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Important precautions and safety information

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

- Read and understand all instructions.
- 2 Use common sense whenever operating electrical appliances.
- 3 Follow all warnings and instructions marked on the machine and in the literature accompanying the machine.
- 4 If an operating instruction appears to conflict with safety information, heed the safety information. You may have misunderstood the operating instruction. If you cannot resolve the conflict, contact your sales or service representative for assistance.
- 5 Unplug the machine from the AC wall socket and/or telephone jack before cleaning. Do not use liquid or aerosol cleaners. Use only a damp cloth for cleaning.
- 6 Do not place the machine on an unstable cart, stand or table. It may fall, causing serious damage.
- 7 Your machine should never be placed on, near or over a radiator, heater, air conditioner or ventilation duct.
- 8 Do not allow anything to rest on the power. Do not locate your machine where the cords will be abused by persons walking on them
- 9 Do not overload wall outlets and extension cords. This can diminish performance, and may result in the risk of fire or electric shock.
- 10 Do not allow pets to chew on the AC power, telephone or PC interface cords.
- 11 Never push objects of any kind into the machine through case or cabinet openings. They may touch dangerous voltage points, creating a risk of fire or shock. Never spill liquid of any kind onto or into the machine.
- 12 Your machine may have a heavy cover for optimal pressure on the document for the best scanning and/or faxing (usually the flatbedtype machine). In this case, replace the cover after placing document on the scan glass, by holding and moving it down slowly until it seats on its location.
- 13 To reduce the risk of electric shock, do not disassemble the machine. Take it to a qualified service technician when repair work is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly could cause electric shock when the unit is subsequently used.
- 14 Unplug the machine from the telephone jack, PC and AC wall outlet and refer servicing to qualified service personnel under the following conditions:
 - When any part of the power cord, plug or connecting cable is damaged or frayed.
 - · If liquid has been spilled into the machine.

- · If the machine has been exposed to rain or water.
- If the machine does not operate properly after instructions have been followed.
- If the machine has been dropped, or the cabinet appears damaged.
- If the machine exhibits a sudden and distinct change in performance.
- Adjust only those controls covered by the operating instructions. Improper adjustment of other controls may result in damage, and may require extensive work by a qualified service technician to restore the machine to normal operation.
- 16 Avoid using this machine during a lightning storm. There may be a remote risk of electric shock from lightning. If possible, unplug the AC power and telephone cord for the duration of the lightning storm.
- 17 SAVE THESE INSTRUCTIONS.
- 18 Use only No.26 AWG or larger telephone line cord.

Laser safety statement

The printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR, chapter 1 Subchapter J for Class I(1) laser products, and elsewhere is certified as a Class I laser product conforming to the requirements of IEC 825.

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

WARNING

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



Ozone safety



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

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

Mercury safety



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

Samsung

Power saver



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

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

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

Recycling



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

Correct disposal of this product (Waste electrical & electronic equipment)

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



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

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

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

Radio frequency emissions

FCC information to the user

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

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

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

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

Caution

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

Canadian radio interference regulations

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

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

United States of America

Federal Communications Commission (FCC)

Intentional emitter per FCC Part 15

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

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 I AN use:

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

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.

WARNING:

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

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

You should also know that:

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

Declaration of conformity (European countries)

Approvals and certifications



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

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

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

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

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

EC certification

Certification to 1999/5/EC radio equipment & telecommunications terminal equipment directive (FAX)

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

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

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

European radio approval information (for products fitted with EU-approved radio devices)

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

This Product is a printer; low power, Radio LAN type devices (radio-frequency (RF) wireless communication devices), operating in the 2.4 GHz/6 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 CE 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.

Outside EU Iceland, Liechtenstein, Norway and Switzerland

European States with restrictions on use:

EU In France, the frequency range is restricted to

2446.5-2483.5 MHz for devices above 10 mW

transmitting power such as wireless

Accept EU No limitations at this time.

Regulatory compliance statements

Wireless guidance

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

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 everyiew of considerations while operating a wireless device:

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

The power output of the wireless device or devices that may be embedded in your printer is well below the RF exposure limits as known at this time. Because the wireless devices (which may be embedded 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. 802.11B (also known as wireless Ethernet) and Bluetooth communication devices are examples of devices that provide wireless communication.



Radio frequency-wireless communication can interferewith equipment on commercial aircraft. Current aviationregulations require wireless devices to be turned off while traveling in an airplane. IEEE 802.11 (also known aswireless Ethornot) and Bluetooth communication devices are examples of devices that provide wirelesscommunication.



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



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



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



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



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

Replacing the fitted plug (for UK Only)

Important

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

Please contact the people from you purchased the machine.

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

Warning

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

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

Important warning: You must earth this machine.

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

Green and Yellow: Earth Blue: Neutral Brown: Live

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

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

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

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

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

1 Introduction

Thank you for purchasing this Samsung multifunctional product. Your machine provides printing, copying, scanning, and faxing (CLX-3160FN only) functions.

This chapter includes:

- Special features
- Printer overview
- · Finding more information
- · Selecting a location

Special features

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

Print with excellent quality and speed



- You can print in full range of colors using cyan, magenta, yellow, and black.
- You can print with a resolution of up to 2400 dpi [Best]. See the Software Section.
- In Black and White mode, your machine prints A4-sized paper at up to 16 ppm^a and letter-sized paper at up to 17 ppm. In Color mode, your machine prints A4-sized or letter sized paper at up to 4 ppm.

Handle paper flexibly



- The manual tray supports letterhead, envelopes, labels, transparencies, custom-sized media, postcards, and heavy paper. The manual tray holds up 1 sheet of paper.
- The 150-sheet tray 1 and 250-sheet optional tray 2 support plain paper in various sizes.

Create professional documents



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

Save time and money



- You can print multiple pages on one single sheet of paper to save paper.
- You can use preprinted forms and letterhead with plain paper. See the Software Section.
- This machine automatically conserves electricity by substantially reducing power consumption when not in use.
- This machine meets Energy Star guidelines for energy efficiency.

Expand your machine's capacity

- You can add a 250-sheet optional tray 2 to your machine. This tray lets you add paper to the machine less often.
- You can print images directly from a PictBridgecompatible device.

Print in various environments

- You can print with Windows 98/Me/NT 4.0/2000/XP (include 64bit)/ 2003.
- · Your machine is compatible with a variety of Linux systems.
- · Your machine is compatible with a variety of Macintosh systems.
- · Your machine comes with a network interfaces.

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.

You can back up data and restore backup files to the machine's memory.

Machine features

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

(I: Installed, O: Option, NA: Not Available)

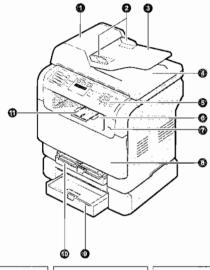
Features	CLX-3160N	CLX-3160FN
USB 2.0	1	1
USB Memory	T	I
Network Interface (Ethernet 10/100 Base TX)	1	ı
Fax Function	NA	1
PictBridge	I	1

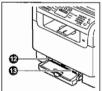
a. pages per minute

Printer overview

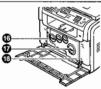
These are the main components of your machine:

Front view







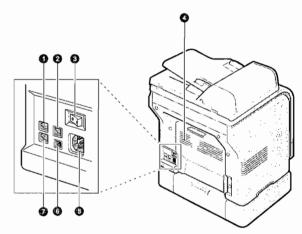


* The figure above shows an CLX-3160FN with all available accessories.

1	ADF (automatic document feeder) ^a	10	tray 1
2	document width guides	11	output support
3	document input tray	12	manual tray paper width guides
4	document output tray	13	manual tray
5	control panel	14	scanner lid
6	output tray	15	scanner glass
7	USB memory port	16	waste toner container
8	front cover	17	toner cartridge
9	optional tray 2	18	imaging unit

a. Automatic document feeder is used as ADF in this user's guide.

Rear view



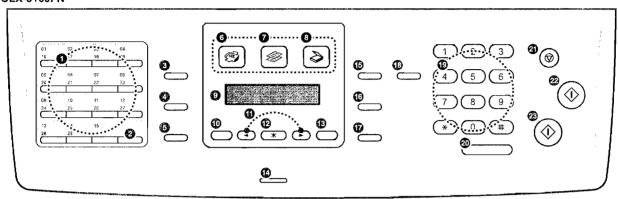
*The figure above shows an CLX-3160FN with all available accessories.

1	extension telephone socket (EXT) ^a	5	power receptacle
2	network port	6	USB port
3	power switch	7	telephone line socket (EXT) ^a
4	rear cover		

a. CLX-3160FN only.

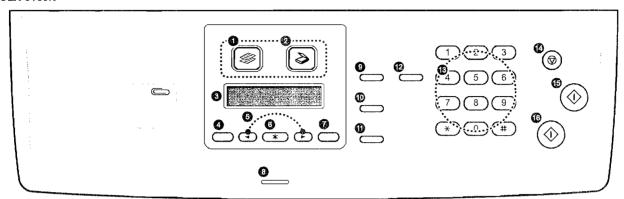
Control panel overview

CLX-3160FN



1	Speed buttons : Allows you to store frequently-dialed fax numbers and enter them with the touch of a few buttons.	13	Back: Sends you back to the upper menu level.
2	Shift : Allows you to shift the speed buttons to access numbers 16 through 30.	14	Status: Shows the status of your machine. See page 14.5.
3	Phone Book: Allows you to store frequently used fax numbers in memory or search for stored fax numbers. Also allows you to print an Phone Book list.	15	Darkness: Adjusts the document brightness for the current copy job.
4	Resolution: Adjusts the document resolution for the current fax job.	16	Original Type: Selects the document type for the current copy job.
5	Redial/Pause: In Standby mode, redials the last number, or in Edit mode, inserts a pause into a fax number.	17	Reduce/Enlarge: Makes a copy smaller or larger than the original.
6	Fax: Activates Fax mode.	18	USB Print: Allows you to directly print files stored on a USB Memory device when it is inserted into the USB memory port on the front of your machine.
7	Copy: Activates Copy mode.	19	Number keypad: dials a number or enters alphanumeric characters.
8	Scan: Activates Scan mode.	20	On Hook Dial: Engages the telephone line.
9	Display: Shows the current status and prompts during an operation.	21	Stop/Clear: Stops an operation at any time. In Standby mode, clears/cancels the copy options, such as the darkness, the document type setting, the copy size, and the number of copies.
10	Menu: Enters Menu mode and scrolls through the available menus.	22	Color Start: Starts a job in Color mode.
11	Scroll buttons: Scroll through the options available in the selected menu, and increase or decrease values.	23	Black Start: Starts a job in Black and White mode.
12	OK: Confirms the selection on the screen.		

CLX-3160N



1	Copy: Activates Copy mode.	9	Darkness: Adjusts the document brightness for the current copy job.
2	Scan: Activates Scan mode.	10	Original Type: Selects the document type for the current copy job.
3	Display: Shows the current status and prompts during an operation.	11	Reduce/Enlarge: Makes a copy smaller or larger than the original.
4	Menu: Enters Menu mode and scrolls through the available menus.	12	USB Print : Allows you to directly print files stored on a USB Memory device when it is inserted into the USB memory port on the front of your machine.
5	Scroll buttons: Scroll through the options available in the selected menu, and increase or decrease values.	13	Number keypad: Dials a number or enters alphanumeric characters.
6	OK: Confirms the selection on the screen.	14	Stop/Clear: Stops an operation at any time. In Standby mode, clears/cancels the copy options, such as the resolution, the document type setting, the copy size, and the number of copies.
7	Back: Sends you back to the upper menu level.	15	Color Start: Starts a job in Color mode.
8	Status: Shows the status of your machine. See page 14.5.	16	Black Start: Starts a job in Black and White mode.

Note

• Use the recessed area on the right of the control panel for storing clips to bind printouts

Finding more information

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

Quick Install Guide



Provides information on setting up your machine and, therefore, be sure to follow the instructions in the guide to get the machine ready.

Online User's



Provides you with step-by-step instructions for using your machine's full features, and contains information for maintaining your machine, troubleshooting, and installing accessories.

This user's guide also contains the **Software Section** providing you with information on how to print documents with your machine on various operating systems, and how to use the supplied software utilities.

Note

 You can access the user's guides in other languages from the Manual folder on the printer software CD.

Network Printer User's Guide



Contained on the network utilities CD, provides you with information on setting up and connecting your machine to a network.

Printer Driver Help



Provides you with help information on printer driver properties and instructions for setting up the properties for printing. To access a printer driver help screen, click **Help** from the printer properties dialog box.

Samsung website

If you have Internet access, you can get help, support, printer drivers, manuals, and order information from the Samsung website, www.samsungprinter.com.

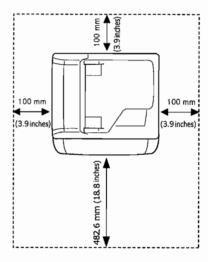
Selecting a location

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

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

Clearance space

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



2 System setup

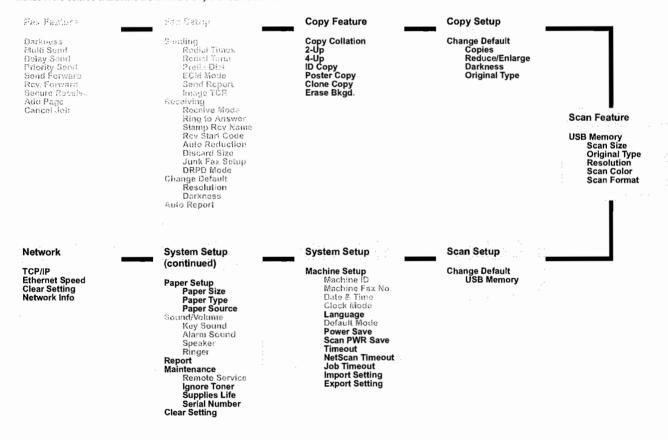
This chapter gives you an overview of menus available on your machine and step-by-step instructions for setting up the machine's systems.

This chapter includes:

- Menu overview
- · Changing the display language
- · Setting the date and time
- Changing the default mode (CLX-3160FN only)
- Setting sounds
- Entering characters using the number keypad
- · Using the save modes
- · Setting print job timeout
- * Menus in the colored characters are available only with CLX-3160FN.

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**. Refer to the following diagram. Menus available in Fax, Copy, or Scan mode vary.



Changing the display language

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

- 1 Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press OK when Machine Setup appears.
- 3 Press the Scroll buttons until Language appears and press OK.
- 4 Press the Scroll buttons until the language you want appears and press OK.
- 5 Press Stop/Clear to return to Standby mode.

Setting the date and time

The current date and time are shown on the display when your machine is on and ready to work. For the CLX-3160FN, all of your faxes will have the date and time printed on them.

Note

- If power to the machine is cut off, you need to reset the correct time and date once the power has been restored.
- 1 Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press OK when Machine Setup appears.
- 3 Press the Scroll buttons until Date & Time appears and press OK.
- 4 Enter the correct time and date using the number keypad.

Month = 01 to 12

Day = 01 to 31

Year = requires four digits

Hour = 01 to 12 (12-hour mode)

00 to 23 (24-hour mode)

Minute = 00 to 59



The date format may differ from country to country

You can also use the **Scroll** buttons to move the cursor under the digit you want to correct and enter a new number.

5 To select AM or PM for 12-hour format, press the * or # button or any number button.

When the cursor is not under the AM or PM indicator, pressing the x or t button immediately moves the cursor to the indicator.

You can change the clock mode to 24-hour format (e.g. 01:00 PM as 13:00). For details, see the next section.

6 Press OK to save the time and date.

When you enter a wrong number, **Out of Range** appears and the machine does not proceed to the next step. If this happens, simply reenter the correct number.

7 Press Stop/Clear to return to Standby mode.

Changing the clock mode

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

- Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press OK when Machine Setup appears.
- 3 Press the Scroll buttons until Clock Mode appears and press OK.
- 4 Press the Scroll buttons to select the other mode and press OK.
- 5 Press Stop/Clear to return to Standby mode.

Changing the default mode (CLX-3160FN only)

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

- Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press OK when Machine Setup appears.
- 3 Press the Scroll buttons until Default Mode appears and press OK.
- 4 Press the Scroll buttons until the default mode you want appears and press OK.
- 5 Press Stop/Clear to return to Standby 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 (CLX-3160FN only): 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 "Common," the speaker is on until the remote machine answers.

You can adjust the volume level using On Hook Dial.

 Ringer (CLX-3160FN only): Adjusts the ringer volume. For the ringer volume, you can select Off, Low, Mid, and High.

Speaker, ringer, key sound, and alarm sound

- Press Menu until System Setup appears on the bottom line of the display and press OK.
- Press the Scroll buttons until Sound/Volume appears and press OK.
- 3 Press the Scroll buttons until the sound option you want appears and press OK.
- 4 Press the Scroll buttons until the desired status or volume for the sound you have selected appears and press OK.
- 5 If necessary, repeat steps 3 through 5 to set other sounds.
- 6 Press Stop/Clear to return to Standby mode.

Speaker volume

- 1 Press On Hook Dial. A dial tone sounds from the speaker.
- 2 Press the Scroll buttons until you hear the volume you want.
- 3 Press On Hook Dial to save the change and return to Standby mode.



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

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 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 ${\bf 6}$, the display shows a different letter, ${\bf M},\,{\bf N},\,{\bf O},\,$ and finally ${\bf 6}.\,$

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 right **Scroll** 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

Key	Assigned numbers, letters, or characters			
1	1 Space			
2	A B C 2			
3	DEF3			
4	G H 4			
5	JKL5			
6	M N O 6			
7	PQRS7			
8	T U V 8			
9	W X Y Z 9			
0	+ - , . ' / * # & @ 0			

Correcting numbers or names

If you make a mistake while entering a number or name, press the left **Scroll** 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 buttons or speed dial numbers.

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

Using the save modes

Power Save mode

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

- 1 Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press OK when Machine Setup appears.
- 3 Press the Scroll buttons until Power Save appears and press OK.
- 4 Press the Scroll buttons until On appears and press OK.
- 5 Press the Scroll buttons until the time setting you want appears and press OK.
- 6 Press Stop/Clear to return to Standby mode.

Scan Power Save mode

Scan Power Save mode allows you to save power by turning off the scan lamp. The scan lamp under the scanner glass automatically turns off when it is not in actual use to reduce power consumption and extend the life of the lamp. The lamp automatically wakes up after some warm-up time when you start scanning.

You can set the length of time for which the scan lamp waits after a scan job is completed before it switches to the power save mode.

- Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press OK when Machine Setup appears.
- 3 Press the Scroll buttons until Scan PWR Save appears and press OK

- 4 Press the Scroll buttons until the time setting you want appears and press OK.
- 5 Press Stop/Clear to return to Standby mode.

Setting print job timeout

You can set the amount of time a single print job is active before it must print.

The machine handles incoming data as a single job if it comes in within the specified time. When an error occurs while processing data from the computer and the data flow stops, the machine waits the specified time and then cancels printing if data flow does not resume.

- Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press OK when Machine Setup appears.
- 3 Press the Scroll buttons until Job Timeout appears and press OK.
- 4 Press the Scroll buttons until the time setting you want appears and press OK.
- 5 Press Stop/Clear to return to Standby mode.

3 Software overview

This chapter gives you an overview of the software that comes with your machine. Further details about installing and using the software are explained in the **Software Section**.

This chapter includes:

- Supplied software
- · Printer driver features
- · System requirements

Supplied software

You must install the printer and scanner software using the supplied CDs after you have set up your machine and connected it to your computer.

Each CD provides you with the following software:

CD	Contents		
Printer software CD	Windows	Printer driver: Use this driver to take full advantage of your printer's features. 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. SmarThrua: This is the accompanying Windows-based software for your multifunctional machine. Network Scan: This program allows you to scan a document on your machine and save it to a network-connected computer. User's Guide in PDF	
	Linux	Printer driver: Use this driver to run your machine from a Linux computer and print documents. 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.	

CD	Contents			Contents		
Printer software CD (continued)	Macintosh	Printer driver: Use this driver to run your machine from a Macintosh. Scanner driver: TWAIN driver is 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.				
network utilities CD	Windows	SyncThru™ Web Admin Service: Use this web-based program to remotely manage, monitor, and troubleshoot network printers. Set IP: Use this program to set your machine's TCP/IP addresses. Network Printer User's Guide in PDF				

a. Allows you to edit a scanned image in many ways using a powerful image editor and to send the image by email. You can also open another image editor program, like Adobe Photoshop, from SmarThru. For details, please refer to the onscreen help supplied on the SmarThru program.

