

Cleaning the machine

If printing quality problems occur or if you use your machine in a dusty environment, you need to clean your machine regularly to keep it in the best printing condition and use your machine longer.



- Cleaning the cabinet of the machine with cleaning materials containing large amounts of alcohol, solvents, or other strong substances can discolor or distort the cabinet.
- If your machine or the surrounding area is contaminated with toner, we recommend you use a cloth or tissue dampened with water to clean it. If you use a vacuum cleaner, toner blows in the air and might be harmful to you.

Cleaning the outside

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

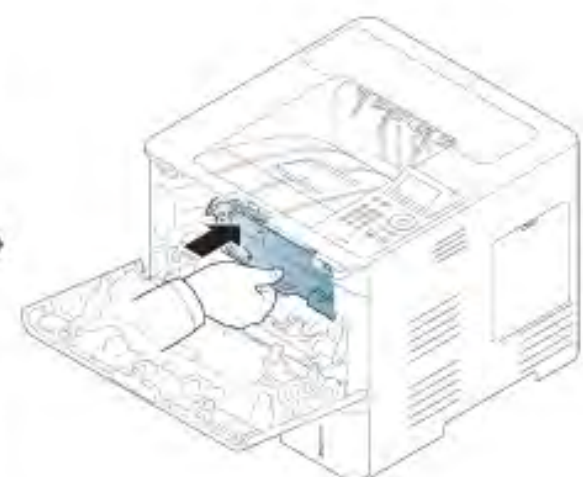
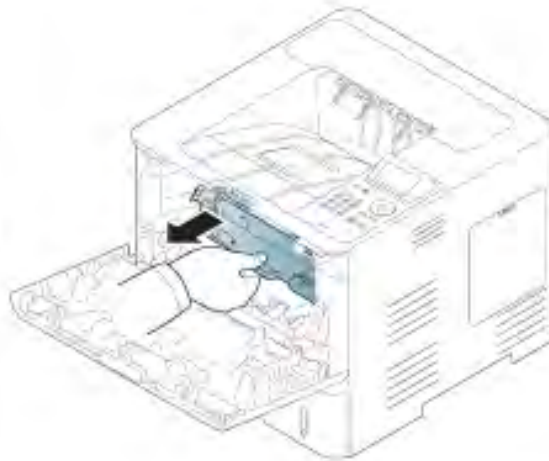
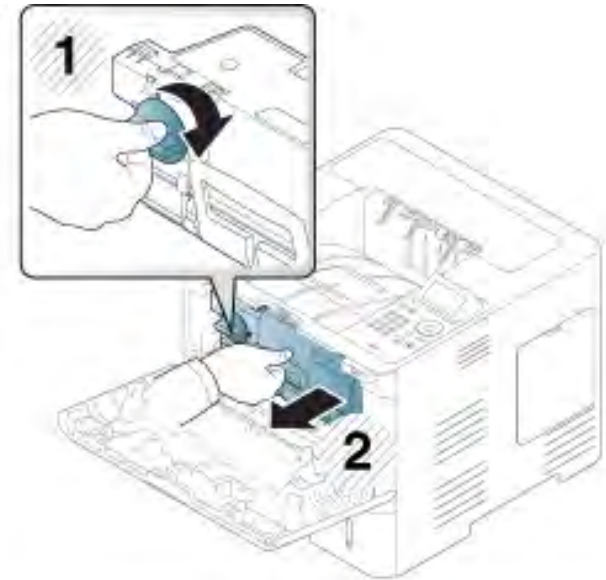
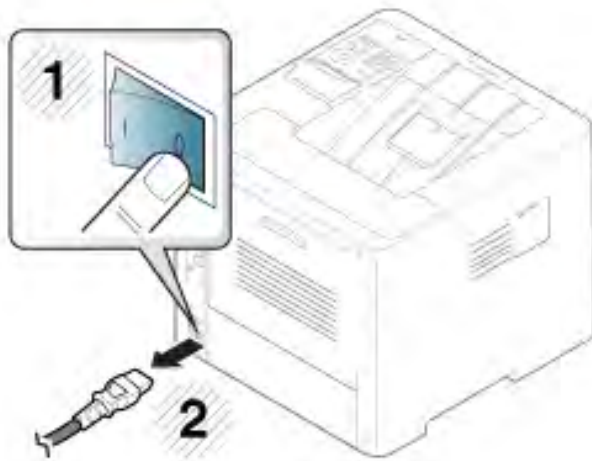
Cleaning the inside

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

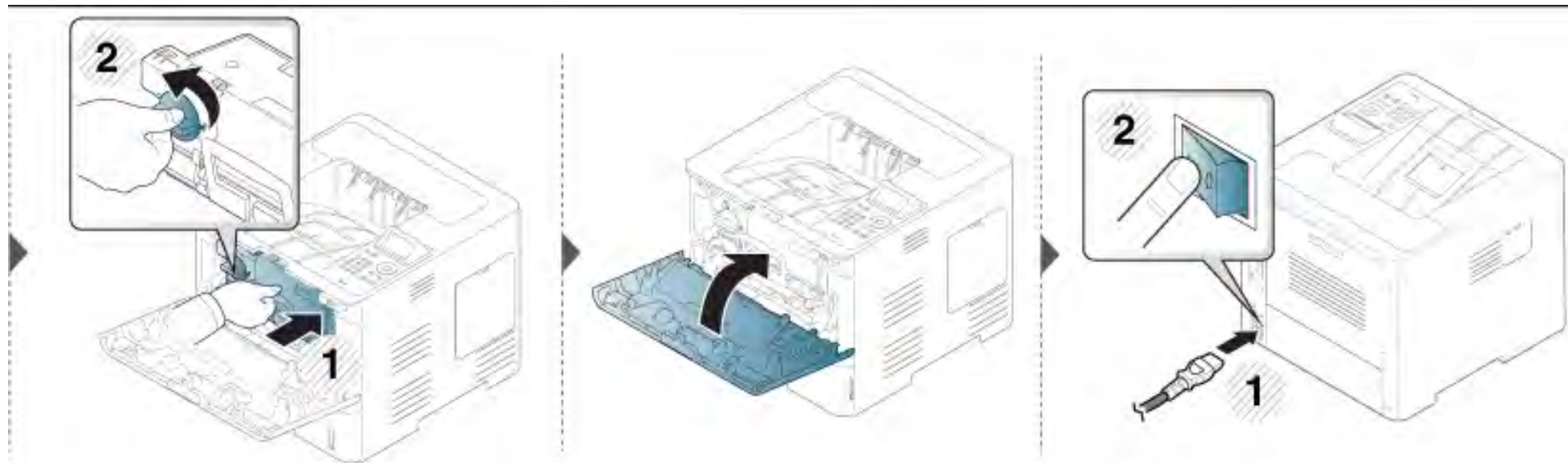


Use a dry lint free cloth when cleaning the inside of the machine, be careful not to damage the transfer roller or any other inside parts. Do not use solvents such as benzene or thinner. Printing quality problems can occur and cause damage to the machine.

Cleaning the machine

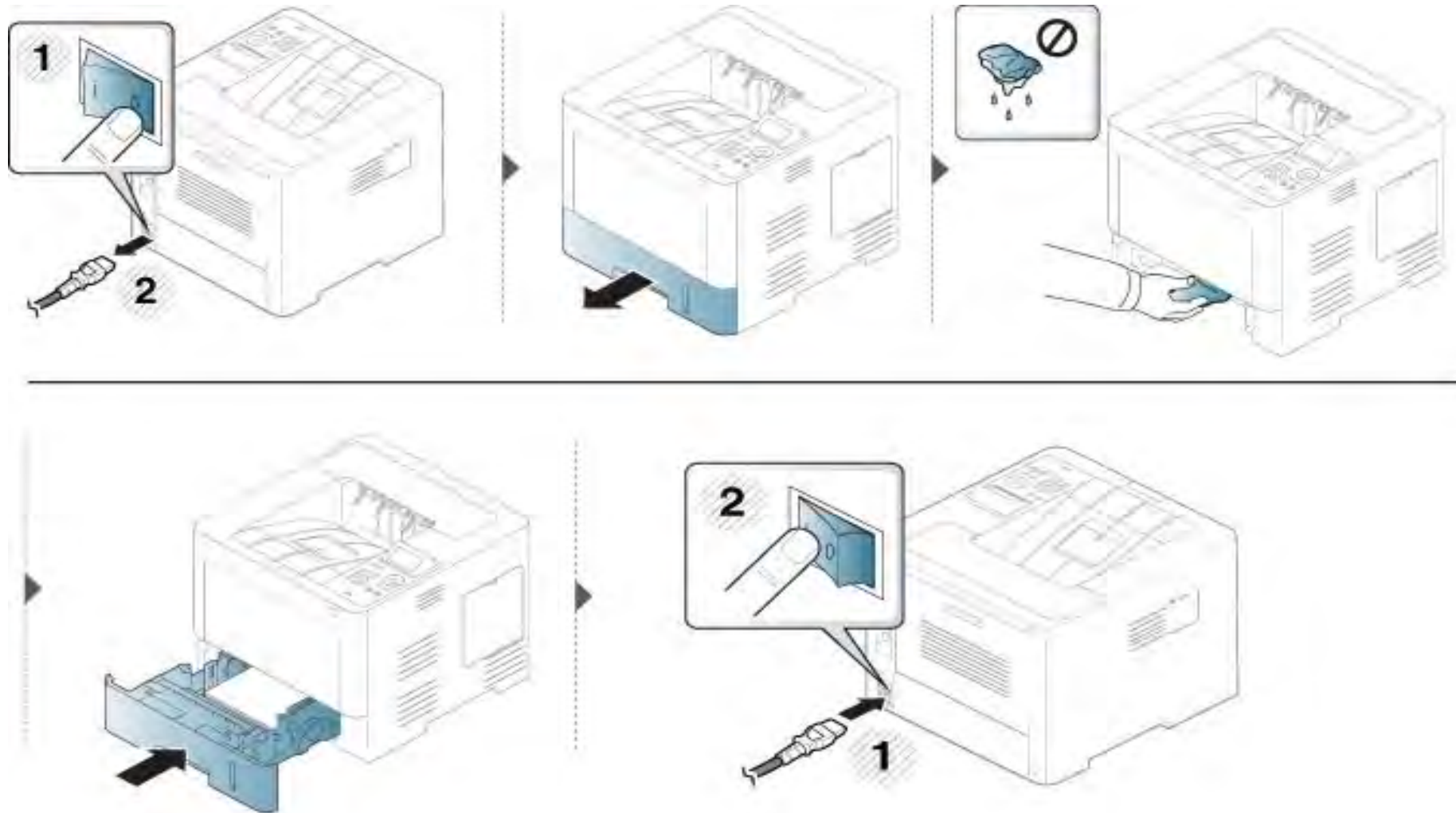


Cleaning the machine



Cleaning the machine

Cleaning the pickup roller



Tips for moving & storing the machine



The warranty does not cover damage from falls or impacts due to the intentional or unintentional actions of the user.

- When moving the machine, do not tilt or turn it upside down. Otherwise, the inside of the machine may be contaminated by toner, which can cause damage to the machine or reduce print quality.
- When moving the machine, make sure at least two people are holding the machine securely.



4. Troubleshooting

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

- **Tips for avoiding paper jams** 82
- **Clearing paper jams** 83
- **Understanding the status LED** 94
- **Understanding display messages** 96



- This chapter gives helpful information about what to do when you encounter an error. If your machine has a display screen, check the message on the display screen first to solve.
- If you cannot find a solution to your problem in this chapter, refer to the **Troubleshooting** chapter in the Advanced Guide (see "Troubleshooting" on page 255).
- If you cannot find a solution in the User's Guide or the problem persists, call for service.

Tips for avoiding paper jams

By selecting the correct medias, most paper jams can be avoided. To avoid paper jams, refer to the following guidelines:

- Ensure that the adjustable guides are positioned correctly (see "Tray overview" on page 37).
- 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 papers in a tray.
- Use only recommended print media (see "Print media specifications" on page 107).

Clearing paper jams



To avoid tearing the paper, pull the jammed paper out slowly and gently.

In tray1



Illustrations in this user's guide may differ from your machine depending on the model and options installed. Check your machine type (see "Front view" on page 17).



