/Email		Activates scan mode.
10	OK		Confirms the selection on the screen.
11	Arrow		Scroll through the options available in the selected menu, and increase or decrease values.
12	Menu		Enters Menu mode and scrolls through the available menus (See "Machine status and advanced feature" on page 1).
13	Back		Sends you back to the upper menu level.
14	Numeric keypad		Dials fax number, and enters the number value for document copies or other options.
15	Address Book		Allows you to store frequently used fax numbers and email addresses or search for stored fax numbers or email addresses.
16	Redial/Pause		In standby mode, redials the last number. Also in edit mode, inserts a pause into a fax number.
17	On Hook Dial		Enable you dial a number with the receiver on the hook.
18	Stop/Clear		Stops an operation at any time. The pop-up window appears on the screen showing the current job that the user can stop or resume.
19	Power Saver		Sends the machine into power saver mode. If you press and hold this button, you can also turn the power on and off (See "Power Saver button" on page 5).

20

Start



Starts a job in black or color mode.

Understanding the Status LED

The color of the **Status** indicates the machine's current status.

Status		Description
Off		<ul style="list-style-type: none"> The machine is off-line.
Green	Blinking	<ul style="list-style-type: none"> When the backlight slowly blinks, the machine is receiving data from the computer. When the backlight blinks rapidly, the machine is printing data.
	On	The machine is on-line and can be used.
Red	Blinking	<ul style="list-style-type: none"> A minor error has occurred and the machine is waiting for the error to be cleared. Check the display message. When the problem is cleared, the machine resumes. A small amount of toner is left in the cartridge. The estimated cartridge life^a of toner is close. Prepare a new cartridge for replacement. You may temporarily increase the printing quality by redistributing the toner (See "Replacing the toner cartridge" on page 2, "Redistributing toner" on page 1).
	On	<ul style="list-style-type: none"> A toner cartridge has almost reached its estimated cartridge life^a. It is recommended to replace the toner cartridge (See "Replacing the toner cartridge" on page 2). A paper jam has occurred (See "Clearing paper jams" on page 3). The cover is opened. Close the cover. There is no paper in the tray. Load paper in the tray. The machine has stopped due to a major error. Check the display message (See "Understanding display messages" on page 8).

a. Estimated cartridge life means the expected or estimated toner cartridge life, which indicates the average capacity of print-outs and is designed pursuant to ISO/IEC 19798. The number of pages may be affected by operating environment, printing interval, graphics, media type and media size. Some amount of toner may remain in the cartridge even when **Replace new [ccc] toner** appears and the printer stops printing.

 Samsung does not recommend using non-genuine Samsung toner cartridge such as one that is refilled or remanufactured. Samsung cannot guarantee a non-genuine Samsung toner cartridge's quality. Service or repair required as a result of using non-genuine Samsung toner cartridges will not be covered under the machine warranty.

 •All printing errors will be appear in the Smart Panel program window. If the problem persists, call for service.

•Check the message on the display screen. Follow the instructions in the message or refer to troubleshooting part (See "Understanding display messages" on page 8). If the problem persists, call for service.

Introducing the useful buttons

Menu button



When you want to know the machine status and set your machine to use an advanced feature, click **Menu** button (See "Machine status and advanced feature" on page 1).

Stop/Clear button



By pressing the , you can:

Function	Description
Cancel print job	Press  during printing.

Power Saver button



When the machine is not in use, save electricity by pressing the **Power Saver** button. Pressing this button for one second puts the machine into power save mode (See "Using the power saving mode" on page 3).

If you press this button for more than three seconds, a pop-up appears, asking if you want to turn the power off. If you choose **Yes**, the power is turned off. This button must then be used to turn the button on.

Status		Description
Off		The machine is not in the power save mode.
Blue	On	The machine is in the power save mode.

 In the following cases, the machine wakes up from the power save mode.

- Data is received.
- Front door or scan unit is opened.
- Control panel key is pressed.
- Power-switch turn the power on and off.

getting started

This chapter gives you step-by-step instructions for setting up the USB connected machine and software.

This chapter includes:

- Setting up the hardware
- Printing a demo page
- Supplied software
- System requirements
- Installing USB connected machine's driver
- Sharing your machine locally

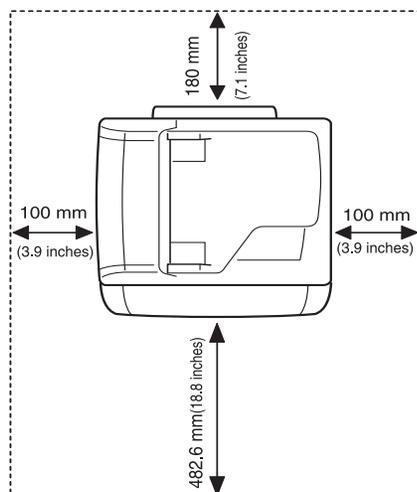
Setting up the hardware

This section shows the steps to set up the hardware, as is explained in the Quick Install Guide. Make sure you read the Quick Install Guide first and follow the steps below:

1. Select a stable location.

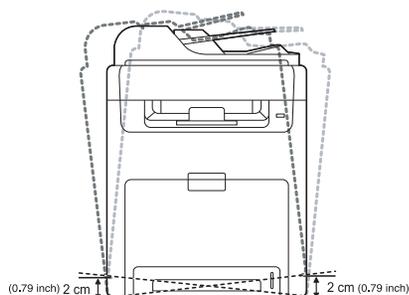
Select a level, stable place with adequate space for air circulation. Allow extra space to open covers and trays.

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



Printing is suitable for altitudes under 1,000 m (3,281 ft). Refer to the altitude setting to optimize your printing (See "Altitude adjustment" on page 1).

Place the machine on a flat, stable surface so that there is no incline greater than 2 cm (0.79 inch). Otherwise, printing quality may be affected.



2. Unpack the machine and check all the enclosed items.
3. Remove all the tapes.
4. Install the toner cartridges.
5. Load paper (See "Loading paper in the tray" on page 3).
6. Make sure that all cables are connected to the machine.
7. Turn the machine on.

 This equipment will be inoperable when mains power fails.

Printing a demo page

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

To print a demo page:

In ready mode, press and hold the **OK** for about 3 seconds, then release.

Supplied software

After you have set up your machine and connected it to your computer, you must install the printer software. If you are a Windows or Macintosh OS, install the software from the supplied CD and if you are a Linux OS user or UNIX OS user, download the software from the Samsung website (www.samsung.com/printer) and install.

 Machine software are occasionally updated due to release of new operating system and etc. If needed, download the latest version from the Samsung website. (www.samsung.com/printer)

OS	Contents
Windows	<ul style="list-style-type: none"> • Printer driver: Use this driver to take full advantage of your machine's features. • PostScript Printer Driver: Use the PostScript driver to print documents with complex fonts and graphics in the PS language. (PostScript printer description file is included.) • Scanner driver: TWAIN and Windows Image Acquisition (WIA) drivers are available for scanning documents on your machine. • Smart Panel: This program allows you to monitor the machine's status and alerts you when an error occurs during printing. • SmarThru Office^a: This program is the accompanying Windows-based software for your multifunctional machine. • Samsung Scan and Fax Manager: You can find out about scan and fax manager program information and installed scan driver's condition. • Samsung Network PC Fax: You can find out about fax manager program information. You can send a fax from your computer without going to the machine. • Printer Settings Utility: This program allows you to set up printer's other options from your computer desktop. • Direct Printing Utility (CLX-6250 Series only): This program allows you to print PDF files directly. • SetIP: Use this program to set your machine's TCP/IP addresses.
Macintosh	<ul style="list-style-type: none"> • PostScript Printer Driver: Use this driver to run your machine from a Macintosh computer and print documents. (PostScript printer description file is included.) • Scanner driver: TWAIN driver and Image Capture driver are available for scanning documents on your machine. • Smart Panel: This program allows you to monitor the machine's status and alerts you when an error occurs during printing. • Samsung Scan and Fax Manager: You can find out about scan and fax manager program information and installed scan driver's condition. • Printer Settings Utility: This program allows you to set up printer's other options from your computer desktop. • SetIP: Use this program to set your machine's TCP/IP addresses.
Linux	<ul style="list-style-type: none"> • Unified Linux Driver: Use this driver to take full advantage of your machine's features. • PostScript Printer Driver: Use this driver to run your machine from a Linux computer and print documents. (PostScript printer description file is included.) • SANE: Use this driver to scan documents. • Smart Panel: This program allows you to monitor the machine's status and alerts you when an error occurs during printing. • Printer Settings Utility: This program allows you to set up printer's other options from your computer desktop. • SetIP: Use this program to set your machine's TCP/IP addresses.
UNIX	<ul style="list-style-type: none"> • UNIX Printer Driver: Use this driver to print documents from the UNIX system.

a. Allows you to edit a scanned image in various ways using a powerful image editor and to send the image by email. You can also open another image editor program, such as Adobe Photoshop, from SmarThru Office. For details, refer to the on screen help supplied on the SmarThru Office program (See "Smarthru Office" on page 3).

System requirements

Before you begin, ensure that your system meets the following requirements:

Microsoft® Windows®

Your machine supports the following Windows operating systems.

OPERATING SYSTEM	Requirement (recommended)		
	CPU	RAM	free HDD space
Windows® 2000	Intel® Pentium® II 400 MHz (Pentium III 933 MHz)	64 MB (128 MB)	600 MB
Windows® XP	Intel® Pentium® III 933 MHz (Pentium IV 1 GHz)	128 MB (256 MB)	1.5 GB
Windows Server® 2003	Intel® Pentium® III 933 MHz (Pentium IV 1 GHz)	128 MB (512 MB)	1.25 GB to 2 GB
Windows Server® 2008	Intel® Pentium® IV 1 GHz (Pentium IV 2 GHz)	512 MB (2048 MB)	10 GB
Windows Vista®	Intel® Pentium® IV 3 GHz	512 MB (1024 MB)	15 GB
Windows® 7	Intel® Pentium® IV 1 GHz 32-bit or 64-bit processor or higher	1 GB (2 GB)	16 GB
	<ul style="list-style-type: none"> • Support for DirectX® 9 graphics with 128 MB memory (to enable the Aero theme). • DVD-R/W Drive 		
Windows Server® 2008 R2	Intel® Pentium® IV 1 GHz (x86) or 1.4 GHz (x64) processors (2 GHz or faster)	512 MB (2048 MB)	10 GB



•Internet Explorer® 5.0 or higher is the minimum requirement for all Windows operating systems.

•Administrator rights are required to install the software.

•**Windows Terminal Services** is compatible with this machine.

Macintosh

OPERATING SYSTEM	Requirements (recommended)		
	CPU	RAM	free HDD space
Mac OS X 10.3 ~ 10.4	<ul style="list-style-type: none"> Intel Processors PowerPC G4/ G5 	<ul style="list-style-type: none"> 128 MB for a PowerPC based Mac (512 MB) 512 MB for a Intel-based Mac (1 GB) 	1 GB
Mac OS X 10.5	<ul style="list-style-type: none"> Intel Processors 867 MHz or faster Power PC G4/ G5 	512 MB (1 GB)	1 GB
Mac OS X 10.6	<ul style="list-style-type: none"> Intel Processors 	1 GB (2 GB)	1 GB

Linux

Item	Requirement (recommended)
Operating system	RedHat® Enterprise Linux WS 4, 5 (32/64 bit) Fedora Core 2~10 (32/64 bit) SuSE Linux 9.1 (32 bit) OpenSuSE® 9.2, 9.3, 10.0, 10.1, 10.2, 10.3, 11.0, 11.1 (32/64 bit) Mandrake 10.0, 10.1 (32/64 bit) Mandriva 2005, 2006, 2007, 2008, 2009 (32/64 bit) Ubuntu 6.06, 6.10, 7.04, 7.10, 8.04, 8.10 (32/64 bit) SuSE Linux Enterprise Desktop 9, 10 (32/64 bit) Debian 3.1, 4.0, 5.0 (32/64 bit)
CPU	Pentium IV 2.4 GHz (Intel Core™2)
RAM	512 MB (1024 MB)
Free HDD space	1 GB (2 GB)

- It is necessary to claim swap partition of 300 MB or larger for working with large scanned images.
- The Linux scanner driver supports the optical resolution at maximum.

UNIX

Item	Requirements
Operating system	Sun Solaris / SPARC Sun Solaris / x86 HP-UX / PA-RISC HP-UX / Itanium IBM AIX / Power
Free HDD space	Up to 100 MB

Installing USB connected machine's driver

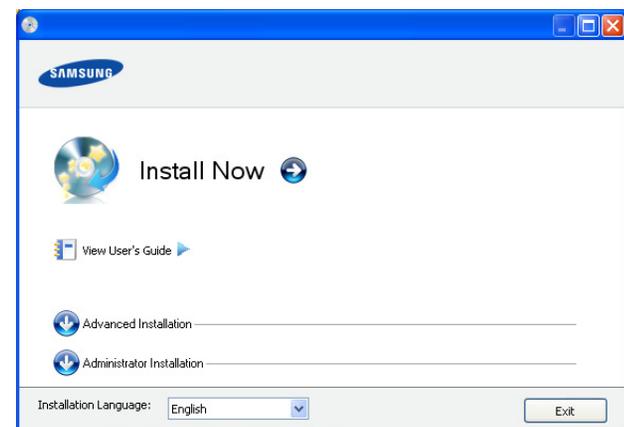
A locally connected machine is a machine directly attached to your computer using the USB cable. If your machine is attached to a network, skip the following steps below and go on to installing network connected machine's driver (See "Installing network connected machine's driver" on page 3).

- Only use an USB cable no longer than 3 m (10 ft.).

Windows

You can install the machine software using the typical or custom method. The following steps below are recommended for most users who use a machine directly connected to your computer. All components necessary for machine operations will be installed.

1. Make sure that the machine is connected to your computer and powered on.
 - If the "Found New Hardware Wizard" window appears during the installation procedure, click **Cancel** in close the window.
2. Insert the supplied software CD into your CD-ROM drive.
 - The software CD 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 CD-ROM drive. Click **OK**.
 - If you use Windows Vista, Windows 7 and Windows 2008 Server R2 click **Start > All programs > Accessories > Run**. Type X:\Setup.exe replacing "X" with the letter which represents your CD-ROM drive and click **OK**.
 - If the **AutoPlay** window appears in Windows Vista, Windows 7 and Windows 2008 Server R2, click **Run Setup.exe** in **Install or run program** field, and click **Continue** or **Yes** in the **User Account Control** windows.
3. Select **Install now**.



If necessary, select a language from the drop-down list.

- For CLX-6250 Series installation window, you can see **Wireless Setting and Installation** menu. You can use this menu if an optional wireless network card is installed and/or the machine is connected to your computer with a USB cable.

Install the optional wireless network card. Instructions for **Wireless Setting and Installation**, refer to the wireless network installation guide provided with the optional wireless network card.

- The **Advanced Installation** has two options, **Custom**

Installation and Install Software Only. The Custom Installation allows you to select the machine's connection and choose individual components to install. The **Install Software Only** allows you to install the supplied software, such as Smart Panel. Follow the instruction in the window.

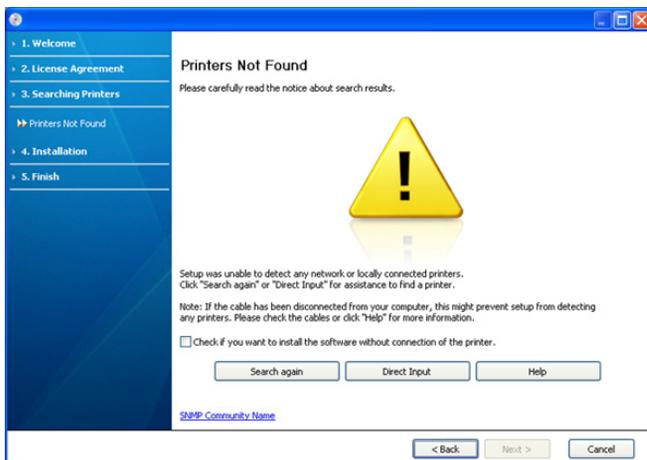
- Administrator Installation provides convenient installation methods useful for administrators (See "Administrator's Guide (Windows only)" on page 1).

4. Read **License Agreement**, and select **I accept the terms of the License Agreement**. Then, click **Next**.



The program searches the machine.

- ☞ If your machine is not found in the network or locally, the following window will appear.



•**Check if you want to install the software without connecting the printer to the network or locally.**

-Check this option to install this program without a machine connected. In this case, the print a test page window will be skipped, and completes the installation.

•**Search again**

When you press this button, the firewall notice window appears;

-Turn off the firewall and **Search again**. For Window operating system, click **Start > Control Panel > Windows Firewall**, and inactivate this option. For other operating systems, refer to their guide.

-Turn off the firewall from the third party's program beside the

operating system. Refer to the manual provided by individual programs.

•**Direct Input**

The **Direct Input** allows you to search for a specific machine on the network.

-**Search by IP address:** Enter the IP address or the host name. Then click **Next**.

To verify your machine's IP address, print a network configuration report (See "Printing a machine report" on page 1).

-Search by network path: To find a shared machine (UNC Path), enter the shared name manually or find a shared printer by clicking the **Browse** button. Then click **Next**.

•**Help**

If your machine is not connected to the computer or network, This help button gives detailed information about the how to connect the machine.

5. The searched machines will be shown on the screen. Select the one you want to use and click **Next**.

☞ When the driver finds only one machine, the confirmation window appears.

6. After the installation is finished, a window asking you to print a test page appears. If you want to print a test page, click **Print a test page**.

Otherwise, just click **Next** and skip to step 8.

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

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

8. To register as a user of the machine in order to receive information from Samsung, click **On-line Registration**.

9. Click **Finish**.

☞ If the printer driver does not work properly, follow the steps below to repair or reinstall the driver.

- a) Make sure that the machine is connected to your computer and powered on.
- b) From the **Start** menu, select **Programs** or **All Programs > Samsung Printers > your printer driver name > Maintenance**.
- c) Select the option you want, follow the instruction on the window.

Macintosh

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

1. Make sure that the machine is connected to your computer and powered on.
2. Insert the supplied software CD into your CD-ROM drive.
3. Double-click the CD-ROM icon that appears on your Macintosh desktop.
4. Double-click the **MAC_Installer** folder.
5. Double-click the **Installer OS X** icon.
6. Enter the password and click **OK**.
7. The Samsung Installer window opens. Click **Continue**.
8. Read the license agreement and click **Continue**.
9. Click **Agree** to agree to the license agreement.
10. Select **Easy Install** and click **Install**. **Easy Install** is recommended for most users. All components necessary for machine operations will be installed.

If you select **Custom Install**, you can choose individual components to

install.

11. When the message which warns that all applications will close on your computer appears, click **Continue**.
12. Select **Typical installation for a local printer** and then click **OK**.
 -  If you select **Typical installation for a network printer** during the machine driver installation, the SetIP program automatically runs. If the machine has already configured network information, close the SetIP program. Go to the next step.
13. After the installation is finished, click **Quit**.
14. Open the **Applications** folder > **Utilities** > **Print Setup Utility**.
 - For Mac OS X 10.5~10.6, open the **Applications** folder > **System Preferences** and click **Print & Fax**.
15. Click **Add** on the **Printer List**.
 - For Mac OS X 10.5~10.6, click the “+” icon; a display window will pop up.
16. For Mac OS X 10.3, select the **USB** tab.
 - For Mac OS X 10.4, click **Default Browser** and find the USB connection.
 - For Mac OS X 10.5~10.6, click **Default** and find the USB connection.
17. For Mac OS X 10.3, if Auto Select does not work properly, select **Samsung in Printer Model** and your machine name in **Model Name**.
 - For Mac OS X 10.4, if Auto Select does not work properly, select **Samsung in Print Using** and your machine name in **Model**.
 - For Mac OS X 10.5~10.6, if Auto Select does not work properly, select **Select a driver to use...** and your machine name in **Print Using**.Your machine appears on the **Printer List**, and is set as the default machine.
18. Click **Add**.

-  If the printer driver does not work properly, uninstall the driver and reinstall it.

Follow steps below to uninstall the driver for Macintosh.

 - a)Make sure that the machine is connected to your computer and powered on.
 - b)Insert the supplied software CD into your CD-ROM drive.
 - c)Double-click CD-ROM icon that appears on your Macintosh desktop.
 - d)Double-click the **MAC_Installer** folder.
 - e)Double-click the **Installer OS X** icon.
 - f)Enter the password and click **OK**.
 - g)The Samsung Installer window opens. Click **Continue**.
 - h)Select **Uninstall** and click **Uninstall**.
 - i)When the message which warns that all applications will close on your computer appears, Click **Continue**.
 - j)When the uninstall is done, click **Quit**.

Linux

You need to download the Linux software package from the Samsung website to install the printer software.

Follow the steps below to install the software.

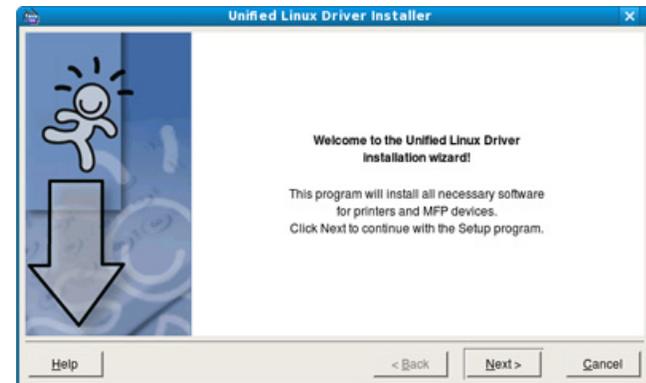
Installing the Linux Unified Driver

- 1.Make sure that the machine is connected to your computer and powered on.
- 2.When the **Administrator Login** window appears, type in root in the **Login** field and enter the system password.

-  You must log in as a super user (root) to install the machine software. If you are not a super user, ask your system

administrator.

- 3.From the Samsung website, download the Unified Linux Driver package to your computer.
- 4.Right click the **Unified Linux Driver** package and extract the package.
- 5.Double click **cdroot > autorun**.
- 6.When the welcome screen appears, click **Next**.



- 7.When the installation is complete, click **Finish**.

The installation program has added the Unified Driver Configurator desktop icon and the Unified Driver group to the system menu for your convenience. If you have any difficulties, consult the on screen 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**.

Installing the SmartPanel

- 1.Make sure that the machine is connected to your computer and powered on.
- 2.When the **Administrator Login** window appears, type in root in the **Login** field and enter the system password.
 -  You must log in as a super user (root) to install the machine software. If you are not a super user, ask your system administrator.
- 3.From the Samsung website, download the **Smart Panel** package to your computer.
- 4.Right click the Smart Panel package and extract the package.
- 5.Double click **cdroot > Linux > smartpanel > install.sh**.

Installing the Printer Setting Utility

- 1.Make sure that the machine is connected to your computer and powered on.
- 2.When the **Administrator Login** window appears, type in root in the **Login** field and enter the system password.
 -  You must log in as a super user (root) to install the machine software. If you are not a super user, ask your system administrator.
- 3.From the Samsung website, download the Printer Setting Utility package to your computer.
- 4.Right click the **Printer Setting Utility** package and extract the package.
- 5.Double click **cdroot > Linux > psu > install.sh**.

-  If the printer driver does not work properly, uninstall the driver and reinstall it again.

Follow the steps below to uninstall the driver for Linux.

- a) Make sure that the machine is connected to your computer and powered on.
- b) When the **Administrator Login** window appears, type in "root" in the **Login** field and enter the system password.
You must log in as a super user (root) to uninstall the printer driver. If you are not a super user, ask your system administrator.
- c) Click the icon at the bottom of the desktop. When the Terminal screen appears, type in:

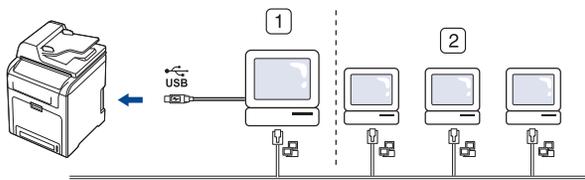
```
[root@localhost root]#cd /opt/Samsung/mfp/uninstall/
```

```
[root@localhost uninstall]#./uninstall.sh
```
- d) Click **Uninstall**.
- e) Click **Next**.
- f) Click **Finish**.

Sharing your machine locally

Follow the steps below to set up the computers to share your machine locally.

If the Host computer is directly connected to the machine with a USB cable and is also connected to the local network environment, the client computer connected to the local network can use the shared machine through the host computer to print.



1	Host computer	A computer which is directly connected to the machine by USB cable.
2	Client computers	Computers which use the machine shared through the host computer.

Windows

Setting up a host computer

1. Install your printer driver (See "Installing USB connected machine's driver" on page 3, "Installing network connected machine's driver" on page 3).
2. Click the Windows **Start** menu.
3. For Windows 2000, select **Settings > Printers**.
 - For Windows XP/2003, select **Printers and Faxes**.
 - For Windows 2008/Vista, select **Control Panel > Hardware and Sound > Printers**.
 - For Windows 7, select **Control Panel > Hardware and Sound > Devices and Printers**.
 - For Windows Server 2008 R2, select **Control Panel > Hardware > Devices and Printers**.
4. Right click your printer icon.
5. For Windows XP/2003/2008/Vista, press **Properties**.
For Windows 7 and Windows Server 2008 R2, from context menus, select the **Printer properties**.

 If **Printer properties** item has ► mark, you can select other printer drivers connected with selected printer.

6. Select the **Sharing** tab.

7. Check the **Change Sharing Options**.
8. Check the **Share this printer**.
9. Fill in the **Share Name** field. Click **OK**.

Setting up a client computer

1. Install your printer driver (See "Installing USB connected machine's driver" on page 3).
2. Click the Windows **Start** menu.
3. Select **All programs > Accessories > Window Explorer**.
4. Enter in the IP address of the host computer and press Enter.



 In case host computer requires **User name** and **Password**, fill in User ID and password of the host computer account.

5. Right click the printer icon you want to share and select **Connect**.
6. When the set up complete message appears, click **OK**.
7. Open the file you want to print and start printing.

Macintosh

 The following steps are for Mac OS X 10.5~10.6. Refer to Mac Help for other OS versions.

Setting up a host computer

1. Install your printer driver (See "Macintosh" on page 4, "Macintosh" on page 5).
2. Open the **Applications** folder > **System Preferences** and click **Print & Fax**.
3. Select the printer to share in the **Printer List**.
4. Select **Share this printer**.

Setting up a client computer

1. Install your printer driver (See "Installing USB connected machine's driver" on page 3).
2. Open the **Applications** folder > **System Preferences** and click **Print & Fax**.
3. Press the "+" icon.
A display window showing the name of your shared printer appears.
4. Select your machine and click **Add**.

network setup

This chapter gives you step-by-step instructions for setting up the network connected machine and software.

This chapter includes:

- Network environment
- Introducing useful network programs
- Using a wired network

Network environment

You need to set up the network protocols on the machine to use it as your network machine. You can set up the basic network settings through the machine's control panel.

The following table shows the network environments supported by the machine:

Item	Requirements
Network interface	<ul style="list-style-type: none">• Ethernet 10/100 Base-TX• 802.11 b/g Wireless LAN (Optional)
Network operating system	<ul style="list-style-type: none">• Windows 2000/XP/2003/2008/Vista/7/2008 Server R2• Various Linux OS• Mac OS X 10.3 ~ 10.6• UNIX
Network protocols	<ul style="list-style-type: none">• TCP/IPv4• DHCP, BOOTP• DNS, WINS, Bonjour, SLP, UPnP• Standard TCP/IP Printing (RAW), LPR, IPP, WSD• SNMPv 1/2/3, HTTP (S), Telnet, SMTP (S), LDAP (S), IPSec• SMB, FTP, Kerberos• TCP/IPv6 (DHCP, DNS, RAW, LPR, SNMPv 1/2/3, HTTP (S), IPSec) <p>(See "IPv6 Configuration" on page 6.)</p>
Wireless security (Optional)	<ul style="list-style-type: none">• Authentication: Open System, Shared Key, WPA Personal, WPA2 Personal (PSK)• Encryption: WEP64, WEP128, TKIP, AES

Introducing useful network programs

There are several programs available to setup the network settings easily in network environment. For the network administrator especially, managing several machines on the network is possible.

 Before using the programs below, set the IP address first.

- Installing network connected machine's driver
- IPv6 Configuration

SyncThru™ Web Service

Web server embedded on your network machine, which allows you to:

- Configure the network parameters necessary for the machine to connect to various network environments.
 - Customize machine settings.
- (See "Using SyncThru™ Web Service" on page 1.)

SyncThru™ Web Admin Service

A web-based machine management solution for network administrators. SyncThru™ Web Admin Service provides you with an efficient way of managing network devices and lets you remotely monitor and troubleshoot network machines from any site with corporate internet access. Download this program from <http://solution.samsungprinter.com>.

SetIP

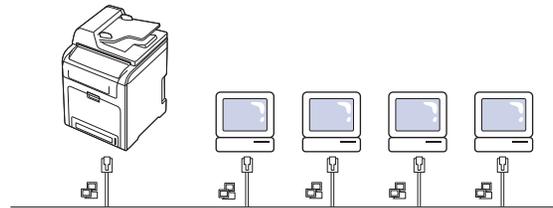
This utility program allows you to select a network interface and manually configure the IP addresses for use with the TCP/IP protocol (See "IPv4 setting using SetIP Program (Windows)" on page 2 , "IPv4 setting using SetIP Program (Macintosh)" on page 2 or "IPv4 setting using SetIP Program (Linux)" on page 3).

 TCP/IPv6 is not supported by this program.

Using a wired network

You must set up the network protocols on your machine to use it on your network. This chapter will show you how this is easily accomplished.

You can use network after connecting network cable to a corresponding port on your machine.



Printing configuration report

You can print a **Network Configuration Report** from the machine's control panel that will show the current machine's network settings. This will help you to set up a network and troubleshoot problems.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Report** and press **OK**.
4. Press the up/down arrow to highlight **Network Info.** and press **OK**.

5. Press **OK** when **Yes** highlights to confirm printing.

The **Network Configuration Report** prints.

Using this **Network Configuration Report**, you can find your machine MAC address and IP address.

For example:

- MAC Address : 00:15:99:41:A2:78
- IP Address : 192.0.0.192

Setting IPv4 address

You must set up an IPv4 address for network printing and management. In most cases a new IP address will be automatically assigned by a DHCP (Dynamic Host Configuration Protocol) server located on the network.

 If you use IPv6 address, refer to "IPv6 Configuration" on page 6

In a few situations the IP address must be set manually. This is called a static IP and is often required in corporate Intranets for security reasons.

- **DHCP IP assignment:** Connect your machine to the network, and wait a few minutes for the DHCP server to assign an IP address to the machine. Then, print the **Network Configuration Report** as explained above. If the report shows that the IP address has changed, the assignment was successful. You will see the new IP address in the report.
- **Static IP assignment:** Use the SetIP program to change the IP address from your computer. If your machine has a control panel, you can also change the IP address using the machine's control panel.

In an office environment, we recommend that you contact a network administrator to set this address for you.

IPv4 setting using control panel

1. Connect your machine to the network with an network cable.
2. Turn on the machine.
3. Press **Menu** on the control panel.
4. Press the up/down arrow to highlight **Network** and press **OK**.
5. Press the up/down arrow to highlight **TCP/IP (IPv4)** and press **OK**.
6. Press the up/down arrow to highlight **Static** and press **OK**.
7. Press the up/down arrow to highlight **IP Address** and press **OK**.
8. Enter the IP address using numeric keypad and press **OK**.
9. Enter other parameters, such as the **Subnet Mask** and **Gateway** and press **OK**.
10. After entering all parameters, press **Stop/Clear** to return to ready mode.

Now go to "Installing network connected machine's driver" on page 3.

IPv4 setting using SetIP Program (Windows)

This program is for manually setting the network IP address of your machine using its MAC address to communicate with the machine. A MAC address is the hardware serial number of the network interface and can be found in the **Network Configuration Report**.

For using SetIP program, disable the computer firewall before continuing by performing the following:

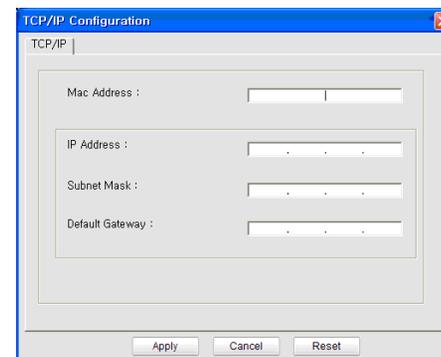
1. Open **Control Panel**.
2. Double click **Security Center**.
3. Click **Windows Firewall**.
4. Disable the firewall.

Installing the program

1. Insert the Printer Software CD-ROM provided with your machine. When the driver CD runs automatically, close that window.
2. Start a web browser such as Internet Explorer and open the X drive. (X represents your CD-ROM drive.)
3. Double-click **Application > SetIP**.
4. Double-click **Setup.exe** to install this program.
5. Click **OK**. If necessary, select a language from the drop-down list.
6. Follow the instructions in the window and complete the installation.

Starting the program

1. Connect your machine and the computer using network cable.
2. Turn on the machine.
3. From the Windows **Start** menu, select **All Programs > Samsung Printers > SetIP > SetIP**.
4. Click on the  icon (third from left) in the SetIP window to open the TCP/IP configuration window.
5. Enter the machine's new information into the configuration window as follows:



- **MAC Address** : Find the machine's MAC address on the **Network Configuration Report** and enter it without the colons. For example, 00:15:99:29:51:A8 becomes 0015992951A8.

 A MAC address is a hardware serial number of the machine's network interface and can be found in the **Network Configuration Report**.

- **IP Address**: Enter a new IP address for your printer. For example, if your computer's IP address is 192.168.1.150, enter 192.168.1.X. (X is number between 1 and 254 other than the computer's address.)
- **Subnet Mask**: Enter a new Subnet Mask for your machine.
- **Default Gateway**: Enter a new Gateway for your machine.

6. Click **Apply**, and then click **OK**. The machine will automatically print the **Network Configuration Report**. Confirm that all of the settings are correct.
7. Click **Exit** to close the SetIP program.
8. If necessary, restart the computer's firewall.

IPv4 setting using SetIP Program (Macintosh)

For using SetIP program, disable the computer firewall before continuing by performing the following:

 The path and UIs may differ by Mac OS version. Refer to the Mac OS manual to turn firewall off.

1. Open **System Preferences**.
2. Click **Security**.

3. Click the **Firewall** menu.
4. Turn the firewall off.

 The following instructions may vary for your model.

Perform the following to configure the IP address:

1. Connect your machine and the computer using network cable.
 2. Insert the Installation CD-ROM, and open the disk window. Open the **MAC_Installer > MAC_Printer > SetIP > SetIPApplet.html**.
 3. Double click the file and **Safari** will automatically open, then select **Trust**. The browser will open the **SetIPApplet.html** page that shows the printer's name and IP address information.
 4. Click on the  icon (third from left) in the SetIP window to open the TCP/IP configuration window.
 5. Enter the printer's new information into the configuration window as follows. In a corporate intranet, you may need to have this information assigned by a network manager before proceeding.
 - **MAC Address:** Find the machine's MAC address from the **Network Configuration Report** and enter it without the colons. For example, 00:15:99:29:51:A8 becomes 0015992951A8.
-  The MAC address is the hardware serial number of the on-board network interface and can be found on the **Network Configuration Report**.
- **IP Address:** Enter a new IP address for your printer.
For example, if your computer's IP address is 192.168.1.150, enter 192.168.1.X. (X is number between 1 and 254 other than the computer's address.)
 - **Subnet Mask:** Enter a new Subnet Mask for your machine.
 - **Default Gateway:** Enter a new Gateway for your machine.
6. Select **Apply**, then **OK**, and **OK** again. The printer will automatically print the configuration report. Confirm that all of the settings are correct. **Quit Safari**. You may close and eject the installation CD-ROM. If necessary, restart the computer's firewall. You have successfully changed the IP address, subnet mask, and gateway.

IPv4 setting using SetIP Program (Linux)

The SetIP program should be automatically installed during the printer driver installation.

 The path and UIs may differ by Linux OS version. Refer to the Linux OS manual to turn firewall off.

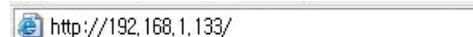
1. Print the machine's network configuration report to find your machine's MAC address.
2. Open the **/opt/Samsung/mfp/share/utills/**.
3. Double click the **SetIPApplet.html** file.
4. Click to open the TCP/IP configuration window.
5. Enter the MAC address, IP address, subnet mask, default gateway, and then click **Apply**.
 -  When you enter the MAC address, enter it without a colon(:).
6. The machine prints the network information. Confirm all of the settings are correct.
7. Close the SetIP program.

Network parameter setting

You can also set up the various network settings through the network administration programs such as SyncThru™ Web Admin Service and SyncThru™ Web Service.

Restoring factory default settings using SyncThru™ Web Service

1. Start a web browser such as Internet Explorer, Safari or Firefox and enter your machine's new IP address in the browser window.
For example,

 http://192.168.1.133/

2. Click **Go** to access the SyncThru™ Web Service.
3. Click **Login** on the upper right of the SyncThru™ Web Service website.
A log-in page appears.
4. Type in the **ID** and **Password** then click **Login**.
If it's your first time logging into SyncThru™ Web Service, type in the below default ID and password.
 - **ID:** admin
 - **Password:** sec00000
5. When the **SyncThru™ Web Service** window opens, click **Settings > Network Settings > Restore Default**.
6. Click **Clear** for network.
7. Turn off and restart machine to apply settings.

Installing network connected machine's driver

You must install the printer driver software for printing. The software includes drivers, applications, and other user friendly programs.

Make sure that the network setup for your machine is completed. All applications should be closed on your computer before beginning installation.

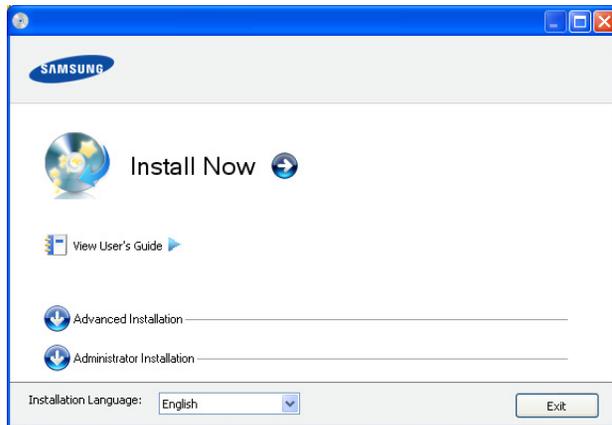
Windows

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

Follow the steps below:

1. Make sure that the machine is connected to the network and powered on.
2. Insert the supplied software CD into your CD-ROM drive.
 - The software CD should automatically run and an installation window appear.
 - If the installation window does not appear, click **Start** and then **Run**. Type X:\Setup.exe, replacing "X" with the letter which represents your CD-ROM drive. Click **OK**.
 - If you use Windows Vista, Windows 7 and Windows 2008 Server R2, click **Start > All programs > Accessories > Run**. Type X:\Setup.exe replacing "X" with the letter which represents your CD-ROM drive and click **OK**.
 - If the **AutoPlay** window appears in Windows Vista, Windows 7 and Windows 2008 Server R2, click **Run Setup.exe** in **Install or run program** field, and click **Continue** or **Yes** in the **User Account Control** windows.

3. Select **Install now**.



If necessary, select a language from the drop-down list.

- For CLX-6250 Series installation window, you can see **Wireless Setting and Installation** menu. You can use this menu if an optional wireless network card is installed and/or the machine is connected to your computer with a USB cable. Install the optional wireless network card. Instructions for **Wireless Setting and Installation**, refer to the wireless network installation guide provided with the optional wireless network card.
- The **Advanced Installation** has two options, **Custom Installation** and **Install Software Only**. **Custom Installation** allows you to select the machine's connection and choose individual component to install. **Install Software Only** allows you to install the supplied software, such as Smart Panel. Follow the guide in the window.
- Administrator Installation provides convenient installation methods useful for administrators (See "Administrator's Guide (Windows only)" on page 1).

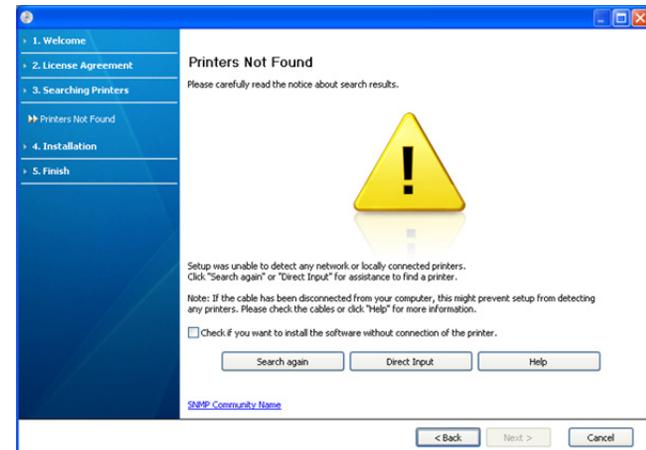
4. Read **License Agreement**, and select **I accept the terms of the License Agreement**. Then, click **Next**.



The program searches for the machine.

- If your machine is not found in the network or locally, the following

window will appear.



• Check if you want to install the software without connecting the printer to the network or locally.

- Check this option to install this program without a machine connected. In this case, the print a test page window will be skipped, and completes the installation.

• Search again

When you press this button, the firewall notice window appears;

- Turn off the firewall and **Search again**. For Window operating system, click **Start > Control Panel > Windows Firewall**, and inactivate this option. For other operating systems, refer to their on-line guides.

- Turn off all firewall from the third party's program beside the operating system. Refer to the manual provided by individual programs.

• Direct Input

The **Direct Input** allows you to search a specific machine on the network.

- **Search by IP address**: Enter the IP address or the host name. Then click **Next**.

To verify your machine's IP address, print a network configuration report (See "Printing a machine report" on page 1).

- **Search by network path**: To find a shared machine (UNC Path), enter the shared name manually or find a shared printer by clicking the **Browse** button. Then click **Next**.

• Help

If your machine is not connected to the computer or network, This help button gives detailed information about the how to connect the machine.

5. The searched machines will be shown on the screen. Select the one you wish to use and click **Next**.

- If the driver searched only one machine, the confirmation window appears.

6. After the installation is finished, a window asking you to print a test page appears. If you want to print a test page, click **Print a test page**.

Otherwise, just click **Next** and skip to step 8.

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

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

8. To register as a user of the machine in order to receive information from Samsung, click **On-line Registration**.

9. Click **Finish**.



- After the driver setup, you may enable firewall.
- If the printer driver does not work properly, follow the steps below to repair or reinstall the driver.
 - a)Make sure that the machine is connected to your machine and powered on.
 - b)From the **Start** menu, select **Programs** or **All Programs** > **Samsung Printers** > **your printer driver name** > **Maintenance**.
 - c)Select the option as you wish, follow the instruction on the window.

Macintosh

1. Make sure that the machine is connected to your network and powered on. Also, your machine's IP address should have been set.
2. Insert the supplied software CD into your CD-ROM drive.
3. Double-click the CD-ROM icon that appears on your Macintosh desktop.
4. Double-click the **MAC_Installer** folder.
5. Double-click the **Installer OS X** icon.
6. Enter the password and click **OK**.
7. The Samsung Installer window opens. Click **Continue**.
8. Read the license agreement and click **Continue**.
9. Click **Agree** to agree to the license agreement.
10. The Samsung Installer window opens. Click **Continue**.
11. Select **Easy Install** and click **Install**. **Easy Install** is recommended for most users. All components necessary for machine operations will be installed.
 - If you select **Custom Install**, you can choose individual components to install.
12. The message which warns that all applications will close on your computer appears. Click **Continue**.
 -  If you select **Typical installation for a network printer** during the machine driver installation, the SetIP program automatically runs. If the machine has already configured network information, close the SetIP program. Go to the next step.
13. After the installation is finished, click **Quit**.
14. Open the **Applications** folder > **Utilities** > **Print Setup Utility**.
 - For Mac OS X 10.5~10.6, open the **Applications** folder > **System Preferences** and click **Print & Fax**.
15. Click **Add** on the **Printer List**.
 - For Mac OS X 10.5~10.6, click the "+" icon; a display window will pop up.
16. For Mac OS X 10.3, select the **IP Printing** tab.
 - For Mac OS X 10.4, click **IP Printer**.
 - For Mac OS X 10.5~10.6, click **IP**.
17. Select **Socket/HP Jet Direct** in **Printer Type**.
 -  When printing a document containing many pages, printing performance may be enhanced by choosing **Socket** for **Printer Type** option.
18. Enter the machine's IP address in the **Printer Address** field.
19. Enter the queue name in the **Queue Name** field. If you cannot determine the queue name for your machine server, try using the default queue first.
20. For Mac OS X 10.3, if Auto Select does not work properly, select **Samsung** in **Printer Model** and your machine name in **Model Name**.

- For Mac OS X 10.4, if Auto Select does not work properly, select **Samsung** in **Print Using** and your machine name in **Model**.
- For Mac OS X 10.5~10.6, if Auto Select does not work properly, select **Select a driver to use...** and your machine name in **Print Using**. Your machine appears on the **Printer List**, and is set as the default machine.

21. Click **Add**.



- If the printer driver does not work properly, uninstall the driver and reinstall it.
 - a)Make sure that the machine is connected to your computer and powered on.
 - b)Insert the supplied software CD into your CD-ROM drive.
 - c)Double-click CD-ROM icon that appears on your Macintosh desktop.
 - d)Double-click the **MAC_Installer** folder.
 - e)Double-click the **Installer OS X** icon.
 - f)Enter the password and click **OK**.
 - g)The Samsung Installer window opens. Click **Continue**.
 - h)Select **Uninstall** and click **Uninstall**.
 - i)When the message which warns that all applications will close on your computer appears, Click **Continue**.
 - j)When the uninstall is done, click **Quit**.

Linux

Install Linux Driver

1. Make sure that the machine is connected to your network and powered on. Also, your machine's IP address should have been set.
2. From the Samsung website, download the Unified Linux Driver package to your computer.
3. Right click the **Unified Linux Driver** package and extract the package.
4. Double click **cdroot** > **autorun**.
5. The Samsung Installer window opens. Click **Continue**.
6. The Add printer wizard window opens. Click **Next**.
7. Select Network printer and click **Search** button.
8. The Printer's IP address and model name appears on list field.
9. Select your machine and click **Next**.
10. Input the printer description and **Next**.
11. When the add printer is done, click **Finish**.
12. When the install is done, click **Finish**.

Add network Printer

1. Double-click the **Unified Driver Configurator**.
2. Click **Add Printer...**
3. The **Add printer wizard** window opens. Click **Next**.
4. Select **Network printer** and click the **Search** button.
5. The printer's IP address and model name appears on list field.
6. Select your machine and click **Next**.
7. Input the printer description and **Next**
8. When the add printer is done, click **Finish**.

UNIX

To use UNIX Printer Driver, you have to install the UNIX printer driver package first, then setup the printer. You can download the UNIX Printer Driver package from the Samsung website.

Installing the UNIX printer driver package

Installation procedure is common for all variants of UNIX OS mentioned (See "UNIX" on page 3).

1. From the Samsung website, download and unpack the UNIX Printer Driver package to your computer.
2. Acquire root privileges.
`su -`
3. Copy appropriate driver archive to the target UNIX computer.
 See administration guide of your UNIX OS for details.
4. Unpack the UNIX printer driver package archive.
For example, on IBM AIX use the following commands.
`cd /tmp`
`gzip -dc /cdrom/unix/packages/aix_power/aix_power.tar.gz | tar -xvf -`
The "binaries" folder consists of **binz**, **install**, **share** files and folders
5. Copy the "binaries" folder to any local folder.
6. Change to the driver's "binaries" directory.
`cd aix_power/binaries`
7. Run the install script.
`./install`
install is the installer script file which is used to install or uninstall the UNIX Printer Driver package.
Use "**chmod 755 install**" command to give the permission to the installer script.
8. Execute the "`./install -c`" command to verify install results.
9. Run "**installprinter**" from the command line. This will bring up the **Add Printer Wizard** window. Setup the printer in this window referring the procedure next.
 On some UNIX OS, for example on Solaris 10 just added printer may not be enabled and/or may not accept jobs. In this case run the following two commands on the root terminal:
`accept <printer_name>`
`enable <printer_name>`

Uninstalling the printer driver package

- 
- The uninstalling printer utility should be used to delete the printer installed in the system.
- a) Run "**uninstallprinter**" command from the terminal.
It will open the **Uninstall Printer Wizard**
The installed printers are listed in the drop-down list
 - b) Select the printer to be deleted.
 - c) Click **Delete** to delete the printer from the system.
 - d) Execute the "`./install -d`" command to uninstall the whole package.
 - e) To verify uninstall results, execute the "`./install -c`" command.
- To reinstall it again, use the command "
- `./install`
- " to reinstall the binaries.

Setting up the printer

To add the printer to your UNIX system, run 'installprinter' from the command line. This will bring up the Add Printer Wizard window. Setup the printer in this window according to the following steps:

1. Type the name of the printer.
2. Select appropriate printer model from model list.
3. Enter any description corresponding to the type of the printer in the **Type** field. This is optional.

4. Specify any printer description in the **Description** field. This is optional.
5. Specify printer location in the **Location** field.
6. Type the IP address or DNS name of the printer in the **Device** textbox for network-connected printers. On IBM AIX with **jetdirect Queue type** only DNS name is possible, numeric IP address is not allowed.
7. **Queue type** shows the connection as **lpd** or **jetdirect** in the corresponding list box. Additionally **usb** type is available on Sun Solaris OS.
8. Select **Copies** to set the number of copies.
9. Check the **Collate** option to receive copies already sorted.
10. Check the **Reverse Order** option to receive copies in the reverse order.
11. Check the **Make Default** option to set this printer as default.
12. Click **OK** to add the printer.

IPv6 Configuration

- 
- TCP/IPv6**
- is supported properly only in Windows Vista or higher.
-
- 
- If the IPv6 network seems to not be working, set all the network setting to the factory defaults and try again (See "Restoring factory default settings using SyncThru™ Web Service" on page 3).

To use the IPv6 network environment, follow the next procedure to use the IPv6 address:

1. Connect your machine to the network with a network cable.
2. Turn on the machine.
3. Print a **Network Configuration Report** from the machine's control panel that will check IPv6 addresses.
 a) Press **Menu** on the control panel.
b) Press the up/down arrow to highlight **Network** and press **OK**.
c) Press the up/down arrow to highlight **Network Info.** and press **OK**.
4. Select **Start > Control Panel > Hardware and Sound > Printers > Add Printer**.
5. Click **Add a local printer** on the **Add Printer** windows.
6. Follow the instruction on the window.
 If the machine does not work in the network environment, activate IPv6. Refer to the next section followed by.

Activating IPv6

1. Connect your machine to the network with a network cable.
2. Turned on the machine.
3. Press **Menu** on the control panel.
4. Press up/down arrow to highlight **Network** and press **OK**.
5. Press up/down arrow to highlight **TCP/IP (IPv6)** and press **OK**.
6. Press up/down arrow to highlight **IPv6 Activate** and press **OK**.
7. Press up/down arrow to highlight **On** and press **OK**.
 **On** is set as a default.
8. Turn the machine off and turn it on again.
9. Print a **Network Configuration Report** from the machine's control panel that will check IPv6 addresses.
 1. Press **Menu** on the control panel.
2. Press up/down arrow to highlight **Network** and press **OK**.
3. Press up/down arrow to highlight **Network Info.** and press **OK**.

Setting IPv6 addresses

Machine supports following IPv6 addresses for network printing and managements.

- **Link-local Address:** Self-configured local IPv6 address. (Address starts with FE80.)
- **Stateless Address:** Automatically configured IPv6 address by a network router.
- **Stateful Address:** IPv6 address configured by a DHCPv6 server.
- **Manual Address:** Manually configured IPv6 address by a user.

DHCPv6 address configuration (Stateful)

If you have a DHCPv6 server on your network, you can set one of the following option for default dynamic host configuration:

1. Press **Menu** on the control panel.
2. Press up/down arrow to highlight **Network** and press **OK**.
3. Press up/down arrow to highlight **TCP/IP (IPv6)** and press **OK**.
4. Press up/down arrow to highlight **DHCPv6 Config** and press **OK**.
5. Press up/down arrow to access the required value.
 - **Routers:** Use DHCPv6 only when requested by a router.
 - **DHCPv6 Addresses:** Always use DHCPv6 regardless of router request.
 - **DHCPv6 Off:** Never use DHCPv6 regardless of router request.

6. Press **OK**.

Manual address configuration

1. Start a web browser such as Internet Explorer that supports IPv6 addressing as a URL (See "Connecting SyncThru™ Web Service" on page 7).



For IPv4, enter the IPv4 address (http://xxx.xxx.xxx.xxx) in the address field and press the Enter key or click **Go**.