Printer driver features

Your printer drivers support the following standard features:

- · Paper source selection
- · Paper size, orientation and media type
- · 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: P

Feature	Printer Driver			
l cutaro	Windows	Macintosh	Linux	
Toner save	0	Х	0	
Print quality option	0	0	0	
Poster printing	0	Х	Х	
Multiple pages per sheet (N-up)	О	0	O (2, 4)	
Fit to page printing	0	0	0	
Scale printing	0	0	0	
Different source for first page	О	О	х	
Watermark	0	Х	Х	
Overlay	0	Х	Х	

System requirements

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

Windows

Item	Requirements		Recommended
Operating system	Windows 98/Me/NT 4.0/2000/XP/2003		
CPU	Windows 98/ Me/NT 4.0/2000	Pentium II 400 MHz or higher	Pentium III 933 MHz
	Windows XP/ 2003	Pentium III 933 MHz or higher	Pentium IV 1 GHz
RAM	Windows 98/ Me/NT 4.0/2000	64 MB or more	128 MB
	Windows XP/ 2003	128 MB or more	256 MB
Free disk space	Windows 98/ Me/NT 4.0/2000	300 MB or more	1 GB
	Windows XP/ 2003	1 GB or more	5 GB
Internet Explorer	5.0 or higher		

Note

 For Windows NT 4.0/2000/XP/2003, users who have an administrator right can install the software.

Linux

Item	Requirements	
Operating system	 RedHat 8.0 ~ 9.0 Fedora Core 1, 2, 3 Mandrake 9.2 ~ 10.1 SuSE 8.2 ~ 9.2 	
Processor	Pentium IV 1 GHz or higher	
RAM	256 MB or higher	
Free disk page	1 GB or higher	
Software	Linux Kernel 2.4 or higher Glibc 2.2 or higher CUPS SANE	

Notes

- It's 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.

Macintosh

Item	Requirements
Operating system	Macintosh 10.3 ~ 10.4
RAM	128 MB
Free disk space	200 MB
Connection	USB interface, Network interface

4 Network setup

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

This chapter includes:

- Introduction
- Supported operating systems
- · Configuring TCP/IP
- · Setting Ethernet speed
- · Restoring the network configuration
- · Printing a network configuration page

Introduction

Once you have connected your machine to a network with an RJ-45 Ethernet cable, you can share the machine with other network users.

You need to set up the network protocols on the machine to use it as your network printer. Protocols can be set up by the following two methods:

Via network administration programs

You can configure your machine's print server settings and manage the machine via the following programs that came with your machine:

- SyncThru[™] Web Admin Service: A web-based printer 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 printers from any site with corporate intranet access.
- SyncThru[™] Web Service: A web server embedded to your network print server, which allows you to:
 - Configure the network parameters necessary for the machine to connect to various network environments.
- Customize printer, copy, and fax settings.
- SetIP: A utility program allowing you to select a network interface and manually configure the addresses for use with the TCP/IP protocol.

For further details, refer to the user's guide on the network utilities CD that came with your machine.

Via the control panel

You can set up the following basic network parameters through the machine's control panel:

- · Configure TCP/IP
- · Configure EtherTalk

Supported operating systems

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

Item	Requirements	
Network interface	Ethernet 10/100 Base-TX	
Network operating system	Windows 98/Me/2000/XP/2003 Various Linux OS Macintosh OS 10.3 ~ 10.4	
Network protocols	TCP/IP on Windows IPP, SNMP	
Dynamic addressing server	DHCP, BOOTP	

- TCP/IP: Transmission Control Protocol/Internet Protocol
- IPP: Internet Printing Protocol
- · SNMP: Simple Network Management Protocol
- DHCP: Dynamic Host Configuration Protocol
- · BOOTP: Bootstrap Protocol

Configuring TCP/IP

Your machine can be set up with a variety of TCP/IP network information, such as an IP address, a subnet mask, a gateway, and DNS addresses. There are several ways in which your machine can be assigned a TCP/IP address, depending on your network.

- Static addressing: A TCP/IP address is assigned manually by the system administrator.
- Dynamic addressing via BOOTP/DHCP (default): A TCP/IP address is assigned automatically by the server.



Note

Before configuring TCP/IP, you need to set the network protocol to TCP/IP.

Static addressing

To enter a TCP/IP address from your machine's control panel, take the following steps:

- Press Menu until Network appears on the bottom line of the display and press OK.
- 2 Press OK when TCP/IP appears.
- 3 Press the Scroll buttons until Static appears and press OK.
- 4 Press OK when IP Address appears.

- 5 Enter a byte between 0 and 255 using the number keypad and press the Scroll buttons to move between bytes.
 - Repeat this to complete the address from the 1st byte to the 4th byte.
- 6 When you have finished, press OK.
- 7 Repeat steps 5 and 6 to configure the other TCP/IP parameters: subnet mask and gateway address.
- 8 Press the Scroll buttons until Primary DNS appears and press OK.
- 9 Enter each byte of the address and press OK.
- 10 Press the Scroll buttons until Secondary DNS appears and press OK.
- 11 Enter each byte of the address and press OK.
- 12 Press Stop/Clear to return to Standby mode.

Dynamic addressing (BOOTP/DHCP)

To have a TCP/IP address assigned automatically by the server, take the following steps:

- Press Menu until Network appears on the bottom line of the display.
- 2 Press OK when TCP/IP appears.
- 3 Press the Scroll buttons until DHCP or BOOTP appears and press OK
- 4 Press Stop/Clear to return to Standby mode.

Setting Ethernet speed

You can select the communication speed for Ethernet connections.

- Press Menu until Network appears on the bottom line of the display and press OK.
- 2 Press the Scroll buttons until Ethernet Speed appears and press OK
- 3 Press the Scroll buttons until the speed you want appears and press OK.
- 4 Press Stop/Clear to return to Standby mode.

Restoring the network configuration

You can return the network configuration to its default settings.

- Press Menu until Network appears on the bottom line of the display and press OK.
- 2 Press the Scroll buttons until Clear Setting appears and press OK
- 3 Press OK when Yes appears to restore the network configuration.
- 4 Power the machine off and back on.

Printing a network configuration page

The Network Configuration page shows how the network interface card on your machine is configured.

- Press Menu until Network appears on the bottom line of the display and press OK.
- 2 Press the Scroll buttons until Network Info appears and press OK.
- 3 Press OK when Yes appears.

The Network Configuration page prints out.

5 Loading originals and print media

This chapter introduces you to how to load originals and print media into your machine.

This chapter includes:

- Loading originals
- Selecting print media
- Loading paper
- · Setting the paper size and type

Loading originals

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

On the scanner glass

Make sure that no originals are in the ADF. If an original is detected in the ADF, 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.

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.

Notes

- Leaving the scanner lid open while copying may affect copy quality and toner consumption.
- Dust on the scanner glass may cause black spots on the printout. Always keep it clean.
- If you are copying a page from a book or magazine, lift the 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.

In the ADF

Using the ADF, you can load up to 50 sheets of paper (75 $\mathrm{g/m^2}$, 20 lb) for one job.

When you use the ADF:

- Do not load paper smaller than 142 x 148 mm (6.9 x 5 inches) or larger than 216 x 356 mm (8.5 x 14 inches).
- Do not attempt to load the following types of paper:
- carbon-paper or carbon-backed paper
- coated paper
- onion skin or thin paper
- wrinkled or creased paper
- curled or rolled paper
- torn paper
- · Remove all staples and paper clips before loading.
- 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 having other unusual characteristics.

To load an original into the ADF:

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



2 Adjust the document width guides to the paper size.



Dust on the ADF glass may cause black lines on the printout. Always keep it clean.

Selecting print media

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

- Desired outcome: The print media you choose should be appropriate for your project.
- Size: You can use any size media that fits easily within the paper adjusters of the paper tray.
- · Weight: Your machine supports print media weights as follows:
 - 16 to 43 lb bond (60 to 163 g/m²) for the tray 1 and manual tray
 - 16 to 24 lb bond (60 to 90 g/m²) for the optional tray 2
- · 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 Samsung has no
- Before purchasing large quantities of print media, ensure that it meets the requirements specified in this user's guide.

Using print media that does not meet these specifications may cause problems, requiring repairs. Such repairs are not covered by Samsung's warranty or service agreements.

Supported print media types and sizes

Туре	Size	Dimensions	Weight	Capacity ^a	
	Letter	215.9 x 279 mm (8.5 x 11 inches)	• 60 to 90 g/m ² (16 to 24 lb	1 sheet for the manual tray 150 sheets of 75 g/m² (20 lb bond) paper for the tray 1 250 sheets of 75 g/m² (20 lb bond) paper for the optional tray 2	
	Legal	215.9 x 355.6 mm (8.5 x 14 inches)	bond) for the optional tray		
	Folio	215.9 x 330.2 mm (8.5 x 13 inches)	• 60 to 105 g/m ² (16 to 28 lb		
	Oficio	215 x 340 mm (8.5 x 13.5 inches)	bond) for the tray 1 and manual tray		
Plain paper	A4	210 x 297 mm (8.27 x 11.69 inches)	- mandar day		
	JIS B5	182 x 257 mm (7.17 x 10.12 inches)			
	Executive	184.2 x 266.7 mm (7.25 x 10.5 inches)			
	A5	148.5 x 210 mm (5.85 x 8.27 inches)			
	A6	105 x 148.5 mm (4.13 x 5.85 inches)			
Envelope -	ISO/Envelope B5	176 x 250 mm(6.93 x 9.84 inches)			
	Envelope Monarch	98.4 x 190.5 mm (3.88 x 7.5 inches)		1 sheet for the manual tray or tray 1	
	Envelope COM-10	105 x 241 mm (4.12 x 9.5 inches)			
	Envelope No.9	98 x 225 mm (3.86 x 8.86 inches)	75 to 90 g/m ² (20 to 24 lb)		
	Envelope DL	110 x 220 mm (4.33 x 8.66 inches)	75 to 90 g/m (20 to 24 lb)		
	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 size 6 3/4	92 x 165 mm (3.62 x 6.5 inches)			
Transparency	Letter, A4	Refer to the Plain paper section	138 to 146 g/m ² (37 to 39 lb)	1 sheet for the manual tray or tray 1	
Labels	Letter, Legal, Folio, Oficio, A4, JIS B5, Executive, A5, A6	Refer to the Plain paper section	120 to 150 g/m ² (32 to 40 lb)	1 sheet for the manual tray or tray 1	
Card stock	Letter, Legal, Folio, Oficio, A4, JIS B5, Executive, A5, A6	Refer to the Plain paper section	105 to 163 g/m ² (28 to 43 lb)	1 sheet for the manual tray or tray 1	
Minimum size (custom)		76 x 127 mm (3 x 5 inches)	60 to 163 g/m ²	1 sheet for the manual tray	
Maximum size (custom)		216 x 356 mm (8.5 x 14 inches)	(16 to 43 lb bond)	or tray 1	

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

Media sizes supported in each mode

Mode	Size	Source
Copy mode	Letter, A4, Legal, Oficio, Folio, Executive, JIS B5, A5, A6	tray 1 optional tray 2 manual tray
Print mode	All sizes supported by the machine	tray 1 optional tray 2 manual tray
Fax mode ^a	Letter, A4, Legal	tray 1 optional tray 2

a. CLX-3160FN only

Guidelines for selecting and storing print media

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

- · Always use print media that conform with the specifications listed on
- · Attempting to print on damp, curled, wrinkled, or torn paper can cause paper jams and poor print quality
- · For the best print quality, use only high quality copier grade paper specifically recommended for use in laser printers.
- · Avoid using the following media types:
 - Paper with embossed lettering, perforations, or a texture that is too smooth or too rough
 - Erasable bond paper
 - Multi-paged paper
 - Synthetic paper and thermally reactive paper
 - Carbonless paper and Tracing paper.

Use of these types of paper could result in paper jams, chemical smells, and damage to your machine.

- · Store print media in its ream wrapper until you are ready to use it. Place cartons on pallets or shelves, not on the floor. Do not place heavy objects on top of the paper, whether it is packaged or unpackaged. Keep it away from moisture or other conditions that can cause it to wrinkle or curl.
- Store unused print media at temperatures between 15° C and 30° C (59° F to 86° F). The relative humidity should be between 10% and
- · Store unused print media in a moisture-proof wrap, such as a plastic container or bag, to prevent dust and moisture from contaminating your paper.
- · Load special media types one sheet at a time through the manual tray to avoid paper jams.
- · To prevent print media, such as transparencies and label sheets, from sticking together, remove them as they print out.

Guidelines for special print media

Media type	Guidelines		
Envelopes	Successful printing on envelopes depends upon the quality of the envelopes. When selecting envelopes, consider the following factors: Weight: The weight of the envelope paper should not exceed 90 g/m² (24 lb) or jamming may occur. Construction: Prior to printing, envelopes should lie flat with less than 6 mm (0.25 inches) curl, and should not contain air. Condition: Envelopes should not be wrinkled, nicked, or otherwise damaged. Temperature: You should use envelopes that are compatible with the heat and pressure of the machine during operation. Use only well-constructed envelopes with sharp and well creased folds. Do not use stamped envelopes. Do not use envelopes with clasps, snaps, windows, coated lining, self-adhesive seals, or other synthetic materials. Do not use damaged or poorly made envelopes. Be sure the seam at both ends of the envelope extends all the way to the corner of the envelope.		
	Envelopes with a peel-off adhesive strip or with more than one flap that folds over to seal must use adhesives compatible with the machine's fusing temperature of 180° C (356° F) for 0.1 second. The extra flaps and strips might cause wrinkling, creasing, or jams, and may even damage the fuser. For the best print quality, position margins no closer than 15 mm (0.6 inches) from the edges of the envelope. Avoid printing over the area where the envelope's seams meet.		

Media type	Guidelines	
Transparencies	 To avoid damaging the machine, use only transparencies designed for use in laser printers. Transparencies used in the machine must be able to withstand 180° C (356° F), the machine's fusing temperature. Place them on a flat surface after removing them from the machine. Do not leave them in the paper tray for long periods of time. Dust and dirt may accumulate on them, resulting in spotty printing. To avoid smudging caused by fingerprints, handle them carefully. To avoid fading, do not expose printed transparencies to prolonged sunlight. Ensure that transparencies are not wrinkled, curled, or have any torn edges. 	
Labels	 To avoid damaging the machine, use only labels designed for use in laser printers. When selecting labels, consider the following factors: Adhesives: The adhesive material should be stable at 180° C (356° F), the machine's fusing temperature. Arrangement: Only use labels with no exposed backing between them. Labels can peel off sheets that have spaces between the labels, causing serious jams. Curl: Prior to printing, labels must lie flat with no more than 13 mm (5 inches) of curl in any direction. Condition: Do not use labels with wrinkles, bubbles, or other indications of separation. Make sure that there is no exposed adhesive material between labels. Exposed areas can cause labels to peel off during printing, which can cause 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 or custom-sized materials	Do not print on media smaller than 76 mm (3 inches) wide or 127 mm (5 inches) long. In the software application, set margins at least 6.4 mm (0.25 inches) away from the edges of the material.	

Media type	Guidelines	
Preprinted paper	Letterhead must be printed with heat-resistant ink that will not melt, vaporize, or release hazardous emissions when subjected to the machine's fusing temperature of 180° C (356° F) for 0.1 second. Letterhead ink must be non-flammable and should not adversely affect printer rollers. Forms and letterhead should be sealed in a moisture-proof wrapping to prevent changes during storage. Before you load preprinted paper, such as forms and letterhead, verify that the ink on the paper is dry. During the fusing process, wet ink can come off preprinted paper, reducing print quality.	

Loading paper

In the tray 1

Load the print media you use for the majority of your print jobs in the tray 1. The tray 1 can hold a maximum of 150 sheets of 20 lb plain paper.

You can purchase an optional tray 2 and attach it below the tray 1 to load an additional 250 sheets of paper. For order information for an optional optional tray 2, see page 12.1.

Loading paper in the tray 1

- 1 Pull open the paper tray and load paper.
 - You can load letterhead with the design side face up. The top edge of the sheet with the logo should be go into the machine first.
- 2 After loading paper, set the paper type and size for the tray 1. See page 5.8 for copying and faxing or the Software Section for PCprinting.



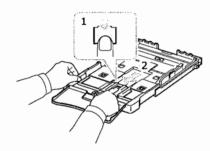
- If you experience problems with paper feed, place one sheet at a time in the manual tray.
- · You can load previously printed paper. The printed side should be facing down with an uncurled edge into the machine. If you experience problems with paper feed, turn the paper around. Note that print quality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

Changing the size of the paper in the tray 1

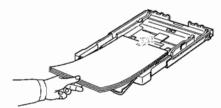
To load longer sizes of paper, such as Legal-sized paper, you need to adjust the paper guides to extend the paper tray.

To change the tray 1 size to other size, you must adjust the paper length guide properly.

- Pull the tray 1 out of the machine. Open the paper cover and remove paper from the tray 1 if necessary.
- Pressing and unlatching the guide lock in the top of the tray, pull the tray out.



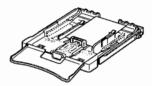
3 Load paper into the tray.



Slide the paper length guide until it lightly touches the end of the paper stack. Squeeze the paper width guide and slide it to the edge of the paper stack without causing it to bend.



For paper smaller than Letter-sized, return the paper guides to their original positions and adjust the paper length guide and paper width guide.



Notes

- · Do not push the paper width guides far enough to cause the material to warp.
- · If you do not correctly adjust the paper width guides, it may cause a paper jams.



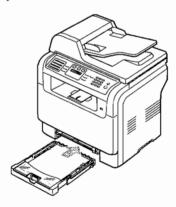




Close the paper cover.



Slide the tray 1 back into the machine.

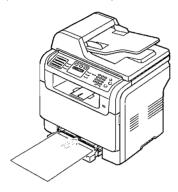


In the manual tray

The manual tray can hold special sizes and types of print material, such as transparencies, postcards, note cards, labels, and envelopes. It is useful for single page printing on letterhead or colored paper.

To load paper in the manual tray:

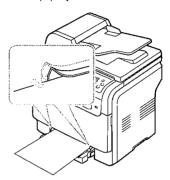
Load the paper with the side to be printed on facing up.



Depending on the media type you are using, keep the following loading guidelines:

- · Envelopes: Flap side down and with the stamp area on the top left
- Transparencies: Print side up and the top with the adhesive strip entering the machine first.
- · Labels: Print side up and top short edge entering the machine
- · Preprinted paper: Design side up with the top edge toward the
- · Card stock: Print side up and the short edge entering the machine
- · Previously printed paper: Previously printed side down with an uncurled edge toward the machine.

Squeeze the manual tray paper width guides and adjust them to the width of the paper. Do not force too much, or the paper will be bent, which will result in a paper jam or skew.



- After loading paper, set the paper type and size for the manual tray. See page 5.8 for copying and faxing or the Software Section for PC-printing.
 - Note
 - · The settings made from the printer driver override the settings on the control panel.

Tips on using the manual tray

- · Load only one size of print media at a time in the manual tray.
- To prevent paper jams, do not add paper when there is still paper in the manual tray. This also applies to other types of print media.
- · Print media should be loaded face up with the top edge going into the manual tray first and be placed in the center of the tray.
- Always load only the print media specified in page 5.2 to avoid paper jams and print quality problems.
- Flatten any curl on postcards, envelopes, and labels before loading them into the manual tray.

Setting the paper size and type

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

- Press Menu until System Setup appears on the bottom line of the display and press OK.
- Press the Scroll buttons until Paper Setup appears and press OK.
- Press OK when Paper Size appears.
- Press the Scroll buttons until the paper tray you want appears and press OK.
- Press the Scroll buttons until the paper size you are using appears and press OK.
- Press Back to return to the upper level.
- Press the Scroll buttons until Paper Type appears and press OK.
- Press the Scroll buttons until the paper type you are using appears and press OK.
- Press Stop/Clear to return to Standby mode.

6 Copying

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

This chapter includes:

- Selecting the paper tray
- Copying
- Changing the settings for each copy
- · Changing the default copy settings
- · Using special copy features
- · Setting copy timeout

Selecting the paper tray

After loading the print media for copy output, you must select the paper tray you will use for copy jobs.

- 1 Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press the Scroll buttons until Paper Setup appears and press OK.
- 3 Press the Scroll buttons until Paper Source appears and press OK.
- 4 Press OK when Copy Tray appears.
- 5 Press the Scroll buttons until the paper tray you want appears and press OK.
- 6 Press Stop/Clear to return to Standby mode.

Copying

Press Copy.

Ready to Copy appears on the top line of the display.

2 Load originals face up into the ADF, or place a single original face down on the scanner glass.

For details about loading an original, see page 5.1.

- 3 Enter the number of copies using the number keypad, if necessary.
- 4 If you want to customize the copy settings including copy size, darkness, and original type, by using the **control panel** buttons. See page 6.1.

If necessary, you can use special copy features, such as poster copying, 2- or 4-up copying. See page 6.2.

5 Press Color Start to begin color copying.

Or, press Black Start to begin black and white copying.

Note

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

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.

Not

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

Darkness

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

To adjust the darkness of copies, press **Darkness**. Each time you press the button, the following modes are available:

- · Normal: Works well with standard typed or printed originals.
- · Light: Works well with dark print.
- · Dark: Works well with light print or faint pencil markings.

Original Type

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

To select the document type, press **Original Type**. Each time you press the button, the following modes are available:

- · Text: Use for originals containing mostly text.
- Text/Photo: Use for originals with mixed text and photographs.
- Photo: Use when the originals are photographs.

Reduced or enlarged copy

By using the Reduce/Enlarge button, 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 ADF.

To select from the predefined copy sizes:

- Press Reduce/Enlarge.
- Press Reduce/Enlarge or the Scroll buttons until the size setting you want appears and press OK.