Clearing paper jams

In optional tray

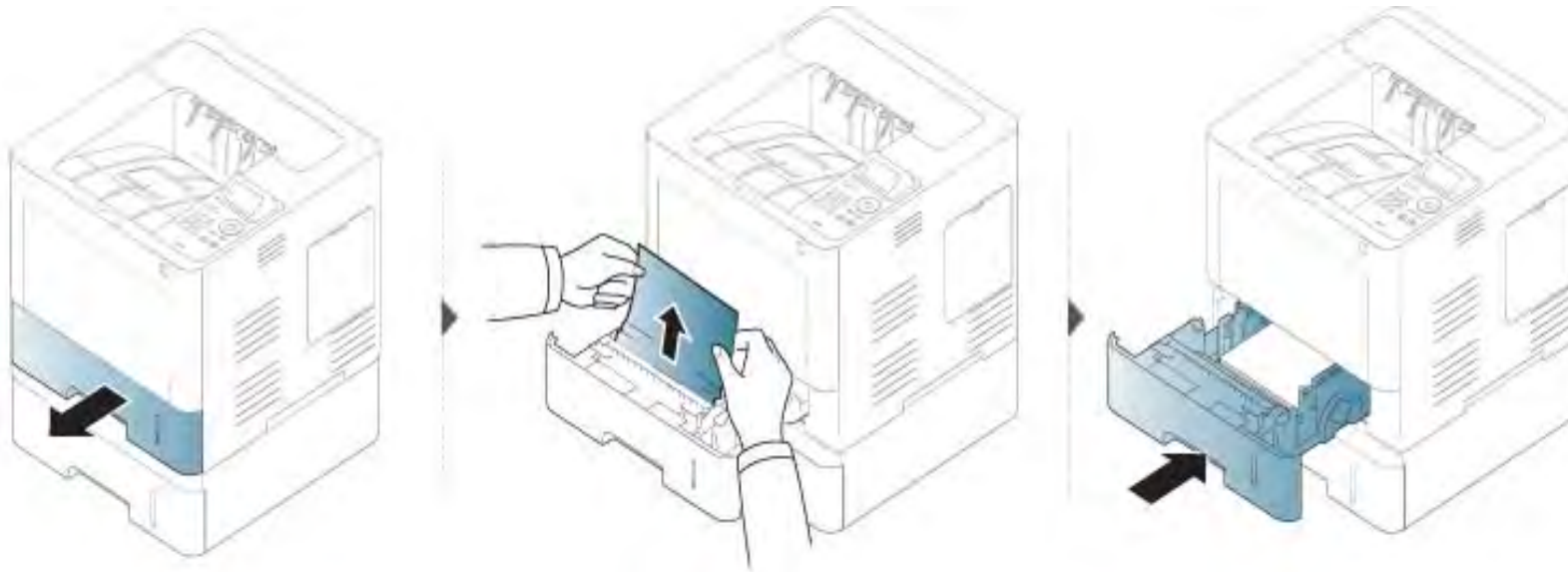


- Illustrations in this user's guide may differ from your machine depending on the model and options installed. Check your machine type (see "Front view" on page 17).
- This troubleshooting may not be available depending on model or optional goods (see "Variety feature" on page 8).



Clearing paper jams

If you do not see the paper in this area, stop and go to next step:

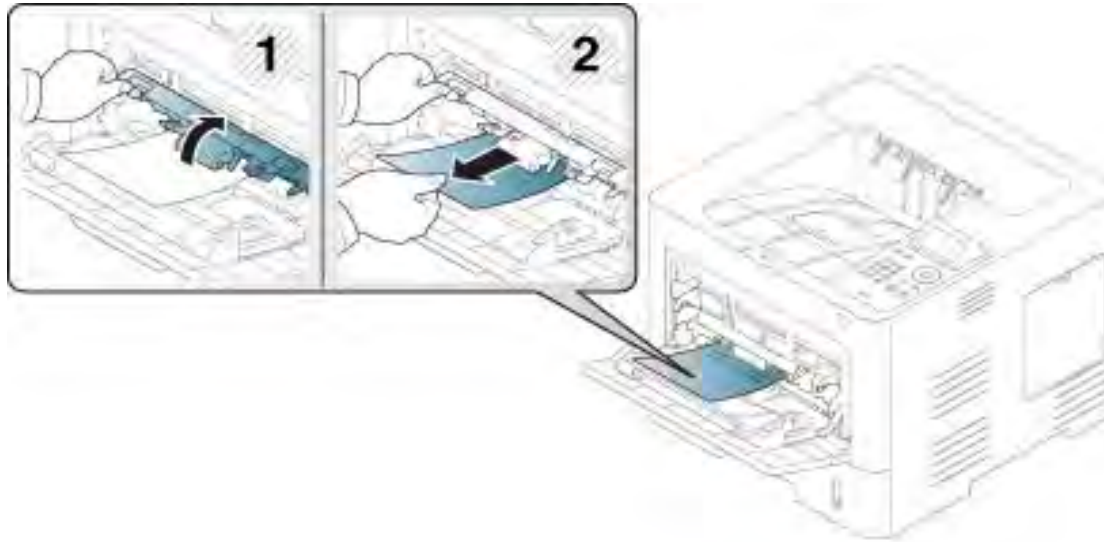


If you do not see the paper in this area, stop and go to next step:



Clearing paper jams

In the multi-purpose tray



Clearing paper jams

Inside the machine

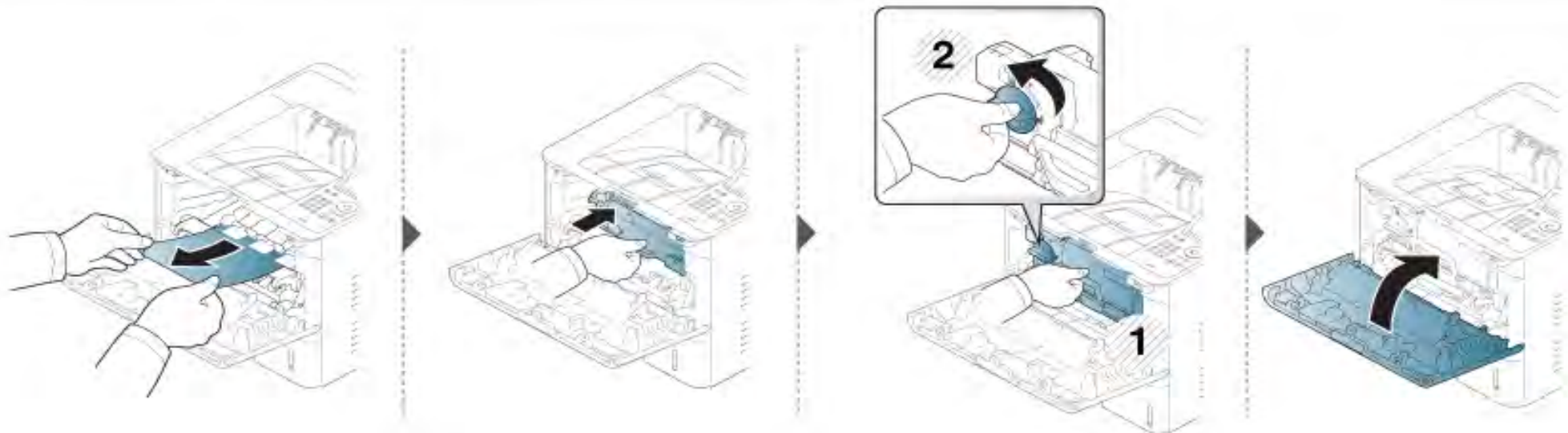
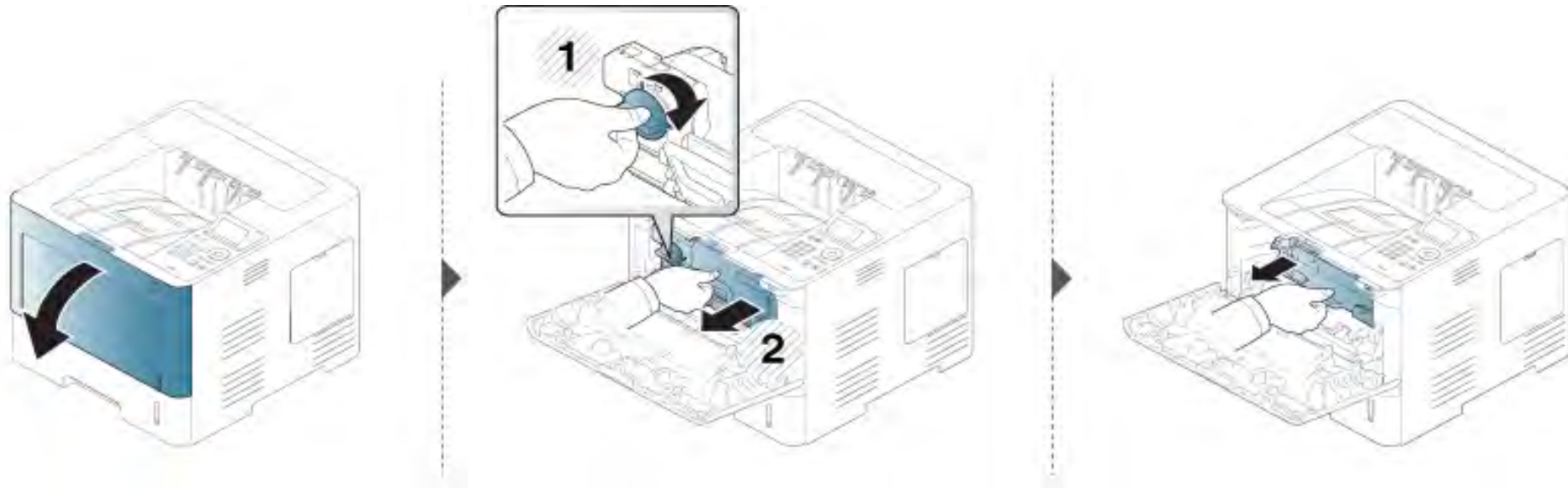


The Fuser area is HOT, please wait until device cools down before accessing this area. Turn power off to cool the machine down. Take care when removing paper from the machine.



Illustrations in this user's guide may differ from your machine depending on the model and options installed. Check your machine type (see "Front view" on page 17).

Clearing paper jams

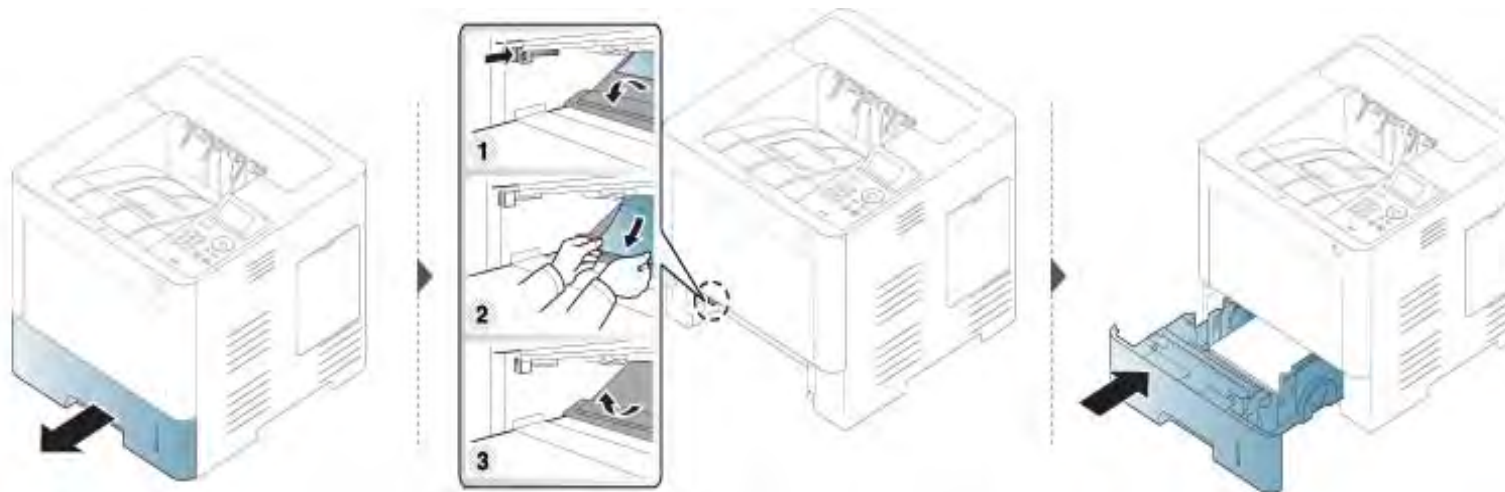


Clearing paper jams

If you do not see the paper in this area, stop and go to next step:



If you do not see the paper in this area, stop and go to next step:

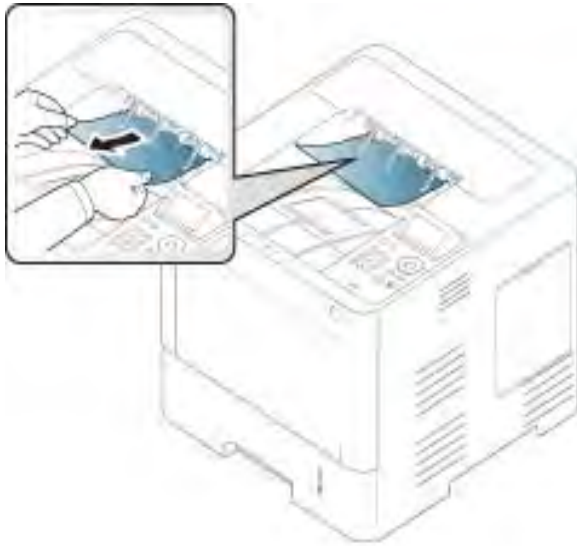


Clearing paper jams

In the exit area

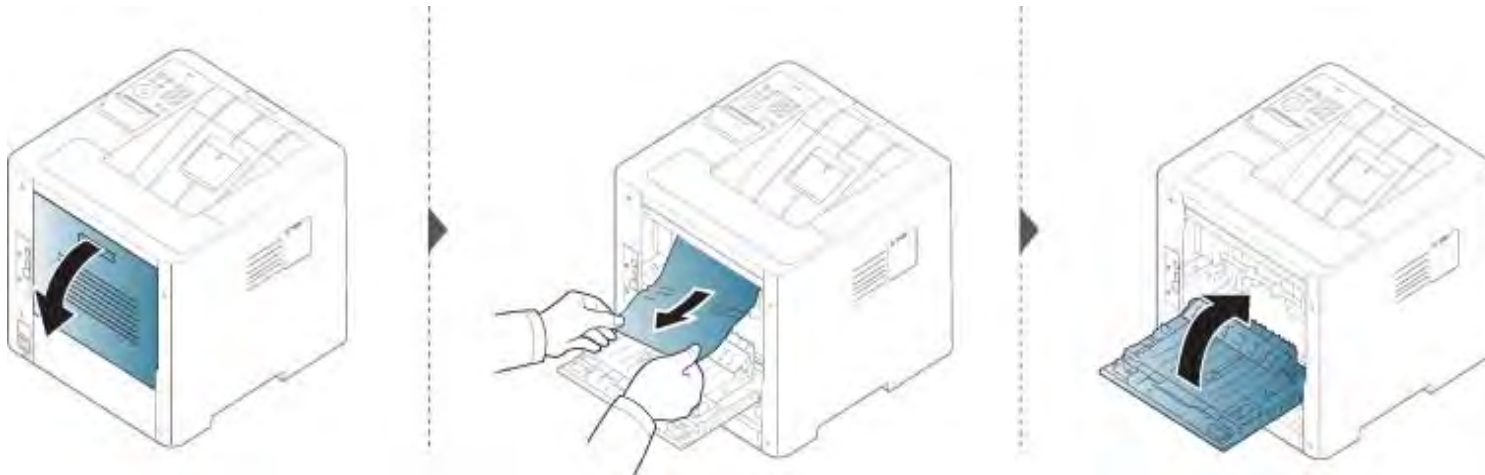


The Fuser area is HOT, please wait until device cools down before accessing this area. Turn power off to cool the machine down. Take care when removing paper from the machine.



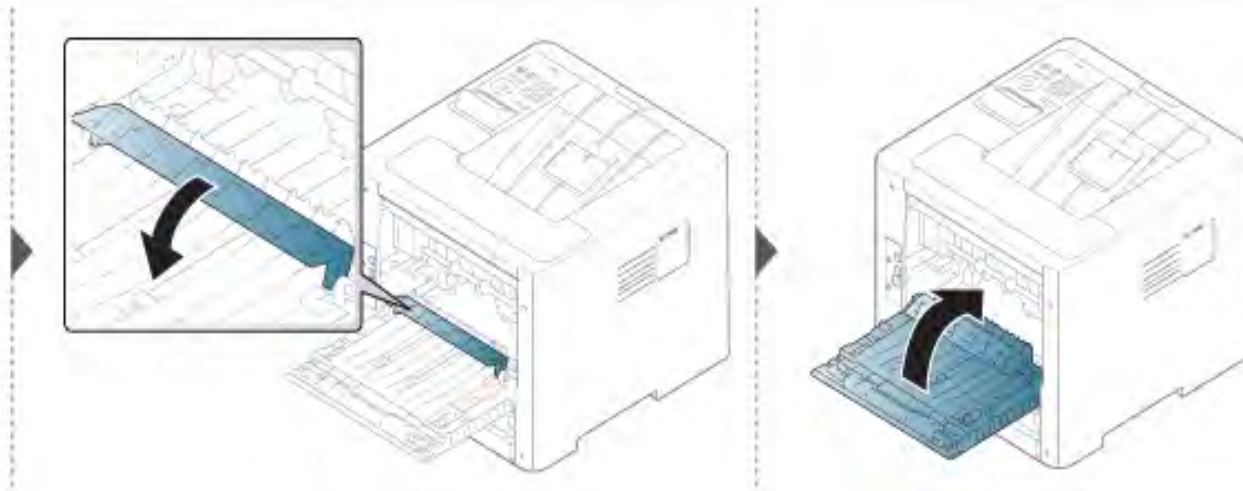
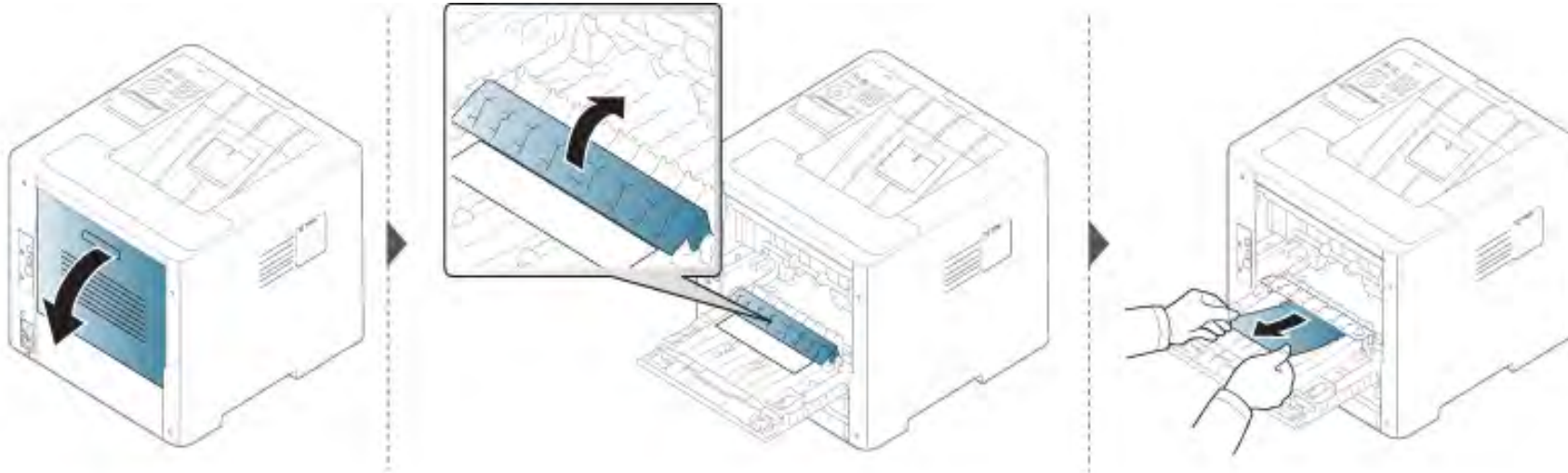
Clearing paper jams

If you do not see the paper in this area, stop and go to next step:



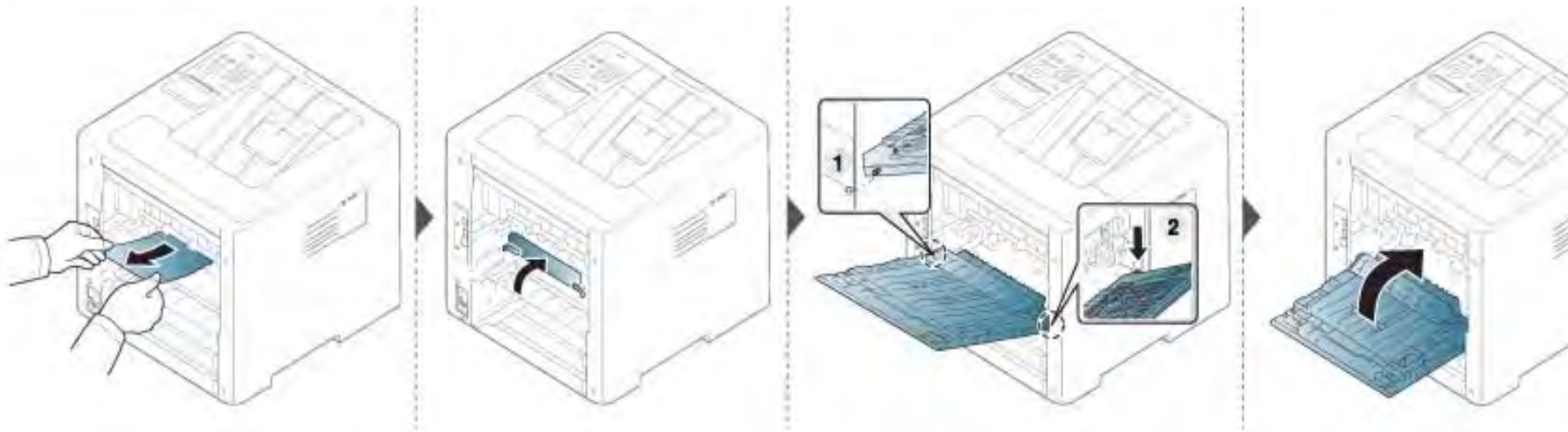
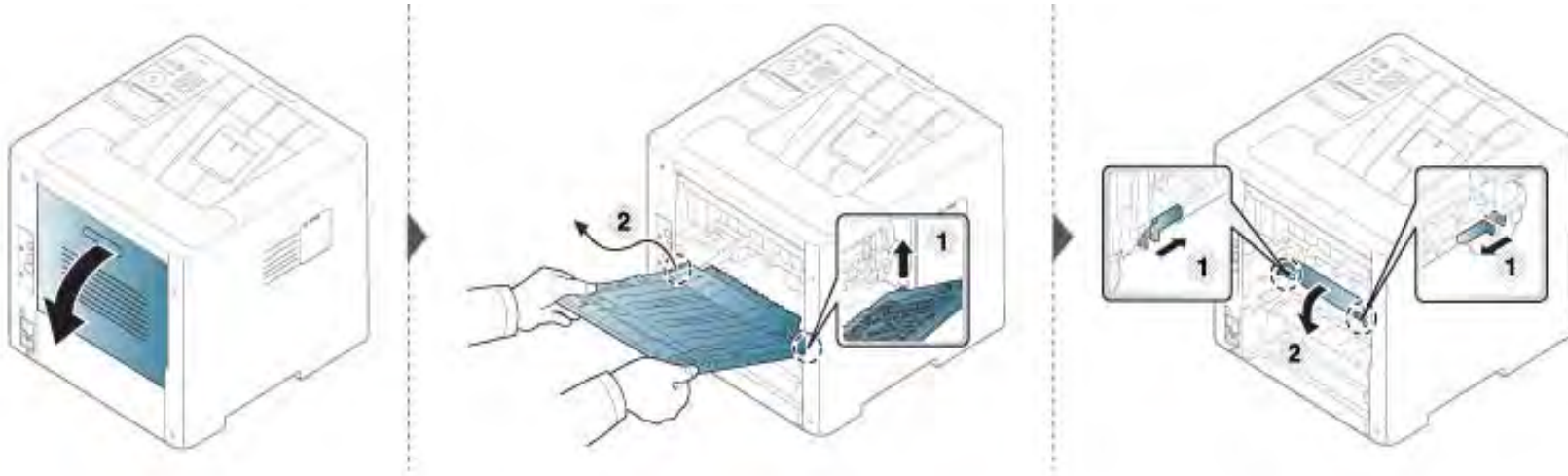
Clearing paper jams

In the duplex unit area



Clearing paper jams

If you do not see the paper in this area, stop and go to next step:



Understanding the status LED

The color of the LED indicates the machine's current status.



