User Guide

proXpress

M456x Series

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

Maintenance

Troubleshooting

Appendix

Introduction

These are the main components of your machine.

Features by model

Some features and optional goods may not be available depending on model or country.

Features		M456x Series
Hi-Speed USB 2.0		●
Network Interface Ethernet 10/100/1000 Base TX wired LAN		●
Wi-Fi/NFC Kit	Network Interface 802.11b/g/n support over 2.4 GHz wireless LAN[a]	○
NFC (Near Field Communication)		○
XOA applications[b]		●
Google Cloud Print™		●
Mopria		●
Eco printing		●
Duplex (2-sided) printing		●
USB memory interface		●
Optional tray (SCF)		○
Stand		○
Dual Scan Document Feeder (DSDF)		●

a.Depending on your country, wireless LAN card may not be available. Contact your local Samsung dealer or the retailer where you bought your machine.
b.To use this feature, XOA applications should be installed. For more information, contact your local Samsung dealer or the retailer where you purchased your machine.

(●: supported, ○: optional, Blank: Not supported)

Useful to know

The machine does not print.

- Open the print queue list and remove the document from the list (see "Canceling a print job" on page 60).
- Remove the driver and install it again (see "Installing the software" on page 36).
- Select your machine as your default machine in your Windows (see "Setting your machine as a default machine" on page 81).

Where can I purchase accessories or supplies?

- Inquire at a Samsung distributor or your retailer.
- Visit www.samsung.com/supplies. Select your country/region to view product service information.

The status LED flashes or remains constantly on.

- Turn the product off and on again.
- Check the meanings of LED indications in this manual and troubleshoot accordingly (see "Understanding the LEDs" on page 33).

A paper jam has occurred.

- Open and close the cover (see "Front view" on page 17).
- Check the instructions on removing jammed paper in this manual and troubleshoot accordingly (see "Clearing paper jams" on page 250).

Printouts are blurry.

- The toner level might be low or uneven. Shake the toner cartridge (see "Redistributing toner" on page 234).
- Try a different print resolution setting (see "Opening printing preferences" on page 61).
- Replace the toner cartridge (see "Replacing the toner cartridge" on page 236).

Where can I download the machine's driver?

- You can get help, support application, machine drivers, manuals, and order information from the Samsung website, www.samsung.com > find your product > Support or Downloads.

About this user guide

This user guide provides information for your basic understanding of the machine as well as detailed steps to explain machine usage.

- Do not discard this manual, and keep it for future reference.
- Read the safety information before using the machine.
- If you have a problem using the machine, refer to the troubleshooting chapter.
- Terms used in this user guide are explained in the glossary chapter.
- All illustrations in this user guide may differ from your machine depending on its options or model you purchased.
- The screenshots in this user guide may differ from your machine depending on the machine's firmware/driver version.
- The procedures in this user guide are mainly based on Windows 7.
- If you are a Mac, Linux or UNIX operating systems user, refer to the User Guide from the Samsung website, www.samsung.com > find your product > Support or Downloads or http://www.samsung.com/printersetup.
- If you have Internet access, you can get help, support application, machine drivers, manuals, and order information from the Samsung website, www.samsung.com > find your product > Support or Downloads.

Conventions

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

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

General icons

Icon	Text	Description
⚠	**Warning**	Used to alert users to the possibility of personal injury.
⚠	**Caution**	Gives users information to protect the machine from possible mechanical damage or malfunction.
✎	**Note**	Provides additional information or detailed specification of the machine function and feature.

Safety information

These warnings and precautions are included to prevent injury to you and others, and to prevent any potential damage to your machine. Be sure to read and understand all of these instructions before using the machine. After reading this section, keep it in a safe place for future reference.
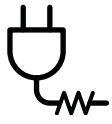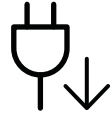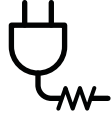
Important safety symbols

Explanation of all icons and signs used in this chapter

⚠	**Warning**	Hazards or unsafe practices that may result in severe personal injury or death.
⚠	**Caution**	Hazards or unsafe practices that may result in minor personal injury or property damage.

Operating environment

⚠ Warning

	Do not use if the power cord is damaged or if the electrical outlet is not grounded. This could result in electric shock or fire.
	Do not place anything on top of the machine (water, small metal or heavy objects, candles, lit cigarettes, etc.). This could result in electric shock or fire.
	• If the machine gets overheated, it releases smoke, makes strange noises, or generates an odd odor, immediately turn off the power switch or unplug the machine. • The user should be able to access the power outlet in case of emergencies that might require the user to pull the plug out. This could result in electric shock or fire.
	Do not bend, or place heavy objects on the power cord. Stepping on or allowing the power cord to be crushed by a heavy object could result in electric shock or fire.

	Do not remove the plug by pulling on the cord; do not handle the plug with wet hands. This could result in electric shock or fire.

⚠ Caution
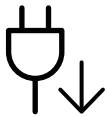
	During an electrical storm or for a period of non-operation, remove the power plug from the electrical outlet. This could result in electric shock or fire.
	Be careful, the paper output area is hot. Burns could occur.
	If the machine has been dropped, or if the cabinet appears damaged, unplug the machine from all interface connections and request assistance from qualified service personnel. Otherwise, this could result in electric shock or fire.
	If the machine does not operate properly after these instructions have been followed, unplug the machine from all interface connections and request assistance from qualified service personnel. Otherwise, this could result in electric shock or fire.
	If the plug does not easily enter the electrical outlet, do not attempt to force it in. Call an electrician to change the electrical outlet, or this could result in electric shock.
	Do not allow pets to chew on the AC power, telephone or PC interface cords. This could result in electric shock or fire and/or injury to your pet.
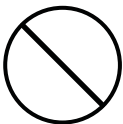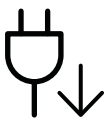
Operating method

⚠ Caution

	Do not forcefully pull the paper out during printing. It can cause damage to the machine.

	Be careful not to put your hand between the machine and paper tray. You may get injured.
	Be careful when replacing paper or removing jammed paper. New paper has sharp edges and can cause painful cuts.
	When printing large quantities, the bottom part of the paper output area may get hot. Do not allow children to touch. Burns can occur.
	When removing jammed paper, do not use tweezers or sharp metal objects. It can damage the machine.
	Do not allow too many papers to stack up in the paper output tray. It can damage the machine.
	Do not block or push objects into the ventilation opening. This could result in elevated component temperatures which can cause damage or fire.
	Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
	This machine's power reception device is the power cord. To switch off the power supply, remove the power cord from the electrical outlet.
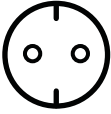
Installation / Moving

⚠ Warning

	Do not place the machine in an area with dust, humidity, or water leaks. This could result in electric shock or fire.

	Place the machine in the environment where it meets the operating temperature and humidity specification. Do not use the machine when it is below freezing temperature or has recently been moved from a location below freezing temperature. Doing so may damage the machine. Only operate the machine when the internal temperature of the machine is within the operating temperature and humidity specifications. Otherwise, quality problems can occur and cause damage to the machine. See "General specifications" on page 281.

⚠ Caution

	Before moving the machine, turn the power off and disconnect all cords. The information below are only suggestions based on the units weight.If you have a medical condition that prevents you from lifting, do not lift the machine. Ask for help, and always use the appropriate amount of people to lift the device safety. Then lift the machine: • If the machine weighs under 20 kg (44.09 lbs), lift with 1 person. • If the machine weighs 20 kg (44.09 lbs) - 40 kg (88.18 lbs), lift with 2 people. • If the machine weighs more than 40 kg (88.18 lbs), lift with 4 or more people. The machine could fall, causing injury or machine damage.
	Choose a flat surface with enough space for ventilation to place the machine. Also consider the space required to open the cover and trays. The place should be well-ventilated and be far from direct light, heat, and humidity.
	When using the machine for a long period of time or printing a large number of pages in a non-ventilated space, it could pollute the air and be harmful to your health. Place the machine in a well-ventilated space or open a window to circulate the air periodically.
	Do not place the machine on an unstable surface. The machine could fall, causing injury or machine damage.
	Use only No.26 AWG[a] or larger, telephone line cord, if necessary. Otherwise, it can cause damage to the machine.
	Make sure you plug the power cord into a grounded electrical outlet. Otherwise, this could result in electric shock or fire.
	Use the power cord supplied with your machine for safe operation. If you are using a cord which is longer than 2 meters (6 feet) with a 110 V machine, then the gauge should be 16 AWG or larger. Otherwise, it can cause damage to the machine, and could result in electric shock or fire.

	Do not put a cover over the machine or place it in an airtight location, such as a closet. If the machine is not well-ventilated, this could result in fire.
	Do not overload wall outlets and extension cords. This can diminish performance, and could result in electric shock or fire.
	The machine should be connected to the power level which is specified on the label. If you are unsure and want to check the power level you are using, contact the electrical utility company.

a.AWG: American Wire Gauge

Maintenance / Checking

⚠ Caution

	Unplug this product from the wall outlet before cleaning the inside of the machine. Do not clean the machine with benzene, paint thinner or alcohol; do not spray water directly into the machine. This could result in electric shock or fire.
	When you are working inside the machine replacing supplies or cleaning the inside, do not operate the machine. You could get injured.
	Keep cleaning supplies away from children. Children could get hurt.
	Do not disassemble, repair or rebuild the machine by yourself. It can damage the machine. Call a certified technician when the machine needs repairing.
	To clean and operate the machine, strictly follow the user's guide provided with the machine. Otherwise, you could damage the machine.
	Keep the power cable and the contact surface of the plug clean from dust or water. Otherwise, this could result in electric shock or fire.

	• Do not remove any covers or guards that are fastened with screws.
	• Fuser units should only be repaired by a certified service technician. Repair by non-certified technicians could result in fire or electric shock.
	• The machine should only be repaired by a Samsung service technician.

Supply usage

⚠ Caution

	Do not disassemble the toner cartridge. Toner dust can be dangerous if inhaled or ingested.
	Do not burn any of the supplies such as toner cartridge or fuser unit. This could cause an explosion or uncontrollable fire.
	When storing supplies such as toner cartridges, keep them away from children. Toner dust can be dangerous if inhaled or ingested.
	Using recycled supplies, such as toner, can cause damage to the machine. In case of damage due to the use of recycled supplies, a service fee will be charged.
	For supplies that contain toner dust (toner cartridge, waste toner bottle, imaging unit, etc.) follow the instructions below. • When disposing of the supplies, follow the instructions for disposal. Refer to the reseller for disposal instructions. • Do not wash the supplies. • For a waste toner bottle, do not reuse it after emptying the bottle. If you do not follow the instructions above, it may cause machine malfunction and environmental pollution. The warranty does not cover damages caused by a user's carelessness.
	When toner gets on your clothing, do not use hot water to wash it. Hot water sets toner into fabric. Use cold water.
	When changing the toner cartridge or removing jammed paper, be careful not to let toner dust touch your body or clothes. Toner dust can be dangerous if inhaled or ingested.
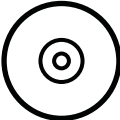
Machine overview

Components

The actual component may differ from the illustration below. Some components may change depending on the configuration.

	Machine[a]
	Imaging unit
	Quick installation guide
	Software CD[b]
	Power cord
	Misc. accessories[c]

a.This illustration may differ from your machine depending on your model. There are various types of machine.
b.The software CD contains the print drivers, user's guide, and software applications.
c.Miscellaneous accessories included with your machine may vary by country of purchase and specific model.

Front view

> • This illustration may differ from your machine depending on your model. There are various types of machine.
> • Some features and optional goods may not be available depending on model or country (see "Features by model" on page 6).
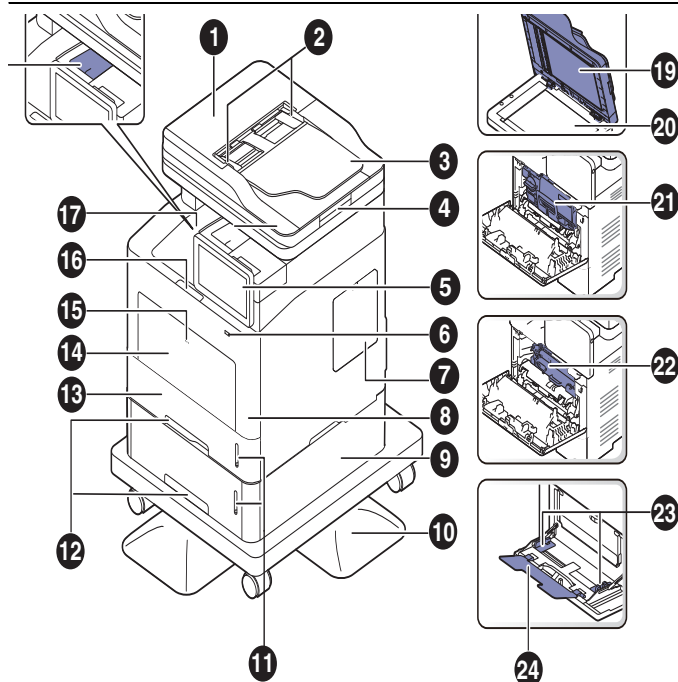
1	Dual Scan Document Feeder (DSDF) cover	13	Tray 1
2	Dual Scan Document Feeder (DSDF) width guide	14	Multi-purpose tray
3	Dual Scan Document Feeder (DSDF) input tray	15	Push-release of multi-purpose tray
4	Dual Scan Document Feeder (DSDF) output tray	16	Front cover release button
5	Control panel	17	Output tray
6	USB memory port	18	Output support tray
7	Control board cover	19	Dual Scan Document Feeder (DSDF)
8	Front cover	20	Scanner glass
9	Optional tray[a]	21	Toner cartridge
10	Stand[b]	22	Imaging unit
11	Paper level indicator	23	Paper width guides on a multi-purpose tray
12	Tray handle	24	Multi-purpose support tray

a. Install the optional tray if it is necessary.
b. Optional device.

Rear view

📝
- This illustration may differ from your machine depending on your model. There are various types of machine.
- Some features and optional goods may not be available depending on model or country (see "Features by model" on page 6).
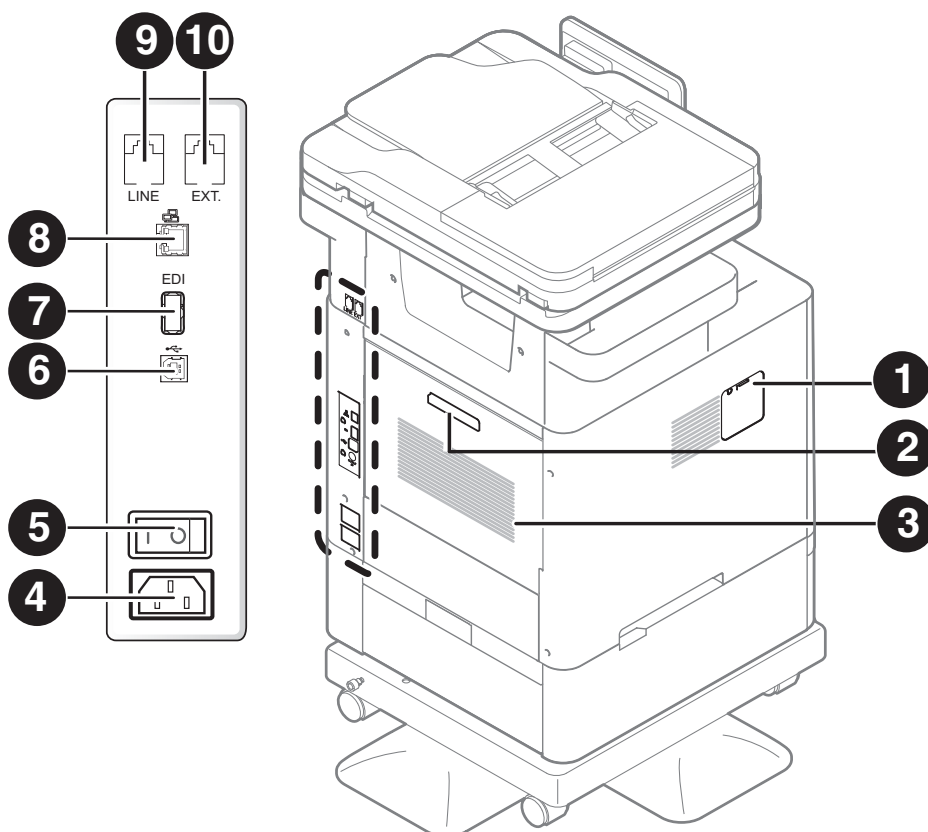
1	Wireless/NFC kit port cover[a]
2	Rear cover handle
3	Rear cover
4	Power receptacle
5	Power-switch
6	USB port
7	EDI port for card reader
8	Network port
9	Telephone line socket (**LINE**)
10	Extension telephone socket (**EXT.**)

a.Optional device.

Control panel overview

Control Panel

⚠️ • When you use the display screen, use your finger only. The screen may be damaged with a sharp pen or anything else.
• The screen may not operate or may not recognize touch inputs properly :
  - If you attach an unauthorized protective film or accessory on the screen.
  - If the screen is covered with dust or any foreign substance.
  - If there is any foreign substance between the display screen and frame or if your other finger is touching the edge of the screen.
  - If there is frost or moisture on the edge of the screen or if you touch the screen with a wet finger.
• When the display screen is scratched or damaged, contact a service representative.
• When you use non-genuine Samsung toner cartridges such as refilled or remanufactured have been used, the background image of display screen may be changed.

1	Display screen	Shows the current machine status and prompts during an operation. You can set menus easily using the display screen.
2	Power LED	Shows the power status of your machine.
3	⏻(Power/Wakeup) button	Turn the power on or off. When the blue LED is on, the machine is powered on and you can use it. If you turn the machine off, press this button for more than two seconds. Then, confirmation window appears.
4	Status LED	Shows the status of your machine (see "Understanding the LEDs" on page 33).

Adjusting angle of the control panel

You can adjust the angle of the control panel for your convenience. Refer to the illustration below.

- Tilt the control panel backwards before you remove printed documents from the machine. Removing documents while the control panel is upright may tear or wrinkle the paper.
- When printing on large paper, such as legal size paper, you can avoid paper jams by adjusting the angle of the control panel so that it lays flat against the machine.
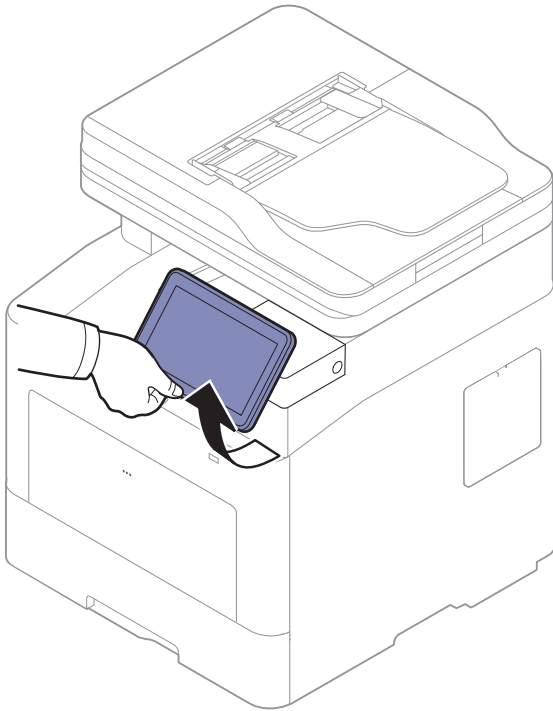
Understanding the pop-up keyboard

You can enter letters, numbers, or special symbols using the pop-up keyboard on the display screen. This keyboard uses the standard QWERTY layout for ease of use.

When you touch an input area, the keyboard pops up on the screen. The keyboard initially shows lowercase letters.
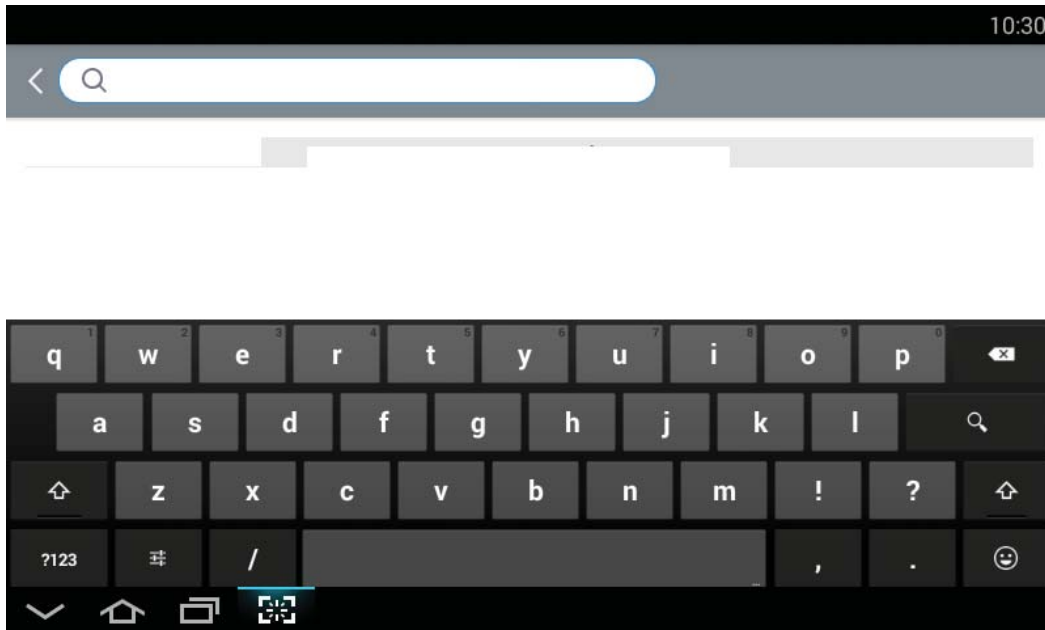
- **Shift key(** ⬆ **):** Tap this key to enter one upper-case letter. Tap this key twice to toggle caps-lock.

- **Symbol/Numeric Mode(** ?123 **):** Tap this key to enter numbers, symbols, and emoticons.

- **ABC Mode(** ABC **):** Tap this key to return the keyboard layout to the default letter keys. Use the Shift key (⬆) to toggle between lower-case and upper-case letters.

- **Space bar(** **):** Tap this key to enter a space.

Turning on the machine

Illustrations on this user guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 17).

- Keep in mind that you should use the power cord supplied with the machine. Otherwise, it can cause damage or fire to the machine.
- Some parts inside of the machine may be hot when power is on, or after printing. Be careful not to burn yourself when working inside the machine.
- Do not disassemble the machine when it is turned on or plugged in. Doing so may give you an electric shock.

1 Connect the machine to the electricity supply first.
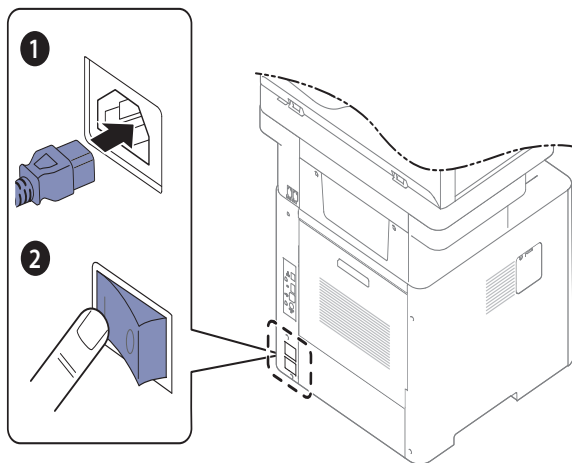
2 Power is turned on automatically.

You can also turn the machine on pressing the ⏻(**Power/Wakeup**) button.

If you want to turn the power off, press and hold ⏻(**Power/Wakeup**) button.

Display screen and useful menu

Display Screen

The Display Screen serves as the user interface of the machine. It shows the current status of processes, notifies you of any prompts or messages, and provides quick access to various features.

Touch gesture terms

The Display Screen is a touchscreen interface. You can interact with it in the same way as a smartphone or tablet computer.

Tap

Lightly touch the screen and release your finger.

For example:
* Tap the on-screen keyboard to enter characters or other text.
* Tap a menu item to select it.
* Tap an application's icon to launch the application.

Touch and hold

Press your finger on an item on the screen and hold it in place.

For example:
* Touch and hold a widget on the home screen to move it.
* Touch and hold on a field to display a pop-up menu of options.

Swipe

Lightly slide your finger vertically or horizontally across the screen.

For example:
* Swipe to scroll through menus or the pages on the Home screen.

Drag

Touch and hold an icon, and then move it to where you want it.

For example:
* Drag icons to a different page in the app drawer.
* Drag icons and widgets to a different page on the home screen.

Command Keys

* (Back): Return to the previous screen, option or step.

* (Home): Go to the main home screen

- (Recent): Show recently used apps.
- Quick launch: A customizable key. See the next section for options.

Adjust Brightness

1 Tap **Settings** > **Display** > **Screen** > **Brightness** from the home screen or **Apps**.

2 Drag to adjust to the screen brightness.

Add quick launch

1 Tap **Settings** > **Display** > **More Settings** > **Quick Launch** from the home screen or **Apps**.

2 Select the desired quick launch function.
   - **None:** The icon is not shown.
   - **Screen Capture:** Capture the current screen to an image file.
   - **Applications:** Open a Screen showing all apps.
   - **Search:** Open the search screen.
   - **Job Status:** Open the Job status screen.
   - **Login/Logout:** Open the Login or Logout screen.

3 Tap (Back) to return to the settings menu.

Home screen overview

The main home screen is the starting point for many applications and functions. You can customize it with application icons, shortcuts, and widgets to give you instant access to

information and applications. You can open the default page at any time by tapping the
icon. The screen images in this user guide may differ from your machine depending on its options or model.

 Depending on authentication settings, a machine's users may need to enter an ID and password. If this is enabled, the machine can only be used by a user with an authorized ID and password on the machine. Contact the machine's administrator.

Navigating the home screens

The machine initially has three home screens. You can place application icons on any page.

 From the main home screen, swipe left or right. The main home screen is located in the center and three additional pages are located on each side.

Navigating the application menus

By default, this machine has several application menus available in the main home screen. If you want to access all application menus and widgets, tap the ⬛ icon and swipe the screen left or right.

✎ From the main home screen, swipe left or right. The main home screen is located in the center.

Accessing recently-used apps

You can easily find any app that you used recently.

1 Tap the 🔲 icon from anywhere to open the recently-used applications window.

2 Tap an application's icon in this window to open it.

Customizing your home screen

You can customize your home screen to suit your needs.

Creating shortcuts

Shortcuts are different from widgets. While widgets can only launch applications, shortcuts can do this and activate features and actions.

Adding a shortcut from the home screen

1 Tap the ⌂ icon to go to the main home screen.

2 Touch and hold the home screen to view a list of available shortcuts to select from.
- **Set wallpaper**
  - **Home Screen** : Set the wallpaper for the **Home Screen**.
  - **Lock Screen** : Set the wallpaper for the **Lock Screen**. To use this feature, you may need to log-in as an administrator (see "Log-in" on page 176).
  - **Home and Lock Screen** : Set the wallpaper for both screens. To use this feature, you may need to log-in as an administrator (see "Log-in" on page 176).
- **Apps, XOA Apps, Widgets and Programs** : Place apps, XOA apps, widgets, and program icons on home screen.
- **Folder** : Create a folder on the home screen.
- **Page** : Add another page to the home screen.

Adding a shortcut from the Apps menu

1 Tap the ⌂ icon to go to the main home screen.

2 Tap the ⊞ icon to view your current applications.

3 Scroll through the list and locate the desired application.

4 Touch and hold the application icon. This creates a shortcut to the application and shows the main home screen.

5 Drag the shortcut to a desired position on the screen and release it. To move to a different page, drag the shortcut to the edge of the screen until the screen scrolls to the desired page.

Deleting a shortcut

1 Touch and hold a shortcut until it becomes movable.

2 You can drag shortcut and place a shortcut in the trash, both items turn red.

✎ This action does not uninstall a program, it only removes the shortcut from the home screen.

Adding and removing widgets

Widgets are self-contained applications that reside on your widgets tab and on any page of the home screen. Unlike shortcuts, a widget appears as an on-screen application.

Adding a widget

1 Tap the ⌂ icon to go to the main home screen.

2 Tap the ⊞ icon and tap the **Widget** tap at the top of the screen.

3 Scroll through the list and locate your desired widget.

4 Touch and hold the widget icon. This creates a copy of the widget and opens the main home screen.

5 Drag the widget to the desired position on the screen and release it. To move the widget to a different page, drag it to the edge of the screen until the screen scrolls to the desired page.

Removing a widget

1 Touch and hold a widget until it becomes movable.

2 You can drag shortcut and place a shortcut in the trash, both items turn red.

This action does not uninstall a widget, it only removes the copy from the home screen.

Moving icons in the Apps menu

1 Tap the icon to go to the main home screen.

2 Tap the icon to view your current applications.

3 Tap the **Apps** tab at the top of the screen if it is not already selected.

4 Drag the icon to a desired position on the screen and release it. To move to a different page, drag the icon to the edge of the screen until the screen scrolls to the desired page.

Changing the Wallpaper

You can customize the Wallpaper (background) of your home screens.

1 From any home screen, touch and hold on an empty area of the screen, and then select **Set wallpaper** option.

2 Tap one of the following options in the window that appears.
- **Home Screen** : Set the wallpaper for the **Home Screen**.
- **Lock Screen** : Set the wallpaper for the **Lock Screen**. To use this feature, you may need to log-in as an administrator (see "Log-in" on page 176).
- **Home and Lock Screen** : Set the wallpaper for both screens. To use this feature, you may need to log-in as an administrator (see "Log-in" on page 176).

3 Tap one of the following options in the next window that appears.
- **Gallery**: Select a wallpaper from photographs and images in the machine's gallery.

You can select any images in a USB device or the '**BOX** > **Download**' folder.

- **Live wallpapers**: Select an animated image.
- **Wallpapers**: Select from several built-in stationary images.

4 Select a wallpaper and tap **Set wallpaper**, or **Cancel**.

Notification Bar

The notification bar includes a pull-down list to show information about currently running processes, toner status, screen brightness and recent notifications.
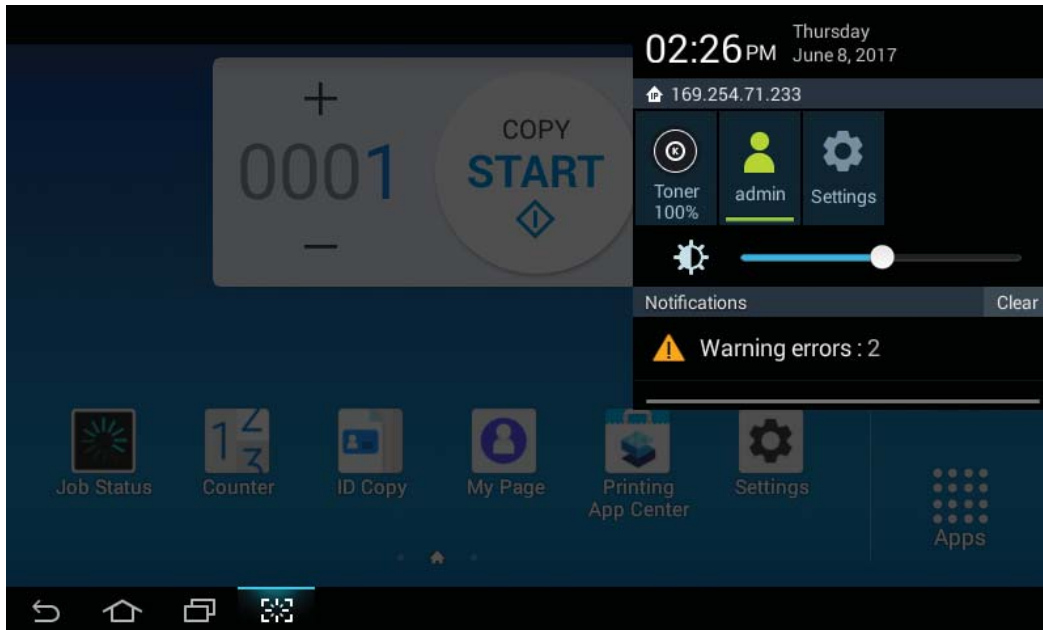
On the home screen, touch and hold the notification bar until the pull-down appears, and then drag down to expand it.