To scale the copy by directly entering the scale rate:

- Press Reduce/Enlarge. 1
- Press Reduce/Enlarge or the Scroll buttons until Custom appears and press OK.
- Enter the scale rate and press **OK** to save the selection.

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, 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.

- Press Copy
- Press Menu until Copy Setup appears on the bottom line of the display and press OK.
- Press OK when Change Default appears.
- Press the Scroll buttons until the setup option you want appears and press OK.
- Press the Scroll buttons until the setting you want appears and
- Repeat steps 4 through 5, as needed.
- Press Stop/Clear to return to Standby mode.

Note

· 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:

Collation



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.

- Press Copy.
- Load originals face up into the ADF. For details about loading an original, see page
- Enter the number of copies using the number 3
- Press Menu until Copy Feature appears on the bottom line of the display and press OK.
- Press OK when Copy Collation appears.
- Press the Scroll buttons to select Yes.
- Press Color Start to begin color copying.

Or, press Black Start to begin black and white copying.

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

2-up or 4-up copying



2-up copying

4-up copying

Your machine can print 2 or 4 original images reduced to fit onto one sheet of paper.

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

- Press Copy.

- Load originals face up in the ADF, or place a single original face down on the scanner glass.
 - For details about loading an original, see page
- Press Menu until Copy Feature appears on the bottom line of the display and press OK.
- Press the Scroll buttons until 2-Up or 4-Up appears and press OK.
- Press the Scroll buttons to select Yes.

6 Press Color Start to begin color copying.

Or, press Black Start to begin black and white copying.

· You cannot adjust the copy size using the Reduce/Enlarge button for making a 2- or 4-up copy.

ID card copying



of A4-, Letter-, Legal-, Folio-, Oficio-, Executive-, B5-, A5-, or A6-sized paper. When you copy using this feature, 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

Your machine can print 2-sided originals on one sheet

copying a small-sized item, such as a name card. This copy feature is available only when you place originals on the scanner glass.

the size of the original. This feature is helpful for

- Press Copy.
- Place a single original face down on the scanner

For details about loading an original, see page

- Press Menu until Copy Feature appears on the bottom line of the display and press OK.
- Press the Scroll buttons until ID Copy appears and press OK.

Place Front Page and Press[Start] appears on the display.

Press OK, Color Start or Black Start.

Your machine begins scanning the front side and shows Place Back Page and Press[Start].

Open the scanner lid and turn the original over.



Note

· If you press Stop/Clear or if no buttons are pressed for approximately 15 seconds, the machine cancels the copy job and returns to Standby mode. 7 Press Color Start to begin color copying.

Or, press Black Start to begin black and white copying.

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

Poster copying





Your machine can print an image onto 9 sheets of paper (3x3). 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.

- Press Copy.
- Place a single original face down on the scanner

For details about loading an original, see page 5.1.

- Press Menu until Copy Feature appears on the bottom line of the display and press OK.
- Press the Scroll buttons until Poster Copy appears and press OK.
- 5 Press the Scroll buttons to select Yes.
- Press Color Start to begin color copying.
- Or, press Black Start to begin black and white copying. Press Color Start to begin color copying.

Or, press Black Start to begin black and white copying.



Note

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

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



Your machine can print multiple image copies from the original document on a single page. The number of images is automatically determined by the original image and paper size.

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

- 1 Press Copy.
- 2 Place a single original face down on the scanner glass.

For details about loading an original, see page 5.1

- 3 Press Menu until Copy Feature appears on the bottom line of the display and press OK.
- 4 Press the Scroll buttons until Clone Copy appears and press OK.
- 5 Press the Scroll buttons to select Yes.
- 6 Press Color Start to begin color copying.

Or, press **Black Start** to begin black and white copying.

Note

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

Erasing background images

You can set the machine 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. This copy feature is only for mono copying.

- 1 Press Copy
- 2 Load originals face up into the ADF, or place a single original face down on the scanner glass.

For details about loading an original, see page 5.1.

- 3 Press Menu until Copy Feature appears on the bottom line of the display and press OK.
- 4 Press the Scroll buttons until Erase Bkgd. appears and press OK.
- 5 Press the Scroll buttons to select On and press OK.
- 6 Press Stop/Clear to return to Standby mode.
- 7 Enter the number of copies using the number keypad.
- 8 Press Black Start to begin mono copying.

Setting copy timeout

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

- 1 Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press OK when Machine Setup appears.
- 3 Press the Scroll buttons until Timeout appears and press OK.
- 4 Press the Scroll buttons until the time setting you want appears.
 Selecting Off means that the machine does not restore the default settings until you press Black Start or Color Start to begin copying, or Stop/Clear to cancel.
- 5 Press OK to save your selection.
- 6 Press Stop/Clear to return to Standby mode.

7 Basic printing

This chapter explains common printing tasks.

Printing a document

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

For details about printing, see the Software Section.

Canceling a print job

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

- 1 Click the Windows Start menu.
- 2 For Windows 98/NT 4.0/2000/Me, select Settings and then Printers

For Windows XP/2003, select Printers and Faxes.

- 3 Double-click the Samsung CLX-3160 Series icon.
- From the Document menu, select Cancel Printing (Windows 98/ Me) or Cancel (Windows NT4.0/2000/XP/2003).

Note

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

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

8 Scanning

Scanning with your machine lets you turn pictures and text into digital files that can be stored on your computer. Then you can fax or email the files, upload them to your website, or use them to create projects that you can print.

This chapter includes:

- Scanning basics
- · Scanning to an application using a local connection
- · Scanning using a network connection

Note

 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.

Scanning basics

Your machine offers the following ways to scan an image using a local connection:

- Via one of the preset imaging applications. Scanning an image launches the selected application, enabling you to control the scanning process. See the next section.
- Via the SmarThru[™] program supplied with your machine. Scanning an image launches SmarThru[™] and enables you to control the scanning process.
- Via the Windows Images Acquisition (WIA) driver. See the Software Section.
- To a portable USB memory device, if inserted into the USB memory port on your machine. See page 11.2.

Also, you can send scanned images to several destinations using a network connection:

 To your networked computer via the Network Scan program. You can scan an image from the machine, if network-connected, to the computer where the Network Scan program is running.

Scanning to an application using a local connection

- 1 Make sure that your machine and computer are turned on and properly connected to each other.
- 2 Load originals face up into the ADF, or place a single original face down on the scanner glass.

For details about loading an original, see page 5.1.

3 Press Scan.

Ready to Scan appears on the top line of the display.

- 4 Press the Scroll buttons until Scan to Appl. appears on the bottom line of the display and press OK.
- 5 Press the Scroll buttons until the application you want to use appears and press OK.
 - Microsoft Paint: Sends the scanned image to Microsoft Paint.
 - My Document: Saves the scanned image in the default folder, My Documents, on your computer.
 - SmarThru: Sends the scanned image to SmarThru™, installed with the printer driver.
 - OCR: Sends the scanned image to the OCR program for text recognition.

Note

- You can add more TWAIN-compliant software for scanning, such as Adobe Photoshop Deluxe, or Adobe Photoshop, from the Printer Settings Utility. See the Software Section.
- 6 On the selected application, adjust the scan settings and begin scanning.

For details, please refer to the application user's guide.

Scanning using a network connection

If you have connected your machine to a network and set up network parameters correctly, you can scan and send images over the network.

Preparing for network scanning

Before using your machine's network scanning features, you need to add the machine to the Network Scan program for scanning to a network client

Adding the machine to the Network Scan program

First, install the Network Scan program. See the Software Section.

To scan images from your machine to your computer through the network, you need to register the machine as an authorized network scanner in the **Network Scan** program.

- 1 In Windows, select Start → Programs → Samsung Network Printer Utilities → Network Scan → Network Scan.
 - The Samsung Network Scan Manager window opens.
- 2 Click the Add Device button or double-click the Add Device icon.
- 3 Click Next.
- 4 Select Browse for a scanner. (recommended), or select Connect to this scanner. and enter the IP address of your machine.
- 5 Click Next.

A list of the scanners on your network appears.

6 Select your machine from the list and enter a name, user ID, and PIN (Personal Identification Number) for the machine.



Notes

- For the scanner name, the model name of your machine is automatically entered, but can be changed.
- You can enter an ID of up to 8 characters. The first character must be a letter.
- The PIN must be 4 digits.
- 7 Click Next.
- 8 Click Finish

Your machine is added to the **Network Scan** program and you can now scan images through the network.



Note

 You can change the scanner properties of your machine and the scan settings from the Samsung Network Scan Manager window. Click Properties and set the options in each tab.

Scanning to a network client

Network Scan allows you to remotely scan an original from your network-connected machine to your computer in JPEG, TIFF, or PDF file format.

Scanning

- 1 Make sure that your machine and the computer are connected to a network and Network Scan is running on the computer.
- 2 Load originals face up into the ADF, or place a single original face down on the scanner glass.

For details about loading an original, see page 5.1.

- 3 Press Scan.
- 4 Press the Scroll buttons until Network Scan appears on the bottom line of the display and press OK.
- 5 Enter the ID you have set in the Samsung Network Scan Manager window and press OK.
- 6 Enter the PIN you have set in the Samsung Network Scan Manager window and press OK.
- 7 The scanning is started and sent to the application on the computer where the Network Scan program is running.

OR

Press the **Scroll** buttons to select the application you will use and press **OK**. And press **Color Start** or **Black Start** to start scanning.

OR

Press the **Scroll** buttons until the scan setting option you want appears and press **Color Start** or **Black Start** to start scanning.

- Scan Size: Sets the image size.
- Original Type: Sets the original document'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. When you select TIFF or PDF, you can select to scan multiple pages.

Setting network scan timeout

If the **Network Scan** program on your computer does not send a refresh request and does not scan a job within a specified timeout period, your machine cancels the scan job. You can change this timeout setting as needed.

- 1 Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press OK when Machine Setup appears.
- 3 Press the Scroll buttons until NetScan Timeout appears and press OK.

4 Enter the desired timeout value and press OK.

The change will be broadcast over the network and will apply to all clients connected to the network.

5 Press Stop/Clear to return to Standby mode.

Changing the default scan settings

To avoid having to customize the scan settings for each job, you can set up default scan settings for USB scan.

- 1 Press Scan.
- 2 Press Menu until Scan Setup appears on the bottom line of the display and press OK.
- 3 Press OK when Change Default appears.
- 4 Press OK when USB Memory appears.
- 5 Press the Scroll buttons until the scan setting option you want appears and press OK.
- 6 Press the **Scroll** buttons until the desired status appears and press **OK**
- 7 Repeat steps 5 and 6 to change other settings.
- 8 Press Stop/Clear to return to Standby mode.

9 Faxing (CLX-3160FN only)

The fax feature is available only on the CLX-3160FN. This chapter gives you information about using your machine as a fax machine.

This chapter includes:

Sending a fax

- · Setting the fax header
- · Adjusting the document settings
- · Sending a fax automatically
- · Sending a fax manually
- · Confirming a transmission
- · Automatic redialing
- · Redialing the last number

Receiving a fax

- Selecting the paper tray
- · Changing receiving modes
- · Receiving automatically in Fax mode
- · Receiving manually in Tel mode
- · Receiving manually using an extension telephone
- · Receiving automatically in Ans/Fax mode
- · Receiving faxes using DRPD mode
- · Receiving in secure receiving mode
- Receiving faxes in memory

Other ways to fax

- Sending a fax to multiple destinations
- · Sending a delayed fax
- · Sending a priority fax
- Forwarding faxes

Sending a fax

Setting the fax header

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

- 1 Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press OK when Machine Setup appears.
- 3 Press OK when Machine ID appears.
- 4 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 **0** button.

For details on how to enter alphanumeric characters, see page 2.3.

- 5 Press OK to save the ID.
- 6 Press the Scroll buttons until Machine Fax No. appears and press
- 7. Enter your fax number using the number keypad and press OK.
- 8 Press Stop/Clear to return to Standby mode.

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 produce 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 Resolution.
- 2 Press Resolution or the Scroll buttons until the option you want appears.
- 3 Press OK to save your selection.

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.	
	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.	
Super Fine	Notes 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.	
Color Fax	Originals with colors. Sending a color fax is enabled only if the machine with which you are communicating supports color fax reception and you send the fax manually. In this mode, memory transmission is not available.	

Note



· The resolution setting is applied to the current fax job. To change the default setting, see page 10.2.

Darkness

You can select the default contrast mode to fax your originals lighter or darker.

- Press Menu, and then OK when Fax Feature appears on the bottom line of the display.
- Press OK when Darkness appears.
- Press the Scroll buttons until the option you want appears and
- Press Stop/Clear to return to Standby mode.

Note

· The darkness setting is applied to the current fax job. To change the default setting, see page 10.2.

Sending a fax automatically

- Press Fax.
- Load originals face up into the ADF, or place a single original face down on the scanner glass.

For details about loading an original, see page 5.1.

Ready to Fax appears on the top line of the display.

- Adjust the resolution and the darkness to suit your fax needs.
- Enter the receiving fax machine's number.

You can use speed buttons, speed dial numbers, or group dial numbers. For details about storing and searching for a number, see

- Press Color Start or Black Start.
- 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 at the Another Page? prompt.

After the number is dialed, the machine begins sending the fax when the receiving fax machine answers.

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

Sending a fax manually

- Press Fax.
- Load originals face up into the ADF, or place a single original face down on the scanner glass.

For details about loading an original, see page 5.1.

- Adjust the resolution and the darkness to suit your fax needs. See page 9.1.
- Press On Hook Dial. You hear a dial tone.
- Enter the receiving fax machine's number.

You can use speed buttons, speed dial numbers, or group dial numbers. For details about storing and searching for a number, see page 10.2.

Press Color Start or Black 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 Standby 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 page 14.5. 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 page 10.1.

Automatic redialing

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

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

To change the time interval between redials and the number of redial attempts. See page 10.1.

Redialing the last number

To redial the number you called last:

1 Press Redial/Pause.

Or, press and hold **Redial/Paus**e to access the numbers you have dialled recently. Press the **Scroll** buttons until the number you want appears and press **OK**, **Color Start** or **Black Start**.

When an original is loaded in the ADF, 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** at the **Another Page?** prompt.

Receiving a fax

Selecting the paper tray

After loading the print media for fax output, you have to select the paper tray you will use for the fax reception.

- Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press the Scroll buttons until Paper Setup appears and press OK.
- 3 Press the Scroll buttons until Paper Source appears and press OK.
- 4 Press the Scroll buttons until Fax Tray appears and press OK.
- 5 Press the Scroll buttons until the paper tray you want appears and press OK.
- 6 Press Stop/Clear to return to Standby mode.

Changing receiving modes

- Press Fax.
- 2 Press Menu until Fax Setup appears on the bottom line of the display and press OK.
- 3 Press the Scroll buttons until Receiving appears and press OK.
- 4 Press OK when Receive Mode appears.
- 5 Press the Scroll buttons until the fax reception mode you want appears.
 - In Fax mode, the machine answers an incoming fax call and immediately goes into the fax reception mode.
 - In Tel mode, you can receive a fax by pressing On Hook Dial and then Color Start or Black Start. You can also pick up the handset of the extension phone and then press the remote receive code. See page 9.4.
 - In Ans/Fax mode, an answering machine attached to 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. See page 9.4.
 - In DRPD mode, you can receive a call using the Distinctive Ring Pattern Detection (DRPD) feature. Distinctive Ring is a telephone company service which enables an user to use a single telephone line to answer several different telephone numbers. For further details, see page 9.4.
- 6 Press OK to save your selection.

7 Press Stop/Clear to return to Standby mode.

Notes

- When your machine's memory is full, the receiving mode automatically switches to Tel.
- 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 page 9.5.

Receiving automatically in Fax mode

Your machine is preset to **Fax** mode at the factory. When you receive a fax, the machine answers the call on a specified number of rings and automatically receives the fax.

To change the number of rings, see page 10.1.

Receiving manually in Tel mode

You can receive a fax call by pressing **On Hook Dial** and then pressing **Black Start** or **Color Start** when you hear a fax tone from the remote machine.

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

Receiving manually using an extension telephone

This features 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 $\star 9 \star$ 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 page 10.1.

Receiving automatically in Ans/Fax mode

To use this mode, you must attach an answering machine to the EXT socket on the back of your machine.

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.

Notes

- If you have set your machine to Ans/Fax mode and your answering machine is switched off, or no answering machine is connected to EXT 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 (manual reception) when the answering machine is connected to your machine, you must switch off the answering machine, or the outgoing message from the answering machine will interrupt your phone conversation.

Receiving 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 by the fax machine. Unless you change it, this ringing pattern will continue to be recognized and answered as a fax call, and all other ringing patterns will be forwarded to the extension telephone or answering machine plugged into the EXT 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.
- 2 Press Menu until Fax Setup appears on the bottom line of the display and press OK.
- 3 Press the Scroll buttons until Receiving appears and press OK.
- 4 Press the Scroll buttons until DRPD Mode appears and press OK.
 Waiting Ring appears on the display.

- Call your fax number from another telephone. It is not necessary to place the call from a fax machine.
- 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 Mode appears and start over from step 4.

Press Stop/Clear to return to Standby mode

When the DRPD feature is set up, the DRPD option is available for the receiving mode setting. To receive faxes in DRPD mode, you need to set the menu to DRPD.

- · 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

- Press Fax.
- Press Menu and then press OK when Fax Feature appears on the bottom line of the display.
- Press the Scroll buttons until Secure Receive appears and press
- Press the Scroll buttons until On appears and press OK.
- 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.
- Re-enter the password to confirm it and press OK.
- Press Stop/Clear to return to Standby 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

- Access the Secure Receive menu by following steps 1 through 3 in "Activating secure receiving mode.
- Press the Scroll buttons until Print appears and press OK.
- Enter the four-digit password and press OK. The machine prints all of the faxes stored in memory.

Deactivating secure receiving mode

- Access the Secure Receive menu by following steps 1 through 3 in "Activating secure receiving mode."
- Press the Scroll buttons until Off appears and press OK.
- Enter the four-digit password and press OK. The mode is deactivated and the machine prints all faxes stored in memory.
- Press Stop/Clear to return to Standby 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.

Also, your machine receives faxes and stores them in its memory when there is no paper in the tray or no toner in the installed toner cartridge.

Other ways to fax

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 can not send a color fax using this feature.

- 1 Press Fax.
- 2 Load originals face up into the ADF, or place a single original face down on the scanner glass.
 - For details about loading an original, see page 5.1.
- 3 Adjust the document resolution and darkness to suit your fax needs. See page 9.1.
- 4 Press Menu until Fax Feature appears on the bottom line of the display and press OK.
- 5 Press the Scroll buttons until Multi Send appears and press OK.
- 6 Enter the number of the first receiving fax machine and press OK. You can use speed buttons, speed dial numbers, or group dial numbers. For details, see page 10.2.
- 7 Enter the second fax number and press OK.
 - The display asks you to enter another fax number to send the document.
- 8 To enter more fax numbers, press OK when Yes appears and repeat steps 6 and 7. You can add up to 209 destinations.

Not

- You cannot use group dial numbers for another fax number.
- 9 When you have finished entering fax numbers, press the Scroll buttons to select No at the Another No.? prompt and press OK.
 - The original is scanned into memory before transmission. The display shows memory capacity and the number of pages being stored in memory.
- 10 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 at the Another Page? prompt.
 - The machine begins sending the fax to the numbers you entered in the order in which you entered them.

Sending a delayed fax

You can set your machine to send a fax at a later time when you will not be present. You can not send a color fax using this feature.

- 1 Press Fax
- 2 Load originals face up into the ADF, or place a single original face down on the scanner glass.
 - For details about loading an original, see page 5.1.
- 3 Adjust the document resolution and darkness to suit your fax needs. See page 9.1.
- 4 Press Menu until Fax Feature appears on the bottom line of the display and press OK.
- 5 Press the Scroll buttons until Delay Send appears and press OK.
- 6 Enter the number of the receiving machine using the number keypad.
 - You can use speed buttons, speed dial numbers, or group dial numbers. For details, see page 10.2.
- 7 Press OK to confirm the number. The display asks you to enter another fax number to which to send the document.
- 8 To enter more fax numbers, press **OK** when **Yes** appears and repeat steps 6 and **7**. You can add up to 10 destinations.

Note

- You cannot use group dial numbers for another fax number.
- 9 When you have finished entering fax numbers, press the Scroll buttons to select No at the Another No.? prompt and press OK.
- 10 Enter the job name you want and press OK.
 - For details on how to enter alphanumeric characters, see page 2.3. If you do not want to assign a name, skip this step.
- 11 Enter the time using the number keypad and press OK, or Black Start

∴Note

 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. The display shows memory capacity and the number of pages being stored in memory.

12 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 at the Another Page? prompt.

The machine returns to Standby mode. The display reminds you that you are in Standby mode and that a delayed fax is set.

Adding pages to a delayed fax

You can add pages to the delayed transmissions previously reserved in your machine's memory.

- 1 Load the originals to be added and adjust document settings.
- 2 Press Menu until Fax Feature appears on the bottom line of the display and press OK.
- 3 Press OK when Add Page appears.
- 4 Press the Scroll buttons until the fax job you want appears and press OK.

The machine scans the original into memory and shows the total number of pages and the number of the added pages.