- Some LEDs may not be available depending on model or country (see "Control panel overview" on page 19).
- To resolve the error, look at the error message and its instructions from the troubleshooting part (see "Understanding display messages" on page 96).
- You also can resolve the error with the guideline from the computer's Samsung Printing Status program window (see "Using Samsung Printer Status" on page 247).
- If the problem persists, call a service representative.

LED	Status		Description
(↔/△) Status	Off		The machine is off-line.
	Blue	Blinking	When the backlight blinks, the machine is receiving or printing data.
		On	• The machine is on-line and can be used.
	Red	Blinking	• A minor error has occurred and the machine is waiting for the error to be cleared. Check the display message. When the problem is cleared, the machine resumes. • Small amount of toner is left in the cartridge. The estimated cartridge life^a. of toner is close. Prepare a new cartridge for replacement. You may temporarily increase the printing quality by redistributing the toner (see "Redistributing toner" on page 65).
		On	• A toner cartridge has almost reached its estimated cartridge life^a. It is recommended to replace the toner cartridge (see "Replacing the toner cartridge" on page 67). • The cover is opened. Close the cover. • There is no paper in the tray when receiving or printing data. Load paper in the tray. • The machine has stopped due to a major error. Check the display message (see "Understanding display messages" on page 96). • A paper jam has occurred (see "Clearing paper jams" on page 83).

Understanding the status LED

LED	Status		Description
() Power	Blue	On	The machine is in power save mode.
		Off	The machine is in ready mode or machine's power is off.

a. Estimated cartridge life means the expected or estimated toner cartridge life, which indicates the average capacity of print-outs and is designed pursuant to ISO/IEC 19752. The number of pages may be affected by operating environment, percentage of image area, printing interval, graphics, media and media size.

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' and their meaning, and correct the problem, if necessary.



- You can resolve the error with the guideline from the computer's Printing Status program window (see "Using Samsung Printer Status" on page 247).
- If a message is not in the table, reboot the power and try the printing job again. If the problem persists, call a service representative.
- When you call for service, provide the service representative with the contents of display message.
- Some messages may not appear on the display depending on the options or models.
- [error number] indicates the error number.
- [tray type] indicates the tray number.
- [color] indicates the color of toner.

Paper Jam-related messages

Message	Meaning	Suggested solutions
• Jam inside of duplex • Jam bottom of duplex	Paper has jammed during duplex printing. This is applicable only to machines with this feature.	Clear the jam (see "In the duplex unit area" on page 92).

Message	Meaning	Suggested solutions
• Jam in exit area	Paper has jammed in the exit area.	Clear the jam (see "In the exit area" on page 90).
• Jam inside of machine	Paper has jammed in the inside machine.	Clear the jam (see "Inside the machine" on page 87).
Paper jam in tray	Paper has jammed in the tray.	Clear the jam (see "In tray1" on page 83).
• Paper jam in tray 2 • Paper jam in tray 3 • Paper jam in tray 4 • Paper jam in tray 5	Paper has jammed in the optional tray.	Clear the jam (see "In optional tray" on page 84).
Paper jam in MP tray	Paper has jammed in the multi-purpose tray.	Clear the jam (see "In the multi-purpose tray" on page 86).

Understanding display messages

Toner-related messages

Message	Meaning	Suggested solutions
• Replace new toner • End of life, Replace with new toner cartridge	The indicated toner cartridge has reached its estimated cartridge life ^b .	Replace the toner cartridge with a Samsung- genuine toner cartridge ^a (see "Replacing the toner cartridge" on page 67).
• Replace IMG. unit • End of life, Replace with new imaging unit	The indicated imaging unit has reached its estimated imaging unit life ^b .	Replace the imaging unit with a Samsung-genuine imaging unit (see "Replacing the imaging unit" on page 69).
• Error: [error number] • Imaging Unit Failure: [error number]. Install imaging unit again	The imaging unit is not installed.	Install the imaging unit. If it is already installed, try to reinstall the imaging unit. If the problem persists, call for service.
• Error: [error number] • Imaging unit Failure: [error number]. Call for service	There is a problem in the imaging unit.	Turn the machine off and back on again. If the problem persists, call for service.

Message	Meaning	Suggested solutions
• Prepare new toner • Prepare new toner cartridge	The estimated cartridge life ^b of toner is close.	Prepare a new cartridge for a replacement. You may temporarily increase the printing quality by redistributing the toner (see "Redistributing toner" on page 65).
• Prepare IMG. unit • Prepare new imaging unit	The estimated imaging unit life of toner is close.	Prepare a new imaging unit for a replacement (see "Replacing the imaging unit" on page 69).
• Shake toner cart. • Shake toner cartridge and then install. Replace toner cartridge if the problem persists	Small amount of toner is left in the indicated cartridge.	You may temporarily increase the printing quality by redistributing the toner (see "Redistributing toner" on page 65).
• Error: [error number] • Toner Cartridge Failure: [error number]. Install toner cartridge again	The toner cartridge is not installed.	Install the toner cartridge. If it is already installed, try to reinstall the toner cartridge. If the problem persists, call for service.

Understanding display messages

Message	Meaning	Suggested solutions
• Toner Not Installed • Toner cartridge is not installed. Install the cartridge	The toner cartridge is not installed.	Reinstall the toner cartridge.
• IMG. Not Installed • Imaging unit is not installed. Install the unit	The imaging unit is not installed.	Reinstall the imaging unit two or three times. If the problem persists, call for service.
• Error: [error number] • Toner Cartridge Failure: [error number]. Call for service	There is a problem in the toner cartridge.	Turn the machine off and back on again. If the problem persists, call for service.
• Toner Not Compatible • Toner cartridge is not compatible. Check users guide	The toner cartridge you have installed is not for your machine.	Install a Samsung-genuine toner cartridge, designed for your machine (see "Available consumables" on page 60).
• IMG. Not Compatible • Imaging unit is not compatible. Check guide	The imaging unit you have installed is not for your machine.	Install a Samsung-genuine imaging unit, designed for your machine (see "Available consumables" on page 60).

Message	Meaning	Suggested solutions
• Replace new toner • Replace with new toner cartridge	The indicated toner cartridge has almost reached its estimated cartridge life ^b .	Replace the toner cartridge for the best print quality when this message appears. Using a cartridge beyond this stage can result in printing quality issues (see "Replacing the toner cartridge" on page 67). If the machine stops printing, replace the toner cartridge (see "Replacing the toner cartridge" on page 67).
• Replace IMG. unit • Replace with new imaging unit	The indicated imaging unit has almost reached its estimated imaging unit life ^b .	Replace the imaging unit for the best print quality when this message appears. Using a imaging unit beyond this stage can result in printing quality issues (see "Replacing the imaging unit" on page 69).
• Remove seal tape • Did not supply enough toner. Remove seal tape of toner cartridge or shake it. Call for service if the problem persists	The seal tape of the toner cartridge is not removed	Remove the seal tape of the toner cartridge (see "Replacing the toner cartridge" on page 67).

Understanding display messages

- a. When the toner cartridge has reached its end of life, the machine will stop printing. In this case, you can choose to stop or continue printing from the SyncThru™ Web Service. (**Settings > Machine Settings > System > Setup > Supplies Management > Toner Cartridge Stop**) or Samsung Easy Printer Manager (**Device Settings > System > Supplies Management > Toner Cartridge Stop**). Turning off this option and continuing to print may damage the device's system.
- b. Estimated cartridge life means the expected or estimated cartridge, which indicates the average capacity of print-outs and is designed pursuant to ISO/IEC 19752. The number of pages may be affected by the percentage of image area, operating environment, printing interval, media type and media size.



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

Tray-related messages

Message	Meaning	Suggested solutions
• Output bin is full • Paper in output bin is full. Remove printed paper	The output tray is full.	Remove papers from the output tray, the machine resumes printing. If the problem persists, call for service.

Message	Meaning	Suggested solutions
• Paper Empty in all trays • Paper is empty in all tray. Load paper	There is no paper in all tray.	Load paper in the tray (see "Loading paper in the tray" on page 38).
• Paper Empty in MP tray • Paper is empty in MP tray. Load paper	There is no paper in the multi-purpose tray.	Load paper in the multi-purpose tray (see "Multi-purpose tray" on page 41).
• Paper mismatch [tray type] • [tray type] paper mismatch	The paper sizespecified in the printerproperties does notmatch the paper youare loading.	You can select the option between Continue or Cancel . If you select Cancel , the printing job will stop. Load the correct paper in the tray. If you select Continue , printing job will continue.
• [tray type] cassette Out • [tray type] cassette is pulled out. Insert it properly	The tray is not securely latched	Close the tray until it locks into place. If the problem persists, call for service.

Understanding display messages

Message	Meaning	Suggested solutions
• Error: [error number] • Input System Failure [error number]. Check [tray type] connection	There is a problem in the tray.	Check the tray connection. If the problem persists, call for service.
• Error: [error number] • Input System Failure [error number] : Pull [tray type] out and insert it	There is a problem in the tray.	Open and close the tray. If the problem persists, call for service
• Paper Low in [tray type] • Paper is low in [tray type]. Load paper	Running out of paper in the tray.	Load paper in the tray.
• Paper Empty in [tray type] • Paper is empty in [tray type]. Load paper	There is no paper in the tray.	Load paper in the tray.

Network-related messages

Message	Meaning	Suggested solutions
• IP Conflict • This IP address conflicts with that of other system. Check it	The IP address is used elsewhere.	Check the IP address or obtain a new IP address.
• 802.1x Network Error • 802.1x authentication failed. Please contact the system administrator	Fail to authenticate.	Check the network authentication protocol. If the problem persists, contact your network administrator.

Misc. messages

Message	Meaning	Suggested solutions
• Front door is open. Close it • Rear door is open. Close it	The cover is not securely latched.	Close the cover until it locks into place.

Understanding display messages

Message	Meaning	Suggested solutions
• Error: [error number] • Engine System Failure: [error number]. Call for service if the problem persists	There is a problem in the engine system.	Unplug the power cord and plug it back in. If the problem persists, call for service.
• Error: [error number] • Fuser Failure: [error number]. Turn off then on. Call for service if the problem persists	There is a problem in the fuser unit.	Reboot the power. If the problem persists, please call for service.
• Error: [error number] • Motor Failure: [error number]. Turn off then on. Call for service if the problem persists	There is a problem in the motor system.	Reboot the power. If the problem persists, please call for service.
• Error: [error number] • MSOK System Failure: [error number]. Call for service	There is a problem in the HDD system.	Reboot the power. If the problem persists, please call for service.

Message	Meaning	Suggested solutions
• Error: [error number] • HDD System Failure: [error number]. Turn off then on. Call for service if the problem persists	There is a problem in the HDD system.	Reboot the power. If the problem persists, please call for service.
• Error: [error number] • LSU Failure: [error number]. Turn off then on. Call for service if the problem persists	There is a problem in the LSU.	Reboot the power. If the problem persists, please call for service.
• Error: [error number] • Fan Failure: [error number]. Turn off then on. Call for service if the problem persists	There is a problem in the fan system.	Reboot the power. If the problem persists, please call for service.
• Error: [error number] • Sensor Failure: [error number]. Turn off then on. Call for service if the problem persists	There is a problem in the sensor.	Reboot the power. If the problem persists, please call for service.

Understanding display messages

Message	Meaning	Suggested solutions
• Error: [error number] • Lamp Failure: [error number]. Turn off then on. Call for service if the problem persists	There is a problem in the lamp.	Reboot the power. If the problem persists, please call for service.
• Not proper Room Temp • The room temperature is not suitable for this set use. Please adjust room temperature	The machine is in a room with improper room temperature.	Move the machine to a room with proper room temperature (see "Specifications" on page 105).
• Replace fuser unit • Replace with new fuser unit	The life of the fuser unit has expired.	Replace the fuser unit with a new one. If the problem persists, please call for service.