Job Status

When you tap **Job Status** from the home screen or **Apps**, the screen lists **Current Job**, **Completed Job**, **Secure Print**, **Secure Fax**,**Active Notice**.

Current Job

Displays a list of jobs in progress and pending.

Completed Job

Displays a list of the completed jobs, including information about jobs in which an error has occurred.

Secure Print / Fax

Displays a list of secured jobs. For secured print, you need to enter the **ID** and **Password** set in the printer driver (see "Print Mode" on page 66). For secured fax, you need to enter the **Password**.

Active Notice

Displays any error messages and codes that have occurred.

Counter

You can check how many pages/jobs were printed, copied, scanned, and faxed-out. You can check the counter by device or users.

Tap **Counter** from the home screen or **Apps**.

You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Information** tab > **Usage Counters** (see "Counter" on page 29).
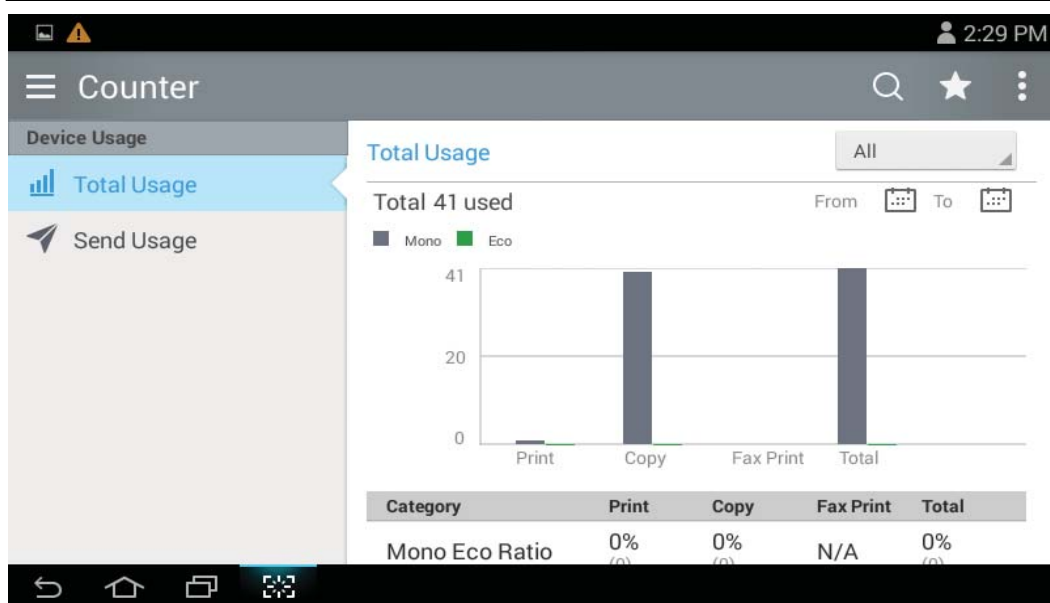
Command keys

Button	Name	Description
	Quick Menu	Open the quick menu.
	Search	Search for a desired menu or app.
	Print	You can print a usage counter report.
	My Program	Open a list of the apps you added.
All	Period	Select the period of checking counter.
	From, To	Set the period of checking counter.

Understanding the Counter menu

- **Total Usage:** Each category shows the usage count by job types (**Print**, **Copy**, **Fax Print**, **Total**).
  - All : Tap and select the period.
- **Send Usage:** Shows the count of **Send** (**Fax**, **Scan**) jobs.
- **User Usage (Login user only):** Each category shows the printing usage by user.

To use **User Usage**, you may need to select to **Application Authentication** and **Standard Accounting Only** from **Settings** > **Admin Settings** > **Security** > **Mode** or **Method** on the home screen or **Apps**.

USB

To use this USB feature, tap **Box** > **USB** from the home screen or **Apps** (see "Using a USB Drive device" on page 223).

You need to insert a USB Drive device into the USB port on your machine.

Help

Help provides online information to help with your machine questions.

The **Help** app provides information about the menus and functions available in the machine. Use

the pane on the left side of the screen to navigate ? (**Help**) app. You can also select the

headings below each section to browse the help topics.

1 Tap [?] (**Help**) from the home screen or **Apps**.

2 Select a topic and follow the built-in navigation.

Tap [?] (**Help**) from the home screen or [≡] (quick menu), and then select on any option you want to know about.

My Page

The **My Page** app allows you to easily change your profile information and settings. Your **My Page** profile stores your contact information as well as your personal settings. You can use these settings to personalize the machine to suit your usage habits and accessibility needs.

To use this feature, tap **My Page** from the home screen or **Apps**.
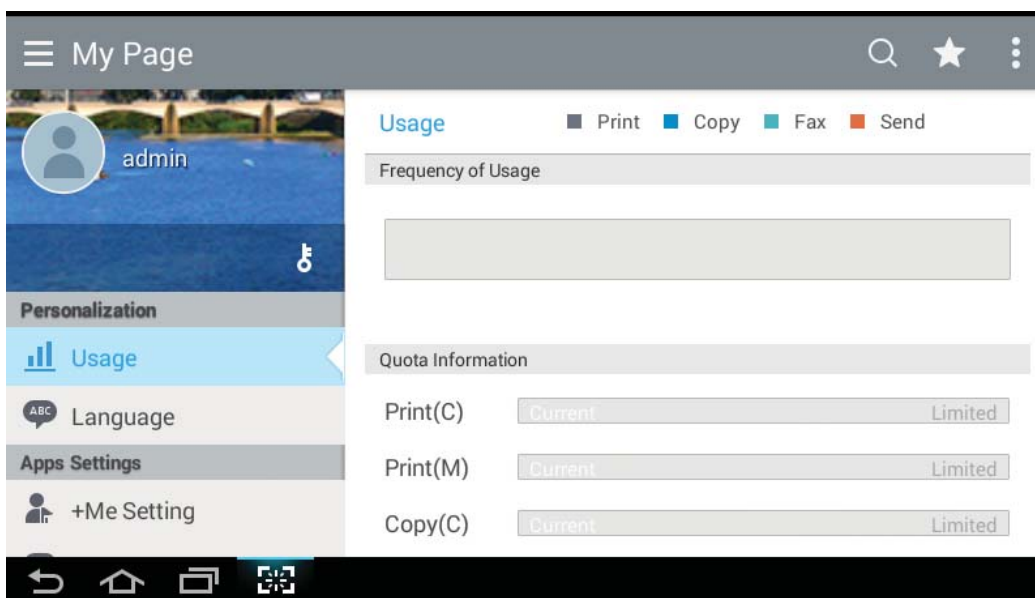
Command keys

Button	Name	Description
≡	Quick Menu	Open the quick menu.
🔍	Search	Search for a desired menu or app.
★	My Program	Open a list of the apps you added.
⋮	Sub menu (Action overflow)	Open the sub menu.

Button	Name	Description
	Change Password	Allows you to change the password.
	Profile Image	Allows you to choose an image for your profile.

Understanding the My Page menu

Allows you to modify various settings to make your experience using the machine more enjoyable.

- **Personalization**
  - **Usage:** The Frequency of Usage graph shows how many print, copy, fax, send, or other jobs you have performed, while the quota information indicates how close you are to your usage quotas.
- **Apps Settings**
  - **+Me Setting:** The **+Me Setting** setting specifies whether or not the machine sends information about your usage to the Box or another destination. You can also specify where your usage information is sent.
  - **Send Feedback:** The **Send Feedback** setting specifies whether or not the machine sends information about your usage to the manufacturer. Sending feedback helps the manufacturer improve the machine through updates or patches.

Understanding the LEDs

The color of the status 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 "Troubleshooting" on page 248).
- You also can resolve the error with the guideline from the computers' Samsung Printer Status program window (see "Using Samsung Printer Status" on page 212).
- If the problem persists, call a service representative.

Status LED

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

Status			Description
Off			• The machine is off-line. • The machine is in power saver mode. When data is received, or any button is pressed, it switches to on-line automatically.
Blue	On		The machine is on-line and can be used.
	Blinking	Fax	The machine is sending or receiving faxes.
		Copy	The machine is copying documents.
		Scan	The machine is scanning documents.
		Print	• When the status LED slowly blinks, the machine is receiving data from the computer. • When the status LED blinks rapidly, the machine is printing data.

Status		Description
Orange	On	• The cover is open. Close the cover. • There is no paper in the tray. Load paper in the tray (see "Loading paper in the tray" on page 46). • The machine has stopped due to a major error. Check the display message (see "Understanding display messages" on page 258). • A paper jam has occurred (see "Clearing paper jams" on page 250). • 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 236). • An imaging unit has almost reached its estimated cartridge life[b]. It is recommended to replace the imaging unit.
	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.

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

b.When the imaging unit 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.

> Check the message on the display screen. Follow the instructions in the message or refer to the troubleshooting chapter (see "Understanding display messages" on page 258). If the problem persists, call for service.

Power LED

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

Status		Description
Off		The machine is off-line.
Blue	On	• The machine is on-line and can be used. • When data is received, or any screen is pressed, it switches to on-line automatically.
	Blinking	When the status LED slowly blinks, the machine is in power save mode.

> ✎ Check the message on the display screen. Follow the instructions in the message or refer to the troubleshooting chapter (see "Understanding display messages" on page 258). If the problem persists, call for service.

Installing the software

After you have set up your machine and connected it to your computer, you must install the printer software. If you are a Windows user, install the software from the supplied CD and if you are a Mac, Linux, or UNIX OS user, download the software from the Samsung website and install (http://www.samsung.com > find your product > Support or Downloads or http://www.samsung.com/printersetup). Before installing, check whether your computer's OS support the software.

> 🖉
> - If you are a Mac, Linux or UNIX operating systems user, refer to the User Guide from the Samsung website.
> - The installation window in this User Guide may differ depending on the machine and interface in use.
> - Only use a USB cable no longer than 3 meters (118 inches).

Supplied software

Printer software are occasionally updated due to release of new operating system and etc. If needed, download the latest version from the Samsung website.

Software		Windows	Mac [a]	Linux [a]	UNIX [a]
PCL printer driver		●			
PS printer driver[a]		●	●	●	●
XPS printer driver [a]		●			
Direct Printing Utility [a]		●			
Samsung Printer Center		●			
Samsung Easy Printer Manager		●	●		
Samsung Printer Status		●			
Samsung Easy Document Creator		●	●		
Easy Capture Manager		●			
Samsung Eco Driver Pack[b]		●			
Samsung Stylish Driver Pack[c]		●			
SyncThru™ Web Service		●	●	●	●
Fax	Samsung Network PC Fax	●	●		
Scan	Scan driver	●	●	●	

a.Download the software from the Samsung website and install it: (http://www.samsung.com > find your product > Support or Downloads). Before installing, check whether your computer's OS support the software.

b.To use the Easy Eco Driver features, the **Eco Driver Pack** must be installed.

c.The printer driver includes a user interface that is optimized for touchscreens. To use this UI, click **Samsung Printer Center** > **Device Options** and then select **Stylish User Interface** (see "Using Samsung Printer Center" on page 206).

Installing for Windows

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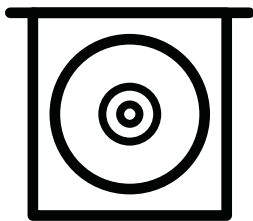
If the installation window does not appear, click **Start** > **All programs** > **Accessories** > **Run**.

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**.

- For Windows 10 / Windows Server 2016
  If the installation window does not appear, from task bar, type in X:**Setup.exe** in **Search** input area, replacing "X" with the letter that represents your CD-ROM drive and press the Enter key.

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

4 Select you want type on the **Printer Setup Type** screen, and then click **Next**.

5 Select you want type on the **Printer Connection Type** screen, and then click **Next**.

6 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. Or, 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 WindowsStore.

  1. From **Charms**, select **Search**.
  2. Click **Store**.
  3. Search and click **Samsung Printer Experience**.
  4. 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.

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

2 Make sure that the machine is powered on.

3 Connect the computer and the machine with a USB cable.

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

If the printer driver does not work properly, follow the steps below to reinstall the driver. From the **Start** menu, select **Programs** or **All Programs** > **Samsung Printers** > **Uninstall Samsung Printer Software**.

- For Windows 8,

  1. From Charms, select **Search** > **Apps**.
  2. Search and click **Control Panel**.
  3. Click **Programs and Features**.
  4. Right-click the driver you want to uninstall and select **Uninstall**.

- For Windows 10 / Windows Server 2016

  1. From task bar, type in **Programs and Features** in **Search** input area. Press the Enter key.
     OR
     From the **Start** ( ) icon, select **All apps** > **Search** > type in **Programs and Features**.
  2. Right-click the driver you want to uninstall and select **Uninstall**.

Media and Tray

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

Preparing originals

- Do not load paper smaller or larger than custom size.
  - **Scan glass:**
    - **M456x Series:** X: 0 - 216 mm (8.50 inches), Y: 0 - 297 mm (11.69 inches)
    - **M4562 Series:** X: 0 - 216 mm (8.50 inches), Y: 0 - 356 mm (14.02 inches)
  - **Document feeder:** X: 105 - 216 mm (4.14 - 8.5 inches), Y: 148 - 356 mm (5.83 - 14.02 inches)
- To prevent paper jams, low print quality and machine failure, do not load the following:
  - Carbon-paper or carbon-backed paper
  - Coated paper
  - Onion skin or thin paper
  - Wrinkled or creased paper
  - Curled or rolled paper
  - Torn paper
    X: 216 mm (8.50 inches), Y: 297 mm (11.69 inches)
- 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, or documents with other unusual characteristics.

Loading originals

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

Illustrations on this user guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 17).

On the scanner glass

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

1 Lift and open the Dual Scan Document Feeder (DSDF).
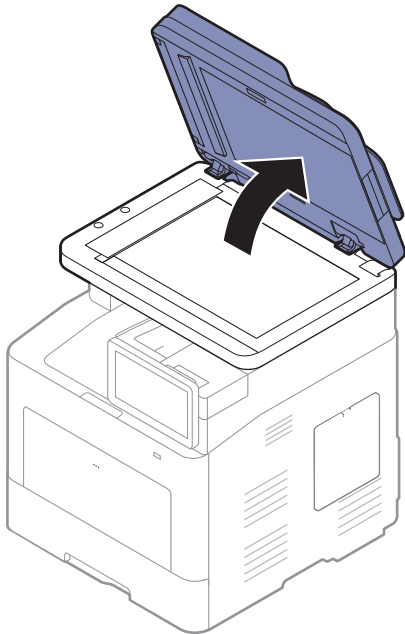
2 Place the original face down on the scanner glass. Align it with the registration guide at the top left corner of the glass.
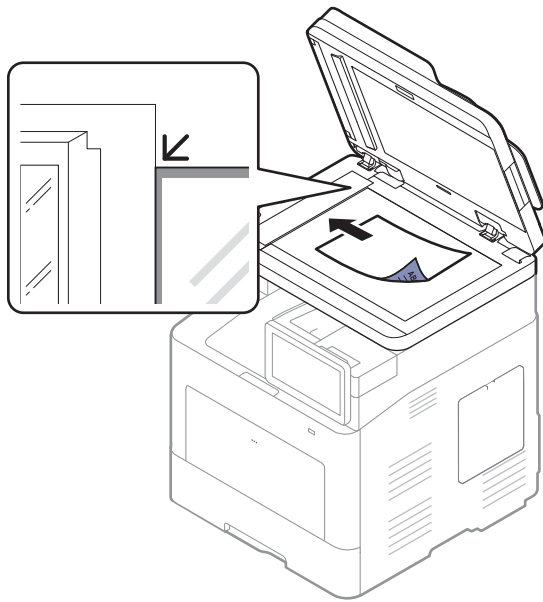
3 Close the Dual Scan Document Feeder (DSDF).

✎ • Leaving the Dual Scan Document Feeder (DSDF) 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 (see "Cleaning the machine" on page 242).
  • If you are copying a page from a book or magazine, lift the Dual Scan Document Feeder (DSDF) 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 scanner lid open.

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

In the document feeder

Using the Dual Scan Document Feeder (DSDF), you can load up to 50 sheets of paper (60 to 90 g/m^2, 16 to 24 lbs bond) for one job.

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

2 Load the original face up into the document feeder input tray. Make sure that the bottom of the original stack matches the paper size marked on the document input tray.
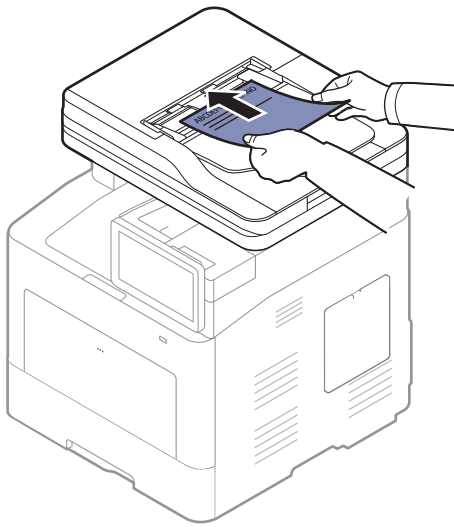
3 Adjust the document feeder width guides to the paper size.
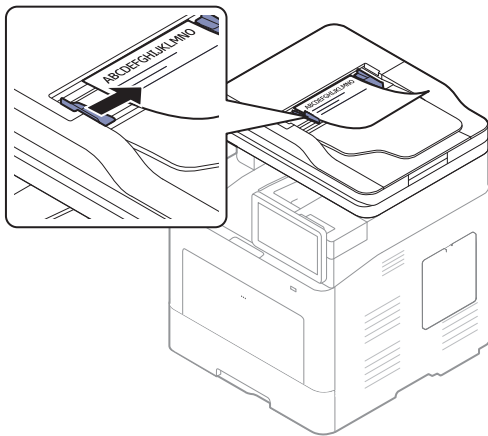
Dust on the document feeder glass may cause black lines on the printout. Always keep the glass clean (see "Cleaning the machine" on page 242).

Selecting print media

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

Guidelines for select the print media

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

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

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

- The type, size, and weight of the print media for your machine are described in print media specifications (see "Print media specifications" on page 282).
- Desired outcome: The print media you choose should be appropriate for your project.
- Brightness: Some print media are whiter than others and produce sharper, more vibrant images.
- Surface smoothness: The smoothness of the print media affects how crisp the printing looks on the paper.

- Some print media may meet all of the guidelines in this user guide and still not produce satisfactory results. This may be the result of the sheets characteristics, improper handling, unacceptable temperature and humidity levels, or other variables over which cannot be controlled.
- Before purchasing large quantities of print media, ensure that it meets the requirements specified in this user guide.

- Using print media that does not meet these specifications may cause problems or require repairs. Such repairs are not covered by Samsung's warranty or service agreements.
- The amount of paper put into the tray may differ according to media type used (see "Print media specifications" on page 282).
- Make sure not to use the inkjet photo paper with this machine. It could cause damage to the machine.
- Using flammable print media can cause a fire.
- Use designated print media (see "Print media specifications" on page 282).

The use of flammable media or foreign materials left in the printer may lead to overheating of the unit and, in rare cases may cause a fire.

Loading paper in the tray

Tray overview
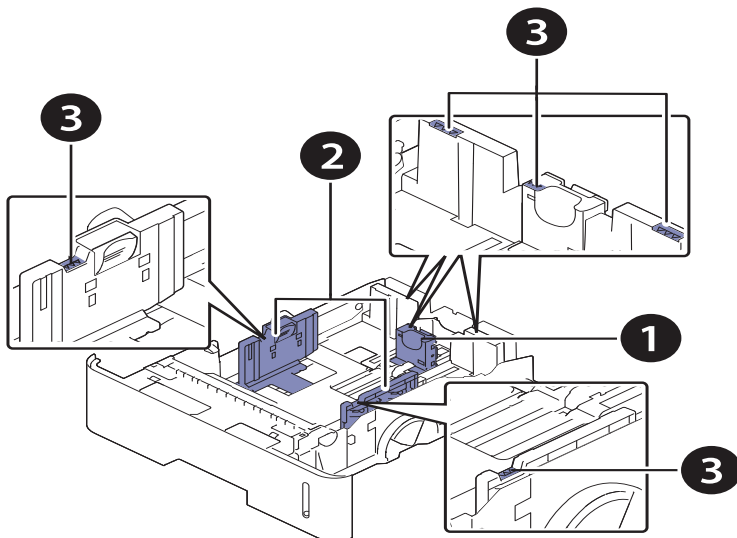
1. Paper length guide
2. Paper width guide
3. Paper limit mark

⚠ If you do not adjust the guide, it may cause paper registration, image skew, or jamming of the paper.

Loading paper in the tray

✎ Illustrations on this user guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 17).

Tray 1 / optional tray

✎ • The procedure is same for all optional trays.
• Do not push the paper width guide too far causing the media to warp.
• If you do not adjust the paper width guide, it may cause paper jams.
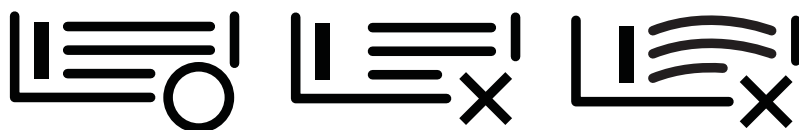
- Do not use a paper with a leading-edge curl, it may cause a paper jam or the paper can be wrinkled.

- Do not overload the tray. Otherwise, it may cause paper jams. Make sure that the paper is below the maximum paper capacity guide inside the tray.
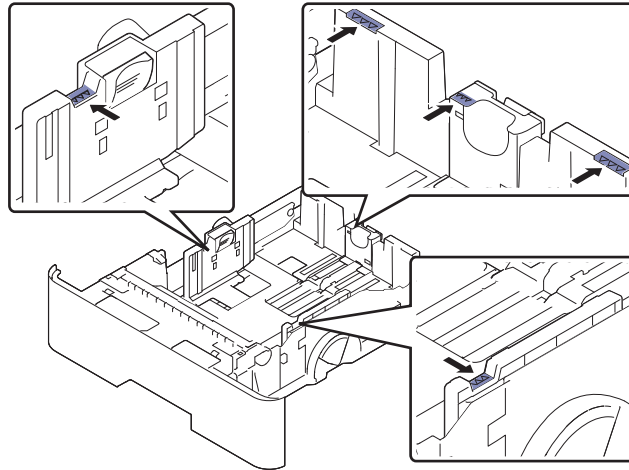
- Paper quantity indicator shows the amount of paper in the tray.
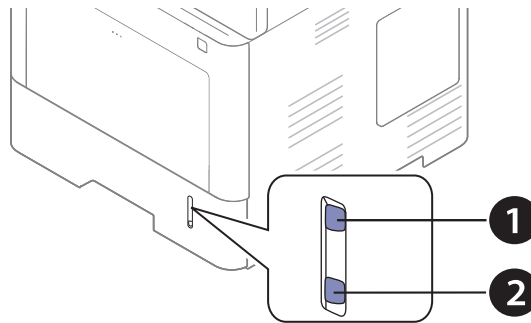
1. Full
2. Empty
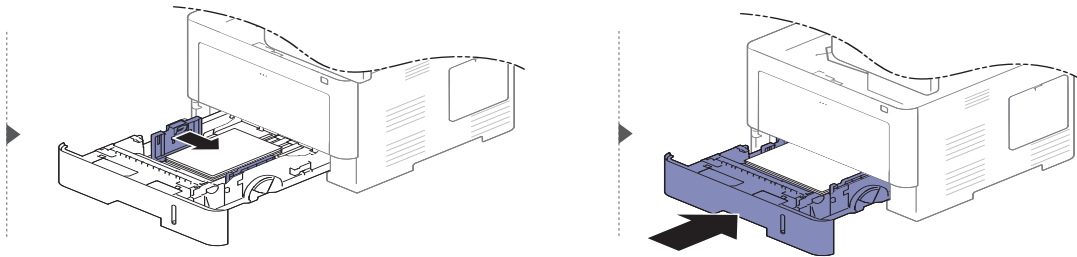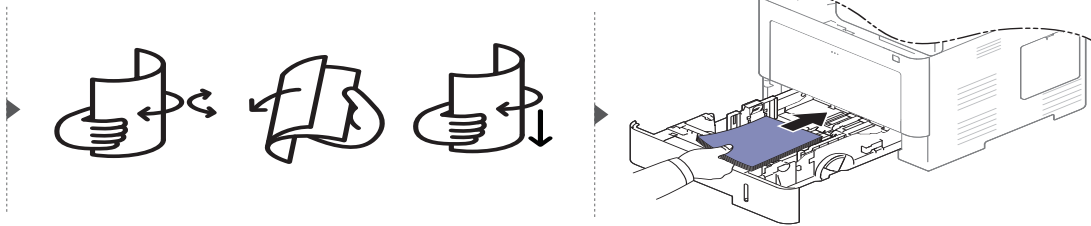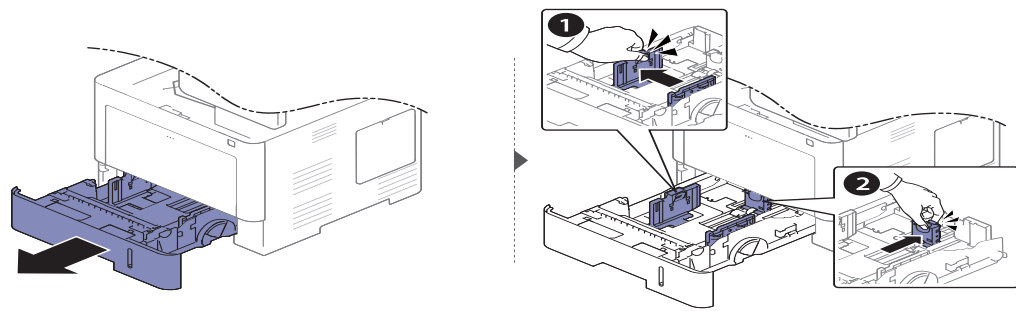
When you print a document, set the paper type and size for the tray (see "Tray Settings" on page 55).

Multi-purpose tray

The multi-purpose tray can hold special sizes and types of print material, such as postcards, note cards, and envelopes (see "Print media specifications" on page 282).

Tips on using the multi-purpose tray

- Load only one type, size and weight of print media at a time in the multi-purpose tray.
- To prevent paper jams, do not add paper while printing when there is still paper in the multi-purpose tray. This also applies to other types of print media.
- To prevent paper jams, do not pull out the paper tray while printing is in progress from the multi-purpose tray or the printing will stop. Make sure that the paper tray is inserted.
- Always load the specified print media only to avoid paper jams and print quality problems (see "Print media specifications" on page 282).
- Flatten any curl on postcards, envelopes, and labels before loading them into the multi-purpose tray.

- When printing the special media, you must follow the loading guideline (see "Printing on special media" on page 50).
- When papers overlap when printing using multi-purpose tray, open tray 1 and remove overlapping papers then try printing again.
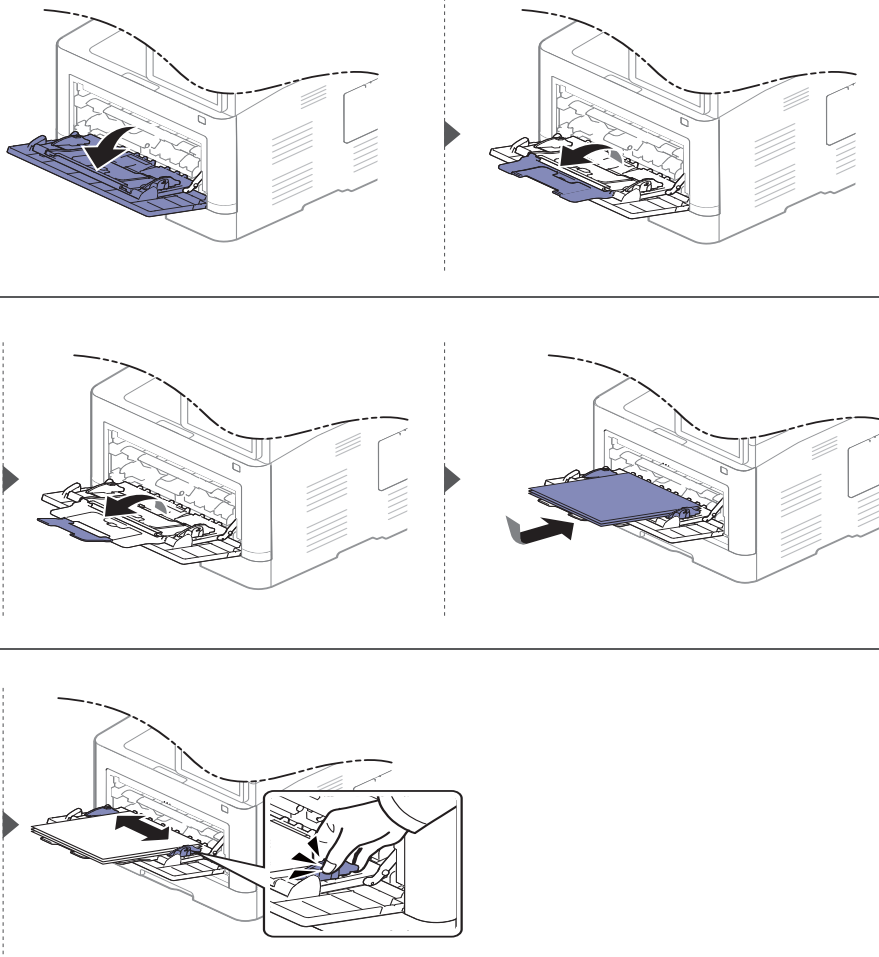
When you print a document, set the paper type and size for the multi-purpose tray.

For information about setting the paper type and size on the control panel (see "Tray Settings" on page 55).

Printing on special media

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

The paper setting in the machine and driver should match to print without a paper mismatch error.

To change the paper setting set in the machine, from **SyncThru™ Web Service** click **Information** > **Current Settings** > **Machine information** > **System** > **Input Trays** (see "Settings tab" on page 201).

Or, you can set it from the control panel.

Then, set the paper type from the **Printing preferences** window > **Paper** tab > **Paper Type** (see "Opening printing preferences" on page 61).

For example, if you want to print on labels, select **Labels** for **Paper Type**.

When using special media, we recommend you feed a piece of paper at a time. Check the maximum input number of media for each tray (see "Print media specifications" on page 282).

Types	Tray 1	Optional tray	Multi-purpose tray
Plain	●	●	●
Thick	●	●	●
Thicker			●
Thin	●	●	●
Cotton	●	●	●
Color	●	●	●
Preprinted	●	●	●
Recycled	●	●	●
Envelope	●	●	●
Labels	●	●	●
CardStock	●	●	●
Bond	●	●	●
Archive	●	●	●
LetterHead	●	●	●
Punched	●	●	●

(●: Supported, Blank: Not supported)

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

Envelope

Printing successfully on envelopes depends upon the quality of the envelopes.

To print an envelope, place it as shown in the following figure.
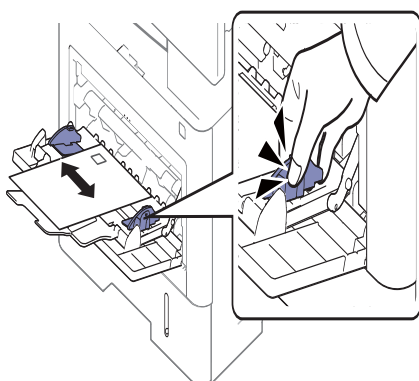
- When selecting envelopes, consider the following factors:
  - **Weight:** should not exceed 90 g/m^2 otherwise, jams may occur.
  - **Construction:** should lie flat with less than 6 mm curl and should not contain air.
  - **Condition:** should not be wrinkled, nicked, nor damaged.
  - **Temperature:** should resist the heat and pressure of the machine during operation.
- Use only well-constructed envelopes with sharp and well-creased folds.
- Do not use stamped envelopes.
- Do not use envelopes with clasps, snaps, windows, coated lining, self-adhesive seals, or other synthetic materials.
- Do not use damaged or poorly made envelopes.
- Be sure the seam at both ends of the envelope extends all the way to the corner of the envelope.
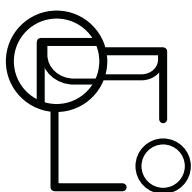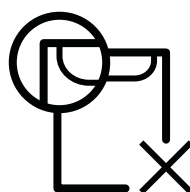
1. Acceptable
2. Unacceptable

- Envelopes with a peel-off adhesive strip or with more than one flap that folds over to seal must use adhesives compatible with the machine's fusing temperature for 0.1 second about 170 °C (338 °F). The extra flaps and strips might cause wrinkling, creasing, or jams, and may even damage the fuser.