Canceling a delayed fax

- 1 Press Menu until Fax Feature appears on the bottom line of the display and press OK.
- 2 Press the Scroll buttons until Cancel Job appears and press OK.
- 3 Press the Scroll buttons until the fax job you want appears and press OK.
- 4 Press OK when Yes appears.

The selected fax is deleted from memory.

Sending a priority fax

Using the Priority Fax feature, a high priority fax can 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 Multiple Send operation between stations (i.e., when the transmission to station A ends, before transmission to station B begins) or between redial attempts.

- 1 Press Fax.
- 2 Load originals face up into the ADF, or place a single original face down on the scanner glass.
 - For details about loading an original, see page 5.1.
- 3 Adjust the document resolution and darkness to suit your fax needs. See page 9.1.
- 4 Press Menu until Fax Feature appears on the bottom line of the display and press OK.
- 5 Press the Scroll buttons until Priority Send appears and press OK.

- 6 Enter the number of the receiving machine.
 - You can use speed buttons, speed dial numbers, or group dial numbers. For details, see page 10.2.
- 7 Press OK to confirm the number.
- 8 Enter the job name you want and press OK.
 - The original is scanned into memory before transmission. The display shows memory capacity and the number of pages being stored in memory.
- 9 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 at the Another Page? prompt.

The machine shows the number being dialed and begins sending the fax

Forwarding faxes

You can forward your incoming and outgoing faxes to another fax machine. You can not send a color fax using this feature.

Forwarding sent faxes

You can set the machine to send copies of all outgoing faxes to a specified destination, in addition to the fax numbers you entered.

- 1 Press Fax.
- 2 Press Menu until Fax Feature appears on the bottom line of the display and press OK.
- 3 Press the Scroll buttons until Send Forward appears and press OK.
- 4 Press the Scroll buttons to select On and press OK.
- 5 Enter the number of the fax machine to which faxes are to be sent and press OK.
- 6 Press Stop/Clear to return to Standby mode.
 - Subsequent sent faxes will be forwarded to the specified fax machine.

Forwarding received faxes

You can set your machine to forward incoming faxes to another fax number during a specified time period. When a fax arrives at your machine, it is stored in memory. Then, the machine dials the fax number that you have specified and sends the fax.

- 1 Press Fax
- 2 Press Menu until Fax Feature appears on the bottom line of the display and press OK.
- 3 Press the Scroll buttons until Rcv. Forward appears and press OK.
- 4 Press the Scroll buttons until Forward appears and press OK.
 - To set the machine to print out a fax when fax forwarding has been completed, select **Forward&Print**.
- 5 Enter the number of the fax machine to which faxes are to be sent and press OK.
- 6 Enter the starting time and press OK.
- 7 Enter the ending time and press OK.
- 8 Press Stop/Clear to return to Standby mode.

Subsequent received faxes will be forwarded to the specified fax machine.

10 Fax setup (CLX-3160FN only)

This chapter gives you information on setting up your machine for receiving and sending faxes.

This chapter includes:

- · Changing the fax setup options
- · Changing the default document settings
- · Printing sent fax report automatically
- · Setting up Phone Book

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.
- 2 Press Menu until Fax Setup appears on the bottom line of the display and press OK.
- 3 Press the Scroll buttons to select Sending or Receiving and press
- 4 Press the Scroll buttons until the menu item you want appears and press OK.
- 5 Press the Scroll buttons until the desired status appears or enter the value for the option you have selected, and press OK.
- 6 If necessary, repeat steps 4 through 5.
- 7 Press Stop/Clear to return to Standby mode.

Sending options

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.

Option	Description
ECM Mode ^a	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.
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 ^b	You can prevent the actual faxed material from being included in the confirmation report for privacy or security protection.

- a. Error Correction Mode
- b. Transmission Confirmation Report

Receiving options

Option	Description
Receive Mode	You can select the default fax receiving mode. For details on receiving faxes in each mode, see page 9.3.
Ring to Answer	You can specify the number of times the machine rings before answering an incoming call.
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.

Option	Description	
Option	Description	
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.	
	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.	
Junk Fax Setup	When you turn on this feature, you can access the following options to set junk fax numbers.	
	 Add: allows you to set up to 10 fax numbers. Delete: allows you to delete the desired junk fax number. Delete All: allows you to delete all junk fax numbers. 	
DRPD Mode ^a	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 page 9.4.	

a. Distinctive Ring Pattern Detection

Changing the default document settings

The fax options, including resolution and darkness, can be set to the most frequently used modes. When you send a fax, the default settings are used if they are not changed by using the corresponding button and menu.

- 1 Press Fax.
- 2 Press Menu until Fax Setup appears on the bottom line of the display and press OK.
- 3 Press the Scroll buttons until Change Default appears and press OK.
- 4 Press OK when Resolution appears.
- 5 Press the Scroll buttons until the resolution you want appears and press OK.
- 6 Press the Scroll buttons until Darkness appears and press OK.

- 7 Press the Scroll buttons until the darkness you want appears and press OK.
- 8 Press Stop/Clear to return to Standby mode.

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.
- 2 Press Menu until Fax Setup appears on the bottom line of the display and press OK.
- Press the Scroll buttons until Auto Report appears and press OK.
- 4 Press the Scroll buttons until On appears and press OK.
- 5 Press Stop/Clear to return to Standby mode.

Setting up Phone Book

You can set up **Phone Book** with the fax numbers you use most frequently. Your machine provides you with the following features for setting up **Phone Book**:

- · Speed buttons
- · Speed/Group dial numbers
 - : Note
- Before beginning to store fax numbers, make sure that your machine is in Fax mode.

Speed buttons

The 15 speed buttons on the control panel lets you store frequently-used fax numbers. You will be able to enter a fax number with the touch of a button. By utilizing the **Shift** button, you can store up to 30 numbers on the speed buttons.

There are two ways to assign numbers to speed buttons. Examine the procedures below and use the appropriate way which you prefer:

Registering after pressing a speed button

- 1 Press Fax.
- 2 Press one of the speed buttons.
- 3 Press OK when Yes appears.
- 4 Enter the name you want and press OK.
 For details on how to enter alphanumeric characters, see page 2.3.
- 5 Enter the fax number you want to store and press OK.

Registering after entering a number first

- Press Fax
- Enter the fax number you want to store.
- Press one of the speed buttons.
- Press OK when Yes appears.

- · If you press a speed button already assigned, the display asks if you want to overwrite. Press OK to confirm Yes and continue. To start over with another speed button, select No.
- Enter the name you want and press OK.

For details on how to enter alphanumeric characters, see page 2.3.

Press OK to confirm the number.

Using speed buttons

When you are prompted to enter a fax number while sending a fax:

- To retrieve a number from speed buttons 1 to 15, press the corresponding speed button and press OK.
- To retrieve a number from speed buttons 16 to 30, press Shift and then the corresponding speed button, and press OK.

Speed dial numbers

You can store up to 240 frequently-used fax numbers in speed dial numbers.

Registering a speed dial number

- Press Fax.
- Press Phone Book until New & Edit appears on the bottom line of the display and press OK.
- Press OK when Speed Dial appears.
- Enter a speed dial number between 0 and 239 and press OK.

If an entry is already stored in the number you choose, the display shows the name to allow you to change it. To start over with another speed dial number, press Back.

- Enter the name you want and press OK.
 - For details on how to enter alphanumeric characters, see page 2.3.
- Enter the fax number you want and press OK.
- Press Stop/Clear to return to Standby mode.

Editing speed dial numbers

- Press Phone Book until New & Edit appears on the bottom line of the display and press OK.
- 2 Press OK when Speed Dial appears.
- Enter the speed dial number you want to edit and press OK.
- Change the name and press OK.
- Change the fax number and press OK.
- Press Stop/Clear to return to Standby 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

- 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 Phone Book. See page 10.4.

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

- Press Fax.
- Press Phone Book until New & Edit appears on the bottom line of the display and press OK.
- Press the Scroll buttons until Group Dial appears and press OK.
- Enter a group dial number between 0 and 49 and press OK.
- Enter a speed dial number and press OK.
- Press OK when Yes appears.
- Repeat steps 5 and 6 to include other speed dial numbers into the group.
- When you have finished, press the Scroll buttons to select No at the Another No.? prompt and press OK.
- Press Stop/Clear to return to Standby mode.

Editing a group dial number

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

- 1 Press Phone Book until New & Edit appears on the bottom line of the display and press OK.
- 2 Press the Scroll buttons until Group Dial appears and press OK.
- 3 Enter the group dial number you want to edit and press OK.
- 4 Enter the speed dial number you want to add or delete 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.

- 5 Press OK to add or delete the number.
- 6 Press OK when Yes appears to add or delete more numbers and repeat steps 4 and 5.
- 7 When you have finished, press the Scroll buttons to select No at the Another No.? prompt and press OK.
- 8 Press Stop/Clear to return to Standby 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 **Phone Book**. See below.

Searching Phone Book for an entry

There are two ways to search for a number in memory. You can either scan from $\bf A$ to $\bf Z$ sequentially, or you can search by entering the first letters of the name associated with the number.

Searching sequentially through the memory

- 1 If necessary, press Fax.
- 2 Press Phone Book until Search & Dial appears on the bottom line of the display and press OK.
- 3 Press the Scroll buttons until the number category you want appears and press OK.
- 4 Press OK when All appears.
- 5 Press the Scroll buttons until the name and number you want appears. You can search upwards or downwards through the entire memory in alphabetical order.

Searching with a particular first letter

- 1 If necessary, press Fax.
- 2 Press Phone Book until Search & Dial appears on the bottom line of the display and press OK.
- 3 Press the Scroll buttons until the number category you want appears and press OK.
- 4 Press the Scroll buttons until ID appears and press OK.
- 5 Enter the first few letters of the name you want and press **OK**.
- 6 Press the Scroll buttons until the name you want appears and press OK.

Deleting a Phone Book entry

You can delete entries in Phone Book one by one.

- 1 Press Phone Book until Delete appears on the bottom line of the display and press OK.
- 2 Press the Scroll buttons until the number category you want appears and press OK.
- 3 Press the Scroll buttons until the searching method you want appears and press OK.
 - Select **Search All** to search for an entry by scanning through all entries in **Phone Book**.
 - Select **Search ID** to search for an entry by the first few letters of the name.
- 4 Press the Scroll buttons until the name you want appears and press OK.

Or, enter the first letters and press **OK**. Press the **Scroll** buttons until the name you want appears and press **OK**.

- 5 Press OK.
- 6 Press OK when Yes appears to confirm the deletion.
- 7 Press Stop/Clear to return to Standby mode.

Printing Phone Book

You can check your Phone Book settings by printing a list.

- Press Phone Book until Print appears on the bottom line of the display.
- 2 Press OK. A list showing your speed button settings, and speed dial and group dial entries prints out.

11 Using USB flash memory

This chapter explains how to use a USB memory device with your machine.

This chapter includes:

- **About USB memory**
- Plugging in a USB memory device
- Scanning to a USB memory device
- Printing from a USB memory device
- Backing up data
- Managing USB memory
- Printing directly from a digital camera

About USB memory

USB memory devices are available with a variety of memory capacities to give you more room for storing documents, presentations, downloaded 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 a USB memory device:

- · Scan documents and save them on a USB memory device.
- · Print data stored on a USB memory device.
- · Back up Phone Book entries and the system settings of your
- · Restore backup files to the machine's memory.
- · Format the USB memory device.
- · Check the available memory space.

Plugging in a USB memory device

The USB memory port on the front of your machine is designed for USB V1.1 and USB V2.0 memory devices. Your machine supports USB memory devices with capacity of up to 512 MB.

You must use only an authorized USB memory device with an A plug type connector.

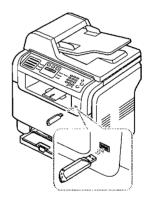


Note

· There are two USB plug types.



Insert a USB memory device into the USB memory port on the front of your machine.



Cautions

- · Do not remove the USB memory device while the machine is in operation, or writing to or reading from USB memory. This may damage your machine.
- If your USB memory device has certain features, such as security settings and password settings, your machine may not automatically detect it. For details about these features, see the device's User's Guide.

Scanning to a USB memory device

You can scan a document and save the scanned image onto a 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.

Scanning

- Insert a USB memory device into the USB memory port on your machine.
- 2 Load originals face up into the ADF, or place a single original face down on the scanner glass.

For details about loading an original, see page 5.1.

- 3 Press Scan
- 4 Press OK when Scan to USB appears on the bottom line of the display.
- 5 Press OK, Color Start or Black Start when USB appears.

Your machine begins scanning the original, and then asks if you want to scan another page.

6 Press OK when Yes appears to scan more pages. Load an original and press Color Start or Black Start.

Otherwise, press the Scroll buttons to select No and press OK.

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.
- 2 Press Menu until Scan Feature appears on the bottom line of the display and press OK.
- 3 Press OK when USB Memory appears.
- 4 Press the Scroll buttons until the setting option you want appears and press OK.

You can set the following options:

- Scan Size: Sets the image size.
- Original Type: Sets the original document'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. When you select TIFF or PDF, you can select to scan multiple pages.

- 5 Press the Scroll buttons until the desired status appears and press OK
- 6 Repeat steps 4 and 5 to set other setting options.
- 7 When you have finished, press Stop/Clear to return to Standby mode

You can change the default scan settings. For details, see page 8.3.

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.

Direct Print option supported file types:

- · PRN: Samsung PCL 6 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.
- · BMP: BMP Uncompressed
- · TIFF: TIFF 6.0 Baseline
- · JPEG: JPEG Baseline

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 USB Print.
 - Your machine automatically detects the device and reads data stored on it.
- 2 Press the Scroll buttons until the folder or file you want appears and press OK.

If you see ${\bf D}$ in the front of a folder name, there are one or more files or folders in the selected folder.

- 3 If you selected a file, skip to the next step.
 - If you selected a folder, press the **Scroll** buttons until the file you want appears.
- 4 Press OK, Black Start, Color Start or USB Print to start printing the selected file.
- 5 If you selected a TIFF, BMP, or JPEG file in step 2, press the Scroll buttons to select the number of copies to be printed or enter the number and press OK.

After printing the file, the display asks if you want to print another job.

6 Press OK when Yes appears to print another job, and repeat from step 2.

Otherwise, press the Scroll buttons to select No and press OK.

7 Press Stop/Clear to return to Standby 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 **Phone Book** entries and the system settings by storing them as backup files on a USB memory device.

Backing up data

- Insert the USB memory device into the USB memory port on your machine.
- 2 Press Menu until System Setup appears on the bottom line of the display and press OK.
- 3 Press OK when Machine Setup appears.
- 4 Press the Scroll buttons until Export Setting appears and press OK.
- 5 Press the Scroll buttons until the option you want appears.
 - · Phone Book: Backs up all Phone Book entries.
 - · All Settings: Backs up all system settings.
- 6 Press OK to begin backing up the data.
 The data is backed up to the USB memory.
- 7 Press Stop/Clear to return to Standby mode.

Restoring data

- 1 Insert the USB memory device on which the backup data is stored in to the USB memory port.
- 2 Press Menu until System Setup appears on the bottom line of the display and press OK.
- 3 Press OK when Machine Setup appears.
- 4 Press the Scroll buttons until Import Setting appears and press OK
- 5 Press the Scroll buttons until the data type you want appears and press OK.
- 6 Press the Scroll buttons until the file containing the data you want to restore appears and press OK.
- 7 Press OK when Yes appears to restore the backup file to the machine.
- 8 Press Stop/Clear to return to Standby 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.

Caution

 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

- Insert the USB memory device into the USB memory port on your machine.
- 2 Press Scan.
- 3 Press OK when Scan to USB appears on the bottom line of the display.
- 4 Press the Scroll buttons until File Manage appears and press OK.
- 5 Press OK when Delete appears.
- 6 Press the Scroll buttons until the folder or file you want appears and press OK.



 If you see D 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 **Scroll** buttons until the file you want to delete appears and press **OK**.

- 7 Press OK when Yes appears to confirm your selection.
- 8 Press Stop/Clear to return to Standby mode.

Formatting a USB memory device

- Insert the USB memory device into the USB memory port on your machine.
- 2 Press Scan.
- 3 Press OK when Scan to USB appears on the bottom line of the display.
- 4 Press the Scroll buttons until File Manage appears and press OK.
- 5 Press the Scroll buttons until Format appears and press OK.
- 6 Press OK when Yes appears to confirm your selection.
- 7 Press Stop/Clear to return to Standby mode.

Viewing the USB memory status

You can check the amount of memory space available for scanning and saving documents.

- Insert the USB memory device into the USB memory port on your machine.
- 2 Press Scan.
- 3 Press OK when Scan to USB appears on the bottom line of the display.
- 4 Press the Scroll buttons until Check Space appears and press OK.

The available memory space appears on the display.

5 Press Stop/Clear to return to the Standby mode.

Printing directly from a digital camera

This machine supports the PictBridge feature. You can print images directly from any PictBridge-compatible device, such as a digital camera, camera phone, and camcorder. You do not need to connect it to a computer.

- 1 Turn on the machine.
- 2 Connect your PictBridge-compatible device to the memory port on the front of the machine using the USB cable supplied with the device
- 3 Send an order to print images from the PictBridge-compatible device.

12 Ordering supplies and

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

- Supplies
- Accessories
- How to purchase

Supplies

When the toner runs out or, the life span of the supplies expires you can order the following types of toner cartridges and supplies for your machine:

Туре	Yield ^a	Part number
Black toner cartridge	2,000 pages	CLP-K300A
Cyan toner cartridge	1,000 pages	CLP-C300A
Magenta toner cartridge	1,000 pages	CLP-M300A
Yellow toner cartridge	1,000 pages	CLP-Y300A
lmaging unit	20,000 black pages (12,500 color pages)	CLP-R300A
Waste toner container	5,000 black pages (1,250 color pages)	CLP-W300A

a. 5% coverage.

Accessories

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

The following accessories are available for your machine:

Accessory	Description	Part number
Optional tray 2	If you are experiencing frequent paper supply problems, you can attach an additional 250 sheets of plain paper tray.	CLX-S3160A

How to purchase

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

13 Maintenance

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

This chapter includes:

- Printing reports
- Clearing memory
- · Cleaning your machine
- · Maintaining the toner cartridge
- · Replacing the Imaging Unit
- · Replacing the Waste Toner Container
- Maintenance Parts
- · Managing your machine from the website
- · Checking the machine's serial number

Printing reports

Your machine can provide various reports with useful information you will need. The following reports are available:

Reports in the colored cells are only available with CLX-3160FN.

Report/List	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 list shows the current status of consumables in your machine.
Phone Book	This list shows all of the fax numbers currently stored in the machine's memory.
	This report shows information on the faxes you have recently sent.
Sent Report	You can set the machine to automatically print this report every 50 communications. See page 10.2.
Rcv Report	This report shows information on the faxes you have recently received.
Schedule Jobs	This list shows the documents currently stored for delayed faxes along with the starting time and type of each operation.
Junk Fax 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 page 10.2.

Report/List	Description
Network Info.	This list shows information on your machine's network connection and configuration.
NetScan Report	This report shows information for the Network Scan records including IP address, time and date, the number of pages scanned, and results. This report is automatically printed every 50 network scan jobs.

Printing a report

- Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press the Scroll buttons until Report appears and press OK.
- 3 Press the Scroll buttons until the report or list you want to print appears and press OK.

To print all reports and lists, select All Report.

4 Press OK when Yes appears to confirm printing.

The selected information prints out.

Other available reports

Your machine prints the following reports automatically or depending on your setting.

- Send 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 page 10.1.
- Multi-communication Report: prints automatically after sending faxes from more than one location.
- Power Failure Report: prints out automatically when power is restored after a power failure if any data loss occurs due to the power failure.

Clearing memory

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

- · For CLX-3160FN users, before clearing the memory, make sure that all fax jobs have been completed, or you will lose those jobs.
- Press Menu until System Setup appears on the bottom line of the display and press OK.
- Press the Scroll buttons until Clear Setting appears and press 2
- Press the Scroll buttons until the item you want to clear appears.

The options in the colored cells are available only with CL.X-3160FN.

Options	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.
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	Restores all of the network options to the factory default.
Phone Book	Clears all Phone Book entries stored in memory.
Sent Report	Clears all records of sent faxes.
Rcv Report	Clears all records of received faxes.
NetScan Report	Clears the information on network scan sessions in memory.

- Press OK when Yes appears.
- Press OK again to confirm clearing.
- Repeat steps 3 through 5 to clear another item.
- Press Stop/Clear to return to Standby mode.

Cleaning your machine

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

· 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.

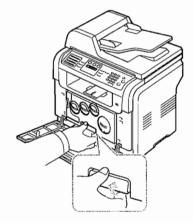
Cleaning the outside

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

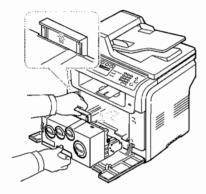
Cleaning the inside

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

- Turn the machine off and unplug the power cord. Wait for the machine to cool down.
- Open the front cover and pull the imaging unit out of the machine using the handle on its bottom.