5. Appendix

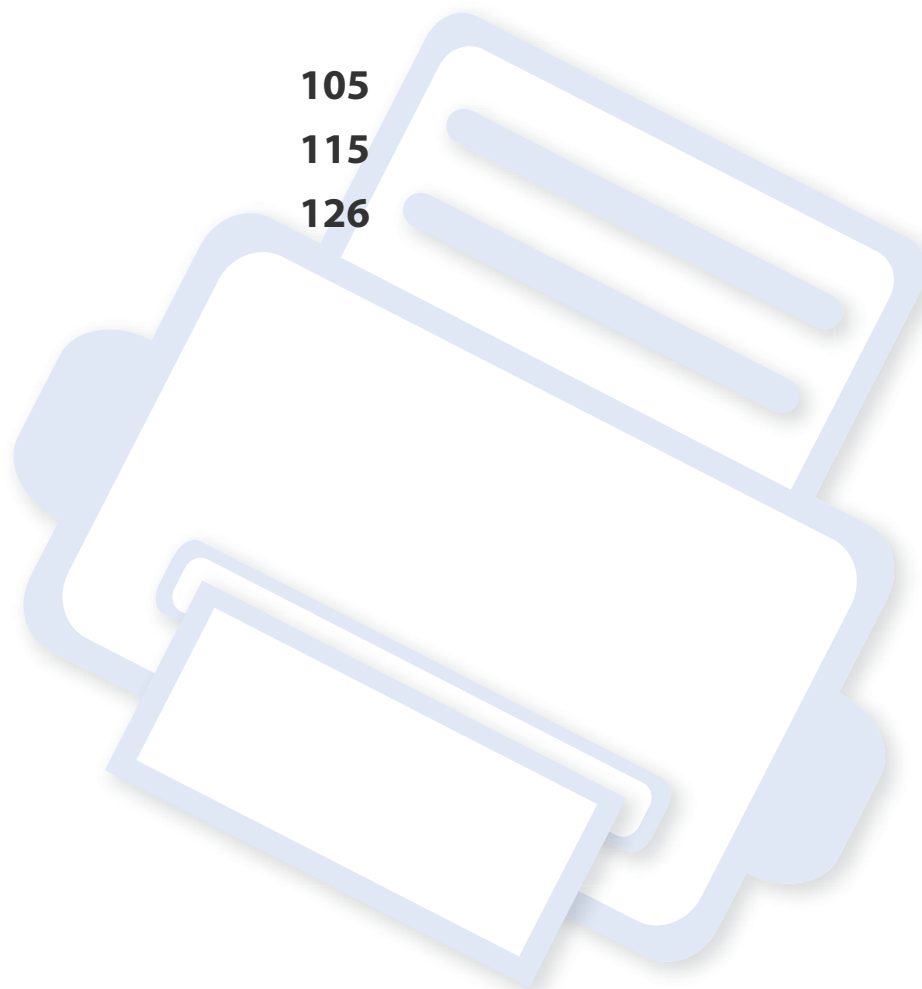
This chapter provides product specifications and information concerning applicable regulations.

- **Specifications**
- **Regulatory information**
- **Copyright**

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Specifications

General specifications



The specification values listed below are subject to change without notice. See www.samsung.com for possible changes in information.

Items		Description
Dimension ^a	Width x Length x Height	433 x 460 x 368 mm (17.05 x 18.11 x 14.49 inches)
Weight ^a	Machine with consumables	28 kg (61.73 lbs)
Noise Level ^{b c}	Ready mode	Less than 30 dB (A)
	Print mode	Less than 54 dB (A)
Temperature	Operation	10 to 30°C (50 to 86 °F)
	Storage (packed)	-20 to 40°C (-4 to 104 °F)
Humidity	Operation	20 to 80% RH
	Storage (packed)	10 to 90% RH
Power rating ^d	110 volt models	AC 110 - 127 V
	220 volt models	AC 220 - 240 V

Specifications

Items		Description
Power consumption ^e	Average operating mode	Less than 850 W
	Ready mode	Less than 16W
	Power save mode	Less than 1.5 W
	Power off mode ^f	Less than 0.45 W

- a. Dimensions and weight are measured without other accessories.
- b. Sound Pressure Level, ISO 7779. Configuration tested: basic machine installation, A4 paper, simplex printing.
- c. China only: If the equipment's noise is louder than 63 db (A), the equipment should be placed in region of relatively independent advice.
- d. See the rating label on the machine for the correct voltage (V), frequency (hertz) and of current (A) for your machine.
- e. The power consumption may be affected by the machine's status, setting conditions, operating environment, and measuring equipment and method the country uses.
- f. Power consumption can be completely avoided only when the power cable is not connected.

Specifications

Print media specifications

Type	Size	Dimensions	print media weight ^a /Capacity ^b	
			Tray1 / Optional tray	Multi-purpose tray
Plain paper	Letter	216 x 279 mm (8.5 x 11 inches)	70 to 90 g/m ² (19 to 24 lb bond)	70 to 90 g/m ² (19 to 24 lb bond)
	Legal	216 x 356 mm (8.5 x 14 inches)	• 550 sheets of 75 g/m ² (20 lb bond)	• 100 sheets of 75 g/m ² (20 lb bond)
	US Folio	216 x 330 mm (8.5 x 13 inches)		
	A4	210 x 297 mm (8.26 x 11.69 inches)		
	Oficio	216 x 343 mm (8.5 x 13.5 inches)		
	JIS B5	182 x 257 mm (7.16 x 10.11 inches)		
	ISO B5	176 x 250 mm (6.93 x 9.84 inches)		
	Executive	184 x 267 mm (7.25 x 10.5 inches)		
	A5	148 x 210 mm (5.82 x 8.26 inches)		
	Statement	140 x 216 mm (5.5 x 8.5 inches)		
	A6	105 x 148 mm (4.13 x 5.82 inches)	Not available in optional tray.	
	Index Card	76 x 127 mm (3.00 x 5.00 inches)	Not available in tray1/optional tray.	
	Postcard 4 x 6	102 x 152 mm (4.00 x 6.00 inches)	Not available in optional tray.	
	Postcard 100 x 148	100 x 148 mm (3.94 x 5.83 inches)	Not available in optional tray.	

Specifications

Type	Size	Dimensions	print media weight ^a /Capacity ^b	
			Tray1 / Optional tray	Multi-purpose tray
Envelope^c	Envelope Monarch	98 x 191 mm (3.87 x 7.5 inches)	75 to 90 g/m ² (20 to 24 lb bond) • 50 sheets of 75 g/m ² (20 lb bond)	75 to 90 g/m ² (20 to 24 lb bond) • 10 sheets of 75 g/m ² (20 lb bond)
	Envelope No. 9	98 x 225 mm (3.87 x 8.87 inches)		
	Envelope No. 10	105 x 241 mm (4.12 x 9.5 inches)		
	Envelope DL	110 x 220 mm (4.33 x 8.66 inches)		
	Envelope C5	162 x 229 mm (6.37 x 9.01 inches)	75 to 90 g/m ² (20 to 24 lb bond) • 50 sheets of 75 g/m ² (20 lb bond)	
	Envelope C6	114 x 162 mm (4.48 x 6.38 inches)		
Thick paper^{d e}	Refer to the Plain paper section	Refer to the Plain paper section	91 to 120 g/m ² (24 to 32 lb bond)	90 to 120 g/m ² (24 to 32 lb bond)
Thicker paper	Refer to the Plain paper section	Refer to the Plain paper section	Not available in tray1/optional tray.	164 to 220 g/m ² (44 to 59 lb bond)
Thin paper	Letter, Legal, Oficio, US Folio, A4, JIS B5, ISO B5, Executive, A5, Statement	Refer to the Plain paper section	60 to 69 g/m ² (16 to 19 lb bond) • 550 sheets	60 to 69 g/m ² (16 to 19 lb bond) • 100 sheets
Labels^{f g}	Letter, Legal, Oficio, US Folio, A4, JIS B5, ISO B5, Executive, A5, A6, Statement	Refer to the Plain paper section	120 to 150 g/m ² (32 to 40 lb bond) • 50 sheets	120 to 150 g/m ² (32 to 40 lb bond) • 10 sheets
Card stock^d	Refer to the Plain paper section	Refer to the Plain paper section	121 to 163 g/m ² (32 to 43lb bond) • 50 sheets	121 to 163 g/m ² (32 to 43lb bond) • 10 sheets

Specifications

Type	Size	Dimensions	print media weight ^a /Capacity ^b	
			Tray1 / Optional tray	Multi-purpose tray
Recycled	Letter, Legal, Oficio, US Folio, A4, JIS B5, ISO B5, Executive, A5, Statement	Refer to the Plain paper section	60 to 90 g/m ² (16 to 24 lb bond)	60 to 90 g/m ² (16 to 24 lb bond)
Preprinted	Letter, Legal, Oficio, US Folio, A4, JIS B5, ISO B5, Executive, A5, Statement	Refer to the Plain paper section	75 to 90 g/m ² (20 to 24 lb bond)	75 to 90 g/m ² (20 to 24 lb bond)
Bond	Letter, Legal, Oficio, US Folio, A4, JIS B5, ISO B5, Executive, A5, Statement	Refer to the Plain paper section	105 to 120 g/m ² (28 to 32 lb bond)	105 to 120 g/m ² (28 to 32 lb bond)
Colored, Cotton, Punched Paper	Letter, Legal, Oficio, US Folio, A4, JIS B5, ISO B5, Executive, A5, Statement	Refer to the Plain paper section	75 to 90 g/m ² (20 to 24 lb bond)	75 to 90 g/m ² (20 to 24 lb bond)
Letterhead⁹	Letter, Legal, Oficio, US Folio, A4, JIS B5, ISO B5, Executive, A5, Statement	Refer to the Plain paper section	75 to 90 g/m ² (20 to 24 lb bond)	75 to 90 g/m ² (20 to 24 lb bond)

Specifications

Type	Size	Dimensions	print media weight ^a /Capacity ^b	
			Tray1 / Optional tray	Multi-purpose tray
Archive ^e	Letter, Legal, US Folio, A4, JIS B5, ISO B5, Executive, A5, Statement, PostCard 4 x 6, PostCard 100 x 148	Refer to the Plain paper section	75 to 90 g/m ² (20 to 24 lb bond)	75 to 90 g/m ² (20 to 24 lb bond)
Minimum size (custom)		76.2 x 127 mm (3 x 5 inches)	60 to 163 g/m ² (16 to 43 lb bond)	
Maximum size (custom)		216 x 356 mm (8.5 x 14 inches)		

- a. If media weight is over 105 g/m² (28 lb bond), load a paper into the tray one by one.
- b. Maximum capacity may differ depending on media weight, thickness, and environmental conditions.
- c. Envelope Monarch and Envelope C6 are not supported for optional tray.
- d. Index Card is supported only multi-purpose tray.
- e. A6, PostCard 4 x 6, and PostCard 100 x 148 are not supported for optional tray.
- f. Smoothness: 100 to 250 (sheffield)
- g. A6 is supported only multi-purpose tray/tray1.

Specifications

System requirements

Microsoft® Windows®

Operating system	Requirement (recommended)		
	CPU	RAM	free HDD space
Windows® XP	Intel® Pentium® III 933 MHz (Pentium IV 1 GHz)	128 MB (256 MB)	1.5 GB
Windows Server® 2003	Intel® Pentium® III 933 MHz (Pentium IV 1 GHz)	128 MB (512 MB)	1.25 GB to 2 GB
Windows Server® 2008	Intel® Pentium® IV 1 GHz (Pentium IV 2 GHz)	512 MB (2 GB)	10 GB
Windows Vista®	Intel® Pentium® IV 3 GHz	512 MB (1 GB)	15 GB
Windows® 7	Intel® Pentium® IV 1 GHz 32-bit or 64-bit processor or higher	1 GB (2 GB)	16 GB
	• Support for DirectX® 9 graphics with 128 MB memory (to enable the Aero theme). • DVD-R/W Drive		
Windows Server® 2008 R2	Intel® Pentium® IV 1 GHz (x86) or 1.4 GHz (x64) processors (2 GHz or faster)	512 MB (2 GB)	10 GB
Windows® 8 Windows® 8.1	Intel® Pentium® IV 1 GHz 32-bit or 64-bit processor or higher	2 GB	20 GB
	• Support for DirectX® 9 graphics with 128 MB memory (to enable the Aero theme). • DVD-R/W Drive		
Windows Server® 2012 Windows Server® 2012 R2	Intel® Pentium® IV 1 GHz (x86) or 1.4 GHz (x64) processors (2 GHz or faster)	512 MB (2 GB)	32 GB

Specifications



- Internet Explorer 6.0 or higher is the minimum requirement for all Windows operating systems.
- Users who have administrator rights can install the software.
- **Windows Terminal Services** is compatible with your machine.