- For the best print quality, position margins no closer than 15 mm from the edges of the envelope.
- Avoid printing over the area where the envelope's seams meet.

Labels

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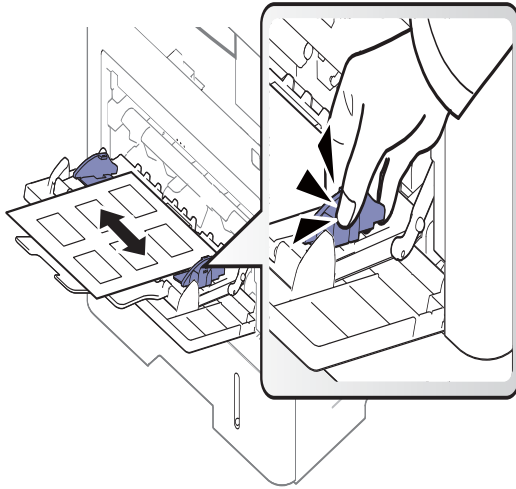
- When selecting labels, consider the following factors:
  - **Adhesives:** Should be stable at your machine's fusing temperature about 170 °C (338 °F).
  - **Arrangement:** Only use labels with no exposed backing between them. Labels can peel off sheets that have spaces between the labels, causing serious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

Card stock/ Custom-sized paper
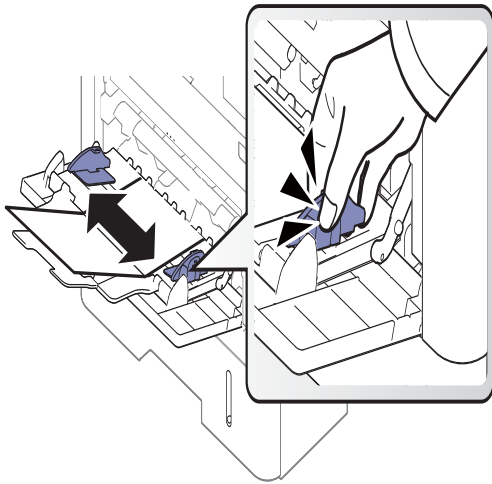
- Do not print on media smaller than 98 mm (3.8 inches) wide or 148 mm (5.8 inches) long.
- In the software application, set the margins to at least 6.4 mm (0.25 inches) away from the edges of the material.

Preprinted paper

When loading preprinted paper, the printed side should be facing up with an uncurled edge at the front. If you experience problems with paper feeding, turn the paper around. Note that print quality is not guaranteed.
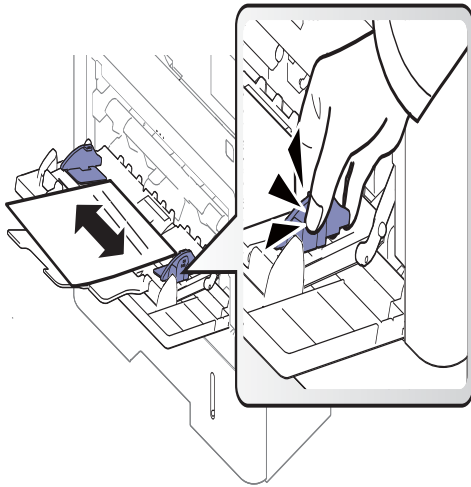
- Must be printed with heat-resistant ink that will not melt, vaporize, or release hazardous emissions when subjected to the machine's fusing temperature for 0.1 second (about 170 °C (338 °F)).
- Preprinted paper ink must be non-flammable and should not adversely affect machine rollers.
- Before you load preprinted paper, verify that the ink on the paper is dry. During the fusing process, wet ink can come off preprinted paper, reducing print quality.

Tray Settings

To change detailed tray settings, tap **Settings**> **Tray Settings** and select the tray and options you want on the display screen.
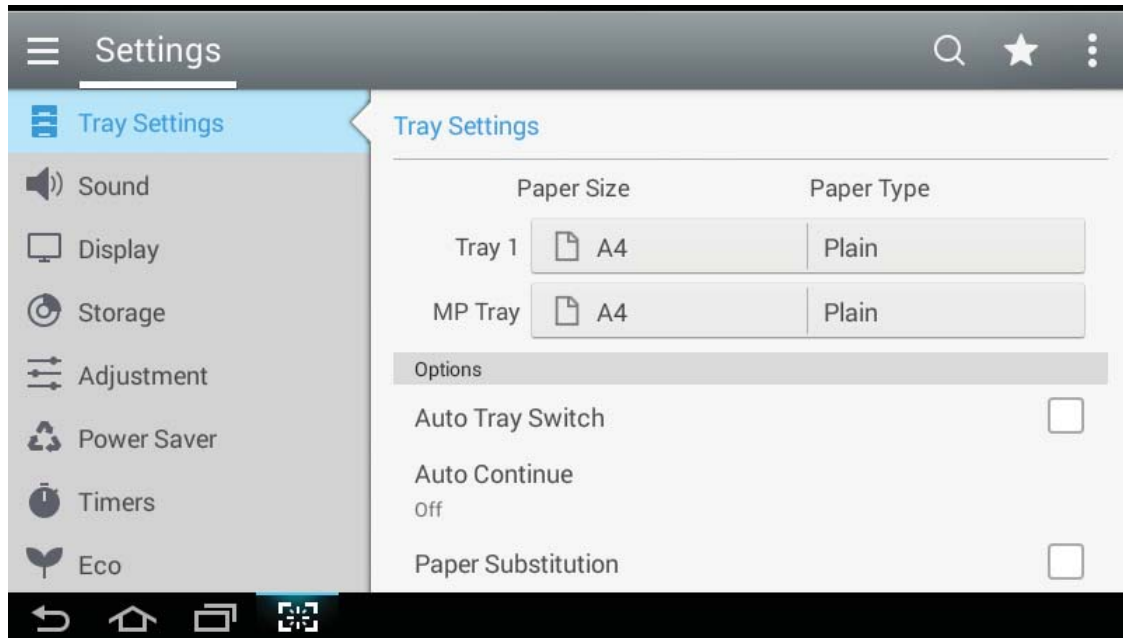
- **Tray 1, MP Tray:** You can set the **Paper Size** and **Paper Type**.
- **Tray 2, Tray 3, Tray 4:** You can see when you install the optional tray. And then, You can set the **Paper Size** and **Paper Type**.
- **Paper Size:** Allows you to change the paper size.
  - You can change the paper list on the display screen. The paper lists are divided into the available A/B type and letter type paper in this machine.
  - If there is no required size paper or you need to use custom sized paper, press the cardinal point arrows to set the paper size. You can also set and save the custom size using **Custom Size**. You can select the custom size whenever you need it.
- **Paper Type:** Allows you to change the paper type.

Options

Scroll through the options by swiping up and down.

- **Auto Tray Switch:** Determine whether or not the machine continues printing when it detects the paper does not match. For example, if both tray 1 and tray 2 are filled with the same size paper, the machine automatically prints from tray 2 after the tray 1 runs out of paper.
- **Auto Continue:** This option allows you to continue printing when the paper size you have set is mismatched with the paper in the tray. When this option is activated, the machine continues printing using similar or large size paper. If this option is inactivated, the machine waits until the required size paper is loaded in the tray.
- **Paper Substitution:** When the requested paper for a print job is not available in the tray, this feature allows you to substitute similar paper size, For example, if the requested letter sized paper is not available in the tray, this machine substitutes A4 for the requested paper.

When the paper is substituted, some image loss may occur.

- **Tray Confirmation Message:** When you load paper into a tray, you can set the confirmation message to appear automatically. This machine can detect some paper sizes and types automatically. If you want to set the paper size and type, or the machine cannot detect them, you can set the size and type directly in the confirmation window.
- **Tray Protection:** If you set tray 1 to **On**, for example, then tray 1 is excluded during tray switching.

This setting works for copy or print jobs: It doesn't affect fax jobs.

- **Tray Priority Settings:** You can set the tray priority. If first setting is tray 1, the machine automatically prints from tray 1 after the second setting tray runs out of paper.
- **Letterhead mode:** This mode allows you to use single-sided or duplex printing without changing the direction of paper in a tray when you are printing on papers with orientation such as Letterhead, Preprinted or Punch type papers.

Printing

This chapter explains common printing tasks.

Basic printing

✎ • The procedures in this chapter are mainly based on Windows 7.
   • Check the operating systems that are compatible with your machine (see "System requirements" on page 286).
   • If you are a Mac, Linux or UNIX operating systems user, refer to the User Guide from the Samsung website, http://www.samsung.com > find your product > Support or Downloads or http://www.samsung.com/printersetup.

Printing

The following **Printing Preferences** window is for Notepad in Windows 7.

1 Open the document you want to print.

2 Select **Print** from the **File** menu.

3 Select your machine from the **Select Printer** list.
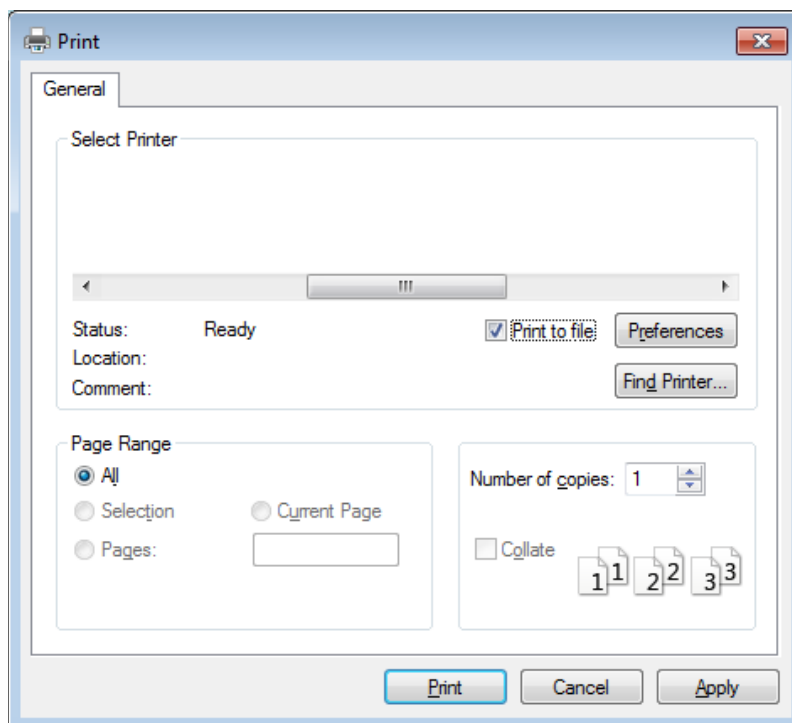
4 The basic print settings including the number of copies and print range are selected within the **Print** window.

> To take advantage of the advanced printing features, click **Properties** or **Preferences** from the **Print** window (see "Opening printing preferences" on page 61).

5 To start the print job, click **OK** or **Print** in the **Print** window.

Canceling a print job

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

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

Opening printing preferences

✎ When you select an option in **Printing Preferences**, you may see a warning mark, ⊗ , or ⚠ . An exclamation mark (⚠) means you can select that certain option but it is not recommended, and (⊗) mark means you cannot select that option due to the machine's setting or environment.

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1 Open the document to print.

2 Select **Print** from the **File** menu.

3 Select your printer driver from the **Select Printer** list.

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

✎ The screenshot may differ depending on model.
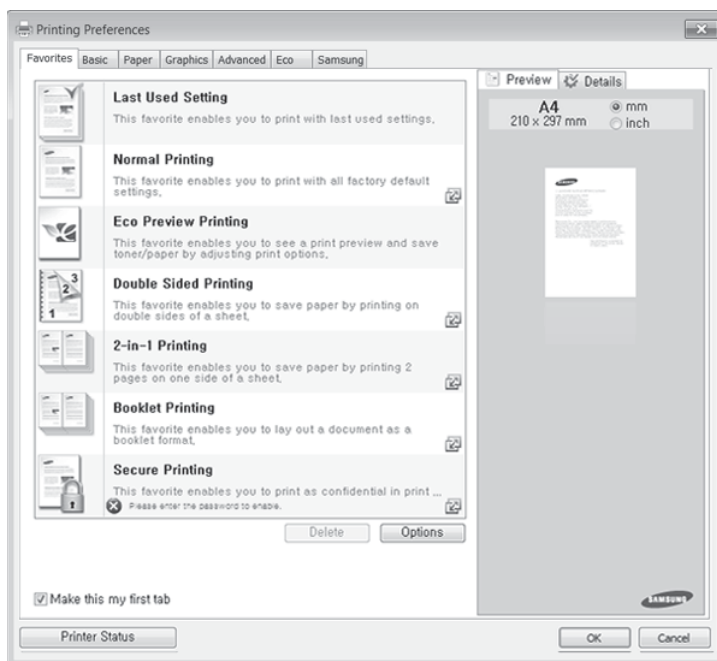
- You can apply **Eco** features to save paper and toner before printing (see "Easy Eco Driver" on page 204).
- You can check the machine's current status pressing the **Printer Status** button (see "Using Samsung Printer Status" on page 212).
- The printer driver includes a user interface that is optimized for touchscreens. To use this UI, click **Samsung Printer Center** > **Device Options** and then select **Stylish User Interface** (see "Using Samsung Printer Center" on page 206).

Favorites tab

Listed items help you choose pre-defined settings.

The screenshot may differ depending on model.
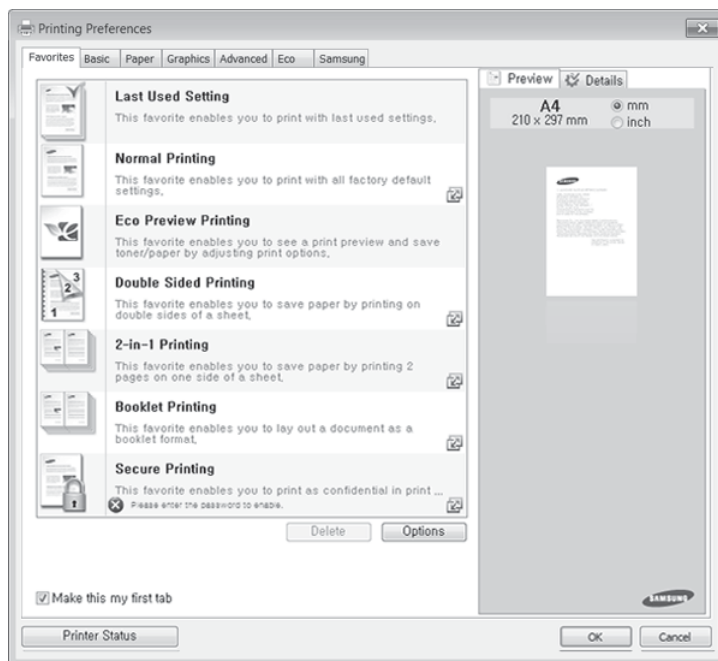
Basic tab

Basic tab to set various printing options.

Orientation

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

Layout Options

This option allows you to select various ways to layout your document.

- **Single Page Per Side:** This option is a basic layout option. This option allows you to print a page on one side of a paper.
- **Multiple Pages Per Side:** See "Printing multiple pages on one sheet of paper" on page 68.

- **Poster Printing:** See "Printing posters" on page 69.
- **Booklet Printing:** See "Printing booklets" on page 69.
- **Page Border:** This option allows you to print your document with a border line around it. This option is not available for **Poster Printing** and **Booklet Printing**.

Double-Sided Printing

This option allows you to print on both sides of paper (see "Printing on both sides of the paper" on page 70).

Paper tab

Use the **Paper** tab options to set the basic paper handling specifications.

Copies

This option allows you to choose the number of copies to be printed. You can select 1 to 9999 copies.

Paper Options

- **Original Size:** This option allows you to set the actual paper size of the originals.
- **Output Size:** This option allows you to scale your print job to any selected paper size regardless of the originals size (see "Fitting your document to a selected paper size" on page 72).
  - **Percentage:** This option allows you to change the size of a page's contents to appear larger or smaller on the printed page by typing in a percentage you want (see "Change the size by percentage of your document" on page 71).
- **Source:** Make sure that **Source** is set to the corresponding paper tray. Use **MP Tray** when printing on special materials, such as envelopes and transparencies.
- **Type:** This option allows you to set the type of paper to be loaded in the tray. This will let you get the best quality printout. If not, the desired print quality may not be achieved.
- **Special Pages:** This option is allows you to set additional features about paper. special pages such as covers.
  - **Page:** The First Page selection specifies where the paper source for the first page of the print job.
  - **Cover:** This property provides you to print a cover page using a specific paper option from a specific paper source which you selected. If you configure the options to make printing on two-sided, the first 2 pages or the last 2 pages of document will be used as a front or back cover.

Graphics tab

Use the **Graphic** tab options to adjust the print quality for your specific printing needs.

Quality

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.

Font/Text

Select **Clear Text** to print text darker than on a normal document.

Check **All Text Black** to print in solid black, regardless of the color it appears on the screen.

Toner Save

The **Toner Save** setting allows the user to save printing toner when printing a draft version of a document. Select Off to print in normal mode and select On to print with less toner applied to the page.

Advanced tab

Use the **Advanced** tab to set various printing options.

Watermark

See "Using watermarks" on page 73.

Overlay

See "Using overlay" on page 75.

Output options

- **Print Order:** This options allows you to set the sequence in which the pages will print. **Print Odd Pages** and **Print Even Pages** are available only when you use the PCL printer driver.
- **Skip Blank Pages:** This option allows you to specify not to print blank pages in the original data.
- **Manual Margin:** This option allows you to specify binding margin. Binding margin adjusts binding position. **This option is not available when you use the PS printer driver**.

If you click **Reset**, settings in the **Advanced** option returns to the default setting.

Security

Encrypts printing data first, and transmits it to the machine. This feature protects the printing information to prevent your data from being comprised on your network. **Job Encryption** feature is enabled only when the hard drive is installed. The hard drive is used to decrypt the printing data.

Job Accounting

This option allows you to print with the given permission.

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

![icon]
- Click the question mark(?) from the upper-right corner of the window and click on any option you want to know about.
- Administrators can enable job accounting and configure permissions in the control panel or SyncThru™ Web Service. For the detailed information about them (see "SyncThru™ Web Service" on page 198).

Eco tab

The **Eco** tab allows you to save print resources and lead you to eco-friendly printing. When you select **Eco Printing**, you can see the eco image ( ) on some options. Also, some options are not available to use in the eco mode.

Eco Options

- **Printer Default:** If you select this option, this feature is determined by the setting you've made on the control panel of the machine.
- **None:** Disables this option.
- **Eco Printing:** Eco mode gets activated. Select **Double-Sided Printing**, **Toner Save**, **Skip Blank Pages** and **Layout** you want to use in eco mode. As long as you do not change the options from the other tabs, the document will be print out as set in the eco mode.
- **Passcode:** If the administrator sets **On-Forced** in **Default Eco Mode** for this machine, the eco mode is always set by this machine's eco setting, while the **Eco Options** in the printer driver is disabled. If you need to change the print settings, click **Passcode** and enter the password or contact your administrator.

Result Simulator

Result Simulator shows the result of reduced emission of carbon dioxide, used electricity, and the amount of saved paper in accordance with the settings you selected.

- The results are calculated on the basis that the total number of printed paper is one hundred without a blank page when the eco mode is disabled.
- Referred to the calculation coefficient about CO2, energy and paper from **IEA**(International Energy Agency), the index of Ministry of Internal Affairs and Communication of Japan and www.remanufacturing.org.uk. Each model has a different index.
- The power consumption in printing mode refers to the average printing power consumption in this machine.
- The actual saved or reduced amount may differ depending on the operating system used, computing performance, application software, connection method, media type, media size, job complexity, etc.

Samsung tab

Use the **Samsung** tab to display the copyright and the version number of the driver. If your computer is connected to the Internet, you can have access to services.

Print Mode

This option allows you to choose how to print or save the printing file by using the HDD in your machine. The default **Print Mode** is **Normal** which is for printing without storing the printing file on the HDD. You can also use this option in other tabs.

- **Normal:** This mode prints without storing your document.
- **Proof:** This mode is useful when you print more than one copy. You can print one copy first to check, then print the rest of the copies later.
- **Confidential:** This mode is used for printing confidential documents. You need to enter a password to print it (see "Job Status" on page 29).
- **Store:** This mode is used only for storing documents on the HDD. If necessary, you can load and print the stored documents. You can find the stored file in the **Box** (see "Using Box" on page 220). First, choose a document box in **Save Location** and then set **Options**.
- **Store and Print:** This mode is used when printing and storing documents at the same time. If necessary, you can load and print the stored documents. You can find the stored file in the **Box** (see "Using Box" on page 220). First, choose a document box in **Save Location** and then set **Options**.

- **Job Name:** This option is used when you need to find a stored file using the control panel.
- **User ID:** This option is used when you need to find a stored file using the control panel. The user name automatically appears as the user name that you use to log on Windows.
- **Enter Password:** If the **Property** of the stored documents you selected is **Secured**, you have to enter the password for the stored document. This option is used for loading a stored file using the control panel.
- **Confirm Password:** Re-enter the password to confirm it.

Using a favorite setting

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

To save a **Favorites** item, follow these steps:

1 Change the settings as needed on each tab.

2 Enter a name for the item in the **Favorites** input box.
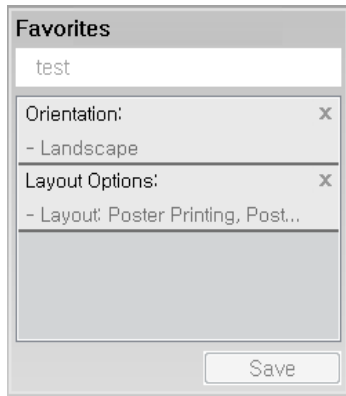
3 Click **Save**.

4 Enter name and description, and then select the desired icon.

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

> To use a saved setting, select it in the **Favorites** tab. The machine is now set to print according to the settings you have selected. To delete saved settings, select it in the **Favorites** tab and click **Delete**.

Using help

Click the option you want to know on the **Printing Preferences** window and press **F1** on your keyboard.

Using special print features

Special print features include:
- "Printing multiple pages on one sheet of paper" on page 68.
- "Printing posters" on page 69.
- "Printing booklets" on page 69.
- "Printing on both sides of the paper" on page 70.
- "Change the size by percentage of your document" on page 71.
- "Fitting your document to a selected paper size" on page 72.
- "Using watermarks" on page 73.
- "Using overlay" on page 75.

Printing multiple pages on one sheet of paper

You can select the number of pages to print on a single sheet of paper. To print more than one page per sheet, the pages will be reduced in size and arranged in the order you specify. You can print up to 16 pages on one sheet.
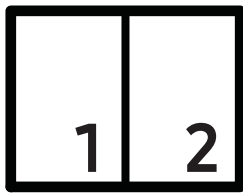
1 To change the print settings from your software application, access **Printing Preferences** (see "Opening printing preferences" on page 61).

2 Click the **Basic** tab, select **Multiple Pages per Side** in the **Type** drop-down list.

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

4 Select the number of pages you want to print per sheet (2, 4, 6, 9, or 16) in the **Pages per Side** drop-down list.

5 Select the page order from the **Page Order** drop-down list, if necessary.

6 Click the **Paper** tab, select the **Original size**, **Source**, and **Type**.

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

Printing posters

This feature allows you to print a single-page document onto 4, 9, or 16 sheets of paper, for the purpose of pasting the sheets together to form one poster-size document.
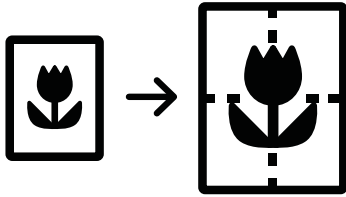
1 To change the print settings from your software application, access **Printing Preferences** (see "Opening printing preferences" on page 61).

2 Click the **Basic** tab, select **Poster Printing** in the **Type** drop-down list.

3 Select the page layout you want.

   Specification of the page layout:

4 Select the **Poster Overlap** value. Specify **Poster Overlap** in millimeters or inches by selecting the radio button on the upper right of **Basic** tab to make it easier to paste the sheets together.

5 Click the **Paper** tab, select the **Original size**, **Source**, and **Type**.

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

7 You can complete the poster by pasting the sheets together.

Printing booklets

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

> ✎ If you want to make a booklet, you need to print on Letter, Legal, A4, JIS B5, Statement, Executive, A5, Ledger, or JIS B4 sized print media.

1 To change the print settings from your software application, access **Printing Preferences** (see "Opening printing preferences" on page 61).

2 Click the **Basic** tab, select **Booklet Printing** from the **Type** drop-down list.

3 Click the **Advanced** button. Then select the option you want.

4 Click the **Paper** tab, select the **Original size**, **Source**, and **Type**.

> ✎ The **Booklet Printing** option is not available for all paper sizes. In order to find out the available paper size for this feature, select the available paper size in the **Original size** option on the **Paper** tab.
> If you select an unavailable paper size, this option can be automatically canceled. Select only available paper. (paper without ⚠ or ✖ mark).

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

Printing on both sides of the paper

You can print on both sides of a paper; duplex. Before printing, decide how you want your document oriented. You can only use this feature with Letter, Legal, Oficio, US Folio, A4, Statement, Executive, 8K, 16K, Ledger or JIS B4 sized paper.

> ✎ • By default, the duplex feature is enabled and the binding option is set to **Long Edge**.
> • Do not print on both sides of the special media, such as labels, envelopes, or thick paper to print on both sides of paper. It may cause a paper jam or damage the machine.

1 To change the print settings from your software application, access **Printing Preferences** (see "Opening printing preferences" on page 61).

2 Click the **Basic** tab.

3 From the **Double-Sided Printing** section, select the binding option you want. The default setting is **Long Edge**.

- **Printer Default:** If you select this option, this feature is determined by the setting you've made on the control panel of the machine. This option is available only when you use the PCL printer driver.
- **None:** Disables this feature.
- **Long Edge:** This option is the conventional layout used in bookbinding.
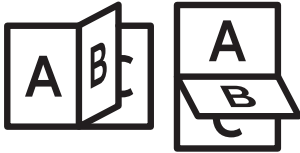
- **Short Edge:** This option is the conventional layout used in calendars.
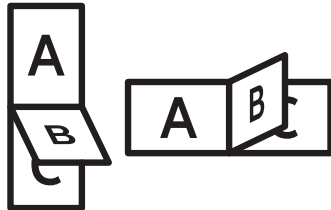
- **Reverse Double-Sided Printing:** Check this option to reverse the print order when duplex printing.

4 Click the **Paper** tab, select the **Original size**, **Source**, and **Type**.

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

Change the size by percentage of your document

You can change the size of a document to appear larger or smaller on the printed page by typing in a percentage you want.
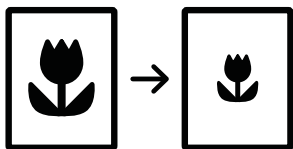
1 To change the print settings from your software application, access **Printing Preferences** (see "Opening printing preferences" on page 61).

2 Click the **Paper** tab.

3 Select actual paper size of the originals from the **Original Size**.

4 Enter the scaling rate in the **Percentage** input box.

You can also click the up/down arrows to select the scaling rate.

> You cannot use this feature when you select a size of paper from the **Output Size**.

5 Select the **Source** and **Type**.

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

Fitting your document to a selected paper size

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

1 To change the print settings from your software application, access **Printing Preferences** (see "Opening printing preferences" on page 61).

2 Click the **Paper** tab.

3 Select actual paper size of the originals from the **Original Size**.

4 Select the size of paper to be printed in the tray from the **Output Size**.

5 Select the **Source** and **Type**.

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

Using watermarks

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

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

> • **Header:** You can add the selected text to the Top left, Top center, or Top right.
> • **Footer:** You can add the selected text to the Bottom left, Bottom center, or Bottom right.
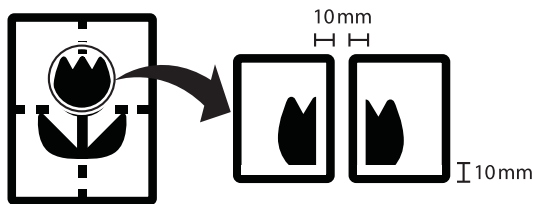
Using an existing watermark

1 To change the print settings from your software application, access **Printing Preferences** (see "Opening printing preferences" on page 61).

2 Click the **Advanced** tab, and select the desired watermark from the **Watermark** drop-down list. You will see the selected watermark in the Triple Cassette Feeder image.

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

> • **Watermark Message:** Allows users to enter the watermark which is the user want to print.
> • **Image file:** Allows users to load the watermark image which is the user want to print.
> • **Watermark name:** Allows users to enter the watermark name for adding to watermark drop-down list.
> • **First Page Only:** Prints watermark only on the first page. Not checked by default.
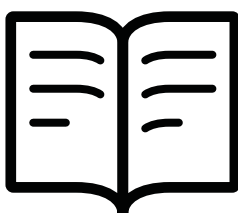
Creating a watermark

1 To change the print settings from your software application, access **Printing Preferences** (see "Opening printing preferences" on page 61).

2 From the **Advanced** tab, select **Edit...** from the **Watermark** drop-down list.

3   Enter a text message in the **Watermark Message** box. You can enter up to 256 characters.

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

4   Select watermark options.

You can select the font name, style, size, and shade from the **Font Attributes** section, as well as set the angle of the watermark from the **Watermark Alignment and Angle** section.

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

6   When you finish editing, click **OK** or **Print** until you exit the **Print** window.

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

Editing a watermark

1   To change the print settings from your software application, access **Printing Preferences** (see "Opening printing preferences" on page 61).

2   Click the **Advanced** tab, select **Edit...** from the **Watermark** drop-down list.

3   Select the watermark you want to edit from the **Current Watermarks** list and change the watermark message and options.

4   Click **Update** to save the changes.

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

Deleting a watermark

1   To change the print settings from your software application, access **Printing Preferences** (see "Opening printing preferences" on page 61).

2   Click the **Advanced** tab, select **Edit...** from the **Watermark** drop-down list.

3   Select the watermark you want to delete from the **Current Watermarks** list and click **Delete**.

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

Using overlay

This option is available only when you use the PCL printer driver.

What is an overlay?

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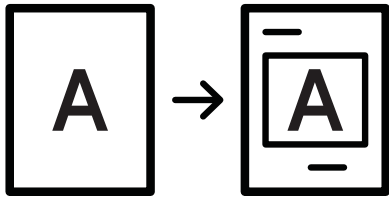
Creating a new page overlay

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

1 Create or open a document containing text or an image for use in a new page overlay. Position the items exactly as you wish them to appear when printed as an overlay.

2 To save the document as an overlay, access **Printing Preferences** (see "Opening printing preferences" on page 61).

3 Click the **Advanced** tab, and select **Create** from the **Overlay** drop-down list.

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

5 Click **Save**.

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

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

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

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

Using a page overlay

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

1 Create or open the document to print.

2 To change the print settings from your software application, access **Printing Preferences** (see "Opening printing preferences" on page 61).

3 Click the **Advanced** tab.

4 Select the **Print Overlay** from the **Overlay** drop-down list.

5 If the overlay file you want does not appear in the **Overlay File 1** or **Overlay File 2** drop-down list, select **Load** from the **Overlay List**. Select the overlay file you want to use.