2. Click **Login** on the upper right of the SyncThru™ Web Service website.
A log-in page appears.
3. Type in the **ID** and **Password** then click **Login** .
If it's your first time logging into SyncThru™ Web Service, type in the below default ID and password.
 - **ID: admin**
 - **Password: sec00000**
4. When the **SyncThru™ Web Service** window opens, click **Settings > Network Settings**.
5. Click **TCP/IPv6**.
6. Enable the **Manual Address** In the **TCP/IPv6** section.
 -  **IPv6 Protocol** should enable.
7. Select the **Address / Prefix** and click the **Add** button, then the router prefix will automatically be entered into the address field.
Enter the rest of address. (ex: 3FFE:10:88:194::AAAA. "A" is the hexadecimal 0 through 9, A through F.)
8. Click the **Apply** button.

Installing printer driver

Driver installation for network printer in IPv6 network environment is same as TCP/IPv4 (See "Installing network connected machine's driver" on page 3).

Select TCP/IP Port and when the list of machines are displayed, simply select your machine's IPv6 address.

Connecting SyncThru™ Web Service

1. Start a web browser such as Internet Explorer that supports IPv6 addressing as a URL .
2. Click **Go** to access the SyncThru™ Web Service.
3. Click **Login** on the upper right of the SyncThru™ Web Service website.
A log-in page appears.
4. Type in the **ID** and **Password** then click **Login** .
If it's your first time logging into SyncThru™ Web Service, type in the below default ID and password.
 - **ID: admin**
 - **Password: sec00000**
5. Select one of the IPv6 addresses (**Link-local Address, Stateless Address, Stateful Address, Manual Address**) from **Network Configuration Report**.
6. Enter the IPv6 addresses. (ex: http://[FE80::215:99FF:FE66:7701])



Address must be enclosed in '[' brackets.

basic setup

After installation is complete, you may want to set the machine's default settings. Refer to the next section if you would like to set or change values. This chapter gives you step-by-step instructions for setting up the machine.

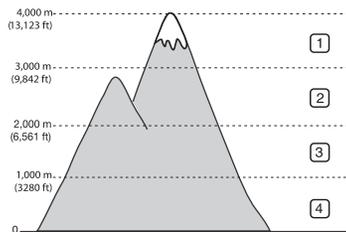
This chapter includes:

- Altitude adjustment
- Changing the display language
- Setting the date and time
- Changing the clock mode
- Changing the default mode
- Setting sounds
- Entering characters using the number keypad
- Using the power saving mode

Altitude adjustment

The print quality is affected by atmospheric pressure, which is determined by the height of the machine above sea level. The following information will guide you on how to set your machine to the best print quality or best quality of print.

Before you set the altitude value, determine the altitude where you are.



- | | |
|---|--------|
| 1 | High 3 |
| 2 | High 2 |
| 3 | High 1 |
| 4 | Normal |

In the control panel

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
4. Press the up/down arrow to highlight **Altitude Adjust** and press **OK**.
5. Press the up/down arrow until the setting option you want appears.
6. Press **OK** to save the selection.
7. Press **Stop/Clear** to return to ready mode.

In the computer

1. Double-click the **Smart Panel** icon on the Windows task bar (or Notification Area in Linux). You can also click **Smart Panel** on the status bar in Mac OS X (See "Understanding Smart Panel" on page 2).
Or, if you are a Windows user, you can launch it from the **Start** menu, select **Programs** or **All Programs** > **Samsung Printers** > **your printer driver name** > **Smart Panel**.
2. Click **Printer Setting**.
3. Click **Setting** > **Altitude Adjustment**. Select the appropriate value from the dropdown list, and then click **Apply**.

 If your machine is connected to a network, SyncThru™ Web Service screen appears automatically. Click **Settings** > **Machine Settings** >

- Setting job timeout
- Auto continue
- Paper substitution
- Net accounting
- Setting the color report
- Setting the default tray and paper
- Changing the font setting

System > Setup > Altitude Ad.. Select the appropriate altitude value, and then click **Apply**.

If it's your first time logging into SyncThru™ Web Service, type in the below default ID and password.

- ID: **admin**
- Password: **sec00000**

Changing the display language

To change the language that appears on the display, follow the steps below:

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
4. Press the up/down arrow to highlight **Language** and press **OK**.
5. Press the up/down arrow to display the language you want.
6. Press **OK** to save the selection.
7. Press **Stop/Clear** to return to ready mode.

Setting the date and time

When you set the time and date, they are used in delay fax and delay print. They are printed on reports. If, however, they are not correct, you need to correct it to the present date and time.

 If the machine's power is cut off, you need to reset the correct time and date once the power has been restored.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
4. Press the up/down arrow to highlight **Date & Time** and press **OK**.
5. Enter the correct time and date using up/down, left/right arrow or numeric keypad.
Month = 01 to 12,
Day = 01 to 31,
Year = requires four digits,
Hour = 01 to 12,
Minute = 00 to 59

6. Press **OK** to save the selection.
7. Press **Stop/Clear** to return to ready mode.

Changing the clock mode

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

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
4. Press the up/down arrow to highlight **Clock Mode** and press **OK**.
5. Press the up/down arrow to select the other mode and press **OK**.
6. Press **Stop/Clear** to return to ready mode.

Changing the default mode

Your machine is preset to Copy mode. You can switch this default mode between Fax mode and Copy mode.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
4. Press the up/down arrow to highlight **Default Mode** and press **OK**.
5. Press the up/down arrow to select the mode you want.
6. Press **OK** to save the selection.
7. Press **Stop/Clear** to return to ready mode.

Setting sounds

You can control the following sounds:

- **Key Sound:** Turns the key sound **On** or **Off**. With this option set to **On**, a tone sounds each time a key is pressed.
- **Alarm Sound:** Turns the alarm sound **On** or **Off**. With this option set to **On**, an alarm tone sounds when an error occurs or fax communication ends.
- **Speaker:** Turns **On** or **Off** the sounds from the telephone line through the speaker, such as a dial tone or a fax tone. With this option set to **Comm.** which means "**Comm.**", the speaker is on until the remote machine answers.
 You can adjust the volume level using **On Hook Dial**.
- **Ringer:** Adjusts the ringer volume. For the ringer volume, you can select **Off**, **Low**, **Mid**, and **High**.

Speaker, ringer, key sound, and alarm sound

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Sound/Volume** and press **OK**.
4. Press the up/down arrow until the sound option you want highlights and press **OK**.
5. Press the up/down arrow until the desired status or volume for the sound you have selected highlights and press **OK**.
6. If necessary, repeat steps 4 through 5 to set other sounds.
7. Press **Stop/Clear** to return to ready mode.

Speaker volume

To adjust the volume using **On Hook Dial**:

1. Press **On Hook Dial**. A dial tone sounds from the earpiece.
2. Press the left/right arrow until you hear the volume you want.
3. Press **On Hook Dial** to save the change and return to ready mode.

Entering characters using the number keypad

As you perform various tasks, you may need to enter names and numbers. For example, when you set up your machine, you enter your name or your company's name, and the fax number. When you store fax numbers or email addresses in memory, you may also enter the corresponding names.

Entering alphanumeric characters

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

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

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

You can enter special characters, such as space, plus sign, and etc. For details, see the below section.

2. To enter additional letters, repeat step 1.

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

You can enter a space by pressing 1 twice.

3. When you have finished entering letters, press **OK**.

Keypad letters and numbers

 Some of the follow key values may not appear depending on the job you are doing.

Key	Assigned numbers, letters, or characters
1	@ / . ' 1
2	A B C a b c 2
3	D E F d e f 3
4	G H I g h i 4
5	J K L j k l 5
6	M N O m n o 6
7	P Q R S p q r s 7
8	T U V t u v 8
9	W X Y Z w x y z 9
0	& + - , 0 _
*	* % ^ ~ ! # \$ () [] (These symbols are available when you type for network authentication.)
#	# = ? " : { } < > ; (These symbols are available when you type for network authentication.)

Correcting numbers or names

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

Inserting a pause

With some telephone systems, you must dial an access code (9, for example) and listen for a second dial tone. In such cases, you must insert a pause in the telephone number. You can insert a pause while you are setting up speed dial numbers.

To insert a pause, press **Redial/Pause** at the appropriate place while entering the telephone number. A dash(-) appears on the display at the corresponding location.

Using the power saving mode

When you are not using the machine for a while, use this feature to save power.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
4. Press the up/down arrow to highlight **Power Save** and press **OK**.
5. Press the up/down arrow to select the time you want.
6. Press **OK** to save the selection.
7. Press **Stop/Clear** to return to ready mode.

Setting job timeout

When there is no input for a certain period of time, the machine exits the current menu and goes in to the default settings. You can set the amount of time the machine will wait.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
4. Press the up/down arrow to highlight **Job Timeout** and press **OK**.
5. Enter the time using up/down arrow or numeric keypad.
6. Press **OK** to save the selection.
7. Press **Stop/Clear** to return to ready mode.

Auto continue

This is the option to set the machine to continue printing or not, in case that the paper size you have set and the paper in the tray mismatches.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
4. Press the up/down arrow to highlight **Auto Continue** and press **OK**.
5. Press the up/down arrow until the setting option you want appears.
 - On**: Automatically prints after set time passes, when the paper size mismatches the tray paper size.
 - Off**: Waits until you press **Start** on the control panel, when the paper size mismatches the tray paper size.
6. Press **OK** to save the selection.
7. Press **Stop/Clear** to return to ready mode.

Paper substitution

This option is to prevent the paper mismatch between tray and the printer driver. For example, if you have A4 paper in the tray but you set the paper size to Letter in the printer driver, the machine prints on A4 paper and vice versa.

 This option only works for mismatch between A4 and Letter paper.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
4. Press the up/down arrow to highlight **Paper Substitution** and press **OK**.
5. Press the up/down arrow to highlight **On** and press **OK**.
6. Press **Stop/Clear** to return to ready mode.

Net accounting

This is the option limits the number of use for fax, printer, copy and scan. First, the administrator needs to install the Job account Plug-in from SyncThru™ Web Admin Service. Then, create user accounts by entering user ID and Password in SyncThru™ Web Admin Service.

If you are not registered, request Administrator for a registration.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
4. Press the up/down arrow to highlight **Net Accounting** and press **OK**.
5. Press the up/down arrow until the setting option you want appears.
 - Protect**: Select the option for which you want to enable or disable net accounting.
 - Change Password**: The access password code can be changed.
6. Press **OK** to save the selection.
7. Press **Stop/Clear** to return to ready mode.

Setting the color report

This menu allows you to print reports in color.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
4. Press the up/down arrow to highlight **Color Report** and press **OK**.
5. Press the up/down arrow to highlight **On** and press **OK**.
6. Press **Stop/Clear** to return to ready mode.

Setting the default tray and paper

You can select the tray and paper you would like to keep using for printing job.

 **Wide A4** is useful when printing in DOS mode. This option prints 80 characters in a line, which printing 78 characters in a line is usual in DOS mode.

In the control panel

Setting the paper size

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Paper Setup** and press **OK**.

4. Press the up/down arrow to highlight **Paper Size** and press **OK**.
5. Press the up/down arrow to select the paper tray you want and press **OK**.
6. Press the up/down arrow to select the paper size you want.
7. Press **OK** to save the selection.
8. Press **Stop/Clear** to return to ready mode.

Setting the paper type

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Paper Setup** and press **OK**.
4. Press the up/down arrow to highlight **Paper Type** and press **OK**.
5. Press the up/down arrow to select the paper tray you want and press **OK**.
6. Press the up/down arrow to select the paper type you want.
7. Press **OK** to save the selection.
8. Press **Stop/Clear** to return to ready mode.

Setting the paper source

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Paper Setup** and press **OK**.
4. Press the up/down arrow to highlight **Paper Source** and press **OK**.
5. Press the up/down arrow to highlight **Copy Tray** or **Fax Tray** and press **OK**.
6. Press the up/down arrow to select the paper tray you want.
7. Press **OK** to save the selection.
8. Press **Stop/Clear** to return to ready mode.

In the computer

Windows

1. Click the Windows **Start** menu.
2. For Windows 2000, select **Settings > Printers**.
 - For Windows XP/2003, select **Printers and Faxes**.
 - For Windows 2008/Vista, select **Control Panel > Hardware and Sound > Printers**.
 - For Windows 7, select **Control Panel > Hardware and Sound > Devices and Printers**.
 - For Windows Server 2008 R2, select **Control Panel > Hardware > Devices and Printers**.
3. Right-click your machine.
4. For Windows XP/2003/2008/Vista, press **Printing Preferences**.
For Windows 7 and Windows Server 2008 R2, from context menus, select the **Printing Preferences**.



If **Printing Preferences** item has ► mark, you can select other printer drivers connected with selected printer.

5. Click **Paper** tab.
6. Select tray and its options, such as paper size and type.
7. Press **OK**.



If you want to use special-sized paper such as a billing paper, select **Paper** tab > **Size > Edit...** in the **Printing Preferences** (See "Opening printing preferences" on page 2).

Macintosh

Macintosh does not support this function. Macintosh users need to change the default setting manually each time they want to print using other settings.

1. Open a Macintosh application and select the file you want to print.
2. Open the **File** menu and click **Print**.
3. Go to **Paper Feed** pane.
4. Set appropriate tray from which you want to print.
5. Go to **Paper** pane.
6. Set paper type to correspond to the paper loaded in the tray from which you want to print.
7. Click **Print** to print.

Linux

1. Open **Terminal Program**
2. When the Terminal screen appears, type in the following:
[root@localhost root]# lpr [FileName]
3. Select **Printer** and click **Properties...**
4. Click **Advanced** tab.
5. Select tray (source) and its options, such as paper size and type.
6. Press **OK**.

Changing the font setting

Your machine has preset the font for your region or country.

If you want to change the font or set the font for special condition, such as the DOS environment, you can change the font setting as follows:

1. Double-click the **Smart Panel** icon on the Windows task bar (or Notification Area in Linux). You can also click **Smart Panel** on the status bar in Mac OS X.
Or, if you are a Windows user, you can launch it from the **Start** menu, select **Programs** or **All Programs > Samsung Printers > your printer driver name > Smart Panel**.
2. Click **Printer Setting**.
3. Click **Emulation**.
4. Confirm if **PCL** is selected in **Emulation Setting**.
5. Click **Apply**.



Following information shows the proper font list for corresponding languages.

- **Russian:** CP866, ISO 8859/5 Latin Cyrillic
- **Hebrew:** Hebrew 15Q, Hebrew-8, Hebrew-7 (Israel only)
- **Greek:** ISO 8859/7 Latin Greek, PC-8 Latin/Greek
- **Arabic & Farsi:** HP Arabic-8, Windows Arabic, Code Page 864, Farsi, ISO 8859/6 Latin Arabic
- **OCR:** OCR-A, OCR-B

media and tray

This chapter provides information on how to load originals and print media into your machine.

This chapter includes:

- Preparing originals
- Loading originals
- Selecting print media
- Changing the tray size

Preparing originals

- Do not load paper smaller than 142 x 148 mm (5.6 x 5.8 inches) or larger than 216 x 356 mm (8.5 x 14 inches).
- Do not attempt to load the following types of paper, in order to prevent paper jam, low print quality and machine damage.
 - Carbon-paper or carbon-backed paper
 - Coated paper
 - Onion skin or thin paper
 - Wrinkled or creased paper
 - Curled or rolled paper
 - Torn paper
 - Used paper (Something previously printed on side one)
- Remove all staples and paper clips before loading.
- Make sure any glue, ink, or correction fluid on the paper is completely dry before loading.
- Do not load originals that include different sizes or weights of paper.
- Do not load booklets, pamphlets, transparencies, or documents with other unusual characteristics.

Loading originals

You can use the scanner glass or the automatic document feeder to load an original for copying, scanning and sending a fax.

On the scanner glass

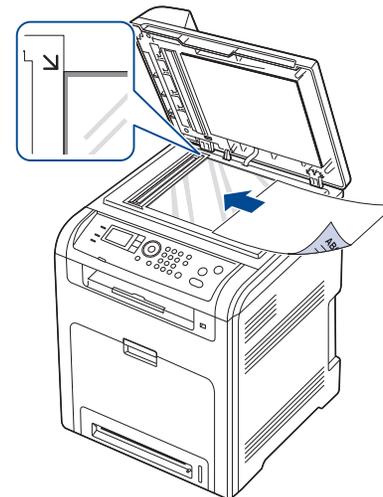
Make sure that no originals are in the document feeder. If an original is detected in the document feeder, the machine gives it priority over the original on the scanner glass. To get the best scan quality, especially for colored or gray-scaled images, use the scanner glass.

- Loading paper in the tray
- Printing on special media
- Setting the paper size and type
- Selecting an output location

1. Lift and open the scanner lid.



2. Place the original face down on the scanner glass. And align it with the registration guide at the top left corner of the glass.



3. Close the scanner lid.



- Leaving the scanner lid open while copying will create a black copy, and consume a great deal of toner.
- Dust on the scanner glass may cause black spots on the printout. Always keep it clean (See "Cleaning the scan unit" on page 3).
- If you are copying a page from a book or magazine, lift the scanner lid until its hinges are caught by the stopper and then close the lid. If the book or magazine is thicker than 30 mm, start copying with the lid open.

- ⚠ •Be careful not to break the scanner glass. You may get hurt.
- Do not put hands while closing the scanner lid. The scanner lid may fall on your hands and get hurt.
- Do not look the light from inside of the scanner while copying or scanning. It is harmful to eyes.

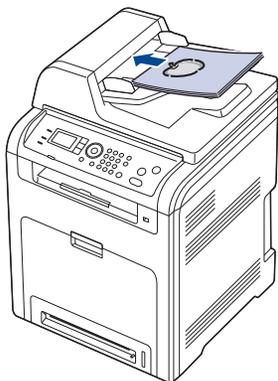
In the document feeder

Using the document feeder, you can load up to 40 sheets of paper (80 g/m², 20 lb bond) for one job.

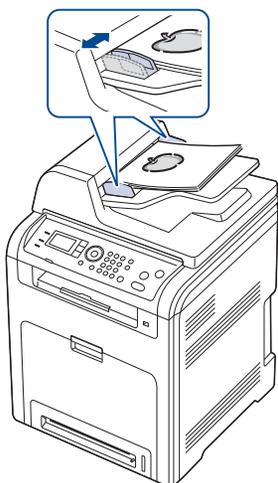
1. Flex or fan the edge of the paper stack to separate the pages before loading originals.



2. Load the original face up into the document feeder. Make sure that the bottom of the original stack matches the paper size marked on the document input tray.



3. Adjust the document width guides to the paper size.



- ⚠ Dust on the document feeder glass may cause black lines on the printout. Always keep the glass clean (See "Cleaning the scan unit" on page 3).

Selecting print media

You can print on a variety of print media, such as plain paper, envelopes, labels. Always use print media that meet the guidelines for use with your machine.

Guidelines to select the print media

Print media that does not meet the guidelines outlined in this user's guide may cause the following problems:

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

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

- The type, size and weight of the print media for your machine are described in print media specifications (See "Print media specifications" on page 3).
- Desired outcome: The print media you choose should be appropriate for your project.
- Brightness: Some print media are whiter than others and produce sharper, more vibrant images.
- Surface smoothness: The smoothness of the print media affects how crisp the printing looks on the paper.
- ⚠ •Some print media may meet all of the guidelines in this section and still not produce satisfactory results. This may be the result of improper handling, unacceptable temperature and humidity levels, or other variables over which cannot be controlled.
- Before purchasing large quantities of print media, ensure that it meets the requirements specifications in this user's guide and meets your output requirements.
- ⚠ Using print media that does not meet these specifications may cause problems, requiring repairs. Such repairs are not covered by the warranty or service agreements.

The amount of paper put into the tray may differ according to media type used (See "Print media specifications" on page 3).

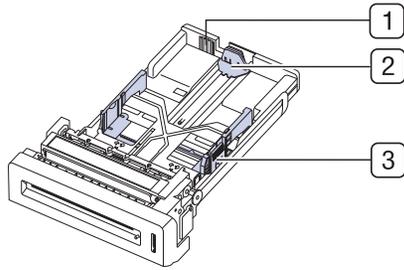
Media sizes supported in each mode

Mode	Size	Source
Copy mode	Letter, A4, Legal, Oficio, Folio, Executive, ISO B5, JIS B5, A5, A6	<ul style="list-style-type: none"> • Tray 1 • Optional tray 2 • Multi-purpose tray
Print mode	All sizes supported by the machine.	<ul style="list-style-type: none"> • Tray 1 • Optional tray 2 • Multi-purpose tray
Fax mode	Letter, A4, Legal	<ul style="list-style-type: none"> • Tray 1 • Optional tray 2
Duplex printing^a	Letter, A4, Legal, Folio, Oficio	<ul style="list-style-type: none"> • Tray 1 • Optional tray 2 • Multi-purpose tray

a. 75 to 105 g/m² (20~28 lb bond) only

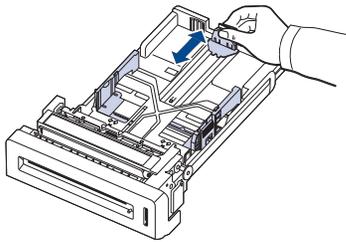
Changing the tray size

The tray is preset to Letter or A4 size, depending on your country. To change the size, you need to adjust the paper guides.



- 1 Tray extend lever**
- 2 Paper length guide**
- 3 Paper width guide**

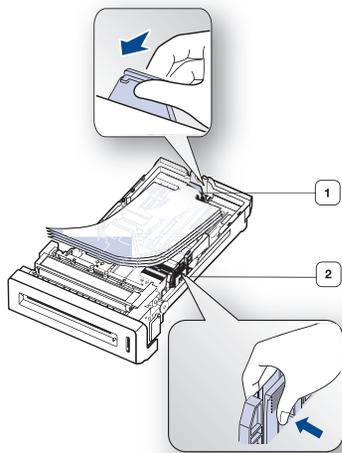
1. Hold the tray with one hand, and with the other hand squeeze and slide the paper length guide to locate them in the correct paper size slot marked at the bottom of the tray.



2. Flex or fan the edge of the paper stack to separate the pages before loading papers.



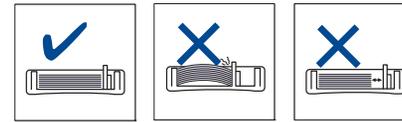
3. After inserting paper into the tray, squeeze the paper width guides and paper length guide. Then slide them to the desired paper size marked at the bottom of the tray.



- 1 Paper length guide**
- 2 Paper width guide**

-  Do not push the paper width guide too far causing the media to warp.
- If you do not adjust the paper width guide, it may cause paper

jams.



Loading paper in the tray

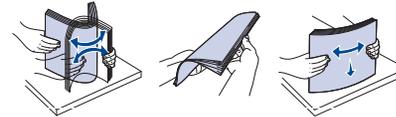
Tray 1/optional tray 2

Load the print media you use for the majority of your print jobs into tray 1. Tray 1 can hold a maximum of 250 sheets of plain paper.

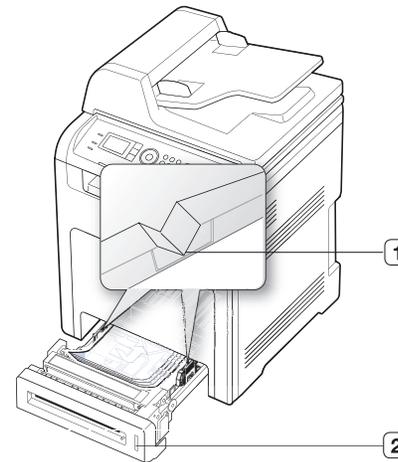
You can purchase an optional tray and attach it below the standard tray to load an additional 500 sheets of plain paper (See "Available accessories" on page 2).

-  Using photographic paper or coated paper may cause problems, requiring repairs. Such repairs are not covered by the warranty or service agreements.

1. Pull out tray. And adjust the tray size to the media size you are loading (See "Changing the tray size" on page 3).
2. Flex or fan the edge of the paper stack to separate the pages before loading papers.



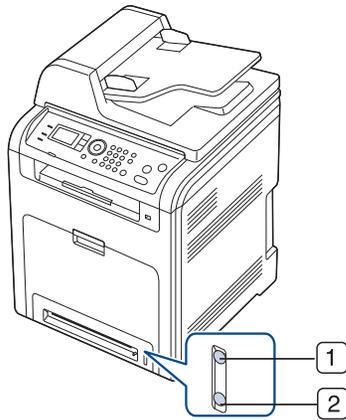
3. Place paper with the side you want to print facing up.



- 1 Paper limit mark**
- 2 Paper level indicator**



Paper quantity indicator shows the amount of paper in the tray.



1 Full

2 Empty

4. When you print a document, set the paper type and size for the tray. For information about setting the paper type and size on the control panel (See "Setting the paper size and type" on page 7).

- If you experience problems with paper feeding, check whether the paper meets the media specification. Then, try placing one sheet at a time in the multi-purpose tray (See "Print media specifications" on page 3).
 - The settings made from the machine driver override the settings on the control panel.
- a) To print in application, open an application and start the print menu.
 - b) Open **Printing Preferences** (See "Opening printing preferences" on page 2).
 - c) Press the **Paper** tab in **Printing Preferences**, and select an appropriate paper type.
 - d) Select tray in paper source, then press **OK**.
 - e) Start printing in application.

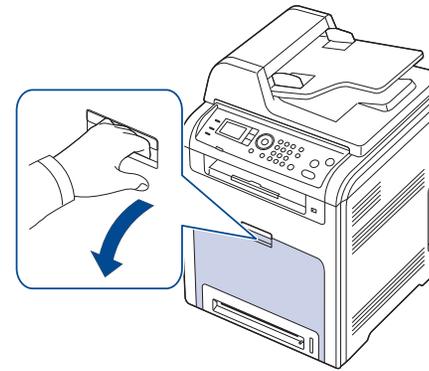
Multi-purpose tray

The multi-purpose tray can hold special sizes and types of print material, such as postcards, note cards and envelopes. It is useful for single page printing on colored paper.

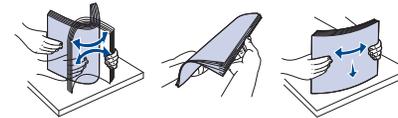
Tips on using the multi-purpose tray

- Load only one type, size and weight of print media at a time in the multi-purpose tray.
- To prevent paper jams, do not add paper while printing when there is still paper in the multi-purpose tray. This also applies to other types of print media.
- Always load the specified print media only to avoid paper jams and print quality problems (See "Print media specifications" on page 3).
- Flatten any curl on postcards, envelopes and labels before loading them into the multi-purpose tray.

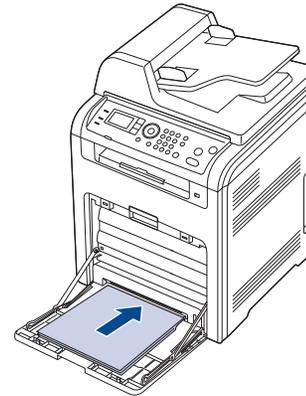
1. Grab the handle of multi-purpose tray and pull it down to open.



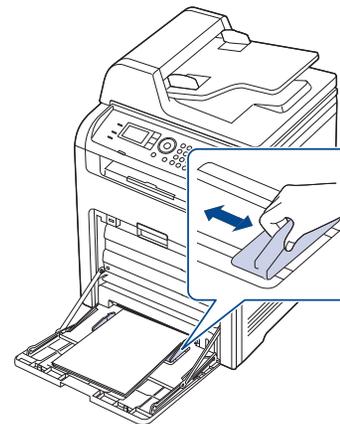
2. Flex or fan the edge of the paper stack to separate the pages before loading papers.



3. Load the paper with the side to be printed on facing down.



4. Squeeze the multi-purpose tray paper width guides and adjust them to the width of the paper. Do not force too much, or the paper will bent resulting in a paper jam or skew.



- When printing the special media, you must follow the loading guideline (See "Printing on special media" on page 5).
- When paper does not feed well while printing, push the paper in manually until it starts feeding automatically.

5. When you print a document, set the paper type and size for the multi-purpose tray.

For information about setting the paper type and size on the control panel (See "Setting the paper size and type" on page 7).

 The settings made from the machine driver override the settings on the control panel.

- a) To print in application, open an application and start the print menu.
- b) Open **Printing Preferences** (See "Opening printing preferences" on page 2).
- c) Press the **Paper** tab in **Printing Preferences**, and select an appropriate paper type.
For example, if you want to use a label, set the paper type to **Label**.
- d) Select **Manual Feeder** in paper source, then press **OK**.
- e) Start printing in application.
- f) After printing, close the multi-purpose tray.

Printing on special media

The table below shows the available special media for each tray.

 When using special media, we recommend you feed one paper at a time. Check the maximum input number of media for each tray (See "Print media specifications" on page 3).

Types	Tray 1	Optional tray	Multi-purpose tray
Plain	•	•	•
Thick	•	•	•
Thicker			•
Extra Thick			•
Thin	•	•	•
Cotton	•	•	•
Color	•	•	•
Preprinted	•	•	•
Recycled	•	•	•
Envelope			•
Labels			•
CardStock			•
Bond			•
Archive			•
Glossy Photo			•
Matte Photo			•

(•: Supported, Blank: Not supported)

The media types are shown in the **Printing Preferences**. This paper type option allows you to set the type of paper to be loaded in the tray. This setting appears in the list, so that you can select it. This will let you get the best quality printout. If not, the desired print quality may not be achieved.

- **Plain:** 70 to 90 g/m² (19 to 24 lb) Normal plain paper.

- **Thick:** 90 to 105 g/m² (24 to 28 lb) thick paper.
- **Thicker:** 106 to 120 g/m² (28 to 32 lb) thicker paper.
- **Extra Thick:** 120 to 170 g/m² (32 to 46 lb) extra thick.
- **Thin:** 60 to 70 g/m² (16 to 19 lb) thin paper.
- **Cotton:** 75 to 90 g/m² (20 to 24 lb) cotton paper.
- **Color:** 75 to 90 g/m² (20 to 24 lb) color-background paper.
- **Preprinted:** 75 to 90 g/m² (20 to 24 lb) preprinted/letterhead paper.
- **Recycled:** 70 to 90 g/m² (19 to 24 lb) recycled paper.

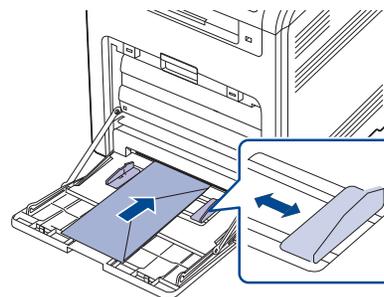
 When you use recycled paper as a used paper, printouts might be wrinkled and/or jamming may occur due to excessive curl.

- **Envelope:** 75 to 90 g/m² (20 to 24 lb) envelope.
- **Labels:** 120 to 150 g/m² (32 to 40 lb) label.
- **CardStock:** 171 to 220 g/m² (46 to 59 lb) cardstock.
- **Bond:** 105 to 120 g/m² (28 to 32 lb) bond.
- **Archive:** 70 to 90 g/m² (19 to 24 lb). If you need to keep the print-out for a long period time, such as archives, select this option.
- **Glossy Photo:** 111 to 130 g/m² (30 to 35lb), 131 to 175 g/m² (35 to 47lb), 176 to 220 g/m² (47 to 59lb) glossy photo paper.
- **Matte Photo:** 111 to 130 g/m² (30 to 35lb), 131 to 175 g/m² (35 to 47lb), 176 to 220 g/m² (47 to 59lb) matte photo paper.

Envelope

Successful printing on envelopes depends upon the quality of the envelopes.

To print an envelope, place it flap side up with the stamp area bottom the top right side.



- When selecting envelopes, consider the following factors:
 - Weight:** The weight of the envelope paper should not exceed 90 g/m² otherwise, jam may occur.
 - Construction:** Prior to printing, envelopes should lie flat with less than 6 mm curl, and should not contain air.
 - Condition:** Envelopes should not be wrinkled, nicked, either damaged.
 - Temperature:** Use envelopes that are compatible with the heat and pressure of the machine during operation.
- Use only well-constructed envelopes with sharp and well-creased folds.
- Do not use stamped envelopes.
- Do not use envelopes with clasps, snaps, windows, coated lining, self-adhesive seals, or other synthetic materials.
- Do not use damaged or poorly made envelopes.
- Be sure the seam at both ends of the envelope extends all the way to the corner of the envelope.

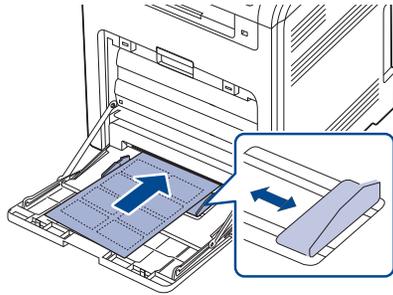


-
- 1 **Acceptable**
 - 2 **Unacceptable**
-

- Envelopes with a peel-off adhesive strip or with more than one flap that folds over to seal must use adhesives compatible with the machine's fusing temperature about 170°C (338 °F) for 0.1 second. The extra flaps and strips might cause wrinkling, creasing, or jams and may even damage the fuser.
- For the best print quality, position margins no closer than 15 mm from the edges of the envelope.
- Avoid printing over the area where the envelope's seams meet.

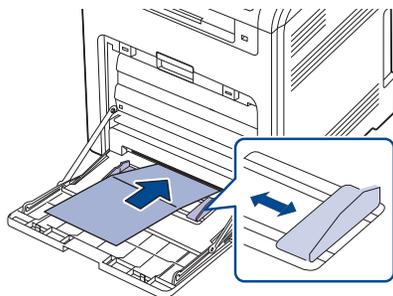
Labels

To avoid damaging the machine, use only labels designed for use in laser machines.



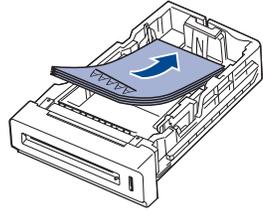
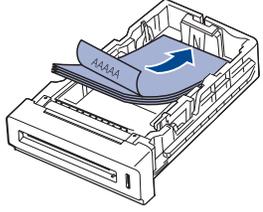
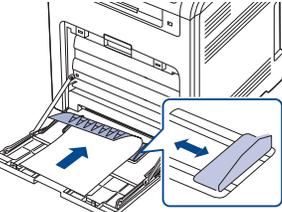
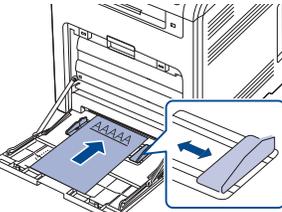
- When selecting labels, consider the following factors:
 - Adhesives:** The adhesive material should be stable at your machine's fusing temperature about 170°C (338 °F).
 - Arrangement:** Only use labels with no exposed backing between them. Labels can peel off sheets that have spaces between the labels, causing serious jams.
 - Curl:** Prior to printing, labels must lie flat with no more than 13 mm of curl in any direction.
 - Condition:** Do not use labels with wrinkles, bubbles, or other indications of separation.
- Make sure that there is no exposed adhesive material between labels. Exposed areas can cause labels to peel off during printing, which can cause paper jams. Exposed adhesive can also cause damage to machine components.
- Do not run a sheet of labels through the machine more than once. The adhesive backing is designed for only a single pass through the machine.
- Do not use labels that are separating from the backing sheet or are wrinkled, bubbled, or otherwise damaged.

Card stock/Custom-sized paper



- Do not print on media smaller than 98 mm (3.9 inches) wide or 148 mm (5.8 inches) long.
- In the software application, set margins at least 6.4 mm (0.25 inches) away from the edges of the material.

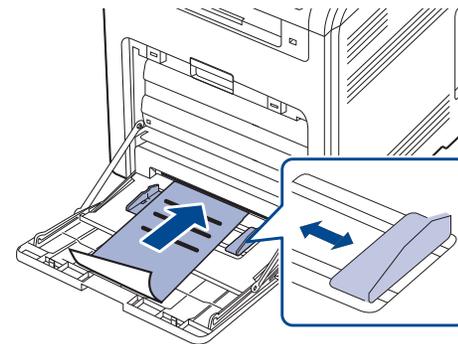
Letterhead/Preprinted paper

	Single-sided	double-sided
Tray1 Optional tray	Face up 	Face down 
Multi-purpose tray	Face down 	Face up 

- Letterhead/ Preprinted paper must be printed with heat-resistant ink that will not melt, vaporize, or release hazardous emissions when subjected to the machine's fusing temperature for 0.1 second. Check your machine's specification to view the fusing temperature about 170°C (338 °F).
- Letterhead/ Preprinted paper ink must be non-flammable and should not adversely affect machine rollers.
- Forms and letterhead should be sealed in a moisture-proof wrapping to prevent changes during storage.
- Before you load letterhead/preprinted paper, verify that the ink on the paper is dry. During the fusing process, wet ink can come off preprinted paper, reducing print quality.

Used paper

When loading used paper, printed side should be facing up with an uncurled edge at the front. If you experience problems with paper feed, turn the paper around. Note that print quality is not guaranteed.



- Used paper must be printed with heat-resistant ink that will not melt, vaporize, or release hazardous emissions when subjected to the

machine's fusing temperature for 0.1 second. Check your machine's specification to view the fusing temperature about 170°C(338 °F).

- Used paper ink must be non-flammable and should not adversely affect machine rollers.
- Before you load used paper, verify that the ink on the paper is dry. During the fusing process, wet ink can come off used paper, reducing print quality.

Photo

- Make sure not to use the inkjet photo paper with this machine. It could cause damage to the machine.

Glossy photo

- ✍ Load one paper to the multi-purpose tray at a time, glossy side facing down.

- Recommended media: Glossy paper (Letter) for this machine by **HP Brochure Paper** (Product: Q6611A) only.
- Recommended media: Glossy paper (A4) for this machine by **HP Superior Paper 160 glossy** (Product: Q6616A).

Matte photo

- ✍ Load one paper to the multi-purpose tray at a time, side to be printed facing down.

Setting the paper size and type

After loading paper in the paper tray, set the paper size and type using the control panel. These settings will apply to copy and fax modes. For computer printing, select the paper size and type in the application program you use on your computer (See "Opening printing preferences" on page 2).

- ✍ The settings made from the machine driver override the settings on the control panel.

Setting the paper size

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Paper Setup** and press **OK**.
4. Press the up/down arrow to highlight **Paper Size** and press **OK**.
5. Press the up/down arrow to select the paper tray you want and press **OK**.
6. Press the up/down arrow to select the paper size you want.
7. Press **OK** to save the selection.
8. Press **Stop/Clear** to return to ready mode.

- ✍ If you want to use special-sized paper-such as a billing paper, select **Custom** in the **Paper** tab in the **Printing Preferences** (See "Opening printing preferences" on page 2).

Setting the paper type

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Paper Setup** and press **OK**.
4. Press the up/down arrow to highlight **Paper Type** and press **OK**.
5. Press the up/down arrow to select the paper tray you want and press **OK**.
6. Press the up/down arrow to select the paper type you want.
7. Press **OK** to save the selection.

8. Press **Stop/Clear** to return to ready mode.

Setting the paper source

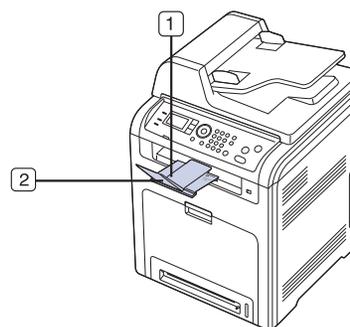
1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Paper Setup** and press **OK**.
4. Press the up/down arrow to highlight **Paper Source** and press **OK**.
5. Press the up/down arrow to highlight **Copy Tray** or **Fax Tray** and press **OK**.
6. Press the up/down arrow to select the paper tray you want.
7. Press **OK** to save the selection.
8. Press **Stop/Clear** to return to ready mode.

- ✍ If you want to use special-sized paper-such as a billing paper, select **Edit..** in the **Paper** tab in the **Printing Preferences** (See "Opening printing preferences" on page 2).

Selecting an output location

- ✍ The surface of the output tray may become hot if you print a large number of pages at once. Make sure that you do not touch the surface, and do not allow children near it.

The printed pages stack on the output tray, and the output support will help the printed pages to align. For the output support to correctly align the pages, you need to pull it out appropriately depending on the paper size.

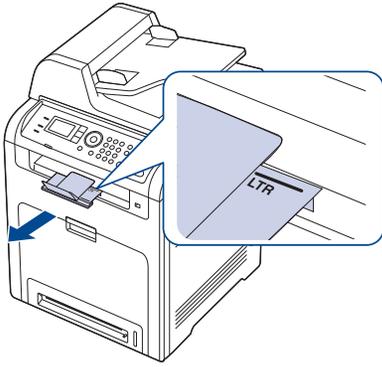


- 1 Output support
- 2 Extension

- ✍ If paper coming out of the output tray has problems, such as excessive curl, try printing to the rear door.
- If the output support is incorrectly adjusted, printed pages may be mis-aligned or fall.

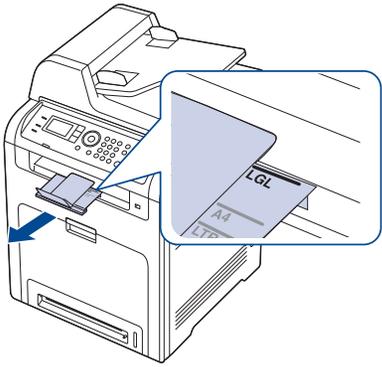
For Letter-sized paper

Pull out the output support to the location indicated LTR as shown, and unfold the extension.



For A4- or Legal-sized paper

Pull out the output support to the location indicated A4, LGL as shown, and unfold the extension.



printing

This chapter explains common printing tasks.

This chapter includes:

- Introducing useful software programs
- Printer driver features
- Basic printing
- Opening printing preferences
- Using help
- Using special print features
- Postscript options
- Using direct printing utility (CLX-6250 Series only)

 The procedures in this chapter are mainly based on Windows XP.

Introducing useful software programs

Samsung AnyWeb Print

This tool helps you to screen-capture, preview, scrap and print the screen of Windows Internet Explorer more easily, than when you use the ordinary program. Click **Start > All programs > Samsung Printers > Samsung AnyWeb Print > Download the latest version** to link the website where the tool is available for the download. This tool is available only for Windows operating systems.

Samsung Easy Color Manager

This program helps users to adjust color as they like. Users can adjust the printout color as they see them on the monitor. The adjusted color can be stored on the printer driver and applied to printouts. Download this program from <http://solution.samsungprinter.com/personal/colormanager>.

Printer driver features

Your printer drivers support the following standard features:

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

In addition, you can use various special printing features. The following table shows a general overview of features supported by your printer drivers:

 Some models or operating system may not support the certain feature(s) in the following table.

- Changing the default print settings
- Setting your machine as a default machine
- Printing to a file (PRN)
- Using the job accounting option
- Macintosh printing
- Linux printing
- UNIX printing

PCL Printer driver

Feature	Windows
Machine quality option	•
Booklet printing	•
Poster printing	•
Multiple pages per sheet	•
Fit to page printing	•
Reduce and enlarge printing	•
Different source for first page	•
Watermark	•
Overlay	•
Double-sided printing (duplex)	•

(•: Supported, Blank: Not supported)

PostScript Printer driver

Feature	Windows	Linux	Macintosh
Machine quality option	•	•	•
Poster printing	•		
Multiple pages per sheet	•	• (2, 4)	•
Fit to page printing	•	•	•
Reduce and enlarge printing	•		•
Different source for first page	•		•
Watermark	•		
Overlay	•		
Double-sided printing (duplex) ^a	•	•	•

a. The machine with duplex feature prints both side of a paper.

(•: Supported, Blank: Not supported)

Basic printing

Your machine allows you to print from various Windows, Macintosh, Linux or UNIX applications. The exact steps for printing a document may vary depending on the application you use.

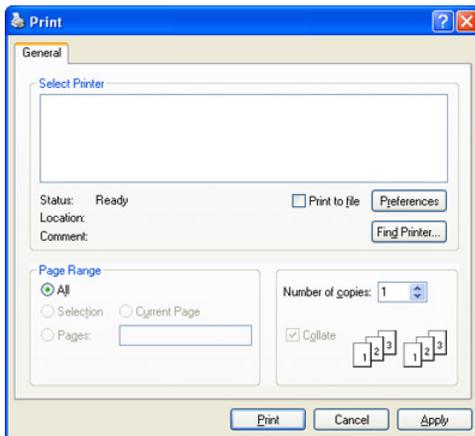
- Your **Printing Preferences** window that appears in this user's guide may differ depending on the machine in use. However, the composition of the **Printing Preferences** window is similar. Check the operating system(s) that are compatible with your machine (See "System requirements" on page 2).
- When you select an option in **Printing Preferences**, you may see a warning mark, , or . An exclamation mark () means you can select that certain option but it is not recommended, and () mark means you cannot select that option due to the machine's setting or environment.

The following procedure describes the general steps required for printing from various Windows applications.

- Macintosh basic printing (See "Macintosh printing" on page 9).
- Linux basic printing (See "Linux printing" on page 10).
- UNIX basic printing (See "UNIX printing" on page 12).

The following **Printing Preferences** window is for Notepad in Windows XP. Your **Printing Preferences** window may differ, depending on your operating system or the application you are using.

1. Open the document you want to print.
2. Select **Print** from the **File** menu. The **Print** window appears.
3. Select your machine from the **Select Printer** list.



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

- To take advantage of the printer features provided by your printer driver, click **Properties** or **Preferences** in the application's **Print** window to change the print setting (See "Opening printing preferences" on page 2).
4. To start the print job, click **OK** or **Print** in the **Print** window.
- The PostScript driver is recommended for best print image quality from PostScript-based applications such as Acrobat Reader®, Adobe Illustrator®, Adobe Photoshop®, etc.
 - If you are using Windows Internet Explorer, the Samsung AnyWeb Print tool will save your time for screen-captured images or printing the image. Click **Start** > **All programs** > **Samsung Printers** > **your machine name** > **Samsung AnyWeb** > **Download the latest version** to link the website where the tool is available for the download.

Canceling a print job

If the print job is waiting in a print queue or print spooler, cancel the job as follows:

1. Click the Windows **Start** menu.
2. For Windows 2000, select **Settings** > **Printers**.
 - For Windows XP/2003, select **Printers and Faxes**.
 - For Windows 2008/Vista, select **Control Panel** > **Hardware and Sound** > **Printers**.
 - For Windows 7, select **Control Panel** > **Hardware and Sound** > **Devices and Printers**.
 - For Windows Server 2008 R2, select **Control Panel** > **Hardware** > **Devices and Printers**.
3. For Windows 2000, XP, 2003, Vista and 2008, double-click your machine.
For Windows 7 and Windows Server 2008 R2, right click your printer icon > context menus > **See what's printing**.

 If **See what's printing** item has  mark, you can select other printer drivers connected with selected printer.

4. From the **Document** menu, select **Cancel**.

 You can also access this window by simply double-clicking the machine icon () in the Windows task bar.

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

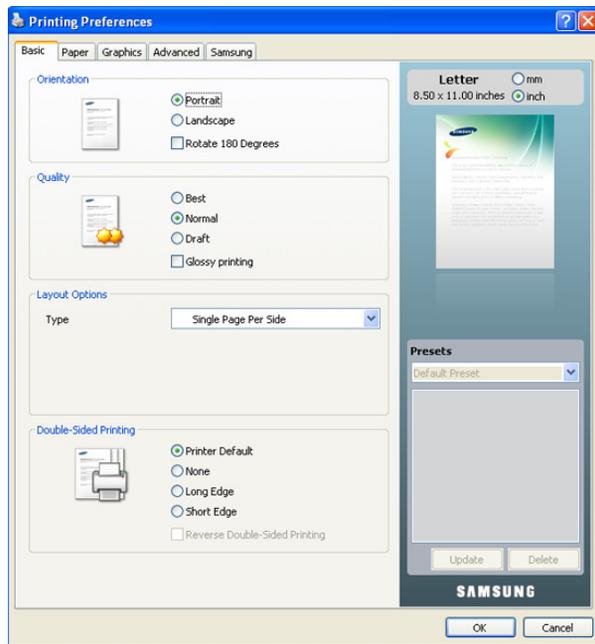
Opening printing preferences

You can preview the settings you selected on the upper right of the **Printing Preferences**.

 The following windows may differ, depending on your operating system, printer models or the application you are using.

1. Open the document you want to print.
2. Select **Print** from the file menu. The **Print** window appears.
3. Select your machine from the **Select Printer**.

4. Click **Properties** or **Preferences**.



Using a favorite setting

The **Presets** option, which is visible on each preferences tab except for **Samsung** tab, allows you to save the current preferences settings for future use.

To save a **Presets** item:

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



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

If you click **Add**, the **Add** button changes to **Update** button. Select more options and click **Update**, settings will be added to the **Presets** you made. To use a saved setting, select it from the **Presets** drop down list. The machine is now set to print according to the setting you selected.

To delete saved setting, select it from the **Presets** drop down list and click **Delete**.

You can also restore the printer driver's default settings by selecting **Default Preset** from the **Presets** drop down list.

Using help

Click the question mark from the upper-right corner of the window and click on any option you want to know about. Then a pop up window appears with information about that option's feature which is provided from the driver.



If you want to search information via a keyword, click the **Samsung** tab in the **Printing Preferences** window, and enter a keyword in the input line of the **Help** option. To get information about supplies, driver update or registration and so on, click appropriate buttons.

Using special print features

Special print features include:

- "Printing multiple pages on one sheet of paper" on page 3.
- "Printing posters" on page 3.
- "Printing booklets" on page 4.
- "Printing on both sides of paper" on page 4.
- "Change percentage of your document" on page 4.
- "Fitting your document to a selected paper size" on page 4.
- "Using watermarks" on page 5.
- "Using overlay (PCL driver only)" on page 5.
- "Job Setting (CLX-6250 Series only)" on page 6.
- "Graphics tab options" on page 6.
- "Enhancing glossiness (Windows only)" on page 7.

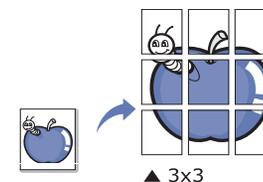
Printing multiple pages on one sheet of paper

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.

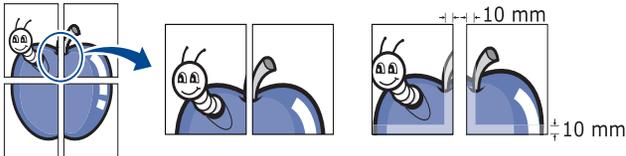
1. To change the print settings from your software application, access **Printing Preferences** (See "Opening printing preferences" on page 2).
2. Click the **Basic** tab, select **Multiple Pages Per Side** in the **Type** drop-down list.
3. Select the number of pages you want to print per sheet (2, 4, 6, 9, or 16) in the **Pages per Side** drop-down list.
4. Select the page order from the **Page Order** drop-down list, if necessary.
5. Check **Print Page Border** to print a border around each page on the sheet.
6. Click the **Paper** tab, select the **Size**, **Source** and **Type**.
7. Click **OK** or **Print** until you exit the **Print** window.

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 **Printing Preferences** (See "Opening printing preferences" on page 2)
2. Click the **Basic** tab, select **Poster Printing** in the **Type** drop-down list.
3. Select the page layout you want.
Specification of the page layout:
 - Poster 2x2:** Document will be enlarged and be divided into 4 pages.
 - Poster 3x3:** Document will be enlarged and be divided into 9 pages.
 - Poster 4x4:** Document will be enlarged and be divided into 16 pages.
4. Select the **Poster Overlap** value. Specify **Poster Overlap** in millimeters or inches by selecting the radio button on the upper right of **Basic** tab to make it easier to paste the sheets together.

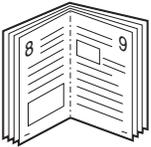


5. Click the **Paper** tab, select the **Size, Source** and **Type**.
6. Click **OK** or **Print** until you exit the **Print** window.
7. You can complete the poster by pasting the sheets together.

Printing booklets

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

-  If you want to make a booklet, you need to print on Letter, Legal, A4, US Folio, or Oficio sized print media.



1. To change the print settings from your software application, access the **Printing Preferences** (See "Opening printing preferences" on page 2).
2. Click the **Basic** tab, select **Booklet Printing** from the **Type** drop-down list.
3. Click the **Paper** tab, select the **Size, Source** and **Type**.

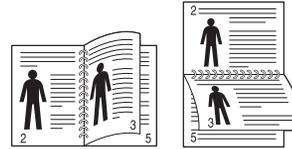
 The **Booklet Printing** option is not available for all paper sizes. In order to find out the available paper size for this feature, select the available paper size in the **Size** option on the **Paper** tab.
If you select an unavailable paper size, this option can be automatically canceled. Select only available paper. (paper without  or  mark).
4. Click **OK** or **Print** until you exit the **Print** window.
5. After printing, fold and staple the pages.

Printing on both sides of paper

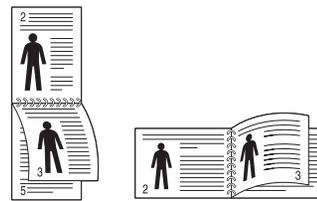
You can print on both sides of a paper; duplex. Before printing, decide how you want your document oriented. You can use this feature with Letter, Legal, A4, US Folio, or Oficio sized paper.