Mac

Operating system	Requirements (Recommended)		
	CPU	RAM	Free HDD space
Mac OS X 10.5	• Intel® processors • 867 MHz or faster Power PC G4/G5	512 MB (1 GB)	1 GB
Mac OS X 10.6	• Intel® processors	1 GB (2 GB)	1 GB
Mac OS X 10.7 - 10.9	• Intel® processors	2 GB	4 GB

Specifications

Linux

Items	Requirements
Operating system	RedHat® Enterprise Linux 5, 6 Fedora12, 13, 14, 15, 16, 17, 18, 19, 20 OpenSuSE® 11.2, 11.3, 11.4, 12.1, 12.2, 12.3, 13.1 Ubuntu 10.04, 10.10, 11.04, 11.10, 12.04, 12.10, 13.04, 13.10, 14.04 SuSE Linux Enterprise Desktop 10, 11 Debian 6, 7 Mint 13, 14, 15, 16
CPU	Pentium IV 2.4GHz (Intel Core™2)
RAM	512 MB (1 GB)
Free HDD space	1 GB (2 GB)

Unix

Items	Requirements
Operating system	Sun Solaris 9, 10, 11 (x86, SPARC) HP-UX 11.0, 11i v1, 11i v2, 11i v3 (PA-RISC, Itanium) IBM AIX 5.1, 5.2, 5.3, 5.4, 6.1 7.1 (PowerPC)
Free HDD space	Up to 100 MB

Specifications

Network environment



Network and wireless models only (see "Features by model" on page 7).

You need to set up the network protocols on the machine to use it as your network machine. The following table shows the network environments supported by the machine.

Items	Specifications
Network interface	- Ethernet 10/100/1000 Base-TX Wired Lan - Network Interface 802.11b/g/n wireless LAN & Near Field Communication(NFC)^a
Network operating system	- Windows® XP, Windows Server® 2003, Windows Vista®, Windows® 7, Windows® 8, Windows Server® 2008 R2 - Various Linux OS - Mac OS X 10.5 -10.9 - UNIX OS
Network protocols	- TCP/IPv4 - DHCP, BOOTP - DNS, WINS, Bonjour, SLP, UPnP - Standard TCP/IP Printing (RAW), LPR, IPP, WSD, AirPrint, Google Cloud Print, ThinPrint - SNMPv 1/2/3, HTTP, IPSec - TCP/IPv6 (DHCP, DNS, Standard TCP/IP Printing, LPR, SNMPv 1/2/3, HTTP, IPSec)
Wireless security	- Authentication: Open System, Shared Key, WPA-Enterprise/ Personal, WPA2-Enterprise/Personal - Encryption: WEP64, WEP128, TKIP, AES

a. Optional device.

Regulatory information

This machine is designed for a normal work environment and certified with several regulatory statements.

Laser safety statement

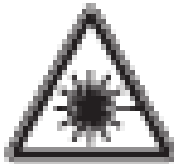
The printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR, chapter 1 Subchapter J for Class I(1) laser products, and elsewhere is certified as a Class I laser product conforming to the requirements of IEC 60825-1 : 2007.

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.

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



CAUTION - CLASS II LASER PRODUCT
WHEN OPEN, AVOID EXPOSURE TO
THE BEAM.

ATTENTION - CLASSE II PRODUIT LASER INVISIBLE
EN CAS D'OUVERTURE, ÉVITER
L'EXPOSITION AU FASCEAU.

BEHUTEN - KLASSE II LASERSTRALUNG NUR
BEI OFFENEM STRAHLUNGSSCHUTZVERBODEN.

ATTENZIONE - CLASSE II RADIAZIONE LASER INVISIBILE CON IL
DISPOSITIVO CHIUSO. EVITARE L'ESPOSIZIONE AL RAGGIO.

PRECAUCIÓN - RADIACIÓN LASER INVISIBLE DE CLASE II PRESENTE
AL ABRIR. EVITAR LA EXPOSICIÓN AL RAZ.

PERIGO - CLASSE II RADIAÇÃO LASER INVISÍVEL AO ABRIR.
EVITE EXPOSIÇÃO DIRETA AO FEIXE.

GEVAAR - KLASSE II ONZICHTBAAR LASERSTRAALING NIEMEN
GEOPEND VERBODEN RUICHTSTELLING NAR DE STRAAL.

AVVERTIMENTO - CLASSE II LUMINUS LASERSTRAHLUNG NUR ABGESCHLOSSEN.
UNTERSUCHUNG FÜR STRAHLEN.

AVVERTIMENTO - CLASSE II LUMINUS LASERSTRAHLUNG NUR ABGESCHLOSSEN.
UNTERSUCHUNG FÜR STRAHLEN.

AVVERTIMENTO - CLASSE II LUMINUS LASERSTRAHLUNG NUR ABGESCHLOSSEN.
UNTERSUCHUNG FÜR STRAHLEN.

WARNING - CLASS II LASER PRODUCT, INVISIBLE LASER RADIATION
WHEN OPEN. AVOID EXPOSURE TO THE BEAM.

VAROITUS - LUOKAN II HÄMÄÄTÖNÄÄLLÄ LASER-SÄTEEN
AVOIMENA, ÄLÄ ALTISTUAKSITA SÄTEELLE.

注意 - Ⅱ 級 レーザー製品、肉眼で不可視光線を発する可能性があります。
主 意 - Ⅱ 級 レーザー製品、肉眼で不可視光線を発する可能性があります。
主 意 - Ⅱ 級 レーザー製品、肉眼で不可視光線を発する可能性があります。

Regulatory information

Ozone safety



This product's ozone emission rate is under 0.1 ppm. Because ozone is heavier than air, keep the product in a place with good ventilation.

Power saver



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

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

ENERGY STAR and the ENERGY STAR mark are registered U.S. marks.

For more information on the ENERGY STAR program see <http://www.energystar.gov>

For ENERGY STAR certified models, the ENERGY STAR label will be on your machine. Check if your machine is ENERGY STAR certified.

Recycling



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

China only

回收和再循环

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

中国能效标识

型号	能效等级	典型能耗 (kW·h)
Xpress M4530ND/M4530NX	1	2.7

依据国家标准 GB 25956-2010

Website: <http://www.samsung.com/cn/support/location/supportServiceLocation.do?page=SERVICE.LOCATION>

Regulatory information

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

(Applicable in countries with separate collection systems)



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

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

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

(The United States of America only)

Dispose unwanted electronics through an approved recycler. To find the nearest recycling location, go to our website: www.samsung.com/recyclingdirect Or call, (877) 278 - 0799

State of California Proposition 65 Warning (US Only)

The California Safe Drinking Water and Toxic Enforcement Act requires the Governor of California to publish a list of chemicals known to the State of California to cause cancer or reproductive toxicity and requires businesses to warn of potential exposure to such chemicals.

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
This appliance can cause low-level exposure to the chemicals, which can be minimized by operating the appliance in a well ventilated area.

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.

Regulatory information

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.



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 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.

Regulatory information

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

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

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



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

FCC Statement for Wireless LAN use:



While installing and operating this transmitter and antenna combination the radio frequency exposure limit of 1 mW/cm^2 may be exceeded at distances close to the antenna installed. Therefore, the user must maintain a minimum distance of 20 cm from the antenna at all times. This device cannot be collocated with another transmitter and transmitting antenna.

Russia / Kazakhstan / Belaru only



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Импортер: ООО «Самсунг Электроникс Рус Компани»
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«САМСУНГ ЭЛЕКТРОНИКС КЗ ЭНД ЦЕНТРАЛ ЭЙЖА» ЖШС
Заңды мекен-жайы: Қазақстан Республикасы, Алматы қ., Өл-Фараби даңғылы, 36, 3,4-қабаттар

Regulatory information

Germany only

Das Gerät ist nicht für die Benutzung am Bildschirmarbeitsplatz gemäß BildscharbV vorgesehen.

Turkey only

- RoHS
EEE Yönetmeliğine Uygundur.
This EEE is compliant with RoHS.
- Bu ürünün ortalama yaşam süresi 7 yıl, garanti süresi 2 yıldır.

Thailand only

This telecommunication equipment conforms to NTC technical requirement.

Replacing the Fitted Plug (for UK Only)

Important

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

Contact the people from you purchased the machine.

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



If you cut off the moulded plug, get rid of it straight away. You cannot rewire the plug and you may receive an electric shock if you plug it into a socket.

Regulatory information

Important warning:



You must earth this machine.

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

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

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

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

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

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

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

Declaration of conformity (European countries)

Approvals and Certifications



Hereby, Samsung Electronics, declares that this [C2620x series] is in compliance with the essential requirements and other relevant provisions of R&TTE Directive 1999/5/EC.

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

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

January 1, 1996: Council Directive 2004/108/EC, 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.

Regulatory information

EC Certification

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

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

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

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

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

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



Wireless devices that may be in your system are only qualified for use in the European Union or associated areas if a CE mark is on the system label.

The power output of the wireless device or devices that may be embedded in your 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 countries

European states with restrictions on use:

EU

EEA/EFTA countries

No limitations at this time

Regulatory information

Regulatory compliance statements

Wireless guidance

Low power, Radio LAN devices (radio frequency (RF) wireless communication devices), operating in the 2.4 GHz/5 GHz Band, may be present (embedded) in your printer system. The following section is a general overview of considerations while operating a wireless device.

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

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

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

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

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



Radio frequency wireless communication can interfere with equipment on commercial aircraft. Current aviation regulations require wireless devices to be turned off while traveling in an airplane. IEEE 802.11 (also known as wireless Ethernet) and Bluetooth communication devices are examples of devices that provide wireless communication.



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

Regulatory information



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



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



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



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

Regulatory information

China only

产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr ⁶⁺)	多溴联苯 (PBB)	多溴联苯醚 (PBDE)
塑料	○	○	○	○	○	○
金属 (机箱)	X	○	○	○	○	○
印刷电路部件 (PCA)	X	○	○	○	○	○
电缆 / 连接器	X	○	○	○	○	○
电源设备	X	○	○	○	○	○
电源线	X	○	○	○	○	○
机械部件	X	○	○	○	○	○
卡盒部件	X	○	○	○	○	○
定影部件	X	○	○	○	○	○
扫描仪部件 - CCD (如果有)	X	X	○	○	○	○
扫描仪部件 - 其它 (如果有)	X	○	○	○	○	○
印刷电路板部件 (PBA)	X	○	○	○	○	○
墨粉	○	○	○	○	○	○
滚筒	○	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 GB/T 26572 标准规定的限量要求以下。
×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 标准规定的限量要求。

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- All other brand or product names are trademarks of their respective companies or organizations.



QR code

The software included in this product contains open source software. You may obtain the complete corresponding source code for a period of three years after the last shipment of this product by sending an email to <mailto:oss.request@samsung.com>. It is also possible to obtain the complete corresponding source code in a physical medium such as a CD-ROM; a minimal charge will be required.

The following URL https://opensource.samsung.com/opensource/M453x_series/seq/0 leads to the download page of the source code made available and open source license information as related to this product. This offer is valid to anyone in receipt of this information.

User's Guide

Samsung Printer **ProXpress**

M453x series

ADVANCED

This guide provides information about installation, advanced configuration, operation and troubleshooting on various OS environments.

Some features may not be available depending on models or countries.

BASIC

This guide provides information concerning installation, basic operation and troubleshooting on Windows.



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1. Using a Network-Connected

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1. Software Installation

This chapter provides instructions for installing essential and helpful software for use in an environment where the machine is connected via a cable. A locally connected machine is a machine directly attached to your computer using the cable. If your machine is attached to a network, skip the following steps below and go on to installing a network connected machine's driver (see "Installing driver over the network" on page 142).