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

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

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

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

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

The selected overlay prints on your document.

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

Deleting a page overlay

You can delete page overlays that you no longer use.

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

2 Select **Print Overlay** from the **Overlay** drop down list.

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

If the overlay file you want does not appear in the **Overlay List**, select **Load** from the **Overlay List**. Select the overlay file you want to delete.

4 Click **Delete**.

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

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

Using Direct Printing Utility

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

> ⚠️ • HDD must be installed on your machine, to print PDF files using this program.
> • You cannot print PDF files that are restricted to print. Deactivate the printing restriction feature, and retry printing.
> • You cannot print PDF files that are restricted by a password. Deactivate the password feature, and retry printing.
> • Whether or not a PDF file can be printed using the Direct Printing Utility program depends on how the PDF file was created.
> • The Direct Printing Utility program supports the PDF version 1.7 and below. For a higher version, you must open the file to print it.

What is Direct Printing Utility?

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

To install this program:

Download the software from the Samsung website then unpack and install it: (http://www.samsung.com/supplies > find your product > Support or Downloads).

Printing

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

From the Direct Printing Utility window

1 From the **Start** menu select **Programs** or **All Programs** > **Samsung Printers**.
   • For Windows 8, from **Charms**, select **Search** > **Apps**.
   • For Windows 10 / Windows Server 2016
     From task bar, type in **Samsung Printers** in **Search** input area. Press the Enter key.
     OR
     From the **Start** (⊞) icon, select **All apps** > **Samsung Printers**.

2 Press **Direct Printing Utility**.

3 Select your machine from the **Select Printer** drop-down list and click **Browse**.

4 Select the PDF file you wish to print and click **Open**.

The PDF file is added in the **Select Files** section.

5 Customize the machine settings for your needs.

6 Click **Print**. The selected PDF file is sent to the machine.

Using the right-click menu

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

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

2 Select the machine you wish to use.

3 Customize the machine settings for your needs.

4 Click **Print**. The selected PDF file is sent to the machine.

Changing the default print settings

 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.

1 For Windows XP Service Pack 3/Server 2003, from the **Start** menu, select **Printer and Faxes**.
   - For Windows Server 2008/Vista, from the **Start** menu, select Control Panel > **Hardware and Sound** > **Printers**.
   - For Windows 7, from the **Start** menu, select Control Panel > **Devices and Printers**.
     For Windows 8, from the **Charms**, select **Search** > **Settings** > **Control Panel** > **Devices and Printers**.
   - For Windows Server 2008 R2, select **Control Panel** > **Hardware** > **Devices and Printers**.
   - For Windows 10 / Windows Server 2016
     From task bar, type in **Devices and Printers** in **Search** input area. Press the Enter key.
     OR
     From the **Start** ( ) icon, select **Settings** > **Devices** > **Printers & scanners** > **Devices and Printers**.

    Right-click the **Start** ( ) icon, you can select **Control Panel** > **Devices and Printers**.

2 Right-click on your machine.

3 For Windows XP Service Pack 3/Server 2003/Server 2008/Vista, select **Printing Preferences**.

   For Windows 7/8 , Windows Server 2008 R2, Windows 10, or Windows Sever 2016 from context menus, select **Printing preferences**.

    If **Printing preferences** has a ▶, you can select other printer drivers connected to the selected printer.

4 Change the settings on each tab.

5 Click **OK**.

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

Setting your machine as a default machine

1 For Windows XP Service Pack 3/Server 2003, from the **Start** menu, select **Printer and Faxes**.
  - For Windows Server 2008/Vista, from the **Start** menu, select Control Panel > **Hardware and Sound** > **Printers**.
  - For Windows 7, from the **Start** menu, select Control Panel > **Devices and Printers**.
    For Windows 8, from the **Charms**, select **Search** > **Settings** > **Control Panel** > **Devices and Printers**.
  - For Windows Server 2008 R2, select **Control Panel** > **Hardware** > **Devices and Printers**.
  - For Windows 10 / Windows Server 2016
    From task bar, type in **Devices and Printers** in **Search** input area. Press the Enter key.
    OR
    From the **Start** ( ) icon, select **Settings** > **Devices** > **Printers & scanners** >**Devices and Printers**.

     Right-click the **Start** ( ) icon, you can select **Control Panel** > **Devices and Printers**.

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2 Select your machine.

3 Right-click your machine and select **Set as Default Printer**.

     For Windows 7 or Windows Server 2008 R2, if **Set as default printer** has a ▶, you can select other printer drivers connected to the selected printer.

Copying

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

Understanding the copy screen

When you tap **Copy** from the home screen or **Apps** , the **Copy** screen appears. This screen has several tabs and many copying options. All the options are grouped by feature so you can configure your selections easily. If you want to go home, tap [⌂] button.

> Click [?] (**Help**) from the home screen or [≡] (quick menu) and then click on any option you want to know about.

Basic screen for the Copy
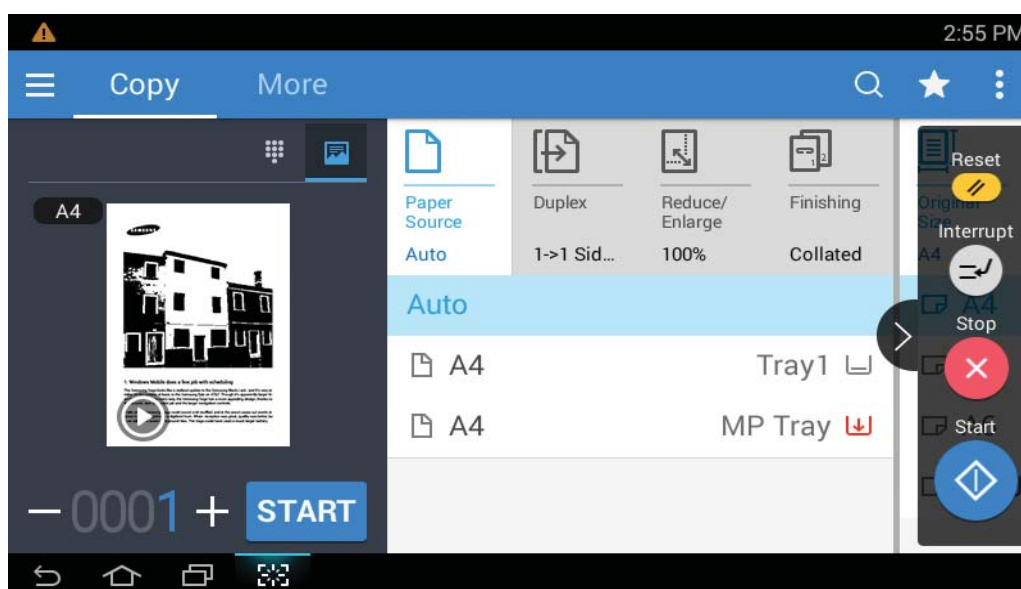
Preview

Display the originals type.

Button	Name	Description
	Numeric keypad	Opens the keypad to enter the number of copies to create.
	Preview for status	Shows the job preview.
	Preview for play	Scans for job.
START	**Start**	Starts a job.

Button	Name	Description
─ , ＋		Set the number of copies printed.

Command keys

Button	Name	Description
☰	Quick Menu	Open the quick menus.
🔍	Search	Search for a desired menu or app.
★	My Program	Add an app to my program list.
⋮	Sub menu (Action overflow)	Open the sub menu.

Virtual Hard Key

> - The positon of virtual hard keys is fixed on the right side of screen.
> - When an app is launched, the virtual hard keys are shown.
> - If the screen is touched, the virtual hard keys always appear.
> - If the ▶ , ◀ touched, the virtual hard keys are hidden and shown.

Button	Name	Description
Reset	Reset	Reset the current machine's configuration.
Interrupt	Interrupt	Suspend the current job, allowing for urgent copying.
Stop	Stop	Stop a job at any time. A popup window appears to show the jobs that you can stop.
Start	Start	Start a job.

⋮ Sub menu (Action overflow)

- **Eco:** When Eco mode is enabled, you can select only economical printing settings. Tap the Eco option in the Action Overflow menu to turn Eco mode on or off.
- **Add to My Program:** Add an app to my program list.

- **Build Job:** This option can be turned on or off. When this option is on:After the scanning is finished, the **Scan More** window appears to ask if you want to scan another page. If you select **Yes**, then you can scan another page in the current job. If you select **No**, then the scanning process is completed and the remainder of the job is performed.
- **Proof Copy:** Allows you to print a test copy to check the quality and alignment of the printout. Tap this option in the Action Overflow menu to print a proof copy. After ensuring that the copy is perfect, tap the Start button to print the rest of the copies.
- **ID Copy:** Allows you to copy both sides of a two-sided original onto one sheet of paper. This feature is helpful for copying originals with important information on both sides, such as driver's licenses.
- **Save to Box:** Allows you to save scanned originals to the hard disk drive in the machine. You can then print these saved documents at a later date or store them as printable files. Tap this option in the Action Overflow menu to save a document to the hard disk drive in the machine.
- **Save as Default:** Allows you to save the current copy options as the default copy settings. After you save the default copy settings, all future copy tasks use these settings. Tap this option in the Action Overflow menu to save the current settings as the default settings.
- **Restore Default:** Allows you to restore the copy settings to the default settings of the machine. This option changes the current copy settings to the original copy settings configured at the factory. Tap the Restore Default option in this menu to restore the default settings.
- **Copy Settings:** The **Another Page Confirmation** option specifies whether the machine requires you to confirm that the scanning is complete after each page. Select this option to efficiently copy multiple pages in a single copy job.

> ✎ - **Another Page Confirmation:** This option specifies whether the machine requires you to confirm that the scanning is complete after each page. Select this option to efficiently copy multiple pages in a single copy job.

- **UI Configuration:** Allows you to select the options that appear in the **Copy** menu. Tap the + or - symbol on the menu icons to add or remove menus. You can also tap and hold a menu icon to move it to a different position or tap **Clear All** to remove all the menus.

Job progress

This menu appears whenever the machine is processing a job.
- **Detail:** Tap this button to see the status, type, and time of the job.
- **Preview Area:** Allows you to see a preview of the document being copied. The image in the preview area indicates the current send settings, such as the orientation and size of the printout.
- **Send Feedback:** Allows you to send feedback about the current send job. If you want to receive sending job by email, you can set from **My page** app (see "Understanding the My Page menu" on page 32).

> ✎ To use this feature, you may need to log-in as an administrator (see "Log-in" on page 176).

Copy tab

You can basic setting on the **Copy** tab. The **Copy** tab provides sections as below.

- You can customize the UI of each tab using UI configuration option (**Copy** > ⋮ Sub menu(action overflow) > **UI Configuration**).
- Some menus are disabled. If so, it is not available to your machine.
- ? (**Help**) app explains the normal and usual procedure for copying originals. Tap ? (**Help**) from the home screen or ☰ (quick menu) and then select on any option you want to know about.

Paper Source

The paper source option sets the tray for this print job. The machine prints the scanned image on the paper in the selected tray. You can see icons that represent paper sizes and the amount of paper remaining in each tray.

Duplex

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

You can select the **Original** and **Output** binding type, either type is **Book** or **Calendar**.

- **1 Sided:** For originals or output binding type that are printed on one side only.
- **2 Sided, Book:** For originals or output binding type that are printed on both sides.
- **2 Sided, Calendar:** For originals or output binding type that are printed on both sides, but the back is rotated 180 degrees.

Reduce/Enlarge

The reduce/enlarge feature allows you print an image larger or smaller than the original. Tap the icons on the screen to reduce a copy by 25 % to 99 %, or enlarge a copy by 101 % to 400 %.

- **100% (Original):** Prints the copy at the same size as the original.
- **Auto:** Reduces or enlarges the copy based on the size of the output paper.
- **Custom:** You can set custom percentage (between 25 to 400%).
- **XY Custom:** You can set XY custom values (between 25 to 400%).
- **Other preset values:** Reduces or enlarges the copy to a preset value. The icons on the right side of the column indicate the presets to use when copying to a different paper size.

Finishing

You can set the print output options.

Sets 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.

- **Skip Blank Pages:** Specifies whether the machine copys blank pages in the original.
- **Collated:** Prints output in sets to match the sequence of originals.

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

Original Size

Use this option to set the actual paper size of the originals.

- **Mixed Size:** If the original uses a combination of both Letter and Legal-size paper, the machine can use the proper-sized paper for each sheet from multiple trays. For example, if the original is 3 pages, two Letter and one Legal, the machine prints in order on the correct paper size for each page.
- **Custom size:** If you need to set a custom value for a special size of paper, use the arrows to set the required size.

Original Orientation

Use this option to set the orientation of the original.

- **Upright Images:** Use this setting for an original document loaded with the top toward the back of the machine.
- **Sideways Images:** Use this setting for an original document loaded into the Dual Scan Document Feeder (DSDF) with the top of the document toward the left side of the machine, or an original document placed on the scanner glass with the top of the document toward the right side of the machine.

Original type

Use this setting to improve copy quality by selecting the appropriate document type for the current job.

- **Text:** Use if the original is mostly text and very few or no images.
- **Text/Photo:** Use if the original is a mix of text and images.
- **Printed Photo:** Use if the original is mostly or exclusively images.

More tab

You can advanced setting on th the **More** tab. The **More** tab provides sections as below.

- You can customize the UI of each tab using UI configuration option (**Copy** › ⋮ Sub menu(action overflow) › **UI Configuration**).
- Some menus are disabled. If so, it is not available to your machine.
- [?] (**Help**) app explains the normal and usual procedure for copying originals. Tap [?] (**Help**) from the home screen or ☰ (quick menu) and then select on any option you want to know about.

N-up

Reduces the size of the original images and prints 2 -16 pages onto one sheet of paper.

When you use the **N-Up** feature, the **ID Copy**, **Image Repeat**, **Booklet**, **Book Copy**, **Image Shift**, and **Poster Copy** menus are disabled.

- **Off:** Disable this feature.
- **N-Up:** Copies the specified number of pages from the original onto one sheet of paper.
- **Orientation:** You can select the direction in which information is copied on a page.
- **Paper Source:** Selects the paper source.
- **Border:** Prints a border around the pages on the printout.

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

Booklet

The machine automatically prints on one or both sides of the paper, which are then folded to produce a booklet with all pages in the correct sequence. The machine will also reduce and correctly adjust the position of each image to fit on the selected paper.

- **Off:** Disables this feature.
- **1 Sided Originals:** Copy one side of the original to one sheet of a booklet.
- **2 Sided Originals, Book:** Copy each side of an original to one sheet of a booklet.
- **2 Sided Originals, Calendar:** Copy each side of an original to one page of a booklet. The second side of each original is rotated 180 degrees so the text will be upright in the booklet.
- **Binding:** Selects the direction of page order.
  - **Left**: The booklet will open to the left.
  - **Right**: The booklet will open to the right.
- **Paper Source:** Selects the paper tray to use.

Book Copy

Use this feature to copy a book. If the book is too thick, lift the Dual Scan Document Feeder (DSDF) until its hinges are engaged by the stopper, then close the Dual Scan Document Feeder (DSDF). If the book or magazine is thicker than 30 mm (1.18 inches), start copying with the Dual Scan Document Feeder (DSDF) open.

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

- **Off:** Disables this feature.
- **Left Page:** Prints only the left page of the book.
- **Right Page:** Prints only the right page of the book.
- **Both Pages(From Left):** Prints both facing pages from the left page.
- **Both Pages(From Right):** Prints both facing pages from a right page.
- **Book Center & Edge Erase:** Erases shadows caused by bindings or book edges from the center and side edges of copies.
- **Duplex:** Erases shadows caused by bindings or book edges from the center nd side edges of copies.

Poster Copy

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.

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

Image Repeat

This option prints several copies of the original image on the same side of a single page. If you have other original in the Dual Scan Document Feeder (DSDF) , all other original images get printed the same way.

- **Off:** Disables this feature.
- **Auto Repeat:** The number of images is automatically determined by the original image and paper size. The number of repeating images is automatically selected based on size of the original, the size of output page, and the reduce/enlarge percentage by up to 100 %.
- **Manual Repeat:** Manually select the number of images from 2, 4, 6, 8, 9 or 16.

Watermark

The watermark option allows you to print text over an existing document. For example, you use it when you want to have large gray letters reading "Draft" or "Confidential" printed diagonally across the first page or all pages of a document.

Stamp

✐	You cannot apply stamps to booklets or posters.

Prints the **IP Address**, **ID**, **Device Information**, **Comment**, **Page Number** or **Date & Time** on printouts. You can set the **Text Size**, **Opacity** or **Position** of the stamp.

Overlay

An overlay is text and/or images stored on a computer hard drive (HDD) in a special file format that can be printed on any document. Overlays can take the place of traditional letterhead paper. Rather than using preprinted letterhead, you can create an overlay matching the layout of the letterhead. To print a letter on your company's letterhead, you do not need to load preprinted letterhead in the machine, just enable the letterhead overlay on your document.

- **Off:** Disables this feature.
- **+ New:** Create a new page overlay containing your logo or image.
- **Overlap:** Select an overlap location.

Erase Edge

You can copy the original without any edges or margins.

- **Off:** Disables this feature.
- **Border Erase:** Erase an equal amount of edges from all copies.
- **Hole Punch Erase:** Erase hole-punch marks from the left edge of copies.

Image Shift

To prevent images from overlapping with punch holes, staples, and other marks, you can move an image's position.

- **Off:** Disables this feature.
- **Auto Center:** Automatically position at the center of the paper.
- **Custom:** Adjust the margins of the paper as needed.

Covers

The machine automatically adds covers to your copied set using stock taken from a different tray. Covers must be the same size and orientation as the main body of the job.

- **Off:** Disables this feature.
- **Front:** Print the document with a front cover.
- **Back:** Print the document with a back cover.
- **Front & Back:** Prints the document with a front and back cover.
- **Cover Sheet:** Sets the option for double-sided copying.
- **Paper Source:** Selects the default paper tray to use.

Image Adjustment

This option allows you to manually adjust the image **Darkness**, **Sharpness**, **Contrast** and **Negative Image**

Background Adjustment

This option allows you to compensate for originals that contain color in the background, such as newspapers or catalogs. You can use the options in this menu to make the copies easier to read.

- **Background Density:** Allows you to adjust the density of the background in the scanned image. This feature is useful when scanning originals that have turned yellow from age or originals with a dark background.
- **Backside Image:** Allows you to erase any text or images that show through from the other side of the original. You can use this feature to ensure that your scanned output is clearly legible.

Mirror Image

This option allows you to reverse the original document like a mirror.

Copy to Edge

This option allows you to use copy the document all the way to the edge of the paper.

Basic copying

This is the usual procedure to copy your original documents.

1 Tap **Copy** from the home screen or **Apps**.

2 Place the originals face up in the Dual Scan Document Feeder (DSDF) or place a single original face down on the scanner glass and close the Dual Scan Document Feeder (DSDF) (see "Loading originals" on page 41).

3 Adjust the settings on the **Copy** tab and **More** tab.

4 Enter the number of copies desired on the numeric keypad (or +, - button) on the control panel, if necessary.

5 Tap **START** , ◇ (**Start**) from the control panel to begin copying.

To cancel the current copy job, tap ✕ (**Stop**)› tap **Job Status** on the control panel. Then delete the job you want (see "Job Status" on page 29).

ID card copying

The **ID Copy** app allows you to copy both sides of a two-sided original onto one sheet of paper. This app is helpful for copying originals with important information on both sides, such as driver's licenses.

During ID copying, the machine prints one side of the original on the upper half of the paper and the other side on the lower half of the paper. Both copied images are the same size as the original, unless otherwise specified.

Basic screen for the ID Copy
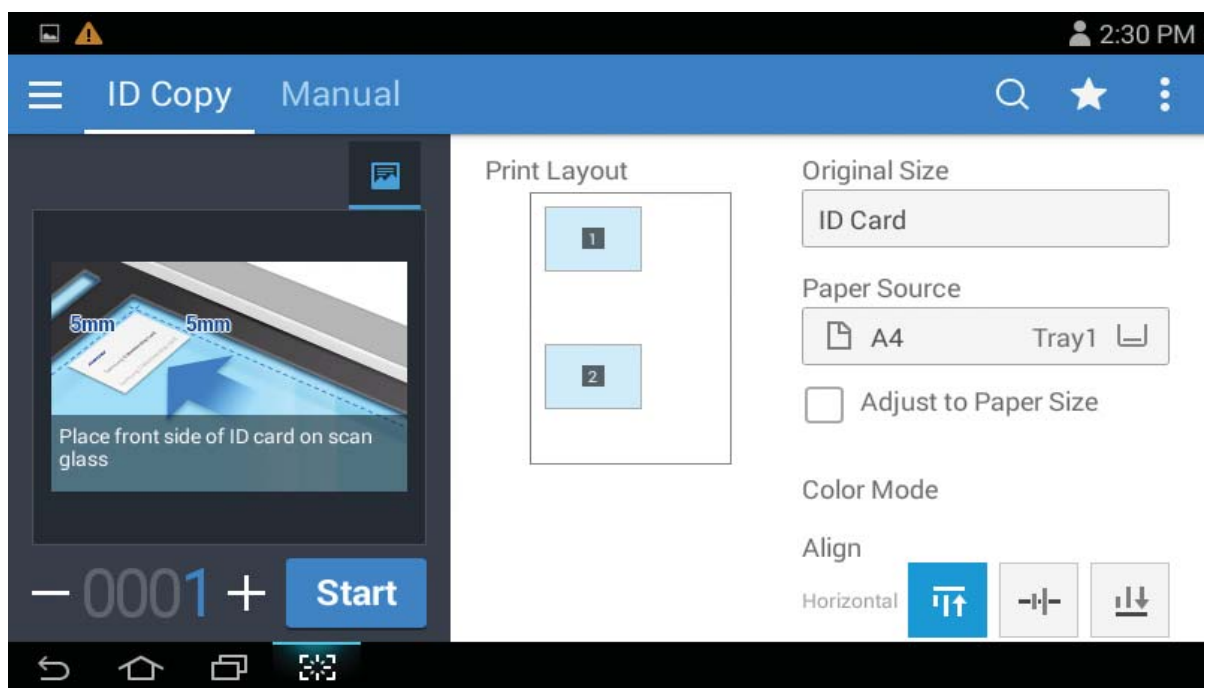
Command keys

Button	Name	Description
	Preview for status	Shows the job preview.
	Start	Starts a job.
		Set the number of copies printed.
	Quick Menu	Open the quick menus.
	Search	Search for a desired menu or app.

Button	Name	Description
⭐	My Program	Add an app to my program list.
⋮	Sub menu (Action overflow)	Open the sub menu.

⋮ Sub menu (Action overflow)

- **Add to My Program:** Add an app to my program list.
- **Print Now:** Allows you to print scanned originals immediately.
- **Save to Box:** Allows you to save scanned originals to the hard disk drive in the machine. You can then print these saved documents at a later date or store them as printable files. Tap this option in the Action Overflow menu to save a document to the hard disk drive in the machine.
- **Save as Default:** Allows you to save the current copy options as the default copy settings. After you save the default copy settings, all future copy tasks use these settings. Tap this option in the Action Overflow menu to save the current settings as the default settings.
- **Restore Default:** Allows you to restore the copy settings to the default settings of the machine. This option changes the current copy settings to the original copy settings configured at the factory. Tap the Restore Default option in this menu to restore the default settings.
- **ID Copy Settings:** Allows you to select the default ID copy mode. You can select **ID copy** or **Manual ID Copy**. Refer to the **Manual** tab for **Manual ID Copy Setup**(See "Manual tab" on page 95).

ID Copy tab

Your machine can print 2-sided originals on one sheet.

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

✎ The original must be placed on the scanner glass to use this feature.

---

1 Tap **ID Copy** from the home screen or **Apps**.

2 If necessary, adjust the settings for each copy such as **Print Layout**, **Original Size**, **Paper Source**, **Adjust to Paper Size**, and **Align**.

Follow the instructions on the control panel.

3 Place the front side of an original facing down on the scanner glass where arrows indicate as shown. Then, close the Dual Scan Document Feeder (DSDF).
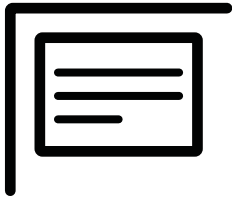
4 Tap **START** .

Your machine begins scanning the front side.

5 Turn the original over and place it on the scanner glass where arrows indicate as shown. Then, close the Dual Scan Document Feeder (DSDF).
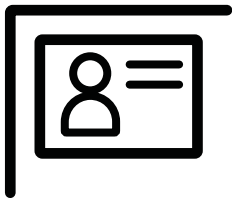
6 Tap **NEXT** .

Your machine begins scanning the back side.

- If you do not press the **NEXT** button, only the front side will be copied.
- If the original is larger than the printable area, some portions may not be printed.

Manual tab

This tab allows you to use ID copy with manually making template, if you frequently copy ID documents of a specific size.

If there is no template configured or you want to create new template, go to Action Overflow

( ) > **ID Copy Settings** > **Manual ID Copy Setup** > **New**.

Manual ID Copy Setup

This menu allows you to create a new template or delete an existing ID copy template. You can setting the following :

- **Template Name:** Specifies the name of the template.
- **Number of Images:** Specifies how many images will appear on the printout.
- **Scan Position:** Specifies where the originals will be placed on the scanner.
- **Image Position:** Specifies where the copied images will appear of the printout.

Scan & Send (Scanning)

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

Understanding the Scan & Send screen

This section describes all scanning and fax functions. When you tap **Scan & Send** from the home screen or **Apps**, the **Scan & Send** screen appears. This screen has 2 tabs and many options. All options are grouped by feature so that you can configure the job easily. If you want to go home, tap [home] button.

Tap [?] (**Help**) from the home screen or [≡] (quick menu) and then select on any option you want to know about.

Basic screen for the Scan & Send
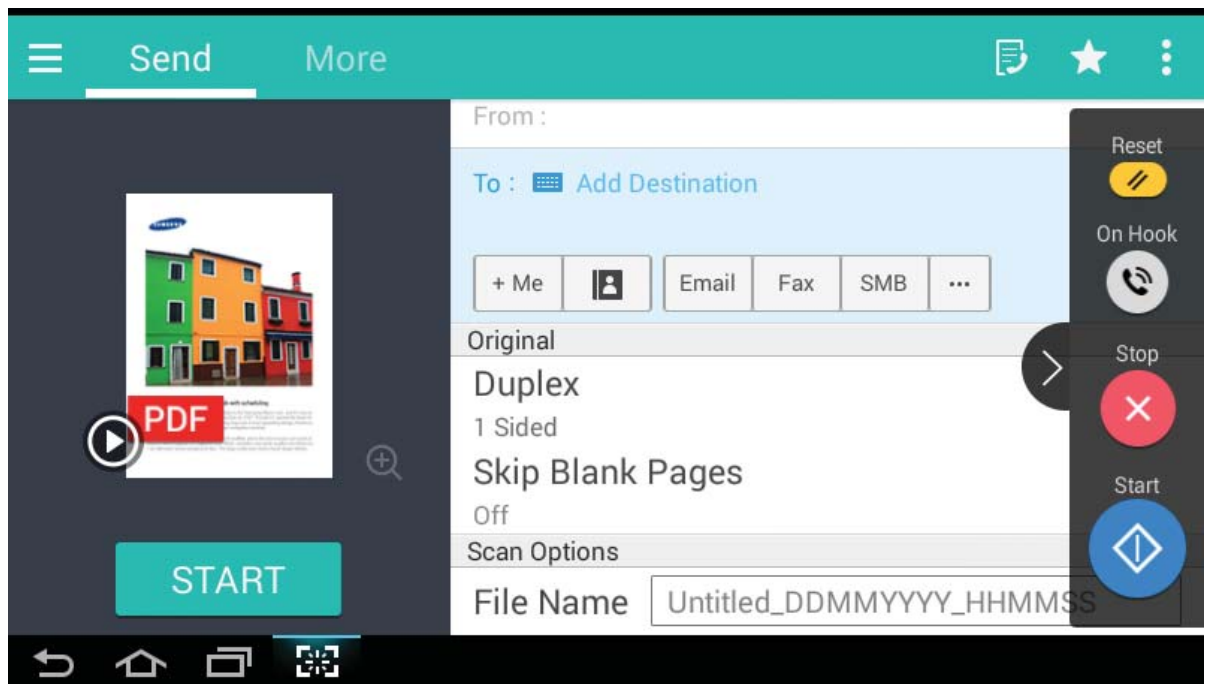
Command keys

Button	Name	Description
≡	Quick Menu	Open the quick menu.
🖹	Fax	Send a fax.
★	My Program	Add an app to my program list.

Button	Name	Description
⋮	Sub menu (Action overflow)	Open the sub menu.
▶	Preview for play	Scans for job. Preview displays the original scanned image.
START	Start	Starts a job.
	+ Me	When users are logged in, the destination configured in their **My Page** profile appears. You can set the destination in the **Send to Destination** menu of the **My Page** app (see "Understanding the My Page menu" on page 32). Administrators can also set the default destination in the sub menu (Action overflow) > **Send Settings**> **+Me Setting**. ✎ You must log in to use your **+ Me** destination. If you do not log in, then the machine sends the copy to the **+ Me** destination specified by the administrator.
📖	Address book	Open your saved destinations in address book.
	Email	This option allows you to send scanned document via Email.
	Fax	This option allows you to send scanned document via Fax.
	SMB	This option allows you to send scanned document via SMB.
...	Additional menu	Open additional menus such as **FTP**, **BOX**, **PC**, **I-FAX**.

Virtual Hard Key

✎
- The positon of virtual hard keys is fixed on the right side of screen.
- When an app is launched, the virtual hard keys are shown.
- If the screen is touched, the virtual hard keys always appear.
- If the ▷ , ◁ touched, the virtual hard keys are hidden and shown.

Button	Name	Description
⫽	**Reset**	Reset to app default configuration.
📞	**On Hook**	When you press this button, you can hear a dial tone. Then enter a fax number. It is similar to making a call using speaker phone.
✕	**Stop**	Stop a job at any time. A popup window appears to show the jobs that you can stop.
◈	**Start**	Start a job.

⋮ Sub menu (Action overflow)

- **Add to My Program:** Add an app to my program list. With this feature, user can set default settings, destinations required for each program. Also can set default options as Auto Launch, add shortcut to Home.
- **Search:** Search for a desired options.
- **Build Job:** This option can be turned on or off. When this option is on:After the scanning is finished, the **Scan More** window appears to ask if you want to scan another page. If you select **Yes**, then you can scan another page in the current job. If you select **No**, then the scanning process is completed and the remainder of the job is performed.
- **ID Send:** Allows you to quickly scan IDs and send the image to an SMB, FTP, or Email address or save it to the Box or a USB storage device.
- **Attach File Only:** Allows you to attach a file to your message. You can use this option to quickly send one or more files from the hard disk drive (BOX) of the machine to an SMB, FTP, Email, Box, USB.
- **Scan & Attach File:** Allows you to scan and attach images to your message. You can use this option to quickly send a scanned image or a file on the hard disk drive (Box) of the machine to an SMB, FTP, or Email, address or save it to the Box or a USB storage device.
- **Internet Fax Rx:** Allows you to print it immediately after checking whether any faxes over the internet are received.
- **Save as Default:** Allows you to save the current **Scan & Send** settings as the default **Scan & Send** settings. After you save the default **Scan & Send** settings, all future send tasks use these settings. Tap this option in the Action Overflow menu to save the current settings as the default **Scan & Send** settings.
- **Restore Default:** Allows you to restore the **Scan & Send** settings to the default **Scan & Send** settings of the machine. This option changes the current **Scan & Send** settings to the original settings configured at the factory. Tap this option in the Action Overflow menu to restore the default **Scan & Send** settings.
- **Send Settings:** Allows you to quickly scan a document and send it to a destination. The scanned document is sent as an image file. Tap this option in the sub menu (action overflow menu) to scan and attach a file to the current message.
  - **Filing Policy:** The **Filing Policy**setting specifies how the machine handles name conflicts when saving files.

- **Print Confirmation Report:** You can use this feature to get confirmation on executed **Scan & Send** destination's successfully or not.