-  We recommend not to print on both sides of the special media, such as labels, envelopes, or thick paper to print on both sides of paper. It may cause a paper jam or damage the machine.

1. To change the print settings from your software application, access **Printing Preferences** (See "Opening printing preferences" on page 2).
2. Click the **Basic** tab.
3. From the **Double-Sided Printing** section, select the binding option you want.
 - Printer Default:** If you select this option, this feature is determined by the setting you've made on the control panel of the machine.
 - None**
 - Long Edge:** This option is the conventional layout used in bookbinding.



- Short Edge:** This option is the conventional layout used in calendars.



- Reverse Double-Sided Printing:** Check this option to reverse the print order when duplex printing.

4. Click the **Paper** tab, select the **Size, Source** and **Type**.
5. Click **OK** or **Print** until you exit the **Print** window.

Change percentage of your document

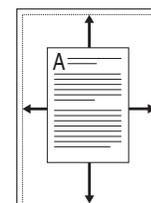
You can change the size of a document to appear larger or smaller on the printed page by typing in a percentage you want.



1. To change the print settings from your software application, access **Printing Preferences** (See "Opening printing preferences" on page 2).
2. Click the **Paper** tab.
3. Enter the scaling rate in the **Percentage** input box.
You can also click the up/down arrows to select the scaling rate.
4. Select the **Size, Source** and **Type** in **Paper Options**.
5. Click **OK** or **Print** until you exit the **Print** window.

Fitting your document to a selected paper size

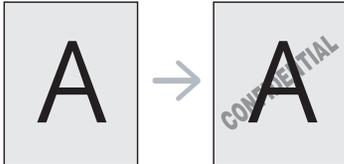
This printer feature allows you to scale your print job to any selected paper size regardless of the document size. This can be useful when you want to check fine details on a small document.



1. To change the print settings from your software application, access **Printing Preferences** (See "Opening printing preferences" on page 2).
2. Click the **Paper** tab.
3. Select the paper size you want from the **Fit to Page**.
4. Select the **Size, Source** and **Type** in **Paper Options**.
5. Click **OK** or **Print** until you exit the **Print** window.

Using watermarks

The watermark option allows you to print text over an existing document. For example, you use it when you 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 machine. 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 **Printing Preferences** (See "Opening printing preferences" on page 2).
2. Click the **Advanced** 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** or **Print** until you exit the print window.

Creating a watermark

1. To change the print settings from your software application, access **Printing Preferences** (See "Opening printing preferences" on page 2).
2. From the **Advanced** tab, select **Edit** from the **Watermark** drop-down list. The **Edit Watermarks** window appears.
3. Enter a text message in the **Watermark Message** box. You can enter up to 256 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 and shade from the **Font Attributes** section, as well as set the angle of the watermark from the **Message Angle** section.
5. Click **Add** to add a new watermark to the **Current Watermarks** list.
6. When you have finished editing, click **OK** or **Print** until you exit the **Print** window.

To stop printing the watermark, select **None** from the **Watermark** drop-down list.

Editing a watermark

1. To change the print settings from your software application, access **Printing Preferences** (See "Opening printing preferences" on page 2).
2. Click the **Advanced** tab, select **Edit** from the **Watermark** drop-down list. 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.

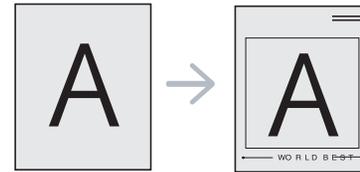
5. Click **OK** or **Print** until you exit the **Print** window.

Deleting a watermark

1. To change the print settings from your software application, access **Printing Preferences** (See "Opening printing preferences" on page 2).
2. Click the **Advanced** tab, select **Edit** from the **Watermark** drop-down list. The **Edit Watermarks** window appears.
3. Select the watermark you want to delete from the **Current Watermarks** list and click **Delete**.
4. Click **OK** or **Print** until you exit the **Print** window.

Using overlay (PCL driver only)

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 letterhead paper. Rather than using preprinted letterhead, you can create an overlay containing exactly the 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 machine just 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 **Printing Preferences** (See "Opening printing preferences" on page 2).
3. Click the **Advanced** tab, and select **Edit** from the **Text** drop-down list. The **Edit Overlay** window appears.
4. In the **Edit Overlay** window, click **Create**.
5. In the **Save As** 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**.
7. Click **OK** or **Print** until you exit the **Print** window.
8. The file is not printed. Instead, it is stored on your computer hard disk drive.

 The overlay document size must be the same as the document 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 **Printing Preferences** (See "Opening printing preferences" on page 2).
3. Click the **Advanced** tab.
4. Select the desired overlay from the **Text** drop-down list.

5.If the overlay file you want does not appear in the **Text** drop-down list, select **Edit** from the list and click **Load**. Select the overlay file you want to use.

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** 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, check **Confirm Page Overlay When Printing** box. 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 **Print** until you exit the **Print** window.

The selected overlay prints on your document.

 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 **Printing Preferences** window, click the **Advanced** tab.

2.Select **Edit** in the **Overlay** drop down list.

3.Select the overlay you want to delete from the **Overlay List** box.

4.Click **Delete**.

5.When a confirming message window appears, click **Yes**.

6.Click **OK** or **Print** until you exit the **Print** window.

Job Setting (CLX-6250 Series only)

This option allows you to choose how to print the printing file by using the 512 MB optional memory or hard disk.

 **Store, Spool, Normal, Proof and Print Schedule** mode is available only if you have installed the optional hard disk.

• **Print Mode:** The default **Print Mode** is **Normal**, which is for printing without saving the printing file in the memory.

-**Normal:** This mode prints without storing your document in the optional memory.

-**Proof:** This mode is useful when you print more than one copy. You can print one copy first to check, then print the rest of copies later.

-**Confidential:** This mode is used for printing confidential document. You need to enter a password to print.

-**Store:** Select this setting to save a document in the hard disk without printing.

-**Spool:** This option can be useful to handle large amount of data. If you select this setting, the print spools the document into the hard disk and then prints it from the hard disk queue, decreasing the computer's work load.

-**Print Schedule:** Select this setting to print the document at a specified time.

• **User ID:** This option is used when you need to find a saved file using the control panel.

• **Job Name:** This option is used when you need to find a saved file using the control panel.

Graphics tab options

Use the following Graphics options to adjust the print quality for your specific printing needs.

Adjusting color

If you feel the color difference between the printout and monitor, you may change the color setting such as color contrast or color level.

The printer driver provides graphic options to adjust the print quality for specific printing needs.

-  •If the option is grayed out or not shown, that option is not applicable with the printer language you are using.
- This options you can select may vary depending on your printer model.

1.To change the print settings from your software application, access **Printing Preferences** (See "Opening printing preferences" on page 2).

2.Click the **Graphics** tab. Refer to the online help for each option's information provided from the **Printing Preferences**.

•**Color Mode:** You can choose color options between **Color** or **Grayscale**. Setting to **Color** typically produces the best possible print quality for color document. If you want to print a color document in gray scale, select **Grayscale**.

 **BlackOptimization** allows you to print in high quality black. If you use this option, it might take longer to print.

To adjust color manually, select **Advanced** in **Color Mode**. Simply slide the color balance slider in the **Levels** tab to adjust color, or select **Matching** tab for driver provided color correction for general image processing.

•**Font/ Text:** Select **Darken Text** to print texts darker than on a normal document. Use **All Text Black** to prints solid black, regardless of the color it appears on the screen.

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

-**True Type 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.

-**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.

•**Raster Compression:** This option determines the compression level of images for transferring data from computer to a printer. If you set this option to **Maximum**, the printing speed will be high, but the printing quality will be low. (PCL driver only)

•**Graphic Controller:** It allows user to emphasize edges of texts and fine lines for improving readability and align each color channel registration in color printing mode.

-**Grayscale Enhancement:** It allows users to preserve the details of nature photos, and improve contrast and readability among gray scaled colors, when printing color documents in grayscale. (PCL driver only)

-**Fine Edge:** It allows users to emphasize edges of texts and fine lines for improving readability.

•**Toner Save:** Selecting this option extends the life of your toner cartridge and reduces your cost per page without a significant reduction in print quality.

3.Select **Apply** after completing the settings.

Adjusting the sharpness and smoothness

Screen options

This option affects the resolution and clarity of your color output. The three screen options are **Normal**, **Enhanced** and **Detailed**.

1. To change the print settings from your software application, access **Printing Preferences** (See "Opening printing preferences" on page 2).
2. Click the **Graphics** tab then select **Advanced in Color Mode**.
3. Select the **Matching** tab.
 - **Printer default:** Follows the set value of **Screen** mode from the printer.
 - **Normal:** This mode will generate printouts with smooth tone over the entire page.
 - **Enhanced:** This mode will generate printouts with sharp texts and smooth graphic/photo objects in the page.
 - **Detailed:** This mode will generate printouts with sharp details over the entire page.
4. Select **OK**.

Enhancing glossiness (Windows only)

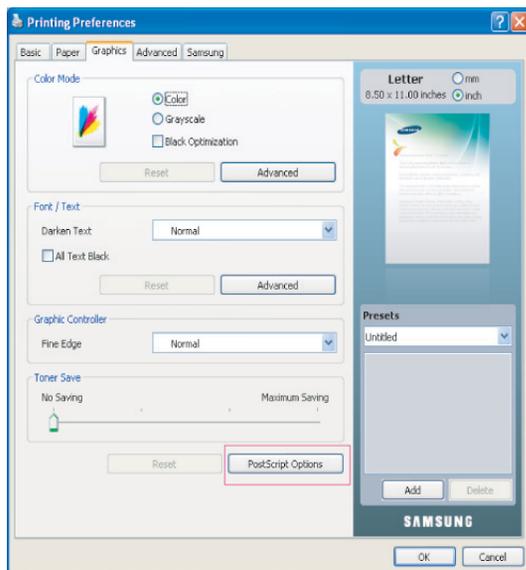
You can enhance the glossiness of the printout by using this feature.



- You can only print on one side of paper with this option.
- If you use this option, it might take longer to print.

1. To change the print settings from your software application, access **Printing Preferences** (See "Opening printing preferences" on page 2).
2. Click the **Basic** tab.
3. Check **Glossy Printing in Quality**.
4. Select **OK**.

Postscript options



The following windows may differ, depending on your operating system, printer models or the application you are using.

Following options are only supported on the Post Script driver.

Open the **Printing Preferences** (See "Opening printing preferences" on page 2). Then click **Graphic** tab > **PostScript Options**.

- **Output Option:** This option allows you to select the output format for PostScript files.
 - **Optimize for Speed:** General format for PostScript files.
 - **Optimize for Portability:** Creates a file that conforms to the Adobe Document Structuring Conventions (ADSC). This is a useful format to use when you want to create a PostScript file and print it on a different machine.
 - **Encapsulated PostScript (EPS):** Creates a file as an image. This is a useful format to use if you want to include the file as an image in another document that will be printed from a different program.
 - **Archive Format:** Creates a PostScript file you can use it later.
- **PostScript Language:** This option allows you to choose the PostScript language level.
- **Send PostScript Error Handler:** If this option is checked, the machine prints an error page when an error occurs during printing.

Using direct printing utility (CLX-6250 Series only)

This chapter explains how to use the Direct Printing Utility to print PDF files without having to open the files.



- Hard disk drive (HDD) should be installed on your machine, to print PDF files using this program.
- You cannot print PDF files that are restricted to print. Deactivate the printing restriction feature, and retry printing.
- You cannot print PDF files that are protected by a password. Deactivate the password feature, and retry printing.
- Whether or not a PDF file can be printed using the Direct Printing Utility program depends on how the PDF file was created.
- The Direct Printing Utility program supports the PDF version 1.4 and below. For a higher version, you must open the file to print it.

What is Direct Printing Utility?

Direct Printing Utility is a program that sends a PDF file directly to your machine to print without having to open the file. It sends data through the Windows spooler using the port of the printer driver. It only supports PDF format.

To install this program, select **Custom installation** and put a check mark in this program when you install the printer driver.

Printing

There are several ways you can print using the Direct Printing Utility.

From the Direct Printing Utility window

1. From the **Start** menu select **Programs** or **All Programs** > **Samsung Printers** > **Direct Printing Utility** > **Direct Printing Utility**.
Or, double-click the Direct Printing Utility shortcut icon on your desktop.
The Direct Printing Utility window opens.
2. Select your machine from the **Select Printer** drop-down list and click **Browse**.
3. Select the PDF file you wish to print and click **Open**.
The PDF file is added in the **Selected Files** section.
4. Customize the machine settings for your needs.
5. Click **Print**. The selected PDF file is sent to the machine.

Using the shortcut icon

1. Select the PDF file you wish to print, drag and drop it to the Direct Printing Utility shortcut icon on your desk top. The selected PDF file is sent to the default machine.

 If the default machine does not support Direct Printing Utility, the message window alerting you to select the appropriate machine opens. Select the appropriate machine in the **Select Printer** section.

2. Customize the machine settings for your needs.
3. Click **Print**. The selected PDF file is sent to the machine.

Using the right-click menu

1. Right-click on the PDF file you wish to print and select Direct Printing Utility.

The Direct Printing Utility window opens with the PDF file is added.

2. Select the machine you wish to use.
3. Customize the machine settings for your needs.
4. Click **Print**. The selected PDF file is sent to the machine.

Changing the default print settings

1. Click the Windows **Start** menu.
2. For Windows 2000, select **Settings > Printers**.
 - For Windows XP/2003, select **Printers and Faxes**.
 - For Windows 2008/Vista, select **Control Panel > Hardware and Sound > Printers**.
 - For Windows 7, select **Control Panel > Hardware and Sound > Devices and Printers**.
 - For Windows Server 2008 R2, select **Control Panel > Hardware > Devices and Printers**.
3. Right-click your machine.
4. For Windows XP/2003/2008/Vista, press **Printing Preferences**.
For Windows 7 and Windows Server 2008 R2, from context menus, select the **Printing preferences**.

 If **Printing preferences** item has ► mark, you can select other printer drivers connected with selected printer.

5. Change the settings on each tab.
6. Click **OK**.

 If you want to change the settings for each print job, change it in **Printing Preferences**.

Setting your machine as a default machine

1. Click the Windows **Start** menu.
2. For Windows 2000, select **Settings > Printers**.
 - For Windows XP/2003, select **Printers and Faxes**.
 - For Windows 2008/Vista, select **Control Panel > Hardware and Sound > Printers**.
 - For Windows 7, select **Control Panel > Hardware and Sound > Devices and Printers**.
 - For Windows Server 2008 R2, select **Control Panel > Hardware > Devices and Printers**.
3. Select your machine.
4. Right-click your machine and select **Set as Default Printer**.

 For Windows 7 and Windows Server 2008 R2
If **Set as default printer** item has ► mark, you can select other

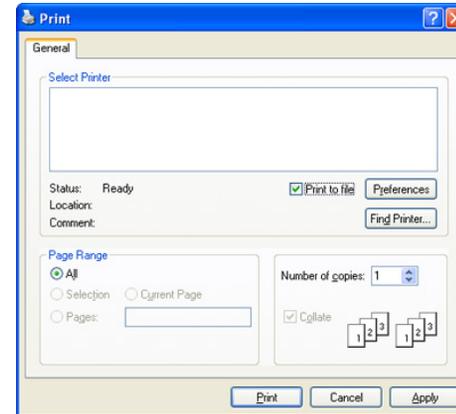
printer drivers connected with selected printer.

Printing to a file (PRN)

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

To create a file:

1. Check the **Print to file** box at the **Print** window.



2. Click **Print**.
3. Type in the destination path and the file name, and then click **OK**.
For example c:\Temp\file name.

 If you type in only the file name, the file is automatically saved in **My Documents**.

Using the job accounting option

This option allows you to print with the given permission.

1. Install the driver (See "Installing USB connected machine's driver" on page 3 or "Installing network connected machine's driver" on page 3).
2. Click the Windows **Start** menu.
3. For Windows 2000, select **Settings > Printers**.
 - For Windows XP/2003, select **Printers and Faxes**.
 - For Windows 2008/Vista, select **Control Panel > Hardware and Sound > Printers**.
 - For Windows 7, select **Control Panel > Hardware and Sound > Devices and Printers**.
 - For Windows Server 2008 R2, select **Control Panel > Hardware > Devices and Printers**.
4. Right-click your machine.
5. For Windows XP/2003/2008/Vista, press **Properties**.
 - For PS driver, select PS driver and right-click to open **Properties**.For Windows 7 and Windows Server 2008 R2, from context menus, select the **Printer properties**.

 If **Printer properties** item has ► mark, you can select other printer drivers connected with selected printer.

6. In printer driver properties, select **Device Options**.
7. Click **Job Accounting** and select one of the options.
 - User permission:** If you check this option, only users with user permission can start a print job.
 - Group permission:** If you check this option, only groups with group permission can start a print job.



- If you want to encrypt job accounting password, check **Job Accounting Password Encryption**.

- Administrators can enable job accounting and configure permissions in SyncThru™ Web Admin Service.

8. Click **OK** until you exit the **Printer properties** window.

Macintosh printing

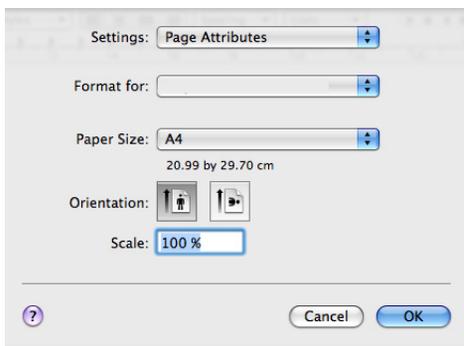
This section explains how to print using Macintosh. You need to set the print environment before printing.

- USB connected (See "Macintosh" on page 4).
- Network connected (See "Macintosh" on page 5).

Printing a document

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

1. Open the document 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, other options and make sure that your machine is selected. Click **OK**.



4. Open the **File** menu and click **Print**.
5. Choose the number of copies you want and indicate which pages you want to print.
6. Click **Print**.

Changing printer settings

You can use advanced printing features provided by your machine.

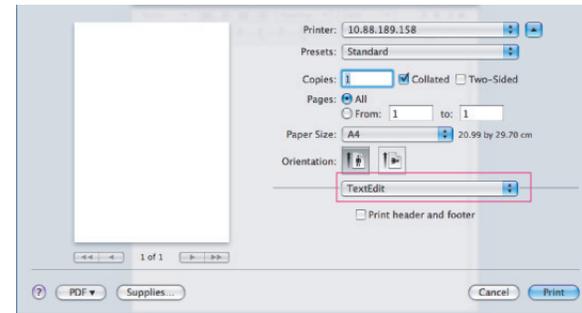
Open an application and select **Print** from the **File** menu. The machine name, which appears in the printer properties pane may differ depending on the machine in use. Except for the name, the composition of the printer properties pane is similar to the following.



- The setting options may differ depending on printers and Macintosh OS version.
- The following panes may differ, depending on your operating system

or the application you are using.

The following pane is the first pane you will see when you open the printer properties pane. Select other advanced features from the drop down list.



Layout

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 drop-down list under **Orientation** to access the following features.

- Pages Per Sheet:** This option determines how many pages to be printed on one page (See "Printing multiple pages on one sheet of paper" on page 10).
- Layout Direction:** This option allows you to select the printing direction on a page similar to the examples on UI.
- Border:** This option allows you to print a border around each page on the sheet.
- Two-Sided:** This option allows you to print on both sides of a paper (See "Printing on both sides of paper" on page 10).
- Reverse Page Orientation:** This option allows you to rotate paper 180 degrees.

Graphics

The **Graphics** tab provides options for selecting **Quality**. Select **Graphics** from the drop-down list under **Orientation** to access the graphic features.

- Quality:** This option allows you to 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.
- Color Mode:** You can set the color options. Setting to **Color** typically produces the best possible print quality for color documents. If you want to print a color document in grayscale, select **Grayscale**.
- BlackOptimization:** allows you to print in high quality black. If you use this option, it might take longer to print.
- Advanced**

- Page Color Setting:** This option allows you to print some pages in color and other pages in mono within a document. For example, if you want to print pages 1~4 in color and you have chosen **Grayscale** in the **Graphic** tab, select **Color** then type in 1-4.

Job Accounting

This option allows you to print with the given permission.

- User permission:** If you check this option, only users with user permission can start a print job.
- Group permission:** If you check this option, only groups with group permission can start a print job.



- If you want to encrypt job accounting password, refer to help  on the bottom left corner of the printer properties pane.

- Administrators can enable job accounting and configure permissions in SyncThru™Web Admin Service.

Job Setting (CLX-6250 Series only)

This option allows you to choose how to print the printing file by using the 512 MB optional memory or Hard disk.

 **Store, Spool, Normal and Print Schedule** mode is available only if you have installed the optional hard disk.

- Print Mode:** The default **Print Mode** is **Normal**, which is for printing without saving the printing file in the memory.
 - Normal:** This mode prints without storing your document in the optional memory.
 - Confidential:** This mode is used for printing confidential document. You need to enter a password to print.
 - Store:** Select this setting to save a document in the hard disk without printing.
 - Spool:** This option can be useful to handle large amount of data. If you select this setting, the print spools the document into the hard disk and then prints it from the hard disk queue, decreasing the computer's work load.
 - Print Schedule:** Select this setting to print the document at a specified time.
- User ID:** This option is used when you need to find a saved file using the control panel.
- Job Name:** This option is used when you need to find a saved file using the control panel.

Paper

Set **Paper 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.

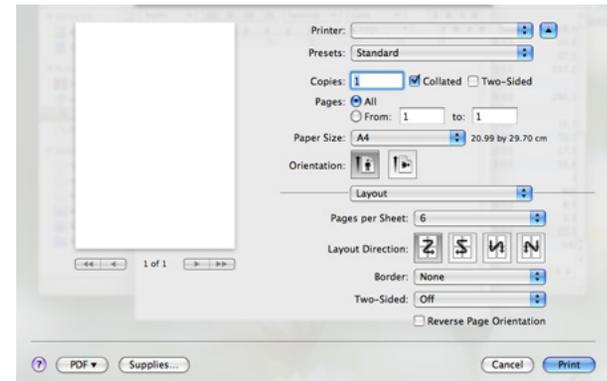
Printer Features

- Reverse Duplex Printing:** This option allows you to select general print order compared to duplex print order. If this option does not appear, your machine does not have this feature.
- Darken Text:** Select this option to print texts darker than on a normal document.
- Fit to Page:** This option allows you to scale your print job to any selected paper size regardless of the document size. This can be useful when you want to check fine details on a small document.
- RGB Color:** This setting determines how colors are rendered. **Standard** is the most widely used setting which the color tone of this mode is the closest to that of standard monitor (sRGB Monitor). **Vivid** mode is appropriate for printing presentation data and charts. The color tone of **Vivid** mode produces more **Vivid** color images than that of **Standard** mode. **Device** mode is best used for printing fine lines, small characters and color drawings. The color tone of **Device** mode may be different from that of monitor, the pure toner colors are used for printing cyan, magenta and yellow colors.
- Screen:** This option affect the resolution and clarity of your color output.

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. Open an application, and select **Print** from the **File** menu.
2. Select **Layout** from the drop-down list under **Orientation**. In the **Pages per Sheet** drop-down list, select the number of pages you want to print on one sheet of paper.

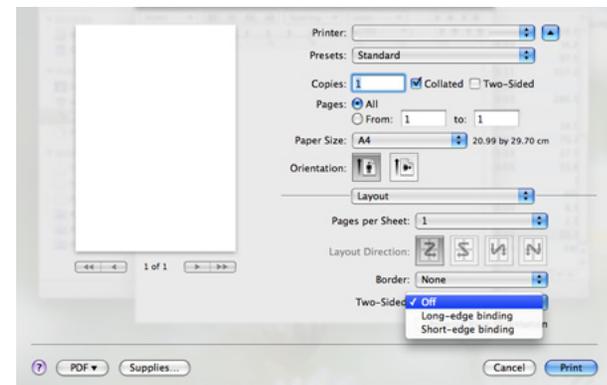


3. Select the other options you want to use.
4. Click **Print**, then machine prints the selected number of pages you want to print on one sheet of paper.

Printing on both sides of paper

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, as follows:

- **Long-Edge Binding:** This option is the conventional layout used in book binding.
 - **Short-Edge Binding:** This option is the type often used with calendars.
1. From your Macintosh application, select **Print** from the **File** menu.
 2. Select **Layout** from the drop-down list under **Orientation**.
 3. Select a binding orientation from **Two Sided Printing** option.
 4. Select the other options you want to use.
 5. Click **Print**, then the machine prints the selected number of pages on a side of a paper.



-  If you print more than 2 copies, the last page of the first copy and the first page of the second copy might print on same sheet of paper. Avoid using this feature when you are printing more than 1 copy.

Linux printing

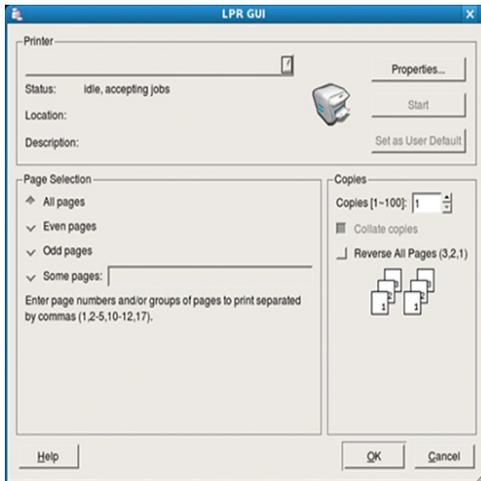
Printing from applications

 The following windows may differ, depending on your operating

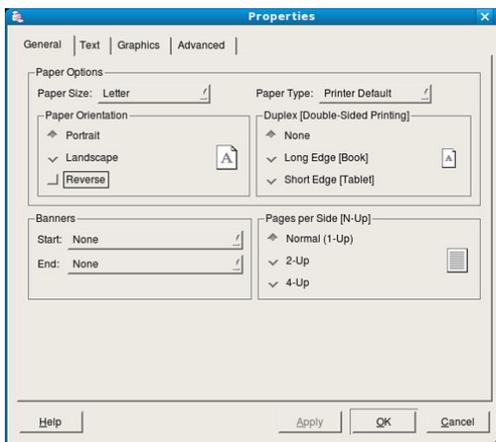
system, printer models or the application you are using.

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

1. Open an application, and 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 print job properties using the following four tabs displayed at the top of the window.



- General:** This option allows you to change the paper size, the paper type and the orientation of the documents. It enables the duplex feature, adds start and end banners and changes the number of pages per sheet.
- Text:** This option allows you to specify the page margins and set the text options, such as spacing or columns.
- Graphics:** This option allows you to set image options that are used when printing image files, such as color options, image size, or image position.
- Advanced:** This option allows you to set the print resolution, paper source and special print features.

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 your machine using the standard CUPS way, directly from the command line interface. The CUPS `lpr` utility allows you to do that. But the drivers package replaces the standard `lpr` tool by a much more user-friendly 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.

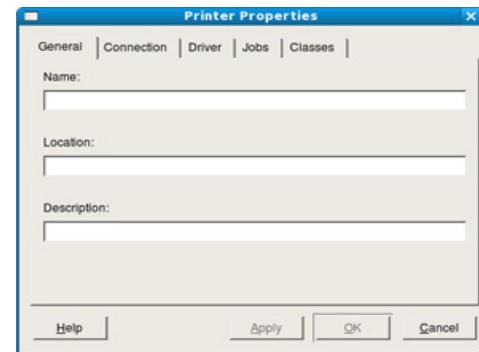
When you type only `lpr` and press **Enter**, the **Select file(s) to print** window appears first. Just select any files you want to print and click **Open**.

2. In the **LPR GUI** window, select your machine from the list, and change the print job properties.
3. Click **OK** to start printing.

Configuring Printer Properties

Using the **Printer 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:** This option allows you to change the printer location and name. The name entered in this tab displays on the printer list in **Printers configuration**.
 - Connection:** This option allows you to view or select another port. If you change the machine port from USB to parallel or vice versa while in use, you must re-configure the machine port in this tab.
 - Driver:** This option allows you to view or select another machine driver. By clicking **Options**, you can set the default device options.
 - Jobs:** This option 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:** This option shows the class that your machine is in. Click **Add to Class** to add your machine to a specific class or click **Remove from Class** to remove the machine from the selected class.
4. Click **OK** to apply the changes and close the **Printer Properties** window.

UNIX printing

Proceeding the print job

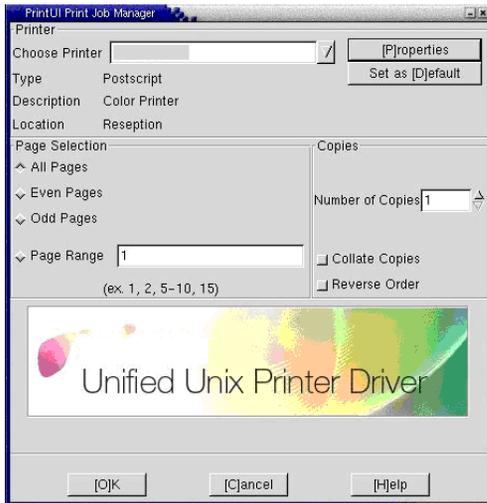
After installing the printer, choose any of the image, text, PS or HPGL files to print.

1. Execute “`printui <file_name_to_print>`” command.

For example, you are printing “`document1`”

`printui document1`

This will open the UNIX Printer Driver **Print Job Manager** in which the user can select various print options.

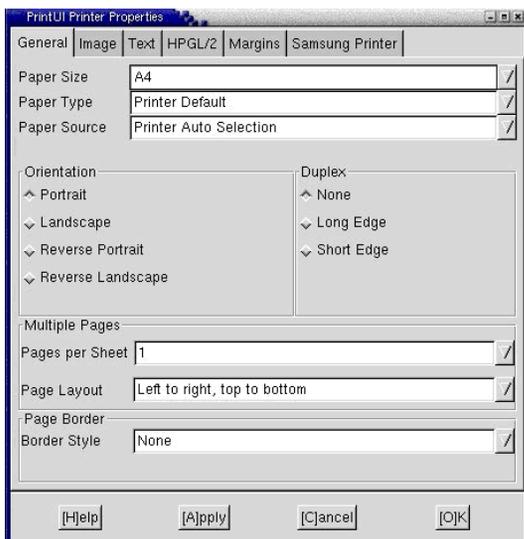


2. Select a printer which has been already added.
3. Select the printing options from the window such as **Page Selection**.
4. Select how many copies needed in **Number of Copies**.
 To take advantage of the printer features provided by your printer driver, press **Properties** (See "Changing the printer settings" on page 12).
5. Press **OK** to start the print job.

Changing the printer settings

The UNIX Printer Driver **Print Job Manager** in which the user can select various print options in printer **Properties**.

The following hot keys may also be used: “H” for **Help**, “O” for **OK** and “A” for **Apply** and “C” for **Cancel**.



General tab

- Paper Size:** Set the paper size as A4, Letter or other paper sizes, according to your requirements.
- Paper Type:** Choose the type of the paper. Options available in the list box are **Printer Default**, **Plain**, and **Thick**.
- Paper Source:** Select the source of the page. By default, it is **Auto Selection**.
- Orientation:** Select the direction in which information is printed on a page.
- Duplex:** Print on both sides of paper to save paper.
- Multiple pages:** Print several pages on one side of paper.
- Page Border:** Choose any of the border styles (e.g.: **Single-line hairline**, **Double-line hairline**)

Image tab

In this tab, you can change the brightness, resolution or an image position of your document.

Text tab

Set the character margin, line space or the columns of the actual print output.

HPGL/2 tab

- Use only black pen:** To print all graphics in black.
- Fit plot to page:** Fit the entire graphic into a single page.
- Pen Width:** Change value to increase the thickness of pen lines. By default, it is 1000.

Margins tab

- Use Margins:** Set the margins for the document. By default, margins are not enabled. The user can change the margin settings by changing the values in the respective fields. Set by default, these values depend on the page size selected.
- Unit:** Change the units to points, inches or centimeters.

Samsung Printer tab

Select various options in the **JCL** and **General** frames to customize various settings. These options are specific to the printer and depend on the PPD file.

copying

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

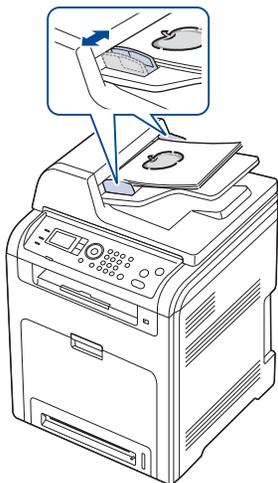
This chapter includes:

- Basic copy
- Changing the settings for each copy
- Changing the default copy settings
- Using special copy features
- Copying both sides of the originals
- Setting copy timeout

Basic copy

This is the normal and usual procedure for copying your originals.

1. Press  (**Copy**) on the control panel.
2. Place originals, face up, in the document feeder. Or you can use the scanner glass with a single original document face down and closed the scanner lid.



3. If necessary, adjust the settings for each copy such as **Reduce/Enlarge**, **Darkness**, **Original Type** and more (See "Changing the settings for each copy" on page 1).
4. Enter the number of copies using the arrow or number keypad, if necessary.
5. Press **Start** on the control panel to begin copying.

 To cancel the current copy job, press **Stop/Clear** on the control panel.

Changing the settings for each copy

Your machine provides default settings for copying so that you can quickly and easily make a copy. However, if you want to change the options for each copy, use the copy function buttons on the control panel.

 If you press **Stop/Clear** while setting the copy options, all of the options you have set for the current copy job will be canceled and return to their default status after the machine completes the copy in progress.

Changing the darkness

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

1. Press  (**Copy**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
4. Press the up/down arrow to highlight **Darkness** and press **OK**.
5. Press the up/down arrow until the contrast mode you want is highlighted and press **OK**.
 - Lightest**: Works well with darker print.
 - Light**: Works well with dark print.
 - Normal**: Works well with standard typed or printed originals.
 - Dark**: Works well with light print.
 - Darkest**: Works well with lighter print or faint pencil markings.
6. Press **Stop/Clear** to return to ready mode.

Selecting the type of originals

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

1. Press  (**Copy**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
4. Press the up/down arrow to highlight **Original Type** and press **OK**.
5. Press the up/down arrow until the image mode you want is highlighted and press **OK**.
 - Text**: Use for originals containing mostly text.
 - Text/Photo**: Use for originals with mixed text and photographs.
 - Photo**: Use when the originals are photographs.
 - Magazine**: Use when the originals are magazines.
6. Press **Stop/Clear** to return to ready mode.

Selecting the scan size of originals

You can choose the size to be scanned.

 The scan size options may vary between document feeder or scanner glass.

1. Press  (**Copy**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
4. Press the up/down arrow to highlight **Scan Size** and press **OK**.
5. Press the up/down arrow until the scan size you want is highlighted and press **OK**.
6. Press **Stop/Clear** to return to ready mode.

Reducing or enlarging copies

You can reduce or enlarge the size of a copied image from 25% to 400% when you copy original documents from the scanner glass, or from 25% to 100% from the document feeder.

To select from the predefined copy sizes:

1. Press  (**Copy**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
4. Press the up/down arrow to highlight **Reduce/Enlarge** and press **OK**.
5. Press the up/down arrow until the size setting you want is highlighted and press **OK**.
6. Press **Stop/Clear** to return to ready mode.

To scale the copy by directly entering the scale rate:

1. Press  (**Copy**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
4. Press the up/down arrow to highlight **Reduce/Enlarge** and press **OK**.
5. Press the up/down arrow to highlight **Custom** and press **OK**.
6. Press the up/down arrow or numeric keypad to enter the copy size you want. Pressing and holding the up/down arrow allows you to quickly scroll to the number you want.
7. Press **OK** to save the selection.
8. Press **Stop/Clear** to return to ready mode.

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

Changing the default copy settings

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

1. Press  (**Copy**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Copy Setup** and press **OK**.
4. Press the up/down arrow to highlight **Change Default** and press **OK**.
5. Press the up/down arrow until the setup option you want is highlighted and press **OK**.
6. Press the up/down arrow until the setting you want is highlighted and press **OK**.
7. Repeat steps 5 through 6, as needed.
8. Press **Stop/Clear** to return to ready mode.

 While you are setting copy options, pressing **Stop/Clear** cancels the changed settings and restores the defaults.

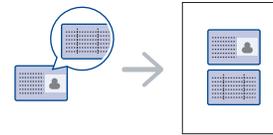
Using special copy features

You can use the following copy features:

ID card copying

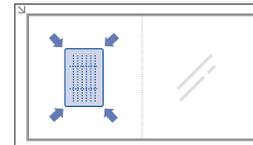
Your machine can print 2-sided originals on one sheet of A4-, Letter-, Legal-, Folio-, Executive-, B5, A5, or A6-sized paper.

The machine prints one side of the original on the upper half of the paper and the other side on the lower half without reducing the size of the original. This feature is helpful for copying a small-sized item, such as a business card.

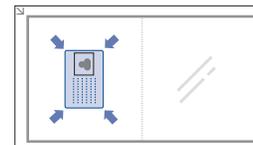


-  This copy feature is available only when you place originals on the scanner glass.
- The size of the 2-sided originals should be smaller than A5, if not, some of it won't be copied.

1. Press **ID Copy** on the control panel.
2. **Place Front Side Press**  appears on the display.
3. Place the front side of an original facing down on the scanner glass where arrows indicate as shown, and close the scanner lid.



4. Press **Start** on the control panel.
Your machine begins scanning the front side and shows **Place Rear Side Press** .
5. Turn the original over and place it on the scanner glass, where arrows indicate as shown then, close the scanner lid.



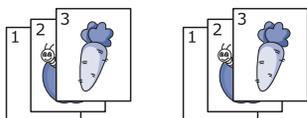
6. Press **Start** on the control panel to begin copying.
-  If the original is larger than the printable area, some portions may not be printed.
 - If you press **Stop/Clear**, the machine cancels the copy job and returns to ready mode.

Deciding the form of copy output

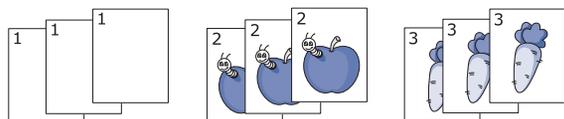
You can set the machine to sort the copy job. For example, if you make 2 copies of a 3 page original, one complete 3 page document will print followed by a second complete document.

1. Press  (**Copy**) on the control panel.
2. Place originals, face up, in the document feeder. Or you can use the scanner glass with a single original document face down and closed the scanner lid.
3. Press **OK** and enter the number of copies using the number keypad.
4. Press **Menu** on the control panel.
5. Press the up/down arrow to highlight **Copy Setup** and press **OK**.
6. Press the up/down arrow to highlight **Change Default** and press **OK**.
7. Press the up/down arrow to highlight **Collation** and press **OK**.
8. Press the up/down arrow to highlight **On** and press **OK**.

- On:** Prints output in sets to match the sequence of originals.



- Off:** Prints output sorted into stacks of individual pages.



9. Press **Stop/Clear** to return to ready mode.

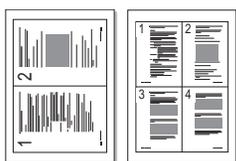
10. Press **Start** to begin copying.

One complete document will print followed by the second complete document.

2-up or 4-up copying (N-up)

The machine reduces the size of the original images and prints 2 or 4 pages onto one sheet of paper.

2 or 4-up copying is available only when you load originals into the document feeder.



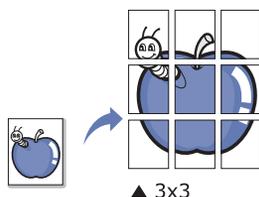
1. Press (**Copy**) on the control panel.
2. Place originals, face up, in the document feeder. Or you can use the scanner glass with a single original document face down and closed the scanner lid.
3. Press **Menu** on the control panel.
4. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
5. Press the up/down arrow to highlight **Layout** and press **OK**.
6. Press the up/down arrow until **2up** or **4up** highlights and press **OK**.
7. Press **Stop/Clear** to return to ready mode.
8. Press **Start** to begin copying.

- You cannot adjust the copy size using **Reduce/Enlarge** for the N-Up feature.

Poster copying

Your original will be divided into 9 portions. You can paste the printed pages together to make one poster-sized document.

This copy feature is available only when you place originals on the scanner glass.



1. Press (**Copy**) on the control panel.
2. Place a single original face down on the scanner glass.
3. Press **Menu** on the control panel.

4. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
5. Press the up/down arrow to highlight **Layout** and press **OK**.
6. Press the up/down arrow to highlight **Poster Copy** and press **OK**.
7. Press **Stop/Clear** to return to ready mode.
8. Press **Start** to begin copying.

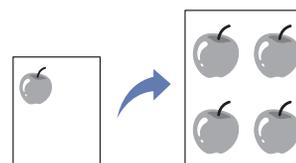
- Your original is divided into 9 portions. Each portion is scanned and printed one by one in the following order:

1	2	3
4	5	6
7	8	9

Clone copying

The machine prints multiple original images on a single page. The number of images is automatically determined by the original image and the paper size.

This copy feature is available only when you place originals on the scanner glass.



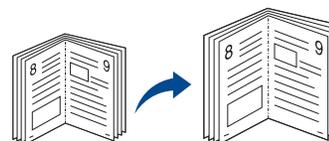
1. Press (**Copy**) on the control panel.
2. Place a single original face down on the scanner glass.
3. Press **Menu** on the control panel.
4. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
5. Press the up/down arrow to highlight **Layout** and press **OK**.
6. Press the up/down arrow to highlight **Clone Copy** and press **OK**.
7. Press **Stop/Clear** to return to ready mode.
8. Press **Start** to begin copying.

- You cannot adjust the copy size using **Reduce/Enlarge** for the **Clone Copy** feature.

Book copying

The **Book Copy** feature allows you to copy an entire book. If the book is too thick, lift the cover until its hinges are caught by the stopper and then close the cover. If the book or magazine is thicker than 30 mm, start copying with the cover open.

This copy feature is available only when you place originals on the scanner glass.



1. Press (**Copy**) on the control panel.
2. Place a single original face down on the scanner glass.
3. Press **Menu** on the control panel.
4. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
5. Press the up/down arrow to highlight **Layout** and press **OK**.
6. Press the up/down arrow to highlight **Book Copy** and press **OK**.

7. Press the up/down arrow until the binding option you want is highlighted.
 - Off:** Does not use this feature.
 - Left Page:** Use this option to print left page of the book.
 - Right Page:** Use this option to print right page of the book.
 - Both Page:** Use this option to print both pages of the book.
8. Press **OK**.
9. Press **Stop/Clear** to return to ready mode.
10. Press **Start** to begin copying.

Adjusting background images

You can set the printer to print an image without its background. This copy feature removes the background color and can be helpful when copying an original containing color in the background, such as a newspaper or a catalog.

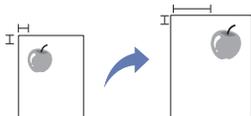
1. Press  (**Copy**) on the control panel.
2. Place originals, face up, in the document feeder. Or you can use the scanner glass with a single original document face down and closed the scanner lid.
3. Press **Menu** on the control panel.
4. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
5. Press the up/down arrow to highlight **Adjust Bkgd.** and press **OK**.
6. Press the up/down arrow until the binding option you want is highlighted.
 - Off:** Does not use this feature.
 - Auto:** Optimizes the background.
 - Enhance Lev.1 ~ 2:** The higher the number is, the more vivid the background is.
 - Erase Lev.1 ~ 4:** The higher the number is, the lighter the background is.
7. Press **OK**.
8. Press **Stop/Clear** to return to ready mode.
9. Press **Start** to begin copying.

Margin shift copying

The **Margin Shift** feature allows you to create a binding edge for the document. The image can be adjusted up or down on the page and/or shifted to the right or left.

 The **Margin Shift** feature can either be used for scanner glass or document feeder depending on the set up.

- Auto Center:** Scanner glass
- Custom Margin:** Scanner glass, Document feeder



1. Press  (**Copy**) on the control panel.
2. Place originals, face up, in the document feeder. Or you can use the scanner glass with a single original document face down and closed the scanner lid.
3. Press **Menu** on the control panel.
4. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
5. Press the up/down arrow to highlight **Margin Shift** and press **OK**.
6. Press the up/down arrow until the binding option you want is highlighted.
 - Off:** Does not use this feature.
 - Auto Center:** Automatically copy in the center of the paper.
 - Custom Margin:** Enter the left, right, top, bottom margin using Number keypad.

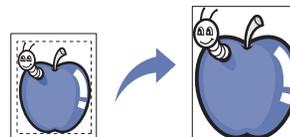
7. Press **OK**.
8. Press **Stop/Clear** to return to ready mode.
9. Press **Start** to begin copying.

Edge erase copying

Edge erase allows you to erase spots, drill holes, fold creases and staple marks along any of the four edges of a document.

 The **Edge Erase** feature can either be used for scanner glass or document feeder depending on the set up.

- Small Original:** Scanner glass
- Hole Punch:** Scanner glass, Document feeder
- Book Center:** Scanner glass
- Border Erase:** Scanner glass, Document feeder



1. Press  (**Copy**) on the control panel.
2. Place originals, face up, in the document feeder. Or you can use the scanner glass with a single original document face down and closed the scanner lid.
3. Press **Menu** on the control panel.
4. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
5. Press the up/down arrow to highlight **Edge Erase** and press **OK**.
6. Press the up/down arrow until the binding option you want is highlighted.
 - Off:** Does not use this feature.
 - Small Original:** Erases the edge of the original if it is small.
 - Hole Punch:** Erases the marks of bookbinding holes.
 - Book Center:** Erases the middle part of the paper which is black and horizontal, when you copy a book.
 - Border Erase:** Erases the certain amount of the edge of the printout.
7. Press **OK**.
8. Press **Stop/Clear** to return to ready mode.
9. Press **Start** to begin copying.

Gray enhance copying

When you copy the original in gray scale, use this feature for the better quality of copy-output. This feature is only for the copy in gray scale.

1. Press  (**Copy**) on the control panel.
2. Place originals, face up, in the document feeder. Or you can use the scanner glass with a single original document face down and closed the scanner lid.
3. Press **Menu** on the control panel.
4. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
5. Press the up/down arrow to highlight **Gray Enhance** and press **OK**.
6. Press the up/down arrow to select **On**.
7. Press **OK**.
8. Press **Stop/Clear** to return to ready mode.
9. Press **Start** to begin copying.

Watermark copying

You can copy the original with a watermark. For example, you can use it when you want to have large gray letters such as **Top Secret** or **Confidential** printed diagonally across the first page or all pages of the copy.

1. Press  (**Copy**) on the control panel.
2. Place originals, face up, in the document feeder. Or you can use the scanner glass with a single original document face down and closed the scanner lid.
3. Press **Menu** on the control panel.
4. Press the up/down arrow to highlight **Copy Feature** and press **OK**.
5. Press the up/down arrow to highlight **WaterMark** and press **OK**.
6. Press the up/down arrow until the binding **Message** option you want is highlighted and **OK**.
7. Press the up/down arrow until the binding **Pages** option you want is highlighted and **OK**.
8. Press **Stop/Clear** to return to ready mode.
9. Press **Start** to begin copying.

Copying both sides of the originals

You can set the machine to print copies on both sides of paper.

 The **Duplex** options may vary between document feeder or scanner glass.

1. Press  (**Copy**) on the control panel.
2. Place originals, face up, in the document feeder. Or you can use the scanner glass with a single original document face down and closed the scanner lid.
3. Press **Duplex** on the control panel.
4. Press the up/down arrow until the binding option you want is highlighted.

•**Off**: Prints in normal mode.

•**1->2Side Short**: Prints pages to be read by flipping like a note pad.



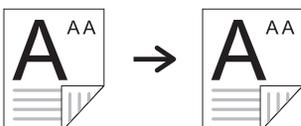
•**1->2Side Long**: Prints pages to be read like a book.



•**2->1Side**: Scans both sides of the originals and prints each of one on a separate sheet.

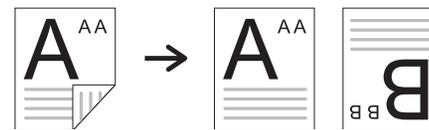


•**2->2Side**: Scans both sides of the original and prints on both sides of the paper. This function produces exactly the same print out from the originals.



•**2->1Side ROT2**: Scans both sides of the original and prints each one on a separate sheet, but the information on the back side of the

printout is rotated 180°.



5. Press **OK** to save your selection.
6. Start copying a document.

Setting copy timeout

You can set the time the machine waits before it restores the default control panel settings, if you press **Start** button prior to the control panel restoring to default, the previous job will be reprinted.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
4. Press the up/down arrow to highlight **Timeout** and press **OK**.
5. Press the up/down arrow until the time setting you want is highlighted. Selecting **Off** means that the machine does not restore the default settings until you press **Start** to begin copying, or **Stop/Clear** to cancel.
6. Press **OK** to save the selection.
7. Press **Stop/Clear** to return to ready mode.

scanning

Scanning with your machine lets you turn pictures and text into digital files that can be stored on your computer.

This chapter includes:

- Basic scanning method
- Scanning originals and sending through email (Scan to Email)
- Scanning originals and sending to your computer (Scan to PC)
- Scanning originals and sending via SMB/FTP (Scan to server)
- Setting authentication for authorized user
- Using Samsung Scan and Fax Manager
- Changing the scan feature settings

 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 resolution.

Basic scanning method

You can scan the originals with your machine via a USB cable or the network. The following methodologies can be used for scanning your documents:

- **Samsung Scan and Fax Manager:** Scan the originals from the control panel. Then, the scanned data will be stored in the connected computers **My Documents** folder. When you install all the software in the supplied CD, the Samsung Scan and Fax Manager is also automatically installed on your computer. This feature can be used via the local connection or the network connection (See "Using Samsung Scan and Fax Manager" on page 5).
- **TWAIN:** TWAIN is the one of a preset imaging applications. Scanning an image launches the selected application, enabling you to control the scanning process. This feature can be used via the local connection or the network connection (See "Scanning with TWAIN-enabled software" on page 6).
- **SmarThru Office :** This program is the accompanying software for your machine. You can use this program to scan images or documents. This feature can be used via the local connection or the network connection (See "Smarthru Office" on page 3).
- **WIA:** WIA stands for Windows Images Acquisition. To use this feature, your computer must be connected directly with the machine via a USB cable (See "Scanning using the WIA driver" on page 6).
- **USB Memory:** You can scan a document and save the scanned image onto an USB memory device (See "Scanning to an USB memory device" on page 1).
- **Email:** You can send the scanned image as an email attachment (See "Scanning originals and sending through email (Scan to Email)" on page 1).
- **FTP:** You can scan an image and upload it to an FTP server (See "Scanning originals and sending via SMB/FTP (Scan to server)" on page 4).
- **SMB:** You can scan an image and send it to a shared folder on an SMB server (See "Scanning originals and sending via SMB/FTP (Scan to server)" on page 4).

- Changing the default scan settings
- Scan on both sides of paper
- Scanning with TWAIN-enabled software
- Scanning using the WIA driver
- Macintosh scanning
- Linux scanning

Scanning originals and sending through email (Scan to Email)

You can scan the originals and email the scanned image to several destinations from the machine by email.

Setting up an email account

To scan and send an image as an email attachment, you need to set up network parameters using SyncThru™ Web Service.

1. Turn your networked computer on and open the web browser.
2. Enter your machine's IP address as the URL in a browser.
3. Click **Go** to access the SyncThru™ Web Service.
4. Click **Login** on the upper right of the SyncThru™ Web Service website. A log-in page appears.
5. Type in the **ID** and **Password** then click **Login** .
If it's your first time logging into SyncThru™ Web Service, type in the below default ID and password.
 - ID:** admin
 - Password:** sec00000
6. Click **Settings > Network Settings and Outgoing Mail Server(SMTP)**.
7. Enter the IP address in dotted decimal notation or as a host name.
8. Enter the server port number, from 1 to 65535.
The default port number is 25.
9. Check the box next to **SMTP Requires Authentication** to require authentication.
10. Enter the SMTP server login name and password.
11. Click **Apply**.

 If the authentication method of SMTP server is POP3 before SMTP, put a check mark of **SMTP Requires POP3 Before SMTP Authentication**.

- a) Enter the IP address in dotted decimal notation or as a host name.
- b) Enter the server port number, from 1 to 65535. The default port number is 110.

Sending a scanned image to several destinations as an email attachment

1. Load originals face up into the document feeder, or place a single original face down on the scanner glass
(See "Loading originals" on page 1).



2. Press  (**Scan/Email**) on the control panel.
3. Press the up/down arrow to highlight **Scan To Email** and press **OK**.
 If you registered **My Log in ID, Password** and checked **Local Authentication in User Access Control** on **SyncThru™ Web Service, Login Name** and **Enter Password** appear. Enter the Auth ID and Password to your machine. Go to step 5.
4. When **From:** appears on the top line of the display, enter the sender's email address and press **OK**.
5. When **Destination Email:** appears on the top line of the display, enter the recipient's email address and press **OK**.
6. To enter additional addresses, press the left/right arrow to highlight **Yes** and press **OK**.
To continue to the next step, press the left/right arrow to highlight **No** and press **OK**.
7. If the displays asks if you want to send the email to your account, press the left/right arrow to highlight **Yes** or **No** and press **OK**.
 This prompt does not appear if you have activated the **Auto Send To Self** option in the **Settings > Scan > Scan To E-mail** on **SyncThru™ Web Service**.
8. Enter an email subject and press **OK**.
9. Press the up/down arrow until the file type you want is highlighted and press **OK**.
When you have finished, select **No** when **Another Page?** appears.
The machine begins scanning and then sends the email.
 While the machine is sending an email, you cannot use the machine to copy or to send a fax.
10. Press the **Stop/Clear** to return to ready mode.