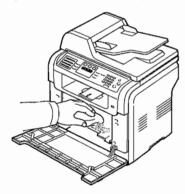


3 Extend the top handle on the imaging unit and then use it to pull the imaging unit out of the machine completely.

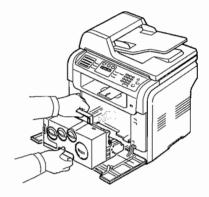


Cautions

- To prevent damage to the imaging unit, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
- Do not touch the green surface on the imaging unit with your hands or any other material. Use the handle on it to avoid touching this area.
- · Be careful not to scratch the surface of the imaging unit.
- 4 With a dry lint-free cloth, wipe away any dust and spilled toner.



5 Holding the handle on the imaging unit push the unit into the machine. Make sure that the imaging unit is installed completely.

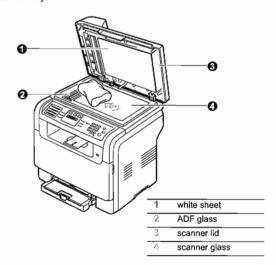


- 6 Close the front cover firmly.
- 7 Plug in the power cord and turn the machine on.

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 ADF glass until it is clean and dry.



- Wipe the underside of the scanner lid and white sheet until it is clean and dry.
- Close the scanner lid.

Maintaining the toner cartridge

Toner cartridge storage

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

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

Expected cartridge life

The life of the toner cartridge depends on the amount of toner that print jobs require. When printing text at 5% coverage, a new toner cartridge lasts an average of 2,000 pages for black and white printing and 1,000 pages for each color printing. The actual number may also be different depending on the print density of the pages you print on, and the number of pages may be affected by operating environment, printing interval, media type, and media size. If you print a lot of graphics, you may need to change the cartridge more often.

Redistributing toner

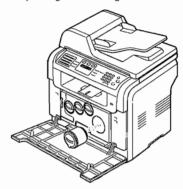
When the toner cartridge is near the end of its life:

- · White streaks or light printing occurs.
- · Toner Low appears on the display.
- · The Status LED blinks red.

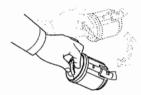
If this happens, you can temporarily reestablish print quality by redistributing the remaining toner in the cartridge. In some cases, white streaks or light printing will still occur even after you have redistributed the toner.

Open the front cover.

2 Pull the corresponding toner cartridge out.

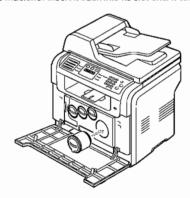


Holding the toner cartridge, thoroughly roll it 5 or 6 times to distribute the toner evenly inside the cartridge.



Note

- · If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into
- Grasp the toner cartridge and align it with the corresponding slot inside the machine. Insert it back into its slot until it clicks into place.



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

Replacing the toner cartridge

The machine uses four colors and has a different toner cartridge for each one: yellow (Y), magenta (M), cyan (C), and black (K).

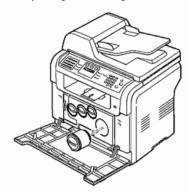
When the toner cartridge is completely empty:

- · Toner Empty appears on the display.
- · The Status LED lights red.
- The machine stops printing. For the CLX-3160FN, incoming faxes are saved in memory.

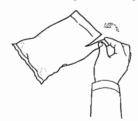
At this stage, the toner cartridge needs to be replaced. For order information for toner cartridges, see page 12.1.

Note

- You can set the machine to disregard the Toner Empty message and to continue printing. See page 13.6.
- 1 Open the front cover.
- 2 Pull the corresponding toner cartridge out.



3 Remove the new toner cartridge from its bag.



4 Holding the toner cartridge, thoroughly roll it 5 or 6 times to distribute the toner evenly inside the cartridge.

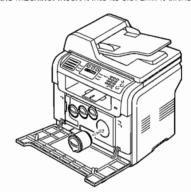


5 Pull the protecting film in the cartridge out.



Note

- If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into folding.
- 6 Grasp the toner cartridge and align it with the corresponding slot inside the machine. Insert it into its slot until it clicks into place.



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

Sending new toner notification (CLX-3160FN only)

You can set your machine to automatically send a fax to your service company or dealer to notify them that your machine requires a new toner cartridge when the toner cartridge needs to be replaced. The fax number needs to be set by your dealer prior to using this feature, otherwise the machine cannot send a notification even though you turn this service on.

- 1 Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press the Scroll buttons until Maintenance appears and press OK
- 3 Press the Scroll buttons until Remote Service appears and press OK.
- 4 Enter a password and press OK.
- 5 Re-enter the password and press OK.
- 6 Press the Scroll buttons to select On and press OK.
- 7 Press Stop/Clear to return to Standby mode.

Once this feature has been enabled, you need to enter the password each time you disable or enable it.

Printing continuously when the Toner Empty message appears

When the toner cartridge is nearly empty, the machine shows the **Toner Empty** message and stops printing. You can set the machine to disregard this message when it appears and to continue printing, even though print quality is not optimal.

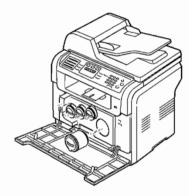
- 1 Press Menu until System Setup appears on the bottom line of the display and press OK.
- Press the Scroll buttons until Maintenance appears and press OK.
- 3 Press the Scroll buttons until Ignore Toner appears and press OK.
- 4 Press the Scroll buttons until the desired status appears and press OK.
- 5 Press Stop/Clear to return to Standby mode.

Replacing the Imaging Unit

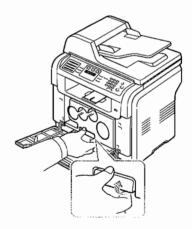
The life of the imaging unit is approximately 20,000 pages for black and white printing and 12,500 pages for color printing. When the life span of the imaging unit has expired, **Replace Imaging Unit** appears on the display of the control panel, indicating the imaging unit needs to be replaced.

To replace the imaging unit:

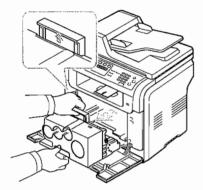
- 1 Turn the machine off, then wait a few minutes for the machine to
- 2 Open the front cover.
- 3 Remove all of the toner cartridges and waste toner container from the machine.



4 Pull the imaging unit out of the machine using the handle on its bottom.



Extend the top handle on the imaging unit and then use it to pull the imaging unit out of the machine completely.

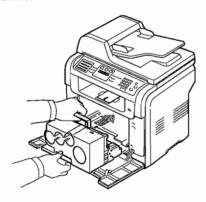


Take a new imaging unit out of its package.

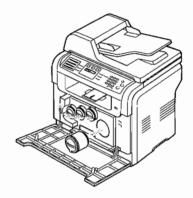


Cautions

- · Don't use sharp objects, such as a knife or scissors, to open the imaging unit package. You could damage the surface of the imaging unit.
- · Be careful not to scratch the surface of the imaging unit.
- · To prevent damage, do not expose the imaging unit to light for more than a few minutes. Cover it with a piece of paper to protect it if necessary.
- Holding the handles on the new imaging unit, push the unit into the machine.



Insert the toner cartridges and waste toner container into their corresponding slots until they click into place.



Close the front cover firmly.

- · If the front cover is not completely closed, the machine will not operate.
- 10 Turn the machine on.



· After rebooting, your machine will automatically reset the counter for the imaging unit.

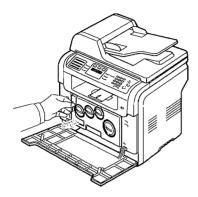
Replacing the Waste Toner Container

The life of the waste toner container unit is approximately 1,250 pages for full color 5% image printing or 5,000 pages for color printing. When the life span of the waste toner container has expired, Replace Waste Toner appears on the display of the control panel, indicating the waste toner container needs to be replaced.

To replace the waste toner container:

- Turn the machine off, then wait a few minutes for the machine to cool.
- Open the front cover.

Pull the waste toner container out of the machine using its handle.



- Make sure that you lay the waste toner container on a flat surface so that the toner does not spill.
- Remove the container's cap from the left side of the container as shown below, and use it to close the waste toner container opening.

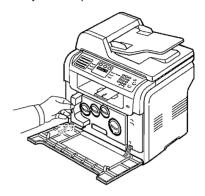


Caution

- · Do not tilt or turn over the container.
- Take a new waste toner container out of its package.
- Open the cap on the new waste toner container and attach it to the left side of the container for future use, as shown below.



Insert the new container into position and then push it to make sure that it is firmly seated in place.



- Close the front cover firmly.
- Turn the machine on.

Note

· After rebooting, your machine will automatically reset the counter for the waste toner container.

Maintenance Parts

To avoid print quality and paper feed problems resulting from worn parts and to maintain your printer in top working condition the following items will need to be replaced at the specified number of pages or when the life span of each item has expired.

Items	Yield (Average)
ADF rubber pad	Approx. 100,000 pages
T2 roller	Approx. 100,000 pages
Fuser unit	Approx. 100,000 black pages or 50,000 color pages
Tray rubber pad	Approx. 250,000 pages
Pickup roller	Approx. 100,000 pages

Samsung highly recommends that an authorized service provider, dealer or the retailer where you bought printer performs this maintenance activity.

Checking replaceables

If you experience frequent paper jams or printing problems, check the number of pages the machine has printed or scanned. Replace the corresponding parts, if necessary.

The following information are available for checking the replaceable elements of your machine:

- · Supplies Info: prints the supply information page.
- · Total: displays the total number of pages printed.
- Toner: displays how much toner remains in the cartridge.
- Drum: displays the number of pages printed.
- Platen Scan: displays the number of pages scanned using the scanner glass.

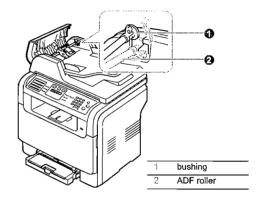
To check the replaceables:

- 1 Press Menu until System Setup appears on the bottom line of the display and press OK.
- 2 Press the Scroll buttons until Maintenance appears and press OK
- 3 Press the Scroll buttons until Supplies Life appears and press OK
- 4 Press the **Scroll** buttons until the item you want appears and press **OK**
- 5 If you selected to print a supply information page, press OK to confirm
- 6 Press Stop/Clear to return to Standby mode.

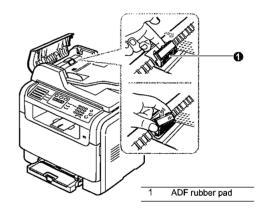
Replacing the ADF rubber pad

You will need to replace the ADF rubber pad when there seems to be a consistent problem with paper pickup or when its specified yield is reached.

- 1 Open the ADF cover.
- 2 Rotate the bushing on the right end of the ADF roller toward the ADF and remove the roller from the slot.

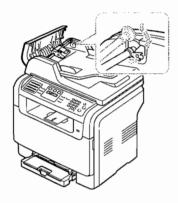


3 Remove the ADF rubber pad from the ADF, as shown.



4 Insert a new ADF rubber pad into place.

Align the left end of the ADF roller with the slot and push the right end of the roller into the right slot. Rotate the bushing on the right end of the roller toward the document input tray.



6 Close the ADF cover.

Managing your machine from the website

If you have connected your machine to a network and set up TCP/IP network parameters correctly, you can manage the machine via Samsung's 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 the printer properties.
- Set the machine to send email notifications to let you know the machine's status.
- · Get support for using the machine.

To access SyncThru™ Web Service:

- 1 Start a web browser, such as Internet Explorer, from Windows.
- 2 Enter the machine IP address (http://xxx.xxx.xxx.xxx) in the address field and press the Enter key or click Go.

Your machine's embedded website opens.

Checking the machine's serial number

When you call for service or register as a user on the Samsung website, the machine's serial number may be required.

You can check the serial number by taking the following steps:

- 1 Press Menu until System Setup appears on the bottom line of the display and press OK.
- Press the Scroll buttons until Maintenance appears and press OK.
- 3 Press the Scroll buttons until Serial Number appears and press OK.
- 4 Check your machine's serial number.
- 5 Press Stop/Clear to return to Standby mode.

14 Troubleshooting

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

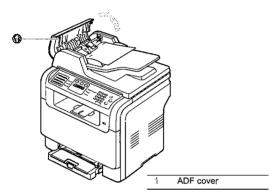
This chapter includes:

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

Clearing document jams

When an original jams while passing through the ADF, **Document Jam** appears on the display.

- 1 Remove any remaining pages from the ADF.
- 2 Open the ADF cover.



3 Pull the jammed paper gently out of the ADF.



4 Close the ADF cover. Then load the removed pages, if any, back into the ADF.

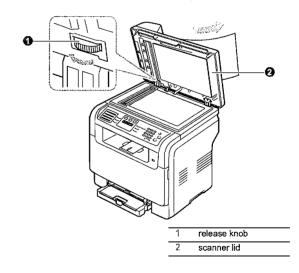


Note

 To prevent document jams, use the scanner glass for thick, thin, or mixed paper-type originals.

Exit misfeed

- 1 Open the scanner lid.
- 2 Turn the release knob to the direction as shown to remove the misfed paper from the document output tray.



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

Roller misfeed

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



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

Clearing paper jams

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

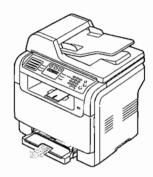
Message	Location of jam	Go to
Paper Jam 0 Open/Close Door	In the paper feed area (tray 1, optional tray 2, or mamual tray)	the next colume, 14.3, and 14.4
Paper Jam 1 Open/Close Door	In the paper exit area	14.4

Caution

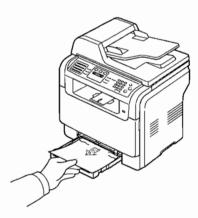
 To avoid tearing the paper, pull out the jammed paper gently and slowly. Follow the instructions in the following sections to clear the jam.

In the tray 1

- Open and close the front cover. The jammed paper is automatically ejected from the machine.
 - If the paper does not exit, go to the next step.
- 2 Pull the tray 1 open.



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



If the paper does not move when you pull, or if you do not see the paper in this area, check the paper exit area. See page 14.4.

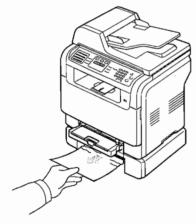
4 Insert the tray 1 into the machine until it snaps into place. Printing automatically resumes.

In the optional tray 2

1 Pull the optional tray 2 open.

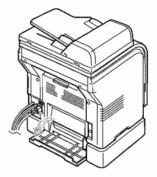


2 Remove the jammed paper from the machine.

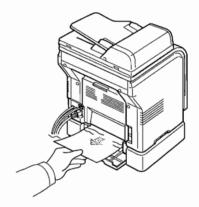


If the paper does not move when you pull, or if you do not see the paper in this area, go to the next step.

3 Open the jam cover in the optional tray 2.



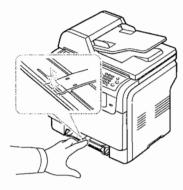
4 Pull the jammed paper out in the direction shown.



5 Close the jam cover. Printing automatically resumes.

in the mamual tray

- Pull the tray 1 out.
- 2 Push the manual tray tab down.



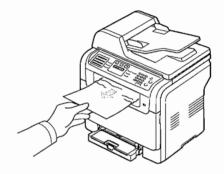
3 Pull the Jammed paper out of the manual tray.



Insert the tray 1 into the machine until it snaps into place. Printing automatically resumes.

In the paper exit area

- Open and close the front cover. The jammed paper is automatically ejected from the machine.
- 2 Gently pull the paper out of the output tray.



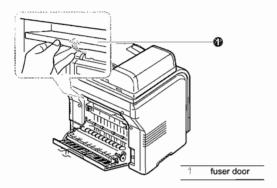
If you do not see the jammed paper or if there is any resistance when you pull, stop and go to the next step.

- Open the rear cover.
- If you see the jammed paper, pull it straight up. Skip to step 8.

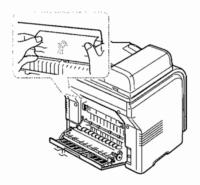


If you still do not see the paper, go to the next step.

5 Open the fuser door.



6 Locate the jammed paper and pull it out.



- 7 Close the fuser door.
- 8 Close the rear cover. Printing automatically resumes.

Tips for avoiding paper jams

By selecting the correct media types, most paper jams can be avoided. When a paper jam occurs, follow the steps outlined on page 14.2.

- Follow the procedures on page 5.5. Ensure that the adjustable guides are positioned correctly.
- Do not overload the tray. Ensure that the paper level is under the brackets of the tray 1.
- Do not remove paper from the tray while your machine is printing.
- · Flex, fan, and straighten paper before loading.
- · Do not use creased, damp, or highly curled paper.
- · Do not mix paper types in a tray.
- Use only recommended print media. See page 5.2.
- Ensure that the recommended print side of print media is facing up in the mamual tray and tray 1.

Understanding the Status LED

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

Status		Description	
Off		The machine is off-line. The machine is in Power Save mode. When data is received, or any button is pressed, it switches to on-line automatically.	
Green	On	The machine is on-line and can be used.	
	Blinking	When the backlight slowly blinks, the machine is receiving data from the computer. When the backlight fast blinks, the machine is printing data.	
Red	On	The toner cartridge is totally exhausted. Remove the old toner cartridge and install a new one. See page 13.5. A paper jam has occurred. To solve the problem, see page 14.2. The front cover is open. Close the front 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 page 14.6 for details on the meaning of the error message.	
	Blinking	 A minor error occurs and the machine is waiting an error to be cleared. Check the display message. When the problem is cleared, the machine resumes. The toner cartridge is low. Order a new toner cartridge. You can temporarily improve print quality by redistributing the toner. See page 13.4. 	

Understanding display messages

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

Note

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

Messages in the colored cells are available only with CLX-3160FN.

Message	Meaning	Suggested solutions
[Color] Toner Empty	The color toner cartridge has run out. The machine stops printing.	Replace the color toner cartridge with a new one. See page 13.5
[Color] Toner Low	The corresponding color toner cartridge is almost empty.	Take out the toner cartridge and thoroughly shake it. By doing this, you can temporarily reestablish printing operations.
[COMM. Error]	The machine has a communication problem.	Ask the sender to try again.
[Incompatible]	The remote machine does not have the requested feature, such as polling. This message also occurs if the remote machine does not have enough memory space to complete the operation you are attempting.	Reconfirm the remote machine's features.
[Line Error]	Your machine cannot connect with the receiving fax machine or has lost contact because of a problem with the phone line.	Try again. If the problem persists, wait an hour or so for the line to clear and try again. Or, turn the ECM mode on. See page 10.1.
[No Answer]	The receiving fax machine has not answered after several redial attempts.	Try again. Make sure that the receiving machine is operational.

Message	Meaning	Suggested solutions
[No Paper] Add Paper	The paper in the tray has run out.	Load paper in the tray. See page 5.5.
[Stop Pressed]	Stop/Clear has been pressed during an operation.	Try again.
ADC Not Confirm Error	A problem has occurred in the ADC in the machine.	Please call for service.
		To cancel the fax job, press the 1 button to accept Yes .
Cancel? 1:Yes 2:No	Your machine's memory has become full while trying to store an original into memory.	If you want to send those pages that have been successfully stored, press the 2 button to accept No. You should send the remaining pages later, when memory is available.
Deve Home Sensor Error	There is a problem in the fuser unit.	Unplug the power cord and plug it back in. If the problem persists, please call for service.
Document Jam	The loaded original has jammed in the ADF.	Clear the jam. See page 14.1.
Door Open	The front cover or rear cover is not securely latched.	Close the cover until it locks into place.
Enter Again	You entered an unavailable item.	Enter the correct item again.
Fuser Fan Locked	There is a problem in the cooling fan of the machine.	Open and then close the front cover.
Group Not Available	You have tried to select a group location number where only a single location number can be used, such as when adding locations for a Multiple Send operation.	Use a speed dial number or dial a number manually using the number keypad.

Message	Meaning	Suggested solutions
Install [Color] Toner	The color toner cartridge is not installed.	Install the color toner cartridge.
Install [Part]	The corresponding part of the machine is not installed.	Install the part into your machine.
Invalid [Color] Toner	The color toner cartridge you have installed is not for your machine.	Install the a Samsung-genuine color toner cartridge designed for your machine.
Invalid [Part]	The color part of the machine is not for your machine.	Install the a Samsung-genuine part designed for your machine.
Line Busy	The receiving fax machine did not answer or the line is already engaged.	Try again after a few minutes.
Low Heat Error Cycle Power	There is a problem in the fuser unit.	Unplug the power cord and plug it back in. If the problem persists, please call for service.
LSU Hsync Error Cycle Power	A problem has occurred in the LSU (Laser Scanning Unit).	Unplug the power cord and plug it back in. If the problem persists, please call for service.
LSU Motor Error Cycle Power	A problem has occurred in the LSU (Laser Scanning Unit).	Unplug the power cord and plug it back in. If the problem persists, please call for service.
Main Motor Locked	There is a problem in the main motor.	Open and then close the front cover.
Memory Dial Full	You are trying to schedule a fax job when memory for storing fax jobs is full.	Wait until a scheduled job is complete.
Memory Full	The memory is full.	Delete unnecessary fax jobs and retransmit after more memory becomes available. Alternatively, split the transmission into more than one operation.