If the report contains characters or fonts that the machine does not support, then **Unknown** may appear in the report instead of the characters/fonts.

- **+Me Setting:** Allows you to select the default destination for the send job. When logged in, you can select your any Send destination as the default send destination. Same will appear in **Scan & Send** widgets too.
- **Send to PC:** Scans and sends scanned output to a computer.
- **Address Book Settings:** This address book contains contacts that are available to all users. You can use the address book to make contacts available to anyone who uses the machine.
  - **Google Address Book:** This address book contains the contacts registered in your Google contacts list. You must log into your Google account to access your **Google Address Book**.
- **UI Configuration:** Allows you to select the options that appear in the **Scan & Send** menu. Tap the + or - symbol on the menu icons to add or remove menus. You can also tap and hold a menu icon to move it to a different position or tap **Clear All** to remove all the menus.

Job progress

This menu appears whenever the machine is processing a job.
- **Detail:** Tap this button to see the status, destination, sender, and time of the job.
- **Preview Area:** Allows you to see a preview of the document being sent. The image in the preview area indicates the current send settings, such as the orientation and size of the file.
- **Send Feedback:** Allows you to send feedback about the current send job. If you want to receive sending job by email, you can set from **My page** app (see "Understanding the My Page menu" on page 32).

To use this feature, you may need to log-in as an administrator (see "Log-in" on page 176).

Send tab

You can basic setting on th the **Send** tab. The **Send** tab provides sections as below.

- You can customize the UI of each tab using UI configuration option (**Send** ⟩ ⋮ Sub menu(action overflow) ⟩ **UI Configuration**).
- Some menus are disabled. If so, it is not available to your machine.
- Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine.
- Tap ? (**Help**) from the home screen or ☰ (quick menu) and then select on any option you want to know about.

Add Destination

Tap [icon] to add a recipient's email address or a fax number. If you want to send to **SMB**, **FTP**, **Box**, **PC**, or **USB** click on respective buttons.

Original

This setting is used to improve the scan quality by selecting the document type for the current scan job.

- **Duplex**
  - **1 Sided:** For originals that are printed on one side only.
  - **2 Sided, Book:** For originals that are printed on both sides.
  - **2 Sided, Calendar:** For originals that are printed on both sides, but the back is rotated 180 degrees.
- **Skip Blank Pages:** Specifies whether the machine scans blank pages in the original.

[icon] To use **2 Sided, Book** and **2 Sided, Calendar**, load the originals on the Dual Scan Document Feeder (DSDF). If the machine cannot detect the original on the Dual Scan Document Feeder (DSDF), it automatically changes to **1 Sided**.

Scan Options

Set file options of the scanned output.

- **File Name:** Enter a file name to store the scan file name at destination.
- **File Format:** Select a file format for the scanned output.
- **PDF Options:** Set PDF file options for the scanned out.
- **Resolution:** Adjust the document resolution. The higher this value, the clearer the result, but scan time may take longer.
- **Quality:** Use this option to produce a high quality document. The higher quality you select, the larger file size.
- **OCR Language:** When producing scanned output for OCR software, select the appropriate language.

Fax Options (fax user only)

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

- **Resolution**
  - **Standard:** Usually recommended for originals with text. This option will reduce the transmission time.
  - **Fine:** Recommended for the originals containing small characters, thin lines, or text from a dot-matrix printer.
  - **Super Fine:** Recommended for originals containing fine details. This option is only available if the receiving machine also supports **Super Fine** resolution.
  - **Ultra Fine:** Recommended for originals containing extremely fine details. This option is only available if the receiving machine also supports **Ultra Fine** resolution.

More tab

You can detail options setting on th the **More** tab. The **More** tab provides sections as below.

- You can customize the UI of each tab using UI configuration option (**Send** > ⋮ Sub menu(action overflow) > **UI Configuration**).
- Some menus are disabled. If so, it is not available to your machine.
- Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine.
- Tap [?] (**Help**) from the home screen or ☰ (quick menu) and then select on any option you want to know about.

Book Scan

Use this feature to scan a book. If the book is too thick, lift the Dual Scan Document Feeder (DSDF) until its hinges are engaged by the stopper, then close the Dual Scan Document Feeder (DSDF). If the book or magazine is thicker than 30 mm (1.18 inches), start copying with the Dual Scan Document Feeder (DSDF) open.

- **Off:** Disable this feature.
- **Left Page:** Scans only the left page of the book.
- **Right Page:** Scans only the right page of the book.
- **Both Pages (From Left):** Scans both facing pages from the left page.
- **Both Pages (From Right):** Scans both facing pages from the right page.
- **Book Center & Edge Erase:** You can set shaded areas to erase shadows caused by bindings or book edges from the center and side edges of copies.

Advanced Fax (fax user only)

Set the sending options for fax, such as **Quick Start Fax** and **Delay Send**.

- **Off:** Disables this feature.
- **Quick Start Fax:** The machine will begin to transmit the fax right after the first page has been scanned. Originals with many pages can be sent this way without overflowing the machine's memory.
- **Delay Send:** Set your machine to send a fax at scheduled time. Define the **Job Name** and **Start Time**.

You can delay a fax by any length of time starting 1 minute and 24 hours after the scan.

Email Settings

Set email information, such as **From**, **Subject** and **Message**.

Color Mode

Use this option to set the default color mode used for scan jobs.

- **Mono:** Scans an image in black and white.

- **Gray:** Scans an image in grayscale.
- **Color:** Scans an image in color.
- **Auto:** Automatically detects whether or not the original contains color. If the original contains color, then the machine prints the document in color. If the original does not contain color, then the machine prints the document in black and white(**Color/Mono**) or grayscale(**Color/Gray**).

- The file format JPEG cannot be selected in the **File Format** option, if **Mono** has been selected for **Color Mode**.
- You cannot use to Gray, Color, Auto Mode in Fax transmmision.

Original Type

Use this setting to improve copy quality by selecting the appropriate document type for the current job.
- **Text:** Use if the original is mostly text and very few or no images.
- **Text/Photo:** Use if the original is a mix of text and images.
- **Photo:** Use if the original is mostly or exclusively images.

Original Size

Use this option to set the actual paper size of the originals.
- **Mixed Size:** Automatically detect the size of original if the original uses a combination of different paper types.
- **Custom size:** If you need to set a custom value for a special size of paper, use the arrows to set the required size.

Original Orientation

Use this option to set the orientation of the original.
- **Upright Images:** The original is in landscape orientation. The images or text in the original are parallel to the long edge of the page.
- **Sideways Images:** The original is in portrait orientation. The images or text in the original are perpendicular to the long edge of the page.

Erase Edge

This option allows you to eliminate unwanted marks or shadows from the margins of the printout. You can use this feature to remove hole punches and damage near the edge of the page or remove the shadows that appear when scanning bound media.

Scan To Edge

This options allows you to scan the full size of a document without omitting any edges or margins. Use this option to scan the document all the way to the edge of the paper. Enable this setting to scan an entire document, including all edges and margins.

Image Adjustment

This option allows you to manually adjust the image.

- **Darkness:** Allows you to adjust the darkness of the scanned output file. This feature is useful when scanning faded originals or originals with little contrast.
- **Sharpness:** Allows you to adjust the edges of text so that it is easier to read. You can also use this feature to enhance the details of images.
- **Contrast:** Allows you to adjust the contrast to make the scanned output crisper or smoother. You can use this feature to improve the quality of an image or increase the readability of text.

Background Adjustment

This option allows you to compensate for originals that contain color in the background, such as newspapers or catalogs. You can use the options in this menu to make the copies easier to read.

- **Background Density:** Allows you to adjust the density of the background in the scanned image. This feature is useful when scanning originals that have turned yellow from age or originals with a dark background.
- **Backside Image:** Allows you to erase any text or images that show through from the other side of the original. You can use this feature to ensure that your scanned output is clearly legible.

Basic scanning

This is the usual procedure to scan your original documents.

1 Tap **Scan & Send** from the home screen or **Apps**.

2 Place the originals face up in the Dual Scan Document Feeder (DSDF) or place a single original face down on the scanner glass and close the Dual Scan Document Feeder (DSDF) (see "Loading originals" on page 41).

3 Adjust the settings in the **Send** tab and **More** tab.

4 Select a destination using ⌨ (**Add Destination**), **+ Me**, 👤 (**Address book**), **Email** , **SMB**, **FTP**, **Box**, or **USB**).

> ✎ You can send scanned documents to **Email**, **Fax**, **FTP**, or **SMB** addresses through the 👤 (**Address book**). The **Email**, **Fax**, **FTP**, or **SMB** icons appear next to the contact's name in the **Address book**. When you select a name, the first icon is selected by default. To send documents to multiple destinations, select the icons for each of the destinations.

5 Tap **START** , ◇ (**Start**) from the control panel to begin scan.

> ✎ To cancel the current send job, tap ✕ (**Stop**), then tap **Job Status** on the control panel, and then delete the job you want (see "Job Status" on page 29).

Scanning with TWAIN-enabled software

If you want to scan documents using other software, you need to use TWAIN-compliant software, such as Adobe Photoshop.

Follow the steps below to scan with TWAIN-compliant software:

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

2 Place the originals face up in the Dual Scan Document Feeder (DSDF) or place a single original face down on the scanner glass and close the Dual Scan Document Feeder (DSDF) (see "Loading originals" on page 41).

3 Open an application, such as Adobe Photoshop.

4 Open the TWAIN window and set the scan options.

5 Scan and save your scanned images.

Using Samsung Easy Document Creator

Samsung Easy Document Creator is an application to help users scan, compile, and save documents in multiple formats, including .epub format.

> • Available for Windows and Mac OS users only.
> • Windows XP Service Pack 3 or higher and Internet Explorer 6.0 or higher is the minimum requirement for Samsung Easy Document Creator.
> • Samsung Easy Document Creator is installed automatically when you install the machine software.

1 Place a single document face down on the document glass, or load the documents face up into the document feeder (see "Loading originals" on page 41).

2 From the **Start** menu select **Programs** or **All Programs** > **Samsung Printers**.

For Mac, open the **Applications** folder > **Samsung** folder > **Samsung Easy Document Creator**.

3 Click **Samsung Easy Document Creator**.

4 Click **Scan** from the home screen.

5 Select the type of scanning or a favorites and then make adjustments to the image.

6 Click **Scan** to scan a final image or **Prescan** to get another preview image.

7 Press **Send** to save the scanned image.

8 Select the option you want.

9 Press **OK**.

> Click the **Help** (?) button from the window, and then click on any option you want to know about.

Faxing

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

Preparing to fax

✎

- You cannot use this machine as a fax through the internet phone. For more information, ask your internet service provider.
- We recommend you use traditional analog phone services like PSTN (public switched telephone network) when using a phone line as a fax line. If you use internet services (DSL, ISDN, VolP), you can improve the connection quality by using a micro-filter. A micro-filter reduces noise and improves connection quality. Since a DSL micro-filter is not provided with the machine, contact your internet service provider.

LINE   EXT.
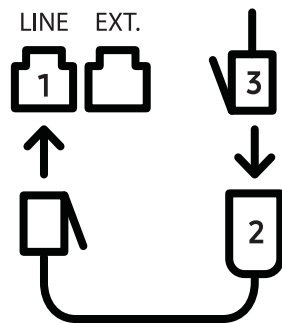
1.   Line port
2.   Micro filter
3.   DSL modem / Telephone line

Before you send or receive a fax, you must connect the supplied cord to the wall jack. Refer to "Quick installation guide". The method of connecting a telephone line varies by country.

Using a fax in your computer

You can send a fax directly from your computer. Make sure that your machine and the computer are connected to the same network.

Sending a fax (Windows)

To send a fax from your computer, the **Samsung Network PC Fax** program must be installed. You can install the **Samsung Network PC Fax** driver from the software CD. You can select the **Samsung Network PC Fax** driver in the **Select Software** window.

1 Open the document you want to send.

2 Select **Print** from the **File** menu.

The **Print** window will be displayed. It may look slightly different depending on your application.

3 Select **Samsung Network PC Fax** from the **Print** window

4 Click **Print** or **OK**.

5 Enter the recipient's fax number and set any options if necessary.

> For more information about **Samsung Network PC Fax**, click **Help**.

6 Click **Send**.

Checking a sent fax list (Windows)

You can check a sent fax list on your computer.

From the **Start** menu, click **Programs** or **All Programs** > **Samsung Printers** > **Network PC Fax** > **Fax Transmission History**. Then, the **Fax Journal** appears with the fax list you have sent.

> For more information about **Fax Transmission History**, click **Help**.

Understanding the fax screen

To open the **Fax** screen, tap **Scan & Send** from the home screen or **Apps**, then tap ![icon] icon(or Fax on the screen). If you see a different screen, tap the ![home icon] icon to go to the home screen.
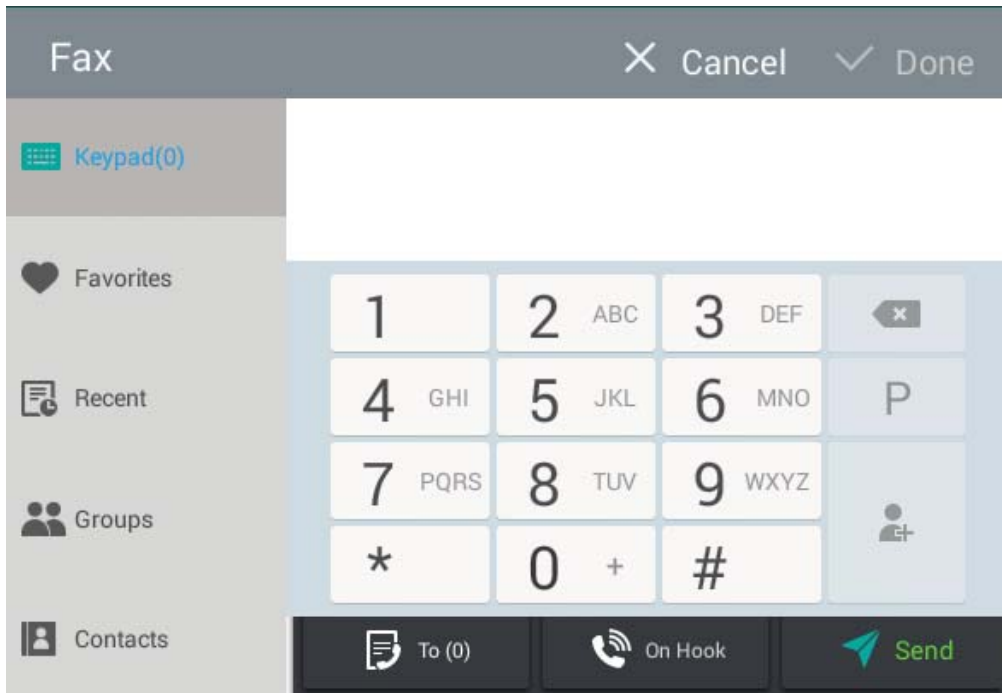
Command keys

Button	Name	Description
![keypad icon]	**keypad**	Open the keypad.
![heart icon]	**Favorites**	Open a list of frequently-used addresses.
![recent icon]	**Recent**	View any recently-used addresses.
![groups icon]	**Groups**	Open a list of group addresses.
![contacts icon]	**Contacts**	Open a list of your contacts.
P	**Pause**	Pause the current job.
![add contacts icon]	**Add Contacts**	Add a new contact to your addresses.
![add to icon]	**Add To**	Add to the destination list.

Button	Name	Description
	Destination List	Open the destination list.
	On Hook	Enable **On Hook** dialing. When you hear the dial tone, enter a fax number using the numeric keypad on the screen.
	Send	Send the fax.

Sending a fax

This section explains how to send a fax and the special methods of transmission.

> You can place the originals use either the Dual Scan Document Feeder (DSDF) or the scanner glass. If the originals are placed on both the Dual Scan Document Feeder (DSDF) and the scanner glass, the machine will read the originals on the Dual Scan Document Feeder (DSDF) first, because it has higher scan priority.

Setting the fax header

In some countries, you are required by law to specify your fax number on any fax you send.

1 Tap **Settings** > **Fax Settings** > **Machine ID & Fax No** from the home screen or **Apps**.

2 Tap the **ID Name** input box. The pop-up keyboard appears.

3 Enter your name or the company name (see "Understanding the pop-up keyboard" on page 21).

4 Tap **Done**.

5 Tap the **Fax Number** input box.

6 Enter your fax number using the numeric keypad on the control panel.

7 Tap **Done**.

8 Tap [↩] or select other settings.

Sending a fax

1 Place the originals face up in the Dual Scan Document Feeder (DSDF) or place a single original face down on the scanner glass and close the Dual Scan Document Feeder (DSDF) (see "Loading originals" on page 41).

2 Tap **Scan & Send** from the home screen or **Apps**.

3 Adjust the document settings in the **Send** tab or **More** tab.

4 Tap ![icon] and enter a fax number directly using ![icon] on the screen, then tap ![icon] or using **Favorites**, **Recent**, **Groups**, **Contacts** tap from the display screen.

- You can send a fax up to 10 destinations at once.
  - You can view and delete a destination from **Destination List** (![icon]).
  - To insert a pause, tap [P] while entering the fax number. A dash (-) appears on the display when a pause is inserted.
  - If you want to use **On Hook** dial, tap ![icon] and enter a fax number using the numeric keypad on the screen while you hear the dial tone.

5 Tap ![icon] to start the process.

- You can send a fax directly from your computer (see "Using a fax in your computer" on page 110).
  - When you want to cancel a fax job, tap ![icon] (**Stop**) from virtual hard key before the machine starts transmission. Or tap **Job Status** from the home screen or **Apps**, select the job you want to delete (see "Job Status" on page 29).
  - You cannot send emails with the machine while it is sending a fax.

Sending a fax using speed dial numbers

When you are prompted to enter a destination number for your fax, you can use a speed dial number previously set by you.

- 1-500 can be assigned for the speed dial numbers
- For one-digit speed dial numbers, press and hold the corresponding number on the numeric keypad on the control panel.
- For two or more digit speed dial numbers, press the first digit button and hold the last number on the numeric keypad on the control panel.

Sending a fax manually using an extension telephone

This method is sending a fax using an extension telephone. Make sure that extension telephone is connected to the **EXT.** socket of the fax kit on the machine.

1 Place the originals face up in the Dual Scan Document Feeder (DSDF) or place a single original face down on the scanner glass and close the Dual Scan Document Feeder (DSDF) (see "Loading originals" on page 41).

2 Tap **Scan & Send** from the home screen or **Apps**.

3 Adjust the document settings in the **Send** tab or **More** tab.

4 Pick up the receiver of the extension telephone.

5 When you hear the dial tone, dial a fax number using the extension telephone.

6 Tap on the control panel. The manual fax pop-up appears.

7 Tap **Send** button on the manual fax pop-up when you hear a high-pitched fax signal from the extension telephone.

Resending automatically

If the line is busy or there is no answer when you send a fax, the machine automatically redials the number.

To change the time interval between redials and/or the number of redial attempts, follow the steps below:

Tap **Settings** > **Fax Settings** > **Redial** from the home screen or **Apps**.

Delaying a fax transmission

You can set your machine to send a fax at a later time (see "General fax settings" on page 119).

To cancel a delayed fax, tap **Off** before it is sent.

Receiving a fax

This section explains how to receive faxes, and the special options available.

Changing Receive Mode

Your machine is preset to **Fax** mode at the factory. When you receive a fax, the machine answers the call after a specified number of rings and automatically receives the fax. If you want to change to another receive mode, follow the steps below:

Tap **Settings** > **Fax Settings** > **Receive Mode** on the display screen.

- **Telephone:** Receive faxes by pressing [icon] > **Receive**.
- **Fax:** Receive incoming faxes normally and immediately enter the fax reception mode.
- **Answering Machine/Fax:** Use when an answering machine is attached to your machine. Your machine answers the 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.

[icon] **Receive start code**: When you receive a call on the extension phone and hear fax tones, press the keys *9* on the extension phone. The machine receives the fax. Press the buttons slowly in sequence. If you still hear the fax tone from the remote machine, try pressing *9* once again.

Receiving manually in Telephone mode

1 Pick up the telephone on the machine when you hear a high-pitched fax signal from the telephone.

2 Tap **Scan & Send** or **Apps** from the home screen.

3 Tap [icon] on the control panel. The pop-up manual fax appears.

4 Tap **Receive** on the control panel.

The machine begins receiving a fax.

Receiving automatically in Answering Machine/Fax mode

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

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

- If you have set your machine to this mode and your answering machine is turned off, or no answering machine is connected to the **EXT.** socket, your machine automatically enters **Fax** mode after a predefined number of rings.
- If your answering machine has a configurable ring counter, set it to answer incoming calls before it rings more than once.
- If you are in **Telephone** mode when the answering machine is connected to your machine, you must switch off the answering machine. Otherwise, outgoing messages from the answering machine will interrupt your phone conversations.

Receiving faxes manually using an extension telephone

This feature works best when you are using an extension telephone connected to the **EXT.** socket on your machine. When you receive a call on the extension phone and hear fax tones, press the keys *9* on the extension phone. The machine receives the fax. Press the buttons slowly in sequence. If you still hear the fax tone from the remote machine, try pressing *9* once again. To change the *9* to, for example, *3*, follow the steps below:

1 Tap **Settings** > **Fax Settings** > **Receive Mode** > **Receive Start Code** on the display screen.

2 Enter number 3 on the screen.

Receiving in Secure Receive 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 incoming faxes when the machine is unattended. In **Secure Receive** mode, all incoming faxes are saved to memory.

1 Tap **Settings** > **Fax Settings** > **Secure Receive** from the home screen or **Apps**.

> **Secure Receive** mode can only be configured by a user with a registered passcode on the machine. When the machine requests, enter your passcode.

2 Tab **On** to enable this feature.

> 🖉 When the machine receives a fax in this mode, **Print** option becomes available. If you want to print the secured faxes, tap **Print**. All secured faxes will then be printed.

3 If you want to set a passcode, tab the passcode blank and enter a passcode.

4 If you want incoming faxes to be always saved to memory, tap **Whole Day**. Otherwise, proceed to the next step.

5 Tap **Start Time** and set the specific start time using the up/down buttons. Tap **Set** when finished.

6 Tap **End Time** and set the specific end time using the up/down buttons. Tap **Set** when finished.

7 Tap [⬅] or select other settings.

> 🖉 To deactivate the **Secure Receive** feature, tap **Off**. Incoming faxes will be automatically printed again.

Setting Received Fax Printing

Use this option to set printing options for received faxes.

Tap **Settings** > **Fax Settings** > **Received Fax Printing** from the home screen or **Apps**.

- **Duplex:** Print received faxes on both sides of the paper.
- **Output Tray:** Specify the tray where the fax is printed.
- **Auto Reduction:** Set to reduce the size of incoming pages automatically. 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. If you do not enable this option, 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.
- **Stamp Received Name:** Print the received fax information on printouts.
- **Paper Source:** Select a tray as the paper source.

Forwarding faxes

You can set your machine to forward sent or received faxes to email, SMB, FTP, and so on. If you are out of the office but need to receive faxes, this feature may be useful.

General fax settings

You can set the default fax options. Set the most frequently-used fax settings.

Tap **Settings** > **Fax Settings** from the home screen or **Apps**.

- Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine.
- Tap [?] (**Help**) from the home screen or [≡] (quick menu) and then select on any option you want to know about.
- You can also use this feature from the SyncThru™ Web Service. Open a web browser from a networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **Fax** (see "Settings tab" on page 201).

Option	Description
Machine ID & Fax No	You can set the machine ID and fax number to be printed at the top of each page.
Redial	Set the machine to re-dial the fax number if the recipient's fax line is busy or not answered. Set the number of re-dial attempts and the interval between attempts. • **Redial Term:** Select terms for re-dialing using the up/down arrows. • **Redial Times:** Select a re-dial time using the up/down arrows. Select 0 to disable redialing.
Prefix Dial	Set the number to be dialed before the destination number. Users may use this to access a PABX (e.g. 9) or an area code (e.g. 02). Once this number is set, it automatically appears on the screen when entering a phone/fax number.
ECM Mode	Set the machine to correct errors. This helps overcome poor line quality and ensures any faxes you send are properly transmitted to any other error correction-equipped fax machine. Sending a fax in this mode may take more time.
Modem Speed	Set the modem speed.

Option	Description
Receive Mode	Select the fax receiving mode. • **Telephone:** Receive faxes by pressing > **Receive**. • **Fax:** Receive incoming faxes normally and immediately enter the fax reception mode. • **Answering Machine/Fax:** Use when an answering machine is attached to your machine. Your machine answers the 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. • **Receive Start Code:** Initiates 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 (see "Receiving faxes manually using an extension telephone" on page 117).
Ring to Answer	Set the number of times the machine rings before answering an incoming call.
Toll Save	Set the machine to send faxes in the toll save time to reduce phone bill costs.
DRPD Mode	Enable a user to answer several different phone numbers on the same telephone line. Set the machine to recognize different ring patterns for each number. This setting may not be available in your country.
Junk Fax Setup	Use this feature to reject faxes sent from numbers stored in memory as junk fax numbers. This feature is useful to block any unwanted faxes. When you turn this feature on, you can access additional options to set junk fax numbers. This option may not be available in your country.
Secure Receive[a]	Set the machine to save the received faxes in memory so that unauthorized people cannot access them when you are absent. This option restricts printing of received faxes when the machine is unattended. You need to log-in as an administrator.
Received Fax Printing	Set options to print received faxes.
Fax Country Setting	Select a country as default. Before changing this, connect a telephone line to the machine. When you change the country, a ping test is performed.

Option	Description
Smart Fax Diagnostics	The Smart Fax feature optimizes the settings for your fax line. • **Auto Configuration:** When sending and receiving faxes, the machine regularly checks for errors and automatically configures the fax settings to ensure a stable connection. • **Start:** Allows you to automatically detect or manually specify the environment when sending or receiving faxes. Select **Auto Detection** to automatically detect the environment, or manually specify the faxing environment as **Normal**, **VoIP(Office)**, **Noise(Home)**, or **Big Noise**. • **Initialize Diagnostics Settings:** Resets all the settings.

a.May only be available for the administrator depending on the authentication settings selected (see "Authentication" on page 183).

Setting up an Address book

This guide gives you guidelines for the address book.

Understanding the address screen

The **Address book** app allows you to access and save frequently used addresses in the machine. You can save fax numbers and email addresses as well as addresses for SMB, FTP, and and so on.

Tap **Address book** from the home screen or **Apps**. If you see a different screen, tap [home icon] to go to the home display screen.

[pencil icon] Tap [? icon] (**Help**) from home screen or [menu icon] (quick menu) and then select on any option you want to know about.

Address screen

You can save frequently used fax numbers, e-mail addresses, SMB server addresses, FTP server addresses in your machine.

[pencil icon] To use some features, you may need to log-in.(see "Log-in" on page 176).
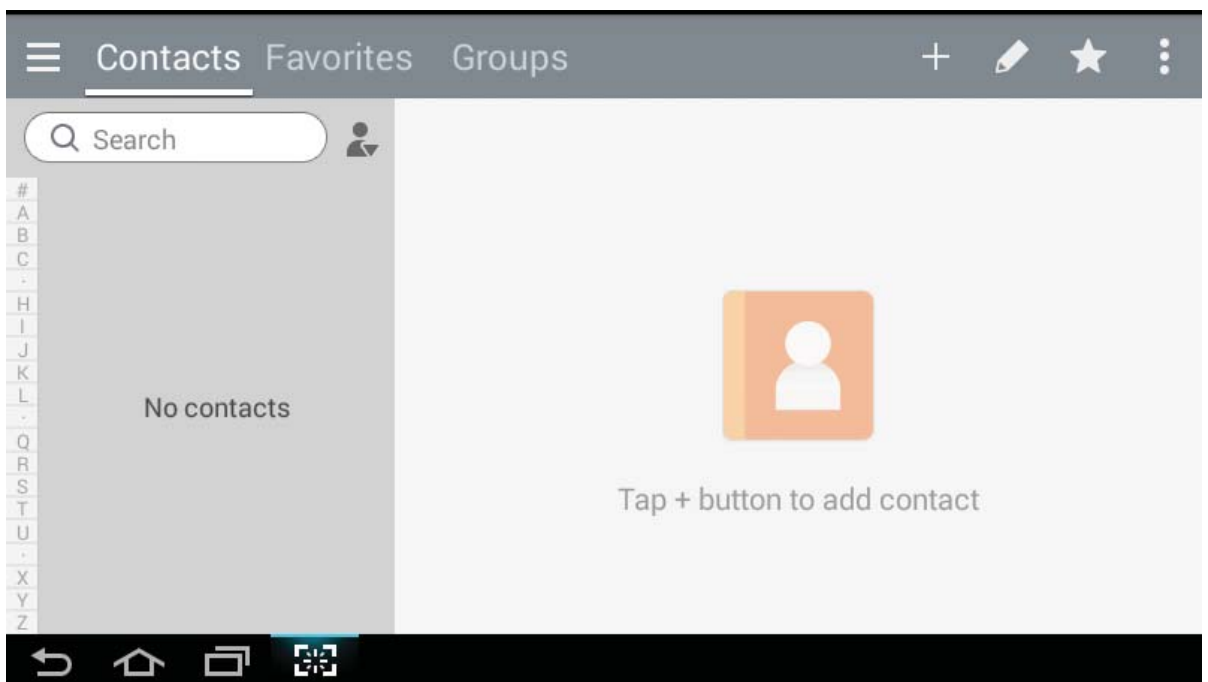
- **Contacts:** Displays the name and contact information of contacts saved in the address book (see "Storing individual addresses" on page 125).
- **Favorites:** Displays the name and contact information of contacts marked as favorites in the address book.

	Tab ⭐ icon for addresses you use often and want to find easily.

- **Groups:** Lists the groups registered in the address book and the users registered to those groups (see "Storing address groups" on page 127).

	You cannot add a group as a member of another group.

Command keys

	To use some features, you may need to log-in as an administrator (see "Log-in" on page 176).

Button	Name	Description
☰	**Quick Menu**	Show the quick menu.
🔍	**Search**	Search for a desired address.
＋	**Add**	Add a contact, favorites, or group.
✏️	**Edit**	Select the address you want to edit and tap this button.
⭐	**My Program**	Shows list of added programs.
⋮	Sub menu (Action overflow)	Open the sub menu.

⋮ Sub menu (Action overflow)

	To use some features, you may need to log-in as an administrator (see "Log-in" on page 176).

- **Search:** Searches the names and contact information in the Contacts list.
- **Delete Contacts:** Delete the contacts you set.
- **Import:** You can import the address book saved from another MFP or same MFP.
- **Export:** You can export the address book saved from another MFP or same MFP.

Using the control panel

Storing individual addresses

1 Tap **Address book** › Tap ➕ from the home screen or **Apps** .

2 Tap the **Name** field, and then enter the name of the recipient. To make the address available to everyone, tap 🔒 (private) to change it to 🔓 (public).

> • Admin (Grants authorities to users.)
>   - Administrators can add, delete, and edit public addresses but cannot add or edit private addresses.
>   - Administrators may only read and delete private addresses added by users.
> • User (Assigned an authority by the administrator.)
>   - Users can add and edit public and private addresses depending on the authorities assigned to them by the administrator.
>   - If a user adds a private address, then only the user and administrator can access that address.
> • General User (Unassigned an authority by the administrator.)
>   - General User can add, delete, and edit public addresses but cannot add or edit private addresses.

3 **Speed No.** is automatically assigned with the first number of unused numbers.

> Use the **Speed No.** on the numeric keypad to select an address quickly.

4 Tap the **Email** input boxes to enter that information of the recipient.

5 Tap the **Fax** input box and enter the fax number using the numeric keypad on the control panel. You can enter only numbers, area code first if necessary.

> • Inserting a pause: On some telephone systems, you must dial an access code (like 9) and listen for a second dial tone before dialing the number. In such cases, you can insert a pause in the telephone number.