Storing email addresses

You can set up **Address Book** with the email addresses you use frequently via **SyncThru™ Web Service** and then easily and quickly enter email addresses by entering the location numbers assigned to them in **Address Book**.

Storing on your local machine

This method means that you store email addresses on your machine's memory. You can add addresses, as well as group them in particular categories.

Individual

1. Turn your networked computer on and open the web browser.
2. Enter your machine's IP address as the URL in a browser.
3. Click **Go** to access the **SyncThru™ Web Service**.
4. Click **Login** on the upper right of the **SyncThru™ Web Service** website.
A log-in page appears.
5. Type in the **ID** and **Password** then click **Login**.
If it's your first time logging into **SyncThru™ Web Service**, type in the below default ID and password.
•**ID:** admin
•**Password:** sec00000
6. Click **Address Book > Individual**.
7. Click **Add**.
8. When the **Add** screen appears, select the **Speed No.** number and enter e-mail address and fax number.
 If you need to set SMB or FTP sever information, check SMB or FTP and set the information.

9. Click **Apply**.

Group

1. Turn your networked computer on and open the web browser.
2. Enter your machine's IP address as the URL in a browser.
3. Click **Go** to access the **SyncThru™ Web Service**.
4. Click **Login** on the upper right of the **SyncThru™ Web Service** website.
A log-in page appears.
5. Type in the **ID** and **Password** then click **Login**.
If it's your first time logging into **SyncThru™ Web Service**, type in the below default ID and password.
•**ID:** admin
•**Password:** sec00000
6. Make sure you have configured individual address book.
7. Click **Address Book > E-mail Group**.
8. Click **Add Group**.
9. When the **Add Group** screen appears, select the **Speed No.** number and enter **Group Name**.
 You can easily add individual address if you check **Yes** for **Add individual(s) after this group is created**.
10. Click **Apply**.

Searching Address Book for an entry

There are two ways to search for an address in memory. You can either scan from 0 to 199 sequentially or search by entering the first letters of the name associated with the address.

Searching sequentially through memory

1. Press  (**Scan/Email**) and **Address Book** on the control panel.
2. Press the up/down arrow to highlight **Search & Dial** and press **OK**.

3. Press the up/down arrow until the option you want highlights and press **OK**.
4. Press the up/down arrow to highlight **All** and press **OK**.
5. Press the up/down arrow until the name and address you want is highlighted. You can search upwards or downwards through the entire memory in index (numerical) order.

Searching with a particular first letter

1. Press  (**Scan/Email**) and **Address Book** on the control panel.
2. Press the up/down arrow to highlight **Search & Dial** and press **OK**.
3. Press the up/down arrow until the option you want is highlighted and press **OK**.
4. Press the up/down arrow to highlight **ID** and press **OK**.
5. Enter the first few letters of the name you want.
6. Press the up/down arrow until the name you want is highlighted and press **OK**.

Printing Address Book

You can check your **Address Book** information by printing a list.

1. Press  (**Scan/Email**) and **Address Book** on the control panel.
2. Press the up/down arrow to highlight **Print** and press **OK**.
3. Press the up/down arrow until the option you want is highlighted and press **OK**.

Your **Address Book** information prints out.

Scanning originals and sending to your computer (Scan to PC)

You can scan an image on the machine via the Samsung Scan and Fax Manager program that is installed in your networked computer.

For USB connected machine

This is a basic scanning method for usb connected machine.

1. Make sure that the machine is connected to your computer and powered on.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass (See "Loading originals" on page 1).
3. Press  (**Scan/Email**) on the control panel.
4. Press the up/down arrow to highlight **Scan To PC** and press **OK**.
5. Press the up/down arrow to highlight **Local PC** and press **OK**.

 If you see **Not Available** message, check the port connection.

6. Press the up/down arrow until the application program you want is highlighted and press **OK**.

Default setting is **My Documents**.

 To add or delete the folder where the scanned file is saved, add or delete the application program in **Samsung Scan and Fax Manager > Properties > Set Scan Button**.

7. Press the up/down arrow until the setting you want is highlighted and press **OK**.
 - Resolution**: Sets the image resolution.
 - Scan Color**: Sets the color mode.
 - Scan Format**: Sets the file format in which the image is to be saved.
 - Scan Size**: Sets the image size.

 •**Scan Format** appears only when you selected the Scan destination to **My Documents**.

•If you want to scan from the default setting, press **Start**.

8. Scanning begins.

 •Scanned image is saved in computer's **My Documents > My Pictures > Samsung** folder.

•You can use Twain driver to scan quickly in **Samsung Scan and Fax Manager** program.

•You can also scan by pressing Window's **Start > Control Panel > Samsung Scan and Fax Manager > Quick Scan**.

For network connected machine

Make sure the scanner printer driver is installed on your computer using the software CD, since the printer driver includes the scan program it does not need to be installed separately in most cases (See "Installing network connected machine's driver" on page 3).

1. Make sure that your machine and the computer are connected to a network and Samsung Scan and Fax Manager is installed on the computer.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass.
3. Press  (**Scan/Email**) on the control panel.
4. Press the up/down arrow to highlight **Scan To PC** and press **OK**.
5. Press the up/down arrow to highlight **Network PC** and press **OK**.

 If you see **Not Available** message, check the port connection.

6. Select your registered computer **ID**, and enter the **Password** if necessary.

 •**ID** is the same ID as the registered **Computer ID** for **Samsung Scan and Fax Manager**.

•**Password** is the 4 digit number registered **Password** for **Samsung Scan and Fax Manager**.

7. Press the up/down arrow until the application program you want highlights and press **OK**.

Default setting is **My Documents**.

 To add or delete the folder where the scanned file is saved, add or delete the application program in **Samsung Scan and Fax Manager > Properties > Set Scan Button**.

8. Press the up/down arrow until the setting you want is highlighted and press **OK**.

•**Resolution**: Sets the image resolution.

•**Scan Color**: Sets the color mode.

•**Scan Format**: Sets the file format in which the image is to be saved.

•**Scan Size**: Sets the image size.

 •**Scan Format** appears only when you selected the Scan destination to **My Documents**.

•If you want to scan from the default setting, press **Start**.

9. Scanning begins.

 •Scanned image is saved in computer's **My Documents > My Pictures > Samsung** folder.

•You can use Twain driver to scan quickly in using the **Samsung Scan and Fax Manager** program.

•You can also scan by pressing Window's **Start > Control Panel >**

Scanning originals and sending via SMB/FTP (Scan to server)

You can scan an image and send it to a total of five destinations via the SMB or FTP.

Setting up an FTP server

To use an FTP server, you need to set up parameters to access the FTP servers using SyncThru™ Web Service.

1. Turn your networked computer on and open the web browser.
2. Enter your machine's IP address as the URL in a your web browser.
3. Click **Go** to access the SyncThru™ Web Service.
4. Click **Login** on the upper right of the SyncThru™ Web Service website.
A log-in page appears.
5. Type in the **ID** and **Password** then click **Login**.
If it's your first time logging into SyncThru™ Web Service, type in the below default ID and password.
•**ID: admin**
•**Password: sec00000**
6. Click **Address Book > Individual**.
7. Click **Add**.
8. Check the box next to **Add FTP**.
9. Enter the server address in dotted decimal notation or a host name.
10. Enter the server port number, from 1 to 65535.
The default port number is 21.
11. Check the box next to **Anonymous** if you want the FTP server to permit access to unauthorized people.
This box is unchecked by default.
12. Enter the **Login Name** and **Password**.
13. Enter the **Path** for saving the scanned image.
14. Click **Apply**.

Setting up an SMB server

To use an SMB server, you need to set up parameters for access to SMB servers using SyncThru™ Web Service.

1. Turn your networked computer on and open the web browser.
2. Enter your machine's IP address as the URL in a your web browser.
3. Click **Go** to access the SyncThru™ Web Service.
4. Click **Login** on the upper right of the SyncThru™ Web Service website.
A log-in page appears.
5. Type in the **ID** and **Password** then click **Login**.
If it's your first time logging into SyncThru™ Web Service, type in the below default ID and password.
•**ID: admin**
•**Password: sec00000**
6. Click **Address Book > Individual**.
7. Click **Add**.
8. Check the box next to **Add SMB**.
9. Enter the server address in dotted decimal notation or a host name.
10. Enter the server port number, from 1 to 65535.
The default port number is 139.
11. Enter the server address in dotted decimal notation or a host name.

12. Check the box next to **Anonymous** if you want to permit unauthorized persons to access the SMB server.
This box is unchecked by default.
13. Enter the **Login Name** and **Password**.
14. Enter the **Domain**. If your server is joined to the certain domain, and you are using the domain account to log in, enter the domain name.
Otherwise, just enter your computer name which is registered to the SMB server.
15. Enter the **Path** for saving the scanned image. The folder (e.g. Scanned Images) must be setup on the root and the folder properties need to be setup as a share, with you listed as having user rights to the folder.
16. Click **Apply**.

Scanning and sending to SMB/FTP server

1. Make sure that your machine is connected to a network.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass.
3. Press  (**Scan/Email**) on the control panel.
4. Press the up/down arrow to highlight **Scan To SMB** or **Scan To FTP**, and press **OK**.
5. Press the up/down arrow to highlight the server and file share required then press **OK**.
6. Press the up/down arrow until the scan format you want is highlighted and press **OK**.
The machine begins scanning and then sends the scanned image to the specified server.

Setting authentication for authorized user

If you have connected your machine to a network and set up the network parameters correctly, you can scan and send images over the network.

To send a scanned image through email or via network server safely, you must register account information of authorized users to your local machine using SyncThru™ Web Service.

Registering local authorized users

1. Turn your networked computer on and open the web browser.
2. Enter your machine's IP address as the URL in your web browser.
3. Click **Go** to access the SyncThru™ Web Service.
4. Click **Security > User Access Control > User Authentication**.
5. Select **Local Authentication** in the **Authentication Method** section.
6. Click **Apply**.
7. Click **OK** in the modifying confirmation pop-up window.
8. Click **User Profile**.
9. Click **Add**.
10. Enter **User Name, Login ID, Password, E-mail Address** and **Fax Number**.
You need to enter the registered user ID and password in the machine when you start scanning to email from the control panel.
11. Click **Apply**.

Using Samsung Scan and Fax Manager

If you have installed the printer driver, the Samsung Scan and Fax Manager program is installed too. Start Samsung Scan and Fax Manager program to find out about this program information and the installed scan driver's condition. Through this program, you can change scan settings and add or delete the folders where scanned documents are saved in your computer.

 The Samsung Scan and Fax Manager program can only be used in the Window and Macintosh system. If you use the Macintosh, See "Setting scan information in Scan Manager" on page 7.

1. From the **Start** menu, click **Control Panel > Samsung Scan and Fax Manager**.

 You can open Samsung Scan and Fax Manager by right clicking the Smart Panel icon in the Windows task bar and selecting Scan Manager.

2. Select the appropriate machine from the Samsung Scan and Fax Manager window.
3. Press **Properties**.
4. The **Set Scan Button** tab allows you to change the saving destination and scan settings, add or delete application program, and format files. You can change the scanning machine by using the **Change Port** tab. (Local or Network)
5. When setting is done, press **OK**.

Set Scan Button tab

Scan Destination

- **Available Destination List:** Shows the list of applications currently linked to scanned images in the PC's registry. Select the program you want to use and click the right arrow and add to **Front Panel Destination List**.
- **Front Panel Destination List:** Shows the list of applications to open scanned images.
- **Add Application:** Allows you to add an application you want to use to the **Available Destination List**.
- **Remove Application:** Allows you to remove an item added by the user from the **Available Destination List**.
- **File Format:** Allows you to select the format of scanned data to be saved. You can choose among **BMP, JPEG, PDF** and **TIFF**.

Scan Property

- **Computer ID:** Shows the ID of your computer.
- **Save Location:** Allows you to choose the location of the default saving folder.
- **Resolution:** Allows you to choose the scan resolution.
- **Scan Color:** Allows you to choose the scan color.
- **Scan Size:** Allows you to choose the scan size.
- **ADF Duplex:** Automatically scans both sides. If your model does not support this option, it will be grayed out.
- **Show Preview:** Checking this box allows you to preview applied scan options. You can modify the options before scanning.
- **Default:** Allows you to go back to default options.

Change Port tab

- **Local Scanner:** Select when your machine is connected via USB or LPT port.
- **Network Scanner:** Select when your machine is connected via network

port.

-**Auto detection on the network:** Automatically detects your machine.

-**IP or Host name:** Enter in your machine's IP address or host name to detect your machine.

Scan Assistant

You can scan by pressing **Samsung Scan and Fax Manager > Quick Scan**.

The **Scan Assistant** window allows you to adjust scan settings and start the scanning process.

- **Favorites:** Allows you to save the current preferences settings for future use. When you save **Favorites**, all current scan settings are saved. To use a saved setting, select it from the **Favorites** drop down list. The machine is now set to scan according to the setting you selected. To delete saved setting, select it from the **Favorites** drop down list and click **Delete**. To set a favorite as startup, select the favorite you want to set as startup, then click the **Set as default** button.
- **Scan settings:** The following scan options are available:
 - Image Type:** Allows you to chose the proper color settings for image scanning.
 - Resolution:** Allows you to choose the image resolution.
 - Document Size:** Allows you to choose the proper size of the scanned image.
 - Document Source:** Allows you to choose the device (document feeder or scan glass) you want to scan with.
 - Prompt for additional pages:** If this check box is checked, you can scan pages continuously. This option is useful when you scan multipage documents and/or when **Document Source** is set to **Flatbed** (platen glass). In this case a sequence of scanned images is processed as a single document
 - Pages to Scan:** Allows you to specify how many pages are to be scanned. This option is available when **Document Source** is set to **ADF**(Document feeder).
- **Preference:** The following scan options are available:
 - Auto-crop image after preview:** If this option is checked, the scanning area will be automatically adjusted to the image size.
 - Preview on program start:** If this option is checked, the scanning area will be selected automatically as shown in the preview.
 - Blank page detection:** This operation automatically detects whether the scanned image is blank or not.
 - Delete page:** Blank pages will be deleted at the end of the scanning process.
 - Separate files:** Blank page will work as a scan job separator. That is, when multiple pages are scanned at once a blank page will divide scanned image sequence into parts. Each part will be treated as a separate document (group).
 - Start from scanner:** If this option is checked, scanning process is managed using scanner touch screen rather than from the computer. The option is not available for some scanner models.
- **Advanced:** In the **Advanced** mode, additional options such as **Image Adjustment, Image Enhancement, and Additional Settings** are available.
 - Image Adjustment:** Allows you to perform some transformations of the scanned image. These transformations include automatic adjustment of image size, straightening and rotation.
 - Image Enhancement:** Allows you to remove various defects of the image and improve its quality.
 - Additional settings:** Allows special processing of scanned images. These transformations include stitching several partial image scans

into a single image, processing of scanned books and watermark stamping.

-  Click the **Help** button from the lower-left corner of the window and click on any option you want to know about. Then a pop up window appears with information about that option's feature which is provided from the **Scan Assistant**.

Changing the scan feature settings

Your machine provides you with the following setting options to allow you to customize your scan jobs. The settings you change will be maintained for a certain time, but after that period, the options will be reset to default values.

- **Scan Size:** Sets the image size.
- **Original Type:** Sets the original documents's type.
- **Resolution:** Sets the image resolution.
- **Scan Color:** Sets the color mode.
- **Scan Format:** Sets the file format in which the image is to be saved. If you select TIFF or PDF, you can select to scan multiple pages. Depending on the selected scan type, this option may not appear.

To customize the settings before starting a scan job:

1. Press  (**Scan/Email**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Scan Feature** and press **OK**.
4. Press the up/down until the scan type you want is highlighted and press **OK**.
5. Press the up/down until the scan setting option you want is highlighted and press **OK**.
6. Press the up/down arrow until the desired status highlights and press **OK**.
7. Repeat steps 5 and 6 to set other setting options.
8. When you have finished, press **Stop/Clear** to return to ready mode.

Changing the default scan settings

To avoid having to change the scan settings for each job, you can set up default scan settings for each scan type.

1. Press  (**Scan/Email**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Scan Setup** and press **OK**.
4. Press **OK** when **Change Default** highlights .
5. Press the up/down until the scan type you want is highlighted and press **OK**.
6. Press the up/down until the scan setting option you want is highlighted and press **OK**.
7. Press the up/down arrow until the desired status highlights and press **OK**.
8. Repeat steps 6 and 7 to set other setting options.
9. When you have finished, press **Stop/Clear** to return to ready mode.

Scan on both sides of paper

-  This is available only when you load originals into the document feeder.

By using the **Duplex** button on your machine, you can set the machine to scan on both sides of paper.

1. Press  (**Scan/Email**) on the control panel.
2. Place originals, face up, in the document feeder. Or you can use the scanner glass with a single original document face down and closed the scanner lid.
3. Press **Duplex** on the control panel.
4. Press the up/down arrow until the binding option you want is highlighted.
 - **Off:** Scans in normal mode.
 - **2 Side:** Scans on both sides of the original.
 - **2->1Side ROT2:** Scans on both sides of the original and prints each one on a separate sheet, but the information on the back side of the printout is rotated 180°.
5. Press **OK** to save your selection.

Scanning with TWAIN-enabled software

If you want to scan documents using other software, you will need to use TWAIN-compliant software, such as Adobe Photoshop.

Follow the steps below to scan with TWAIN-compliant software:

1. Make sure that the machine is connected to your computer and powered on.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass (See "Loading originals" on page 1).
3. Open an application, such as Adobe Photoshop.
4. Open the TWAIN window and set the scan options.
5. Scan and save your scanned image.

Scanning using the WIA driver

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

-  The WIA driver works only on Windows XP/Vista/7 with a USB port.

Windows XP

1. Make sure that the machine is connected to your computer and powered on.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass (See "Loading originals" on page 1).
3. From the **Start** menu, select **Control Panel**, > **Scanners and Cameras**.
4. Double click your scanner driver icon. The **Scanner and Camera Wizard** appears.
5. Click **Next**.
6. Set the option in **Choose scanning preferences** window and click **Preview** to see how your options affect the picture.
7. Click **Next**.
8. Enter a picture name, and select a file format and destination to save the picture.
9. Your picture has been successfully copied to your computer. Choose one of the options on screen.
10. Click **Next**.
11. Click **Finish**.

Windows Vista

1. Make sure that the machine is connected to your computer and powered on.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass
(See "Loading originals" on page 1).
3. From the **Start** menu select **Control Panel > Hardware and Sound > Scanners and Cameras**.
4. Double click **Scan a document or picture**. **Windows Fax and Scan** application appears.

 •You can click on **View scanners and cameras** to view scanners,
•If there is no **Scan a document or picture**, open the MS paint program and from the **File** click **From Scanner or Camera...**

5. Click **New Scan**. Scan driver appears.
6. Choose your scanning preferences and click **Preview** to see your preferences affect the picture.
7. Click **Scan**.

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

Windows 7

1. Make sure that the machine is connected to your computer and powered on.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass
(See "Loading originals" on page 1).
3. From the **Start** menu select **Control Panel > Hardware and Sound > Devices and Printers**.
4. Click right button of mouse on device driver icon in **Printers and Faxes > Start Scan**. **New Scan** application appears.
5. Choose your scanning preferences and click **Preview** to see your preferences affect the picture.
6. Click **Scan**.

Macintosh scanning

You can scan documents using **Image Capture** program. Macintosh OS offers **Image Capture** program.

Scanning with USB

1. Make sure that the machine is connected to your computer and powered on.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass
(See "Loading originals" on page 1).
3. Start **Applications** and click **Image Capture**.

 If **No Image Capture device connected** message appears, disconnect the USB cable and reconnect it. If the problem continues, refer to the **Image Capture's** help.

4. Set the scan options on this program.
5. Scan and save your scanned image.

 •For more information about using **Image Capture**, refer to the **Image Capture's** help.
•Use TWAIN-compliant software to apply more scan options.
•You can also scan using TWAIN-compliant software, such as Adobe

Photoshop.

- Scan process differ according to TWAIN-compliant software. Please refer to the user's guide of the software.
- If scanning does not operate in **Image Capture**, update Mac OS to the latest version. **Image Capture** operates properly in Mac OS X 10.3.9 or higher and Mac OS X 10.4.7 or higher.

Scanning with network

1. Make sure that the machine is connected to your computer and powered on.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass
(See "Loading originals" on page 1).
3. Start **Applications** and click **Image Capture**.
4. For Mac OS X 10.4 ~ 10.5
Click **Devices** and click **Browse Devices**.
For Mac OS X 10.6
Select your device below **SHARED**. Skip to step 7.
5. For Mac OS X 10.4:
Select your machine in Twain devices option. Make sure that **Use TWAIN software** checkbox is checked, and click **Connect**.
•If a warning message appears, click **Change Port..** to select port.
•If TWAIN UI appears, from the **Preference** tab, click **Change Port..** to select port.

 Refer to Scan Manager for **Change port..** use (See "Setting scan information in Scan Manager" on page 7).

For Mac OS X 10.5:

Make sure that **Connected** checkbox is checked beside your machine in **Bonjour Devices**.

If you want to scan using TWAIN, refer to the Mac OS X 10.4 steps above.

6. Set the scan options on this program.
7. Scan and save your scanned image.

 •For more information about using **Image Capture**, refer to the **Image Capture's** help.
•Use TWAIN-compliant software to apply more scan options.
•You can also scan using TWAIN-compliant software, such as Adobe Photoshop.
•Scan process differ according to TWAIN-compliant software. Please refer to the user's guide of the software.
•If scanning does not operate in **Image Capture**, update Mac OS to the latest version. **Image Capture** operates properly Mac OS X 10.4.7 or higher.

Setting scan information in Scan Manager

To find out about Scan Manager program information, to check the installed scan driver's condition, to change scan settings, and to add or delete the folders where scanned documents to computer are saved in Scan Manager program, follow these instructions:

1. From the Smart Panel menu on Status bar, click Scan Manager.
2. Select the appropriate machine from the Scan Manager.
3. Press **Properties**.
4. Use **Set Scan Button** to change the file destination or scan settings, to add or delete application programs, and to format files. You can change the scanning machine by using **Change port.** (Local or Network)

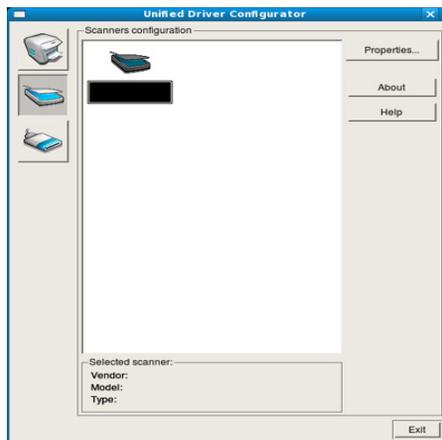
5. When done, press **OK**.

Linux scanning

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

Scanning

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.

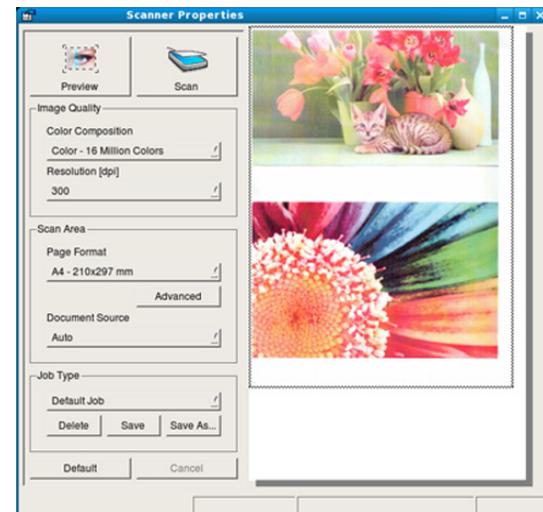


If you use only one machine device and it is connected to the computer and turned on, your scanner appears on the list and is automatically selected.

If you have two or more scanners connected 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 originals face up into the document feeder, or place a single original face down on the platen glass (See "Loading originals" on page 1).
6. From the **Scanner Properties** window, click **Preview**.
The document is scanned and the image preview appears in the

Preview Pane.



7. Drag the pointer to set the image area to be scanned in the **Preview Pane**.
8. Change the scan options in the **Image Quality** and **Scan Area** sections.
 - Image Quality**: This option allows you to select the color composition and the scan resolution for the image.
 - Scan Area**: This option 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 the option from the **Job Type** drop-down list (See "Adding Job Type Settings" on page 8).
Click **Default** to restore the default setting for the scan options.
9. 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**.
10. The scanned image appears.
If you want to edit the scanned image, use the toolbar (See "Using the Image Manager" on page 9).
11. When you are finished, click **Save** on the toolbar.
12. Select the file directory where you want to save the image and enter the file name.
13. Click **Save**.

Adding Job Type Settings

You can save your scan option settings for later use.

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:

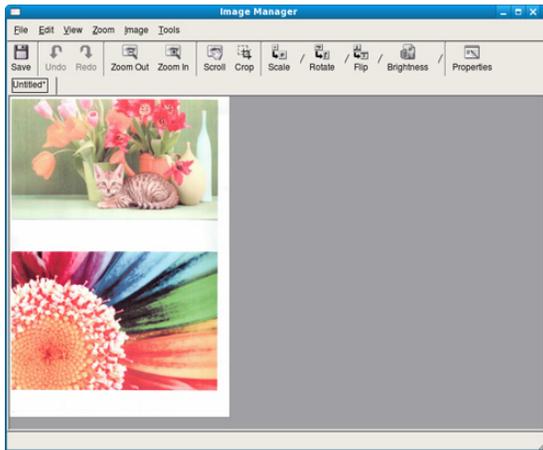
1. Select the setting you want to use from the **Job Type** drop-down list.
2. The next time you open the **Scanner Properties** window, the saved setting is automatically selected for the scan job.

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.



Use the following tools to edit the image:

Tools	Name	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.
	Brightness	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 on screen help.

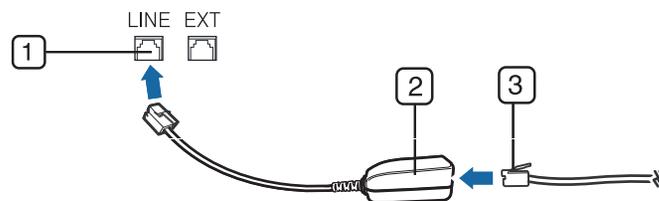
faxing

This chapter gives you information about using the fax feature in your machine.

This chapter includes:

- Preparing to fax
- Using a fax in your computer
- Sending a fax
- Receiving a fax

-  • You cannot use this machine as a fax through the internet phone line. For more information ask your internet service provider.
- We recommend using traditional analog phone services (PSTN: public switched telephone network) when connecting telephone lines to use the Fax. If you use other Internet services (DSL, ISDN, VoIP), you can improve the connection quality by using the Micro-filter. The Micro-filter eliminates unnecessary noise signals and improves connection quality or Internet quality. Since the DSL Micro-filter is not provided with the machine, contact your Internet Service provider for use on DSL Micro-filter.



- 1 Line port
- 2 Micro filter
- 3 DSL modem / Telephone line

Preparing to fax

Before you send a fax, you need to connect the supplied line cord to the wall jack. Refer to the Quick Install Guide how to make a connection. The method of making a telephone connection varies from one country to another.

Using a fax in your computer

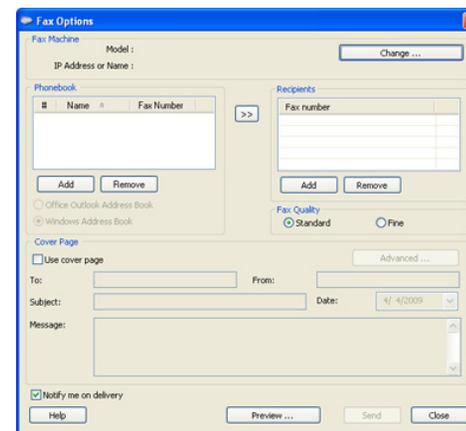
You can send a fax from your computer without going to the machine.

Sending a fax

To send a fax from your computer, the **Samsung Network PC Fax** program must be installed. This program will be installed when you installed the printer driver.

1. Open the document to be sent.
2. Select **Print** from the **File** menu.
The **Print** window will be displayed. It may look slightly different depending on your application.
3. Select **Samsung Network PC Fax** from the **Print** window
4. Click **Print** or **OK**.

- Adjusting the document settings
 - Forwarding a fax to another destination
 - Setting up address book
 - Printing sent fax report automatically
5. Enter the recipients' numbers and select the option.



If you want to use a cover page, check **Use cover page**.

Check **Notify me on delivery**, when the fax delivered to the recipients successfully.

6. Click **Send**.

 For more information about **Samsung Network PC Fax**, click **Help**.

Checking a sent fax list

You can check a sent fax list on your computer.

From the **Start** menu, click **Programs** or **All Programs** > **Samsung Printers** > **Network PC Fax** > **Fax Journal**. Then, the **Fax Journal** appears with the fax list you have sent.

Receiving a fax

If you have installed the printer driver, the Samsung Scan & Fax Manager program is also installed. Start Samsung Scan & Fax Manager program to find out about this program information and the installed driver's condition. Through this program, you can change fax settings and add or delete the folders where faxed documents are saved in your computer.

 The Samsung Scan & Fax Manager program can only be used with the Windows and Macintosh systems. Check if the forwarding a fax to PC is set to **On**:

- a) Press  (**Fax**) on the control panel.
- b) Press **Menu** on the control panel.
- c) Press the up/down arrow to highlight **Fax Feature** appears and press **OK**.
- d) Press the up/down arrow to highlight **Forward** appears and press **OK**.

e) Press the up/down arrow to highlight **PC**: appears and press **OK**.

1. Open the Samsung Scan & Fax Manager.
 - For Windows, from the **Start** menu, click **All programs > Samsung Printers > Samsung Scan & Fax Manager > Samsung Scan & Fax Manager**.
Or you can open this program by right clicking the Smart Panel icon in the Windows task bar and selecting the **Samsung Scan & Fax Manager**.
 - For Macintosh, from the Smart Panel menu on status bar, click **Samsung Scan & Fax Manager**.
2. Select the appropriate machine from the **Samsung Scan & Fax Manager**.
3. Click **Properties**.
4. Use **Set Fax Receiving** to change the fax settings.
5. When setting is done, press **OK**.

Set Fax Receiving tab

- **Enable Fax Receiving:** You can select whether to use or not.
- **File Format:** You can convert the received faxes to PDF or TIFF.
- **Save Location:** Selects location to save the converted faxes.
- **Prefix:** Selects file or folder scheme as prefix.
- **Notify me when fax received:** Shows popup window to notify receiving a fax.
- **Print received fax:** After receiving the fax, set prints information for the received fax.

Change Port tab

- **Local Scanner:** Select when your machine is connected via USB or LPT port.
- **Network Scanner:** Select when your machine is connected via network port.
 - **Auto detection on the network:** Automatically detects your machine.
 - **IP or Host name:** Enter in your machine's IP address or host name to detect your machine.

Sending a fax

This part explains how to send a fax and the special methods of transmission.

-  When you place the originals, in the document feeder and/or on the platen glass one at a time (See "Loading originals" on page 1). If the originals are placed on both the document feeder and the scanner glass, the machine will read the originals on the document feeder first, which has higher priority in scanning.

Setting the fax header

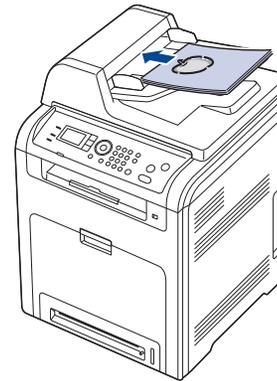
In some countries, you are required by law to indicate your fax number on any fax you send.

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **System Setup** and press **OK**.
4. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
5. Press the up/down arrow to highlight **Machine ID** and press **OK**.

6. Enter your name or the company name using the number keypad. You can enter alphanumeric characters using the number keypad, and include special symbols by pressing the 1 button. For details on how to enter alphanumeric characters, see "Entering characters using the number keypad" on page 2.
7. Press **OK** to save the ID.
8. Press the up/down arrow to highlight **Machine Fax No.** and press **OK**.
9. Enter your fax number using the number keypad and press **OK**.
10. Press **Stop/Clear** to return to ready mode.

Sending a fax

1. Press  (**Fax**) on the control panel.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass.



3. Adjust the resolution and the darkness to suit your fax needs (See "Adjusting the document settings" on page 6).
4. Enter the receiving fax machine's number.
You can use speed dial numbers, or group dial numbers. For details about storing and searching for a number, see "Setting up address book" on page 7.
5. Press **Start** on the control panel. The machine starts to scan and send a fax to destinations.
 -  If you want to send fax directly from your computer, use SmarThru Office (See "Using SmarThru Office" on page 3).
 - When you want to cancel a fax job, press **Stop/Clear** before the machine start transmission.
 - If you used the scanner glass, the machine shows the message asking to place another page.
 - While the machine is sending a fax, you can not send an email at the same time.

Sending a fax manually

This method is sending a fax using **On Hook Dial** on the control panel.

1. Press  (**Fax**) on the control panel.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass.
3. Adjust the resolution and the darkness to suit your fax needs (See "Adjusting the document settings" on page 6).
4. Press **On Hook Dial** on the control panel.
5. Enter a fax number using the number keypad on the control panel.
6. Press **Start** when you hear a high-pitched fax signal from the remote fax machine.

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

Confirming a transmission

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

When something goes wrong while sending your fax, an error message appears on the display. For a list of error messages and their meanings, see "Understanding display messages" on page 8. If you receive an error message, press **Stop/Clear** to clear the message and try to send the fax again.

You can set your machine to print a confirmation report automatically each time sending a fax is completed. For further details, see "Printing sent fax report automatically" on page 9.

Automatic redialing

When the number you have dialed is busy or there is no answer when you send a fax, the machine automatically redials the number. The redial time depends on the country's factory default setting. To change the time interval between redials and the number of redial attempts (See "Changing the fax setup options" on page 1).

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

Redialing the last number

To redial the number you called last:

1. Press **Redial/Pause** on the control panel.
2. When an original is loaded in the document feeder, the machine automatically begins to send.
If an original is placed on the scanner glass, select **Yes** to add another page. Load another original and press **OK**. When you have finished, select **No** when **Another Page?** appears.

Sending a fax to multiple destinations

You can use the Multiple Send feature, which allows you to send a fax to multiple locations. Originals are automatically stored in memory and sent to a remote station. After transmission, the originals are automatically erased from memory. You cannot send a color fax using this feature.

1. Press  (**Fax**) on the control panel.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass.
3. Adjust the resolution and the darkness to suit your fax needs (See "Adjusting the document settings" on page 6).
4. Press **Menu** on the control panel.
5. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
6. Press the up/down arrow to highlight **Multi Send** and press **OK**.
7. Enter the number of the first receiving fax machine and press **OK**.
You can press speed dial numbers or select group dial number using **Address book** button. For details, see "Setting up address book" on page 7.
8. Enter the second fax number and press **OK**.
The display asks you to enter another fax number to send the document.
9. To enter more fax numbers, press **OK** when **Yes** highlights and repeat steps 7 and 8. You can add up to 10 destinations.
10. Press **OK** to start storing the scanned original data into memory.

 Once you entered a group dial number, you cannot enter another group dial numbers anymore.

11. When you have finished entering fax numbers, press the left/right arrow to select **No** when **Another Page?** appears.
12. If an original is placed on the scanner glass, select **Yes** to add another pages. Load another original and press **OK**.
When you have finished, select **No** when **Another Page?** appears.
The machine begins sending the fax to the numbers you entered in the order in which you entered them.

Delaying a fax transmission

You can set your machine to send a fax at a later time when you will not be present. You cannot send a color fax using this feature.

1. Press  (**Fax**) on the control panel.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass.
3. Adjust the resolution and the darkness to suit your fax needs (See "Adjusting the document settings" on page 6).
4. Press **Menu** on the control panel.
5. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
6. Press the up/down arrow to highlight **Delay Send** and press **OK**.
7. Enter the number of the receiving fax machine and press **OK**.
You can press speed dial numbers or select group dial number using **Address book** button. For details, see "Setting up address book" on page 7.
8. The display asks you to enter another fax number to send the document.
9. To enter more fax numbers, press **OK** when **Yes** highlights and repeat steps 7. You can add up to 10 destinations.
 Once you entered a group dial number, you cannot enter another group dial numbers anymore.
10. When you have finished entering fax numbers, press the left/right arrow to select **No** when **Another Page?** appears and press **OK**.
11. Enter the job name you want and press **OK**.
For details on how to enter alphanumeric characters, see "Entering characters using the number keypad" on page 2.
If you do not want to assign a name, skip this step.
12. Enter the time using the number keypad and press **OK**.
 If you set a time earlier than the current time, the fax will be sent at that time on the following day.

The original is scanned into memory before transmission.

13. If an original is placed on the scanner glass, select **Yes** to add another pages. Load another original and press **OK**.
When you have finished, select **No** when **Another Page?** appears.
The machine returns to ready mode. The display reminds you that you are in ready mode and that a delayed fax is set.

Adding documents to a reserved delay fax job

You can add additional documents to the delayed fax job which is saved in memory.

1. Load the originals to be added and adjust document settings.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
4. Press the up/down arrow to highlight **Add Pages** and press **OK**.
5. Press the up/down arrow until the fax job you want appears and press **OK**.
When you have finished, select **No** when **Another Page?** appears.
The machine scans the original into memory.

6. Press **Stop/Clear** to return to ready mode.

Canceling a reserved delay fax job

You can cancel the delayed fax job which is saved in memory.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
3. Press the up/down arrow to highlight **Cancel Job** and press **OK**.
4. Press the up/down arrow until the fax job you want appears and press **OK**.
5. Press **OK** when **Yes** highlights.
The selected fax is deleted from memory.
6. Press **Stop/Clear** to return to ready mode.

Sending a priority fax

This function is used when a high priority fax need to be sent ahead of reserved operations. The original is scanned into memory and immediately transmitted when the current operation is finished. In addition, priority transmission will interrupt a sending to multiple destinations between stations (example, when the transmission to station A ends, before transmission to station B begins) or between redial attempts.

1. Press  (**Fax**) on the control panel.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass.
3. Adjust the resolution and the darkness to suit your fax needs (See "Adjusting the document settings" on page 6).
4. Press **Menu** on the control panel.
5. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
6. Press the up/down arrow to highlight **Priority Send** and press **OK**.
7. Enter the number of the receiving fax machine and press **OK**.
You can press speed dial numbers or select group dial number using **Address book** button. For details, see "Setting up address book" on page 7.
8. Enter the job name you want and press **OK**.
The original is scanned into memory before transmission.
9. If an original is placed on the scanner glass, select **Yes** to add another pages. Load another original and press **OK**.
When you have finished, select **No** when **Another Page?** appears.
The machine starts to scan and send a fax to destinations.

Sending faxes on both sides of paper

 This is available only when you load originals into the document feeder.

You can set the machine to send faxes on both sides of paper.

1. Press  (**Fax**) on the control panel.
2. Place originals, face up, in the document feeder. Or you can use the scanner glass with a single original document face down and closed the scanner lid.
3. Press **Duplex** on the control panel.
4. Press the up/down arrow until the binding option you want highlights.
 - Off**: Send faxes in normal mode.
 - 2 Side**: Send faxes on both sides of the original.
 - 2->1Side ROT2**: Send faxes on both sides of the original and prints each one on a separate sheet, but the information on the back side of the printout is rotated 180°.
5. Press **OK** to save your selection.

Receiving a fax

This part explains how to receive a fax, and the special receiving methods available.

Changing the receive modes

Your machine is preset to **Copy** mode at the factory; however you can change the default so fax is priority (See "Changing the default mode" on page 2). When you receive a fax, the machine answers the call on a specified number of rings and automatically receives the fax. But if you want to change the Fax mode to another mode, follow the steps below:

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Setup** and press **OK**.
4. Press the up/down arrow to highlight **Receiving** and press **OK**.
5. Press the up/down arrow to highlight **Receive Mode** and press **OK**.
6. Press the up/down arrow until the fax reception mode you want highlights.
 - Fax**: Answers an incoming fax call and immediately goes into the fax reception mode.
 - Tel**: Receives a fax by pressing **On Hook Dial** and then **Start**.
 - Ans/Fax**: Is for when an answering machine attached to your machine. Your machine answers an incoming call, and the caller can leave a message on the answering machine. If the fax machine senses a fax tone on the line, the machine automatically switches to Fax mode to receive the fax.
 - DRPD**: you can receive a call using the Distinctive Ring Pattern Detection (DRPD) feature. Distinctive Ring is a telephone company service which enables an user to use a single telephone line to answer several different telephone numbers. For further details, see "Receiving faxes using DRPD mode" on page 5.
 This setting may not be available depending on your country.
7. Press **OK** to save your selection.
8. Press **Stop/Clear** to return to ready mode.
 -  •To use the **Ans/Fax** mode, attach an answering machine to the EXT socket on the back of your machine.
 - If you do not want other people to view your received documents, you can use secure receiving mode. In this mode, all of the received faxes are stored in memory. For further details, see "Receiving in secure receiving mode" on page 5.

Receiving manually in Tel mode

You can receive a fax call by pressing **On Hook Dial** and then pressing **Start** when you hear a fax tone ; however you can change the default so fax is priority (See "Changing the default mode" on page 2). The machine begins receiving the fax.

To change the number of rings, see "Changing the fax setup options" on page 1.

Receiving automatically in Answering Machine/Fax mode

To use this mode, you must attach an answering machine to the EXT socket on the back of your machine (See "Rear view" on page 2).

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

-  • If you have set your machine to this mode and your answering machine is switched off, or no answering machine is connected to EXT socket, your machine automatically goes into Fax mode after a predefined number of rings.
- If your answering machine has a user-selectable ring counter, set the machine to answer incoming calls within 1 ring.
- If you are in Tel mode when the answering machine is connected to your machine, you must switch off the answering machine. Otherwise, the outgoing message from the answering machine will interrupt your phone conversation.

Receiving faxes manually using an extension telephone

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

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

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

9 is the remote receive code preset at the factory. The first and the last asterisks are fixed, but you can change the middle number to whatever you wish. For details about changing the code, see "Changing the fax setup options" on page 1

Receiving faxes using DRPD mode

Distinctive Ring is a telephone company service which enables an user to use a single telephone line to answer several different telephone numbers. The particular number someone uses to call you is identified by different ringing patterns, which consist of various combinations of long and short ringing sounds. This feature is often used by answering services who answer telephones for many different clients and need to know which number someone is calling in on to properly answer the phone.

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

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

To set up the DRPD mode:

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Setup** and press **OK**.
4. Press the up/down arrow to highlight **Receiving** and press **OK**.
5. Press the up/down arrow to highlight **DRPD Mode** and press **OK**.
Waiting Ring appears on the display.
6. Call your fax number from another telephone. It is not necessary to place the call from a fax machine.
7. When your machine begins to ring, do not answer the call. The machine requires several rings to learn the pattern.

When the machine completes learning, the display shows **Completed DRPD Setup**. If the DRPD setup fails, **Error DRPD Ring** appears.

Press OK when DRPD appears and start over from step 6.

-  • DRPD must be set up again if you re-assign your fax number, or connect the machine to another telephone line.
- After DRPD has been set up, call your fax number again to verify that the machine answers with a fax tone. Then have a call placed to a different number assigned to that same line to be sure the call is forwarded to the extension telephone or answering machine plugged into the EXT socket.

Receiving in secure receiving mode

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

Activating secure receiving mode

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
4. Press the up/down arrow to highlight **Secure Receive** and press **OK**.
5. Press the up/down arrow to highlight **On** and press **OK**.
6. Enter a four-digit password you want to use and press **OK**.

 You can activate secure receiving mode without setting a password, but cannot protect your faxes.

7. Re-enter the password to confirm it and press **OK**.
8. Press **Stop/Clear** to return to ready mode.

When a fax is received in secure receiving mode, your machine stores it in memory and shows **Secure Receive** to let you know that there is a fax received.

Printing received faxes

1. Access the **Secure Receive** menu by following steps 1 through 4 in "Activating secure receiving mode."
2. Press the up/down arrow to highlight **Print** and press **OK**.
3. Enter the four-digit password and press **OK**.
The machine prints all of the faxes stored in memory.

Deactivating secure receiving mode

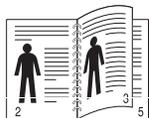
1. Access the **Secure Receive** menu by following steps 1 through 4 in "Activating secure receiving mode."
2. Press the up/down arrow to highlight **Off** and press **OK**.
3. Enter the four-digit password and press **OK**.
The mode is deactivated and the machine prints all faxes stored in memory.
4. Press **Stop/Clear** to return to ready mode.

Printing received faxes on both sides of the paper

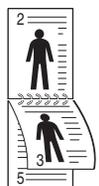
Set this duplex feature to save paper. When the machine prints the received fax data, it prints them on both sides of the paper.

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Setup** and press **OK**.
4. Press the up/down arrow to highlight **Receiving** and press **OK**.
5. Press the up/down arrow to highlight **Duplex Print** and press **OK**.
6. Press the up/down arrow until the binding option you want highlights.

- Off:** Prints in Normal mode.
- Long Edge:** Prints pages to be read like a book.



- Short Edge:** Prints pages to be read by flipping like a note pad.



7. Press **OK** to save your selection.
8. Press **Stop/Clear** to return to ready mode.

Receiving faxes in memory

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

Adjusting the document settings

Before starting a fax, change the following settings according to your original's status to get the best quality.

Resolution

The default document settings procedure good results when using typical text-based originals. However, if you send originals that are of poor quality, or contain photographs, you can adjust the resolution to produce a higher quality fax.

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
4. Press the up/down arrow to highlight **Resolution** and press **OK**.
5. Press the up/down arrow until the option you want is highlighted and press **OK**.
6. Press **Stop/Clear** to return to ready mode.

Recommended resolution settings for different original document types are described in the table below:

mode	recommended for:
Standard	Originals with normal sized characters.
Fine	Originals containing small characters or thin lines or originals printed using a dot-matrix printer.

mode	recommended for:
Super Fine	Originals containing extremely fine detail. Super Fine mode is enabled only if the machine with which you are communicating also supports the Super Fine resolution. <ul style="list-style-type: none"> •For memory transmission, Super Fine mode is not available. The resolution setting is automatically changed to Fine •When your machine is set to Super Fine resolution and the fax machine with which you are communicating does not support Super Fine resolution, the machine transmits using the highest resolution mode supported by the other fax machine.
Photo Fax	Originals containing shades of gray or photographs.

-  The resolution setting is applied to the current fax job. To change the default setting, see "Change default" on page 2.

Darkness

You can select the degree of darkness of the original document.

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
4. Press the up/down arrow to highlight **Darkness** and press **OK**.
5. Press the up/down arrow until the option you want highlights and press **OK**.
6. Press **Stop/Clear** to return to ready mode.

-  The darkness setting is applied to the current fax job. To change the default setting, see "Change default" on page 2.

Scan size

You can choose the size to be scanned.

-  The scan size options may vary between document feeder or scanner glass.

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
4. Press the up/down arrow to highlight **Scan Size** and press **OK**.
5. Press the up/down arrow until the scan size you want highlights and press **OK**.
6. Press **Stop/Clear** to return to ready mode.

Forwarding a fax to another destination

You can set the machine to forward the received or sent fax to other destination by a fax, an email or a server. If you are out of office but have to receive the fax, this feature may be useful.

-  When you forward a fax by an email, you must first set the mail server and IP address in SyncThru™ Web Service (See "Using SyncThru™ Web Service" on page 1).

Forwarding a sent fax to another destination

You can set the machine to forward every fax you sent to another destination.

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
4. Press the up/down arrow to highlight **Forward** and press **OK**.
5. Press the up/down arrow to highlight **Fax** and press **OK**.
6. Press the up/down arrow to highlight **Send Forward** and press **OK**.
7. Press the up/down arrow to highlight **On** and press **OK**.
8. Enter the number of the fax machine to which faxes are to be sent and press **OK**.
9. Press **Stop/Clear** to return to ready mode.
Subsequent sent faxes will be forwarded to the specified fax machine.

Forwarding a received fax to another destination

With this feature, you can forward every fax you received to another destination by faxing. When the machine receives a fax, a fax is stored in the memory then, the machine sends it to the destination you have set.

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
4. Press the up/down arrow to highlight **Forward** and press **OK**.
5. Press the up/down arrow to highlight **Fax** and press **OK**.
6. Press the up/down arrow to highlight **Receive Forward** and press **OK**.
7. Press the up/down arrow to highlight **Forward** and press **OK**.
To set the machine to print out a fax when fax forwarding has been completed, select **Forward & Print**.
8. Enter the number of the fax machine to which faxes are to be sent and press **OK**.
9. Enter the starting time using up/down, left/right arrow or numeric keypad and press **OK**.
10. Enter the ending time using up/down, left/right arrow or numeric keypad and press **OK**.
11. Press **Stop/Clear** to return to ready mode.
Subsequent received faxes will be forwarded to the specified fax machine.

Forwarding a sent fax to other destination by an email

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
4. Press the up/down arrow to highlight **Forward** and press **OK**.
5. Press the up/down arrow to highlight **Email** and press **OK**.
6. Press the up/down arrow to highlight **Send Forward** and press **OK**.
7. Press the up/down arrow to highlight **On** and press **OK**.
8. Enter your email address and press **OK**.
9. Enter the email address to which faxes are to be sent and press **OK**.
10. Press **Stop/Clear** to return to ready mode.
Subsequent sent faxes will be forwarded to the specified email address.

Forwarding a received fax to other destination by an email

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.

3. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
4. Press the up/down arrow to highlight **Forward** and press **OK**.
5. Press the up/down arrow to highlight **Email** and press **OK**.
6. Press the up/down arrow to highlight **Receive Forward** and press **OK**.
7. Press the up/down arrow to highlight **Forward** and press **OK**.
To set the machine to print out a fax when fax forwarding has been completed, select **Forward & Print**.
8. Enter your email address and press **OK**.
9. Enter the email address to which faxes are to be sent and press **OK**.
10. Press **Stop/Clear** to return to ready mode.
Subsequent received faxes will be forwarded to the specified email addresses.

Forwarding a sent fax to other destination by a server

 When you forward a fax to FTP or SMB server, you must first set the server in SyncThru™ Web Service (See "Setting up an FTP server" on page 4 or "Setting up an SMB server" on page 4). You can forward a fax to a total of five destinations via the SMB or FTP.

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
4. Press the up/down arrow to highlight **Forward** and press **OK**.
5. Press the up/down arrow to highlight **Server** and press **OK**.
6. Press the up/down arrow to highlight **Send Forward** and press **OK**.
7. Press the up/down arrow to highlight **On** and press **OK**.
8. Press **Stop/Clear** to return to ready mode.
Subsequent sent faxes will be forwarded to the specified server.

Forwarding a received fax to other destination by server

 When you forward a fax to FTP or SMB server, you must first set the server in SyncThru™ Web Service (See "Setting up an FTP server" on page 4 or "Setting up an SMB server" on page 4). You can forward a fax to a total of five destinations via the SMB or FTP.

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Feature** and press **OK**.
4. Press the up/down arrow to highlight **Forward** and press **OK**.
5. Press the up/down arrow to highlight **Server** and press **OK**.
6. Press the up/down arrow to highlight **Receive Forward** and press **OK**.
7. Press the up/down arrow to highlight **Forward** and press **OK**.
To set the machine to print out a fax when fax forwarding has been completed, select **Forward & Print**.
8. Press **Stop/Clear** to return to ready mode.
Subsequent received faxes will be forwarded to the specified server.

Setting up address book

You can set up **Address Book** with the fax numbers you use most frequently. Your machine provides you with the following features for setting up **Address Book**:

 Before beginning to store fax numbers, make sure that your machine

is in Fax mode.

Speed dial numbers

You can store up to 240 frequently-used fax numbers in speed dial numbers.

Registering a speed dial number

1. Press  (**Fax**) on the control panel.
2. Press **Address Book** on the control panel.
3. Press the up/down arrow to highlight **New & Edit** and press **OK**.
4. Press the up/down arrow to highlight **Speed Dial** and press **OK**.
5. Enter a speed dial number between 1 and 240 and press **OK**.
If an entry is already stored in the number you choose, the display shows the message to allow you to change it. To start over with another speed dial number, press **Back**.
6. Enter the name you want and press **OK**.
For details on how to enter alphanumeric characters, see ""Entering characters using the number keypad" on page 2.
7. Enter the fax number you want and press **OK**.
8. Press **Stop/Clear** to return to ready mode.