Message	Meaning	Suggested solutions
MP Tray Paper Empty	There is no paper in the multi-purpose tray.	Load paper in the multi-purpose tray.
Not Assigned	The speed button or speed dial number you tried to use has no number assigned to it.	Enter the number manually using the number keypad or store the number or address.
Open Heat Error Cycle Power	There is a problem in the fuser unit.	Unplug the power cord and plug it back in. If the problem persists, please call for service.
Operation Not Assigned	You are in the Add Page/Cancel Job operation, but there are no jobs stored.	Check the display to see if there are any scheduled jobs.
Out Bin Full	The output tray of the machine is full of paper.	Remove paper.
Paper Jam 0 Open/Close Door	Paper has jammed in the feeding area of the tray.	Clear the jam. See page 14.2, 14.3 and 14.4.
Paper Jam 1 Open/Close Door	Paper has jammed in the paper exit area.	Clear the jam. See page 14.4.
Power Failure	Power has turned off then on and the machine's memory has not been back up.	The job which you were trying to do before the power failure must be completely re-done.
Replace [Color] Toner	This message appears between Toner Empty and Toner Low status.	Replace the toner cartridge with a new one. See page 13.5.
Replace [Part]	The life of the part expires totally.	Replace the part with a new one. Call for service.
Replace [Part] Soon	The life of the part expires soon.	See page 13.8 and 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, or Stop/Clear to cancel the redial operation.

Message	Meaning	Suggested solutions
Scanner locked	The scanner module is locked	Unlock the scanner and press Stop/ Clear .
SCF Cover Open	The jam cover in the optional tray 2 is open.	Close the jam cover in the optional tray 2.
SCF Paper Jam	Paper has jammed in the optional tray 2.	Clear the jam. See page 14.3.
Self Diagnostic	The engine in your machine is checking some problems detected.	Please wait a few minutes.
Transfer Belt Error	A problem has occurred in the transfer belt in the machine.	Unplug the power cord and plug it back in. If the problem persists, please call for service.
Tray 1 Paper Empty	There is no paper in the tray 1.	Load paper in the tray 1. See page 5.5.
Tray 2 Paper Empty	There is no paper in the optional tray 2.	Load paper in the optional tray 2.

Solving other problems

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

Paper feeding problems

Condition	Suggested solutions	
Paper is jammed during printing.	Clear the paper jam. See page 14.2.	
Paper sticks together.	 Ensure that there is not too much paper in the tray. The tray can hold up to 150 sheets of paper, depending on the thickness of your paper. Make sure that you are using the correct type of paper. See page 5.4. Remove paper from the tray and flex or fan the paper. Humid conditions may cause some paper to stick together. 	
Multiple sheets of paper do not feed.	 Different types of paper may be stacked in the tray. Load paper of only one type, size, and weight. If multiple sheets have caused a paper jam, clear the paper jam. See page 14.2. 	
Paper does not feed into the machine.	 Remove any obstructions from inside the machine. Paper has not been loaded correctly. Remove paper from the tray and reload it correctly. There is too much paper in the tray. Remove excess paper from the tray. The paper is too thick. Use only paper that meets the specifications required by the machine. See page 5.2. If an original does not feed into the machine, the ADF rubber pad may require to be replaced. See page 13.9. 	
The paper keeps jamming.	 There is too much paper in the tray. Remove excess paper from the tray. If you are printing on special materials, use the mamual tray. An incorrect type of paper is being used. Use only paper that meets the specifications required by the machine. See page 5.2. There may be debris inside the machine. Open the front cover and remove the debris. If an original does not feed into the machine, the ADF rubber pad may require to be replaced. See page 13.9. 	

Condition	Suggested solutions
Transparencies stick together in the paper exit.	Use only transparencies specifically designed for laser printers. Remove each transparency as it exits from the machine.
Envelopes skew or fail to feed correctly.	Ensure that the paper guides are against both sides of the envelopes.

Printing problems

Condition	Possible cause	Suggested solutions
	The machine is not receiving power.	Check the power cord connections. Check the power switch and the power source.
	The machine is not selected as the default printer.	Select Samsung CLX-3160 Series as your default printer in your Windows.
	Check the machine for	the following:
	 Paper is jammed. Cle No paper is loaded. I 	s not installed. Install the toner
The machine does not print.	The connection cable between the computer and the machine is not connected properly.	Disconnect the printer cable and reconnect it.
	The connection cable between the computer and the machine is defective.	If possible, attach the cable to another computer that is working properly and print a job. You can also try using a different printer cable.
	The port setting is incorrect.	Check the Windows printer setting to make sure that the print job is sent to the correct port. If the computer has more than one port, make sure that the machine is attached to the correct one.
	The machine may be configured incorrectly.	Check the printer properties to ensure that all of the print settings are correct.

Condition	Possible cause	Suggested solutions
The machine	The printer driver may be incorrectly installed.	Repair the printer software. See the Software Section .
does not print. (continued)	The machine is malfunctioning.	Check the display message on the control panel to see if the machine is indicating a system error.
The machine selects print materials from the wrong paper source.	The paper source selection in the printer properties may be incorrect.	For many software applications, the paper source selection is found under the Paper tab within the printer properties. Select the correct paper source. See the printer driver help screen.
	The job may be very complex.	Reduce the complexity of the page or try adjusting the print quality settings.
A print job is extremely slow.	If you are using Windows 9x/Me, the Spool Setting may be set incorrectly.	From the Start menu, choose Settings and then Printers. Right-click the Samsung CLX-3160 Series machine icon, choose Properties, click the Details tab, and then choose the Spool Settings button. Select the desired spool setting.
	The page orientation setting may be incorrect.	Change the page orientation in your application. See the printer driver help screen.
Half the page is blank.	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	The printer cable is loose or defective.	Disconnect the printer cable and reconnect. Try a print job that you have already printed successfully. If possible, attach the cable and the machine to another computer and try a print job that you know works. Finally, try a new printer cable.
prints, but the text is wrong, garbled, or incomplete.	The wrong printer driver was selected.	Check the application's printer selection menu to ensure that your machine is selected.
	The software application is malfunctioning.	Try printing a job from another application.
	The operating system is malfunctioning.	Exit Windows and reboot the computer. Turn the machine off and then back on again.
	The toner cartridge is defective or out of toner.	Redistribute the toner, if necessary. See page 13.4. If necessary, replace the toner cartridge.
Pages print, but are blank.	The file may have blank pages.	Check the file to ensure that it does not contain blank pages.
	Some parts, such as the controller or the board, may be defective.	Contact a service representative.
The illustrations print incorrectly in Adobe Illustrator.	The setting in the software application is wrong.	Select Download as Bit Image in the TrueType Options window of the graphic properties and print the document again.

Printing quality problems

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

Condition	Suggested solutions
Light or faded print Aa Cc	If a vertical white streak or faded area appears on the page: The toner supply is low. You may be able to temporarily extend the toner cartridge life. See page 13.4. If this does not improve the print quality, install a new toner cartridge. The paper may not meet paper specifications; for example, the paper is too moist or too rough. See page 5.2. If the entire page is light, the print resolution setting is too low. Adjust the print resolution. See the help screen of the printer driver. A combination of faded or smeared defects may indicate that the toner cartridge needs cleaning. The surface of the LSU part inside the machine may be dirty. Clean the LSU. See page 13.2.
AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	The paper may not meet specifications; for example, the paper is too moist or too rough. See page 5.2. The transfer roller may be dirty. Clean the inside of your machine. See page 13.2. The paper path may need cleaning. See page 13.2.
AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	If faded areas, generally rounded, occur randomly on the page: A single sheet of paper may be defective. Try reprinting the job. The moisture content of the paper is uneven or the paper has moist spots on its surface. Try a different brand of paper. See page 5.2. The paper lot is bad. The manufacturing processes can cause some areas to reject toner. Try a different kind or brand of paper. If these steps do not correct the problem, contact a service representative.

Condition	Suggested solutions
AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	 If black vertical streaks appear on the page: The drum inside the toner cartridge has probably been scratched. Remove the toner cartridge and install a new one. See page 13.5. If white vertical streaks appear on the page: The surface of the LSU part inside the machine may be dirty. Clean the LSU. See page 13.2.
Color or Black background AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	If the amount of background shading becomes unacceptable: Change to a lighter weight paper. See page 5.2. Check the machine's environment: very dry (low humidity) or high humidity (higher than 80% RH) conditions can increase the amount of background shading. Remove the old toner cartridge and install a new one. See page 13.5.
AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	 Clean the inside of the machine. See page 13.2. Check the paper type and quality. See page 5.2. Remove the toner cartridge and install a new one. See page 13.5.
Vertical repetitive defects A a B b C A a B b C A a B b C A a B b C A a B b C A a B b C A a B b C A a B b C C A a B b C C A a B b C C A a B b C C A a B b C C A a B b C C A a B b C C C A a B b C C C A a B b C C C A a B b C C C A a B b C C C A a B b C C C C A a B b C C C C C C C C C C C C C C C C C C	If marks repeatedly appear on the printed side of the page at even intervals: The toner cartridge may be damaged. If a repetitive mark occurs on the page, print a cleaning sheet several times to clean the cartridge; see page 13.4. After the printout, if you still have the same problems, remove the toner cartridge and install a new one. See page 13.5. Parts of the machine may have toner on them. If the defects occur on the back of the page, the problem will likely correct itself after a few more pages. The fusing assembly may be damaged. Contact a service representative.

Condition	Suggested solutions
	Background scatter results from bits of toner randomly distributed on the printed page.
Background scatter	 The paper may be too damp. Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture. If background scatter occurs on an envelope, change the printing layout to avoid printing over areas that have overlapping seams on the reverse side. Printing on seams can cause problems. If background scatter covers the entire surface area of a printed page, adjust the print resolution through your software application or the printer properties.
Misformed characters	If characters are improperly formed and producing hollow images, the paper stock may be too slick. Try a different paper. See
AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	 page 5.2. If characters are improperly formed and producing a wavy effect, the scanner unit may need service. For service, contact a service representative.
Page skew	Ensure that the paper is loaded properly. Check the paper type and quality. See page
AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	 5.2. Ensure that the paper or other material is loaded correctly and the guides are not too tight or too loose against the paper stack.
Curl or wave	Ensure that the paper is loaded properly. Check the paper type and quality. Both high
AaBbCC AaBbCC AaBbCC AaBbCC AaBbCC	temperature and humidity can cause paper curl. See page 5.2. • Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray.

Condition	Suggested solutions
Wrinkles or creases AabbCc AabbCc AabbCc AabbCc AabbCc AabbCc AabbCc	Ensure that the paper is loaded properly. Check the paper type and quality. See page 5.2. Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray.
Back of printouts are dirty	
AaBbCc AaBbCc AaBbCc AaBbCc	Check for leaking toner. Clean the inside of the machine. See page 13.2.
Solid Color or Black pages	 The toner cartridge may not be installed properly. Remove the cartridge and reinsert it. The toner cartridge may be defective and need replacing. Remove the toner cartridge and install a new one. See page 13.5. The machine may require repair. Contact a service representative.
AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	 Clean the inside of the machine. See page 13.2. Check the paper type and quality. See page 5.2. Remove the toner cartridge and install a new one. See page 13.5. If the problem persists, the machine may require repair. Contact a service representative.
Character Voids	Character voids are white areas within parts of characters that should be solid black: If you are using transparencies, try another type of transparency. Because of the composition of transparencies, some character voids are normal. You may be printing on the wrong surface of the paper. Remove the paper and turn it around. The paper may not meet paper specifications. See page 5.2.

Condition	Suggested solutions
AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	If horizontally aligned black streaks or smears appear: 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 page 13.5. If the problem persists, the machine may require repair. Contact a service representative.
AaBbCc AaBbCc AaBbCc	If the printed paper is curled or paper does not feed into the machine: Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray.

Copying problems

Condition	Suggested solutions
Copies are too light or too dark.	Use Darkness to darken or lighten the background of the copies.
Smears, lines, marks, or spots appears on copies.	If defects are on the original, press Darkness to lighten the background of your copies. If no defects are on the original, clean the scan unit. See page 13.3.
Copy image is skewed.	Ensure that the original is face down on the scanner glass or face up in the ADF. Check that the copy paper is loaded correctly.
Blank copies print out.	Ensure that the original is face down on the scanner glass or face up in the ADF.
Image rubs off the copy easily.	Replace the paper in the tray with paper from a new package. In high humidity areas, do not leave paper in the machine for extended periods of time.

Condition	Suggested solutions
Frequent copy paper jams occur.	 Fan the stack of paper, then turn it over in the tray. Replace the paper in the tray with a fresh supply. Check/adjust the paper guides, if necessary. Ensure that the paper is the proper paper weight. 75 g/m² (20 lb bond) paper is recommended. Check for copy paper or pieces of copy paper remaining in the machine after a paper jam has been cleared.
Toner cartridge produces fewer copies than expected before running out of toner.	 Your originals may contain pictures, solids, or heavy lines. For example, your originals may be forms, newsletters, books, or other documents that use more toner. The machine may be turned on and off frequently. The scanner lid may be left open while copies are being made.

Scanning problems

Condition	Suggested solutions
The scanner does not work.	Make sure that you place the original to be scanned face down on the scanner glass, or face up in the ADF. There may not be enough available memory to hold the document you want to scan. Try the Prescan function to see if that works. Try lowering the scan resolution rate. Check that the USB cable is connected properly. Make sure that the USB cable is not defective. Switch the cable with a known good cable. If necessary, replace the cable. Check that the scanner is configured correctly. Check scan setting in the SmarThru Configuration or the application you want to use to make certain that the scanner job is being sent to the correct port.

Condition	Suggested solutions
The unit scans very slowly.	Check if the machine is printing received data. If so, scan the document after the received data has been printed. Graphics are scanned more slowly than text. Communication speed slows in scan mode because of the large amount of memory required to analyze and reproduce the scanned image. Set your computer to the ECP printer mode through BIOS setting. It will help to increase the speed. For details about how to set BIOS, refer to your computer user's guide.
Message appears on your computer screen: "Device can't be set to the H/W mode you want." "Port is being used by another program." "Port is Disabled. "Scanner is busy receiving or printing data. When the current job is completed, try again." "Invalid handle." "Scanning has failed."	 There may be a copying or printing job in progress. When that job is complete, try your job again. The Selected port is currently being used. Restart your computer and try again. The printer cable may be improperly connected or the power may be off. 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.

Network Scan problems

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

Fax problems (CLX-3160FN only)

Condition	Suggested solutions
The machine is not working, there is no display and the buttons are not working.	Unplug the power cord and plug it in again. Ensure that there is power to the electrical outlet.
No dial tone sounds.	 Check that the phone line is connected properly. Check that the phone socket in the wall is working by plugging in another phone.
The numbers stored in memory do not dial correctly.	Make sure that the numbers are stored in memory correctly. Print a Phone Book list, referring to page 10.4.
The original does not feed into the machine.	 Make sure that the paper is not wrinkled and you are putting it in correctly. Check that the original is the right size, not too thick or thin Make sure that the ADF is firmly closed. The ADF rubber pad may need to be replaced. See page 13.9.

Condition	Suggested solutions
Faxes are not received automatically.	 The receiving mode should be set to Fax. Make sure that there is paper in the tray. Check to see if the display shows any error message. If it does, clear the problem.
The machine does not send.	 Make sure that the original is loaded in the ADF or on the scanner glass. Sending should show up on the display. Check the fax machine you are sending to, to see if it can receive your fax.
The incoming fax has blank spaces or is of poorquality.	 The fax machine sending you the fax may be faulty. A noisy phone line can cause line errors. Check your machine by making a copy. The toner cartridge may be empty. Replace the toner cartridge, referring to page 13.5.
Some of the words on an incoming fax are stretched.	The fax machine sending you the fax had a temporary document jam.
There are lines on the originals you send.	Check your scan unit for marks and clean it. See page 13.3.
The machine dials a number, but a connection with the other fax machine fails.	The other fax machine may be turned off, out of paper, or cannot answer incoming calls. Speak with the other machine operator and ask her/him to sort out the problem.
Faxes do not store in memory.	There may not be enough memory space to store the fax. If the display shows the Memory Full message, delete from memory any faxes you no longer need and then try again to store the fax.
Blank areas appear at the bottom of each page or on other pages, with a small strip of text at the top.	You may have chosen the wrong paper settings in the user option setting. For details about paper settings, see page 5.2.

Common Windows problems

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

Note

Refer to Microsoft Windows 98/Me/NT4.0/2000/XP/2003
 User's Guide that came with your PC for further information on Windows error messages.

Common Linux problems

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

Condition	Suggested solutions
The machine does not appear on the scanners list.	Check if your machine is attached to your computer. Make sure that it is connected properly via the USB port and is turned on. Check if the scanner driver for your machine is installed in your system. Open MFP Configurator, switch to Scanners configuration, then press Drivers. Make sure that driver with a name corresponding to your machine's name is listed in the window. Check if the MFP port is not busy. Since functional components of MFP (printer and scanner) share the same I/O interface (MFP port), the situation of simultaneous access of different "consumer" application to the same port is possible. To avoid possible conflicts, only one of them at a time is allowed to gain control over the device. The other "consumer" will encounter "device busy" response. This can usually happen while starting scan procedure, and appropriate message box appears. To identify the source of the problem, you should open port configuration and select the port assigned to your scanner. port symbol /dev/mfp0 corresponds to LP:0 designation displayed in the scanners' options, /dev/mfp1 relates to LP:1 and so on. USB ports start at /dev/mfp4, so scanner on USB:0 relates to /dev/mfp4 respectively and so forth sequentially. In the Selected port pane you can see if the port is occupied by some other application. If this is the case, you should wait for completion of the current job or should press Release port button, if you are sure that the present port's owner is not functioning properly.

Condition	Suggested solutions
The machine does not scan.	 Check if a document is loaded into the machine. Check if your machine is connected to the computer. Make sure if it is connected properly if I/O error is reported while scanning. Check if the port is not busy. Since functional components of MFP (printer and scanner) share the same I/O interface (MFP port), the situation of simultaneous access of different "consumer" application to the same MFP port is possible. To avoid possible conflicts, only one of them at a time is allowed to gain control over the device. The other "consumer" will encounter "device busy" response. This can usually happen while starting scan procedure, and appropriate message box will be displayed. To identify the source of the problem, you should open port configuration and select the port assigned to your scanner. MFP port's symbol /dev/mfp0 corresponds to LP:0 designation displayed in the scanners' options, /dev/mfp1 relates to LP:1 and so on. USB ports start at /dev/mfp4, so scanner on USB:0 relates to /dev/mfp4 respectively and so forth sequentially. In the Selected port pane you can see if the port is occupied by some other application. If this is the case, you should wait for completion of the current job or should press Release port button, if you are sure that the present port's owner is not functioning properly.
I cannot scan via Gimp Front-end.	Check if Gimp Front-end has "Xsane:Device dialog." on the "Acquire" menu. If not, you should install Xsane plug-in for Gimp on the your computer. You can find Xsane plug-in package for Gimp on Linux distribution CD or Gimp home page. For the detail information, refer to the Help for Linux distribution CD or Gimp Front-end application. If you wish to use other kind of scan application, refer to the Help for application.

Condition	Suggested solutions
I encounter error "Cannot open MFP port device file" when printing a document.	Please avoid changing print job parameters (via LPR GUI, for example) while a print job is in progress. Known versions of CUPS server break the print job whenever print options are changed and then try to restart the job from the beginning. Since Unified Linux Driver locks MFP port while printing, the abrupt termination of the driver keeps the port locked and therefore unavailable for subsequent print jobs. If this situation occurred, please, try to release the MFP port.

Common Macintosh problems (CLX-3160FN only)

Condition	Suggested solutions
The printer does not print a document from Acrobat Reader.	You should change the Print Method option to Print as Image when you print from Acrobat Reader.
The document has printed, but the print job has not disappeared from the spooler in Mac OS 10.3.2.	Update your Mac OS to OS 10.3.3. or higher.