6 Tap the **Internet Fax** input boxes to enter that information of the recipient.

7 Tap the **SMB**, and/or **FTP** input boxes to enter that information of the recipient.

> • Select the login method in **Login Type**:
>   - **Auto Login** : Automatically logs in using the ID and password you provide.
>   - **Anonymous** : Logs in as an anonymous user if the server allows it.
>   - **Login Prompt** : Asks you to enter your ID and password every time that you connect.
>   - **Single Sign On** : Logs in using the ID and passwords you used to log in to the machine. Use this if you use the same ID and password on both the server and the machine.
> • If the SMB server you entered is not registered to any domain, leave it blank or enter the computer name of the SMB server.
> • **User Login Name:** Select this option to create a sub-folder in the file folder you selected. The sub-folder is named according to the user name entered in step 5. If the file folder already has a sub-folder of the same name, the machine does not create a sub-folder.
> • **Folder Creation Cycle:** Set the cycle of sub-folder creation. The machine creates sub-folders according to this option. If the file folder already has a sub-folder of the same name, the machine does not create a sub-folder.
>   - **Every Day:** A sub-folder is created every day using the name format "YYYY-MM-DD" (for example, "2016-01-01").
>   - **Every Month:** A sub-folder is created every month using the name format "YYYY-MM" (for example, "2016-01").
>   - **Every Year:** A sub-folder is created every year using the name format "YYYY" (for example, "2016").
> • **Create Group For Multiple Files:** If you select this option and scan multiple files, the machine creates a sub-folder in the file folder you selected to store all sent files.
>   If all folder creation options are enabled at the same time, sent files are stored as below.
>   - When a single scanned file is sent:
>   **folder****user name****2016-01-01****DOC.jpg**
>   - When multiple scanned files are sent:
>   **folder****user name****2016-01-01****DOCJPEG****DOC000.jpg**
>   **folder****user name****2016-01-01****DOCJPEG****DOC001.jpg**
>   **folder****user name****2016-01-01****DOCJPEG****DOC002.jpg**

8 Tap **Done** to save the information.

Editing Individual address

When editing a contact, tap a field to change or delete the information, or add additional fields to the contact's information.

1 Tap **Address book** > **Contacts** from the home screen or **Apps**.

2 Tap the name of individual you want to edit. Tap 🖉 .

> 🖉 If you want to delete an individual address, check the box of that address and tap ⋮ Sub menu (Action overflow) > **Delete Contacts**.

3 Tap the input field for the information you want to change. The pop-up keyboard appears, allowing you to type in the field.

4 Tap **Done** to save the information.

Storing address groups

1 Tap **Address book** > **Groups** > ➕ from the home screen or **Apps**.

2 Tap the **Name** input field and enter a name for the group.

3 Tap **+Add Contact** and check the boxes for any addresses you want include in the group. Tap **Done** when you are finished.

> 🖉 To search for a contact, tap the search field in the **+Add Contact** screen. Enter the first few letters of a contact's name or tap 🔍 icon to show all contacts. In the list that appears, check the boxes for the contacts you want to add and tap **Done**.

4 Tap **Done** to save the information.

Editing address groups

1 Tap **Address book** > **Groups** from the home screen or **Apps**.

2 Tap the name of group you want to edit and tap 🖉 .

> ✏️ If you want to delete an address group, check the box for the group you want to delete and tap ➖.

3 Tap the group name input field to change the name of the group.

4 Tap **+Add contact** and check the boxes for any addresses you want include in the group. Tap **Done** when you are finished.

> ✏️ To search for a contact, tap the search field in the **+Add contact** screen. Enter the first few letters of a contact's name or tap the 🔍 icon to show all contacts. In the list that appears, check the boxes for the contacts you want to add and tap **Done**.

5 To remove an individual address from the group, check the box for that address and tap ➖.

6 Tap **Done** to save the information.

Searching for address book entries

You can search the addresses that are currently stored in the address book.

1 Tap **Address book** > **Contacts** or **Groups**from the home screen or **Apps**.

2 Tap 🔍 input field and enter a name or part of a name to search for.

3 The machine then displays the search results.

Deleting address book entries

You can delete addresses currently stored in the address book.

> ✏️ To use this feature, you may need to log-in as an administrator (see "Log-in" on page 176).

1 Tap **Address book** > **Contacts** or **Groups** on the home screen or **Apps**.

2 Check the boxes of the addresses you want to delete and tap tap ⋮ Sub menu (Action overflow) > **Delete Contacts**.

3 Tap **OK** in the confirmation window and the selected addresses are deleted from the address book.

Viewing the address book

You can browse for individual addresses and groups.

1 Tap **Address book** from the home screen or **Apps**.

2 Tap an address to see more information about it.

> You can tap ✎ when viewing an address to edit its information directly, or when viewing an address group to see a list of that group's members.

Using SyncThru™ Web Service

You can store addresses conveniently from the networked computer using SyncThru™ Web Service. Only for users registered on the machine can store addresses through login SyncThru™ Web Service.

Storing on your local machine

This method allows you to store addresses on your machine's memory. You can add addresses and group them into categories.

Adding individual addresses to the address book

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Address Book** tab > **Add**.

3 Enter a name to add and select a speed dial number in the **General** field.

> • A **Speed Dial Number** allows you to enter that number on the numeric keypad to dial that number quickly.
> • Check **Favorites** for addresses you use often. You can easily find them in search results.

4 Enter an email address in the **Email** field.

5 Enter a fax number in the **Fax** field.

6 Check the enable SMB box in **SMB** and enter the **SMB** information.

7 Enter a server IP address or a host name in **SMB Server Address**.

8 Enter a server port number in **SMB Server Port**.

9 Select the login method in **Login Type**.
   • **Auto Login** : Automatically logs in using the ID and password you provide.
   • **Anonymous** : Logs in as an anonymous user if the server allows it. If you select this login method, go to the step 18

- **Login Prompt** : Asks you to enter your ID and password every time that you connect. If you select this login method, go to step 18.
- **Single Sign On** : Logs in using the ID and passwords you used to log in to the machine. Use this if you use the same ID and password on both the server and the machine. If you select this login method, go to step 18.

10 Enter a login name in the **Login ID** field.

11 Enter a password in **Password** and re-enter the same password in **Confirm Password**.

12 Enter a domain name in **Domain**.

> If the SMB server you entered is not registered to a domain, leave this field blank or enter the computer name of the SMB server.

13 Enter the scan file folder to store scanned images in **Path**.

Example: **/shared_Folder/**

14 Select **Scan folder creating policy** options:
- **Create new folder using login name:** If you select this option, the machine creates a sub-folder in the file folder you selected. The sub-folder is named using the user name from step 15.

> If the file folder already has a sub-folder of the same name, the machine does not create a sub-folder.

- **Create new folder every:** You can set the cycle of sub-folder creation. The machine create a sub-folder according to these options:

> If the file folder already has a sub-folder of the same name, the machine does not create a sub-folder.

  - **Every Day:** A sub-folder is created every day using the name format "YYYY-MM-DD" (for example, "2016-01-01").
  - **Every Month:** A sub-folder is created every month using the name format "YYYY-MM" (for example, "2016-01").
  - **Every Year:** A sub-folder is created every year using the name format "YYYY" (for example, "2016").
- **Create new folder only if scan output consist of several files:** If you select this option and multiple files are scanned, the machine creates sub-folders in the file folder you selected and the sent files are stored in the sub-folder.

> If all folder creation options are enabled at the same time, sent files are stored as below.
> - When a single scanned file is sent:
>   **folder****user name**\\2016-01-01\\DOC.jpg
> - When multiple scanned files are sent:
>   **folder****user name**\\2016-01-01\\DOCJPEG\\DOC000.jpg
>   **folder****user name**\\2016-01-01\\DOCJPEG\\DOC001.jpg
>   **folder****user name**\\2016-01-01\\DOCJPEG\\DOC002.jpg

15 Select the policy for generating file names in **Filing Policy**. If the server already contains a file of the same name, the file is processed based on the following options.
- **Change Name:** The sent file is automatically saved as a pre-defined file name.
- **Cancel:** Do not save the sent file.
- **Overwrite:** Overwrite the existing file with the newly sent file.

16 Enter the file name in **File Name** to store on the server.

17 To verify that the process is working with your settings, click **Test**.

18 Enter **FTP** server information as you did for **SMB**.

19 Select **Apply**.

> Select **Undo** to delete the information you entered. If you click **Cancel**, the **Add** window is closed.

Editing individual addresses in Address Book

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Address Book** tab.

3 Check the box for the address you want to edit and click **Edit**.

4 Change the address information.

5 Select **Apply**.

> ✎ Select **Undo** to reverse any changes you entered. Click **Cancel** to close the window without saving any changes.

Deleting individual addresses in Address Book

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Address Book** tab.

3 Check the boxes of the addresses you want to delete and click **Delete**.

Check the box at the top of the column to select all addresses.

Click **OK** in the confirmation window to delete the addresses.

Searching for individual addresses in the address book

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Address Book** tab.

> ✎ You can sort the address book by clicking each column header. For example, click **Speed No.** to sort the addresses by speed dial number. Click a column a second time to reverse the sort order.

3 Enter a name or part of a name to search for in the search field.

> ✎ You can search for addresses in a specific category such as **Fax Number**, **Email**, **SMB**, and so on.
>
> For example, if you want to find a fax number, click the drop down list next to 🔍 and select **Fax Number**.

4 Select 🔍 and the search results appear.

> ✎ You can see the addresses in a specific category such as **Fax Number**, **Email**, **SMB**, etc. For example, if you want to see the addresses which are included fax number, click drop down list below **LDAP** and select **Fax Number**.

Exporting Address Book

✎ To use this feature, you may need to log-in as an administrator (see "Log-in" on page 176).

You can import the address book saved in the machine to the computer in CSV file format using SyncThru™ Web Service.

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Address Book** tab > **Individual**.

3 Select **Export** from the **Task** drop down list.

4 Select the option you want and click the **Export** button.

Then the address book file stored in your computer.

✎ • Encryption
  - **Encrypt only credential data** : Encrypts only passwords.
  - **Encrypt whole data** : Encrypts all the data.
• **Key**, **Confirm Key**: Requires you to enter a key when importing the address book. If you enter the wrong key when importing the address book, then the import process stops.

Importing Address Book

You can edit the exported address book in CSV file format and send it back to the machine by exporting to the machine from your computer.

✎ Followings are the conditions for editing the imported CSV file.
• Password-protected or security enhanced CSV file cannot be edited.
• The CSV file needs to be saved in Notepad program in UTF-8.
• Do not change the first row (model name, version, title field).
• Use comma(,) as a separator.
• When importing the address book data from a computer to the machine, the existing address book data is deleted.
• Make sure to enter valid data. If you enter invalid data, unexpected errors can occur. Refer to the below rules for entering valid data.
  - **Speed dial:** A number is required for each address. You cannot use duplicate numbers. Only numbers are allowed.
  - **User Name:** This field is not mandatory. You can enter up to 64 byte in UTF-8. <, ", >, \ and / are not allowed.
  - **Fax:** This field is not mandatory. You can enter up to 40 byte using numbers (0-9) and special characters (#,*,-).

- **Email:** This field is not mandatory. You can enter up to 128 byte in email address format (ex: printer@domain.com)

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Address Book** tab > **Individual**.

3 Select **Browse**, and select the stored file.

4 Select **Overwrite** or **Append** in **Options**.

5 Enter the key you set when you exported the address book.

6 Select **Browse**, and select the stored file.

7 Select **Import** > **OK**.

Grouping addresses in address book

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Address Book** tab > Groups > **Add Group**.

3 Enter the group name to be added in **Group Name**.

4 Select **Add individual(s) after this group is created** > **Apply**.

> If you do not want to add individual addresses to the group address you made, skip this step. You can add individual addresses next time pressing **Group Details**.

5 Check the addresses you want to add to **Group Address Book** in **Individual Address Book**.

6 Select the arrow in the middle. The selected addresses are added in **Group Address Book**.

7 Select **Apply**.

Editing address groups in Address Book

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Address Book** tab > Groups.

3 Check the group address you want to edit and press **Edit Group**.

4 Change the group address information.

5 Select **Apply**.

> Press **Undo** to delete the information you entered. If you press **Cancel**, the **Edit** window closes.

Deleting address groups from Address Book

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Address Book** tab > **Groups**.

3 Check the box for the groups you want to delete.

4 Select **Delete Group**.

Select **OK** when the confirmation window appears.

Checking address groups

You can see information about address groups and add or delete individual addresses from the group in the **Group Details** window.

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Address Book** tab > **Groups**.

3 Select the group address you want to see and click **Group Details**.

- You can add individual addresses directly. Check the addresses you want to add to **Group Address Book** in **Individual Address Book**.
- You can delete individual addresses directly. Check the addresses you want to delete and press **Delete** in **Group Address Book**.

Using a Network-Connected Machine

This chapter gives you step-by-step instructions for setting up the network environment before using the machine. You need to be familiar with the terms used for setting up the network environment. Refer to the glossary for terms you do not understand ("Glossary" on page 301).

Network environment

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

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

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

Item	Specification
Network interface	• Ethernet 10/100/1000 Base-TX Wired Lan • Network Interface 802.11b/g/n support over 2.4 GHz wireless LAN and NFC (Near Field Communication)[a]
Network operating system	• Windows® XP Service Pack 3, Windows Server® 2003, Windows Vista®, Windows® 7, Windows 8, Windows Server® 2008 R2, Windows 10, Windows Server® 2016 • Novell NetWare 5.x ~ 6.x
Network protocols	• TCP/IPv4 • TCP/IPv6 (DHCP, DNS, RAW, LPR, SNMPv 1/2/3, HTTP, IPSec) • DHCP, BOOTP • DNS, DDNS, WINS, Bonjour, SLP, UPnP(SSDP) • Standard TCP/IP Printing (RAW), LPR, IPP, FTP Printing, ThinPrint • FTP(S), SMB, SMTP(S), WSD, I-Fax • LDAP(S), Kerberos, 802.1x • SNMPv 1/2/3, HTTP(S), IPSec

a.Optional device. See "Available accessories" on page 230.

Accessing network setup

1 Make sure that the Ethernet cable is connected to your machine.

2 Tap **Settings** > **Network Settings** > **Ethernet** from the home screen or **Apps**.

3 Log-in as an administrator (see "Log-in" on page 176).

Network settings (configuring TCP/IP)

When you connect your machine to a network, you must first configure the TCP/IP settings for the machine. The settings shown below are the basic settings required for using your machine as a network machine. You can set TCP/IP, DNS server, TCP/IPv6, Ethernet, and IP address allocation methods.

Ethernet

You can set Ethernet settings.

Tap **Settings**〉 **Network Settings**〉 **Ethernet** from the home screen or **Apps**.

✎ You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine (see "Settings tab" on page 201).

- **Ethernet Port:** You can enable/disable Ethernet port.
- **Ethernet Speed:** Choose the speed rate of Ethernet.
- **MAC Address:** Shows the Mac address of the machine.

TCP/IP Protocol

You can set IPv4 settings.

Tap **Settings** 〉 **Network Settings** 〉 **Ethernet** 〉 **TCP/IPv4** from the home screen or **Apps**.

✎ You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine (see "Settings tab" on page 201).

IP Setting

You can choose the method for allocating IP addresses.
- **Static:** Select to enter IP address/Subnet Mask/ Gateway Address manually.
- **BOOTP:** IP address/Subnet Mask/ Gateway Address are automatically allocated by the BOOTP Server.
- **DHCP:** IP address/Subnet Mask/ Gateway Address are automatically allocated by the DHCP Server.

DNS Configuration

You can configure the DNS server.
- **Host Name:** Enter the host name. You can enter up to 63 characters. Default name is "**SEC[MAC address]**".
- **Domain Name:** Enter the domain name. You can enter up to 128 characters.

- **Primary DNS Server:** Enter the address of the DNS server you want to use primarily.
- **Secondary DNS Server:** Enter the address of the DNS server you want to use as an alternative.
- **Dynamic DNS Registration:** If you want to use, check the checkbox(es) of dynamic DNS registration. If this option is checked, the machine registers its host name and domain name to configured DNS servers dynamically. Also, if this option is checked and DHCP is selected, DHCP FQDN options are automatically disabled.

WINS (Windows Internet Name Service)

You can configure the WINS server. WINS is used in the Windows operating system. Select this option.

Display IP address / Host Name

You can set the machine to display the IP address or host name on the Notification Bar. If you select this option the IP address or host name will show on the Notification Bar.

TCP/IPv6

You can set the IPv6 settings.

Tap **Settings** > **Network Settings** > **Ethernet** > **TCP/IPv6** from the home screen or **Apps**.

You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine (see "Settings tab" on page 201).

- **Protocol:** Tap to use IPv6 protocol in the system. Reboot the machine to apply the change.
- **IPv6 Address:** Shows the IPv6 address types.
  - **Link-local Address:** This is an IPv6 address starting with a prefix value FE80. This address has local link scope and is automatically generated.
  - **Stateless Address:** This is an IPv6 address which is formed by router advertised prefix and interface identifier. On a interface like Ethernet, interface identifier is usually derived from the Mac address of the machine. The advertised prefix depends on the router configurations.

More than one address may be configured for the router advertisement, but only one will be displayed in the display screen.

  - **Stateful Address:** This is an IPv6 address which is acquired by a DHCPv6 server.
  - **Manual Address:** This is an IPv6 address which an administrator can configure manually.
- **DHCPv6 Configuration:** Select the DHCPv6 configuration you want to us.
  - **Use DHCP as directed by a router:** DHCPv6 is enabled when a router advertises to use DHCPv6.
  - **Always Enable DHCP:** Regardless of router advertisement, use DHCPv6 to acquire an IPv6 address.
  - **Never use DHCP:** Disables DHCPv6.
- **DHCP Unique Identifier:** Clients use an DHCP Unique Identifier (DUID) to obtain an IP address from the DHCPv6 server. The server looks up the DUID in its database and delivers the appropriate configuration data (address, lease times, DNS servers, etc.) to the client.

- **DHCP Identity Association Identifier:** Each interface has an ID, called an Identity Association Identifier (IAID), that binds the interface to one or more IP addresses. Each allocation in the DHCPv6 server includes a DUID and an IAID pair.

802.1x

You can enable 802.1x authentication, which is a port-based authentication. If this authentication is enabled, the machine is not allowed to access through the protected side of the network until the machine is authorized. Use this feature to protect your network.

Tap **Settings** > **Network Settings** > **Ethernet** > **802.1x** from the home screen or **Apps**.

- **802.1x:** Check to enable this feature.
- **802.1x Authentication Method:** Select the authentication algorithm to use.
  - **EAP-MD5:** Offers minimal security. The MD5 hash function is vulnerable to dictionary attacks, and does not support key generation.
  - **PEAP:** Recommended for users who only intend to use Microsoft desktop clients and servers. For other users, it is not recommended.
  - **EAP-MS-CHAPv2:** MS-CHAPv2 provides two-way authentication between peers by combining a peer Challenge message with the Response packet and an authenticator Response message on the Success packet.
  - **TLS:** This is used to provide secure communication over the Internet between a client and server.

Printing a network configuration report

You can identify the network information connected to your machine by printing a network configuration report.

Tap **Settings** > **Management** > **Report** > **Network Configuration** from the home screen or **Apps** then tap **Print**.

> You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine (see "Information tab" on page 200).

Set Protocols

You can enable/disable the protocols (**Standard TCP/IP**, **LPR**, **IPP**, **FTP**, **POP3**, **ThinPrint**, **CIFS**, **SNTP** (Simple Network Time Protocol), **SLP** (Service Location Protocol), **Telnet**, **SNMP V1/V2** (Simple Network Management Protocol), **SNMPv3**, **UPnP(SSDP)** Protocol, and **mDNS** (Multicast Domain Name System), **SetIP**, **IPv6**, and **HTTP**.

Tap **Settings** > **Network Settings**> **Network Protocol** from the home screen or **Apps**.

🖉 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine (see "Settings tab" on page 201).

Network filtering settings

You can set your machine to prevent unlisted IP or MAC addresses from connecting to the machine.

You can set general network filtering settings.

Tap **Settings** > **Network Settings** > **Network Security** > **Network Filtering** from the home screen or **App**.

✎ You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine (see "Settings tab" on page 201).

- **MAC Filtering:** Disable MAC filtering.
- **IPv4 Filtering:** Disable IPv4 filtering.
- **IPv6 Filtering:** Disable IPv6 filtering.

Wireless network setup (Optional)

✎ • Check the option lists and contact the purchasing point to order (see "Available accessories" on page 230). After installing the Wi-Fi/NFC kit (Optional), set the machine to use this feature.
• Make sure your machine supports wireless networking. Wireless networking may not be available depending on the model (see "Features by model" on page 6).

For errors that occur during the wireless settings, refer to the troubleshooting chapter (see "Wireless network problems" on page 279).

Wireless networks require higher security, so when an access point is first set up, a network name (SSID), the type of security used, and a Network Password are created for the network. Ask your network administrator about this information before proceeding with the machine installation.

Introducing wireless set up methods

You can set wireless settings either from the machine or the computer. Choose the setting method from the below table.

> - Some wireless network installation types may not be available depending on the model or country.
> - It is strongly recommended that you set the password on Access Points. If you do not set the password on Access Points, they might be exposed to illegal access from unknown machines including PCs, smart phones and printers. Refer to the Access Point user' guide for password settings.

Set up method	Connecting method	Description & Reference
With Access Point	From the computer	See "Using a network cable" on page 152.
	From the machine's control panel	See "Using the WPS menu" on page 148.
		See "Using the Wi-Fi Networks" on page 152.
Wi-Fi Direct setup		See "Setting the Wi-Fi Direct for mobile printing" on page 154.

Using the WPS menu

If your machine and access point (or wireless router) support Wi-Fi Protected Setup™ (WPS), then you can easily configure the wireless network settings through the **WPS** menu without the need for a computer.

> - Using the **WPS(PBC)** or entering the PIN from the computer to connect to the access point (or wireless router) varies depending on the access point (or wireless router) you are using. Refer to the user guide of the access point (or wireless router) you are using.
> - When using the WPS to set the wireless network, security settings may change. To prevent this, lock the WPS option for the current wireless security settings. The option name may differ depending on the access point (or wireless router) you are using.

Items to prepare

- Check if the access point (or wireless router) supports Wi-Fi Protected Setup™ (WPS).
- Check if your machine supports Wi-Fi Protected Setup™ (WPS).
- Networked computer (PIN mode only)

Choosing your type

There are two methods available to connect your machine to a wireless network.

- The **Push Button Configuration (PBC)** method allows you to connect your machine to a wireless network by pressing both the **WPS Settings** menu on the control panel of your machine and the WPS (PBC) button on a Wi-Fi Protected Setup™ WPS-enabled access point (or wireless router) respectively.
- The **Personal Identification Number (PIN)** method helps you connect your machine to a wireless network by entering the supplied PIN information on a Wi-Fi Protected Setup™ WPS-enabled access point (or wireless router).

Connecting WPS

Factory default in your machine is **PBC**mode, which is recommended for a typical wireless network environment.

Connecting in PBC mode

Type in the **ID** and **Password**.
Use the same login ID, Password, Domain as when logging in from the machine (see "Log-in" on page 176). If you want to create a new user or change the password, see "Security tab" on page 202.

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1 Tap **Settings** > **Network Settings** > **Wi-Fi** from the home screen or **Apps**.

2 Tap **WPS Settings** > **Connect via PBC**.

3 Tap **Start**.

4 Tap the **WPS (PBC)** button on the access point (or wireless router).

5 Follow the instruction on the display screen.

The messages are displayed on the display screen

Connecting in PIN mode

Type in the **ID** and **Password**.
Use the same login ID, Password, Domain as when logging in from the machine (see "Log-in" on page 176). If you want to create a new user or change the password, see "Security tab" on page 202.

---

1 Tap **Settings** > **Network Settings** > **Wi-Fi** from the home screen or **Apps**.

2 Tap **WPS Settings** > **Connect via PIN**.

3 Tap **Start**.

4 The eight-digit PIN appears on the display.

You need to enter the eight-digit PIN within two minutes on the computer that is connected to the access point (or wireless router).

You need to enter the PIN from the computer to connect to the access point (or wireless router) varies depending on the access point (or wireless router) you are using. Refer to the user guide of the access point (or wireless router) you are using.

5 Follow the instruction on the display screen.

The messages are displayed on the display screen

Using the Wi-Fi Networks

Before starting, you will need to know the network name (SSID) of your wireless network and the network key if it is encrypted. This information was set when the access point (or wireless router) was installed. If you do not know about your wireless environment, please ask the person who set up your network.

Type in the **ID** and **Password**.
Use the same login ID, Password, Domain as when logging in from the machine (see "Log-in" on page 176). If you want to create a new user or change the password, see "Security tab" on page 202.

---

1 Tap **Settings** > **Network Settings** > **Wi-Fi** from the home screen or **Apps**.

2 Tap **Wi-Fi Settings**.

3 The machine will display a list of available networks from which to choose. After a network is chosen then printer will prompt for the corresponding security key.

4 Select the Wi-Fi network option you want.

Using a network cable

See your network administrator, or the person that set up your wireless network, for information about your network configuration.

Your machine is a network compatible machine. To enable your machine to work with your network, you will need to perform some configuration procedures.

Items to prepare

- Access point
- Network-connected computer
- A machine installed with a wireless network interface
- Network cable

IP setting using SetIP Program (Windows)

This program is used to manually set the network IP address of your machine using its MAC address to communicate with the machine. The MAC address is the hardware serial number of the network interface and can be found in the **Network Configuration Report** (see "Printing a network configuration report" on page 144).

Configuring the machine's wireless network

Before starting, you will need to know the network name (SSID) of your wireless network and the network key if it is encrypted. This information was set when the access point (or wireless router) was installed. If you do not know about your wireless environment, please ask the person who set up your network.

To configure wireless parameters, you can use **SyncThru™ Web Service**.

Using SyncThru™ Web Service

Before starting wireless parameter configuration, check the cable connection status.

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Network Settings** tab.

3 Select **Wi-Fi** > **Wizard**.

4 Select the one **Network Name(SSID)** in the list.

5 Select **Next**.

   If the wireless security setting window appears, enter the registered password (network password) and select **Next**.

6 The confirmation window appears, please check your wireless setup. If the setup is right, click **Apply**.

Turning the Wi-Fi network on/off

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Network Settings** tab > **Wi-Fi**.

3 You can turn the Wi-Fi network on/off.

Setting the Wi-Fi Direct for mobile printing

Wi-Fi Direct is a secure and easy-to-use peer-to-peer connection between a Wi-Fi Direct-enabled printer and mobile device.

With Wi-Fi Direct, you can connect your printer to a Wi-Fi Direct network while concurrently connecting to an access point. You can also use a wired network and a Wi-Fi Direct network simultaneously so multiple users can access and print documents both from Wi-Fi Direct and from a wired network.

> - Check the option lists and contact the purchasing point to order (see "Available accessories" on page 230). After installing the Wi-Fi/NFC kit (Optional), set the machine to use this feature.
> - You cannot connect your mobile device to the internet through the printer's Wi-Fi Direct.
> - The supported protocol list may differ from your model, Wi-Fi Direct networks do NOT support IPv6, network filtering, IPSec, WINS, and SLP services.

Setting up Wi-Fi Direct

You can enable Wi-Fi Direct feature by one of the following methods.

From the machine

> Type in the **ID** and **Password**.
> Use the same login ID, Password, Domain as when logging in from the machine (see "Log-in" on page 176). If you want to create a new user or change the password, see "Security tab" on page 202.

1 Tap **Settings** > **Network Settings** > **Wi-Fi** from the home screen or **Apps**.

2 Tap **Wi-Fi Direct**.

3 Enable **Wi-Fi Direct**.

From the network-connected computer

If your printer is using a network cable or a wireless access point, you can enable and configure Wi-Fi Direct from SyncThru™ Web Service.

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Settings** tab > **Network Settings** > **Wi-Fi** > **Wi-Fi Direct™**.

3   Enable **Wi-Fi Direct**™ and set other options.

Setting up the mobile device

- After setting up Wi-Fi Direct from the printer, refer to the user manual of the mobile device you are using to set its Wi-Fi Direct.
- After setting up Wi-Fi Direct, you need to download the mobile printing application (For example: Samsung Mobile Print) to print from your smartphone.

- When you have found the printer you want to connect to from your mobile device, select the printer and the printer's LED will blink. Press the WPS menu on the printer and it will be connected to your mobile device.
- If your mobile device does not support Wi-Fi Direct, you need to enter the "Network Key" of a printer instead of pushing the WPS menu.

Using the Machine via Mobile Device

This chapter gives you step-by-step instructions for setting up the mobile device before using the machine. Check that Wi-Fi enabled features are on your mobile device and Wi-Fi feature is enabled on your printer ("Using a Network-Connected Machine" on page 138).

Using the NFC feature (Optional)

✎ If you want to add NFC feature to the machine, check the option lists and contact the purchasing point to order (see "Available accessories" on page 230). After installing the Wi-Fi/NFC kit (Optional), set the machine to use this feature.

The NFC (Near Field Communication) printer allows you to directly print/scan/fax from your mobile device just by holding your mobile device over the NFC tag on Wireless/NFC Kit (Wireless LAN Option). It does not require installing print driver or connecting to an access point. You just need NFC supported mobile device. In order to use this feature, mobile apps needs to be installed on your mobile device.

✎ • Depending on the material of the mobile device cover, NFC recognition may not work properly.
   • Depending on the mobile device you are using, the transmission speed may differ.
   • This feature is available only for the model with a NFC tag (see "Machine overview" on page 16).
   • Using a cover or a battery other than the ones that came with the mobile device, or a metal cover/sticker can block NFC.
   • If NFC devices keep failing to communicate,
     - Remove the case or cover from the mobile device, then try again.
     - Reinstall the battery from the mobile device, then try again.

Requirements
• NFC and Wi-Fi Direct enabled, supported mobile apps installed mobile device with Android 4.0 or higher.

✎ Only Android OS 4.1 or higher will automatically enable the Wi-Fi Direct feature on your mobile device when you enable the NFC feature. We recommend you to upgrade your mobile device to Android OS 4.1 or higher to use the NFC feature.

• Wi-Fi Direct feature enabled printer (see "Setting the Wi-Fi Direct for mobile printing" on page 154).

Related Apps

There are some apps that can be used with the NFC feature. The apps can be downloaded from the Google Play Store.

- **Samsung Mobile Print:** Enables users to print, scan (Only users with the machine supports scan), or fax (Only users with the machine supports fax) photos, documents, and web pages directly from your smartphone or tablet (see "Using the Samsung Mobile Print App" on page 163).
- **Samsung Mobile Print Control:** Helps users to get an authentication easily. This app provides one way of getting a user authentication using your mobile device (see "Using the Samsung Mobile Print Control App" on page 157).
- **Samsung Mobile Print Manager:** Enables users to use cloning and wireless setup features using your mobile device (see "Using the Samsung Mobile Print Manager App" on page 159).

Using the Samsung Mobile Print Control App

You can use it to get an authentication/registration from the **Samsung Mobile Print Control** app.

Authentication from the mobile device

1 Check that NFC enabled features are on your mobile device and Wi-Fi Direct feature is enabled on your printer.

2 Open **Samsung Mobile Print Control** app.

> If you do not have **Samsung Mobile Print Control** installed on your cellphone, go to the application store (Samsung Apps, Play Store, App Store) on your mobile device, and just search for download the app and try again.

3 Select how user would like to authenticate by using NFC.

4 Select login method.

5 Type in the **ID** and **Password**.

Use the same admin ID, Password as when logging in from the machine (see "Log-in" on page 176).

> If you want to create a new user or change the password, see "Security tab" on page 202.

6 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag (NFC) on your printer.