Editing speed dial numbers

1. Press  (**Fax**) on the control panel.
2. Press **Address Book** on the control panel.
3. Press the up/down arrow to highlight **New & Edit** and press **OK**.
4. Press the up/down arrow to highlight **Speed Dial** and press **OK**.
5. Enter the speed dial number you want to edit and press **OK**.
6. Change the name and press **OK**.
7. Change the fax number and press **OK**.
8. Change the name and press **OK**.
9. Press **Stop/Clear** to return to ready mode.

Using speed dial numbers

When you are prompted to enter a destination number while sending a fax, enter the speed dial number at which you stored the number you want.

- For a one-digit (0-9) speed dial number, press and hold the corresponding digit button on the number keypad.
- For a two- or three-digit speed dial number, press the first digit button(s) and then hold down the last digit button.

You can also search through memory for an entry by pressing Address Book (See "Searching address book for an entry" on page 8).

Group dial numbers

If you frequently send the same document to several destinations, you can group these destinations and set them under a group dial number. You can then use a group dial number to send a document to all of the destinations within the group. You can set up to 200 (0 through 199) group dial numbers using the destination's existing speed dial numbers.

Registering a group dial number

1. Press  (**Fax**) on the control panel.
2. Press **Address Book** on the control panel.
3. Press the up/down arrow to highlight **New & Edit** and press **OK**.
4. Press the up/down arrow to highlight **Group Dial** and press **OK**.
5. Enter a group dial number between 0 and 199 and press **OK**.

If an entry is already stored in the number you choose, the display shows the message to allow you to change it.

6. Enter the name you want and press **OK**.
For details on how to enter alphanumeric characters, see ""Entering characters using the number keypad" on page 2.
7. Enter the first few letters of the speed dial's name you want.
8. Press the up/down arrow until the name and number you want highlights and press **OK**.
9. Press **OK** when **Yes** highlights when **Another Page?** appears.
Repeat step 7 to include other speed dial numbers into the group.
10. When you have finished, press the left/right arrow to select **No** when **Another Page?** appears and press **OK**.
11. Press **Stop/Clear** to return to ready mode.

Editing a group dial number

1. Press  (**Fax**) on the control panel.
2. Press **Address Book** on the control panel.
3. Press the up/down arrow to highlight **New & Edit** and press **OK**.
4. Press the up/down arrow to highlight **Group Dial** and press **OK**.
5. Enter the group dial number you want to edit and press **OK**.
6. Enter the name you want to edit and press **OK**.
7. Enter the first few letters of the speed dial's name you want to add or delete.
8. Press the up/down arrow until the name and number you want highlights and press **OK**.
If you entered a new speed dial number, **Add?** appears.
If you enter a speed dial number stored in the group, **Delete?** appears.
9. Press **OK** to add or delete the number.
10. Press **OK** when **Yes** highlights to add or delete more numbers and repeat steps 7 and 8.
11. When you have finished, press the left/right arrow to select **No** at the **Another Number?** and press **OK**.
12. Press **Stop/Clear** to return to ready mode.

Using group dial numbers

To use a group dial entry, you need to search for and select it from memory.

When you are prompted to enter a fax number while sending a fax, press **Address Book**. See below.

Searching address book for an entry

There are two ways to search for a number in memory. You can either scan from A to Z sequentially, or you can search by entering the first letters of the name associated with the number.

Searching sequentially through the memory

1. Press  (**Fax**) on the control panel.
2. Press **Address Book** on the control panel.
3. Press the up/down arrow to highlight **Search & Dial** and press **OK**.
4. Press the up/down arrow to highlight **Group Dial** and press **OK**.
5. Press the up/down arrow to highlight **All** and press **OK**.
6. Press the up/down arrow until the name and number you want highlights. You can search upwards or downwards through the entire memory in alphabetical order.

Searching sequentially through the memory

1. Press  (**Fax**) on the control panel.
2. Press **Address Book** on the control panel.
3. Press the up/down arrow to highlight **Search & Dial** and press **OK**.
4. Press the up/down arrow to highlight **Group Dial** and press **OK**.
5. Press the up/down arrow to highlight **Search ID** and press **OK**.
6. Enter the first few letters of the name you want.
7. Press the up/down arrow until the group dial's name and number you want highlights.

Deleting a Address Book for entry

1. Press  (**Fax**) on the control panel.
2. Press **Address Book** on the control panel.
3. Press the up/down arrow to highlight **Delete** and press **OK**.
4. Press the up/down arrow until the deleting option you want is highlighted and press **OK**.
5. Press the up/down arrow until the searching method you want highlights and press **OK**.
Select **Search All** to search for an entry by scanning through all entries in **Address Book**.
Select **Search ID** to search for an entry by the first few letters of the name.
6. Press the up/down arrow until the name you want is highlighted and press **OK**.
Or, enter the first letters. Press the up/down arrow until the name you want highlights and press **OK**.
7. Press **OK** when **Yes** highlights to confirm the deletion.
8. Press **Stop/Clear** to return to ready mode.

Printing Address Book

You can check your **Address Book** settings by printing a list.

1. Press  (**Fax**) on the control panel.
2. Press **Address Book** on the control panel.
3. Press the up/down arrow to highlight **Print** and press **OK**.
The machine begins printing.

Printing sent fax report automatically

You can set the machine to print a report with detailed information about the previous 50 communication operations, including time and dates.

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Setup** and press **OK**.
4. Press the up/down arrow to highlight **Auto Report** and press **OK**.
5. Press the up/down arrow to highlight **On** and press **OK**.
6. Press **Stop/Clear** to return to ready mode.

using usb memory device

This chapter explains how to use a USB memory device with your machine.

This chapter includes:

- About USB memory device
- Scanning to an USB memory device
- Printing from a USB memory device
- Backing up data
- Managing USB memory

About USB memory device

USB memory devices are available with a variety of memory capacities to give you more room for storing documents, presentations, music and videos, high resolution photographs, or whatever other files you want to store or move.

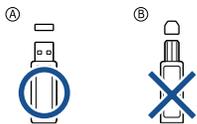
You can do the following on your machine using an USB memory device:

- Scan documents and save them on an USB memory device.
- Print data stored on an USB memory device.
- Format the USB memory device.

Your machine supports USB memory devices with FAT16/FAT32 and sector size of 512 bytes.

Check your USB memory device's file system from your dealer.

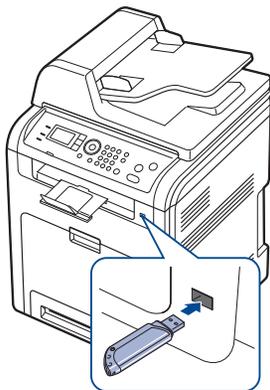
You must use only an authorized USB memory device with an A plug type connector.



Use only an USB memory device with metal-shielded connector.



Insert a USB memory device into the USB memory port on your machine.



- Do not remove the USB memory device while it is in use. The machine warranty does not cover damage caused by user's misuse.
- If your USB memory device has certain features (example, security key, security partition, booting disk, password settings and so forth), do not use the USB memory device with your machine. The

files stored in the USB memory device may be corrupted, or the machine may not automatically detect it. For details about these features, see device's User's Guide.

Scanning to an USB memory device

You can scan a document and save the scanned image onto an USB memory device. There are two ways of doing this: you can scan to the device using the default settings, or you can customize your own scan settings. When you scan a document, the machine uses the default settings such as the resolution. You can also customize your own scan setting.

If your USB memory device has certain features (example, security key, security partition, booting disk, password settings and so forth), do not use the USB memory device with your machine. The files stored in the USB memory device may be corrupted, or the machine may not automatically detect it. For details about these features, see device's User's Guide.

Scanning

1. Insert a USB memory device into the USB memory port on your machine.
2. Load originals face up into the document feeder, or place a single original face down on the scanner glass.
3. Press  (**Scan/Email**) and press **OK**.
4. Press the up/down arrow to highlight **Scan To USB** and press **OK**. Your machine begins scanning the original, and then asks if you want to scan another page.
5. To scan another page, press the left/right arrow to highlight **Yes** and press **OK**. Load an original and press **Start**. Otherwise, press the left/right arrow to highlight **No** and press **OK**.
6. After scanning is complete, you can remove the USB memory device from the machine.

Customizing scan to USB

You can specify image size, file format, or color mode for each scanning to USB job.

1. Press  (**Scan/Email**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Scan Feature** and press **OK**.
4. Press the up/down arrow to highlight **USB Feature** and press **OK**.
5. Press the up/down arrow to highlight the setting you want and press **OK**. You can set the following options:
 - **Scan Size:** Sets the image size.



The scan size options may vary between document feeder or scanner glass.

- Original Type:** Sets the original document's type.
 - Resolution:** Sets the image resolution.
 - Scan Color:** Sets the color mode. If you select **Mono** in this option, you cannot select **JPEG** in **Scan Format**.
 - Scan Format:** Sets the file format in which the image is to be saved. When you select **TIFF** or **PDF**, you can select to scan multiple pages. If you select **JPEG** in this option, you cannot select **Mono** in **Scan Color**.
6. Press the up/down arrow until the desired status is highlighted and press **OK**.
 7. Repeat steps 5 and 6 to set other setting options.
 8. When you have finished, press **Stop/Clear** to return to ready mode.
- You can change the default scan settings. For details, see "Changing the default scan settings" on page 6.

Printing from a USB memory device

You can directly print files stored on a USB memory device. You can print TIFF, BMP, JPEG and PRN files.

If your USB memory device has certain features (example, security key, security partition, booting disk, password settings and so forth), do not use the USB memory device with your machine. The files stored in the USB memory device may be corrupted, or the machine may not automatically detect it. For details about these features, see device's User's Guide.

Direct Print option supported file types:

- **PRN:** Only files created by provided driver with your machine are compatible. PRN files can be created by selecting the **Print to file** check box when you print a document. The document will be saved as a PRN file, rather than printed on paper. Only PRN files created in this fashion can be printed directly from USB memory device (See "Printing to a file (PRN)" on page 8).



If you print PRN files created from other machine, the printout would be different .

- **BMP:** BMP Uncompressed
- **TIFF:** TIFF 6.0 Baseline
- **JPEG:** JPEG Baseline
- **PDF:** PDF 1.4 and below

To print a document from a USB memory device:

1. Insert a USB memory device into the USB memory port on your machine. If one has already been inserted, press **Direct USB**.
2. Press the up/down arrow to highlight **USB Print** and press **OK**.
Your machine automatically detects the device and reads data stored on it.
3. Press the up/down arrow until the folder or file you want is highlighted and press **OK**.
If you see **+** in the front of a folder name, there are one or more files or folders in the selected folder.
4. If you selected a file, skip to the next step.
If you selected a folder, press the up/down arrow until the file you want is highlighted and press **OK**.
5. Press the up/down arrow to select the number of copies to be printed or enter the number.
6. Press **OK** or **Start** to start printing the selected file.
After printing the file, the display asks if you want to print another job.

7. To print another document, press the left/right arrow to highlight **Yes** and press **OK**. Repeat from step 3.
Otherwise, press the left/right arrow to highlight **No** and press **OK**.
8. Press **Stop/Clear** to return to ready mode.

Backing up data

Data in the machine's memory can be accidentally erased due to power failure or storage failure. Backup helps you protect your Address Book entries and the system settings by storing them as backup files on a USB memory device.

Backing up data

1. Insert a USB memory device into the USB memory port on your machine.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **System Setup** and press **OK**.
4. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
5. Press the up/down arrow to highlight **Export Setting** and press **OK**.
6. Press the up/down arrow until the option you want is highlighted.
 - Address Book:** Backs up all Address Book entries.
 - Setup Data:** Backs up all system settings.
7. Press **OK** to begin backing up the data.
The data is backed up to the USB memory.
8. Press **Stop/Clear** to return to ready mode.

Restoring data

1. Insert a USB memory device on which the backup data is stored in to the USB memory port.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **System Setup** and press **OK**.
4. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
5. Press the up/down arrow to highlight **Import Setting** and press **OK**.
6. Press the up/down arrow until the data type you want is highlighted and press **OK**.
7. Press the up/down arrow until the file containing the data you want to restore highlights and press **OK**.
8. To restore the backup file to the machine, press the left/right arrow to highlight **Yes** and press **OK**.
9. Press **Stop/Clear** to return to ready mode.

Managing USB memory

You can delete image files stored on a USB memory device one by one or all at once by reformatting the device.



After deleting files or reformatting a USB memory device, files cannot be restored. Therefore, confirm that you no longer need the data before deleting it.

Deleting an image file

1. Insert a USB memory device into the USB memory port on your machine.
2. Press **Direct USB** on the control panel.
3. Press the up/down arrow to highlight **File Manage** and press **OK**.
4. Press the up/down arrow to highlight **Delete** and press **OK**.
5. Press the up/down arrow until the folder or file you want is highlighted and press **OK**.



If you see + in the front of a folder name, there are one or more files or folders in the selected folder.

If you selected a file, the display shows the size of the file for about 2 seconds. Go to the next step.

If you selected a folder, press the up/down arrow until the file you want to delete highlights and press **OK**.

6. To delete file, press the up/down arrow to highlight **Yes** and press **OK**.
7. Press **Stop/Clear** to return to ready mode.

Formatting a USB memory device

1. Insert a USB memory device into the USB memory port on your machine.
2. Press **Direct USB** on the control panel.
3. Press the up/down arrow to highlight **File Manage** and press **OK**.
4. Press the up/down arrow to highlight **Format** and press **OK**.
5. To format USB memory device, Press the up/down arrow to highlight **Yes** and press **OK**.
6. Press **Stop/Clear** to return to ready mode.

Viewing the USB memory status

1. Insert a USB memory device into the USB memory port on your machine.
2. Press **Direct USB** on the control panel.
3. Press the up/down arrow to highlight **Check Space** and press **OK**.
The available memory space appears on the display.
4. Press **Stop/Clear** to return to ready mode.

machine status and advanced feature

This chapter explains how to browse the current status of your machine, and the method of setting for the advanced machine setup. Read this chapter carefully in order to use your machine's diverse features.

This chapter includes:

- Fax setup
- Copy setup
- Scan setup
- Printing a report
- Clearing memory

 Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine.

Fax setup

Changing the fax setup options

Your machine provides you with various user-selectable options for setting up the fax system. You can change the default settings for your preferences and needs.

To change the fax setup options:

1. Press  (**Fax**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Fax Setup** and press **OK**.
4. Press the up/down arrow until the fax setup item you want is highlighted and press **OK**.
5. Press the up/down arrow until the option you want is highlighted and press **OK**.
6. Press the up/down arrow until the desired status appears or enter the value for the option you have selected, and press **OK**.
7. If necessary, repeat steps 4 through 6.
8. Press **Stop/Clear** to return to ready mode.

Sending

Option	Description
Redial Times	You can specify the number of redial attempts. If you enter 0, the machine will not redial.
Redial Term	Your machine can automatically redial a remote fax machine if it was busy. You can set an interval between attempts.
Prefix Dial	You can set a prefix of up to five digits. This number dials before any automatic dial number is started. It is useful for accessing a PABX exchange.
ECM Mode	This mode helps with poor line quality and makes sure any faxes you send are sent smoothly to any other ECM-equipped fax machine. Sending a fax using ECM may take more time.

- Network
- Document management
- Job management
- Menu overview

Option	Description
Send Report	You can set your machine to print a confirmation report showing whether a transmission was successful, how many pages were sent, and more. The available options are On , Off , and On-Error , which prints only when a transmission is not successful.
Image TCR	This function allows users to know what fax messages have been sent by showing sent messages in the transmission report. The first page of the message is turned into an image file than is printed on the transmission report so the users can see what messages have been sent. However, you can not use this function when sending fax without saving the data in the memory.
Dial Mode	This setting may not be available depending on your country. If you cannot reach this option, your machine does not support this feature. You can set the dial mode for your machine to either tone dialing or pulse dialing. If you have a public telephone system or a private branch exchange (PBX) system, you may need to select Pulse . Contact your local telephone company if you are not sure which dial mode to use. If you select Pulse , some phone system features might not be available. It can also take longer to dial a fax or phone number.

Receiving

Option	Description
Receive Mode	You can select the default fax receiving mode. For details on receiving faxes in each mode, see "Changing the receive modes" on page 4.
Ring To Answer	You can specify the number of times the machine rings before answering an incoming call.

Option	Description
Stamp RCV Name	This option allows the machine to automatically print the page number, and the date and time of reception at the bottom of each page of a received fax.
Rcv Start Code	This code allows you to initiate fax reception from an extension phone plugged into the EXT socket on the back of the machine. If you pick up the extension phone and hear fax tones, enter the code. It is preset to *9* at the factory.
Auto Reduction	When receiving a fax containing pages as long as or longer than the paper loaded in the paper tray, the machine can reduce the size of the original to fit the size of the paper loaded in the machine. Turn on this feature if you want to automatically reduce an incoming page. With this feature set to Off , the machine cannot reduce the original to fit onto one page. The original will be divided and printed in actual size on two or more pages.
Discard Size	When receiving a fax containing pages as long as or longer than the paper in your machine, you can set the machine to discard a specific length from the end of the received fax. The machine will print the received fax on one or more sheets of paper, minus the data that would have been on the specified discard segment. When the received fax contains pages larger than the paper in your machine, and Auto Reduction has been turned on, the machine will reduce the fax to fit on the existing paper, and nothing will be discarded.
Junk Fax Setup	This setting may not be available depending on your country. Using this feature, the system will not accept faxes sent from remote stations whose numbers are stored in the memory as junk fax numbers. This feature is useful for blocking any unwanted faxes. When you turn on this feature, you can access the following options to set junk fax numbers. <ul style="list-style-type: none"> • Add: Allows you to set up to 10 fax numbers. • Delete: Allows you to delete the desired junk fax number. If you select Delete All, Allows you to delete all junk fax numbers.
DRPD Mode	This setting may not be available depending on your country. This mode enables a user to use a single telephone line to answer several different telephone numbers. In this menu, you can set the machine to recognize which ring patterns to answer. For details about this feature, see "Receiving faxes using DRPD mode" on page 5.
Duplex Print	Set this duplex feature to save paper. When the machine prints the received fax data, it prints them on both sides of the paper. For details about this feature, see "Printing received faxes on both sides of the paper" on page 5.

Option	Description
Doc Box Saving	This menu only appears when an optional hard disk drive (HDD) has been installed. With this feature set to On , allows you to store received faxes in the common box.

Change default

Option	Description
Resolution	Changing the resolution setting affects the appearance of the received document. <ul style="list-style-type: none"> • Standard: Originals with normal sized characters. • Fine: Originals containing small characters or thin lines or originals printed using a dot-matrix printer. • Super Fine: Originals containing extremely fine detail. Super Fine mode is enabled only if the machine with which you are communicating also supports the Super Fine resolution. <ul style="list-style-type: none"> • For memory transmission, Super Fine mode is not available. The resolution setting is automatically changed to Fine. • When your machine is set to Super Fine resolution and the fax machine with which you are communicating does not support Super Fine resolution, the machine transmits using the highest resolution mode supported by the other fax machine. • Photo Fax: Originals containing shades of gray or photographs.
Darkness	You can select the default contrast mode to fax your originals lighter or darker.
Scan Size	Sets the image size. <ul style="list-style-type: none"> • The scan size options may vary between document feeder or scanner glass.

Auto Report

You can set the machine to print a report with detailed information about the previous 50 communication operations, including time and dates.
For further details, see "Printing sent fax report automatically" on page 9.

Copy setup

Changing the copy setup options

For copy output, you can set up several options in advance.

1. Press  (**Copy**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Copy Setup** and press **OK**.

4. Press the up/down arrow until the copy setup item you want is highlighted and press **OK**.
5. Press the up/down arrow until the setup option you want is highlighted and press **OK**.
6. Press the up/down arrow until the setting you want is highlighted and press **OK**.
7. Repeat steps 4 through 6, as needed.
8. Press **Stop/Clear** to return to ready mode.

Change default

Option	Description
Scan Size	Sets the image size.  The scan size options may vary between document feeder or scanner glass.
# of Copies	You can enter the number of copies using the number keypad.
Collation	Collation is a process of printing a multiple-copy job in sets.
Reduce/Enlarge	Reduces or enlarges the size of a copied image.
Darkness	Adjusts the brightness level to make a copy that is easier to read, when the original contains faint markings and dark images.
Original Type	Improves the copy quality by selecting the document type for the current copy job.

Scan setup

Changing the scan setup options

To avoid having to customize the scan settings for each job, you can set up default scan settings for each scan type.

1. Press  (**Scan/Email**) on the control panel.
2. Press **Menu** on the control panel.
3. Press the up/down arrow to highlight **Scan Setup** and press **OK**.
4. Press **OK** when **Change Default** highlights .
5. Press the up/down until the scan type you want is highlighted and press **OK**.
6. Press the up/down until the scan setting option you want is highlighted and press **OK**.
 Setting option is the same for each scan type.
7. Press the up/down arrow until the desired status is highlighted and press **OK**.
8. Repeat steps 6 and 7 to set other setting options.
9. When you have finished, press **Stop/Clear** to return to ready mode.

Option	Description
Scan Size	Sets the image size.  The scan size options may vary between document feeder or scanner glass.
Original Type	Sets the original document's type.
Resolution	Sets the image resolution.

Option	Description
Scan Color	Sets the color mode.
Scan Format	Sets the file format in which the image is to be saved. If you select BMP, JPEG, TIFF, or PDF, you can select to scan multiple pages.  Depending on the selected scan type, this option may not appear.

Printing a report

You can print a report on the machine's configuration or font list, etc.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Report** and press **OK**.
4. Press the up/down arrow until the report or list you want to print highlights and press **OK**.
To print all reports and lists, select **All Reports**.
5. Press **OK** when **Yes** appears to confirm printing.
The selected information prints out.

Option	Description
Configuration	This list shows the status of the user-selectable options. You may print this list to confirm your changes after changing settings.
Supplies Info.	This item allows you to check how many pages are printed and how much toner are left in the cartridge.
Address Book	This list shows all of the email addresses currently stored in the machine's memory.
Send Report	This report shows the fax number, the number of pages, the elapsed time of the job, the communication mode, and the communication results for a particular fax job. You can set up your machine to automatically print a transmission confirmation report after each fax job (See "Sending" on page 1).
Sent Report	This report shows information on the faxes and emails you have recently sent. You can set the machine to automatically print this report every 50 communications (See "Sending" on page 1).
Fax Rcv Report	This report shows information on the faxes you have recently received.
Scheduled Jobs	This list shows the documents currently stored for delayed faxes along with the starting time and type of each operation.
JunkFax Report	This list shows the fax numbers specified as junk fax numbers. To add or delete numbers to or from this list, access the Junk Fax Setup menu (See "Receiving" on page 1).
Network Info.	This list shows information on your machine's network connection and configuration.

Option	Description
User Auth List	This list shows authorized users who are allowed to use the email function.
PCL Font List	You can print the PCL font list.
PS3 Font List	You can print the PS3 font list.
Accounting Report	This is used only when network authentication is enabled with SyncThru™ Web Service. Prints the report of printing out count for each login user.
Stored Job^a	This list shows the current status of stored job on hard disk drive (HDD).
Completed Job^a	The Completed Job page shows the list of completed print jobs. The list contains up to 50 files from the latest print jobs.
Net Auth Log	This is shows users and their IDs who logged in the domain.
Counter info.	You can view the amount of each category that your machine has printed so far.
Fax Options	You can set to print the information of a fax reports.

a. This menu only appears when an optional hard disk drive (HDD) has been installed.

 You can also print the machine's status information and browse status with SyncThru™ Web Service. Open the Web browser on your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Information > Print information**.

Clearing memory

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

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Clear Setting** and press **OK**.
4. Press the up/down arrow until the item you want to clear highlights and press **OK**.
5. Press **OK** when **Yes** highlights to confirm clearing.
6. Repeat steps 4 through 5 to clear another item.
7. Press **Stop/Clear** to return to ready mode.

 Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine.

Option	Description
All Settings	Clears all of the data stored in memory and resets all of your settings to the factory default.
Fax Setup	Restores all of the fax options to the factory default.
Copy Setup	Restores all of the copy options to the factory default.

Option	Description
Scan Setup	Restores all of the scan options to the factory default.
System Setup	Restores all of the system options to the factory default.
Network Setup	Restores all of the network options to the factory default.
Address Book	Clears all of the email address entries stored in memory.
Sent Report	Clears all records of sent faxes and emails.
Fax Rcv Report	Clears all records of received faxes.

Network

You may set up the network with the machine's display screen. Before doing that, you must have the relevant information concerning the type of network protocols and computer system you use. If you are not sure which setting to use, contact your network administrator to configure this machine to the network.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **Network** and press **OK**.
3. Press the up/down arrow until the setup option you want is highlighted and press **OK**.
4. Press the up/down arrow until the setting you want is highlighted and press **OK**.
5. Repeat steps 3 through 4, as needed.
6. Press **Stop/Clear** to return to ready mode.

Option	Description
TCP/IP (IPv4)	Select appropriate protocol and configure parameters to use the network environment.
TCP/IP (IPv6)	
Ethernet Speed	Configure the network transmission speed.
Wireless^a	Configure the wireless network environments.
Clear Setting	Reverts the network settings to the default values.
Network Info.	This list shows information on your machine's network connection and configuration.

a. This menu only appears when an optional wireless network interface has been installed.

Document management

This menu only appears when an optional hard disk drive (HDD) has been installed.

This menu allows you to store the scanned documents in a box, set various options for stored documents and change the default settings for stored documents.

 •To use this menu, you need to create a box first. Creating and editing the box can only be done through SyncThru™ Web Service (See "Box tab" on page 1).

•**Common Box** is provided by default.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **Document Box** and press **OK**.
3. Press the up/down arrow until the setup option you want is highlighted and press **OK**.

Option	Description
Doc Box Feature	<ul style="list-style-type: none"> • Add From Scan: You can store scanned documents in a box. The stored file will be named automatically as "yearmonthdayhourminutesecond". • Task From Box: You can print a document from a box.
Doc Box Setup	<ul style="list-style-type: none"> • Add From Scan: You can set the default options for storing the document to a box. • Task From Box: You can set the default options for printing the document from a box.
Doc Box Report	You can print a report about documents stored in a box.

 For the document stored in the **Secure Box**, you can set the password for accessing the document.

Job management

This menu item is available when the optional hard disk or memory is installed

(See "Printing with the optional hard disk" on page 8 or "Printing with the optional memory (CLX-6250 Series only)" on page 5).

Menu overview

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

 Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine.

Items	Option
Fax Feature	Darkness Resolution Scan Size Multi Send Delay Send Priority Send Forward Secure Receive Add Page Cancel Job
Fax Setup	Sending Redial Times Redial Term Prefix Dial ECM Mode Send Report Image TCR Dial Mode^a Receiving Receive Mode Ring To Answer Stamp RCV Name Rcv Start Code Auto Reduction Discard Size Junk Fax Setup DRPD Mode^a Duplex Print Doc Box Saving^b Change Default Resolution Darkness Scan Size Auto Report
Copy Feature	Scan Size Reduce/Enlarge Darkness Original Type Layout Adjust Bkgd Margin Shift Edge Erase Gray Enhance WaterMark

Items	Option
Copy Setup	Change Default Scan Size # of Copies Collation Reduce/Enlarge Darkness Original Type
Scan Feature	USB Feature Scan Size Original Type Resolution Scan Color Scan Format Email Feature Scan Size Original Type Resolution Scan Color FTP Feature Scan Size Original Type Resolution Scan Color SMB Feature Scan Size Original Type Resolution Scan Color
Scan Setup	Change Default USB Feature Scan Size Original Type Resolution Scan Color Scan Format Email Feature Scan Size Original Type Resolution Scan Color Scan Format FTP Feature Scan Size Original Type Resolution Scan Color Scan Format SMB Feature Scan Size Original Type Resolution Scan Color Scan Format Send Report

Items	Option
System Setup	Machine Setup Machine ID Machine Fax No. Date & Time Clock Mode Form Menu ^b Select Form ^b Language Default Mode Power Save Timeout Job Timeout Altitude Adjust Auto Continue Paper Substitution Net Accounting Import Setting Export Setting Color Report Paper Setup Paper Size Paper Type Paper Source Wide A4 Sound/Volume Key Sound Alarm Sound Speaker Ringer Report All Reports Configuration Supplies Info. Address Book Send Report Sent Report Fax Rcv Report Scheduled Jobs JunkFax Report Network Info. User Auth List PCL Font List PS Font List Accounting Report Stored Job ^b Completed Job ^b Net Auth Log Counter info. Fax Options Maintenance CLR Empty Msg ^c Supplies Life Color Serial Number Toner Low Alert

Items	Option
System Setup	Clear Setting All Settings Fax Setup Copy Setup Scan Setup System Setup Network Setup Address Book Sent Report Fax Rcv Report Job Management^b Active Job Stored Job File Policy Image Overwrite^b Immediate On Demand
Network	TCP/IP (IPv4) DHCP BOOTP Static IP Address Primary DNS Secondary DNS TCP/IP (IPv6) IPv6 Activate DHCPv6 Config Ethernet Speed Auto 10M Half 10M Full 100M Half 100M Full Wireless^d WLAN Settings Wizard Custom WLAN Default WLAN Signal Clear Setting Network Info.
Document Box^b	Doc Box Feature Task From Box Add From Scan Doc Box Setup Task From Box Add From Scan Doc Box Report

d. This menu only appears when an optional wireless network interface has been installed.

a. This setting may not be available depending on your country.

b. This menu only appears when an optional hard disk drive (HDD) has been installed.

c. This menu only appears when the toner cartridge has almost reached its estimated cartridge life.

management tools

This chapter introduces management tools provided to help you make full use of your machine.

This chapter includes:

- Introducing useful management tools
- Using SyncThru™ Web Service
- Using the Smart Panel program

Introducing useful management tools

The programs below help you to use your machine conveniently.

- "Using SyncThru™ Web Service" on page 1.
- "Using the Smart Panel program" on page 2.
- "Smarthru Office" on page 3.
- "Using the Unified Linux Driver Configurator" on page 4.

Using SyncThru™ Web Service

 Internet Explorer 6.0 or higher is the minimum requirement for SyncThru™ Web Service.

If you have connected your machine to a network and set up TCP/IP network parameters correctly, you can manage the machine via SyncThru™ Web Service, an embedded web server. Use SyncThru™ Web Service to:

- View the machine's device information and check its current status.
- Change TCP/IP parameters and set up other network parameters.
- Change printer preference.
- Set the email notifications advising of the machine's status.
- Get support for using the machine.

To access SyncThru™ Web Service:

1. Access a web browser, such as Internet Explorer, from Windows.
Enter the machine IP address (<http://xxx.xxx.xxx.xxx>) in the address field and press the Enter key or click **Go**.
2. Your machine's embedded website opens.

Logging into SyncThru™ Web Service

Before configuring options in SyncThru™ Web Service, you need to log-in as an administrator. You can still use SyncThru™ Web Service without logging in but you won't have access to **Settings** tab and **Security** tab.

1. Click **Login** on the upper right of the SyncThru™ Web Service website.
A log-in page appears.
2. Type in the **ID** and **Password** then click **Login**.
If it's your first time logging into SyncThru™ Web Service, type in the below default ID and password.
 - **ID:** admin
 - **Password:** sec00000

SyncThru™ Web Service overview



- Smarthru Office
- Using the Unified Linux Driver Configurator

 Some tabs may not appear depending on your model.

Information tab

This tab gives you general information about your machine. You can check things, such as the machine's IP address, remaining amount of toner, ethernet information, firmware version and more. You can also print reports such as an error report and so on.

- **Active Alerts:** This item allows you to check the alerts occurred in the machine and their severity.
- **Supplies:** This item allows you to check how many pages are printed and amount of toner left in the cartridge.
- **Usage Counters:** This item allows you to check the usage count by print types: simplex, duplex.
- **Current Settings:** This item allows you to check the machine and network information.
- **Print information:** This item allows you to print reports such as system related reports, e mail address and font reports.

Box tab

This tab only appears when an optional hard disk drive (HDD) is installed.

You can save PC-printed, faxed, scanned or copied documents in the **User Box** or **System Box** and print the saved documents.

 When saving the document using the **Add from Scan** menu in the control panel, you can choose the box to save the scanned document from the below.

- **Common Box:** This box is provided by default. Received faxes are stored in this box. Allows you to store received faxes if **Doc Box Saving** menu in the control panel is **On**. You cannot delete this box.
- **Public Box:** This box can be created by a user.
- **Secure Box:** This box is created by a user. You can set the password for accessing this box.
- **User Box:** Only received fax and scanned documents will be saved in this box. Types of boxes provided may differ depending on the model you are using.
- **System Box:** You can save the documents from the system.
 - **Secured Received Fax:** Allows you to store received faxes if **Secure Receive** menu in the control panel is **On**.
 - **Stored Print:** Allows you to print documents which you have saved as **Store**, **Proof** or **Print Schedule** in the printer driver's **Job Setting** option.
 - **Secured Print:** Allows you to print documents which you have saved as **Confidential** in the printer driver's **Job Setting** option.

Address Book tab

You can store contact information such as name, speed no, e-mail address and so on. For grouping individual addresses, Fax Group entry and E-mail Group entry are ready.

- Individual:** You can create an individual address book. Click the **Add** button.
- Fax Groups:** You can create fax group address books. You can add users by clicking the **Add** button or by dragging the user from **Individual** group to **Fax Groups**.
- E-mail Groups:** You can create e-mail group address books. You can add users by clicking the **Add** button or by dragging the user from **Individual** group to **E-mail Groups**.

Setting tab

This tab allows you to set configurations provided by your machine and network. You need to log-in as an administrator to view this tab.

- Machine Settings tab:** This tab allows you to set options provided by your machine.
 - System:** You can set settings related to your machine.
 - Printer:** You can set settings related to printing jobs.
 - Copy:** You can set settings related to copying jobs.
 - Fax:** You can set settings related to faxing jobs.
 - Scan:** You can set settings related to scanning jobs.
 - E-mail Notification:** You can set e-mail notification feature and e-mail address of recipients who will receive the notification.
- Network Settings tab:** This tab allows you to view and change the network environment. You can set things, such as TCP/IP, network protocols and so on.
 - SNMP:** You can exchange of management information between network devices using SNMP.
 - Outgoing Mail Server(SMTP):** You can set the outgoing E-mail server.
 - Restore Default:** You can restore default network settings.

Security tab

This tab allows you to set system and network security information. You need to log-in as an administrator to view this tab.

- System Security:** You can set the system administrator's information and also enable or disable machine features.
- Network Security:** You can set settings for HTTPs, IPSec, IPv4/IPv6 filtering, 802.1x, Authentication servers.
- User Access Control:** You can set configurations for user accessibility.

Maintenance tab

This tab allows you to maintain your machine by upgrading firmwares and setting contact information for sending emails. You can also connect to Samsung website or download drivers by selecting the **Link** menu.

- Firmware Update:** You can upgrade your machine's firmware.
- Contact Information:** You can view the contact information.
- Link:** You can view the links to useful sites where you can download or check information.

E-mail notification setup

You can receive emails about your machine's status by setting this option. By setting information such as IP address, host name, e-mail address and SMTP server information, the machine status (toner cartridge shortage or machine error) will be sent to a certain person's e-mail automatically. This option may be used more frequently by a machine administrator.

1. Start a web browser, such as Internet Explorer, from Windows. Enter the machine IP address (<http://xxx.xxx.xxx.xxx>) in the address field and press the Enter key or click **Go**.
2. Your machine's embedded website opens.
3. From the **Settings** tab, select **Machine Settings > E-mail Notification**.



If you haven't configured outgoing server environment, go to **Settings > Network Settings > Outgoing Mail Server(SMTP)** to configure network environment before setting e-mail notification.

4. Click **Add** button to add e-mail notification user. Set the recipient name and e-mail address(es) with notification items you want to receive an alert for.
5. Click **Apply**.



If the firewall is activated, the e-mail may not be sent successfully. In that case, contact the a network administrator.

Setting the system administrator information

Set the the system administrator information. This setting is necessary for using the e-mail notification option.

1. Start a web browser, such as Internet Explorer, from Windows. Enter the machine IP address (<http://xxx.xxx.xxx.xxx>) in the address field and press the Enter key or click **Go**.
2. Your machine's embedded website opens.
3. From the **Security** tab, select **System Security > System Administrator**
4. Enter the name of the administrator, phone number, location and E-mail address.
5. Click **Apply**.

Using the Smart Panel program

Smart Panel is a program that monitors and informs you of the machine status, and allows you to customize the machine's settings. For Windows and Macintosh, Smart Panel is installed automatically when you install the machine software. For Linux, you can download Smart Panel from Samsung website and install (See "Installing the SmartPanel" on page 5).



- To use this program, you need the following system requirements:
- Windows. Check for windows operating system(s) compatible with your machine (See "System requirements" on page 2).
 - Mac OS X 10.3 or higher.
 - Linux. Check for Linux systems that are compatible with your machine (See "System requirements" on page 2).
 - Internet Explorer version 5.0 or higher for flash animation in HTML Help.

Understanding Smart Panel

If an error occurs while printing, you can check the error from the Smart Panel.

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).

Windows		Double-click this icon in Windows.
Macintosh		Click this icon in Mac OS X.
Linux		Click this icon in Linux.

Or, if you are a Windows user, you can launch it from the **Start** menu, select **Programs** or **All Programs** > **Samsung Printers** > **your machine name** > **Smart Panel**.

 •If you have already installed more than one Samsung machine, first select the correct machine model you want in order to access the corresponding Smart Panel.

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

•The Smart Panel window and its contents shown in this user's guide may differ depending on the machine or operating system in use.

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



1	Toner Level	View the level of toner remaining in the toner cartridge(s). The machine and the number of toner cartridge(s) shown in the above window may differ depending on the machine in use. Some machines do not have this feature.
2	Buy Now	Order replacement toner cartridge(s) online.
3	User's Guide	View User's Guide.  This button changes to Troubleshooting Guide when error occurs. You can directly open troubleshooting section in the user's guide.
4	Printer Setting	Configure various machine settings in the Printer Settings Utility window. Some machines do not have this feature.  If you connect your machine to a network, the SyncThru™ Web Service window appears instead of the Printer Settings Utility window.
5	Driver Setting	Set all of the machine options you need in the Printing Preferences window. This feature is available only for Windows (See "Opening printing preferences" on page 2).

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**. Select the settings you want from the **Options** window.

Smarthru Office

The supplied software CD provides you with SmarThru Office. SmarThru Office offers you convenient features to use with your machine.

Starting SmarThru Office

Follow the steps below to start SmarThru Office:

1. Make sure that your machine and computer are turned on and properly connected to each other.
2. Once you have installed SmarThru Office, you will see the SmarThru Office icon on your desktop.
3. Double-click the SmarThru Office icon.



 This menu displays direct buttons for some features. The direct buttons include: **Categories**, **Binder**, **Life Cycle**, **Scan and OCR**, **Fix and Enhance** and **Samsung Website**. You can disable this menu by checking "**Do not show this dialog again**".



4. The SmarThru Office appears.

For more information about SmarThru Office, click **Help** > **SmarThru Office help**. The **SmarThru Office Help** window appears; you can view on screen help supplied on the SmarThru program.

 Click the SmarThru icon  in the tray area of the Windows taskbar to activate the SmarThru Office launcher.



 Follow the steps below to uninstall SmarThru Office. Before you begin the uninstall, ensure that all applications are closed on your computer.

- a) From the **Start** menu, select **Programs** or **All Programs**.
- b) Select SmarThru Office, and then select **Uninstall SmarThru Office**.
- c) When your computer asks you to confirm your selection, read the statement and click **OK**.
- d) Click **Finish**.

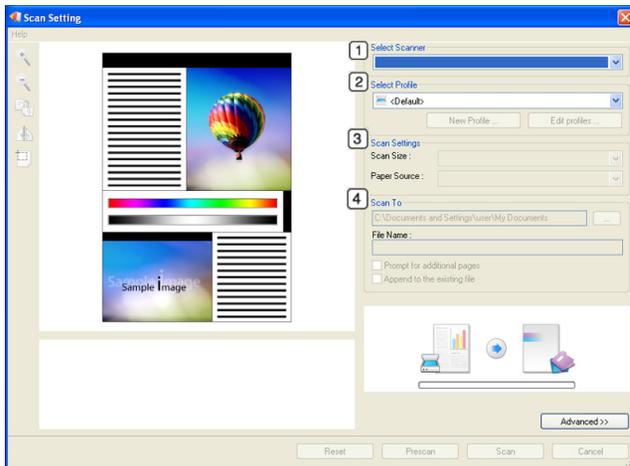
Using SmarThru Office

Scanning

1. Click the SmarThru icon  in the tray area of the windows taskbar to activate the SmarThru Office launcher.

2. Click the scanning icon  to open the scanning window.

3.Scan Setting window opens.



1	Select Scanner	Allows you to select between the Local or Network scanner.
2	Select Profile	Allows you to save settings frequently used for future use. Click New Profile to save the setting.
3	Scan Settings	Allows you to customize settings for Scan Size and Paper Source .
4	Scan To	Allows you to customize settings for File Name and location to send scanned data.

Click **Advanced** button to set more scan options.

4.Set scan settings and click **Scan**.

Printing

- 1.Click the SmarThru icon in the tray area of the Windows taskbar to active the SmarThru Office launcher.
- 2.Click the printing icon to open the printing window.
- 3.Select the file you want to print.
- 4.Select the machine you want to use for printing.
- 5.Click **Print** to start the job.

Sending a file via fax

You can fax while working on SmarThru Office.

- 1.Click the SmarThru icon in the tray area of the Windows taskbar to active the SmarThru Office launcher.
- 2.Click the faxing icon to open the faxing window.
- 3.Set fax settings and click **Send Fax**.
 - Select Fax Machine:** Choose whether the machine is connected locally or via network. If the machine is in network, click **Browse** to insert the IP address and other information.
 - Pages Ready:** Select file you want to fax. Click **Add**.
 - Recipients:** Click **Add** to enter the fax number.
 - Cover page:** If you need a cover page, enter the values for the options. If not, click **Skip Cover Page**.
 - Fax Settings:** If the original document is faded or not vivid, click **Fine**. In this case, the fax speed could be low.

Sending a file to FTP

You can upload files to an FTP server while working on SmarThru Office.

- 1.Double-click the SmarThru Office icon on your desktop.
- 2.Select the file to send to FTP.
- 3.Select **File > Send to > Send By FTP**.
- 4.**Send By FTP** window opens.
- 5.Add your file and click **Upload**.

Email

You can send email while working on SmarThru Office.

You need an email client program, such as Outlook Express, to send email in SmarThru Office. Procedure for sending email may differ depending on email client program you are using.

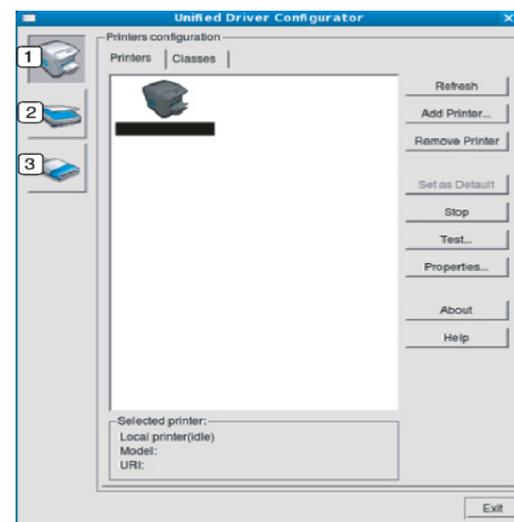
- 1.Double-click the SmarThru Office icon on your desktop.
- 2.Select the file to send to Email.
- 3.Select **File > Send to > Send By E-mail**.
- 4.An email client opens.
- 5.Type in necessary information and send your email.

Using the Unified Linux Driver Configurator

Unified Driver Configurator is a tool primarily intended for configuring machine devices. You need to install Unified Linux Driver to use Unified Driver Configurator (See "Installing the Linux Unified Driver" on page 5). After the driver is installed on your Linux system, the Unified Driver Configurator icon will automatically be created on your desktop.

Opening the Unified Driver Configurator

1. Double-click the **Unified Driver Configurator** on the desktop. You can also click the **Startup** Menu icon and select **Samsung Unified Driver > Unified Driver Configurator**.
2. Click each button on the left to switch to the corresponding configuration window.



- 1 **Printers Configuration**
- 2 **Scanners Configuration**
- 3 **Ports Configuration**

To use the on screen help, click **Help**.

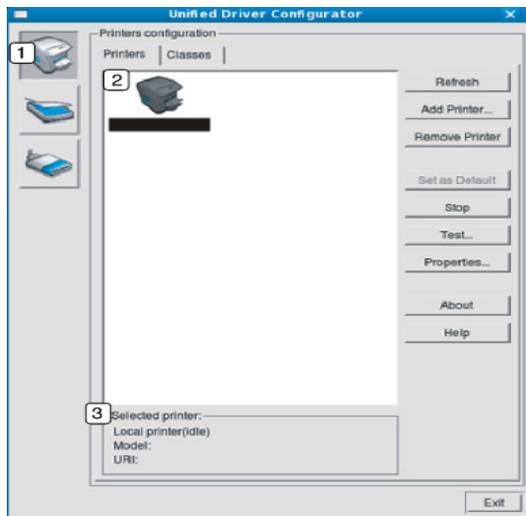
3. After changing the configurations, click **Exit** to close the Unified Driver Configurator.

Printers configuration

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

Printers tab

View the current system's printer configuration by clicking on the machine icon button on the left side of the Unified Driver Configurator window.



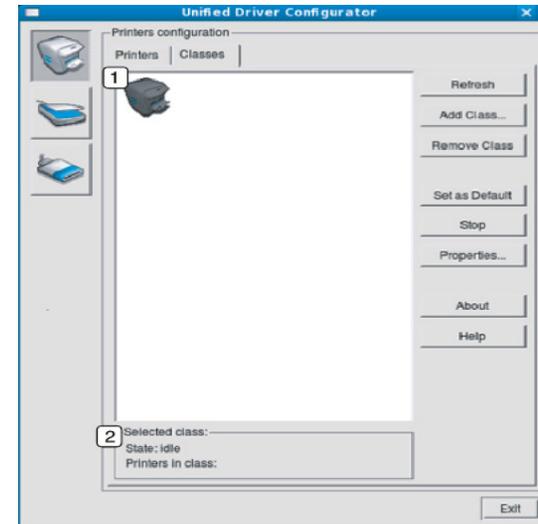
- | | |
|---|---|
| 1 | Switches to Printers configuration . |
| 2 | Shows all of the installed machine. |
| 3 | Shows the status, model name and URI of your machine. |

The printer control buttons are, as follows:

- Refresh:** Renews the available machines list.
- Add Printer:** Allows you to add a new machines.
- Remove Printer:** Removes the selected machine.
- Set as Default:** Sets the current selected machine as a default machine.
- Stop/Start:** Stops/starts the machine.
- Test:** Allows you to print a test page to ensure the machine is working properly.
- Properties:** Allows you to view and change the printer properties.

Classes tab

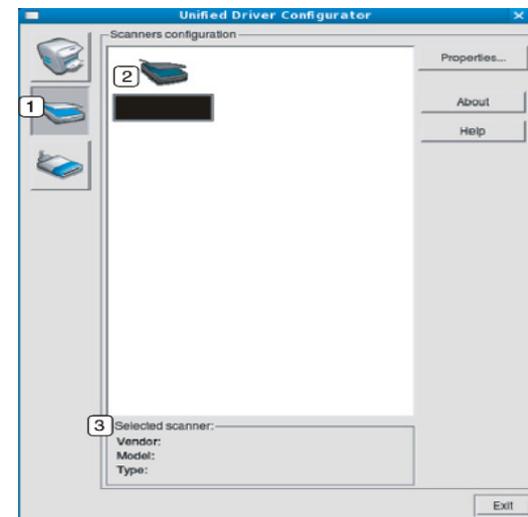
The Classes tab shows a list of available machine classes.



- | | |
|---|--|
| 1 | Shows all of the machine classes. |
| 2 | Shows the status of the class and the number of machines in the class. |
- Refresh:** Renews the classes list.
 - Add Class:** Allows you to add a new machine class.
 - Remove Class:** Removes the selected machine class.

Scanners configuration

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

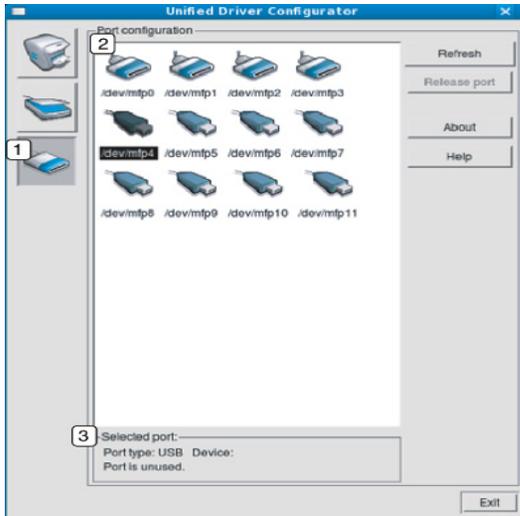


- | | |
|---|--|
| 1 | Switches to Scanners configuration . |
| 2 | Shows all of the installed scanners. |
| 3 | Shows the vendor, model name and type of your scanner. |

- **Properties:** Allows you to change the scan properties and scan a document.

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 a busy state when its owner has terminated the job for any reason.



1	Switches to Ports configuration .
2	Shows all of the available ports.
3	Shows the port type, device connected to the port, and status.

- **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 a parallel port or USB port. Since the machine 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 Unified Linux Driver package provides an appropriate port sharing mechanism that is used by Samsung printer and scanner drivers. The drivers talk to their devices via so-called machine ports. The current status of any machine port can be viewed via the **Ports configuration**. The port sharing prevents you from accessing one functional block of the machine device, while another block is in use.

When you install a new machine 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 machine’s functionality. For machine scanners, I/O ports are being chosen by scanner drivers automatically, so proper settings are applied by default.

maintenance

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

This chapter includes:

- Printing a machine report
- Monitoring the supplies life
- Adjusting the color contrast
- Finding the serial number
- Using Toner Low Alert
- Cleaning a machine
- Storing the toner cartridge
- Tips for moving & storing your machine

Printing a machine report

You can print the machine's information and job report.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Report** and press **OK**.
4. Press the up/down arrow until the report or list you want to print appears and press **OK**.
To print all reports and lists, select **All Reports**.
5. Press the left/right arrow to highlight **Yes** at the **Printing?** prompt and press **OK**.

 You can use SyncThru™ Web Service to print the machine's configuration or browse the status. Open the web browser in the networked computer and type the machine's IP address. When SyncThru™ Web Service opens, click **Information > Print Information Sheet**.

Monitoring the supplies life

To view the supply life indicators, follow the steps below:

1. Press **Menu** on the control panel.
2. Press up/down arrow to highlight **System Setup** and press **OK**.
3. Press up/down arrow to highlight **Maintenance** and press **OK**.
4. Press up/down arrow to highlight **Supplies Life** and press **OK**.
5. The display shows options as you press up/down arrow.
6. When you select the option, press **OK** to browse the life.

Adjusting the color contrast

Color menu allows you to adjust the color setting.

1. Press **Menu** on the control panel.
2. Press up/down arrow to highlight **System Setup** and press **OK**.
3. Press up/down arrow to highlight **Maintenance** and press **OK**.
4. Press up/down arrow to highlight **Color** and press **OK**.
5. The display shows options as you press up/down arrow.

Option	Description
Custom Color	This menu allows you to adjust contrast, color by color. <ul style="list-style-type: none">• Default: Optimizes colors automatically.• Manual Adjust: Allows you to manually adjust the color contrast for each cartridge. It is recommended to use the Default setting for best color quality.
Auto Color Reg.	You can adjust the position of color texts or graphics to match the position of the printed colors to those on your screen.  If you have moved the machine, it is strongly recommended to operate this menu manually.
Density Control^a	The machine automatically calibrates the toner density of machine for the best possible color print quality. If you select Off , the machine is calibrated by the factory default toner density.
Density Adjustment^a	This item allows you to quickly adjust color density. You can easily adjust the color density and see the result right away but it's not a permanent adjustment. Use this item to get a quick result.
Density Sensing^a	Automatically calculates the reduced or worn out supplies like toner or machine parts and uses this information to adjust the color density. For example, if the yellow toner is running out, the machine calculates the amount of remaining yellow toner and adjusts color density so the printouts are fine.
Density Calibration^a	You can manually calibrate the toner density of machine for the best possible color print quality.

a. CLX-6250 Series only.

Finding the serial number

When you call for service or register as a user on the Samsung website, the machine's serial number by taking the following steps:

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Maintenance** and press **OK**.
4. Press the up/down arrow to highlight **Serial Number** and press **OK**.
5. Check your machine's serial number.
6. Press **Stop/Clear** to return to ready mode.

Using Toner Low Alert

If toner in the cartridge has run out, a message informing user to change the toner cartridge appears. You can set the option for this message to appear or not.

1. Press **Menu** on the control panel.
2. Press up/down arrow to highlight **System Setup** and press **OK**.
3. Press up/down arrow to highlight **Maintenance** and press **OK**.
4. Press up/down arrow to highlight **Toner Low Alert** and press **OK**.