15 Specifications

This chapter includes:

- General specifications
- Printer specifications
- Scanner and copier specifications
- Facsimile specifications (CLX-3160FN only)

General specifications

Item	Description
Model name	IR31CFF: CLX-3160FN
Model Hame	IR31CFC: CLX-3160N
ADF	Up to 50 sheets (20 lb bond, 75 g/m ²)
ADF document size	Width: 5.6 to 8.5 inches (142 to 216 mm)
ADI document size	Length: 5.8 to 14 inches (148 to 356 mm)
	Tray 1: 150 multi-pages for plain paper (20 lb bond, 75 g/m²), 1 page for label, card stock, transparency, and envelope (16 to 43 lb bond, 60 to 163 g/m²)
Paper input capacity	Manual tray: 1 page for plain paper, label, card stock, transparency, and envelope (16 to 43 lb bond, 60 to 163 g/m²)
	Optional tray 2: 250 multi pages for plain paper (16 to 24lb bond, 60 to 90 g/m²)
Paper output capacity	Output tray: 100 sheet (face down)
D	110 - 127 VAC, 50/60 Hz, 4.5 A (USA, Canada)
Power rating	220 - 240 VAC, 50/60 Hz, 2.5 A (others)
Power consumption	Average: 400 W
7 ower consumption	Power save mode: Less than 17 W
	Standby mode: Less than 35 dBA
Noise level ^a	Printing: Less than 48 dBA (color printing) Less than 49 dBA (black and white printing)
	Copying mode: Less than 55 dBA
Warm-up time	Less than 35 seconds (from sleep mode)
Operating environment	Temperature: 59° F to 90° F (15° C to 32.5° C)
- CHAROTINION	Humidity: 20% to 80% RH
Display	16 characters x 2 lines

Item	Description	
Toner cartridge life ^b	Black	2,000 pages at 5% coverage
	Color	1,000 pages at 5% coverage
Memory	128 MB (Non extendable)	
External dimension (W x D x H)	466 x 429 x 486 mm (18.3 x 16.8 x 19.1 inches)	
Weight	20.5 Kg (including consumables)	
Package weight	Paper: 2.8 Kg, Plastic: 0.7 Kg	
Duty cycle	Monthly print: Up to 24,200 pages	

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

Printer specifications

Item	Description	
Printing method	Laser Beam Printing	
Printing speed ^a	Black & White	Up to 16 ppm in A4 17 ppm in Letter
	Color	Up to 4 ppm in A4 or Letter
First print out time	Black & White	From ready: Less than 14 seconds From coldboot: Less than 45 seconds
	Color	From ready: Less than 26 seconds From coldboot: Less than 57 seconds
Print resolution	Up to 2,400 x 600 dpi effective output	
Printer language	SPL-C (Samsung Printer Language Color)	
OS Compatibility ^b	Windows 98/Me/NT 4.0/2000/XP/2003 Various Linux OS (USB only) Macintosh 10.3 ~ 10.4	
Interface	High Speed USB 2.0	

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

Scanner and copier specifications

Item		Description	
Compatibility	TWAIN standard / WIA standard		
Scanning method	ADF and Flat-bed Color CCD (Charge Coupled Device) module		
Resolution	Optical: 600 x 1,200 dpi (mono and color) Enhanced: 4,800 x 4,800 dpi		
Effective scanning length	Scanner glass: 11.7 inches (297 mm) ADF: 14 inches (356 mm)		
Effective scanning width	Max 8.2 inches (208 mm)		
Color bit depth	24 bit		
Mono bit depth	1 bit for Linearity & Haftone 8 bit for Gray mode		
Copy speed ^a	Black & white	Up to 16 ppm in A4 (17 ppm in Letter)	
	Color	Up to 4 cpm in A4 or Letter	
Copy resolution	Scan: up to 600 x 300 (text, text/photo) up to 600 x 600 (photo) Print: up to 600 x 600 (text, text/photo) up to 1200 x 1200 (photo)		
Zoom rate	Scanner glass: 25 to 400% ADF: 25 to 100%		
Multiple copies	1 to 99 pages		
Grayscale	256 levels		

a. Copy Speed is based on Single Document Multiple Copy.

Facsimile specifications (CLX-3160FN only)

Item	Description
Compatibility	ITU-T Group 3
Applicable line	Public Switched Telephone Network (PSTN) or behind PABX
Data coding	MH/MR/MMR/JBIG/JPEG
Modem speed	33.6 Kbps
Transmission speed	Approx. 3 seconds/page ^a
Maximum document length	Scanner glass: 11.7 inches (297 mm) Automatic document glass: 14 inches (356 mm)
Resolution	Standard: 203 x 98 dpi Fine: 203 x 196 dpi Super Fine: 300 x 300 dpi Photo: 203 x 196 dpi Color: 200 x 200 dpi
Memory	4 MB
Halftone	256 levels
Auto dialer	Speed buttons (up to 30 numbers) Speed dialing (up to 240 numbers)

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

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Samsung Printer Software section

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Installing Printer Software in Windows

This chapter includes:

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

Installing Printer Software

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

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

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

Installing Software for Local Printing

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

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

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

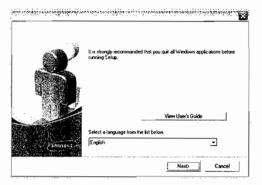
Typical Installation

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

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

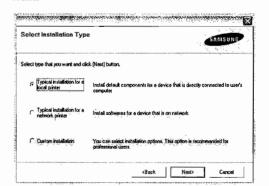
The Printer software CD should automatically run, and an installation window appears.

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

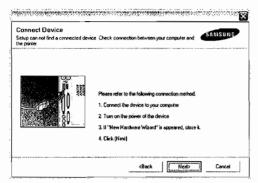


3 Click Next.

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



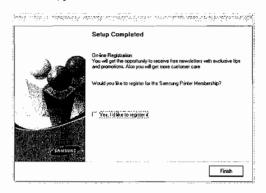
Note: If your printer is not already connected to the computer, the following window will appear.



- · After connecting the printer, click Next.
- If you don't want to connect the printer at this time, click
 Next, and No on the following screen. Then the installation
 will start and a test page will not be printed at the end of the
 installation.
- The installation window that appears in this User's Guide may differ depending on the printer and interface in use.
- After the installation is finished, a window asking you to print a test page appears. If you choose to print a test page, select the checkbox and click Next. Otherwise, just click Next and skip to step 7.
- 6 If the test page prints out correctly, click Yes.
 If not, click No to reprint it.

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

Otherwise, just click Finish.



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

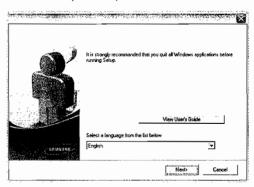
Custom Installation

You can choose individual components to install.

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

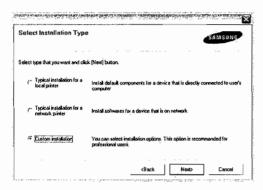
The Printer software CD should automatically run, and an installation window appears.

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

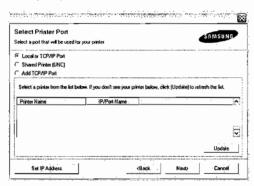


3 Click Next.

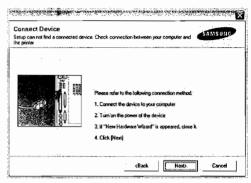
- If necessary, select a language from the drop-down list.
- View User's Guide: Allows you to view the User's Guide. If your computer doesn't have Adobe Acrobat, click on this option and it will automatically install Adobe Acrobat Reader for you.
- 4 Select Custom installation. Click Next.



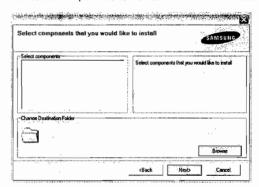
5 Select your printer and click Next.



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



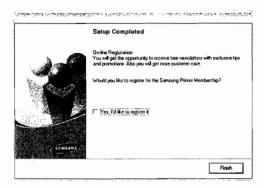
- · After connecting the printer, click Next.
- If you don't want to connect the printer at this time, click Next, and No on the following screen. Then the installation will start and a test page will not be printed at the end of the installation.
- The installation window that appears in this User's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



- 7 After the installation is finished, a window asking you to print a test page appears. If you choose to print a test page, select the checkbox and click Next.
 Otherwise, just click Next and skip to step 9.
- 8 If the test page prints out correctly, click Yes.
 If not, click No to reprint it.

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

Otherwise, just click Finish.



Installing Software for Network Printing

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

You can install the printer software using the typical or custom method. $% \label{eq:continuous}%$

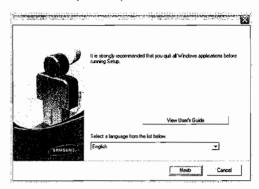
Typical Installation

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

- Make sure that the printer is connected to your network and powered on. For details about connecting to the network, see the supplied printer's User's Guide.
- 2 Insert the supplied Printer software CD into your CD-ROM drive.

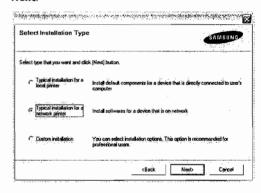
The Printer software CD should automatically run, and an installation window appears.

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

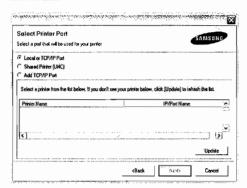


3 Click Next.

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

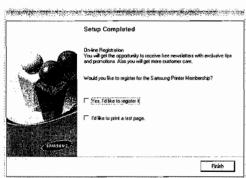


5 The list of printers available on the network appears. Select the printer you want to install from the list and then click Next.



- If you do not see your printer on the list, click Update to refresh the list, or select Add TCP/IP Port to add your printer to the network. To add the printer to the network, enter the port name and the IP address for the printer.
- To find a shared network printer (UNC Path), select Shared Printer [UNC] and enter the shared name manually or find a shared printer by clicking the Browse button.
- 6 After the installation is finished, a window appears asking you to print a test page and to register yourself as a user of Samsung Printers in order to receive information from Samsung. If you so desire, select the corresponding checkbox(es) and click Finish.

Otherwise, just click Finish.



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

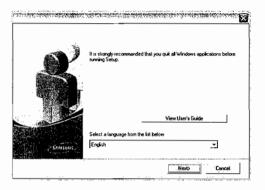
Custom Installation

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

- Make sure that the printer is connected to your network and powered on. For details about connecting to the network, see the supplied printer's User's Guide.
- 2 Insert the supplied Printer software CD into your CD-ROM drive.

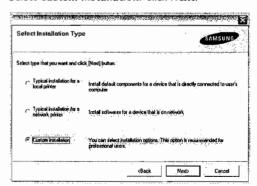
The Printer software CD should automatically run, and an installation window appears.

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



3 Click Next.

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

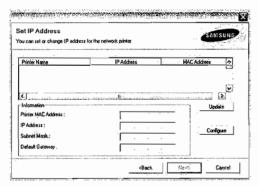


5 The list of printers available on the network appears. Select the printer you want to install from the list and then click Next.



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

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



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

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



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

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

Otherwise, just click Finish.



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

Reinstalling Printer Software

You can reinstall the software if installation fails.

- 1 Start Windows.
- 2 From the Start menu select Programs or All Programs

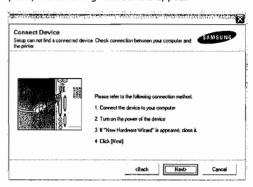
 → your printer driver name → Maintenance.
- 3 Select Repair and click Next.
- 4 The list of printers available on the network appears. Select the printer you want to install from the list and then click Next.



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

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

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



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

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

- a. To print a test page, select the check box and click Next.
- b. If the test page prints out correctly, click Yes.
 If it doesn't, click No to reprint it.
- 6 When the reinstallation is done, click Finish.

Removing Printer Software

- 1 Start Windows.
- 2 From the Start menu select Programs or All Programs → your printer driver name → Maintenance.
- 3 Select Remove and click Next.
 - You will see a component list so that you can remove any item individually.
- 4 Select the components you want to remove and then click **Next**
- When your computer asks you to confirm your selection, click Yes.
 - The selected driver and all of its components are removed from your computer.
- 6 After the software is removed, click Finish.

2 Basic Printing

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

This chapter includes:

- Printing a Document
- Printer Settings
 - Layout Tab
 - Paper Tab
 - Graphics Tab
 - Extras Tab
 - About Tab
 - Printer Tab
 - Using a Favorite Setting
 - Using Help

Printing a Document

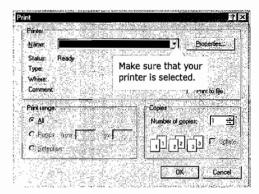
Notes:

- Your printer driver **Properties** window that appears in this User's Guide may differ depending on the printer in use.
 However the composition of the printer properties window is similar
- Check the Operating System(s) that are compatible with your printer. Please refer to the OS Compatibility section of Printer Specifications in your Printer User's Guide.
- If you need to know the exact name of your printer, you can check the supplied Printer software CD.

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

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

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



- 3 Select your printer driver from the Name drop-down list.
- 4 To take advantage of the printer features provided by your printer driver, click **Properties** or **Preferences** in the application's Print window. For details, see "Printer Settings" on page 13.

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

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

Printer Settings

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

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

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

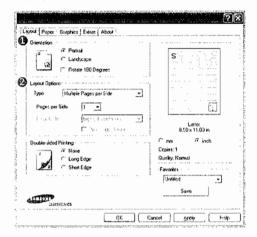
If you access printer properties through the Printers folder, you can view additional Windows-based tabs (refer to your Windows User's Guide) and the Printer tab (see "Printer Tab" on page 16).

NOTES:

- Most Windows applications will override settings you specify in the printer driver. Change all print settings available in the software application first, and change any remaining settings using the printer driver.
- The settings you change remain in effect only while you are using the current program. To make your changes permanent, make them in the Printers folder.
- The following procedure is for Windows XP. For other Windows OS, refer to the corresponding Windows User's Guide or online help.
- 1. Click the Windows Start button.
- 2. Select Printers and Faxes.
- 3. Select your printer driver icon.
- Right-click on the printer driver icon and select Printing Preferences.
- 5. Change the settings on each tab, click OK.

Layout Tab

The **Layout** tab provides options to adjust how the document appears on the printed page. The **Layout Options** includes **Multiple Pages per Side** and **Poster**. See "Printing a Document" on page 12 for more information on accessing printer properties.



Orientation

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

- Portrait prints across the width of the page, letter style.
- Landscape prints across the length of the page, spreadsheet style.





▲ Portrait

▲ Landscape

Rotate 180 Degrees allows you to rotate the page, 180 degrees.

Layout Options

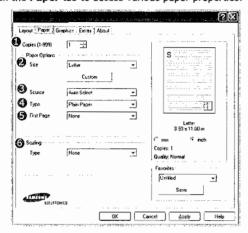
Layout Options allows you to select advanced printing options. You can choose **Multiple Pages per Side**, **Poster** and **Booklet**.

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

Paper Tab

Use the following options to set the basic paper handling specifications when you access the printer properties. See "Printing a Document" on page 12 for more information on accessing printer properties.

Click the Paper tab to access various paper properties.

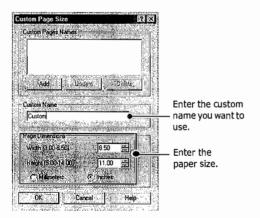


Copies

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

Size

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



Source

Make sure that **Source** is set to the corresponding paper tray. Use **Manual Feed** when printing on special materials like envelopes and transparencies. You have to load one sheet at a time into the Manual Tray or Multi-Purpose Tray. If the paper source is set to **Auto Select**, the printer automatically picks up print material in the following tray order: Manual Tray or Multi-Purpose Tray, Tray1, Optional Tray2

Type

Set **Type** to correspond to the paper loaded in the tray from which you want to print. This will let you get the best quality printout. If not, print quality may not be acheived as you want. **Cotton**: 20 lb to 24 lb (75~90 g/m2) cotton paper such as Gilbert 25 % and Gilbert 100 %.

Plain Paper: Normal plain paper. Select this type if your printer is monochrome and printing on the 16 lb (60 g/m2) cotton paper. **Recycled:** 20 lb to 24 lb (75~90 g/m2) recycled paper. **Color Paper:** 20 lb to 24 lb (75~90 g/m2) color-backgrounded paper.

First Page

This property allows you to print the first page using a different paper type from the rest of the document. You can select the paper source for the first page.

For example, load thick stock for the first page into the Multipurpose Tray, and plain paper into Tray1. Then, select **Tray1** in the **Source** option and **Multi-Purpose Tray** in the **First Page** option.

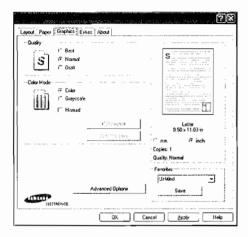
Scaling

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

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

Graphics Tab

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



Quality

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

Color Mode

You can choose 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**. If you want to adjust the color options manually, select **Manual** and click the **Color Adjust** or **Color Matching** button.

- Color Adjust: You can adjust the appearance of images by changing the settings in the Levels option.
- Color Matching: You can adjust the appearance of images by changing the settings in the **Settings** option.

Advanced Options

You can set advanced settings by clicking the ${\bf Advanced}$ ${\bf Options}$ button.

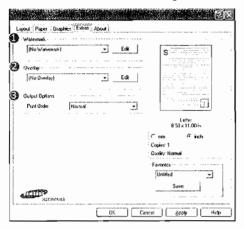


- TrueType Options: This option determines what the driver tells the printer about how to image the text in your document. Select the appropriate setting according to the status of your document. This option may be available only in Windows 9x/Me, depending on your particular printer model.
 - Download as Bit Image: When this option is selected, the driver will download the font data as bitmap images.
 Documents with complicated fonts, such as Korean or Chinese, or various other fonts, will print faster in this setting.
 - Print as Graphics: When this option is selected, the driver will download any fonts as graphics. When printing documents with high graphic content and relatively few TrueType fonts, printing performance (speed) may be enhanced in this setting.
- Print All Text Black: When the Print All Text Black option is checked, all text in your document prints solid black, regardless of the color it appears on the screen.
- Darken Text: When the Darken Text option is checked, all text in your document is allowed to print darker than on a normal document. Some printers do not support this feature.

Extras Tab

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

Click the Extras tab to access the following feature:



Watermark

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

Overlay

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

NOTE: The Overlay feature is not supported in NT 4.0.

6 Output Options

- Print Order: You can set the sequence in which the pages print. Select the print order from the drop-down list.
 - Normal: Your printer prints all pages from the first page to the last page.
 - Reverse All Pages: Your printer prints all pages from the last page to the first page.
 - Print Odd Pages: Your printer prints only the odd numbered pages of the document.
 - Print Even Pages: Your printer prints only the even numbered pages of the document.

About Tab

Use the **About** tab to display the copyright notice and the version number of the driver. If you have an Internet browser, you can connect to the Internet by clicking on the web site icon. See "Printing a Document" on page 12 for more information about accessing printer properties.

Printer Tab

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

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

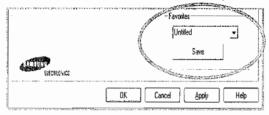
- 1 Click the Windows Start menu.
- 2 Select Printers and Faxes.
- 3 Select your printer driver icon.
- 4 Right-click on the printer driver icon and select Properties.
- 5 Click the **Printer** tab and set the options.

Using a Favorite Setting

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

To save a Favorites item:

- ${f 1}$ Change the settings as needed on each tab.
- 2 Enter a name for the item in the Favorites input box.



3 Click Save.

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

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

To delete a Favorites item, select it from the list and click $\ensuremath{\textbf{Delete}}.$

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

Using Help

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

You can also click $\ensuremath{\underline{\mathcal{T}}}$ from the upper right corner of the window, and then click on any setting.

3

Advanced Printing

This chapter explains printing options and advanced printing tasks.

NOTE:

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

This chapter includes:

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

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



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

- 1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 12.
- 2 From the Layout tab, choose Multiple Pages per Side in the Type drop-down list.
- 3 Select the number of pages you want to print per sheet (1, 2, 4, 6, 9, or 16) in the **Pages per Side** drop-down list.
- 4 Select the page order from the Page Order drop-down list, if necessary.
 - Check **Print Page Border** to print a border around each page on the sheet.
- 5 Click the Paper tab, select the paper source, size, and type.
- 6 Click **OK** and print the document.

Printing Posters



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



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

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





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







0.15 inches

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

Printing Booklets





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

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

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

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

Printing on Both Sides of Paper

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

The options are

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









▲ Long Edge

▲ Short Edge

NOTE:

- Do not print on both sides of labels, transparencies, envelopes, or thick paper. Paper jamming and damage to the printer may result.
- To use double-sided printing, you can use only the following paper sizes: A4, Letter, Legal, and Folio, with a weight of 20~24 lbs (75~90 g/m²).
- 1 To change the print settings from your software application, access printer properties. "Printing a Document" on page 12.
- 2 From the **Layout** tab, select the paper orientation.
- 3 From the Double-sided Printing section, select the duplex binding option you want.
- 4 Click the Paper tab and select the paper source, size, and type.
- 5 Click **OK** and print the document.

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

Printing a Reduced or Enlarged Document





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

- 1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 12.
- 2 From the Paper tab, select Reduce/Enlarge in the Type drop-down list.
- 3 Enter the scaling rate in the Percentage input box.
 You can also click the ▼ or ▲ button.
- 4 Select the paper source, size, and type in **Paper Options**.
- 5 Click **OK** and print the document.

Fitting Your Document to a Selected Paper Size



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

- 1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 12.
- 2 From the Paper tab, select Fit to Page in the Type dropdown list.
- 3 Select the correct size from the Target Page drop-down
- 4 Select the paper source, size, and type in Paper Options.
- 5 Click **OK** and print the document.

Using Watermarks

The Watermark option allows you to print text over an existing document. For example, you may want to have large gray letters reading "DRAFT" or "CONFIDENTIAL" printed diagonally across the first page or all pages of a document.

There are several predefined watermarks that come with the printer, and they can be modified, or you can add new ones to the list.

Using an Existing Watermark

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

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

Creating a Watermark

- 1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 12.
- Click the Extras tab, and click the Edit button in the Watermark section. The Edit Watermark window appears.
- 3 Enter a text message in the Watermark Message box. You can enter up to 40 characters. The message displays in the preview window.
 - When the **First Page Only** box is checked, the watermark prints on the first page only.
- 4 Select watermark options.
 - You can select the font name, style, size, or grayscale level from the **Font Attributes** section and set the angle of the watermark from the **Message Angle** section.
- 5 Click Add to add a new watermark to the list.
- 6 When you have finished editing, click **OK** and start printing.