Wait few seconds for the mobile device to connect to the printer.
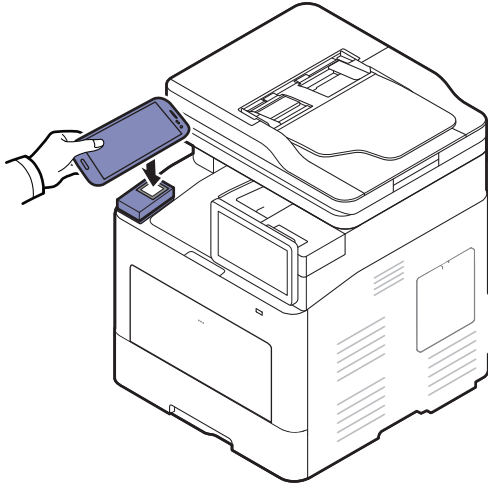
> ✎ For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC antenna on your mobile device before tagging.

Registration from the mobile device

1 Check that NFC enabled features are on your mobile device and Wi-Fi Direct feature is enabled on your printer.

2 Open **Samsung Mobile Print Control** app.

> ✎ If you do not have **Samsung Mobile Print Control** installed on your cellphone, go to the application store (Samsung Apps, Play Store, App Store) on your mobile device, and just search for download the app and try again.

3 Press the ⚙ icon on the **Samsung Mobile Print Control** screen.

4 Select how user would like to authenticate by using NFC.

5 Select login method.

6 Type in the **ID** , **Password**, **Domain**, and **Passcode**, then click **OK**.

Use the same admin ID, Password, Domain as when logging in from the machine (see "Log-in" on page 176).

> ✎ If you want to create a new user or change the password, see "Security tab" on page 202.

7 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag (NFC) on your printer.

Wait few seconds for the mobile device to connect to the printer.
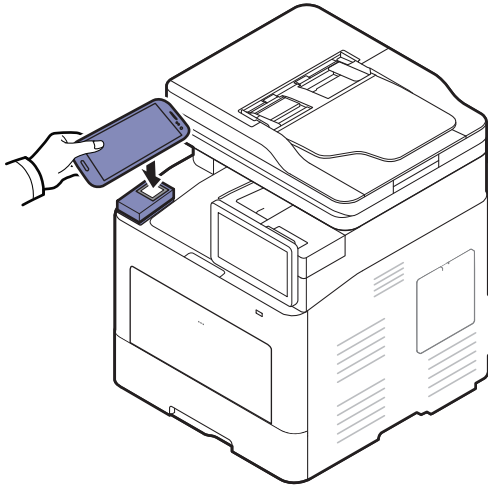
> For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC antenna on your mobile device before tagging.

8 Registration complete message appears on the printer's touch screen.

Using the Samsung Mobile Print Manager App

If you have more than one printer and need to set the same settings on each printer, you can easily do it using the **Samsung Mobile Print Manager** app. Touch your cellphone on the NFC tag on your printer to copy the settings and tap on the printer you want to set the setting.

> When exporting the data, you can save more than one data. When importing the data, you can select the data from the list and import.

Exporting(Copying the setting to your mobile device)

1 Check that NFC and Wi-Fi Direct enabled features are on your mobile device and Wi-Fi Direct feature is enabled on your printer.

2 Open **Samsung Mobile Print Manager** from your mobile device.

> If you do not have **Samsung Mobile Print Manager** installed on your cellphone, go to the application store (Samsung Apps, Play Store) on your mobile device, and just search for download the app and try again.

3 Press **Export**.

4 Type in the **ID** and **Password**.

Use the same admin ID, Password as when logging in from the machine (see "Log-in" on page 176).

 If you want to create a new user or change the password, see "Security tab" on page 202.

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5 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag (NFC) on your printer.

Wait few seconds for the mobile device to connect to the printer.
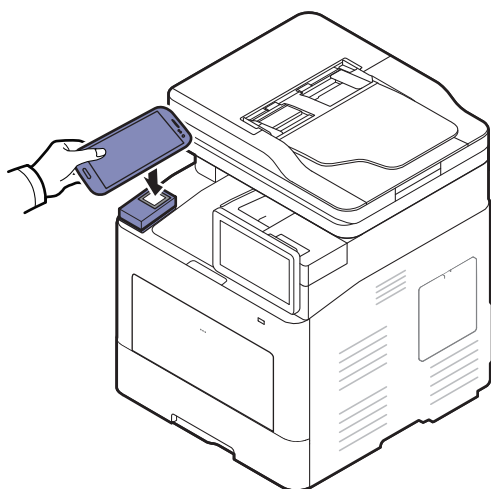
- For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC antenna on your mobile device before tagging.
- While cloning, the machine is locked.

---

6 Select the settings you want to apply and press **OK**.

7 Follow the instruction on the mobile device's screen.

Importing (Applying the settings to the machine)

1 Check that NFC and Wi-Fi Direct enabled features are on your mobile device and Wi-Fi Direct feature is enabled on your printer.

2 Open **Samsung Mobile Print Manager** from your mobile device.

> If you do not have **Samsung Mobile Print Manager** installed on your cellphone, go to the application store (Samsung Apps, Play Store) on your mobile device, and just search for download the app and try again.

3 Press **Import**.

4 Type in the **ID** and **Password**.

Use the same admin ID, Password as when logging in from the machine (see "Log-in" on page 176).

> If you want to create a new user or change the password, see "Security tab" on page 202.

5 Select the settings you want to copy.

6 Follow the instruction on the mobile device's screen.

7 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag (NFC) on your printer.

Wait few seconds for the mobile device to connect to the printer.
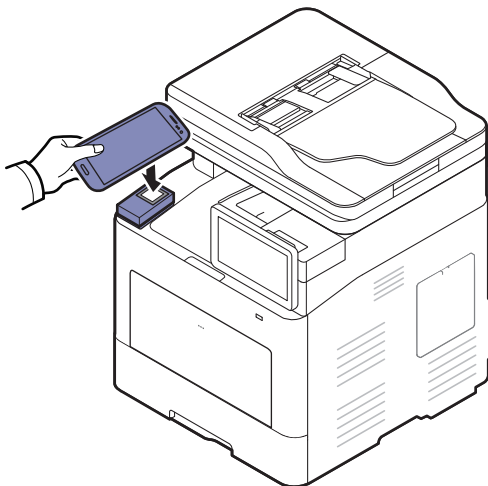
> - For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC antenna on your mobile device before tagging.
> - While cloning, the machine is locked.
> - While importing, the machine is rebooted.

Wireless Setup

You can copy wireless setting from your phone to your printer by touching your mobile device on the NFC tag on your printer.

1 Check that NFC and Wi-Fi Direct enabled features are on your mobile device and Wi-Fi Direct feature is enabled on your printer.

2 Open **Samsung Mobile Print Manager** from your mobile device.

> If you do not have **Samsung Mobile Print Manager** installed on your cellphone, go to the application store (Samsung Apps, Play Store) on your mobile device, and just search for download the app and try again.

3 When the **Samsung Mobile Print Manager** screen appears on your mobile device, tap **Wi-Fi Setup**.

4 Type in the **ID** and **Password**.

Use the same admin ID, Password as when logging in from the machine (see "Log-in" on page 176).

> If you want to create a new user or change the password, see "Security tab" on page 202.

5 If the access point (or wireless router) is connected to the connection confirmation window appears, then click **OK**.If the access point (or wireless router) not connection, select the desired access point (or wireless router) and click **OK**, then click **OK**.

6 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag (NFC) on your printer.

Wait few seconds for the mobile device to connect to the printer.
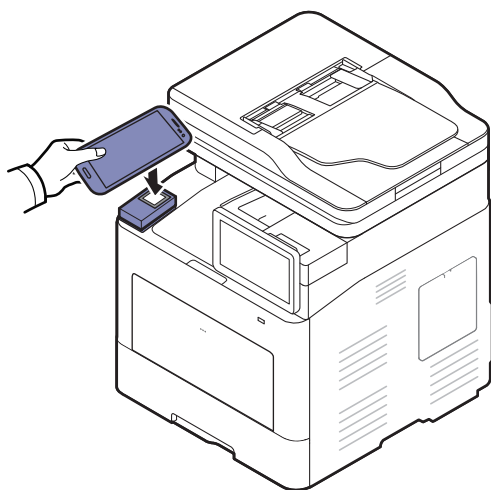
✎ For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC antenna on your mobile device before tagging.

---

7 Follow the instruction on the mobile device's screen.

Using the Samsung Mobile Print App

Samsung Mobile Print is a free application that enables users to print, scan (Only users with multi-functional printers), or fax (Only users with multi-functional printers) photos, documents, and web pages directly from your smartphone or tablet.

Printing

1 Check that NFC and Wi-Fi Direct enabled features are on your mobile device and Wi-Fi Direct feature is enabled on your printer.

2 Open **Samsung Mobile Print** app.

✎ If you do not have **Samsung Mobile Print** installed on your cellphone, go to the application store (Samsung Apps, Play Store) on your mobile device, and just search for download the app and try again.

---

3 Select print mode.

4 Select the content you want to print.

If necessary, change the print option by pressing the ⚙ icon.

5 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag (NFC) on your printer.

Wait a few seconds for the mobile device to send a job to the printer.
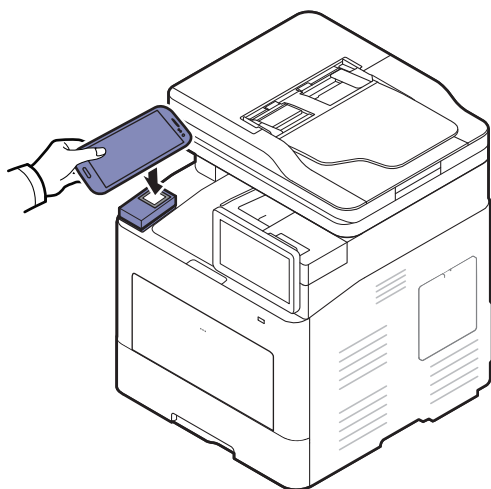
> For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC antenna on your mobile device before tagging.

6 The printer starts printing.

Scanning

1 Check that NFC and Wi-Fi Direct enabled features are on your mobile device and Wi-Fi Direct feature is enabled on your printer.

2 Open **Samsung Mobile Print** app.

> If you do not have **Samsung Mobile Print** installed on your cellphone, go to the application store (Samsung Apps, Play Store) on your mobile device, and just search for download the app and try again.

3 Select scan mode.

4 Place a single document face down on the document glass, or load the documents face up into the document feeder (see "Loading originals" on page 41).

If necessary, change the scan option by pressing the ⚙ .

5 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag
   (NFC) on your printer.

   Wait few seconds for the mobile device to send a job to the printer.
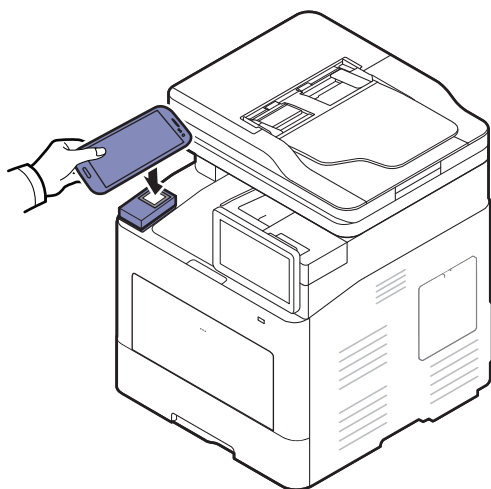
> For some mobile devices, NFC tag might not be located at the back of the mobile
> device. Check the location of the NFC antenna on your mobile device before tagging.

6 The printer starts scanning the content.

   The scanned data is saved on your mobile device.

> If you want to continue scanning, follow the instruction on the app screen.

Sending Fax

1 Check that NFC and Wi-Fi Direct enabled features are on your mobile device and Wi-Fi Direct
   feature is enabled on your printer.

2 Open **Samsung Mobile Print** app.

> If you do not have **Samsung Mobile Print** installed on your cellphone, go to the
> application store (Samsung Apps, Play Store) on your mobile device, and just search
> for download the app and try again.

3 Select fax mode.

4 Select the content you want to send fax.

If necessary, enter the fax number and change the fax option by pressing the ⚙ icon.

5 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag (NFC) on your printer.

Wait few seconds for the mobile device to send a job to the printer.
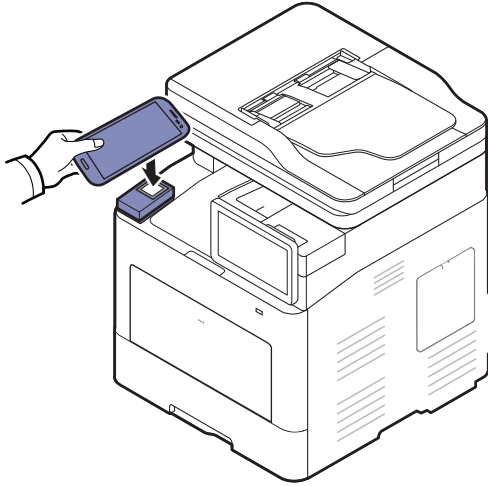
> 📝 For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC antenna on your mobile device before tagging.

6 The printer starts faxing the content.

Supported Mobile Apps

Available Apps

- **Samsung Mobile Print: Samsung Mobile Print** is a free application that enables users to print, scan(Only users with the machine supports scan), or fax(Only users with the machine supports fax) photos, documents, and web pages directly from your smartphone or tablet. **Samsung Mobile Print** is not only compatible with your Android and iOS smart phones but also with your iPod Touch and tablet PC. It connects your mobile device to a network connected Samsung printer or to a wireless printer through a Wi-Fi access point. Installing a new driver or configuring network settings isn't necessary – just simply install the **Samsung Mobile Print** application, and it will automatically detect compatible Samsung printers. Besides printing photos, web pages, and PDFs, scanning is also supported. If you have a Samsung multifunction, scan any document into a JPG, PDF, or PNG format for quick and easy viewing on your mobile device (see "Using the Samsung Mobile Print App" on page 163).
- **Samsung Mobile Print Control:** Helps users to get an authentication easily. This app provides one way of getting a user authentication using your mobile device (see "Using the Samsung Mobile Print Control App" on page 157).
- **Samsung Mobile Print Manager:** Enables users to use cloning and wireless setup features using your mobile device (see "Using the Samsung Mobile Print Manager App" on page 159).

Downloading Apps

To download apps, go to the application store (Play Store, App Store) on your mobile device, and just search for "**Samsung Mobile Print** /**Samsung Mobile Print Control**/**Samsung Mobile Print Manager**." You can also visit iTunes for Apple devices on your computer.

- **Samsung Mobile Print**/**Samsung Mobile Print Control**
  - **Android:** Search for **Samsung Mobile Print** or **Samsung Mobile Print Control** from Play Store, and then download the app.
  - **iOS:** Search for **Samsung Mobile Print** or **Samsung Mobile Print Control** from App Store, and then download the app.
- **Samsung Mobile Print Manager**
  - **Android:** Search for **Samsung Mobile Print Manager** from Play Store, and then download the app.

Supported Mobile OS

- **Samsung Mobile Print**
  - Android OS 4.0 or higher
  - iOS 8.0 or higher
- **Samsung Mobile Print Control**
  - NFC and Wi-Fi Direct enabled, supported mobile apps installed mobile device with Android 4.0 or higher, iOS 8.0 or higher
- **Samsung Mobile Print Manager**
  - NFC and Wi-Fi Direct enabled, supported mobile apps installed mobile device with Android 4.0 or higher

Mopria™

> 📝
> - Only Mopria-certified machines can use the Mopria feature. Check the box that your machine came in for the Mopria-certified logo.
> - Make sure that the printer and mobile device are connected to the same network and the communication is available.

Mopria™ Print Service is a mobile printing solution that enhances the new print functionality on any Android phone or tablet (Android version 4.4 or later). With this service, you can connect and print to any Mopria-certified printer on the same network as your mobile device without additional set-up. Many native Android apps support printing, including Chrome, Gmail, Gallery, Drive and Quickoffice.

Setting up the machine for Mopria printing

Bonjour(mDNS) and IPP protocols are required on your machine to use the **Mopria** feature. Perform the following steps to enable the **Mopria** feature.

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Settings** tab > **Network Settings** > **Standard TCP/IP, LPR, IPP** > **IPP**. Then, select **Enable**.

3 Select **Settings** tab > **Network Settings** > **mDNS**. Then, select **Enable**.

4 Select **Security** tab > **System Security** > **Feature Management** > **Mopria**. Then, select **Enable**.

Setting up Mopria on your mobile device

If you do not have **Mopria Print Service** app installed on your mobile device, open to the app store (Play Store, App Store) on your mobile device, search for **Mopria Print Service**, and then download and install the app.

1 In the **Settings** menu of your Android device, tap **Printing**.

> The location of this option may differ depending on your mobile device. If you cannot locate the **Printing** option, refer to the user's manual for your mobile device.

2 Under **Print Services**, tap **Mopria Print Service**.

3 Tap the **On/Off** slider to enable the **Mopria Print Service**.

Printing via Mopria

To print via Mopria on an Android device:

1 Open the email, photo, web page, or document that you want to print.

2 Tap **Print** on the menu in the app.

3 Select **your printer**, and then configure the print options.

4 Touch **Print** again to print the document.

> **To cancel a print job**: Select and delete the document from the print queue in the **Notification Bar**.

AirPrint

 Only AirPrint certified machines can use the AirPrint feature. Check the box your machine came in for the AirPrint certified mark.

- **AirPrint** allows you to print directly from Mac OS (MacBook Pro, MacBook Air, and iMAC) and iOS (iPhone, iPad and iPod touch). Scan and Fax are available only for Mac OS. (Only users with multi-functional printers)
- Make sure that the printer and mobile device are connected to the same network and the communication is available.

Setting up AirPrint

Bonjour(mDNS) and IPP protocols are required on your machine to use the **AirPrint** feature. You can enable the **AirPrint** feature by one of the following methods.

1 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

2 Select **Settings** tab > **Network Settings** > **Standard TCP/IP, LPR, IPP** > **IPP**. Then, select **Enable**.

3 Select **Settings** tab > **Network Settings** > **mDNS**. Then, select **Enable**.

4 Select **Security** tab > **System Security** > **Menu Management** > **AirPrint**. Then, select **Enable**.

Printing via AirPrint

For example, the iPad manual provides these instructions:

1 Open your email, photo, web page, or document you want to print.

2 Touch the action icon( ).

3 Select **your printer driver name**and option menu to set up.

4 Touch **Print** button. Print it out.

 Cancelling print job: To cancel the printing job or view the print summary, click the print center icon ( ) in multitasking area. You can click cancel in the print center.

Google Cloud Print™

Google Cloud Print™ is a service that allows you to print to a printer using your smart phone, tablet, or any other web-connected devices. Just register your Google account with the printer, and you are ready to use the Google Cloud Print™ service. You can print your document or email with Chrome OS, Chrome browser, or a Gmail™/ Google Docs™ application on your mobile device, so you don't need to install the printer driver on the mobile device. Refer to the Google website (http://google.com/cloudprint/learn/ or http://support.google.com/cloudprint) for more information about Google Cloud Print™.

Registering your Google account to the printer

Registering from the Chrome Browser

- Make sure the printer machine is turned on and connected to a wired or wireless network that has access to the Internet.
- You should create your Google account in the advance.

1 Open the Chrome browser.

2 Visit www.google.com.

3 Sign in to the Google website with your Gmail™ address.

4 Enter your printer's IP address in the address field and press the Enter key or click **Go**.

5 Access the **SyncThru™ Web Service** (see "Logging into SyncThru™ Web Service" on page 199).

> If the network environment is using a proxy server, you need to configure the proxy's IP and port number from **Settings** > **Network Settings** > **Proxy**. Contact your network service provider or network administrator for more information.

6 Select Settings tab > **Network Settings** > **Google Cloud Print**.

7 Enter your printer's name and description.

8 Click **Register**.

The confirmation pop-up window appears.

> If you set the browser to block pop-ups, the confirmation window will not appear. Allow the site to show pop-ups.

---

9 Click **Finish printer registration**.

10 Click **Manage your printers**.

Now your printer is registered with Google Cloud Print™ service.

Google Cloud Print™-ready devices will appear in the list.

Printing with Google Cloud Print™

The printing procedure varies depending on the application or the device you are using. You can see the application list that supports Google Cloud Print™ service.

> Make sure the printer is turned on and connected to a wired or wireless network that has access to the Internet.

Printing from an application on mobile device

The following steps are an example of using the Google Docs™ app from Android mobile phone.

1 Install the Cloud Print application on your mobile device.

> If you do not have the application, download it from the application store such as Android Market or App Store.

---

2 Access the Google Docs™ application from your mobile device.

3 Tap the option button of the document that you want to print.

4 Tap the send button.

5 Tap the Cloud Print button.

6 Set the printing options if you want.

7 Tap **Click here to Print**.

Printing from the Chrome browser

The following steps are an example of using the Chrome browser.

1 Run Chrome.

2 Open the document or email that you want to print.

3 Click the wrench icon in the browser's top right corner.

4 Click **Print**. A new tab for printing appears.

5 Select **Print with Google Cloud Print**.

6 Click the **Print** button.

Advanced Features
for Settings Menu

This chapter explains the **Settings** menu provided by your machine. The **Settings** menu provides various options for administrators to set in order to use the machine to its full capabilities.

✎ • For some options, you need to contact your local service provider to set the settings.
   • Some menus may not appear on the display screen depending on the settings or models. If so, it is not applicable to your machine.
   • Some options are only available to the administrator depending on the authentication settings selected (see "Authentication" on page 183).

Log-in

Depending on the authentication settings you selected, you may need to log-in as an administrator to access some options under **Settings** menu (see "Authentication" on page 183). Contact your network service provider or network administrator for more information.

1 Tap **Settings** from the home screen or **Apps**.

2 Select the option you want. If the option is available for only the administrator, log-in screen appears.

  Enter the **ID**, **Password**, and **Domain** using the pop-up keyboard which appears when you tap each field.

  - Enter the ID and password you first set when you turned on the machine(see "Initial settings (administrator only)" on page 186).
  - You can also use the **Recent Users** button to find the recently used ID and Domain List button to find the domain from the list stored in the machine.
  - When you log-in, you can see the ID of the logged in user on the display.

3 Tap **Log in**.

Language and Input

This menu allows you to configure the language in which to display the menus. You can also set onscreen keyboard options.

Tap **Settings** > **Language and Input** from the home screen or **Apps**.

Feature	Description
Language	Allows you to select the language.
Keyboard & Input Methods	You can change the keyboard used by your machine.
Speech	Allows you to set the speech settings for Voice input.

Language

Allows you to select the language that appears on the display screen.

Tap **Settings** > **Language** from the home screen or **Apps** then select the language what you want.

Keyboard & Input Methods

Allows you to specify the keyboard that the machine uses.

- **Default:** Select the default input language and method.

Speech

- **Text to speech output:** Provides audible readout of text, for example, the contents of email messages.

Machine

Before using the machine, set up the general settings.

> ✎ • Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine.
>
> • Tap [?] (**Help**) from the home screen or [≡] (quick menu), and then select on any option you want to know about.

Tap **Settings** > **Machine** from the home screen or **Apps**.

Feature	Description
Tray Settings	Allows you to adjust the current tray settings, such as the paper type and tray priorities (see "Tray settings" on page 179).
Sound	Allows you to set the volume for button sound, notice alarm, and sounds occurring during fax job. You can test the volume right after you set the level (see "Sound" on page 179).
Display	Allows you to set the brightness and quick launch.
Storage	Management all application's storage.
Adjustment	Allows you to adjust altitude, humidity, image, and machine test functions.
Power Saver	Allows you to reduce energy consumption. If you set this option, the machine goes into power saving mode when not in use. There are two power saving modes (see "Power Saver" on page 180).
Timers	Allows you to set the time for machine to return to the default setting or cancel the held job if there is no input for an extended time (see "Timers (administrator only)" on page 181).
Eco[a]	Allows you to set the Eco mode as a default and change settings for Eco mode. Using Eco mode can save printing resources (see "Eco" on page 181).

a. Available for the administrator depending on the authentication settings selected (see "Authentication" on page 183).

Tray settings

This feature allows you to check the current tray settings and change the settings if necessary. There are many options available for setting the tray and paper. Make the best use of the options to fit your needs for trays and paper.

> ✎ You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **System** > **Input Trays**(see "Settings tab" on page 201).

> ✎ If some options are grayed out, it means that the grayed-out option is not supported for your machine or optional parts needed to use the option are not installed.

Sound

You can set the volume for button sound, notice alarm, and the sounds occurring during a fax job. Using the slide bar select the desired volume and press the **Test** button to test the volume.

- **Key Sound:** Allows you to adjust the sound volume for when pressing the button
- **Alarm Sound:** Allows you to adjust the sound volume for when notice alarm.
- **Fax Sound:** Allows you to adjust the sound volume occurring during a fax job. This option has other sub-options.

Display

You can change various settings for the display.

- **Screen:** Allows you to adjust the LCD brightness.
- **More Settings:** You can select the register at **Quick Launch** (**None**, **Screen Capture**, **Applications**, **Search**, **Job Status**, **Login/Logout**)

Storage

You can management the all application storage and shows all storage information.

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

Adjustment

You can choose the altitude of the place where your machine is located. You can also adjustment the image management and checking the machine test.

- **Altitude Adjustment** : You can choose the altitude of the place where your machine is located. The print quality is affected by atmospheric pressure, which is determined by the height of the machine above sea level. Therefore, it is important to set the right altitude.
  - **Normal** : 0 ~ 1,000 m (3,280 ft)
  - **High 1** : 1,000 m (3,280 ft) ~ 2,000 m (6,561 ft)
  - **High 2** : 2,000 m (6,561 ft) ~ 3,000 m (9,842 ft)
  - **High 3** : 3,000 m (9,842 ft) ~ 4,000 m (13,123 ft)
  - **High 4** : 4,000 m (13,123 ft) ~ 5,000 m (16,404 ft)
- **Humidity** : Optimizes print quality according to the humidity in the environment. Choose a humidity setting based on the humidity in the work environment. The levels of humidity range from **Normal** (normal humidity) to **High 3** (high humidity).
- **Custom Color:** Allows you to adjust the level of print density and copy darkness.
- **Machine Test:** Allows you to adjust the tone level.
  - **Print Adjustment** : Allows you to adjust the print area. When images are printed off the page or shifted, adjust the print area.

Power Saver

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

> The **Power Save** option can be wake up by pressing the display screen.

Performance Optimization

When this option is **On**, you can wake up the machine from the power saving mode with the following actions:

- Pressing (⏻)(**Power/Wakeup**) on the control panel.
- Loading paper in a tray.
- Opening or closing the cover.
- Pulling a tray out or pushing a tray in.
- Place the originals in the Dual Scan Document Feeder (DSDF).
- Plug in the USB Drive device.

Low Power Save

Low Power Save option allows your machine to save power. When you are not using the machine for a while, some parts of the machine automatically enter **Low Power Save** option. **Low Power Save** option conserves less power than **Power Save** option.

Power Save

When you are not using the machine for a while, use this option to save power. The machine conserves more power in **Power Save** option than in **Low Power Save** mode.

Timers (administrator only)

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

> You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** > **Machine Settings** > **System** > **Setup**.

- **System Timeout:** The machine returns to the Copy menu if there is no input for the given time.
- **Held Job Timeout:** When an error occurs while printing and there is no signal from the computer, the machine holds a job for a specific time period before deleting it.

Eco

Allows you to save print resources and enables ecofriendly printing.
- **Default ECO Mode:** Select whether to turn the Eco mode on or off.

> **On-Forced**: Sets the Eco mode on. If a user wants to turn the Eco mode off, the user needs to enter the password.

- **Eco Features Configuration:** Setting the Eco features.
  - **Default Settings**: The machine is set to Default Eco mode.
  - **Custom Settings**: Change any necessary values.

Admin Settings

This option is only available to administrators.

✎ • Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine.

 • Tap ? (**Help**) from the home screen or ☰ (quick menu), and then select on any option you want to know about.

Tap **Settings** › **Admin Settings** from the home screen or **Apps**.

Feature	Description
Security	Allows you to set up the security related settings (see "Security" on page 183).
General Settings	Allows you to set up the general settings (**Measurement**, **Supplies Management**, **Contention Management**, and other settings) (see "General Settings" on page 185).
Initial Settings	Allows you to set the basic settings needed to be set before using the machine (see "Initial settings (administrator only)" on page 186).
Fax Settings	You can set the default fax options. Set the most frequently used fax settings (see "Fax Settings" on page 187).
Print Settings	You can set print related settings. When there is no specific input for printing options, the machine prints with the settings you set here. Set the frequently used printing settings. This feature can be useful if your company has a specific printing form (see "Print Settings" on page 187).
Box Settings	Allows you to check the current box settings and change the settings if necessary (see "Box Settings" on page 188).
Report Settings	The paper source setting specifies the default paper tray that the machine uses to print reports.
Application Management	You can install or uninstall applications. If you add an application, you need to activate the license of the installed application. Some applications may not have a license (see "Application Management" on page 188).

Security

Allows you to set up the security related settings.

Image Overwrite

You can set the machine to overwrite data stored in the memory. The machine overwrites the data with different patterns eliminating the possibilities of recovery.

✎   This feature may not be available depending on models or option kits installed.

- **Automatic Image Overwrite:** When a job is completed, there are temporal images left in the memory. For security reasons, you can set the machine to automatically overwrite secure non-volatile memory. If you want to secure memory space, you can set the machine to automatically overwrite secure non-volatile memory.
- **Manual Image Overwrite:** When printing, copying, scanning, and faxing, the machine temporarily uses memory space. For security reasons, you can set the machine to manually overwrite secure non-volatile memory. If you want to secure memory space, you can manually overwrite secure non-volatile memory. You can set the machine to repeat the manual image overwrite after the system is rebooted.
- **Scheduled Image Overwrite:** You can set the schedule to manually overwrite the image.
- **Overwrite Method:** You can select the method for overwriting the secure non-volatile memory(hard).
  - **German VSITR:** Select to overwrite the memory 7 times. When overwriting for the 6 times, alternate 0x00 and 0xff are used to overwrite the disk, and, in the 7th time, the disk is written with 0xAA.
  - **DoD 5220.28-M:** Select to overwrite the memory 3 times. When overwriting three times, patterns 0x35, 0xCA, 0x97 are used to overwrite the disk's content. This method of overwriting the disk is specified by US DoD.
  - **Australian ACSI 33:** Select to overwrite the memory 5 times. When overwriting 5 times, character "C" and its complement alternatively are used to overwrite the disk. After the 2nd time, there is a mandatory validation. For the 5th time, random data is used.
  - **DoD 5220.22M (ECE):** Select to overwrite the memory 3 times. When overwriting three times, patterns 0x35, 0xCA, 0x97 are used to overwrite the disk's content. This method of overwriting the disk is specified by US DoD.
  - **Custom Overwrite:** Select to determine the number of times the memory will be overwritten. The hard disk will be overwritten as many times as the number you select.

Authentication

This feature allows you to choose the authentication method for user authentication.

✎   You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click the **Security** tab > **User Access Control**. (see "Security tab" on page 202).

- **Mode:** Select the authentication mode.

- **Basic Authentication:** Activate basic authentication. Users are asked to login when they select options that are only available to administrators. Those options are marked with "a" or "(administrator only)" in this guide.
- **Device Authentication:** Activate device authentication. Device authentication requests a user to login before being able to use the device. Users cannot use any application without logging in.
- **Application Authentication:** Activate application authentication. An administrator can choose the application(s) to require user to login to use. Users cannot use the selected application(s) without logging-in. Press **Application Mode** to enable authentication.