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- **Reinstallation for Mac** 134
- **Installation for Linux** 135
- **Reinstallation for Linux** 136



- If you are a Windows OS user, refer to the Basic Guide for installing the machine's driver (see "Installing the driver locally" on page 22).
- Only use a USB cable no longer than 3 meters (118 inches).

Installation for Mac

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

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



3 Double-click the CD-ROM icon that appears on your Mac desktop.

- For Mac OS X 10.8, double-click the CD-ROM that appears on **Finder**.

4 Double-click the **MAC_Installer** folder > **Installer OS X** icon.

5 Click **Continue**.

6 Read the license agreement and click **Continue**.

7 Click **Agree** to agree to the license agreement.

8 Click **Install**. All components necessary for machine operations will be installed.

If you click **Customize**, you can choose individual components to install.

9 Enter the password and click **OK** (or **Install Software**).

10 Select **USB Connected Printer** on the **Printer Connection Type** and click **Continue**.

11 Click **Add Printer** button to select your printer and add it to your printer list.

12 Click **Continue**.

13 After the installation is finished, click **Close**.

Reinstallation for Mac

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

- 1 Open the **Applications** folder > **Samsung** > **Printer Software Uninstaller**.
- 2 To uninstall printer software, click **Continue**.
- 3 Check the program you want to delete and click **Uninstall**.
- 4 Enter the password and click **OK**.
- 5 After the uninstallation is finished, click **Close**.



If a machine has already been added, delete it from the **Print Setup Utility** or **Print & Fax**.

Installation for Linux

You need to download Linux software packages from the Samsung website to install the printer software (<http://www.samsung.com> > find your product > Support or Downloads).

Installing the Unified Linux Driver



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

- 1 Make sure that the machine is connected to your computer and powered on.
- 2 Copy **Unified Linux Driver** package to your system.
- 3 Open Terminal program and go to the folder that you copied the package to.
- 4 Extract the package.
- 5 Move to **uld** folder.
- 6 Execute "**./install.sh**" command (If you're not logged in as root, execute the command with "**sudo**" as "**sudo ./install.sh**")
- 7 Proceed with installation.

- 8 When installation finished, launch printing utility (Go to **System** > **Administration** > **Printing** or execute "**system-config-printer**" command in Terminal program).
- 9 Click **Add** button.
- 10 Select your printer.
- 11 Click **Forward** button and add it to your system.

Reinstallation for Linux

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

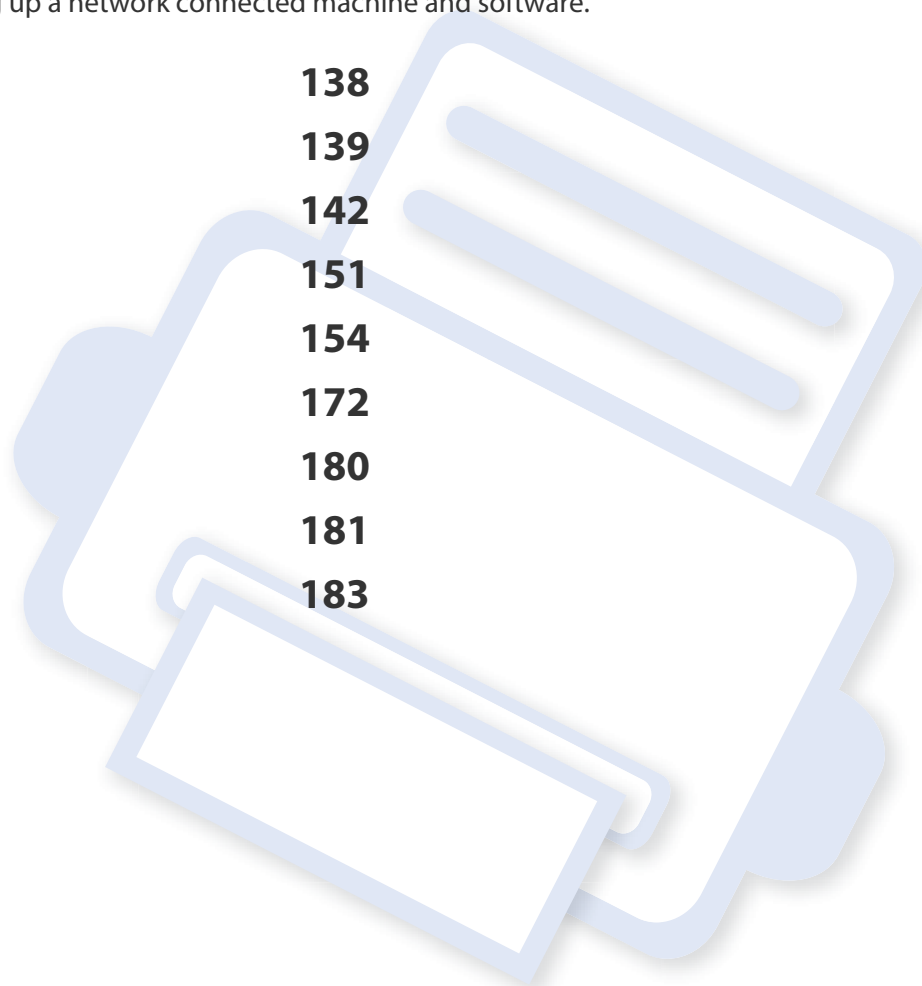
- 1 Open **Terminal** program.
- 2 Move to **uld** folder extracted from **Unified Linux Driver** package.
- 3 Execute "**./uninstall.sh**" command (If you're not logged in as root, execute the command with "**sudo**" as "**sudo ./uninstall.sh**")
- 4 Proceed with uninstallation.



2. Using a Network-Connected Machine

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

- **Useful network programs** 138
- **Wired network setup** 139
- **Installing driver over the network** 142
- **IPv6 configuration** 151
- **Wireless network setup(Optional)** 154
- **Using the NFC feature (Optional)** 172
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Useful network programs

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



- Before using the programs below, set the IP address first.
- Some features and optional goods may not be available depending on model or country (see "Features by model" on page 7).

SyncThru™ Web Service

The web server embedded on your network machine allows you to do the following tasks (see "Using SyncThru™ Web Service" on page 240).

- Check the supplies information and status.
- Customize machine settings.
- Set the email notification option. When you set this option, the machine status (toner cartridge shortage or machine error) will be sent to a certain person's email automatically.
- Configure the network parameters necessary for the machine to connect to various network environments.

SyncThru™ Web Admin Service

Web-based machine management solution for network administrators. SyncThru™ Web Admin Service provides you with an efficient way of managing network devices and lets you remotely monitor and troubleshoot network machines from any site with corporate internet access.

- Download this program from Samsung website (<http://www.samsung.com> > find your product > Support or Downloads).

SetIP wired network setup

This utility program allows you to select a network interface and manually configure the IP addresses for use with the TCP/IP protocol.

- See "IPv4 configuration using SetIP (Windows)" on page 139.
- See "IPv4 configuration using SetIP (Mac)" on page 140.
- See "IPv4 configuration using SetIP (Linux)" on page 141.

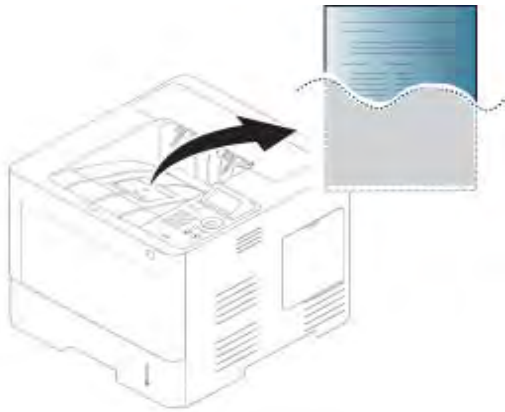


- The machine that does not support the network port, it will not be able to use this feature (see "Rear view" on page 18).
- TCP/IPv6 is not supported by this program.

Wired network setup

Printing a network configuration report

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



Touch  (**Setup**) on the touch screen and select **Network > Network Configuration**.

- **The machine has a display screen:** Press the **Menu**() button on the control panel and select **Network > Network Configuration**.
- **The machine has a touch screen:** Press the  (**Setup**) on the touch screen and select **Network > Network Configuration**.

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

For example:

- MAC Address: 00:15:99:41:A2:78
- IP Address: 169.254.192.192

Setting IP address



- The machine that does not support the network interface, it will not be able to use this feature (see "Rear view" on page 18).
- TCP/IPv6 is not supported by this program.

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

IPv4 configuration using SetIP (Windows)

Before using the SetIP program, disable the computer firewall from **Control Panel > Security Center > Windows Firewall**.



The following instructions may differ for your model.

Wired network setup

- 1 Download the software from the Samsung website then unpack and install it: (<http://www.samsung.com> > find your product > Support or Downloads).
- 2 Follow the instructions in the installation window.
- 3 Connect your machine to the network with a network cable.
- 4 Turn on the machine.
- 5 From the Windows **Start** menu, select **All Programs > Samsung Printers > SetIP > SetIP**.
- 6 Click the  icon (third from left) in the SetIP window to open the TCP/IP configuration window.
- 7 Enter the machine's new information into the configuration window. In a corporate intranet, you may need to have this information assigned by a network manager before proceeding.



Find the machine's MAC address from the **Network Configuration Report** (see "Printing a network configuration report" on page 139) and enter it without the colons. For example, 00:15:99:29:51:A8 becomes 0015992951A8.

- 8 Click **Apply**, and then click **OK**. The machine will automatically print the **Network Configuration Report**. Confirm that all the settings are correct.

IPv4 configuration using SetIP (Mac)

Before using the SetIP program, disable the computer firewall from **System Preferences > Security** (or **Security & Privacy**) > **Firewall**.



The following instructions may vary from your model.

- 1 Connect your machine to the network with a network cable.
 - 2 Insert the supplied software CD into your CD-ROM drive.
- 
- 3 Double-click the CD-ROM icon that appears on your Mac desktop.
 - For Mac OS X 10.8, Double-click the CD-ROM that appears on Finder.
 - 4 Double-click the **MAC_Installer** folder > **Installer OS X** icon.
 - 5 Click **Continue**.
 - 6 Read the license agreement and click **Continue**.
 - 7 Click **Agree** to agree to the license agreement.

Wired network setup

- 8 Click **Install**. All components necessary for machine operations will be installed.
If you click **Customize**, you can choose individual components to install.
- 9 Enter the password and click **OK** (or **Install Software**).
- 10 When the message that warns that all applications will close on your computer appears, click **Continue**.
- 11 Select **Network Connected Printer (Wired or Wireless)** on the **Printer Connection Type** and click **Set IP Address** button.
- 12 Click the  icon (third from left) in the SetIP window to open the TCP/IP configuration window.
- 13 Enter the machine's new information into the configuration window. In a corporate intranet, you may need to have this information assigned by a network manager before proceeding.



Find the machine's MAC address from the **Network Configuration Report** (see "Printing a network configuration report" on page 139) and enter it without the colons. For example, 00:15:99:29:51:A8 becomes 0015992951A8.

- 14 Click **Apply**, and then click **OK**. The machine will automatically print the **Network Configuration Report**. Confirm that all the settings are correct.

IPv4 configuration using SetIP (Linux)

Before using the SetIP program, disable the computer firewall from **System Preferences** or **Administrator**.



The following instructions may vary from your model or operating systems.

- 1 Download SetIP program from Samsung web site and extract it.
- 2 Double-click the **SetIPApplet.html** file in **cdroot/Linux/noarch/at_opt/share/utils** folder.
- 3 Click to open the TCP/IP configuration window.
- 4 Enter the machine's new information into the configuration window. In a corporate intranet, you may need to have this information assigned by a network manager before proceeding.



Find the machine's MAC address from the **Network Configuration Report** (see "Printing a network configuration report" on page 139) and enter it without the colons. For example, 00:15:99:29:51:A8 becomes 0015992951A8.

- 5 The machine will automatically print the **Network Configuration Report**.

Installing driver over the network



- Some features and optional goods may not be available depending on model or country (see "Features by model" on page 7).
- The machine that does not support the network interface, it will not be able to use this feature (see "Rear view" on page 18).
- You can install the printer driver and software when you insert the software CD into your CD-ROM drive. For windows, select the printer driver and software in the **Select Software to Install** window.

Windows



The firewall software might be blocking network communication. Before connecting the device to the network, disable the computer's firewall.