Cleaning a machine

If printing quality problems occur or if you use your machine in a dusty environment, you need to clean your machine regularly to keep the best printing condition and use your machine longer.

- ⚠ •Cleaning the cabinet of the machine with cleaning materials containing large amounts of alcohol, solvent, or other strong substances can discolor or distort the cabinet.
- If your machine or the surrounding area is contaminated with toner, we recommend you use cloth or tissue dampened with water to clean it. If you use a vacuum cleaner, toner blows in the air and might be harmful to you.

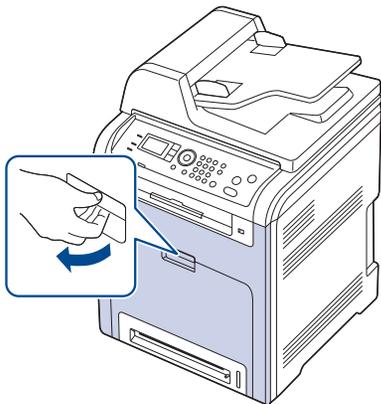
Cleaning the outside

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

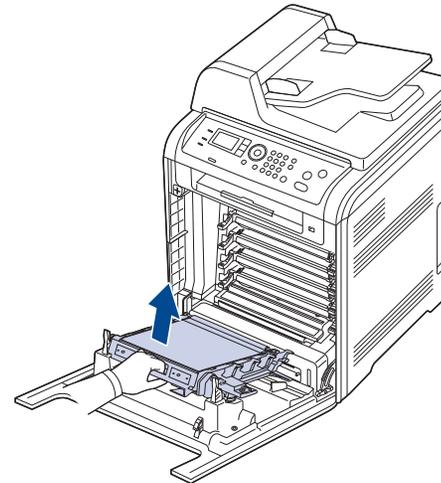
Cleaning the inside

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

1. Turn the machine off and unplug the power cord. Wait for the machine to cool down.
2. Using the handle, completely open the front door.

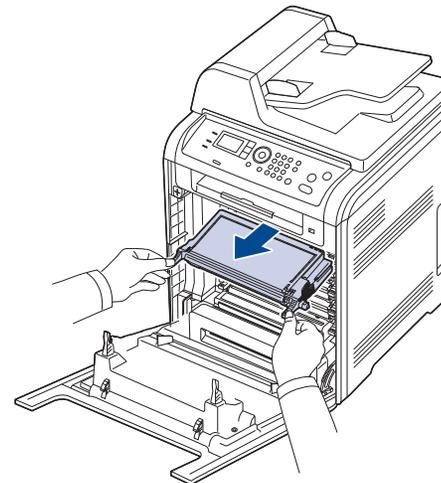


3. Press the green release handle to release the paper transfer belt. Holding the handle on the paper transfer belt, lift it out of the machine do not touch surface of belt.

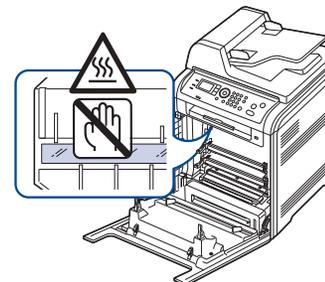


- ⓘ When you open the front door and work inside the machine, it is highly recommend that you remove the paper transfer belt first. Because the work you do could contaminate the paper transfer belt.

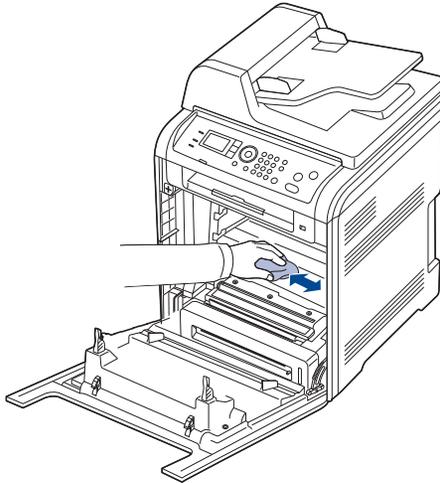
4. Grasp the handles on the toner cartridge and pull the cartridge out.



- ⚠ If you open the front door, be careful not to touch the underneath the control panel (the lower part of the fuser unit). The temperature of the fuser unit might be extremely hot and could damage your skin.

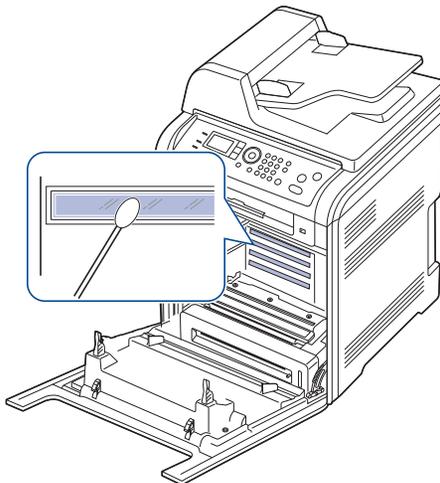


5. With a dry, lint-free cloth, wipe away any dust and spilled toner from the toner cartridge area.



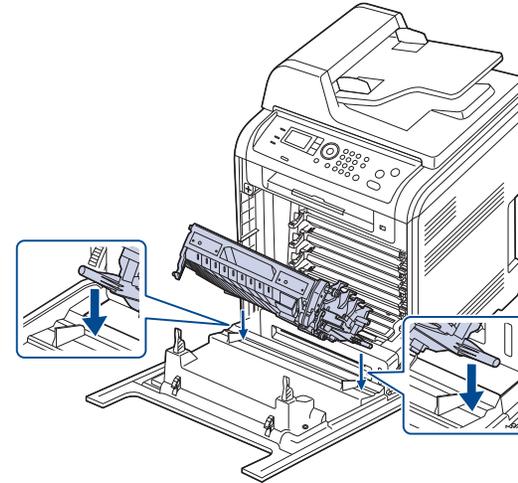
 While cleaning the inside of the machine, be careful not to damage the transfer roller or any other inside parts. Do not use solvents such as benzene or thinner to clean. Printing quality problems can occur and cause damage to the machine.

6. Locate the long strip of glass (LSU) inside the machine and using a cotton swab, gently clean the 4 pieces of LSU glass.

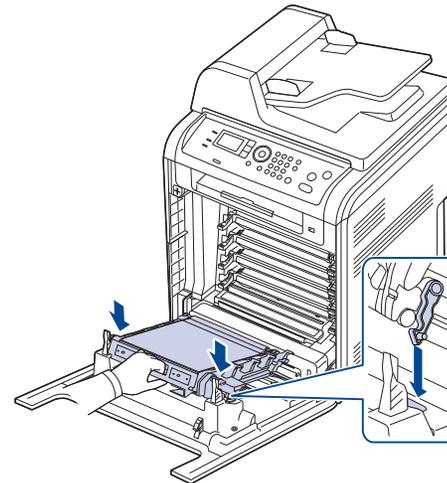


7. Slide the toner cartridge back into the machine.

8. Holding the handle on the paper transfer belt, align it with the slots on the inside of the front door.



9. Lower the paper transfer belt until it is parallel with the front door and firmly seated.



10. Close the front door. Ensure that the cover is securely closed.

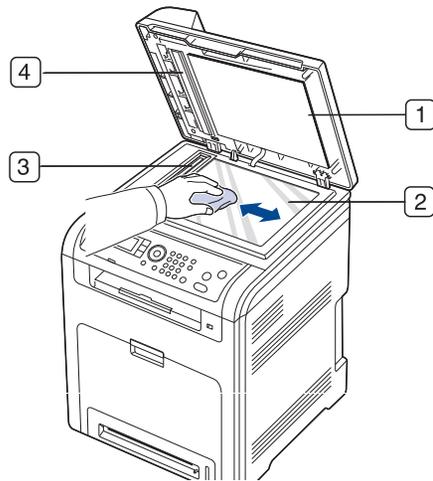
 If the front door is not completely closed, the machine will not operate.

11. Plug in the power cord and turn the machine on.

Cleaning the scan unit

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

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



- | | |
|---|-----------------------|
| 1 | Scanner lid |
| 2 | Scanner glass |
| 3 | Document feeder glass |
| 4 | White bar |

- Wipe the underside of the scanner lid and white sheet until it is clean and dry.
- Close the scanner lid.

Storing the toner cartridge

Toner cartridges contain components that are sensitive to light, temperature and humidity. Samsung suggests users follow the recommendations below to ensure the optimum performance, highest quality and longest life from your new Samsung toner cartridges.

Store this cartridge in the same environment as the printer it will be used in; this should be in controlled office temperature and humidity conditions. The toner cartridge should remain in its original, unopened package until installation – If original packaging is not available, cover the top opening of the cartridge with paper and store in a dark cabinet.

Opening the cartridge package prior to use dramatically shortens its useful shelf and operating life. Do not store on the floor. If the toner cartridge is removed from the printer, always store the cartridge:

- Inside the protective bag from the original package.
- Store lying flat (not standing on end) with the same side facing up as if they were installed in the machine.
- Do not store consumables in;
 - Temperature greater than 40°C (104°F).
 - Humidity range less than 20% nor not greater than 80%.
 - An environment with extreme changes in humidity or temperature.
 - Direct sunlight or room light.
 - Dusty places.
 - A car for a long period of time.
 - An environment where corrosive gases are present.
 - An environment with salty air.

Handling instructions

- Do not touch the surface of the photosensitive drum in the cartridge.
- Do not expose the cartridge to unnecessary vibrations or shock.
- Never manually rotate the drum, especially in the reverse direction; this can cause internal damage and toner spillage.

Use of non-Samsung and refilled toner cartridge

Samsung Electronics does not recommend or approve the use of non-Samsung brand toner cartridges in your printer including generic, store brand, refilled, or remanufactured toner cartridges.

-  Samsung's printer warranty does not cover damage to the machine caused by the use of a refilled, remanufactured, or non-Samsung brand toner cartridge.

Estimated cartridge life

Estimated cartridge life (the life of the toner cartridge yield) depends on the amount of toner that print jobs require. The actual print-out number may vary depending on the print density of the pages you print on, operating environment, printing interval, media type, and/or media size. For example, if you print a lot of graphics, the consumption of the toner is high and you may need to change the cartridge more often.

Tips for moving & storing your machine

- When moving the machine, do not tilt or turn it upside down. Otherwise, the inside of the machine may be contaminated by toner, which can cause damage to the machine or bad print quality.
- When moving the machine, make sure at least two people are holding the machine securely.
- When moving the machine or when machine is not in use for a long time, lock the scanner lock.



troubleshooting

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

This chapter includes:

- Redistributing toner
- Clearing original document jams
- Tips for avoiding paper jams

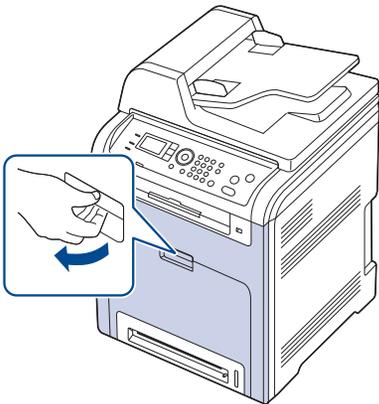
Redistributing toner

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

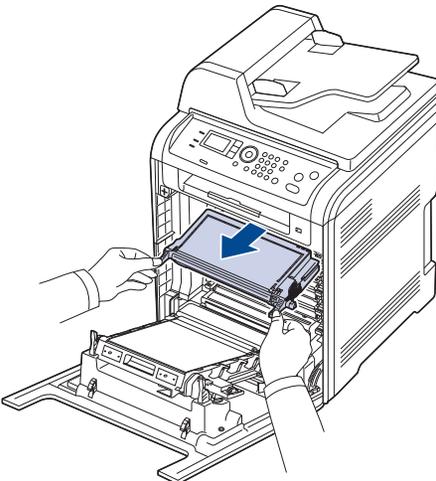
- White streaks or light printing occurs.
- The toner-related message saying that the toner is low may appear on the display.
- The **Status** LED blinks red.

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

1. Using the handle, completely open the front door.

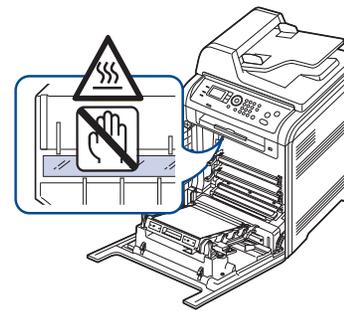


2. Grasp the handles on the toner cartridge and pull the cartridge out.



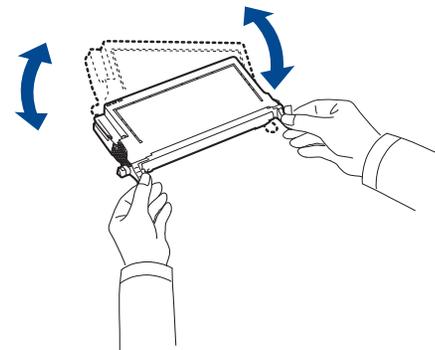
- Clearing paper jams
- Understanding display messages
- Solving other problems

 If you open the front door, be careful not to touch the underneath the control panel (the lower part of the fuser unit). The temperature of the fuser unit might be extremely hot and could damage your skin.



 When you open the front door and work inside the machine, it is highly recommended that you remove the paper transfer belt first. Because the work you do could contaminate the paper transfer belt.

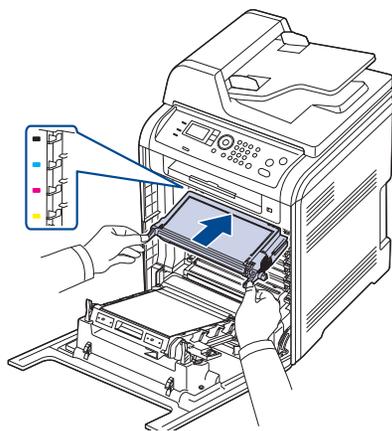
3. Holding both handles on the toner cartridge, thoroughly rock it from side to side to redistribute the toner.



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

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

place completely.



5. Close the front door. Ensure that the cover is securely closed.

 If the front door is not completely closed, the machine will not operate.

Clearing original document jams

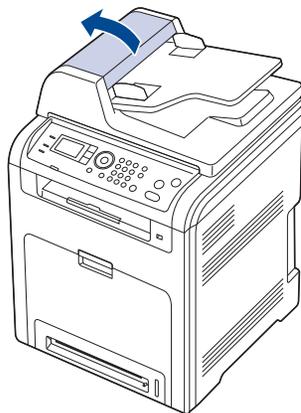
When an original jams while passing through the document feeder, a warning message appears on the display screen.

 To avoid tearing the document, remove the jammed document slowly and gently.

 To prevent document jams, use the scanner glass for thick, thin, or mixed paper-type originals.

Input misfeed

1. Remove any remaining pages from the document feeder.
2. Open the document feeder cover.



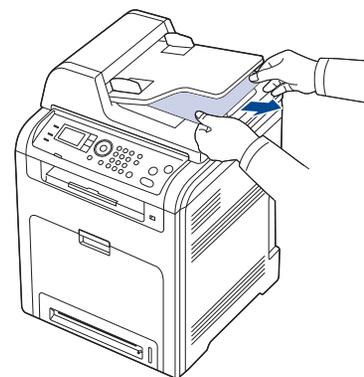
3. Gently remove the original jammed from the document feeder.



4. Close the document feeder cover. Reload the pages you removed, if any, in the document feeder.

Exit misfeed

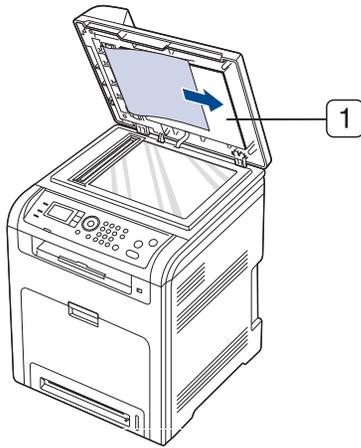
1. Remove any remaining pages from the document feeder.
2. Remove the misfeed original, and remove the sheets from the document output tray by carefully pulling it to the right using both hands.



3. Load the removed pages back into the document feeder.

Roller misfeed

1. Open the scanner lid.
2. Remove the misfeed original, and remove the sheets from the feed area by carefully pulling it to the right using both hands.



1 scanner lid

3. Close the scanner lid. Load the removed pages back into the document feeder.

Tips for avoiding paper jams

By selecting the correct media types, most paper jams can be avoided. When a paper jam occurs, refer to the next guidelines.

- Ensure that the adjustable guides are positioned correctly (See "Loading paper in the tray" on page 3).
Do not overload the tray. Ensure that the paper level is below the paper capacity mark on the inside 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 "Setting the paper size and type" on page 7).
- Ensure that the recommended side of the print media is facing up in the tray, or facing down in the multi-purpose tray.

Clearing paper jams

When a paper jam occurs, a warning message appears on the display screen.

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

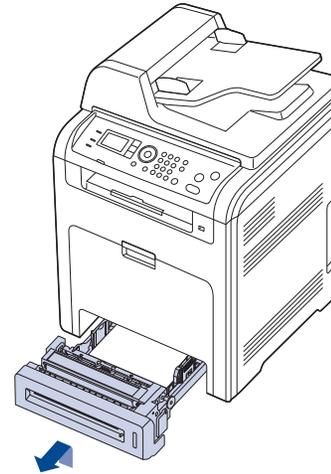
In tray 1

-  Click this link to open an animation about clearing a jam.

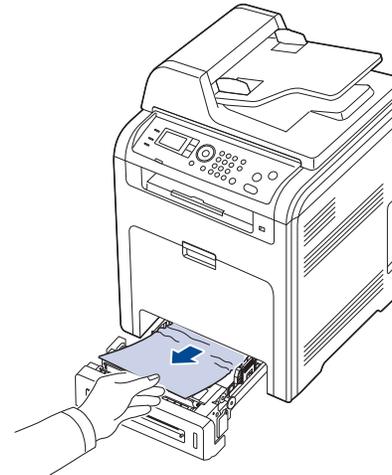
1. Open and close the front door. The jammed paper is automatically ejected from the machine.

If the paper does not exit, go to the next step.

2. Pull out tray 1 .



3. Remove the jammed paper by pulling in the direction shown. To avoid tearing the paper, pull it out gently and slowly.



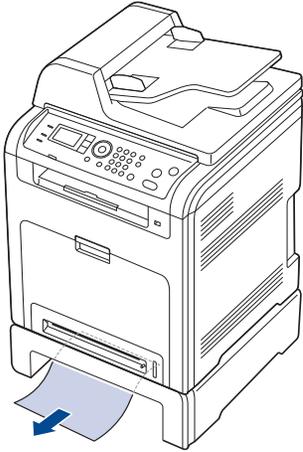
If the paper does not move when you pull, or if you do not see the paper in this area, check the fuser area around the toner cartridge (See "Inside the machine" on page 4).

4. Insert tray 1 back into the machine until it snaps into place. Printing automatically resumes.

In optional tray 2

-  Click this link to open an animation about clearing a jam.

1. Pull out optional tray 2.
2. Remove the jammed paper by pulling in the direction shown. To avoid tearing the paper, pull it out gently and slowly.



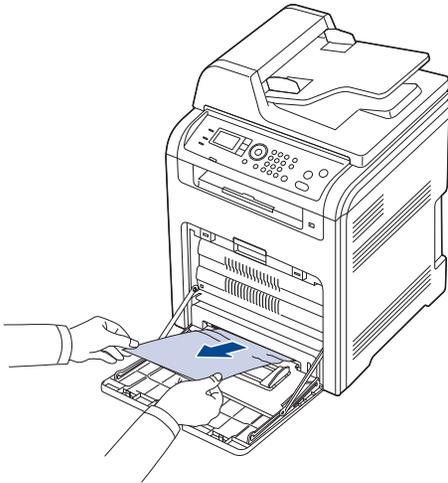
If the paper does not move when you pull or if you do not see the paper in this area, stop and go to the next step.

3. Pull tray 1 half-way out.
4. If you see the jammed paper, remove the paper from the machine by gently pulling it straight out.
5. Insert the trays back into the machine. Printing automatically resumes.

In the multi-purpose tray

 Click this link to open an animation about clearing a jam.

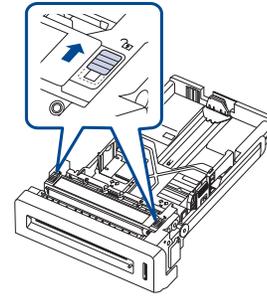
1. If the paper is not feeding properly, pull the paper out of the machine.



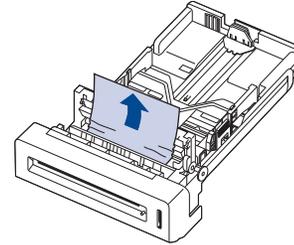
If you cannot find the jammed paper, or if there is any resistance removing the paper, stop pulling and go to step 2.

2. Close the multi-purpose tray.
3. Pull the tray out.

4. Open the inner cover while you are pushing the lever with two hands.



5. Pull the paper out gently.



6. Replace the tray.
7. Open and close the front door to resume printing.

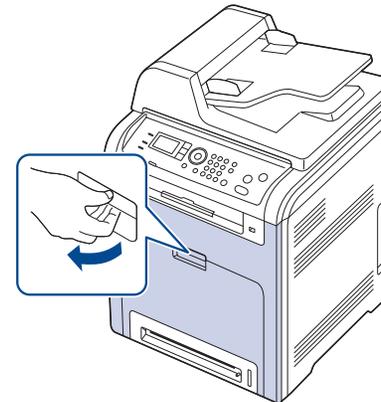
 If the front door is not completely closed, the machine will not operate.

Inside the machine

 Click this link to open an animation about clearing a jam.

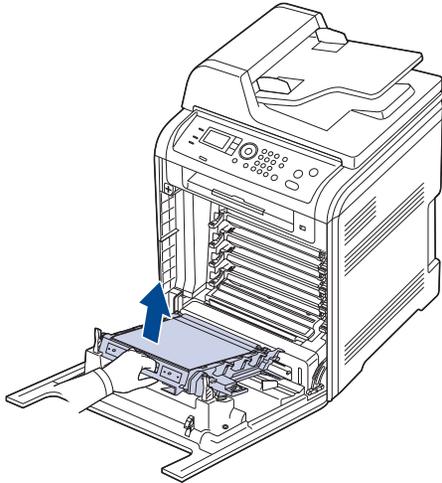
 The fuser area is hot. Take care when removing paper from the machine.

1. Using the handle, completely open the front door.

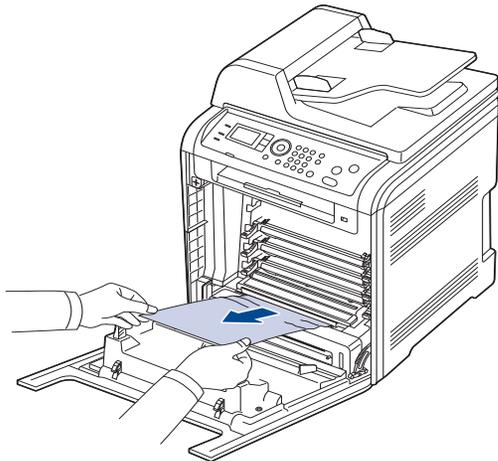


 Be careful not to scratch the surface of the paper transfer belt.

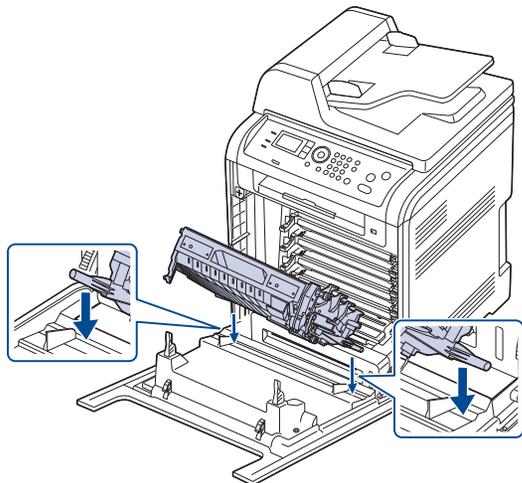
2. Press the green release handle to release the paper transfer belt. Holding the handle on the paper transfer belt, lift it out of the machine.



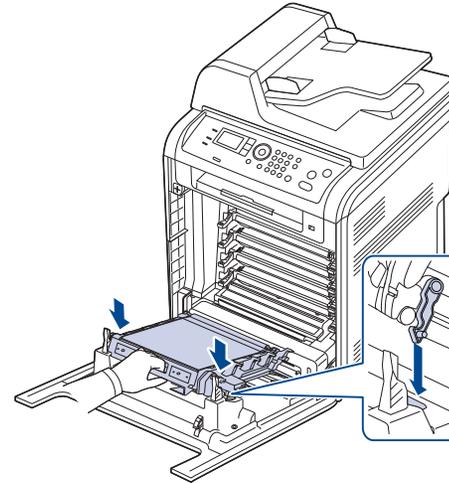
3. Remove the jammed paper by pulling in the direction shown. To avoid tearing the paper, pull it out gently and slowly.



4. Holding the handle on the paper transfer belt, align it with the slots on the inside of the front door.



5. Lower the paper transfer belt until it is parallel with the front door and firmly seated.



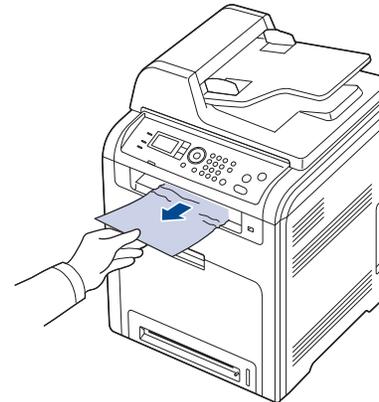
6. Close the front door to resume printing.

 If the front door is not completely closed, the machine will not operate.

In exit area

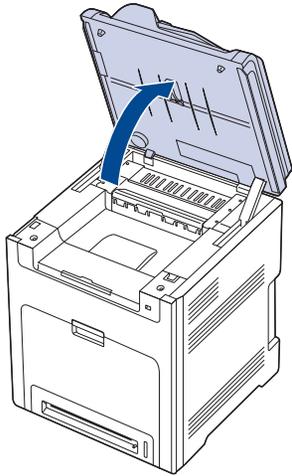
 Click this link to open an animation about clearing a jam.

1. Open and close the front door. The jammed paper is automatically ejected from the machine.
If you do not see the jammed paper, go to next step.
2. Gently pull the paper out of the output tray.



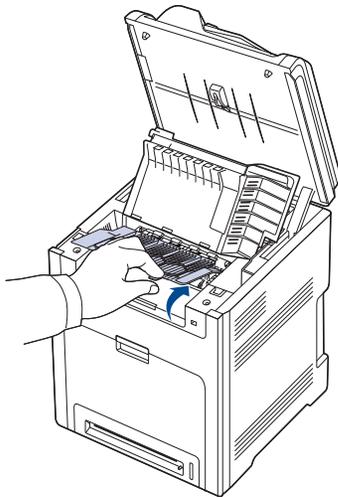
If you do not see the jammed paper or if there is any resistance when you pull, stop and go to the next step.

3. Open the scan unit.



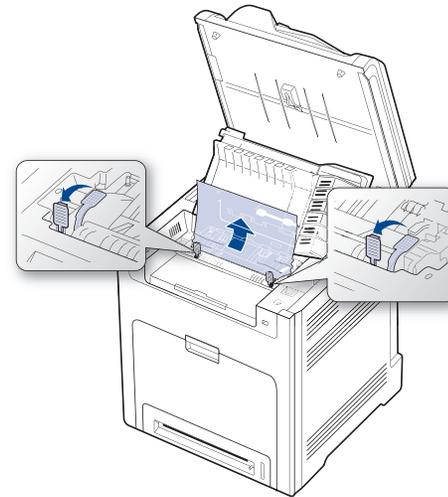
 When the scanner lid is open, the scan unit cannot be opened. Do not force the scan unit open, it can cause damage to the machine. Close the scanner lid before opening the scan unit.

4. Open the fuser cover.
5. Open the inner cover.



 Do not touch the fuser inside the inner cover. It is hot and could cause burns!

6. Pull up the paper jam lever in the direction of the arrow to separate the fuser rollers and carefully remove the jammed paper from the unit.

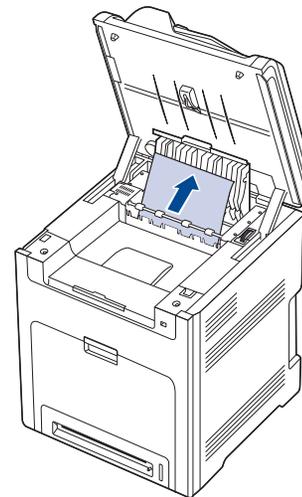


7. Press down the paper jam lever to reapply pressure to the rollers.
8. Close the inner cover.

 Before closing the inner cover, the jam lever must be fastened first (step7). Otherwise, paper jam can occur.

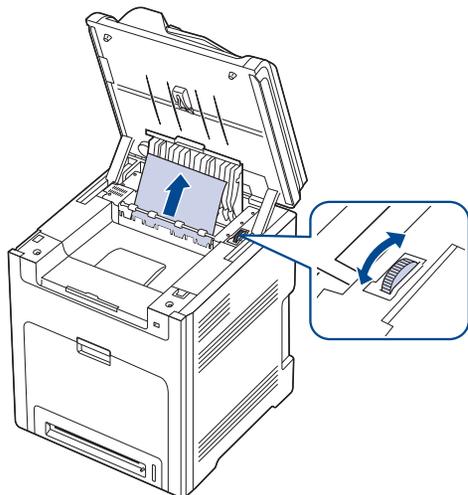
If you do not see the jammed paper or if there is any resistance when you pull, stop and go to the next step.

9. Open the inner cover of reverse unit and carefully remove the jammed paper out of the machine.



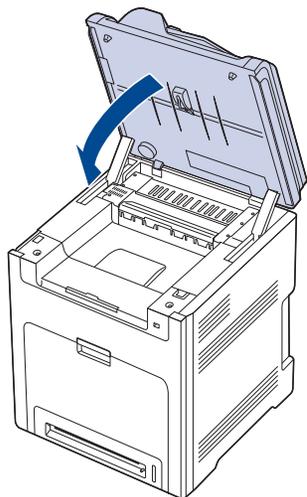
If there is any resistance removing the paper or difficulty picking up jammed paper, stop pulling and turn the release knob to the direction as

shown to remove the misfed paper.



10. Close the inner cover of the reverse unit.

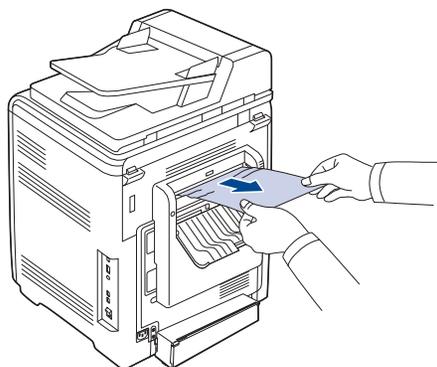
11. Lowering down the scan unit gently and slowly until it is completely closed. Make sure that it is securely latched. Be careful not to pinch your fingers!



 If the scan unit is not completely closed, the machine will not operate.

If you do not see the jammed paper or if there is any resistance when you pull, stop and go to the next step.

12. Open the rear cover and carefully take the jammed paper out of the machine.

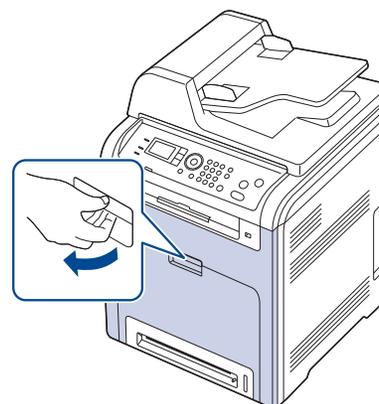


13. Close the rear cover.

In the duplex unit area

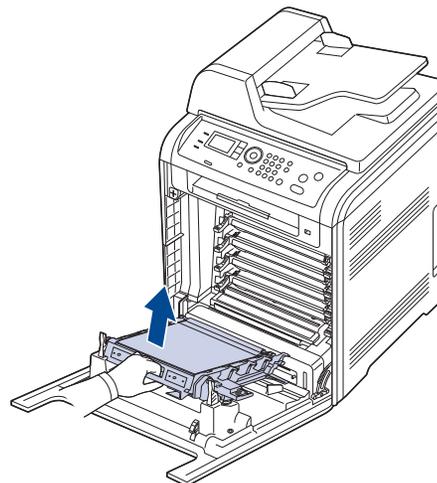
 Click this link to open an animation about clearing a jam.

1. Open the front door.

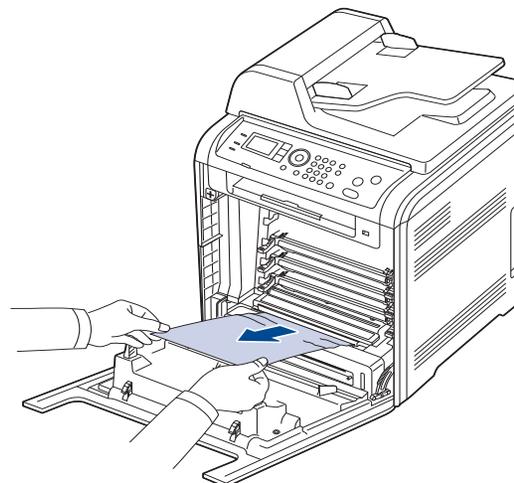


 Be careful not to scratch the surface of the paper transfer belt.

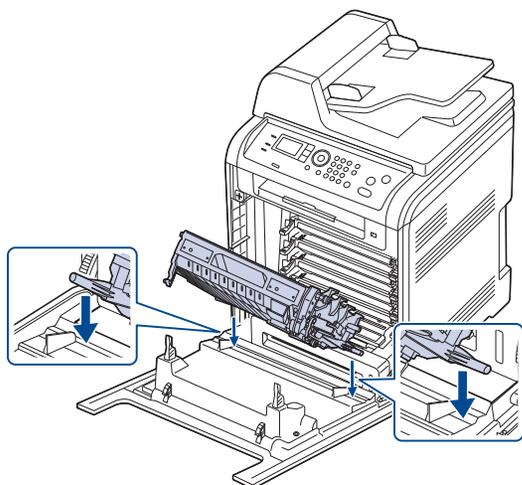
2. Press the green release handle to release the paper transfer belt. Holding the handle on the paper transfer belt, lift it out of the machine.



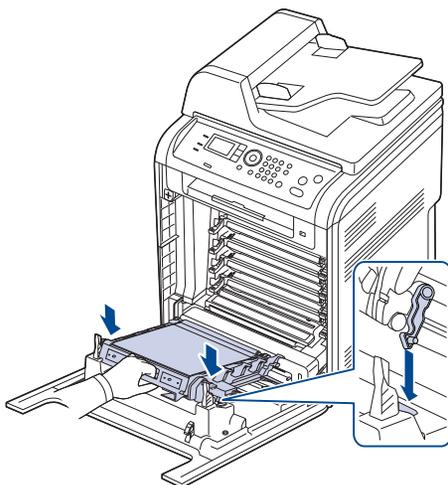
3. Remove the jammed paper by pulling in the direction shown. To avoid tearing the paper, pull it out gently and slowly.



4. Holding the handle on the paper transfer belt, align it with the slots on the inside of the front door.



5. Lower the paper transfer belt until it is parallel with the front door and firmly seated.



6. Close the front door to resume printing.



If the front door is not completely closed, the machine will not operate.

Understanding display messages

Messages appear on the control panel display to indicate the machine's status or errors. Some error messages are shown with graphics to aid you in troubleshooting.

Checking display messages

1. When errors occur, **Check Error** appears on the display and press **OK**.
2. Check the display message to see what kind of error has occurred.
If several messages appear, press the up/down arrow to highlight the message you want solve.
3. Press **OK** on the control panel.

Refer to the tables below to understand the messages' and their meaning, and solve the problem, using the suggested solutions.



- If **Check Error** still appears, repeat above steps.
- If a message is not in the table, reboot the power and try the printing

job again. If the problem persists, call for service.

- When you call for service, provide the service representative with the contents of display message and the serial number.
- Some messages may not appear in the display depending on options or models.
- [aaa] indicates the error code. When you contact the service center, this error code help to handle the problem.
- [ccc] indicates the part of the each toner cartridge.
- [xxx] indicates the media type.
- [zzz] indicates the paper size.
- [yyy] indicates the tray.

Message	Meaning	Suggested solutions
[ccc] toner cart. error Error: [aaa] Open/Close Door	The toner cartridge is wrong installed.	Open and close the front door; and check that the toner cartridge's are installed correctly. If the problem persists, call for service.
Prepare new [ccc] toner Prepare new [ccc] toner cartridge	Small amount of toner is left in the cartridge. The estimated cartridge life of toner is close.	Prepare a new cartridge for replacement. You may temporarily increase the printing quality by redistributing the toner (See "Redistributing toner" on page 1).

Message	Meaning	Suggested solutions
<p>Replace new [ccc] toner</p> <p>Replace with new [ccc] toner cartridge</p>	<p>The indicated toner cartridge has almost reached its estimated cartridge life. The machine might stop printing.</p> <p> Estimated cartridge life means the expected or estimated toner cartridge life, which indicates the average capacity of print-outs and is designed pursuant to ISO/IEC 19798. The number of pages may be affected by the percentage of image area, operating environment, printing interval, media type and media size. Some amount of toner may remain in the cartridge even when red LED is turns on and the printer stops printing.</p>	<ul style="list-style-type: none"> You can choose Stop or Continue as shown on the control panel. If you select Stop, the printer stops printing and you cannot print any more without changing the cartridge. If you select Continue, the printer keeps printing but the printing quality cannot be guaranteed. Replace the toner cartridge for the best print quality when this message appears. Using a cartridge beyond this stage can result in printing quality issues. (See "Replacing the toner cartridge" on page 2) <p> Samsung does not recommend using non-genuine Samsung toner cartridge such as refilled or remanufactured . Samsung cannot guarantee non-genuine Samsung toner cartridge's quality. Service or repair required as a result of using non-genuine Samsung toner cartridges will not be covered under the machine warranty.</p> <ul style="list-style-type: none"> If the machine stops printing, replace the toner cartridge (See "Replacing the toner cartridge" on page 2).
<p>[ccc] toner Not Compatible</p> <p>[ccc] toner cartridge is not compatible.</p> <p>Check guide</p>	<p>The toner cartridge you have installed is not for your machine.</p>	<p>Install a Samsung-genuine toner cartridge, designed for your machine.</p>

Message	Meaning	Suggested solutions
<p>[ccc] toner Not Installed</p> <p>[ccc] toner cartridge is not installed.</p> <p>Install it</p>	<p>The toner cartridge is not installed or the CRUM (Consumer Replaceable Unit Monitor) in the cartridge is not properly connected.</p>	<p>Reinstall the toner cartridge two or three times. If the problem persists, the toner cartridge is not being detected. Call for service.</p>
<p>[ccc] Toner Not Installed</p> <p>[ccc] Toner is not installed.</p> <p>Remove seal tape & reinstall</p>	<p>The machine cannot detect a toner cartridge.</p>	<p>Remove the sealing tape from the toner cartridge.</p> <p>Refer to Quick Install Guide.</p>
<p>Group Not Available</p>	<p>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.</p>	<p>Use a speed dial number or dial number manually using the number keypad.</p>
<p>Data Read Fail</p> <p>Check USB Memory</p>	<p>Time expired while reading date.</p>	<p>Try again.</p>
<p>Data Write Fail</p> <p>Check USB Memory</p>	<p>Storing to the USB memory failed.</p>	<p>Check the available USB memory space.</p>
<p>Door is open.</p> <p>Close it</p>	<p>The door is not securely latched.</p>	<p>Close the door until it locks into place.</p>
<p>Door is open or</p> <p>Check Transfer belt</p>	<p>The front door is not securely latched.</p>	<p>Close the front door until it locks into place.</p>
<p>IP Conflict</p> <p>This IP address conflicts with that of other system</p>	<p>The IP address is used elsewhere.</p>	<p>Check the IP address or obtain a new IP address.</p>
<p>Connection Error</p>	<p>Connection with the SMTP server failed.</p>	<p>Check the server settings and the network cable.</p>
<p>Enter Again</p>	<p>You entered an unavailable item.</p>	<p>Enter the correct item again.</p>
<p>Fax memory is almost full</p>	<p>The fax memory is full.</p>	<p>Delete unnecessary fax jobs and retransmit after more memory becomes available. Alternatively, split the transmission into more than one operation.</p>
<p>Fan error</p> <p>Error: [aaa]</p> <p>Turn off then on</p>	<p>There is a problem in the machine.</p>	<p>Turn the machine off and turn it on again. If the problem persists, call for service.</p>
<p>Fuser error</p> <p>Error: [aaa]</p> <p>Turn off then on</p>	<p>There is a problem in the machine.</p>	<p>Turn the machine off and turn it on again. If the problem persists, call for service.</p>
<p>Fuser unit Not Installed</p> <p>Fuser unit is not installed.</p> <p>Install it</p>	<p>The fuser unit is not installed.</p>	<p>Call for service.</p>

Message	Meaning	Suggested solutions
Paper Empty in [yyy] Paper is empty in [yyy]. Load paper	There is no paper in the tray.	Load paper in the tray (See "Loading paper in the tray" on page 3).
Jam bottom of duplex	Paper has jammed during duplex printing.	Clear the jam (See "In the duplex unit area" on page 7).
Jam in exit area	Paper has jammed in exit area.	Clear the jam (See "In exit area" on page 5).
Jam inside machine	Paper has jammed inside the machine.	Clear the jam (See "Inside the machine" on page 4).
Jam inside of duplex	Paper has jammed during duplex printing.	Clear the jam (See "In the duplex unit area" on page 7).
Jam top of duplex	Paper has jammed during duplex printing.	Clear the jam (See "In the duplex unit area" on page 7).
Junk Fax Error Junk Fax Job Cancelled	The machine has received a fax from which is registered as a junk fax.	The received fax data will be deleted. Reconfirm junk fax setup (See "Receiving" on page 1).
Line Busy The line is already engaged. Try Again Later	The receiving fax machine did not answer or the line is already engaged.	Try again after a few minutes.
Line Error The Fax Line has a problem. Try Again Later	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 again. Or, turn the ECM mode on (See "Sending" on page 1.)
LSU error Error: [aaa] Turn off then on	There is a problem in the machine.	Turn the machine off and turn it on again. If the problem persists, call for service.
Memory Full Cancel Start	The memory is full.	Press the left/right arrow to highlight Cancel or Start , then press OK . If you select Cancel , the machine stops the fax job. If you select Start , the machine only sends scanned documents of the fax job.
Memory Full Divide the job	The memory is full.	Split the transmission into more than one operation.
Memory Full Fax memory is full. Print or remove received fax job	The memory is full.	Print or remove the received fax data in the memory.
Motor Error Error: [aaa] Turn off then on	There is a problem in the machine.	Turn the machine off and turn it on again. If the problem persists, call for service.

Message	Meaning	Suggested solutions
Network Error There is a problem with the network.	There is a problem with the network.	Check the network. If the problem persists, ask the system administrator or the person who has set up your local network.
No Answer The remote fax machine has not answered	The remote fax machine has not answered after several redial attempts.	Try again. Verify the number to ensure that a fax can be received.
Not proper room temperature. Change room temperature	The machine is in a room with improper room temperature.	Move the machine to a room with proper room temperature (See "Environmental specifications" on page 1).
No Such Job	You are performing an Add Pages or Cancel Job operation, but there are no jobs waiting.	Check the display to see if there are any scheduled jobs. The display should indicate if any scheduled jobs are in Standby mode, for example, Delay Fax.
Network problem Network cable is not connected. Check it.	The machine is not connected with a network cable.	Connect the machine to the network with a network cable.
Network problem Network card is not installed. Check it.	There is a problem on the network interface.	Turn the power switch off and on. If the problem persists, call for service.
Original paper Jam Original paper Jam inside of scanner. Remove Jam	The load original has jammed in the document feeder.	Clear the jam (See "Clearing original document jams" on page 2).
Original paper Jam Original paper is too long for scanner. Check size	The original is too long for scanner.	Check the originals (See "Preparing originals" on page 1).
Output Bin Full Output Bin Full Remove printed paper	The document output tray is full.	The document output tray can hold up to 160 sheets of plain paper. Once the paper is removed from the document output tray, the printer resumes printing.
Paper Jam in MP	Paper has jammed in the multi-purpose tray area.	Clear the jam (See "In the multi-purpose tray" on page 4).
Paper Jam in tray1	Paper has jammed in the tray1 area.	Clear the jam (See "In tray 1" on page 3).
Paper Jam in tray2	Paper has jammed in the tray2 area.	Clear the jam (See "In optional tray 2" on page 3).

Message	Meaning	Suggested solutions
Paper Empty in [yyy] Paper is empty in [yyy] Load paper	There is no paper in the tray.	Load paper in the tray (See "Loading paper in the tray" on page 3).
Paper Mismatch [yyy] Load [zzz][xxx] Continue  Cancel 	The paper size specified in the printer properties does not match the paper you are loading.	You can select the option between Continue or Cancel . If you select Cancel , the printing job will stop. Load the correct paper in the tray. If you select Continue , printing job will continue.
BOOTP problem BOOTP has a problem. Switching to Auto IP	There is a problem with the network.	Check your network environment, or contact your network administrator.
DHCP problem DHCP has a problem. Reconfigure BOOTP/static IP	There is a problem with the network.	Check your network environment, or contact your network administrator.
DHCP problem DHCP has a problem. Switching to Auto IP	There is a problem with the network.	Check your network environment, or contact your network administrator.
BOOTP problem BOOTP has a problem. Reconfigure DHCP/static IP	There is a problem with the network.	Check your network environment, or contact your network administrator.
Replace [ccc] toner Replace with new [ccc] Toner	The toner cartridge has reached the end of its lifespan.	Replace the toner cartridge with a Samsung-genuine toner cartridge (See "Replacing the toner cartridge" on page 2).
Replace Fuser unit Replace with new fuser unit	The fuser unit has reached the end of its lifespan.	This message appears when the fuser unit is worn. Replace the fuser unit with a new one. Call for service.
Retry Redial?	The machine is waiting for a specified time interval to redial a previously busy station.	You can press OK to immediately redial, Stop/Clear to cancel the redial operation.
Scanner door Open Door of scanner is open. Close it	The scanner door is not securely latched.	Close the scanner door until it locks into place.
Scanner locked Scanner locking switch is locked. Release it	The scanner module is locked.	Unlock the CCD (See "Front view" on page 1). Or turn off the machine and on again. If the problem persists, call for service.

Message	Meaning	Suggested solutions
Self Diagnostics Please Wait...	The engine in your printer is performing self diagnostics.	Please wait a few minutes.
Send Error There is a problem in DNS	There is a problem in DNS.	Configure the DNS setting.
Send Error There is a problem in POP3	There is a problem in POP3.	Configure the POP3 setting.
Send Error There is a problem in SMTP	There is a problem in SMTP.	Change to the available server.
Send Error There is a problem in SMTP authentication	There is a problem in SMTP authentication.	Configure the authentication setting.
Send Error There is a problem on the NIC Card	There is a problem on network interface card.	Turn the power switch off and on. If the problem persists, call for service.
Sensor Failure [aaa] Turn off then on	There is a problem in the sensor signal.	Turn the machine off and turn it on again. If the problem persists, call for service.
Mail Size Error Mail exceeds than server support	The mail size is larger than the supported size by SMTP server.	Divide your mail or reduce the resolution.
System error Error: [aaa] Turn off then on	There is a problem in the machine.	Turn the machine off and turn it on again. If the problem persists, call for service.
Mail Size Error One Page is Too Large	Single page data exceeds the configured mail size.	Reduce the resolution and try again.
Too many Faxes Too may faxes are received. Print or remove job	Too many faxes are received.	Print or remove received fax.
Too many Faxes Too may faxes are queued. Wait or remove job	Too many faxes are queued to be sent.	Cancel reserved fax in priority fax feature.
TR belt Not installed Transfer belt unit is not installed. Install it	The transfer belt is not installed.	Install a Samsung-genuine transfer belt.
TR. belt Not compatible Transfer belt unit is not compatible. Check guide	The transfer belt of the machine is not for your machine.	Install the a Samsung-genuine part designed for your machine.
Transfer belt is low Transfer belt unit will be worn. Order new one	The life of the transfer belt will expired soon.	Order a transfer belt (See "Available accessories" on page 2).

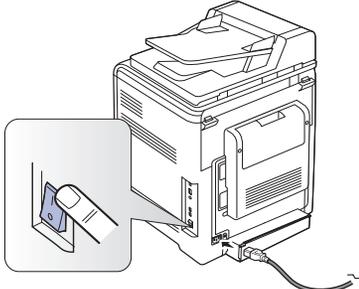
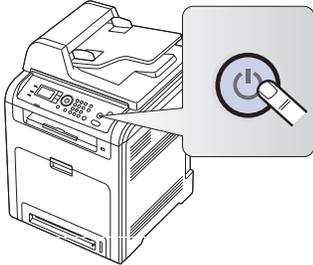
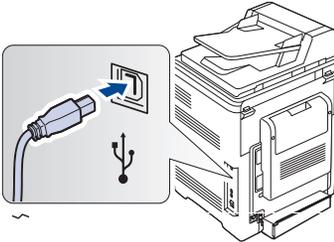
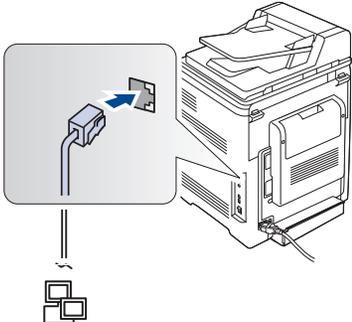
Message	Meaning	Suggested solutions
Replace TR. Belt Replace with new Transfer belt unit	The life of the transfer belt has expired.	Replace the transfer belt with a new one. Install a Samsung-genuine transfer belt.
Tray[yyy] cassette Out Tray[yyy] cassette is pulled out. Insert it properly	The tray is not properly closed.	To close the tray, lower the rear edge, align it with the slot, and slide it into the printer.
Tray[yyy] has a problem Communication problem occurred with tray[yyy]	The machine cannot communicate with the optional tray .	Reinstall the optional tray. If the problem persists, call for service.
Tray[yyy] Not Installed Tray[yyy] is not installed. Install it	The optional tray is not installed.	Reinstall the optional tray. If the problem persists, call for service.
Tray2 has a problem Communication problem occurred with Tray2	The machine cannot communicate with the optional tray 2.	Check the cable connecting the machine and the optional tray 2. If the problem persists, call for service.
Tray2 Not installed Tray2 is not installed. Install it	The optional tray2 is not installed.	Install the optional tray 2. If the optional tray 2 is installed, check the cable connecting the machine and the optional tray 2. If the problem persists, call for service.
Updating Data Please Wait...	<ul style="list-style-type: none"> The machine is updating data. This message can also appear when printing on paper smaller than A4, such as envelope or B5. In this case, the machine is adjusting the settings for best print results. 	Wait a few minutes.

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, call for service.

Power problems

 Click this link to open an animation about power problems.

Condition	Suggested solutions
<p>The machine is not receiving power; or the printer cable connection between the computer and the machine is not connected properly.</p>	<ul style="list-style-type: none"> Plug in the power cord and then press the power switch to turn the machine on.  <p>Or press  (power) on the control panel.</p>  <ul style="list-style-type: none"> Disconnect the machine printer cable and reconnect it. <p>-For Local USB</p>  <p>-For Network Printing</p> 

Paper feeding problems

Condition	Suggested solutions
<p>Paper jams during printing.</p>	<p>Clear the paper jam (See "Clearing paper jams" on page 3).</p>
<p>Paper sticks together.</p>	<ul style="list-style-type: none"> Check the maximum paper capacity of the tray (See "Print media specifications" on page 3). Make sure that you are using the correct type of paper (See "Print media specifications" on page 3). Remove paper from the tray and flex or fan the paper. Humid conditions may cause some paper to stick together, install paper from a fresh ream.
<p>Multiple sheets of paper do not feed.</p>	<p>Different types of paper may be stacked in the tray. Load paper of only one type, size, and weight.</p>
<p>Paper does not feed into the machine.</p>	<ul style="list-style-type: none"> 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 "Print media specifications" on page 3). If an original does not feed into the machine, the document feeder rubber pad may require to be replaced. Contact a service representative.
<p>The paper keeps jamming.</p>	<ul style="list-style-type: none"> 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 "Print media specifications" on page 3). There may be debris inside the machine. Open the front door and remove any debris. If an original does not feed into the machine, the document feeder rubber pad may need to be replaced. Contact a service representative.
<p>Envelopes skew or fail to feed correctly.</p>	<p>Ensure that the paper guides are against both sides of the envelopes.</p>

Printing problems

Condition	Possible cause	Suggested solutions
The machine does not print.	The machine is not receiving power.	Check the power cord connections. Check both power switches and the power source.
	The machine is not selected from the available printers list.	Select this printers "Name" from the available printers drop-down list in the application you are printing from
	Check the machine for the following: <ul style="list-style-type: none"> • The front door is not closed. Close the front door. • Paper is jammed. Clear the paper jam (See "Clearing paper jams" on page 3). • No paper is loaded. Load paper (See "Loading paper in the tray" on page 3). • The toner cartridge is not installed. Install the toner cartridge. If a system error occurs, contact your service representative.	
	The connection printer cable between the computer and the machine is not connected properly.	Disconnect the machine printer cable and reconnect it.
	The connection printer cable between the computer and the machine is defective.	If possible, attach the printer cable to another computer that is working properly and print a job. You can also try using a different machine printer cable.
	The port setting is incorrect.	Check the Windows printer settings 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 Printing Preferences to ensure that all of the print settings are correct (See "Opening printing preferences" on page 2).
	The printer driver may be incorrectly installed.	Repair the machine software (See "Installing USB connected machine's driver" on page 3).
	The machine is malfunctioning.	Check the display message on the control panel to see if the machine is indicating a system error. Contact a service representative.