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

Editing a Watermark

- 1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 12.
- 2 Click the Extras tab and click the Edit button in the Watermark section. The Edit Watermark window appears.
- 3 Select the watermark you want to edit from the Current Watermarks list and change the watermark message and options.
- 4 Click **Update** to save the changes.
- 5 Click **OK** until you exit the Print window.

Deleting a Watermark

- 1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 12.
- 2 From the Extras tab, click the Edit button in the Watermark section. The Edit Watermark window appears.
- 3 Select the watermark you want to delete from the Current Watermarks list and click Delete.
- 4 Click **OK** until you exit the Print window.

Using Overlays

What is an Overlay?



An overlay is text and/or images stored in the computer hard disk drive (HDD) as a special file format that can be printed on any document. Overlays are often used to take the place of preprinted forms and letterhead paper. Rather than using preprinted letterhead, you can create an overlay containing the exact same information that is currently on your letterhead. To print a letter with your company's letterhead, you do not need to load preprinted letterhead paper in the printer. You need only tell the printer to print the letterhead overlay on your document.

NOTE: The Overlay feature is not supported in NT 4.0.

Creating a New Page Overlay



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

- 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.
- To save the document as an overlay, access printer properties. See "Printing a Document" on page 12.
- 3 Click the Extras tab, and click Edit button in the Overlay section.
- 4 In the Edit Overlay window, click **Create Overlay**.
- 5 In the Create Overlay window, type a name in the File name box. Select the destination path, if necessary. (The default is C:\Formover).
- 6 Click Save. The name appears on the Overlay List box.
- 7 Click OK or Yes to finish creating.

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

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

Using a Page Overlay

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

- 1 Create or open the document you want to print.
- 2 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 12.
- 3 Click the Extras tab.
- 4 Select the desired overlay from the Overlay drop-down list box.
- 5 If the overlay file you want does not appear in the Overlay list, click Edit button and Load Overlay, and select the overlay file.

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

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

6 If necessary, click Confirm Page Overlay When Printing. If this box is checked, a message window appears each time you submit a document for printing, asking you to confirm your wish to print an overlay on your document.

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

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

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

NOTE: The resolution of the overlay document must be the same as that of the document you will print with the overlay.

Deleting a Page Overlay

You can delete page overlays that you no longer use.

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

4 Sharing the Printer Locally

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

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

NOTES:

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

Setting Up a Host Computer

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

Setting Up a Client Computer

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

5

Using Smart Panel

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

Notes:

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

Understanding Smart Panel

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

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

Double-click this icon in Windows.



Click this icon in Mac OS X.





Double-click this icon in Linux.

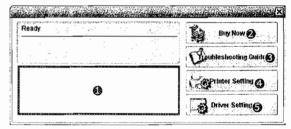


If you are a Windows user, from the **Start** menu, select **Programs** or **All Programs** \rightarrow **your printer driver name** \rightarrow **Smart Panel**.

Notes:

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

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



Toner Level

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

Buy Now

You can order replacement toner cartridge(s) online.

Troubleshooting Guide

You can view Help to solve problems.

Printer Setting

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

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

Driver Setting (Only for Windows)

You can use the printer properties window, which allows you to access all of the printer options you need for using your printer. For details, See "Printer Settings" on page 13.

Opening the Troubleshooting Guide

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

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

Using Printer Settings Utility

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

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

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

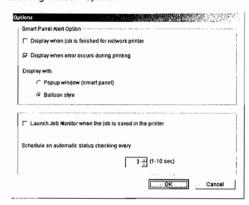
Using Onscreen Help File

For more information about Printer Settings Utility, click

Changing the Smart Panel Program Settings

Right-click (in Windows or Linux) or click (in Mac OS X) the Smart Panel icon and select ${\bf Options}.$

The following window opens.



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

6 Scanning

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

This chapter includes:

- · Scanning Using Samsung SmarThru
- Scanning Process with TWAIN-enabled Software
- · Scanning Using the WIA Driver

Notes

- Check the Operating System(s) that are compatible with your printer. Please refer to the OS Compatibility section of Printer Specifications in your Printer User's Guide.
- You can check your printer name in the supplied CD-ROM.
- The maximum resolution that can be achieved depends upon various factors, including computer speed, available disk space, memory, the size of the image being scanned, and bit depth settings. Thus, depending on your system and what you are scanning, you may not be able to scan at certain resolutions, especially using enhanced dpi.

Scanning Using Samsung SmarThru

Samsung SmarThru is the accompanying software for your machine. With SmarThru, scanning is the proverbial piece of cake

Uninstalling Samsung SmarThru

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

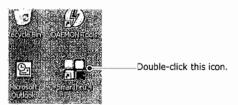
- From the Start menu, select Programs.
- Select SmarThru 4, and then select Uninstall SmarThru
 4.
- 3 When your computer asks you to confirm, click **OK**.
- 4 Click Finish.

You may be prompted to restart your computer. In this case you must shut the computer down and then restart it before the changes will be saved.

Using Samsung SmarThru

Follow these steps to start scanning using the SmarThru:

- Make sure that your machine and computer are turned on and properly connected to each other.
- 2 Place your photograph or page on the document glass or ADF.
- 3 Once you have installed Samsung SmarThru, you will see the SmarThru 4 icon on your desktop. Double-click the SmarThru 4 icon.



The SmarThru 4 window opens.



•Scan To

Allows you to scan an image and save it to an application or folder, email it, or publish it on a web site.

Image

Allows you to edit an image you have saved as a graphic file and send it to a selected application or folder, email it, or publish it on a web site.

Copy

Allows you to produce professional quality copies. You can make black and white or color copies of an image if your machine supports it, and customize the copy settings.

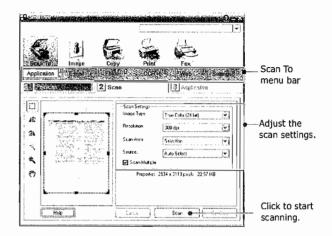
Print

Allows you to print images you have saved. You can print images in black and white or color mode if your machine supports it.

Fax

Allows you to fax images or files you have saved on your computer. This is available when your machine supports the fax feature.

4 Click Scan To. The Scan To menu bar appears on the SmarThru 4 window.



Scan To lets you use the following services:

Application

Scanning an image and placing it in an image editor application, such as Paint or Adobe Photoshop.

•E-mai

Scanning an image and emailing it. Allows you to scan an image, preview it, and email it.

Note: To send an image by e-mail, you must have a mail client program, like Outlook Express, which has been set up with your e-mail account.

Folder

Scanning an image and saving it to a folder. Allows you to scan an image, preview it, and save it to the folder of your choice.

•OCR

Scanning an image and performing text recognition. Allows you to scan an image, preview it, and send it to the OCR program for text recognition.

- Recommended Scan Option for OCR
- Resolution: 200 or 300 dpi
- Image Type: Grayscale or Black & White

•Web

Scanning an image, previewing it, and publishing it on a web site, using the specified file format for the image you want to publish.

Settings

Customizing settings of **Scan To** basic functions. Allows you to customize settings for **Application**, **E-mail**, **OCR**, and **Web** functions.

- **5** Click the service icon according to your job.
- 6 SmarThru 4 opens for the selected service. Adjust the scan settings.
- 7 To start scanning, click Scan.

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

Using Onscreen Help File

For more information about SmarThru, click ② at the top right corner of the window. The SmarThru Help window opens and allows you to view onscreen help supplied on the SmarThru program.

Scanning Process with TWAINenabled Software

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

The basic scanning process involves a number of steps:

- Make sure that your machine and computer are turned on and properly connected to each other.
- 2 Load the document(s) face up into the ADF.

OR

Place a single document face down on the document glass.

- **3** Open an application, such as PhotoDeluxe or Photoshop.
- 4 Open the TWAIN window and set the scan options.
- 5 Scan and save your scanned image.

Note: You need to follow the program's instructions for acquiring an image. Please refer to the user's guide of the application.

Scanning Using the WIA Driver

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

 $\ensuremath{\text{\textbf{NOTE}}}\xspace$ The WIA driver works only on Windows XP with USB port.

- Load the document(s) face up into the ADF.
 OR
 - Place a single document face down on the document glass.
- 2 From the Start menu on your desktop window, select Settings, Control Panel, and then Scanners and Cameras.
- 3 Double click your scanner driver icon. The Scanner and Camera Wizard launches.
- 4 Choose your scanning preferences and click **Preview** to see how your preferences affect the picture.
- 5 Click Next.
- 6 Enter a picture name, and select a file format and destination to save the picture.
- 7 Follow the on-screen instructions to edit the picture after it is copied to your computer.

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

Using Your Printer in Linux

You can use your machine in a Linux environment.

This chapter includes:

- Getting Started
- Installing the Unified Linux Driver
- Using the Unified Driver Configurator
- Configuring Printer Properties
- · Printing a Document
- Scanning a Document (for MFP device only)

Getting Started

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

Samsung's Unified Linux Driver package contains printer and scanner drivers, providing the ability to print documents and scan images. The package also delivers powerful applications for configuring your machine and further processing of the scanned documents.

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

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

Installing the Unified Linux Driver

Installing the Unified Linux Driver

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

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

3 Insert the printer software CD-ROM. The CD-ROM will automatically run.

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

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

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

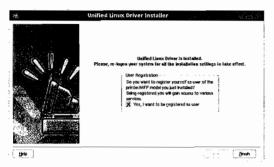
[root@localhost root]#cd /mnt/cdrom/Linux [root@localhost root]#./install.sh

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

4 When the welcome screen appears, click Next.



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



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

Uninstalling the Unified Linux Driver

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

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

2 Insert the printer software CD-ROM. The CD-ROM will automatically run.

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

If the CD-ROM is secondary master and the location to mount is /mnt/cdrom, $\label{eq:cdrom} % \begin{subarray}{ll} \end{subarray} % \begin{suba$

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

[root@localhost root]#cd /mnt/cdrom/Linux [root@localhost root]#./uninstall.sh

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

- 3 Click Uninstall.
- 4 Click Next.



5 Click Finish.

Using the Unified Driver Configurator

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

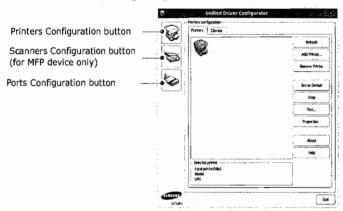
After installing the Unified Linux driver (see page A.3), the Unified Linux Driver Configurator icon will automatically be created on your desktop.

Opening the Unified Driver Configurator

Double-click Unified Driver Configurator on the desktop.

You can also click the Startup Menu icon and select Samsung Unified Driver and then Unified Driver Configurator.

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



You can use the onscreen help by clicking Help.

3 After changing the configurations, click Exit to close the Unified Driver Configurator.

Printers Configuration

Printers configuration has the two tabs; Printers and Classes.

Printers Tah

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

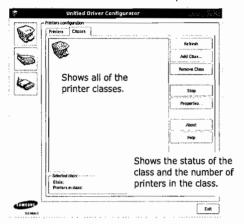


You can use the following printer control buttons:

- Refresh: renews the available printers list.
- · Add Printer: allows you to add a new printer.
- · Remove Printer: removes the selected printer.
- Set as Default: sets the current printer as a default printer.
- Stop/Start: stops/starts the printer.
- **Test**: allows you to print a test page to check if the machine is working properly.
- Properties: allows you to view and change the printer properties. For details, see page 33.

Classes Tab

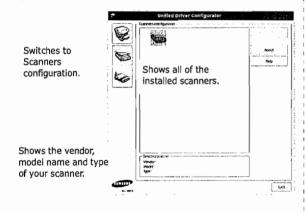
The Classes tab shows a list of available printer classes.



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

Scanners Configuration (for MFP device only)

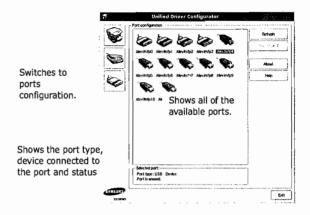
In this window, you can monitor the activity of scanner devices, view a list of installed Samsung MFP devices, change device properties, and scan images.



- Properties...: Allows you to change the scan properties and scan a document. See page 34.
- Drivers...: Allows you to monitor the activity of the scan drivers.

Ports Configuration

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



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

Sharing Ports Between Printers and Scanners (for MFP device only)

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

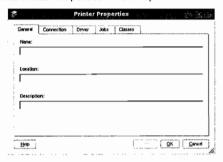
The Samsung Unified Linux Driver package provides an appropriate port sharing mechanism that is used by Samsung printer and scanner drivers. The drivers address their devices via so-called MFP ports. The current status of any MFP port can be viewed via the Ports Configuration. The port sharing prevents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

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

Configuring Printer Properties

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

- 1 Open the Unified Driver Configurator.
 - If necessary, switch to Printers configuration.
- Select your machine on the available printers list and click Properties.
- 3 The Printer Properties window opens.



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

- •General: allows you to change the printer location and name. The name entered in this tab displays on the printer list in Printers configuration.
- •Connection: allows you to view or select another port. If you change the printer port from USB to parallel or vice versa while in use, you must re-configure the printer port in this tab.
- Driver: allows you to view or select another printer driver. By clicking Options, you can set the default device options.
- Jobs: shows the list of print jobs. Click Cancel job to cancel the selected job and select the Show completed jobs check box to see previous jobs on the job list.
- Classes: shows the class that your printer is in. Click Add to Class to add your printer to a specific class or click Remove from Class to remove the printer from the selected class.
- 4 Click OK to apply the changes and close the Printer Properties Window.

Printing a Document

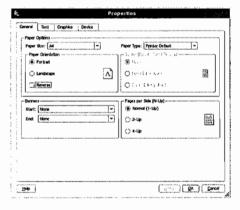
Printing from Applications

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

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



4 Change the printer and print job properties.



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

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

To abort the current job, click Cancel.

Printing Files

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

To print any document file:

- 1 Type lpr <file_name> from the Linux shell command line and press Enter. The LPR GUI window appears.
 - When you type only *lpr* and press **Enter**, the Select file(s) to print window appears first. Just select any files you want to print and click **Open**.
- 2 In the LPR GUI window, select your printer from the list, and change the printer and print job properties.
 - For details about the properties window, see page 33.
- 3 Click OK to start printing.

Scanning a Document (for MFP device only)

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

- Double-click the Unified Driver Configurator on your deskton
- 2 Click the button to switch to Scanners Configuration.
- 3 Select the scanner on the list.



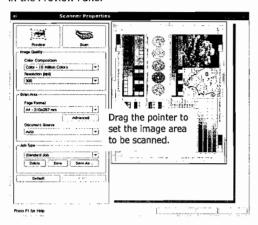
When you have only one MFP device and it is connected to the computer and turned on, your scanner appears on the list and is automatically selected.

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

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

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

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



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

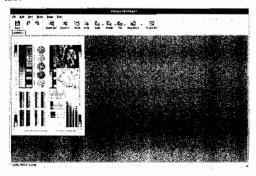
If you want to use one of the preset scan option settings, select from the Job Type drop-down list. For details about the preset Job Type settings, see page 35.

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

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

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

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



If you want to edit the scanned image, use the toolbar. For further details about editing an image, see page 35.

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

Adding Job Type Settings

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

To save a new Job Type setting:

- 1 Change the options from the Scanner Properties window.
- 2 Click Save As.
- 3 Enter the name for your setting.
- 4 Click OK.

Your setting is added to the Saved Settings drop-down list.

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

- Select the setting you want to use from the Job Type dropdown list.
- 2 Click Save.

The next time you open the Scanner Properties window, the saved setting is automatically selected for the scan job.

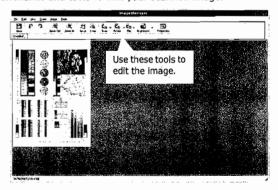
To delete a Job Type setting:

- Select the setting you want to delete from the Job Type drop-down list.
- 2 Click Delete.

The setting is deleted from the list

Using the Image Manager

The Image Manager application provides you with menu commands and tools to edit your scanned image.



You can use the following tools to edit the image:

SE PER CE	The state of the s
Save	Saves the image.
(P Undo	Cancels your last action.
્યુ Redo	Restores the action you canceled.
Scroll	Allows you to scroll through the image.
**************************************	Crops the selected image area.
된 Zoom Out	Zooms the image out.
变 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.
	Allows you to flip the image vertically or horizontally.
e c Effect	Allows you to adjust the brightness or contrast of the image, or to invert the image.
Properties	Shows the properties of the image.

For further details about the Image Manager application, refer to the onscreen help.

8

Using Your Printer with a Macintosh

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

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

This chapter includes:

- Installing Software for Macintosh
- · Setting Up the Printer
- Printing

(01/05Y/01/4/45)

Installing Software for Macintosh

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

Install the Printer driver

- Make sure that you connect your printer to the computer. Turn on your computer and printer.
- 2 Insert the Printer software CD which came with your printer into the CD-ROM drive.
- 3 Double-click CD-ROM icon that appears on your Macintosh desktop.
- 4 Double-click the Installer folder.
- 5 Double-click the **Printer** folder.
- 6 Double-click the Samsung SPLC Installer icon.
- 7 Enter the password and click **OK**.
- 8 The Samsung SPL Installer window opens. Click Continue and then click Continue.
- 9 Select Easy Install and click Install.
- 10 After the installation is finished, click Quit.

Uninstalling the Printer driver

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

- 1 Insert the Printer software CD which came with your printer into the CD-ROM drive.
- 2 Double-click CD-ROM icon that appears on your Macintosh desktop.
- 3 Double-click the Installer folder.
- 4 Double-click the Printer folder.
- 5 Double-click the Samsung SPLC Installer icon.
- 6 Enter the password and click OK.
- 7 The Samsung SPL Installer window opens. Click Continue and then click Continue.
- 8 Select Uninstall and then click Uninstall.
- 9 When the uninstallation is done, click Quit.

Setting Up the Printer

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

For a Network-connected Macintosh

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

- Follow the instructions on "Installing Software for Macintosh" on page 37 to install the PPD and Filter files on your computer.
- 2 Open Print Setup Utility from the Utilities folder.
- 3 Click Add on the Printer List.
- 4 Select the IP Printing tab.
- 5 Enter the printer's IP address in the Printer Address field.
- 6 Enter the queue name in the Queue Name field. If you cannot determine the queue name for your printer server, try using the default queue first.
- 7 Select Samsung in Printer Model and your printer in Model Name.
- 8 Click Add.
- 9 Your printer's IP address appears on the **Printer List**, and is set as the default printer.

For a USB-connected Macintosh

- 1 Follow the instructions on "Installing Software for Macintosh" on page 37 to install the PPD and Filter files on your computer.
- 2 Open Print Setup Utility from the Utilities folder.
- 3 Click Add on the Printer List.
- 4 Select the USB tab.
- 5 Select Samsung in Printer Model and your printer in Model Name.
- 6 Click Add.

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

Printing

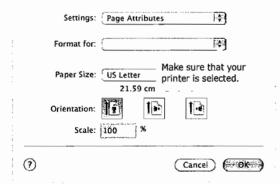
NOTES:

- The Macintosh printer's properties window that appears in this User's Guide may differ depending on the printer in use. However the composition of the printer properties window is similar.
- You can check your printer name in the supplied CD-ROM.

Printing a Document

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

- Open a Macintosh application and select the file you want to print.
- 2 Open the File menu and click Page Setup (Document Setup in some applications).
- 3 Choose your paper size, orientation, scaling, and other options and click OK.



- ▲ Mac OS 10.3
- 4 Open the File menu and click Print.
- 5 Choose the number of copies you want and indicate which pages you want to print.
- 6 Click Print when you finish setting the options.

Changing Printer Settings

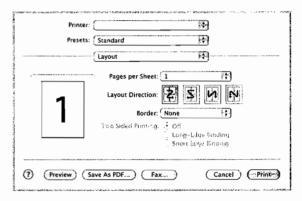
You can use advanced printing features when using your printer.

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

Layout Setting

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

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

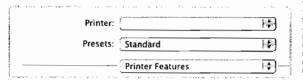


▲ Mac OS 10.3

Printer Features Setting

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

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



▲ Mac OS 10.3

Image Mode

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

Fit to Page

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

Paper Type

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

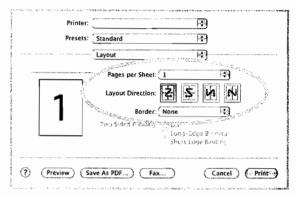
Resolution(Quality)

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

Printing Multiple Pages on One Sheet of Paper

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

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



▲ Mac OS 10.3

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

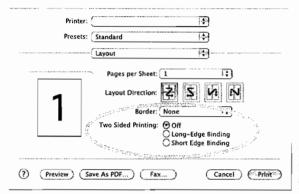
Duplex Printing

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

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

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

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



- ▲ Mac OS 10.3
- 3 Select a binding orientation from Two Sided Printing option.
- 4 Click Print and the printer prints on both sides of the paper.

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

Scanning

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

The basic scanning process involves a number of steps:

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

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

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