1

Make sure that the machine is connected to the network and powered on. Also, your machine's IP address should have been set (see "Setting IP address" on page 139).

2

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



If the installation window does not appear, click **Start > All programs > Accessories > Run**.

X:**Setup.exe** replacing "X" with the letter, which represents your CD-ROM drive and click **OK**.

- For Windows 8,

If the installation window does not appear, from **Charms**, select **Search > Apps** and search for **Run**. Type in X:\Setup.exe, replacing "X" with the letter that represents your CD-ROM drive and click **OK**.

If "**Tap to choose what happens with this disc.**" pop-up window appears, click the window and select **Run Setup.exe**.

3

Review and accept the installation agreements in the installation window. Then, click **Next**.

4

Select **Network** on the **Printer Connection Type** screen. Then, click **Next**.

Installing driver over the network

- 5 Follow the instructions in the installation window.

From the Windows 8 Start Screen



- The V4 driver is automatically downloaded from the Windows Update if your computer is connected to the Internet. If not, you can manually download the V4 driver from Samsung website, www.samsung.com > find your product > Support or downloads.
- You can download **Samsung Printer Experience** app from the **Windows Store**. You need have a Microsoft account to use the Windows Store.
 - a From **Charms**, select **Search**.
 - b Click **Store**.
 - c Search and click **Samsung Printer Experience**.
 - d Click **Install**.
- If you install the driver using the supplied software CD, V4 driver is not installed. If you want to use the V4 driver in the **Desktop** screen, you can download from the Samsung website, www.samsung.com > find your product > Support or downloads.
- If you want to install Samsung's printer management tools, you need to install them using the supplied software CD.

- 1 Make sure that the machine is connected to the network and powered on. Also, your machine's IP address should have been set (see "Setting IP address" on page 139).

- 2 From **Charms**, select **Settings** > **Change PC settings** > **Devices**.

- 3 Click **Add a device**.

Discovered machines will be shown on the screen.

- 4 Click the model name or host name you wish to use.



You can print a Network Configuration Report from the machine's control panel that will show the current machine's host name (see "Printing a network configuration report" on page 139).

- 5 The driver is automatically installed from the **Windows Update**.

Silent installation Mode

Silent installation mode is an installation method that does not require any user intervention. Once you start the installation, the machine driver and software are automatically installed on your computer. You can start the silent installation by typing **/s** or **/S** in the command window.

Command-line Parameters

Following table shows commands that can be used in the command window.



Following command-line are effective and operated when command is used with **/s** or **/S**. But **/h**, **/H** or **/?** are exceptional commands that can be operated solely.

Installing driver over the network

Command- line	Definition	Description
/s or/S	Starts silent installation.	Installs machine drivers without prompting any UIs or user intervention.

Command- line	Definition	Description
/p"<port name>" or/P"<port name>"	Specifies printer port.  Network Port will be created by use of Standard TCP/IP Port monitor. For local port, this port must exist on system before being specified by command.	Printer port name can be specified as IP address, hostname, USB local port name, IEEE1284 port name or network path. For example: • /p"xxx.xxx.xxx.xxx" in where, "xxx.xxx.xxx.xxx" means IP address for network printer. /p"USB001", /P"LPT1:", /p"hostname" • /p"\\computer_name\shared_printer" or "\\xxx.xxx.xxx.xxx\shared_printer" in where, "\\computer_name\shared_printer" or "\\xxx.xxx.xxx.xxx\shared_printer" means the network path to the printer by entering two slashes, the computer name or local IP address of the PC sharing the printer, and then the share name of the printer.

Installing driver over the network

Command- line	Definition	Description
/a"<dest_path>" or/A"<dest_path>"	Specifies destination path for installation.  The destination path should be a fully qualified path.	Since machine drivers should be installed on the OS specific location, this command applies to only application software.
/n"<Printer name>" or/N"<Printer name>"	Specifies printer name. Printer instance shall be created as specified printer name.	With this parameter, you can add printer instances as your wishes.
/nd or/ND	Commands not to set the installed driver as a default machine driver.	It indicates installed machine driver will not be the default machine driver on your system if there are one or more printer drivers installed. If there is no installed machine driver on your system, then this option won't be applied because Windows OS will set installed printer driver as a default machine driver.

Command- line	Definition	Description
/x or/X	Uses existing machine driver files to create printer instance if it is already installed.	This command provides a way to install a printer instance that uses installed printer driver files without installing an additional driver.
/up"<printer name>" or/UP"<printer name>"	Removes only specified printer instance and not the driver files.	This command provides a way to remove only specified printer instance from your system without effecting other printer drivers. It will not remove printer driver files from your system.
/d or/D	Uninstalls all device drivers and applications from your system.	This command will remove all installed device drivers and application software from your system.
/v"<share name>" or/V"<share name>"	Shares installed machine and add other available platform drivers for Point & Print.	It will install all supported Windows OS platform's machine drivers to system and share it with specified <share name> for point and print.
/o or /O	Opens Printers and Faxes folder after installation.	This command will open Printers and Faxes folder after the silent installation.

Installing driver over the network

Command- line	Definition	Description
/h, /H or /?		Shows Command-line Usage.

Mac

1 Make sure that the machine is connected to your network and powered on.

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



3 Double-click the CD-ROM icon that appears on your Mac desktop.

- For Mac OS X 10.8, Double-click the CD-ROM that appears on Finder.

4 Double-click the **MAC_Installer** folder > **Installer OS X** icon.

5 Click **Continue**.

6 Read the license agreement and click **Continue**.

7 Click **Agree** to agree to the license agreement.

8 Click **Install**. All components necessary for machine operations will be installed.

If you click **Customize**, you can choose individual components to install.

9 Enter the password and click **OK** (or **Install Software**).

10 Select **Network Connected Printer (Wired or Wireless)** on the **Printer Connection Type** and click **Continue**.

11 Click **Add Printer** button to select your printer and add it to your printer list.

12 Click **IP** and Select HP Jetdirect - Socket in Protocol.

13 Enter the machine's IP address in the Address input field.

14 Enter the queue name in the Queue input field. If you cannot determine the queue name for your machine server, try using the default queue first.

15 If Auto Select does not work properly, choose Select Printer Software and your machine name in Print Using.

16 Click **Add**.

17 Click **Continue**.

18 After the installation is finished, click **Close**.

Installing driver over the network

Linux

You need to download Linux software packages from the Samsung website to install the printer software (<http://www.samsung.com> > find your product > Support or Downloads).

- 1 Make sure that the machine is connected to your network and powered on. Also, your machine's IP address should have been set.
- 2 Copy **Unified Linux Driver** package to your system.
- 3 Open Terminal program and go to the folder that you copied the package to.
- 4 Extract the package.
- 5 Move to **uld** folder.
- 6 Execute **"./install.sh"** command (If you are not logged in as root, execute the command with **"sudo"** as **"sudo ./install.sh"**).
- 7 Proceed with installation.
- 8 When installation finished, launch **Printing** utility (Go to **System > Administration > Printing** or execute **"system-config-printer"** command in Terminal program).
- 9 Click **Add** button.

- 10 Select **AppSocket/HP JetDirect** and enter your machine's IP address.
- 11 Click **Forward** button and add it to your system.

Add a network printer

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

Installing driver over the network

UNIX



- Make sure your machine supports the UNIX operating system before installing the UNIX printer driver (see "Operating System" on page 7).
- The commands are marked with "", when typing the commands, do not type "".
- Some features and optional goods may not be available depending on model or country (see "Operating System" on page 7).

To use the UNIX printer driver, you have to install the UNIX printer driver package first, then setup the printer. You can download the UNIX printer driver package from the Samsung website (<http://www.samsung.com> > find your product > Support or Downloads).

Installing the UNIX printer driver package

The installation procedure is common for all variants of UNIX OS mentioned.

- 1 From the Samsung website, download and unpack the UNIX Printer Driver package to your computer.
- 2 Acquire root privileges.
"su -"
- 3 Copy the appropriate driver archive to the target UNIX computer.



See administration guide of your UNIX OS for details.

- 4 Unpack the UNIX printer driver package.
For example, on IBM AIX, use the following commands.
"gzip -d < enter the package name | tar xf -"
- 5 the unpacked directory.
- 6 Run the install script.
"./install -i"
install is the installer script file which is used to install or uninstall the UNIX Printer Driver package.
Use "**chmod 755 install**" command to give the permission to the installer script.
- 7 Execute the "**./install -c**" command to verify installation results.
- 8 Run "**installprinter**" from the command line. This will bring up the **Add Printer Wizard** window. Setup the printer in this window referring to the following procedures.

Installing driver over the network



On some UNIX OS, for example on Solaris 10, just added printers may not be enabled and/or may not accept jobs. In this case run the following two commands on the root terminal:

```
"accept <printer_name>"
```

```
"enable <printer_name>"
```

Uninstalling the printer driver package



The utility should be used to delete the printer installed in the system.

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

To re-install it, use the command "**./install -i**" to reinstall the binaries.

Setting up the printer

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

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

Installing driver over the network

- 11 Check the **Make Default** option to set this printer as default.
- 12 Click **OK** to add the printer.

IPv6 configuration



IPv6 is supported properly only in Windows Vista or higher.

The machine supports the following IPv6 addresses for network printing and managements.

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

In the IPv6 network environment, follow the next procedure to use the IPv6 address.

From the control panel

Activating IPv6



Accessing menus may differ from model to model (see "Menu overview" on page 26).

1

Select **Menu** () > **Network** > **TCP/IP (IPv6)** > **IPv6 Protocol** on the control panel.

OR

Select  (**Setup**) > **Network** > **Next** > **TCP/IP (IPv6)** > **IPv6 Protocol** on the touch screen.

2

Select **On** using arrows on the touch screen.

3

Turn the machine off and turn it on again.



When you install the printer driver, do not configure both IPv4 and IPv6. We recommend to configure either IPv4 or IPv6.

DHCPv6 address configuration

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

IPv6 configuration

- 1 Select **Menu**() > **Network** > **TCP/IP (IPv6)** > **DHCPv6 Config** on the control panel.

Select  (**Setup**) > **Network** > **Next** > **TCP/IP (IPv6)** > **DHCPv6 Config** on the touch screen.

- 2 Select the option you want using arrows and touch  (back) to save the selection.

- **Router:** Use DHCPv6 only when requested by a router.
- **Always Use:** Always use DHCPv6 regardless of router request.
- **Never Use:** Never use DHCPv6 regardless of router request.

From the SyncThru™ Web Service

Activating IPv6

- 1 Access a web browser, such as Internet Explorer, from Windows. Enter the machine IP address (http://xxx.xxx.xxx.xxx) in the address field and press the Enter key or click **Go**.
- 2 If it's your first time logging into **SyncThru™ Web Service** you need to log-in as an administrator. Type in the below default ID and password. We recommend you to change the default password for security reasons.
 - **ID: admin**
 - **Password: sec00000**
- 3 When the **SyncThru™ Web Service** window opens, move the mouse cursor over the **Settings** of the top menu bar and then click **Network Settings**.
- 4 Click **TCP/IPv6** on the left pane of the website.
- 5 Check the **IPv6 Protocol** check box to activate IPv6.
- 6 Click the **Apply** button.
- 7 Turn the machine off and turn it on again.

IPv6 configuration



- You can also set the DHCPv6.
- To manually set the IPv6 address:
Check the **Manual Address** check box. Then, the **Address/Prefix** text box is activated. Enter the rest of the address (e.g., :3FFE:10:88:194::AAAA. "A" is the hexadecimal 0 through 9, A through F).



Address must be enclosed in '[']' brackets.

IPv6 address configuration

- 1 Start a web browser, such as Internet Explorer, that supports IPv6 addressing as a URL.
- 2 Select one of the IPv6 addresses (**Link-local Address**, **Stateless Address**, **Stateful Address**, **Manual Address**) from **Network Configuration Report** (see "Printing a network configuration report" on page 139).
 - **Link-local Address:** Self-configured local IPv6 address (Address starts with FE80).
 - **Stateless Address:** Automatically configured IPv6 address by a network router.
 - **Stateful Address:** IPv6 address configured by a DHCPv6 server.
 - **Manual Address:** Manually configured IPv6 address by a user.
- 3 Enter the IPv6 addresses (e.g., : http://[FE80::215:99FF:FE66:7701]).