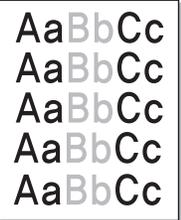
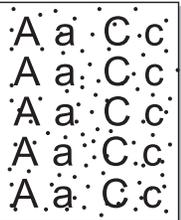
Condition	Possible cause	Suggested solutions
	The document size is so big that the hard disk space of the computer is insufficient to access the print job.	Make available more hard disk space and print the document again.
The machine selects print materials from the wrong paper source.	The paper option that was selected in the Printing Preferences may be incorrect.	For many software applications, the paper source selection is found under the Paper tab within the Printing Preferences . Select the correct paper source. See the printer driver help screen (See "Opening printing preferences" on page 2).
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.
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.

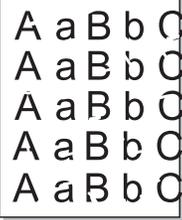
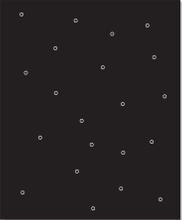
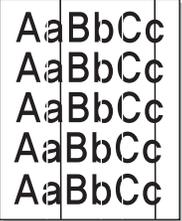
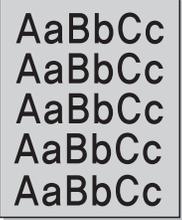
Condition	Possible cause	Suggested solutions
The machine prints, but the text is wrong, garbled, or incomplete.	The machine cable is loose or defective.	Disconnect the machine printer cable and reconnect. Try a print job that you have already printed successfully. If possible, attach the printer cable and the machine to another computer that you know works ensure print driver is installed and try a print job. Finally, try a new machine 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 back on again.
	If you are in a DOS environment, the font setting for your machine may be set incorrectly.	Change the language setting (See "Changing the display language" on page 1).
	Printer driver corrupted.	Reinstall printer driver.
Pages print, but they are blank.	The toner cartridge is defective or out of toner.	Redistribute the toner, if necessary. If necessary, replace the toner cartridge.
	The file may have blank pages.	Check the file to ensure that it does not contain blank pages.
	Some parts, such as the controller or the board, may be defective.	Contact a service representative.
The machine does not print PDF files correctly. Some parts of graphics, text, or illustrations are missing.	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.  It will take longer to print when you print a PDF file as an image.

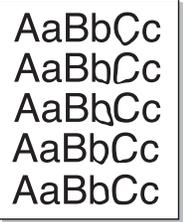
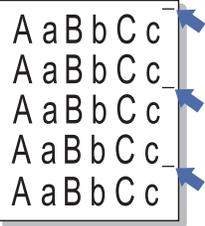
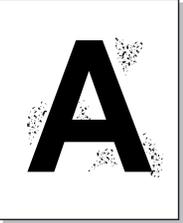
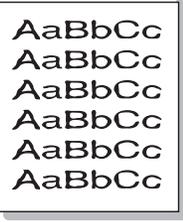
Condition	Possible cause	Suggested solutions
The print quality of photos is not good. Images are not clear.	The resolution of the photo is very low.	Reduce the photo size. If you increase the photo size in the software application, the resolution will be reduced.
Before printing, the machine emits vapor near the output tray.	Using damp paper can cause vapor during printing.	This is not a problem. Just keep printing.
The machine does not print special-sized paper, such as billing paper.	Paper size and paper size setting do not match.	Set the correct paper size in the Paper tab in the Printing Preferences (See "Opening printing preferences" on page 2).

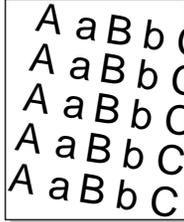
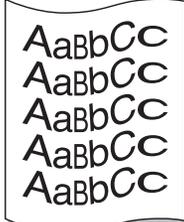
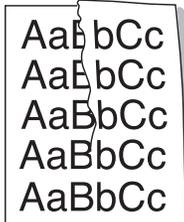
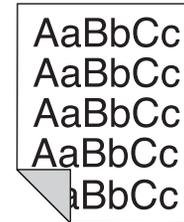
Printing quality problems

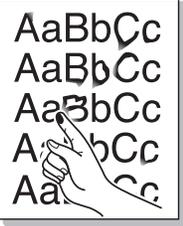
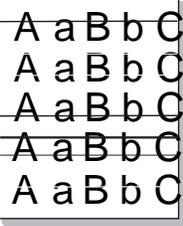
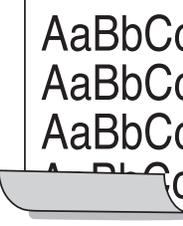
If the inside of the machine is dirty or paper has been loaded improperly, there might be a reduction in print quality. See the table below to clear the problem.

Condition	Suggested Solutions
Light or faded print 	<ul style="list-style-type: none"> 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 "Redistributing toner" on page 1). If this does not improve the print quality, install a new toner cartridge. The paper may not meet paper specifications; for example, the paper may be too moist or rough (See "Print media specifications" on page 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. A combination of faded or smeared defects may indicate that the toner cartridge needs cleaning (See "Cleaning the inside" on page 2). The surface of the LSU part inside the machine may be dirty (See "Cleaning the inside" on page 2).
Toner specks 	<ul style="list-style-type: none"> The paper may not meet specifications; for example, the paper may be too moist or rough (See "Print media specifications" on page 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.

Condition	Suggested Solutions
Dropouts 	<p>If faded areas, generally rounded, occur randomly on the page:</p> <ul style="list-style-type: none"> 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 "Print media specifications" on page 3). The paper lot is bad. The manufacturing processes can cause some areas to reject toner. Try a different kind or brand of paper. Change the printer option and try again. Go to Printing Preferences, click Paper tab, and set type to Thick (See "Opening printing preferences" on page 2). If these steps do not correct the problem, contact a service representative.
White Spots 	<p>If white spots appear on the page:</p> <ul style="list-style-type: none"> The paper is too rough and a lot of dirt from a paper falls to the inner devices within the machine, so the transfer roller may be dirty. Clean the inside of your machine (See "Cleaning the inside" on page 2). The paper path may need cleaning (See "Cleaning the inside" on page 2).
Vertical lines 	<p>If black vertical streaks appear on the page:</p> <ul style="list-style-type: none"> The surface (drum part) of the toner cartridge inside the machine has probably been scratched. Remove the toner cartridge and install a new one (See "Replacing the toner cartridge" on page 2). <p>If white vertical streaks appear on the page:</p> <ul style="list-style-type: none"> The surface of the LSU part inside the machine may be dirty (See "Cleaning the inside" on page 2). <p>If vertical streaks appear on the page:</p> <ul style="list-style-type: none"> The surface of the scanner glass and its white sheet may be dirty. Clean these unit (See "Cleaning the scan unit" on page 3).
Color or Black background 	<p>If the amount of background shading becomes unacceptable:</p> <ul style="list-style-type: none"> Change to a lighter weight paper (See "Print media specifications" on page 3). Check the environmental conditions: very dry conditions or a high level of humidity (higher than 80% RH) can increase the amount of background shading. Remove the old toner cartridge and, install a new one (See "Replacing the toner cartridge" on page 2). If this problem persists, contact a service representative.

Condition	Suggested Solutions
<p>Toner smear</p> 	<p>If toner smears on the page:</p> <ul style="list-style-type: none"> • Clean the inside of the machine (See "Cleaning the inside" on page 2). • Check the paper type and quality (See "Print media specifications" on page 3). • Remove the toner cartridge and then, install a new one (See "Replacing the toner cartridge" on page 2).
<p>Vertical repetitive defects</p> 	<p>If marks repeatedly appear on the printed side of the page at even intervals:</p> <ul style="list-style-type: none"> • The toner cartridge may be damaged. If you still have the same problem, remove the toner cartridge and, install a new one (See "Replacing the toner cartridge" on page 2). • 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.
<p>Background scatter</p> 	<p>Background scatter results from bits of toner randomly distributed on the printed page.</p> <ul style="list-style-type: none"> • The paper may be too damp. Try printing with a fresh ream of paper. Do not open reams 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 in Printing Preferences (See "Opening printing preferences" on page 2).
<p>Misformed characters</p> 	<ul style="list-style-type: none"> • If characters are improperly formed and producing hollow images, the paper stock may be too slick. Try different paper (See "Print media specifications" on page 3). • If characters are improperly formed and producing a wavy effect, the scanner unit may need service (See "Cleaning the scan unit" on page 3).

Condition	Suggested Solutions
<p>Page skew</p> 	<ul style="list-style-type: none"> • Ensure that the paper is loaded properly. • Check the paper type and quality (See "Print media specifications" on page 3). • Ensure that the guides are not too tight or too loose against the paper stack.
<p>Curl or wave</p> 	<ul style="list-style-type: none"> • Ensure that the paper is loaded properly. • Check the paper type and quality. Both high temperature and humidity can cause paper curl (See "Print media specifications" on page 3). • Turn the stack of paper over in the tray. Also try rotating the paper 180° in the tray.
<p>Wrinkles or creases</p> 	<ul style="list-style-type: none"> • Ensure that the paper is loaded properly. • Check the paper type and quality (See "Print media specifications" on page 3). • Turn the stack of paper over in the tray. Also try rotating the paper 180° in the tray.
<p>Back of printouts are dirty</p> 	<p>Check for leaking toner. Clean the inside of the machine (See "Cleaning the inside" on page 2).</p>
<p>Solid Color or Black pages</p> 	<ul style="list-style-type: none"> • The toner cartridge may not be installed properly. Remove the cartridge and reinsert it. • The toner cartridge may be defective. Remove the toner cartridge and install a new one (See "Replacing the toner cartridge" on page 2). • The machine may require repair. Contact a service representative.

Condition	Suggested Solutions
<p>Loose toner</p> 	<ul style="list-style-type: none"> • Clean the inside of the machine (See "Cleaning the inside" on page 2). • Check the paper type and quality (See "Print media specifications" on page 3). • Remove the toner cartridge and then, install a new one (See "Replacing the toner cartridge" on page 2). • If the problem persists, the machine may require repair. Contact a service representative.
<p>Character Voids</p> 	<p>Character voids are white areas within parts of characters that should be solid black:</p> <ul style="list-style-type: none"> • 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 "Print media specifications" on page 3).
<p>Horizontal stripes</p> 	<p>If horizontally aligned black streaks, white streaks or smears appear:</p> <ul style="list-style-type: none"> • The toner cartridge may be installed improperly. Remove the cartridge and reinsert it. • The toner cartridge may be defective. Remove the toner cartridge and install a new one (See "Replacing the toner cartridge" on page 2). • The machine might had a minor shock during printing or copying. There is no problem with the machine. Try printing again. • If the problem persists, the machine may require repair. Contact a service representative.
<p>Curl</p> 	<p>If the printed paper is curled or paper does not feed into the machine:</p> <ul style="list-style-type: none"> • Turn the stack of paper over in the tray. Also try rotating the paper 180° in the tray. • Change the printer option and try again. Go to Printing Preferences, click Paper tab, and set type to Thin (See "Opening printing preferences" on page 2).
<p>An unknown image repetitively appears on a few sheets or loose toner, light print, or contamination occurs.</p>	<p>Your machine is probably being used at an altitude of 1,000 m (3,281 ft) or above. The high altitude may affect the print quality, such as loose toner or light imaging. Change the correct altitude setting to your machine (See "Altitude adjustment" on page 1).</p>

Copying problems

Condition	Suggested solution
<p>Copies are too light or too dark</p>	<p>Use Darkness in Copy feature to lighten or darken the backgrounds of copies (See "Changing the darkness" on page 1).</p>
<p>Smears, lines, marks, or spots appear on copies.</p>	<ul style="list-style-type: none"> • If the defects are on the original, use Darkness in Copy feature to lighten the background of your copies (See "Changing the darkness" on page 1). • If there are no defects on the original, clean the scan unit (See "Cleaning the scan unit" on page 3).
<p>Copy image is skewed.</p>	<ul style="list-style-type: none"> • Ensure that the original is face down on the scanner glass or face up in the document feeder. • Check that the copy paper is loaded correctly.
<p>Blank copies print out.</p>	<p>Ensure that the original is face down on the scanner glass or face up in the document feeder.</p>
<p>Image rubs off the copy easily.</p>	<ul style="list-style-type: none"> • 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.
<p>Frequent copy paper jams occur.</p>	<ul style="list-style-type: none"> • Fan the 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 type and weight. • Check for copy paper or pieces of copy paper remaining in the machine after a paper jam has been cleared.
<p>Toner cartridge produces fewer copies than expected before running out of toner.</p>	<ul style="list-style-type: none"> • 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 scanner lid may be left open while copies are being made. • Turn the machine off and back on.

Scanning problems

Condition	Suggested solutions
The scanner does not work.	<ul style="list-style-type: none"> • Make sure that you place the original to be scanned face down on the scanner glass, or face up in the document feeder. • 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 machine printer cable is connected properly. • Make sure that the machine printer cable is not defective. Switch the printer cable with a known good cable. If necessary, replace the printer cable. • Check that the scanner is configured correctly. Check scan setting in the SmarThru Office or the application you want to use to make certain that the scanner job is being sent to the correct port (for example, USB001).
The unit scans very slowly.	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • There may be a copying or printing job in progress. Try your job again when that job is finished. • The selected port is currently being used. Restart your computer and try again. • The machine printer cable may be improperly connected or the power may be off. • The scanner driver is not installed or the operating environment is not set up properly. • Ensure that the machine is properly connected and the power is on, then restart your computer. • The USB cable may be improperly connected or the power may be off.

Fax problems

condition	suggested solutions
The machine is not working, there is no display, or the buttons are not working.	<ul style="list-style-type: none"> • Unplug the power cord and plug it in again. • Ensure that there is power being supplied to the electrical outlet. • Ensure that the power switch is turned on, and the soft power switch on the control panel is pressed.
No dial tone.	<ul style="list-style-type: none"> • Check that the phone line is properly connected. • Check that the phone socket on 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 Address Book list (See "Setting up address book" on page 7).
The original does not feed into the machine.	<ul style="list-style-type: none"> • Make sure that the paper is not wrinkled and you are inserting it in correctly. Check that the original is the right size, not too thick or thin. • Make sure that the document feeder is firmly closed. • The document feeder rubber pad may need to be replaced. Contact a service representative.
Faxes are not received automatically.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • Make sure that the original is loaded in the document feeder or on the scanner glass. • 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.	<ul style="list-style-type: none"> • 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. • A toner cartridge has almost reached its estimated cartridge life. Replace the toner cartridge (See "Replacing the toner cartridge" on page 2).
Some of the words on an incoming fax are stretched.	The fax machine sending the fax had a temporary document jam.
There are lines on the originals you sent.	Check your scan unit for marks and clean it (See "Cleaning the scan unit" on page 3).

condition	suggested solutions
The machine dials a number, but the 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 them to solve the problem on their side.
Faxes do not store in memory.	There may not be enough memory space to store the fax. If the display indicating the memory status shows, delete any faxes you no longer need from the memory, and then try to store the fax again. Call for service.
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 "Setting the paper size and type" on page 7).

Samsung Scan and Fax Manager Problem

Condition	suggested solution
Samsung Scan and Fax Manager does not work.	<ul style="list-style-type: none"> • Check your system requirements. Samsung Scan and Fax Manager works in Window and Macintosh (See "System requirements" on page 2). • Check that the Samsung Scan and Fax Manager is installed by looking under "All programs" in windows. If not installed and/or working correctly, reinstalled using the CD supplied with the product, or download the latest version from the Samsung website. (www.samsung.com/printer)

Common PostScript problems

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

Problem	Possible cause	Solution
PostScript file cannot be printed.	The PostScript driver may not be installed correctly.	<ul style="list-style-type: none"> • Install the PostScript driver (See "Installing USB connected machine's driver" on page 3). • Print a configuration page and verify that the PS version is available for printing. • Reinstall the PS driver. If the problem persists, contact a service representative.
"Limit Check Error" report prints.	The print job was too complex.	You might need to reduce the complexity of the page or install more memory (See "Installing a memory module" on page 5).
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 is not selected in the driver.	The printer driver has not been configured to recognize the optional tray.	Open the PostScript driver properties, select the Device Options tab, and set the tray option.
When printing 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 the one in Acrobat Reader.	Make sure that the resolution setting in your printer driver matches the one in Acrobat Reader.

Common Windows problems

Condition	Suggested solutions
"File in Use" message appears during installation.	Exit all software applications. Remove all software from the printer's startup group, then restart Windows. Reinstall the printer driver.
"General Protection Fault", "Exception OE", "Spool 32", 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.

 Refer to Microsoft Windows User's Guide that came with your computer for further information on Windows error messages.

Common Linux problems

condition	Suggested solutions
The machine does not print.	<ul style="list-style-type: none"> • 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 machines. Make sure that your machine is displayed on the list. If not, open Add new printer wizard to set up your device. • Check if the machine 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, press the Start button. After that normal operation of the machine should be restored. The "stopped" status might be activated when some problems in printing occurred. For instance, this could be an attempt to print a document when the port is claimed by a scanning application. • Ensure the port is not busy. Since functional components of machine (printer and scanner) share the same I/O interface (port), the situation of simultaneous access of different user applications 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 user will encounter "device busy" response. You should open ports configuration and select the port assigned to your machine. In the Selected port pane you can see if the port is occupied by some other application. If this is the case, you should either wait for completion of the current job or press the Release port button, if you are sure that the present application is not functioning properly. • Check if your application has special print option such as "-oraw". If "-oraw" is specified in the command line parameter, then remove it to print properly. For Gimp front-end, select "print" -> "Setup printer" and edit command line parameter in the command item. • The 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. Use the socket printing instead of ipp or install a later version of CUPS (cups-1.1.22 or higher).

condition	Suggested solutions
Some color images come out all black.	This is a known bug in Ghostscript (until GNU Ghostscript version 7.05) when the base color space of the document is indexed color space and it is converted through CIE color space. Because Postscript uses CIE color space for Color Matching System, you should upgrade Ghostscript on your system to at least GNU Ghostscript version 7.06 or later. You can find recent Ghostscript versions at www.ghostscript.com .
Some color images come out in unexpected color.	This is a known bug in Ghostscript (until GNU Ghostscript version 7.xx) when the base color space of the document is indexed RGB color space and it is converted through CIE color space. Because Postscript uses CIE color space for Color Matching System, you should upgrade Ghostscript on your system to at least GNU Ghostscript version 8.xx or later. You can find recent Ghostscript versions at www.ghostscript.com .
The machine does not print whole pages and its output is half page printed.	It is a known problem that occurs when a color printer is used on version 8.51 or earlier of Ghostscript, 64-bit Linux OS, and reported to bugs.ghostscript.com as Ghostscript Bug 688252. The problem is solved in AFPL Ghostscript v. 8.52 or above. Download the latest version of AFPL Ghostscript from http://sourceforge.net/projects/gho
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 detailed information, refer to the Help for Linux distribution CD or Gimp Front-end application. If you wish to use another kind of scan application, refer to application's Help.
I encounter error "Cannot open port device file" when printing a document.	Avoid changing print job parameters (via LPR GUI, for example) while a print job is in progress. Known versions of CUPS (Common UNIX Printing System) 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 the port while printing, the abrupt termination of the driver keeps the port locked and unavailable for subsequent print jobs. If this situation occurs, try to release the port by selecting Release port in Port configuration window.

condition	Suggested solutions
The machine does not appear on the scanners list.	<ul style="list-style-type: none"> • Ensure your machine is attached to your computer, connected properly via the USB port, and is turned on. • Ensure the scanner driver for your machine is installed in your system. Open Unified Linux 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. • Ensure the port is not busy. Since functional components of machine (printer and scanner) share the same I/O interface (port), the situation of simultaneous access of different user applications 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 user will encounter "device busy" response. This usually happens when starting a scan procedure. An appropriate message box appears. To identify the source of the problem, open the 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 another application. If this is the case, you should either wait for completion of the current job or press the Release port button, if you are sure that the present port applicaton is not functioning properly.
The machine does not scan.	<ul style="list-style-type: none"> • Ensure a document is loaded into the machine, ensure your machine is connected to the computer. • If there is an I/O error while scanning.

 Refer to Linux User's Guide that came with your computer for further information on Linux error messages.

Common Macintosh problems

condition	Suggested solutions
The machine does not print PDF files correctly. Some parts of graphics, text, or illustrations are missing.	<p>Printing the PDF file as an image may enable the file to print. Turn on Print As Image from the Acrobat printing options.</p> <p> It will take longer to print when you print a PDF file as an image.</p>
The document has printed, but the print job has not disappeared from the spooler in Mac OS X 10.3.2.	Update your Mac OS to OS Mac OS X 10.3.3. or higher.
Some letters are not displayed normally during the cover page printing.	Mac OS cannot create the font during the cover page printing. The English alphabet and numbers are displayed normally on the cover page.
When printing a document in Macintosh with Acrobat Reader 6.0 or higher, colors print incorrectly.	Make sure that the resolution setting in your machine driver matches the one in Acrobat Reader.

 Refer to Macintosh User's Guide that came with your computer for further information on Macintosh error messages.

supplies and accessories

This chapter provides information on purchasing supplies, accessories and maintenance parts available for your machine.

This chapter includes:

- How to purchase
- Available supplies
- Available accessories
- Maintenance parts
- Replacing the toner cartridge
- Replacing the paper transfer belt

 Available accessories may differ from country to country. Contact your sales representatives to obtain the list of available accessories.

How to purchase

To order Genuine Samsung supplies, accessories and, maintenance parts, contact your local Samsung dealer or the authorized retailer where you purchased your machine. You can also visit www.samsung.com/supplies, select your country/region, and obtain information on calling for service.

Available supplies

When supplies reach their lifespan, you can order the following types of supplies for your machine:

Type	Average yield ^a	Part name
TONER CARTRIDGES Standard yield	<ul style="list-style-type: none"> • Average continuous black cartridge yield: 2,500 standard pages (Black) • Average continuous colored cartridge yield: 2,000 standard pages (Yellow/Magenta/Cyan) 	K508(CLT-K508S): Black C508(CLT-C508S): Cyan M508(CLT-M508S): Magenta Y508(CLT-Y508S): Yellow Region A^b: K5082(CLT-K5082S): Black C5082(CLT-C5082S): Cyan M5082(CLT-M5082S): Magenta Y5082(CLT-Y5082S): Yellow

- Necessary precautions to take when installing accessories
- Activating the added accessories in printer properties
- Upgrading a memory module
- Installing a wireless network interface card
- Installing a hard disk
- Checking replaceable's lifespan

Type	Average yield ^a	Part name
TONER CARTRIDGES High yield	<ul style="list-style-type: none"> • Average continuous black cartridge yield: 5,000 standard pages (Black) • Average continuous colored cartridge yield: 4,000 standard pages (Yellow/Magenta/Cyan) 	K508L(CLT-K508L): Black C508L(CLT-C508L): Cyan M508L(CLT-M508L): Magenta Y508L(CLT-Y508L): Yellow Region A^b: K5082L(CLT-K5082L): Black C5082L(CLT-C5082L): Cyan M5082L(CLT-M5082L): Magenta Y5082L(CLT-Y5082L): Yellow
Paper transfer belt	Approx. 50,000 pages When the transfer belt has worn out with abrasion, you need to change it. By this time you may be notified with the transfer belt-related message on the display.	CLT-T508

a. Declared yield value in accordance with ISO/IEC 19798.

b. Region A: Albania, Austria, Belgium, Bosnia, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Macedonia, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, UK.

To replace a toner cartridge see "Replacing the toner cartridge" on page 2.

 Depending on the options and percentage of image area, job mode used, the toner cartridge's lifespan may differ.

 You must purchase supplies, including toner cartridges, in the same country where you purchased your machine. Otherwise, supplies will be incompatible with your machine since the system configurations vary from country to country.

Available accessories

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

Accessory	function	Part name
Memory module	Extend your machine's memory capacity.	<ul style="list-style-type: none"> CLX-6220 Series <ul style="list-style-type: none"> -CLP-MEM201: 128 MB -CLP-MEM202: 256 MB CLX-6250 Series <ul style="list-style-type: none"> -ML-MEM150: 128 MB -ML-MEM160: 256 MB -ML-MEM170: 512 MB
Optional tray 2	If you are experiencing frequent paper supply problems, you can attach an additional 500 sheets tray. You can print documents in various sizes and types of print materials.	CLX-S6250A
Hard disk (CLX-6250 Series only)	Allows you to enhance the machine's capability and print in various ways.	ML-HDK300
IEEE 802.11 b/g Wireless LAN (CLX-6250 Series only)^a	Allows you to connect your printer to a wireless network.	ML-NWA40L

a. Depending on your country, wireless LAN cards may not be available. Contact your local Samsung dealer or the retailer where you bought your printer.

Maintenance parts

To purchase maintenance parts, contact the source where you bought the machine.

Replacing maintenance parts can be performed only by an authorized service provider, dealer, or the retailer where you bought the machine. The warranty does not cover the replacement of any maintenance parts once it has reached its "Average Yield".

Maintenance parts are replaced at specific intervals to avoid print quality and paper feed problems resulting from worn parts, see table below. The purpose of which is to maintain your machine in top working condition. The maintenance parts below should be replaced when the life span of each item has been met.

parts	Average yield ^a
Fuser unit	Approx. 100,000 pages
Document feeder friction pad	Approx. 75,000 pages
Document feeder pick-up roller	Approx. 20,000 pages
Pick-up roller (Multi-purpose tray, Tray1, Optional tray 2)	Approx. 70,000 pages
Friction pad (Multi-purpose tray, Tray1, Optional tray 2)	Approx. 70,000 pages

a. It will be affected by operating system used, computing performance, application software, connecting method, media type, media size and job complexity.

Replacing the toner cartridge

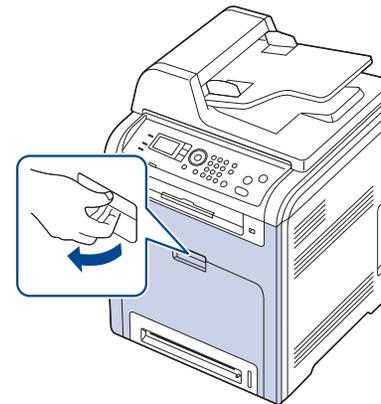
 Click this link to open an animation about replacing a toner cartridge.

When the toner cartridge reaches its estimated cartridge life.

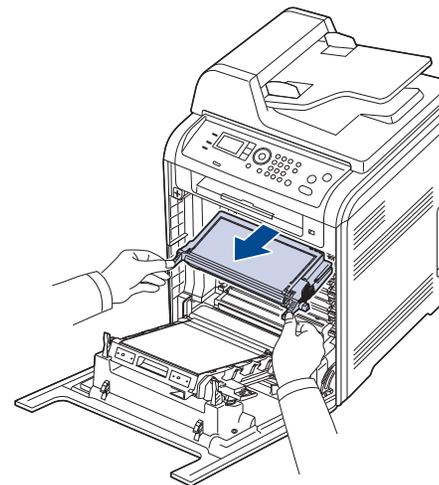
- The status LED and the toner-related message on the display indicates which each individual toner cartridge should be replaced.
- The machine stops printing. Incoming faxes are saved in memory.

At this stage, the toner cartridge needs to be replaced. Check the type of the toner cartridge for your machine (See "Available supplies" on page 1).

- Using the handle, completely open the front door.

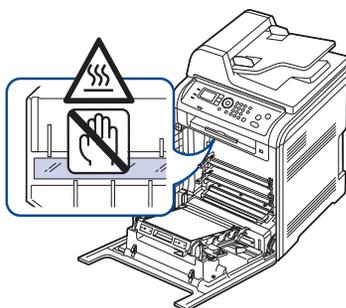


- Grasp the handles on the toner cartridge and pull to remove the cartridge from the machine.



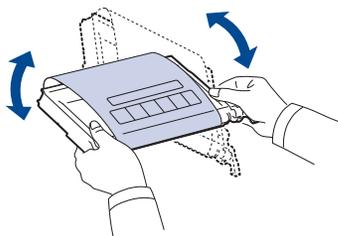
 If you open the front door, be careful not to touch the underneath the control panel (the lower part of the fuser unit). The temperature of the fuser unit might be extremely hot and could damage your

skin.



When you open the front door and work inside the machine, it is highly recommended that you remove the paper transfer belt first. Because the work you do could contaminate the paper transfer belt.

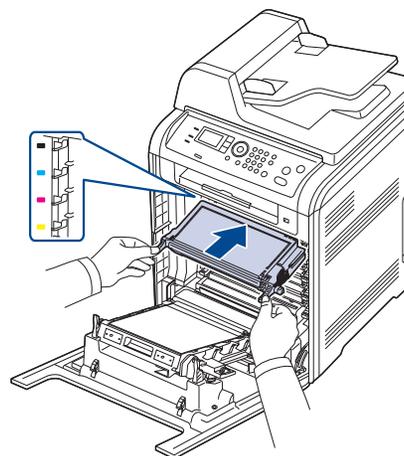
3. Remove the new toner cartridge from its bag.
 - Don't use sharp objects, such as a knife or scissors, to open the print cartridge package. You could damage the surface of the print cartridge.
 - To prevent damage, do not expose the print cartridge to light for more than a few minutes. Cover it with a piece of paper to protect it if necessary.
4. Slowly shake the cartridge five or six times to distribute the toner evenly inside the cartridge. It will assure maximum copies per cartridge.



5. Place the print cartridge on a flat surface, as shown, and remove the paper covering the print cartridge by removing the tape.
 - If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.
 - Do not touch the surface, the OPC drum in the cartridge. If the surface is contaminated, it might affect the printout quality. Use the handle on the cartridge to avoid touching this area.
6. Hold the toner cartridge by the handle and slowly insert the cartridge into the opening in the machine. Ensure the color cartridge is placed in the correct position, see label in picture below for the correct color position for each cartridge.

Tabs on the sides of the cartridge and corresponding grooves within the machine will guide the cartridge into the correct position until it locks into

place completely.



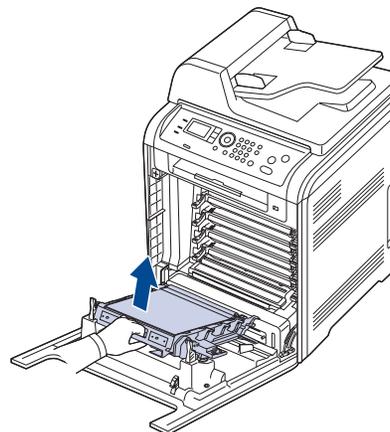
7. Close the front door. Make sure that the cover is securely closed.
 - If the front door is not completely closed, the machine will not operate.

Replacing the paper transfer belt

After the life span of the paper transfer belt is complete, you have to replace it.

- The transfer belt-related message appears on the display, telling it's time for a replacement.
 - The Smart Panel program window appears on the computer telling you the paper transfer belt needs to be replaced.
- The life span of the paper transfer belt may be affected by operating environment, printing interval, media type, and media size.

1. Open the front door.
 - If you leave the front door open for more than a few minutes, the OPC drum in the toner cartridge can be exposed to light. This will cause damage to the OPC drum. Close the front door should the installation need to be halted for any reason.
2. Press the green release handle to release the paper transfer belt. Holding the handle on the paper transfer belt, lift it out of the machine.

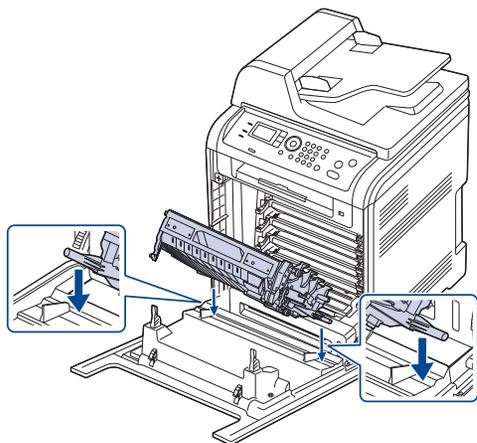


3. Remove a new paper transfer belt from its bag.
4. Remove the paper covering the paper transfer belt.
 - Do not use sharp objects, such as a knife or scissors, to open the paper transfer belt package. You could damage the surface of

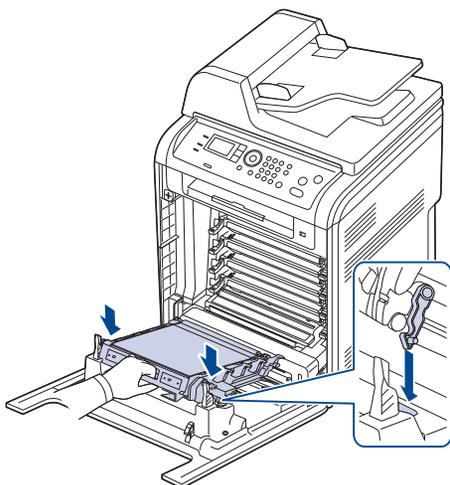
the paper transfer belt.

•Be careful not to scratch the surface of the paper transfer belt.

5. Holding the handle on the new paper transfer belt, align it with the slots on the inside of the front door.



6. Lower the paper transfer belt until it is parallel with the front door and firmly seated.



7. Close the front door to resume printing.



If the front door is not completely closed, the machine will not operate.

Necessary precautions to take when installing accessories

- Disconnect the power cord.
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 module) are sensitive to static electricity. Before installing or removing any 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 around before finishing the installation, repeat this procedure to discharge any static electricity again.

- Activating the added accessories in the PS driver properties.
After installing an accessory such as an optional tray, PS driver users must do the additional setting. Go to the PS printer properties and set the added accessory activated.



When installing accessories, the battery inside the machine is a service component and needs to be replaced by an authorized servicer. Do not change it by yourself.

There is a risk of an explosion if battery is replaced by an incorrect type.

Activating the added accessories in printer properties

After installing added accessories, you need to select it in the printer properties of the printer driver in order to use it.

1. Install the driver (See "Installing USB connected machine's driver" on page 3 or "Installing network connected machine's driver" on page 3).
 2. Click the Windows **Start** menu.
 3. For Windows 2000, select **Settings > Printers**.
 - For Windows XP/2003, select **Printers and Faxes**.
 - For Windows 2008/Vista, select **Control Panel > Hardware and Sound > Printers**.
 - For Windows 7, select **Control Panel > Hardware and Sound > Devices and Printers**.
 - For Windows Server 2008 R2, select **Control Panel > Hardware > Devices and Printers**.
 4. Right-click your machine.
 5. For Windows XP/2003/2008/Vista, press **Properties**.
 - For PS driver, select PS driver and right-click to open **Properties**.For Windows 7 and Windows Server 2008 R2, from context menus, select the **Printer properties**.
-  If **Printer properties** item has ► mark, you can select other printer drivers connected with selected printer.
6. In printer driver properties, select **Device Options**.
 7. In printer driver properties, set the necessary options.
 8. Click **OK**.

Upgrading a memory module

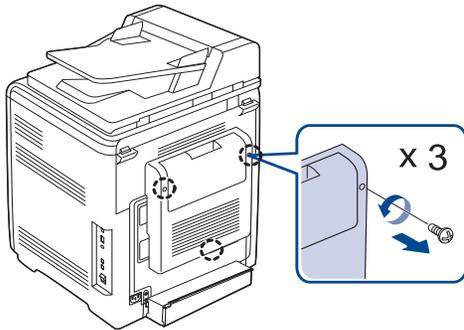
Your machine supports DIMM (**Dual Inline Memory Module**). Use this memory module slot to install additional memory.

When you are expanding the memory capacity, you can add a memory module to the vacant memory slot (See "Available accessories" on page 2).

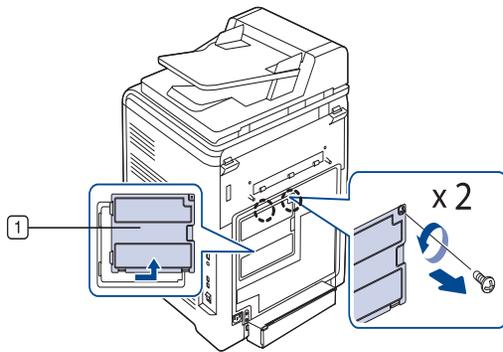
We recommend the use of only genuine Samsung DIMM's. You may void your warranty if it is determined that your machine problem is being caused by third party DIMM's.

Installing a memory module

1. Turn the machine off and unplug all cables from the machine.
2. Remove the screws and remove the rear cover.

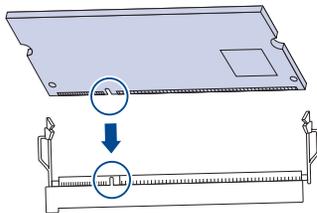


3. Remove the screws, then lift up the cover slightly and pull the cover to the right.



1 Control board cover

4. Remove the new memory module from its bag.
5. Holding the memory module by the edges, align the memory module in the slot at about a 30-degree angle. Make sure that the notches of the module and the grooves on the slot fit each other.



 The notches and grooves illustrated above may not match those on an actual memory module and its slot.

6. Press the memory module into the slot with care until you hear a 'click'.
 Do not press the memory module strongly or the module may be damaged. If the module does not seem to fit into the slot properly, carefully try the previous procedure again.
7. Install the control board with the screw removed in step 3.
8. Install the rear cover with the screw removed in step 2.
9. Reconnect the power cord and printer cable, and turn the machine on.

 If you use the PS driver, you must activate the added memory in the PS driver properties (See "Activating the added accessories in printer properties" on page 4).

Printing with the optional memory (CLX-6250 Series only)

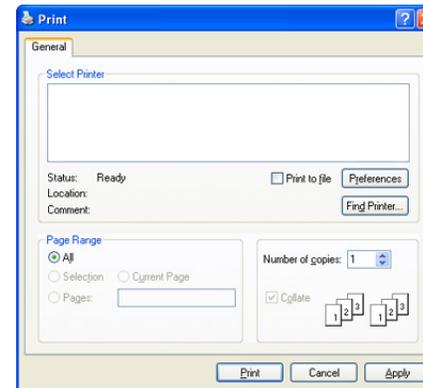


- You can only use this feature if you have installed the 512 MB optional memory. (CLX-6250 Series only)
- After installing the optional memory, you can use advanced printing features, such as proofing a job and specifying of printing a private job in the printer properties window.

Job Settings

This option allows you to choose how to print the printing file by using the 512 MB optional memory.

1. Open the document you want to print.
2. Select **Print** from the **File** menu. The **Print** window appears.
3. Select your printer driver from the **Select Printer** list.



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

4. Access **Printing Preferences** (See "Opening printing preferences" on page 2).
5. Click the **Advanced** tab then select **Job Settings**.
6. Select the **Print Mode** you want .
 - **Normal**: This mode prints without storing your document in the optional memory.
 - **Proof**: This mode is useful when you print more than one copy. You can print one copy first to check, than print the rest of copies later.
 - **Confidential**: This mode is used for printing confidential documents. You need to enter a password to print.
7. Select **OK**.

Controlling the active job queue

All of the print jobs waiting to be printed are listed in the active job queue in the order you sent them to the printer. You can delete a job from the queue before printing, or promote a job to print sooner.

1. Press **Menu** on the control panel.
2. Press left/right arrow until **Job Management** appears and press **OK**.
3. Press left/right arrow until **Active Job** appears and press **OK**.
4. Press left/right arrow until the user's name and file name you want to use appears and press **OK**.



If the select file is a confidential print job, enter the specified 4-digit password.

Use the left/right arrow to enter digits. When you press **OK**, the cursor will move to the next character. When you finish entering the password, press **OK**.

If you enter the incorrect password, **Invalid Password** appears. Reenter the correct password.

5. Press the left/right arrow until the desired setting appears and press **OK**.

- Cancel:** You can delete a file from the queue.
- Promote:** You can select a job waiting in the active job queue and change its print order so that it can be printed sooner.
- Release:** You can print a job scheduled to be printed at a specified time immediately. In this case, the job currently printing is stopped and the selected job will be printed. This function is available when the job is scheduled for later printing.

6. When **Yes** appears, press **OK**.

File Policy

You can choose the file policy for generating file name before you proceed with the job through optional memory. If the optional memory already has the same name when you entered a new file name, you can rename or overwrite it.

1. Press Menu on the control panel.

2. Press the up/down arrow to highlight **System Setup** and press **OK**.

3. Press the up/down arrow to highlight **Job Management** and press **OK**.

4. Press the up/down arrow to highlight **File Policy** and press **OK**.

5. Press the up/down arrow to highlight the desired setting and press **OK**.

- Rename :** If the optional memory already has the same name when you enter a new file name, the file will be saved as a different name that is automatically programmed.
- Overwrite :** You can set the machine to delete previous job information on optional memory as you store new job information.

6. Press **OK**.

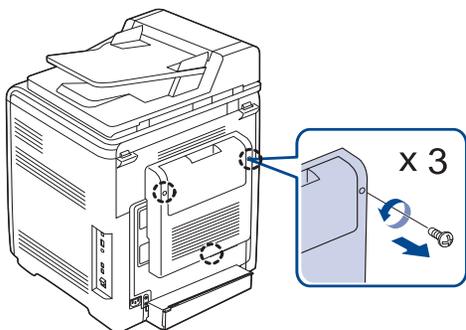
Installing a wireless network interface card

Depending on your country, wireless LAN cards may not be available. Contact your local Samsung dealer or the retailer where you bought your printer.

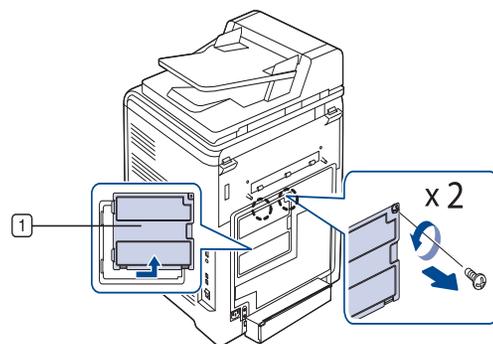
The machine is equipped with a network interface which allows you to use your machine on a network. You can also purchase a wireless network interface card to enable the use of the machine in wireless network environments (See "Available accessories" on page 2).

Installing a wireless network interface card

1. Turn the machine off and unplug all cables from the machine.
2. Remove the screws and remove the rear cover.

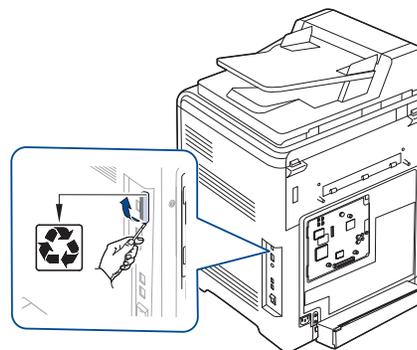


3. Remove the screws, then lift up the cover slightly and pull the cover to the right.

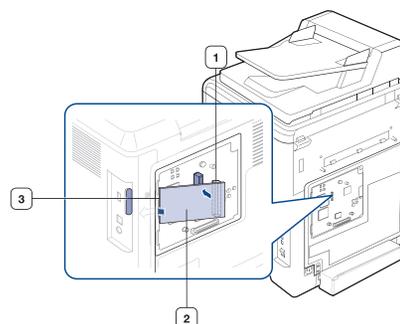


1 Control board cover

4. Detach the dummy panel on your machine using a screwdriver. Be careful when removing not to damage the plastic cover.

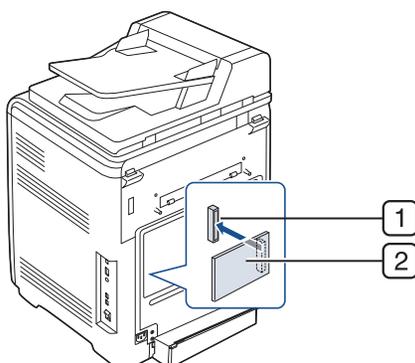


5. Take out a new wireless interface card from its bag.
6. Place the wireless network interface card into the card guide [below item 3], ensure the connector side of the card is to the right.



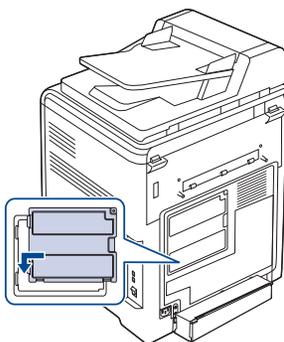
1 wireless network interface card connector
2 wireless network interface card
3 wireless network interface card guide

7. Align the wireless network card connector on the right side of the card with the connector on the control board [1]. Press the wireless interface card [2] down firmly into the main connector [1] until it is completely and securely in place.



-
- 1 Connector
 - 2 Wireless interface card
-

8. Install the control board cover with the screws removed in step 3.



9. Install the rear cover with the screws removed in step 2.

10. Plug all the cables back into the machine, and turn the machine on.

11. Set the wireless network environment.



For information about configuring and using the printer on a wireless network environment, refer to the Wireless network install guide provided with the wireless network interface card. You can also configure the network parameters on the control panel; see the next column.

Configuring the machine's wireless network

Before starting you will need to know the network name (SSID) of your wireless network and the network key if it is encrypted. This information was set when the wireless router (access point) was installed. If you do not know about your wireless environment, please ask the person who has set up your network.

To configure wireless parameters, you can use both control panel and **SyncThru™ Web Service**.

Using the control panel

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **Network** and press **OK**.
3. Press the up/down arrow to highlight **Wireless** and press **OK**.
4. Press the up/down arrow to highlight **WLAN Settings** and press **OK**.
5. Press the up/down arrow to select the setup method you want is highlighted and press **OK**.
 - **Wizard**: The wireless network interface card in your printer searches for wireless networks in the area and shows the results.
 - **Custom**: You can configure the wireless settings according to your needs.

Wizard mode

1. The wireless network interface card on your machine searches for wireless network in the area and shows the results.
2. Press the up/down arrow to select a network you want to use in **Search List** and press **OK**. You can select a network using SSID.
3. When None appears in WLAN Security on the display, press **OK** to save your selection. go to step 6.
 - If you see another messages, go to the next step.
4. According to the network you select, WLAN security encryption type will be **WEP** or **WPA**.
 - In case of **WEP**, Press the up/down to select **Open System** or **SharedKey**.
 - **Open System: Authentication** is not used, and **Encryption** may or may not be used, depending on the need for data security. Enter the **WEP Key** using number keypad after selecting **Open System**.
 - **SharedKey: Authentication** is used. A device that has a proper WEP Key can access the network. Enter the **WEP Key** using number keypad after selecting **SharedKey**.
 - In case of **WPA**, Enter the **WPA Key** using number keypad. The Key length should be between 8 to 63 characters long.
5. Press **OK**.
6. Press **Stop/Clear** to return to ready mode.



- **SSID**: SSID (Service Set Identifier) is a name that identifies a wireless network. Access points and wireless devices attempting to connect to a specific wireless network must use the same SSID. The SSID is case-sensitive.
- **WEP**: WEP (Wired Equivalent Privacy) is a security protocol preventing unauthorized access to your wireless network. WEP encrypts the data portion of each packet exchanged on a wireless network using a 64-bit or 128-bit WEP encryption key.
- **WPA**: WPA authorizes and identifies users based on a secret key that changes automatically at regular intervals. WPA also uses TKIP (Temporal Key Integrity Protocol) and AES (Advanced Encryption Standard) for data encryption.

Custom mode

1. Enter the SSID when **Edit SSID** appears on the top line of the display, the name that identifies a wireless network. SSID is case-sensitive so you need to enter it carefully. Press **OK**.
2. Select the type of wireless connections. Press the up/down arrow to select the method of **Operation Mode** you want and press **OK**.
 - **Ad-hoc**: Allows wireless devices to communicate directly with each other in a peer-to-peer environment. Go to step 3.
 - **Infrastructure**: Allows wireless devices to communicate with each other through an access point. Go to step 4.
3. Press the up/down arrow to select the method of **Channel** you want and press **OK**. If you select **Auto**, the wireless network interface card on your machine will automatically adjust the channels.
4. Press the up/down arrow to select the method of **WLAN Security** you want and press **OK**.
 - **None**: This is used when the validation of a wireless device's identity and data encryption are not required for your network. Open system is used for IEEE 802.11 authentication.
 - **Static WEP**: This uses the WEP (Wired Equivalent Privacy) algorithm suggested by IEEE 802.11 standard for security. Static WEP security mode requires a proper WEP key for data encryption, decryption, and IEEE 802.11 authentication. Press the left/right arrow to select the setup method you want in **Authentication** and press **OK**.

-**Open System:** Authentication is not used, and encryption may or may not be used, depending on the need for data security. Enter the **WEP Key** using number keypad after selecting **Open System** and then press **OK**.

-**SharedKey: Authentication** is used. A device that has a proper **WEP Key** can access the network. Enter the **WEP Key** using number keypad after selecting **SharedKey** and then press **OK**.

•**WPA-PSK or WPA2-PSK:** You can select **WPA-PSK** or **WPA2-PSK** to authenticate the print server based on WPA Pre-Shared Key. This uses a shared secret key (generally called Pre Shared Key passphrase) which is manually configured on the access point and each of its clients.

a. Press **OK** when **WPA-PSK** or **WPA2-PSK** appears on the bottom line of the display.

b. Press the up/down arrow to select **TKIP** or **AES** in **Encryption** and press **OK**. If you select **WPA2-PSK**, press the up/down arrow to select **AES** or **TKIP + AES** in **Encryption** and press **OK**.

c. Enter the **WPA Key** using number keypad and press **OK**.

5. When you have finished, press **Stop/Clear** to return to the ready mode. If you do not know about your wireless environment, please ask the network administrator.

 Disconnect the network cable (standard or crossover). Your machine should then start communicating wirelessly with the network. In case of Ad-hoc mode, you can use a wireless LAN and wired LAN simultaneously.

Now go to "Installing network connected machine's driver" on page 3.

Using SyncThru™ Web Service

For information about configuring and using the machine on a wireless network environment, refer to the Wireless network install guide provided with the wireless network interface card. You can also configure the network parameters on the SyncThru™ Web Service.

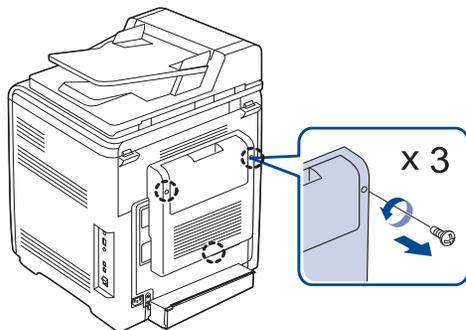
Installing a hard disk

Installing the hard disk allows the data from your computer to be sent to the print queue of the printer hard disk. This decreases the workload of the computer. You can also use various print features, such as storing a job in the hard disk, proofing a job, and printing private documents.

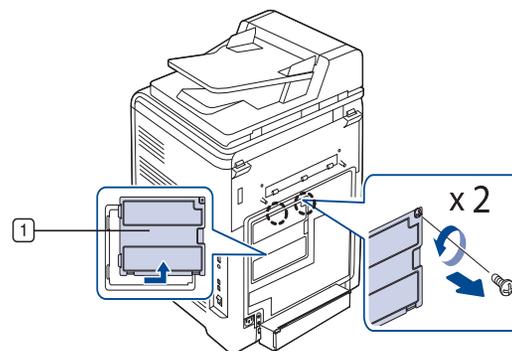
The order information is provided for optional hard disk (See "Available accessories" on page 2).

Installing a hard disk

1. Turn the machine off and unplug all cables from the machine.
2. Remove the screws and remove the rear cover.

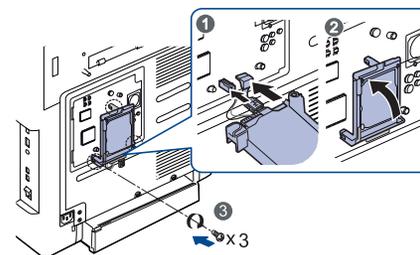


3. Remove the screws, then lift up the cover slightly and pull the cover to the right.



1 Control board cover

4. Take out a new hard disk from its plastic bag.
5. Align the connector on the hard disk with the connector on the control board. Push the hard disk in until it is latched into place.



6. Fasten down the hard disk with the screws supplied with your new hard disk; then reinstall the covers removed in steps 2 and 3.
7. Reconnect the power cord and machine cable. Turn on the machine.
8. You must activate the added hard disk in the driver properties (See "Activating the added accessories in printer properties" on page 4).

Printing with the optional hard disk

 After installing the optional hard disk, you can use advanced printing features, such as storing or spooling a print job to the hard disk, proofing a job, and specifying of printing a private job in the printer properties window.

Once you have stored files in the hard disk, you can easily print or delete the stored files using the control panel of your printer.

Storing a job

You can store jobs on the hard disk.

1. Open the document you want to print.
2. Select **Print** from the file menu. The **Print** window appears.
3. Select your machine from **Select Printer** list.
4. Click **Properties** or **Preferences**.
5. Click the **Advanced** tab and click **Job Setting**.
6. Select the print mode you want from the drop-down list (See "Using help" on page 3).
7. Enter the user's name and file name.
8. Click **OK** until the **Print** window is displayed.
9. Click **OK** or **Print** to start printing.

Printing or deleting a stored job

You can print or delete jobs stored on the hard disk.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Job Management** and press **OK**.
4. Press the up/down arrow to highlight **Stored Job** and press **OK**.
5. Press the up/down arrow to highlight the user's name and file name you want use and press **OK**.

 If the select file is a confidential print job, enter the specified 4-digit password.

Use the up/down arrow to enter digits and use the left/right arrow to move between digits. When you finish entering the password, press **OK**.

If you enter the incorrect password, **Invalid Password** appears. Reenter the correct password.

6. Press the up/down arrow to highlight the desired setting and press **OK**.
 - Print:** You can print a stored job.
 - Delete:** You can delete a stored job.
7. When **Yes** appears, press **OK**.

Controlling the active job queue

All of the print jobs waiting to be printed are listed in the active job queue in the order you sent them to the printer. You can delete a job from the queue before printing, or promote a job to print sooner.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Job Management** and press **OK**.
4. Press the up/down arrow to highlight **Active Job** and press **OK**.
5. Press the up/down arrow to highlight the user's name and file name you want use and press **OK**.

 If the select file is a confidential print job, enter the specified 4-digit password.

Use the up/down arrow to enter digits and use the left/right arrow to move between digits. When you finish entering the password, press **OK**.

If you enter the incorrect password, **Invalid Password** appears. Reenter the correct password.

6. Press the up/down arrow to highlight the desired setting and press **OK**.
 - Cancel:** You can delete a file from the queue.
 - Promote:** You can select a job waiting in the active job queue and change its print order so that it can be printed sooner.
 - Release:** You can print a job scheduled to be printed at a specified time immediately. In this case, the job currently printing is stopped and the selected job will be printed. This function is available when the job is scheduled for later printing.
7. When **Yes** appears, press **OK**.

Form file

Form overlay are images stored in the printer hard disk drive (HDD) as a special file format that can be printed in layers on any document.

Creating new form files

Use the steps below to create a new form overlay.

1. Create or open a document containing text or an image for use in a new form file.
2. To save the document as a form file, access **Printing Preferences** (See "Opening printing preferences" on page 2).
3. Click the **Advanced** tab, and select **Advanced**.
4. In the **Advanced Output Options** window, check **Save as Form for Overlay**.
5. Click **Search**.
6. Type a file name of up to eight characters in the **File name** box. Select the destination path and click **Save**.
7. Click **OK** or **Print** until you exit the **Print** window.
8. A confirm message appears, click **Yes** to save.
 - The file is not printed. Instead, it is stored on your computer hard disk drive.
-  If you click **NO**, the machine prints your form without saving.
9. A confirm message appears, click **Yes** to save.
 -  The form file size must be the same as the document you print with the form file.

Using form files on your machine's hard disk

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Machine Setup** and press **OK**.
4. Press the up/down arrow to highlight **Form Menu** and press **OK**.
5. Press the up/down arrow until the item you want appears and press **OK**.
 - Off:** Prints in normal mode.
 - Single Form:** Prints all page using the first form.
 - Double Form:** Prints the front page using the first form and the back page using the second form.
6. Press **Back**.
7. Press the up/down arrow to highlight **Select Form** and press **OK**.
8. Press the up/down arrow until the item you want appears and press **OK**.
9. Press the up/down arrow until the form file for the second form appears and press **OK**.

File Policy

You can choose the file policy for generating file name before you proceed with the job through hard disk drive (HDD). If the hard disk drive (HDD) memory already has the same name when you entered a new file name, you can rename or overwrite it.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Job Management** and press **OK**.
4. Press the up/down arrow to highlight **File Policy** and press **OK**.
5. Press the up/down arrow to highlight the desired setting and press **OK**.
 - Rename :** If the hard disk drive (HDD) memory already has the

same name when you enter a new file name, the file will be saved as a different name that is automatically programmed.

- Overwrite** : You can set the machine to delete previous job information on hard disk drive (HDD) as you store new job information.

6. Press **OK**.

Deleting residual image data

Image Overwrite is a security measure for customers who are concerned about unauthorized access and duplication of classified or private document.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Job Management** and press **OK**.
4. Press the up/down arrow to highlight **Image Overwrite** and press **OK**.
5. Press the up/down arrow to highlight the desired setting and press **OK**.

- Immediate** : All residual image data from the machine will be erased immediately after each job has been processed.
- On Demand** : This option provides an on-demand facility for a system administrator to erase all the real image data remained in hard disk drive (HDD) after this option enabled. All existing jobs will be deleted regardless of their status and all job submissions will be prohibited for the duration of the overwrite.

6. Press the up/down arrow to move to **On** or **Off** for **Immediate**. Press the up/down arrow to move to **Enable** or **Disable** for **On Demand**.



If you selected **On Demand** enabled, the machine confirms if the overwrite feature starts now. Press the up/down arrow to select **Yes** or **No**. If you select **Yes**, **On Demand** overwrite starts as soon as you select **Yes**. If you select **No**, this feature will be enabled.

7. Press **OK**.

Checking replaceable's lifespan

If you experience frequent paper jams or printing problems, check the number of pages the machine has printed. Replace the corresponding parts, if necessary.

1. Press **Menu** on the control panel.
2. Press the up/down arrow to highlight **System Setup** and press **OK**.
3. Press the up/down arrow to highlight **Maintenance** and press **OK**.
4. Press the up/down arrow to highlight **Supplies Life** and press **OK**.
5. Press the up/down arrow until the item you want appears and press **OK**.
6. Press **Stop/Clear** to return to ready mode.

specifications

This chapter guides you about this machine's specifications.

This chapter includes:

- Hardware specifications
- Environmental specifications
- Electrical specifications
- Print media specifications

 The specification values are listed below, specification are subject to change without notice. See www.samsung.com/printer for possible changes in information.

Hardware specifications

	Item	Description
Dimension	Height	651 mm (25.63 inches)
	Depth	498 mm (19.61 inches)
	Width	468 mm (18.43 inches)
Weight	Machine with consumables	37.40 Kg (82.45 lbs)
Package weight	Paper	5.8 Kg (12.7 lbs)
	Plastic	1.8 Kg (3.9 lbs)

Environmental specifications

	Item	Description
Noise Level^a	Ready mode	35 dB(A)
	Printing mode	<ul style="list-style-type: none">• CLX-6220 Series: 53 dB(A)• CLX-6250 Series: 54 dB(A)
Temperature	Operation	15 to 32 °C (59 to 89.6 °F)
	Storage (Packed)	-20 to 40 °C (-4 to 104°F)
Humidity	Operation	20 to 80% RH
	Storage (Packed)	10 to 90% RH

a. Sound Pressure Level, ISO 7779. Configuration tested: machine basic installation, A4 paper, simplex printing.

Electrical specifications

 Power requirements are based on the country/region where the device is sold. Do not convert operating voltages. Doing so might damage the device and void the product warranty.

	Item	Description
Power rating^a	110 volt models	AC 110 - 127 V
	220 volt models	AC 220 - 240 V

	Item	Description
Power consumption	Average operating mode	<ul style="list-style-type: none"> • CLX-6220 Series: Less than 550 W • CLX-6250 Series: Less than 580 W
	Ready mode	<ul style="list-style-type: none"> • CLX-6220 Series: Less than 33 W • CLX-6250 Series: Less than 38 W
	Power save mode	<ul style="list-style-type: none"> • CLX-6220 Series: Less than 11 W • CLX-6250 Series: Less than 13 W
	Power off mode	Less than 1 W

a. See the rating label on the machine for the correct voltage, frequency (hertz) and type of current for your machine.

Print media specifications

Type	Size	Dimensions	Print media weight ^a /Capacity ^b	
			tray1 / optional tray	multi-purpose tray
Plain paper	Letter	216 x 279 mm (8.5 x 11 inches)	70 to 90 g/m ² (19 to 24 lbs bond)	70 to 90 g/m ² (19 to 24 lbs bond) • 100 sheets of 80 g/m ² (20 lbs bond)
	Legal	216 x 356 mm (8.5 x 14 inches)	• 250 sheets of 80 g/m ² (20 lbs bond) for tray1	
	US Folio	216 x 330 mm (8.5 x 13 inches)	• 500 sheets of 80 g/m ² (20 lbs bond) for optional tray.	
	A4	210 x 297 mm (8.27 x 11.69 inches)		
	Oficio	216 x 343 mm (8.5 x 13.5 inches)	70 to 90 g/m ² (19 to 24 lb bond) • 250 sheets of 80 g/m ² (20 lbs bond)	
	JIS B5	182 x 257 mm (7.17 x 10.12 inches)		
	ISO B5	176 x 250 mm (6.93 x 9.84 inches)		
	Executive	184 x 267 mm (7.25 x 10.5 inches)	70 to 90 g/m ² (19 to 24 lb bond) • 250 sheets of 80 g/m ² (20 lbs bond) for tray1 • Not available in optional tray.	
	A5	148 x 210 mm (5.83 x 8.27 inches)		
	Statement	140 x 216 mm (5.5 x 8.5 inches)		
	A6	105 x 148 mm (4.13 x 5.83 inches)		
Envelope	Envelope Monarch	98 x 191 mm (3.87 x 7.5 inches)	Not available in tray1 / optional tray.	75 to 90 g/m ² (20 to 24 lbs bond) • 10 sheets
	Envelope No. 10	105 x 241 mm (4.12 x 9.5 inches)		
	Envelope DL	110 x 220 mm (4.33 x 8.66 inches)		
	Envelope C5	162 x 229 mm (6.38 x 9.02 inches)		
	Envelope C6	114 x 162 mm (4.49 x 6.38 inches)		
	Envelope No. 9	98 x 225 mm (3.87 x 8.87 inches)		
	Envelope 6 3/4	92 x 165 mm (3.62 x 6.5 inches)		
Thick paper	Refer to the Plain paper section	Refer to the Plain paper section	90 to 105 g/m ² (24 to 28 lbs bond) • 250 sheets of 80 g/m ² (20 lbs bond) f or tray1. • 500 sheets of 80 g/m ² (20 lbs bond) for optional tray.	90 to 105 g/m ² (24 to 28 lbs bond) • 40 sheets
Thin paper	Refer to the Plain paper section	Refer to the Plain paper section	60 to 70 g/m ² (16 to 19 lbs bond) • 250 sheets of 80 g/m ² (20 lbs bond) f or tray1. • 500 sheets of 80 g/m ² (20 lbs bond) for optional tray.	60 to 70 g/m ² (16 to 19 lbs bond) • 100 sheets
Thicker paper	Refer to the Plain paper section	Refer to the Plain paper section	Not available in tray1 / optional tray.	106 to 120 g/m ² (28 to 32 lbs bond) • 10 sheets
Extra thick	Refer to the Plain paper section	Refer to the Plain paper section		120 to 170 g/m ² (32 to 46 lbs bond) • 10 sheets
Labels ^c	Refer to the Plain paper section	Refer to the Plain paper section		120 to 150 g/m ² (32 to 40 lbs bond) • 10 sheets
Card stock	Refer to the Plain paper section	Refer to the Plain paper section		171 to 220 g/m ² (46 to 59 lbs bond) • 5 sheets
Glossy Photo, Matte Photo	Refer to the Plain paper section	100 x 150 mm (4 x 6 inches)		111 to 220 g/m ² (30 to 59 lbs bond) • 1 sheet
Minimum size (custom)		98 x 148 mm (3.9 x 5.8 inches)		
Maximum size (custom)		216 x 356 mm (8.5 x 14 inches)		

a. If media weight is over 105 g/m² (28 lb bond), load a paper into the multi-purpose tray one by one.

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

c. Smoothness: 100 to 250 (sheffield).

administrator's guide (windows only)

This chapter gives helpful information and troubleshooting tips for system administrators using Samsung Installer.

Overview

Samsung provides convenient installation methods useful for administrators. Administrators can remotely install the machine driver to multiple client computers or use command window to install the driver at once. Administrators can also make their own installation package for distribution.

Check the system requirements before installing the machine's driver (See "System requirements" on page 2).

Remote installation

Remote Installation is provided under **Administrator Installation** menu. It is provided for administrators to remotely install device drivers and application software to multiple client computers. To use remote installation, you must configure at least one group. Multiple client computers can be added to a group that has the same installation configuration. Installation configuration includes device drivers or application software to be installed, port used for printing, default printer, printer name, sharing information and etc.

 For remote installation, all client computers must be joined to a domain or a workgroup and file sharing must be enabled to be accessed by remote installer software on both server and client sides. If you cannot access the client computers, you might need to disable the **Firewall** option on the client computers.

Domain remote installation

 You need to be a member of domain administrator to use **Domain Remote Installation**.

1. Make sure that the machine is connected to the network or USB and powered on.
2. Insert the supplied software CD into your CD-ROM drive.
 - The software CD 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 CD-ROM drive. Click **OK**.
 - If you use Windows Vista, Windows 7 and Windows 2008 Server R2 click **Start > All programs > Accessories > Run**. Type X:\Setup.exe replacing "X" with the letter which represents your CD-ROM drive and click **OK**.
 - If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** windows.
 - If the **AutoPlay** window appears in Windows 7 and Windows 2008 Server R2, click **Run Setup.exe** in **Install or run program** field, and click **Yes** in the **User Account Control** windows.
3. Select **Administrator Installation > Remote Installation**. If necessary, select a language from the drop-down list.

4. Read **License Agreement**, and select **I accept the terms of the License Agreement**. Then, click **Next**.
5. **Select Client Group** window appears.
6. Click **New Group**.
 - To use remote installation, you need at least a group. If you have already created a group, load the group you want and go to step 16.
 - Edit Group**: You can edit groups.
 - Load Group**: You can load groups.
 - Delete Group**: You can delete groups.
7. **Log on** window appears. Select **Domain Remote Installation** and type in the administrator's **Domain, ID** and **Password**.
 -  If your company has no domain network environment, you can use **Workgroup Remote Installation** (See "Workgroup Remote Installation" on page 2).
8. Click **Next**.
9. **Select Clients** window appears.
10. Type in the group name in the **Group Name** field.
11. Add the client computers to be in the group to the right side panel.
 -  •You can click ... button to search the client computers and add button to add a client computer by typing the IP address or the computer name of client.
 - You can add up to 50 client computers in a group. If you want to add more than 50 client computers, you need to create more groups.
 - If the firewall is enabled on the client computer, access may be denied.
 - The client computer's operating system should be Windows 2000 or higher.
 - C drive must be shared as C\$.
12. **Select Software and Utilities to Install** window appears. Select the driver(s) and application software(s) you want to install and click **Next**.
13. **Select Printer connection** window appears. Select the printer connection type and click **Next**.
 - If you selected **Network Connection, Search Network Printers window appears**, type in the IP address or host name in the information field than click **Search**. when you are finished, click **Next**.
 - The discovered printer list will show network printers on the same subnet. If you want to specify a network printer that is located over subnet then specify IP address of network printer directly.
14. **Confirm Group details** window appears. Check the group information and click **Next**.
 -  **Location to save the group** shows the path of default folder which stores the created group information. The group information file will be created as "<group_name>.RGI". You can change the path by clicking the **Change** button.
15. **Select Client Group** window appears again.

16. Select the group(s) and click **Next** to start remote installation.

Remote installation begins, you can see the installation status from the window.

17. When installation is completed, **Results of remote installation** window appears.

Check the result. For failed client computers, you can reinstall again by clicking the **Reinstall** button.

 For failed client computers, you can check the log file which is created in the client computers.

Workgroup Remote Installation

You can also use remote installation method with workgroups.

If your company has no domain network environment, you should use **Workgroup Remote Installation**.

 If the client computer uses Windows Vista or higher, ID should be **Administrator**.

1. Make sure that the machine is connected to the network or USB and powered on.
2. Insert the supplied software CD into your CD-ROM drive.
 - The software CD 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 CD-ROM drive. Click **OK**.
 - If you use Windows Vista, Windows 7 and Windows 2008 Server R2 click **Start > All programs > Accessories > Run**. Type X:\Setup.exe replacing "X" with the letter which represents your CD-ROM drive and click **OK**.
 - If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** windows.
 - If the **AutoPlay** window appears in Windows 7 and Windows 2008 Server R2, click **Run Setup.exe** in **Install or run program** field, and click **Yes** in the **User Account Control** windows.
3. Select **Administrator Installation > Remote Installation**. If necessary, select a language from the drop-down list.
4. Read **License Agreement**, and select **I accept the terms of the License Agreement**. Then, click **Next**.
5. **Select Client Group** window appears.
6. Click **New Group**.

To use remote installation, you need at least a group. If you have already created a group, load the group you want and go to step 16.

 - Edit Group**: You can edit groups.
 - Load Group**: You can load groups.
 - Delete Group**: You can delete groups.
7. **Log on** window appears. Select **Workgroup Remote Installation** and type in the **Workgroup, ID** and **Password**.

 •For Windows XP/2000/2003, the ID should be of a member of Administrators group for operating computers and for Windows Vista/2008/7, the ID should be of the default administrator account named Administrator.

 - You can also use **Domain Remote Installation** (See "Domain remote installation" on page 1).
8. Click **Next**.
9. **Select Clients** window appears.
10. Type in the group name in the **Group Name** field.

11. Add the client computers to be in the group to the right side panel.



- You can click ... button to search the client computers and add button to add the client computer by typing the IP address or the computer name of client.
- You can add up to 50 client computers in a group. If you want to add more than 50 client computers, you need to create more groups.
- If the firewall is enabled on the client computer, access may be denied.
- The client computer's operating system should be Windows 2000 or higher.
- If you have grouped the client computers in a workgroup and you try to connect to the client computer, a pop up window asking you to enter an Administrator's ID/password of the client computer you selected will appear if you can't access through the password you set in step 7.
- C drive must be shared as C\$.

12. **Select Software and Utilities to Install** window appears.

Select the driver(s) and application software(s) you want to install and click **Next**.

13. **Select Printer connection** window appears.

Select the printer connection type and click **Next**.

•If you selected **Network Connection**, **Search Network Printers window appears**, type in the IP address or host name in the information field than click **Search**. when you are finished, click **Next**.

•The discovered printer list will show network printers on the same subnet. If you want to specify a network printer that is located over subnet then specify IP address of network printer directly.

14. **Confirm Group details** window appears.

Check the group information and click **Next**.



Location to save the group shows the path of default folder which stores the created group information. The group information file will be created as "<group_name>.RGI". You can change the path by clicking the **Change** button.

15. **Select Client Group** window appears again.

16. Select the group(s) and click **Next** to start remote installation.

Remote installation begins, you can see the installation status from the window.

17. When installation is completed, **Results of remote installation** window appears.

Check the result. For failed client computers, you can reinstall again by clicking the **Reinstall** button.



For failed client computers, you can check the log file which is created in the client computers.

Error log messages

Message	Meaning	Suggested solutions
Connection Error	Unable to bind the socket. [Port number:...]	Restart the client computer.
	Unable to listen the socket. [Port number:...]	
	Unable to connect to the client computer.	
	Client computer's socket is closed.	
Setup Error	Unable to access the default shared folder(C\$) in the client computer.	<ul style="list-style-type: none"> • Check if C drive folder is shared as C\$. • Check if you can remotely access the client computer's C\$ folder on a network browser.
	Unable to copy service files.	Check if you can remotely access the client computer's C\$ folder on the network browser.
	Unable to start the service on the client computer.	Check whether RMInstallService program is running from Services . (From the Windows Start menu, select Control Panel > Administrative Tools > Services). If RMInstallService is stopped then restart it and try remote installation again. If you can't restart RMInstallService , then reboot client computer and try remote installation again.
	Unable to create thread for monitoring.	Restart the client computer.
	Unable to share folder on client computer.	Check if the shared folder in the client computer can be shared with full control.
	Unable to copy Installation files.	
	Unable to execute the setup file normally.	<ul style="list-style-type: none"> • Check if the same model's installer is running. • Check if the installer is waiting for a user input.

Message	Meaning	Suggested solutions
	N/A	Check if the environment of client computer is supported for installation.
OS not supported		
Internet Explorer not supported		
MSXML not supported		
Insufficient free space		
Not Administrator		

Create Customized Installer

Create Customized Installer allows administrators to create their own installation package with the installation setting you want. You can choose the drivers or software to be installed, assigned printer, printer name, sharing options, default printer and so on.

The created installation package can be distributed as a single self-extraction EXE package to clients through file servers or special distribution servers. You can also create an install script file for silent installation.

Creating a setup package

You can create a setup package from CD to a local folder. The created setup package will include only selected device drivers or application. There are two types of setup package you can create. **Normal(setup.exe)** and **Self-Extraction Package. Normal(setup.exe)** will extract only selected driver or application files from CD. **Self-Extraction Package** will package like normal installation CD package as a single self-extractable setup.exe file.

1. Make sure that the machine is connected to the network or USB and powered on.
2. Insert the supplied software CD into your CD-ROM drive.
 - The software CD 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 CD-ROM drive. Click **OK**.
 - If you use Windows Vista, Windows 7 and Windows 2008 Server R2 click **Start > All programs > Accessories > Run**. Type X:\Setup.exe replacing "X" with the letter which represents your CD-ROM drive and click **OK**.
 - If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** windows.
 - If the **AutoPlay** window appears in Windows 7 and Windows 2008 Server R2, click **Run Setup.exe** in **Install or run program** field, and click **Yes** in the **User Account Control** windows.
3. Select **Administrator Installation > Create Customized Installer**. If necessary, select a language from the drop-down list.

4. Read **License Agreement**, and select **I accept the terms of the License Agreement**. Then, click **Next**.
 5. **Select Package Type** window appears.
Select **Normal(setup.exe)** or **Self-Extraction Package**.
If you place the mouse cursor over the package type, you can see the detailed information on the bottom right side of the window.
 6. **Select Software and Utilities to Install** window appears.
Check the device drivers or application software you want to included in the setup package and click **Next**.
 7. **Select Printer connection** window appears.
Select the printer connection type and click **Next**.
 - If you selected **Network Connection**, **Search Network Printers window appears**, type in the IP address or host name in the information field than click **Search**. when you are finished, click **Next**.
 - The discovered printer list will show network printers on the same subnet. If you want to specify a network printer that is located over subnet then specify IP address of network printer directly.
-  If you can't search network printers on the network then check whether your firewall setting is disabled. If it is enabled, disable firewall temporarily and try searching again.
8. **Set Printer Drivers** window appears. Click **Next**.
If necessary, configure printer name, sharing, shared name and default printer setting. If you changed settings then you should click **Apply** button to apply changes then click **Next**.
 9. **Summary** window appears. Check the package information and click **Next** to start creating the setup package.
You can modify the package configuration by clicking the **Back** button.
-  Check the **Install the package as silent mode**, if you want to make the installation package as a silent installation package. Silent installation installs the driver automatically by the set option without user intervention.
10. When creating the setup package is finished, **Packaging Completed** window appears.
Check **Open package folder upon completion** if you want the created package to open automatically after it's created.
 11. Click **Finish**.

Creating a setup script file

You can generate setup configuration script file based on the CD image. It can be used with Silent installation for distributing software to multiple client computers. For example, you can upload a full CD setup files into a file server then distribute batch file or log-on script file that executes silent installation with this customized script file(ex: \\<file_server>\CD\setup.exe /s /i"c:\temp\CONFIG.CI3).

1. Make sure that the machine is connected to the network or USB and powered on.
2. Insert the supplied software CD into your CD-ROM drive.
 - The software CD 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 CD-ROM drive. Click **OK**.
 - If you use Windows Vista, Windows 7 and Windows 2008 Server R2 click **Start > All programs > Accessories > Run**. Type X:\Setup.exe replacing "X" with the letter which represents your CD-ROM drive and click **OK**.

- If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** windows.
 - If the **AutoPlay** window appears in Windows 7 and Windows 2008 Server R2, click **Run Setup.exe** in **Install or run program** field, and click **Yes** in the **User Account Control** windows.
3. Select **Administrator Installation > Create Customized Installer**.
If necessary, select a language from the drop-down list.
 4. Read **License Agreement**, and select **I accept the terms of the License Agreement**. Then, click **Next**.
 5. **Select Package Type** window appears.
Select **Generate a Setup script file**.
If you place the mouse cursor over the package type, you can see the detailed information on the bottom right side of the window.
 6. **Select Software and Utilities to Install** window appears.
Check the device drivers or application software you want to included in the setup package and click **Next**.
 7. **Select Printer connection** window appears.
Select the printer connection type and click **Next**.
 - If you selected **Network Connection**, **Search Network Printers window appears**, type in the IP address or host name in the information field than click **Search**. when you are finished, click **Next**.
 - The discovered printer list will show network printers on the same subnet. If you want to specify a network printer that is located over subnet then specify IP address of network printer directly.
-  •If you can't search network printers on the network then check whether your firewall setting is disabled. If it is enabled, disable firewall temporarily and try searching again.
- Setup configuration script filename is set as **CONFIG.CI3** and it's not changeable.
8. **Set Printer Drivers** window appears. Click **Next**.
If necessary, configure printer name, sharing, shared name and default printer setting. If you changed settings then you should click **Apply** button to apply changes then click **Next**.
 9. **Summary** window appears. Check the package information and click **Next** to start creating the setup package.
You can modify the package configuration by clicking the **Back** button.
-  Check the **Install the package as silent mode**, if you want to make the installation package as a silent installation package. Silent installation installs the driver automatically by the set option without user intervention.
10. When creating the setup package is finished, **Packaging Completed** window appears.
Check **Open package folder upon completion** if you want the created package to open automatically after it's created.
 11. Click **Finish**.

Modifying a setup script file

1. Make sure that the machine is connected to the network or USB and powered on.
2. Insert the supplied software CD into your CD-ROM drive.
 - The software CD 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 CD-ROM drive. Click **OK**.

- If you use Windows Vista, Windows 7 and Windows 2008 Server R2 click **Start > All programs > Accessories > Run**. Type **X:\Setup.exe** replacing “X” with the letter which represents your CD-ROM drive and click **OK**.
 - If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** windows.
 - If the **AutoPlay** window appears in Windows 7 and Windows 2008 Server R2, click **Run Setup.exe** in **Install or run program** field, and click **Yes** in the **User Account Control** windows.
3. Select **Administrator Installation > Create Customized Installer**. If necessary, select a language from the drop-down list.
 4. Read **License Agreement**, and select **I accept the terms of the License Agreement**. Then, click **Next**.
 5. **Select Package Type** window appears. Select **Modify Script**. If you place the mouse cursor over the package type, you can see the detailed information on the bottom right side of the window.
 6. Open the script file you want to modify(ex:**CONFIG.CI3**).
 **CONFIG.CI3** script file will exist in **\Setup\Script** subfolder of the created setup package.
 7. **Select Printer connection** window appears. Select the printer connection type and click **Next**.
 - If you selected **Network Connection, Search Network Printers window appears**, type in the IP address or host name in the information field than click **Search**. when you are finished, click **Next**.
 - The discovered printer list will show network printers on the same subnet. If you want to specify a network printer that is located over subnet then specify IP address of network printer directly.
 -  •If you can't search network printers on the network then check whether your firewall setting is disabled. If it is enabled, disable firewall temporarily and try searching again.
 - Setup configuration script filename is set as **CONFIG.CI3** and it's not changeable.
 8. **Set Printer Drivers** window appears. Click **Next**. If necessary, configure printer name, sharing, shared name and default printer setting. If you changed settings then you should click **Apply** button to apply changes then click **Next**.
 9. **Summary** window appears. Check the package information and click **Next** to start creating the setup package. You can modify the package configuration by clicking the **Back** button.
 10. When creating the setup package is finished, **Packaging Completed** window appears. Check **Open package folder upon completion** if you want the created package to open automatically after it's created.
 11. Click **Finish**.

Silent installation Mode

Silent installation mode is an installation method that does not require any user intervention. Once you start the installation, the machine driver and software are automatically installed on you computer. You can start the silent installation by typing **/s** or **/S** in the command window. Silent installation can also be performed by using the command script file (See"Create Customized Installer" on page 3).

Command-line Parameters

Following table shows commands that can be used in the command window or in making a script file (See "Creating a setup script file" on page 4).

 Following command-line are effective and operated when command is used with **/s** or **/S**. But **/h**, **/H** or **/?** are exceptional commands that can be operated solely.

Command-line	Definition	Description
/s or /S	Starts silent installation.	Installs machine drivers without prompting any UIs or user intervention.
/p"<port name>" or /P"<port name>"	 Specifies printer port. Network Port will be created by use of Standard TCP/IP Port monitor. For local port, this port must exist on system before being specified by command.	Printer port name can be specified as IP address, hostname, USB local port name or IEEE1284 port name. For example <ul style="list-style-type: none"> • /p"xxx.xxx.xxx.xxx" in where, "xxx.xxx.xxx.xxx" means IP address for network printer. /p"USB001", /P"LPT1:", /p"hostname" • When installing the driver silently in Korean, type in-Setup.exe /s /L"0x0012" or Setup.exe /s /L"18".
/l"<Lang_code>" or /L"<Lang_code>"	 Sets language code. The default language will be decided automatically if there is no specified installation language commanded. The default language depends on your system locale information.	Decimal number and hexadecimal number can be used but hexadecimal number must have prefix with "0X". Refer to Language Codes section for available <Lang_code>. This command applies to all machine's drivers and application software if specified language is supported. All software included in the machine's drivers will be installed as the specified language. <ul style="list-style-type: none"> • Setup.exe /s /L"0x0012" or Setup.exe /s /L"18"; install setup package silently with Korean.
/a"<dest_path>" or /A"<dest_path>"	 Specifies destination path for installation. The destination path should be a fully qualified path.	Since machine drivers should be installed on the OS specific location, this command applies to only application software.

Command-line	Definition	Description
/i"<script filename>" or /I"<script filename>"	Specifies customized install script file for custom operation.  The script filename should be a fully qualified filename.	Customized script file can be assigned for customized silent installation. This script file can be created or modified through provided installer customizing utility or by text editor. Note: This customized script file is prior than default installer setting in setup package but not prior than command-line parameters.
/n"<Printer name>" or /N"<Printer name>"	Specifies printer name. Printer instance shall be created as specified printer name.	With this parameter, you can add printer instances as your wishes.
/nd or /ND	Commands not to set the installed driver as a default machine driver.	It indicates installed machine driver will not be the default machine driver on your system if there are one or more printer drivers installed. If there is no installed machine driver on your system, then this option won't be applied because Windows OS will set installed printer driver as a default machine driver.
/x or /X	Uses existing machine driver files to create printer instance if it is already installed.	This command provides a way to install a printer instance that uses installed printer driver files without installing an additional driver.
/up"<printer name>" or /UP"<printer name>"	Removes only specified printer instance and not the driver files.	This command provides a way to remove only specified printer instance from your system without effecting other printer drivers. It will not remove printer driver files from your system.
/d or /D	Uninstalls all device drivers and applications from your system.	This command will remove all installed device drivers and application software from your system.
/v"<share name>" or /V"<share name>"	Shares installed machine and add other available platform drivers for Point & Print.	It will install all supported Windows OS platform's machine drivers to system and share it with specified <share name> for point and print.

Command-line	Definition	Description
/o or /O	Opens Printers and Faxes folder after installation.	This command will open Printers and Faxes folder after the silent installation.
/f"<log filename>" or /F"<log filename>"	Specifies log filename. The default log file is created in the system temp folder if not specified.	It will create a log file to a specified folder.
/h, /H or /?	Shows Command-line Usage.	

Language code

Code	Language
0X0009	English
0X0012	Korean
0X0804	Simplified Chinese
0X0404	Traditional Chinese
0x040c	French
0X0007	German
0X0010	Italian
0X000a	Spanish
0X0013	Dutch
0X001D	Swedish
0X0006	Danish
0X000b	Finnish
0X0014	Norwegian
0X0019	Russian
0X0005	Czech
0X000e	Hungarian
0X0008	Greek
0X0816	Standard Portuguese
0X0416	Brazilian Portuguese
0X0015	Polish
0X001F	Turkish
0X0001	Arabic
0X000D	Hebrew
0x0424	Slovenian
0X0418	Romanian
0X0402	Bulgarian
0X041A	Croatian
0X081A	Serbian

Code	Language
0X0422	Ukraine
0X041B	Slovakia
0X0421	Indonesian
0x041E	Thai
0X0429	Farsi

Frequently Asked Question

Remote Installation related questions

No.	Question	Answer
1	Client computers are not listed in the list when logging on as a domain.	Primary DNS address in all client computers should be specified as your domain server. If the client computer is turned off, turn it on.
2	“ Cannot access ” error message appears during workgroup remote installation.	This error message appears if access was denied. You should check the settings of network access; sharing and security model for local accounts. <ul style="list-style-type: none"> From the Windows Start menu, click Control Panel > Administrative Tools > Local Security Policy > Local Policies > Security Options > Network access: Sharing and security model for local accounts. If the setting is not Classic – local users authenticate as themselves, change it to Classic – local users authenticate as themselves.
3	“ Cannot access ” error message appears during domain / workgroup remote installation	Check if the C drive folder is shared. C Drive folder should be shared as C\$ to access remote client computers.

Create Customized Installer related questions

No.	Question	Answer
1	When I try to open the CONFIG.CI3 script file, the files doesn't open and a warning message pops up.	When the Custom utility opens the config.ci3 script file, it checks manufacture, model and script file type. Check the <MFG>, <MDL> node of the file you want to open, and if <SCRIPT_TYPE> value is 'Config'.
2	I cannot precede the next step at Search Network Printer dialog.	It checks if the IP address/hostname is valid or not. You can specify only the IP address/hostname which is connected via network currently. Check the connection status of the printer to specify.
3	When I execute the customized installer package, the welcome dialog appears and I need to select the options again.	If you want to install as silent mode, check the Install the package as silent mode check box in the Summary window.

contact samsung worldwide

If you have any comments or questions regarding Samsung products, contact the Samsung customer care center.

Country/Region	Customer Care Center	Web Site
ARGENTINE	0800-333-3733	www.samsung.com/ar
AUSTRALIA	1300 362 603	www.samsung.com/au
AUSTRIA	0810-SAMSUNG (7267864, € 0.07/min)	www.samsung.com/at
BELARUS	810-800-500-55-500	www.samsung.ua www.samsung.com/ua_ru
BELGIUM	02 201 2418	www.samsung.com/be (Dutch) www.samsung.com/be_fr (French)
BRAZIL	0800-124-421 4004-0000	www.samsung.com/br
CANADA	1-800-SAMSUNG (726-7864)	www.samsung.com/ca
CHILE	800-SAMSUNG (726-7864)	www.samsung.com/cl
CHINA	400-810-5858 010-6475 1880	www.samsung.com/cn
COLOMBIA	01-8000112112	www.samsung.com.co
COSTA RICA	0-800-507-7267	www.samsung.com/latin
CZECH REPUBLIC	800-SAMSUNG (800-726786) Samsung Zrt., česká organizační složka, Oasis Florenc, Sokolovská394/17, 180 00, Praha 8	www.samsung.com/cz
DENMARK	8-SAMSUNG (7267864)	www.samsung.com/dk
ECUADOR	1-800-10-7267	www.samsung.com/latin
EL SALVADOR	800-6225	www.samsung.com/latin
ESTONIA	800-7267	www.samsung.com/ee
KAZAKHSTAN	8-10-800-500-55-500	www.samsung.com/kz_ru
KYRGYZSTAN	00-800-500-55-500	
FINLAND	30-6227 515	www.samsung.com/fi
FRANCE	01 4863 0000	www.samsung.com/fr
GERMANY	01805 - SAMSUNG (726-7864 € 0,14/min)	www.samsung.de
GUATEMALA	1-800-299-0013	www.samsung.com/latin
HONDURAS	800-7919267	www.samsung.com/latin

Country/Region	Customer Care Center	Web Site
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glossary

 The following glossary helps you get familiar with the product by understanding the terminologies commonly used with printing as well as mentioned in this user's guide.

802.11

802.11 is a set of standards for wireless local area network (WLAN) communication, developed by the IEEE LAN/MAN Standards Committee (IEEE 802).

802.11b/g

802.11b/g can share same hardware and use the 2.4 GHz band. 802.11b supports bandwidth up to 11 Mbps; 802.11g up to 54 Mbps. 802.11b/g devices may occasionally suffer interference from microwave ovens, cordless telephones, and Bluetooth devices.

Access point

Access Point or Wireless Access Point (AP or WAP) is a device that connects wireless communication devices together on wireless local area networks (WLAN), and acts as a central transmitter and receiver of WLAN radio signals.

ADF

An Automatic Document Feeder (ADF) is a mechanism that will automatically feed an original sheet of paper so that the machine can scan some amount of the paper at once.

AppleTalk

AppleTalk is a proprietary suite of protocols developed by Apple, Inc for computer networking. It was included in the original Macintosh (1984) and is now deprecated by Apple in favor of TCP/IP networking.

BIT Depth

A computer graphics term describing the number of bits used to represent the color of a single pixel in a bitmapped image. Higher color depth gives a broader range of distinct colors. As the number of bits increases, the number of possible colors becomes impractically large for a color map. 1-bit color is commonly called as monochrome or black and white.

BMP

A bitmapped graphics format used internally by the Microsoft Windows graphics subsystem (GDI), and used commonly as a simple graphics file format on that platform.

BOOTP

Bootstrap Protocol. A network protocol used by a network client to obtain its IP address automatically. This is usually done in the bootstrap process of computers or operating systems running on them. The BOOTP servers assign the IP address from a pool of addresses to each client. BOOTP enables 'diskless workstation' computers to obtain an IP address prior to loading any advanced operating system.

CCD

Charge Coupled Device (CCD) is a hardware which enables the scan job. CCD Locking mechanism is also used to hold the CCD module to prevent any damage when you move the machine.

Collation

Collation is a process of printing a multiple-copy job in sets. When collation is selected, the device prints an entire set before printing additional copies.

Control Panel

A control panel is a flat, typically vertical, area where control or monitoring instruments are displayed. They are typically found in front of the machine.

Coverage

It is the printing term used for a toner usage measurement on printing. For example, 5% coverage means that an A4 sided paper has about 5% image or text on it. So, if the paper or original has complicated images or lots of text on it, the coverage will be higher and at the same time, a toner usage will be as much as the coverage.

CSV

Comma Separated Values (CSV). A type of file format, CSV is used to exchange data between disparate applications. The file format, as it is used in Microsoft Excel, has become a de facto standard throughout the industry, even among non-Microsoft platforms.

DADF

A Duplex Automatic Document Feeder (DADF) is a mechanism that will automatically feed and turn over an original sheet of paper so that the machine can scan on both sides of the paper.

Default

The value or setting that is in effect when taking a printer out of its box state, reset, or initialized.

DHCP

A Dynamic Host Configuration Protocol (DHCP) is a client-server networking protocol. A DHCP server provides configuration parameters specific to the DHCP client host requesting, generally, information required by the client host to participate on an IP network. DHCP also provides a mechanism for allocation of IP addresses to client hosts.

DIMM

Dual Inline Memory Module (DIMM), a small circuit board that holds memory. DIMM stores all the data within the machine like printing data, received fax data.

DNS

The Domain Name Server (DNS) is a system that stores information associated with domain names in a distributed database on networks, such as the Internet.

Dot Matrix Printer

A dot matrix printer refers to a type of computer printer with a print head that runs back and forth on the page and prints by impact, striking an ink-soaked cloth ribbon against the paper, much like a typewriter.

DPI

Dots Per Inch (DPI) is a measurement of resolution that is used for scanning and printing. Generally, higher DPI results in a higher resolution, more visible detail in the image, and a larger file size.

DRPD

Distinctive Ring Pattern Detection. Distinctive Ring is a telephone company service which enables a user to use a single telephone line to answer several different telephone numbers.

Duplex

A mechanism that will automatically turn over a sheet of paper so that the machine can print (or scan) on both sides of the paper. A printer equipped with a Duplex Unit can print on both sides of paper during one print cycle.

Duty Cycle

Duty cycle is the page quantity which does not affect printer performance for a month. Generally the printer has the lifespan limitation such as pages per year. The lifespan means the average capacity of print-outs, usually within the warranty period. For example, if the duty cycle is 48,000 pages per month assuming 20 working days, a printer limits 2,400 pages a day.

ECM

Error Correction Mode (ECM) is an optional transmission mode built into Class 1 fax machines or fax modems. It automatically detects and corrects errors in the fax transmission process that are sometimes caused by telephone line noise.

Emulation

Emulation is a technique of one machine obtaining the same results as another.

An emulator duplicates the functions of one system with a different system, so that the second system behaves like the first system. Emulation focuses on exact reproduction of external behavior, which is in contrast to simulation, which concerns an abstract model of the system being simulated, often considering its internal state.

Ethernet

Ethernet is a frame-based computer networking technology for local area networks (LANs). It defines wiring and signaling for the physical layer, and frame formats and protocols for the media access control (MAC)/data link layer of the OSI model. Ethernet is mostly standardized as IEEE 802.3. It has become the most widespread LAN technology in use during the 1990s to the present.

EtherTalk

A suite of protocols developed by Apple Computer for computer networking. It was included in the original Macintosh (1984) and is now deprecated by Apple in favor of TCP/IP networking.

FDI

Foreign Device Interface (FDI) is a card installed inside the machine to allow a third party device such as a coin operated device or a card reader. Those devices allow the pay-for-print service on your machine.

FTP

A File Transfer Protocol (FTP) is a commonly used protocol for exchanging files over any network that supports the TCP/IP protocol (such as the Internet or an intranet).

Fuser Unit

The part of a laser printer that fuses the toner onto the print media. It consists of a heat roller and a pressure roller. After toner is transferred onto the paper, the fuser unit applies heat and pressure to ensure that the toner stays on the paper permanently, which is why paper is warm when it comes out of a laser printer.

Gateway

A connection between computer networks, or between a computer network and a telephone line. It is very popular, as it is a computer or a network that allows access to another computer or network.

Grayscale

A shades of gray that represent light and dark portions of an image when color images are converted to grayscale; colors are represented by various shades of gray.

Halftone

An image type that simulates grayscale by varying the number of dots. Highly colored areas consist of a large number of dots, while lighter areas consist of a smaller number of dots.

HDD

Hard Disk Drive (HDD), commonly referred to as a hard drive or hard disk, is a non-volatile storage device which stores digitally-encoded data on rapidly rotating platters with magnetic surfaces.

IEEE

The Institute of Electrical and Electronics Engineers (IEEE) is an international non-profit, professional organization for the advancement of technology related to electricity.

IEEE 1284

The 1284 parallel port standard was developed by the Institute of Electrical and Electronics Engineers (IEEE). The term "1284-B" refers to a specific connector type on the end of the parallel cable that attaches to the peripheral (for example, a printer).

Intranet

A private network that uses Internet Protocols, network connectivity, and possibly the public telecommunication system to securely share part of an organization's information or operations with its employees. Sometimes the term refers only to the most visible service, the internal website.

IP address

An Internet Protocol (IP) address is a unique number that devices use in order to identify and communicate with each other on a network utilizing the Internet Protocol standard.

IPM

The Images Per Minute (IPM) is a way of measuring the speed of a printer. An IPM rate indicates the number of single-sided sheets a printer can complete within one minute.

IPP

The Internet Printing Protocol (IPP) defines a standard protocol for printing as well as managing print jobs, media size, resolution, and so forth. IPP can be used locally or over the Internet to hundreds of printers, and also supports access control, authentication, and encryption, making it a much more capable and secure printing solution than older ones.

IPX/SPX

IPX/SPX stands for Internet Packet Exchange/Sequenced Packet Exchange. It is a networking protocol used by the Novell NetWare operating systems. IPX and SPX both provide connection services similar to TCP/IP, with the IPX protocol having similarities to IP, and SPX having similarities to TCP. IPX/SPX was primarily designed for local area networks (LANs), and is a very efficient protocol for this purpose (typically its performance exceeds that of TCP/IP on a LAN).

ISO

The International Organization for Standardization (ISO) is an international standard-setting body composed of representatives from national standards bodies. It produces world-wide industrial and commercial standards.

ITU-T

The International Telecommunication Union is an international organization established to standardize and regulate international radio and telecommunications. Its main tasks include standardization, allocation of the radio spectrum, and organizing interconnection arrangements between different countries to allow international phone calls. A -T out of ITU-T indicates telecommunication.

ITU-T No. 1 chart

Standardized test chart published by ITU-T for document facsimile transmissions.

JBIG

Joint Bi-level Image Experts Group (JBIG) is an image compression standard with no loss of accuracy or quality, which was designed for

compression of binary images, particularly for faxes, but can also be used on other images.

JPEG

Joint Photographic Experts Group (JPEG) is a most commonly used standard method of lossy compression for photographic images. It is the format used for storing and transmitting photographs on the World Wide Web.

LDAP

The Lightweight Directory Access Protocol (LDAP) is a networking protocol for querying and modifying directory services running over TCP/IP.

LED

A Light-Emitting Diode (LED) is a semiconductor device that indicates the status of a machine.

MAC address

Media Access Control (MAC) address is a unique identifier associated with a network adapter. MAC address is a unique 48-bit identifier usually written as 12 hexadecimal characters grouped in pairs (e. g., 00-00-0c-34-11-4e). This address is usually hard-coded into a Network Interface Card (NIC) by its manufacturer, and used as an aid for routers trying to locate machines on large networks.

MFP

Multi Function Peripheral (MFP) is an office machine that includes the following functionality in one physical body, so as to have a printer, a copier, a fax, a scanner and etc.

MH

Modified Huffman (MH) is a compression method for decreasing the amount of data that needs to be transmitted between the fax machines to transfer the image recommended by ITU-T T.4. MH is a codebook-based run-length encoding scheme optimized to efficiently compress white space. As most faxes consist mostly of white space, this minimizes the transmission time of most faxes.

MMR

Modified Modified READ (MMR) is a compression method recommended by ITU-T T.6.

Modem

A device that modulates a carrier signal to encode digital information, and also demodulates such a carrier signal to decode transmitted information.

MR

Modified Read (MR) is a compression method recommended by ITU-T T.4. MR encodes the first scanned line using MH. The next line is compared to the first, the differences determined, and then the differences are encoded and transmitted.

NetWare

A network operating system developed by Novell, Inc. It initially used cooperative multitasking to run various services on a PC, and the network protocols were based on the archetypal Xerox XNS stack. Today NetWare supports TCP/IP as well as IPX/SPX.

OPC

Organic Photo Conductor (OPC) is a mechanism that makes a virtual image for print using a laser beam emitted from a laser printer, and it is usually green or rust colored and a cylinder shaped.

An imaging unit containing a drum slowly wears the drum surface by its usage in the printer, and it should be replaced appropriately since it gets worn from grits of a paper and the drum cleaning blade.

Originals

The first example of something, such as a document, photograph or text, etc, which is copied, reproduced or translated to produce others, but which is not itself copied or derived from something else.

OSI

Open Systems Interconnection (OSI) is a model developed by the International Organization for Standardization (ISO) for communications. OSI offers a standard, modular approach to network design that divides the required set of complex functions into manageable, self-contained, functional layers. The layers are, from top to bottom, Application, Presentation, Session, Transport, Network, Data Link and Physical.

PABX

A private automatic branch exchange (PABX) is an automatic telephone switching system within a private enterprise.

PCL

Printer Command Language (PCL) is a Page Description Language (PDL) developed by HP as a printer protocol and has become an industry standard. Originally developed for early inkjet printers, PCL has been released in varying levels for thermal, dot matrix printer, and xerographic printers.

PDF

Portable Document Format (PDF) is a proprietary file format developed by Adobe Systems for representing two dimensional documents in a device independent and resolution independent format.

PostScript

PostScript (PS) is a page description language and programming language used primarily in the electronic and desktop publishing areas. - that is run in an interpreter to generate an image.

Printer Driver

A program used to send commands and transfer data from the computer to the printer.

Print Media

The media like paper, envelopes, labels, and transparencies which can be used in a printer, a scanner, a fax or, a copier.

PPM

Pages Per Minute (PPM) is a method of measurement for determining how fast a printer works, meaning the number of pages a printer can produce in one minute.

PRN file

An interface for a device driver, this allows software to interact with the device driver using standard input/output system calls, which simplifies many tasks.

Protocol

A convention or standard that controls or enables the connection, communication, and data transfer between two computing endpoints.

PS

See PostScript.

PSTN

The Public-Switched Telephone Network (PSTN) is the network of the world's public circuit-switched telephone networks which, on industrial premises, is usually routed through the switchboard.

RADIUS

Remote Authentication Dial In User Service (RADIUS) is a protocol for remote user authentication and accounting. RADIUS enables centralized management of authentication data such as usernames and passwords using an AAA (authentication, authorization, and accounting) concept to manage network access.

Resolution

The sharpness of an image, measured in Dots Per Inch (DPI). The higher the dpi, the greater the resolution.

SMB

Server Message Block (SMB) is a network protocol mainly applied to share files, printers, serial ports, and miscellaneous communications between nodes on a network. It also provides an authenticated Inter-process communication mechanism.

SMTP

Simple Mail Transfer Protocol (SMTP) is the standard for e-mail transmissions across the Internet. SMTP is a relatively simple, text-based protocol, where one or more recipients of a message are specified, and then the message text is transferred. It is a client-server protocol, where the client transmits an email message to the server.

SSID

Service Set Identifier (SSID) is a name of a wireless local area network (WLAN). All wireless devices in a WLAN use the same SSID in order to communicate with each other. The SSIDs are case-sensitive and have a maximum length of 32 characters.

Subnet Mask

The subnet mask is used in conjunction with the network address to determine which part of the address is the network address and which part is the host address.

TCP/IP

The Transmission Control Protocol (TCP) and the Internet Protocol (IP); the set of communications protocols that implement the protocol stack on which the Internet and most commercial networks run.

TCR

Transmission Confirmation Report (TCR) provides details of each transmission such as job status, transmission result and number of pages sent. This report can be set to print after each job or only after failed transmissions.

TIFF

Tagged Image File Format (TIFF) is a variable-resolution bitmapped image format. TIFF describes image data that typically come from scanners. TIFF images make use of tags, keywords defining the characteristics of the image that is included in the file. This flexible and platform-independent format can be used for pictures that have been made by various image processing applications.

Toner Cartridge

A kind of bottle or container within a machine like a printer which contains toner. Toner is a powder used in laser printers and photocopiers, which forms the text and images on the printed paper. Toner can be fused by the heat of the fuser, causing it to bind to the fibers in the paper.

TWAIN

An industry standard for scanners and software. By using a TWAIN-compliant scanner with a TWAIN-compliant program, a scan can be initiated from within the program.; an image capture API for Microsoft Windows and Apple Macintosh operating systems.

UNC Path

Uniform Naming Convention (UNC) is a standard way to access network shares in Window NT and other Microsoft products. The format of a UNC path is: \\<servername>\<sharename>\<Additional directory>

URL

Uniform Resource Locator (URL) is the global address of documents and resources on the Internet. The first part of the address indicates what protocol to use, the second part specifies the IP address or the domain name where the resource is located.

USB

Universal Serial Bus (USB) is a standard that was developed by the USB Implementers Forum, Inc., to connect computers and peripherals. Unlike the parallel port, USB is designed to concurrently connect a single computer USB port to multiple peripherals.

Watermark

A watermark is a recognizable image or pattern in paper that appears lighter when viewed by transmitted light. Watermarks were first introduced in Bologna, Italy in 1282; they have been used by papermakers to identify their product, and also on postage stamps, currency, and other government documents to discourage counterfeiting.

WEP

Wired Equivalent Privacy (WEP) is a security protocol specified in IEEE 802.11 to provide the same level of security as that of a wired LAN. WEP provides security by encrypting data over radio so that it is protected as it is transmitted from one end point to another.

WIA

Windows Imaging Architecture (WIA) is an imaging architecture that is originally introduced in Windows Me and Windows XP. A scan can be initiated from within these operating systems by using a WIA-compliant scanner.

WPA

Wi-Fi Protected Access (WPA) is a class of systems to secure wireless (Wi-Fi) computer networks, which was created to improve upon the security features of WEP.

WPA-PSK

WPA-PSK (WPA Pre-Shared Key) is special mode of WPA for small business or home users. A shared key, or password, is configured in the wireless access point (WAP) and any wireless laptop or desktop devices. WPA-PSK generates a unique key for each session between a wireless client and the associated WAP for more advanced security.

XPS

XML Paper Specification (XPS) is a specification for a Page Description Language (PDL) and a new document format, which has benefits for portable document and electronic document, developed by Microsoft. It is an XML-based specification, based on a new print path and a vector-based device-independent document format.