- Method
  - **Local Authentication**: Executes authentication process based on the user information stored at HDD in the device.
    - **LUI Login Screen:** Provides Pre-Installed-For-LUI, by default.
    - **SWS Login Screen:** Provides Pre-Installed-For SWS, by default.
  - **SMB and Local Authentication**: Executes authentication process based on the user information stored at SMB server.
    - **LUI Login Screen:** Provides Pre-Installed-For-LUI, by default.
    - **SWS Login Screen:** Provides Pre-Installed-For SWS, by default.
  - **Kerberos and Local Authentication**: Executes authentication process based on the user information stored at kerberos server.
    - **LUI Login Screen:** Provides Pre-Installed-For-LUI, by default.
    - **SWS Login Screen:** Provides Pre-Installed-For SWS, by default.
  - **LDAP and Local Authentication**: Executes authentication process based on the user information stored at LDAP server.
    - **LUI Login Screen:** Provides Pre-Installed-For-LUI, by default.
    - **SWS Login Screen:** Provides Pre-Installed-For SWS, by default.
  - **SyncThruAaProvider**: Executes authentication process based on the user information allocated from SWS.
    - **LUI Login Screen:** Provides Pre-Installed-For-LUI , by default.
    - **SWS Login Screen:** Provides Pre-Installed-For SWS, by default.
  - **Standard Accounting Only**: Allows users to login by entering ID and password.
    - **ID/PW Login:** You can login from ID&Password.
    - **ID Only Login:** You can login from ID only.
  - **Options** : Select what to require for the user to login
    - **Auto Logout:** You can use auto logout. You can set the auto logout time.
    - **Logout Policy:** You can select the logout Identification type.
    - **Login Restriction:** You can set the Login Restriction time, attempts, or lock-out time.
- **Secure Print:** You can login from secure print.

Accounting

You can set usage limits for each user to use each feature if **Standard** accounting method is chosen (see "Authentication" on page 183).

✎ You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click the **Security** tab > **User Access Control** > **Accounting** > **Accounting Methods**. (see "Security tab" on page 202).

- **No Accounting:** Select not to use this feature.
- **Standard Accounting:** Select to use the installed job accounting method.
- **SyncThruAaProvider:** Select to use the job accounting method provided by the SyncThru™Web Admin Service (For detailed information, refer to the SyncThru™Web Admin Service guide).

General Settings

Allows you to set up the general settings.

Measurement

You can choose the measuring unit and default paper size.

Supplies Management

Allows you to set options for supplies reorder notification. If you set this option, the machine will display a warning message when the supplies are running out. Prepare the supplies in advance.

✎ - **Imaging Unit Reorder Notification:** Issues a notification when the imaging unit has the specified lifespan remaining.
- **Toner Cartridge Reorder Notification:** Issues a notification when a toner cartridge has the specified lifespan remaining.
- **Toner Save:** The **Toner Save** setting allows the user to save printing toner when printing a document.

Contention Management

Allows you to set **Copy**, **Print**, **Send**, **Report** priority.

More Settings

- **Job Progress Window:** Allows you to show job progress in display.
- **Skip Blank Pages:** This option allows you to specify not to print blank pages in the original data.
- **Job Deletion:** The Job Deletion setting specifies whether users can delete all jobs or only the jobs that they create.
  - **Allow all jobs to delete** : All users allow all jobs to delete.
  - **Allow only own jobs to delete** : Users allow only own jobs to delete.
- **Home Screen Lock:** All users are not allow to create, move or delete icon at home screen.

- **Job Rescheduling:** Processes jobs based on the order of priority set in the **Contention Management** option.
- **Smart Duplex:** Uses simplex mode when printing only one original page or a blank page although the duplex option is enabled.

Initial settings (administrator only)

You can change the initial settings when you first turn the machine on.

> If you want to stop adjusting the initial settings, press **Exit**. The settings you have set so far will be saved. However, the **Exit** button is not enabled if it's the first time using this option.

- **Language:** Select the language to use on the display screen then tap **Next**.
- **Note:** Read and tap **Next**.
- **Administrator Account:** Input the **Name**, **New Password**, **Confirm Password**.The **admin** is entered as a default in Name field.
- **Date & Time:** Set the **Date**, **Time**, **Time Zone**, date and hour format, and **Day light Saving**.

> Example for selecting the time zone, select your country area.

- **Device Attribution:** Remove the existing device name and enter the device name you want to use. Then tap **Next**. Keep in mind to enter the device name to be used on the network.

> - If necessary, enter the location of the machine in the **Location** field.
> - If necessary, enter the information in the **Administrator** field for the person to contact when any problem occurs on the machine.

- **Verify Connections:** Tap the **Test** button to verify the **Ethernet Card connection**. When **Connected** appears after tap the **Test** button, press **Next**.
  If **Not connected** appears, make sure that the machine is connected to the network then verify the LAN connection again.

> - If a network connection problem persists, contact your network administrator.
> - If you installed an optional fax kit, press each **Test** button for verify connection of them.

- **Network Settings:** Enter the **IP address**, **Subnet Mask**, **Gateway**, **Host Name**, **Domain Name**, **Primary DNS Server** and **Secondary DNS Server** in each field. Then tap **Next**.

> - If a new IP address is assigned automatically by a DHCP or BOOTP, press **DHCP** or **BOOTP**.
> - If you are not sure about your network environment, contact your network administrator.

- **SNMP Configuration:** Enter the **Community Name**, **Access Permission**, **Authentication User Name**, **Authentication Password**, **Authentication Confirm Password**, **Privacy Password** and **Privacy Confirm Password** in each field. Then tap **Done**.

Fax Settings

You can set the default fax options. Set the most frequently used fax settings.

Tap **Settings** > **Fax Settings** from the home screen or **Apps**.

- If the optional fax is not installed, the fax icon will not appear on the display screen.
- The fax options are different from country to country depending on the International Communications Regulatory. If some of the fax options explained in the instructions have been grayed-out, it means that the grayed-out option is not supported in your communication environment.
- You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **Fax** (see "Settings tab" on page 201).

Print Settings

You can set print related settings. When there is no specific input for printing options, the machine prints with the settings you set here. Set the frequently used printing settings. This feature can be useful if your company has a specific printing form.

Tap **Settings** > **Print Settings** from the home screen or **Apps**.

You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click the **Settings** tab > **Machine Settings** > **Printer**. (see "Settings tab" on page 201).

General

- **General:** You can set Skip Blank Page, Paper Source and Emulation.
  - **Skip Blank Pages:** You can skip the blank pages during printing.
  - **Paper Source:** You can select the tray as a paper source.
  - **Emulation:** You can choose the emulation format.

Layout

- **Layout:** Provides paper layout related options.
  - **Orientation:** Select the paper orientation.
  - **Duplex:** Select the paper orientation for duplex mode.
  - **Number of Copies:** Select the number of copies you want to print.
  - **Margin:** Adjust the margin for Common Duplex, Common Simplex and Emulation.

Box Settings

You can store documents print,download and sent from computers or scanned images in the **Box**. The **Box** is located on your machine's hard disk drive (HDD). It means the documents are stored on the HDD. You can create a password for a certain Stored Document, so unauthorized users cannot access it. Also, you can print stored documents by using a variety of printing features and send the documents to several destination such as email, server or fax. You can set a Stored Document and use Stored Document feature with SyncThru™ Web Service.

> If important data is stored in the **Box**, we recommend you to backup the data regularly. Samsung disclaims all responsibility for damage or loss of data caused by misuse or failure of the machine.

Report Settings

The paper source setting specifies the default paper tray that the machine uses to print reports.

Application Management

You can install or uninstall applications. If you add an application, you need to activate the license of the installed application. Some applications may not have a license.

Tap **Settings** > **Application Management** from the home screen or **Apps**.

> - You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click the **Maintenance** tab > **Application Management**. (see "Maintenance tab" on page 203).
> - Some models may not support this feature.

Installing an application

1 Tap **Install** button.

2 A pop-up window with folder tree appears. Select the application file and press **OK**.

3 A verification message appears. Read the agreement and check **I accept terms of the License Agreement** and press **OK**.

Application installation begins.

Viewing an application in details

1 Tap the application name you want to view in details.

2 View the application's information in details.

Enabling/Disabling an application

1 Select the application you want to enable/disable and press **Enable/Disable**.

2 The application you selected is enabled/disabled.

Uninstalling an application

1 Select the application you want to uninstall and tap **Uninstall**.

2 A confirmation window appears. Press **Yes**.

The application you selected is uninstalled.

Management

 • Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine.

• Tap (**Help**) from the home screen or (quick menu), and then select on any option you want to know about.

You can check the supplies life and printing report.

Tap **Settings** > **Management** from the home screen or **Apps**.

Supplies Life

This feature allows you to check the remaining percentage of each supply.

ex) toner cartridge / imaging unit

Report

This feature allows you to print all the reports provided by your machine. You can use these reports to help you maintain your machine.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Information** > **Print information** (see "Information tab" on page 200).

System Report

• **Configuration:** Print to see the machine configuration information. Product information, version information, product setting, and paper setting are included.
• **Supplies Information:** Print to check remaining percentage of each supply.
• **Usage Counter:** Print to check the count of the jobs performed. Print usage, scan usage, and fax usage information are included.
• **Demo Page:** Print demo page to check if the machine is working properly. Also you can select A4 or Letter size.
• **Error Information:** Print to check what errors have occurred in the machine. Error types and counts are included.
• **Network Configuration:** Print to see the network configuration information. Network configuration information such as TCP/IP, Raw TCP/IP, and LPD information are printed.
• **Account:** Print to see the account list.

Send

- **Send Confirmation:** You can set the machine to print a report whether a send was successfully completed or not.
- **Fax Received:** Print to check the list of faxes received.
- **Fax Sent:** Print to check the list of faxes sent.
- **Fax Scheduled Jobs:** Print to check the list of scheduled fax jobs.
- **Email Sent:** Print to check the transmission state of the **Scan to Email** job.

Font

- **PCL Font List:** Print to see the PCL font list.
- **PS Font List:** Print to see the PS font list

Network Settings

This option is setting the Network Settings functions.

✎ • Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine.

• Tap ? (**Help**) from the home screen or ☰ (quick menu), and then select on any option you want to know about.

Tap **Settings** > **Network Settings** from the home screen or **Apps**.

Ethernet

Feature	Description
Ethernet Port	You can enable/disable Ethernet port.
Ethernet Speed	You can select the speed rate of Ethernet.
MAC Address	Shows the Mac address of the machine.
IP Setting	You can set the **TCP/IPv4** IP setting.
DNS Configuration	You can set the **DNS** setting.
WINS	You can configure the WINS server.
Display IP Address / Host Name	You can set the machine to display the IP address or host name on the home screen.
Protocol	You can enable/disable IPv6 protocol.
IPv6 Address	You can set the IPv6 address types.
DHCPv6 Configuration	You can set the DHCPv6 configuration.
DHCP Unique Identifier	Show the DHCP Unique Identifier.
DHCP Identity Association Identifier	Show the DHCP Identity Association Identifier.
802.1x	You can enable/disable 802.1x Security.
802.1x Authentication Method	You can select the authentication algorithm to use.

TCP/IPv4

You can set IPv4 settings.

• **IP Setting:** You can choose the method for allocating IP addresses.
  - **Static**: Select to enter IP address/Subnet Mask/ Gateway Address manually.

- **BOOTP**: IP address/Subnet Mask/ Gateway Address are automatically allocated by the BOOTP Server.
- **DHCP**: IP address/Subnet Mask/ Gateway Address are automatically allocated by the DHCP Server.
- **DNS Configuration:** You can configure the DNS server.
  - **Host Name:** Enter the host name. You can enter up to 63 characters. Default name is "**SEC[MAC address]**".
  - **Domain Name:** Enter the domain name. You can enter up to 128 characters.
  - **Primary DNS Server:** Enter the address of the DNS server you want to use primarily.
  - **Secondary DNS Server:** Enter the address of the DNS server you want to use as an alternative.
  - **Dynamic DNS Registration:** If you want to use, check the checkbox(es) of dynamic DNS registration. If this option is checked, the machine registers its host name and domain name to configured DNS servers dynamically. Also, if this option is checked and DHCP is selected, DHCP FQDN options are automatically disabled.
- **WINS:** You can configure the WINS server. WINS is used in the Windows operating system. Select this option.
- **Display IP Address** / **Host Name**: You can set the machine to display the IP address or host name on the Notification Bar. If you select this option the IP address will show on the Notification Bar.

TCP/IPv6

You can set the IPv6 settings.

- **Protocol:** Tap to use IPv6 protocol in the system. Reboot the machine to apply the change.
- **IPv6 Address:** Shows the IPv6 address types.
  - **Link-local Address:** This is an IPv6 address starting with a prefix value FE80. This address has local link scope and is automatically generated.
  - **Stateless Address:** This is an IPv6 address which is formed by router advertised prefix and interface identifier. On a interface like Ethernet, interface identifier is usually derived from the Mac address of the machine. The advertised prefix depends on the router configurations.

More than one address may be configured for the router advertisement, but only one will be displayed in the display screen.

  - **Stateful Address:** This is an IPv6 address which is acquired by a DHCPv6 server.
  - **Manual Address:** This is an IPv6 address which an administrator can configure manually.
- **DHCPv6 Configuration:** Select the DHCPv6 configuration you want to us.
  - **Use DHCP as directed by a router:** DHCPv6 is enabled when a router advertises to use DHCPv6.
  - **Always Enable DHCP:** Regardless of router advertisement, use DHCPv6 to acquire an IPv6 address.
  - **Never use DHCP:** Disables DHCPv6.
- **DHCP Unique Identifier:** Show the DHCP Unique Identifier.
- **DHCP Identity Association Identifier:** Show the DHCP Identity Association Identifier.

802.1x

You can enable 802.1x authentication, which is a port-based authentication. If this authentication is enabled, the machine is not allowed to access through the protected side of the network until the machine is authorized. Use this feature to protect your network.

- **802.1x:** Check to enable this feature.
- **802.1x Authentication Method:** Select the authentication algorithm to use.
  - **EAP-MD5:** Offers minimal security. The MD5 hash function is vulnerable to dictionary attacks, and does not support key generation.
  - **PEAP:** Recommended for users who only intend to use Microsoft desktop clients and servers. For other users, it is not recommended.
  - **EAP-MS-CHAPv2:** MS-CHAPv2 provides two-way authentication between peers by combining a peer Challenge message with the Response packet and an authenticator Response message on the Success packet.
  - **TLS:** This is used to provide secure communication over the Internet between a client and server.

Network Protocol

You can enable/disable what you want network protocol.

Network Security

📝 You can enable and configure these options in SyncThru™ Web Service only(see "Security tab" on page 202).

Feature	Description
IPSec	You can disable IPSec if it is turned on in SyncThru™ Web Service.
Network Filtering	You can disable the network filtering options if it is turned on in SyncThru™ Web Service.

- **IPSec:** You can disable IP security settings.
- **Network Filtering**
  - **MAC Filtering** : Disable MAC filtering.
  - **IPv4 Filtering**: Disable IPv4 filtering.
  - **IPv6 Filtering**: Disable IPv6 filtering.

NFC

You can turn on/off NFC function. The NFC feature is available when the optional Wi-Fi/NFC kit or Wi-Fi/NFC/BLE kit installed (see "Using the NFC feature (Optional)" on page 156).

System

✐ • Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine.

• Tap ⟨?⟩ (**Help**) from the home screen or ☰ (quick menu), and then select on any option you want to know about.

Date and Time

When you set the time and date, it will be used for sending/printing delayed fax/print jobs or will be printed on reports. However, if they are not correct, you need to change it to the correct time.

About System

You can see the hardware configuration, system capabilities, and software version of the machine.

Machine Details

You can check the detailed machine information. Check the status of installed hardware and software versions to help you maintain the machine. You can download the latest software from the Samsung website (http://www.samsung.com/printer).

- **H/W Configuration:** Shows the status of installed hardware including optional parts .
- **Capabilities:** Shows the capabilities of the hardware.
- **Software Versions:** Shows the software versions of the systems installed.

Accessibility

Allows you to configure the machine to make it easier to use. In this menu, you can change various sound, interaction, and display options so that the machine is more accessible to users.

Contact Information

This feature allows you to view the service center's information and contact point where users can get help. If you log in as an administrator, you can change the contact information.

- **System Administrator:** Check the contact information of the administrator.
- **Samsung Support:** Check the information of the service center.

Useful Tools

This chapter introduces management tools provided to help you make full use of your machine.

Accessing management tools

Samsung provides a variety of management tools for Samsung printers.

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

2 From the **Start** menu, select **Programs** or **All Programs**.
- For Windows 8, from **Charms**, select **Search** > **Apps**.
- For Windows 10 / Windows Server 2016
  From task bar, type in **Samsung Printers** in **Search** input area. Press the enter key.
  OR
  From the **Start**( ) icon, select **All apps** > **Search** > **Samsung Printers**.

3 Find **Samsung Printers**.

4 Under **Samsung Printers**, you can see installed management tools.

5 Click the management tool you want to use.

- After installing the driver, for some management tools, you can access them directly from the **Start** menu > **Programs** or **All Programs**.
- For Windows 8, after installing the driver, for some management tools, you can access them directly from the **Start** screen by clicking on the corresponding tile.

SyncThru™ Web Service

This chapter gives you step-by-step instructions for setting up the network environment through SyncThru™ Web Service.

> 🖉 Some menus may not appear on the display screen depending on the settings or models. If so, it is not applicable to your machine.

What is SyncThru™Web Service?

If you have connected your machine to a network and set up TCP/IP network parameters correctly, you can manage the machine via SyncThru™ Web Service. 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 preference.
- Set the email notifications advising of the machine's status.
- Get support for using the machine.
- Upgrade machine software.

Required web browser

You need one of the following web browsers to use SyncThru™ Web Service.

- Internet Explorer® 8.0 or higher
- Chrome 27.0.1453 (stable release at 2013-05-21) or higher
- FireFox 21.0 (stable release at 2013-05-14) or higher
- Safari 5.1.9 (Mac OS X 10.6 support) or higher

Connecting to SyncThru™ Web Service

IPv4 supported web browser

1 Start a web browser, such as Internet Explorer®, that supports IPv4 addressing as a URL.

Enter the machine's IP address (http://xxx.xxx.xxx.xxx) in the address field and press the Enter key or click **Go**.

> 🖉 You can get the machine's IP address from the machine (see"Report" on page 190).

2 Your machine's SyncThru™ Web Service website opens.

IPv6 supported web browser

1 Start a web browser, such as Internet Explorer®, that supports IPv6 addressing as a URL.

2 Select one of the IPv6 address (**Stateless Address**, **Stateful Address**, **Manual Address**, **Link-Local**) from **Network Configuration Report**.

> 🖉 You can get the machine's IPv6 address from the machine report (see"Report" on page 190).

3 Enter the IPv6 addresses (eg., http://[3ffe:10:88:194:213:77ff:fe82:75b]).

> ⚠ The address must be enclosed in '[ ]' brackets.

4 Your machine's SyncThru™ Web Service website opens.

Logging into SyncThru™ Web Service

Before configuring options in SyncThru™ Web Service, you need to log-in as an administrator. You can still use SyncThru™ Web Service without logging in, but you will not have access to or view the **Settings** tab and the **Security** tab.

1 Click **Login** on the upper right of the SyncThru™ Web Service website.

A log-in page appears.

2 Type in the **ID** and **Password** and select the **Domain**. Then click on **LOGIN**.

Use the same login ID, Password, Domain as when logging in from the machine (see "Log-in" on page 176).

> 🖉 If you want to create a new user or change the password, see "Security tab" on page 202.

Information tab

This tab gives you general information about your machine. You can check things, such as the machine's status, supplies' status, count information, network information, and more. You can also print reports, such as configuration page.

- **Active Alerts:** You can check the current alerts in the machine. Use this information to troubleshoot machine errors.
- **Supplies:** You can check the supplies' information. For toner cartridges and imaging units, supplies' status is displayed with a visual graph showing you the amount of each supply left. Page counts are also available which can help you predict when to change the supplies. This feature is also available from the machine (see "Management" on page 190).
- **Usage Counter:** You can check the billing information and usage counter of the machine. This feature is also available from the machine (see "Counter" on page 29).
- **Current Settings:** Shows the current settings of the machine and network.
  - **Machine Information:** Shows the current machine settings.
  - **Network Information:** Shows the current network settings. Use this page as a reference and change the necessary settings needed for using the network.
  - **Security Information:** Shows the current security settings of the machine and network.
  - **Print Information:** You can print all the reports provided by your machine. You can use these reports to help you maintain your machine. This feature is also available in the machine (see "Report" on page 190).

Address Book tab

You can manage the address book. This feature is also available from the machine (see "Understanding the address screen" on page 123).

- **Individual:** You can manage individual entries in the address book.
- **Group:** You can manage group address books.

Box tab

You can manage the Box. This feature is also available from the machine (see "Using Box" on page 220).

Forward / Print / Send / Download

You can manage the folder and files in **Forward**, **Print**, **Send**, **Download**.

- **Add:** You can create **Box** in **Print**, **Send**, **Download** tab and **Secured Box** in **Print**, **Send** tab.
- **Delete:** You can delete **Box** and file in **Forward**, **Print**, **Send**, **Download** tab.
- **Edit:** You can edit **Box** and file name in **Print**, **Send**, **Download** tab.
- **Browse:** If you want to browse the **Box**, check the **Box** you want then click **Browse**.
- **Task:** You can copy and move the Box and files in **Print**, **Send**, **Download** tab.

Settings tab

Settings tab has sub menus, **Machine Settings** and **Network Settings**. You cannot view or access this tab if you do not log-in as an administrator (see "Logging into SyncThru™ Web Service" on page 199).

- **Machine Settings:** You can set machine settings.
  - **System:** You can set machine related settings.
  - **Printer:** You can set print related settings such as darkness or adjust the background. This feature is also available from the machine (see "Print Settings" on page 187).
  - **Copy:** You can set copy related settings such as darkness or adjusting the background. This feature is also available from the machine (see "Copy tab" on page 86).
  - **Fax:** You can set fax related settings such as fax number or redial times. This feature is also available from the machine (see "Understanding the fax screen" on page 111).
  - **Scan & Send:** You can set scan related settings. This feature is also available from the machine (see "Understanding the Scan & Send screen" on page 97).
  - **Box:** You can set box related settings.This feature is also available from the machine (see "Using Box" on page 220).
  - **Address Book Settings:** This address book contains contacts that are available to all users. You can use the address book to make contacts available to anyone who uses the machine.
  - **E-mail Notification:** When an error occurs or the consumables are running out, the machine sends a notification to the administrator via e-mail. You can set whether to use this feature or not. You can also select which alerts to receive and when.
- **Network Settings:** You can set up the network environment to use your machine as a network machine. You can also set the settings from the machine. Refer to the network setup chapter (see "Network settings (configuring TCP/IP)" on page 141).
  - **General:** You can set general machine information to use in the network and set Ethernet settings. This feature is also available from the machine (see "Ethernet" on page 141).
  - **TCP/IPv4, TCP/IPv6, Raw TCP/IP, LPR, IPP,Telnet, WSD, SLP, UPNP, mDNS, CIFS, SNMP, SNMPv1/v2, SNMPv3:** You can set protocol settings.This feature is also available from the machine.
  - **Outgoing Mail Server (SMTP):** You can set server settings for outgoing emails. If this setting is not configured, you cannot use scan to email feature. Outgoing emails will be sent through SMTP server you set here. This feature is also available from the machine (see "Network Protocol" on page 194).

- **Incoming Mail Server (POP3):** You can set your machine to get email from mail server when I-FAX printing is required. This feature is also available from the machine (see "Network Protocol" on page 194).
- **HTTP:** You can allow or block users from accessing the SyncThru™ Web Service. This feature is also available from the machine (see "Network Protocol" on page 194).
- **Proxy:** You can set proxy settings and enable authentication to connect to license server through http proxy server. These proxy settings are provided currently only if the administrator wants to update an XOA application's license online through proxy server.

Security tab

The security tab has **System Security**, **Network Security**, **User Access Control** and **System Log**. You cannot access this tab if you do not log-in as an administrator (see "Logging into SyncThru™ Web Service" on page 199).

- **System Security:** From the SyncThru™ Web Service, select the **Security** tab > **System Security**.
  - **System Administrator:** Enter the system administrator's information. The machine sends email notification to the email address set here. This feature is also available from the machine.
  - **Feature Management:** Specifies the services, PC application security, physical ports, and network protocol features to use. Select the features to use, and then click **Apply**.
  - **Information Hiding:** Specifies which information to hide. Select the amount of information that you want to hide, and then click **Apply**.
  - **Restart Device:** You can reboot your machine. Click the **Restart Now** button to reboot.
- **Network Security:** From the SyncThru™ Web Service, select the **Security** tab > **Network Security**.
  - **Digital Certificate:** You can manage digital certificates. A digital certificate is an electronic certificate that verifies the secure association between communication nodes. You need to add the certificate for SSL communication.
  - **Secure Connection:** You can enable or disable secure connection to use more enhanced secure network channel. For secure communication, using the **Secure Connection** feature is recommended.
  - **SNMPv3:** You can set SNMPv3.
  - **IP Security:** You can set IP security settings.
  - **802.1x(Ethernet):** You can enable/disable 802.1x Security as well as manage filtering rules.
  - **IP/MAC Filtering:** You can set filtering options for IP and MAC addresses. If the administrator does not add a filtering rule for IPv4, IPv6, and MAC addresses, nothing is filtered. If the administrator has added a filtering rule, filtering will be applied to the entered IPv4, IPv6, and MAC addresses.
    - **IPv4 Filtering:** You can enable/disable IPv4 filtering as well as manage filtering rules.
    - **IPv6 Filtering:** You can enable/disable IPv6 filtering as well as manage filtering rules.
    - **MAC Filtering:** You can enable/disable Mac filtering as well as manage filtering rules.
- **External Authentication Server:** Set the servers for authentication.
- **User Access Control:** You can restrict users from accessing the machine or application. You can also give specific permission for user to only use certain feature of the machine. For example, you can allow user A to only use print feature. In this case, user A will not be able to scan, copy or fax with the machine.
  - **Authentication:** You can choose the authentication method for user authentication. Select a mode and click on the **Options** button.

- **Authorization (Giving rights):** You can give permissions to a user to only use certain features of the machine.
    - **Authority Management:** You can give different rights to different users. For example, you can allow user A to use all the machine's functions while giving user B only the right to print.
    - **External User Authority:** Set the servers for authentication.
- **Accounting:** You can manage accounts.
- **User profile:** You can store user information on the machine's hard drive or NFC. You can use this feature to manage the users using the machine. You can also group the users and manage them as a group. You can make a maximum of 500 individual users and 200 user groups. User identified by user ID and password are allowed to modify their password. They are allowed to view all of their profile information. When it comes to the role, users are allowed to see only the role they belong to but not its permissions.
- **System Log:** You can keep logs of events that have happened in the machine. The administrator can record and manage the machine usage information by keeping the system log files. The system log files are stored on the machine's mass storage device (hard disk), and when it is full, it will erase old data. Export and save the important audit data separately using the exporting feature.
    - **Log configuration:** You can enable or disable keeping logs. You can also backup log files by periods and transfer to a repository server.
    - **Log Viewer:** You can view, delete, and search log files.

Maintenance tab

This tab allows you to maintain your machine by upgrading firmware, managing applications, and setting contact information for sending emails. You can also connect to the Samsung website or download manuals and drivers by selecting the **Link** menu.

- **Firmware Version:** You can check the firmware version used in the machine. Check the version and update it if necessary. This feature is also available from the machine (see "Machine Details" on page 195).
- **Samsung MIB Version:** The version number of the MIB (Management Information Base).
- **Application Management:** You can add or delete applications/license. If you add an application, you need to activate the license of the installed application. Some applications may not have a license. This feature is also available from the machine (see "Application Management" on page 188)
- **Backup/Restore:** You can backup the machine's configurations and restore the configuration when there is a problem with the machine. The saved (backed up) files can also be used to configure other machines.
- **Wi-Fi Interface:** You can enable or disable the Wi-Fi menu.
- **Contact Information:** You can view contact information. To change the information, (see "Contact Information" on page 195).
- **Link:** You can view links to useful websites where you can:
  - view product information and get support (samsung website).
  - download manuals and drivers.
  - order consumable supplies.

Easy Eco Driver

With the Easy Eco Driver, you can apply Eco features to save paper and toner before printing.

Easy Eco Driver also allows you simple editing such as removing images and texts, and more. You can save frequently used settings as a preset.

How to use:

1. Open a document to print.
2. Open printing preference window (see "Opening printing preferences" on page 61).
3. From the **Favorites** tab, select **Eco Printing Preview**.
4. Click **OK** > **Print** in the window. A preview window appears.
5. Select the options you want to apply to the document.
   You can see the preview of the applied features.
6. Click **Print**.

🖎 If you want to run Easy Eco Driver every time you print, check **Start Easy Eco Driver before printing job** checkbox in the **Basic** tab of the printing preference window.

Using Samsung Easy Document Creator

- Available for Windows and Mac OS users only.
- Windows XP Service Pack 3 or higher and Internet Explorer 6.0 or higher is the minimum requirement for Samsung Easy Document Creator.
- Samsung Easy Document Creator is installed automatically when you install the machine software.

Samsung Easy Document Creator is an application to help users scan, compile, and save documents in multiple formats (including .epub). These documents can be shared over social networking sites or fax. Whether you're a student organizing research from a library or a stay-at-home parent sharing scanned pictures from last year's birthday party, Easy Document Creator will provide you with the necessary tools.

The Samsung Easy Document Creator provides the following features:

- **Scan:** Use for scanning pictures or documents.
- **Text Converting Scan(Windows only):** Use for scanning documents that need to be saved in an editable text format.
- **Document Conversion:** Provides the ability to convert existing files into multiple formats.
- **Fax:** Provides the ability to directly fax a document from Easy Document Creator if the Samsung Network PC fax driver is installed.

Click the **Help** (?) button from the window, and then click on any option you want to know about.

Using Samsung Printer Center

 Available for Windows users only.

The **Samsung Printer Center** allows you to manage all the printer drivers installed on your computer from a single integrated application. You can use the **Samsung Printer Center** to add and remove printer drivers, check the status of printers, update printer software, and configure printer driver settings.

Understanding Samsung Printer Center

To open the program:

For Windows,

Select **Start** > **Programs** or **All Programs** > **Samsung Printers** > **Samsung Printer Center**.
- For Windows 8
  From the **Charms**, select **Search** > **Apps** > **Samsung Printers** > **Samsung Printer Center**.
- For Windows 10 / Windows Server 2016
  From task bar, type in **Samsung Printers** in **Search** input area. Press the enter key and then select **Samsung Printer Center**.
  OR
  From the **Start**( ) icon, select **All apps** > **Samsung Printers** > **Samsung Printer Center**.

Printers tab

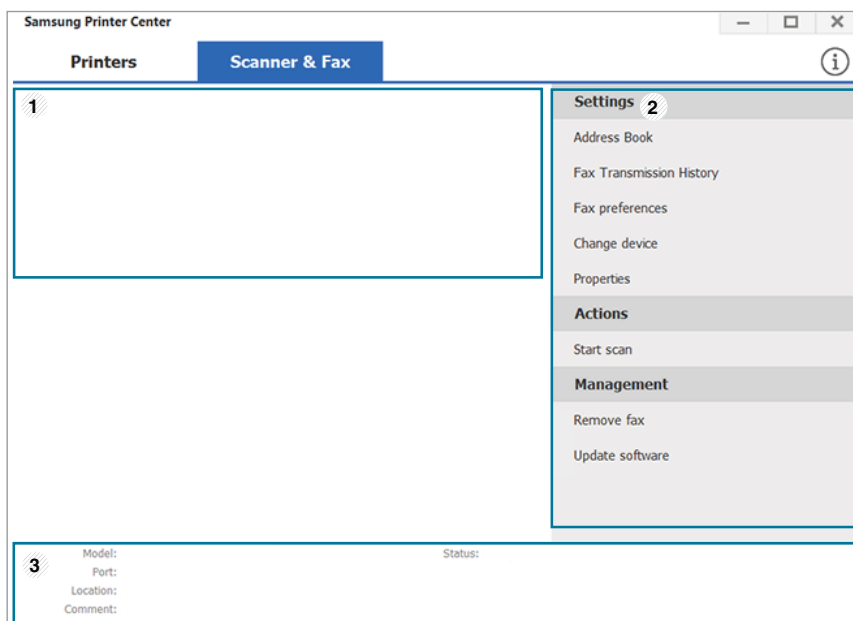 The screenshot may differ depending on operating system you are using.

1	Printer list	Displays the printer drivers installed on your computer. To add a printer driver to the list, click the ➕ button.

2	Quick links	Displays links to various printer driver management functions. The quick links in the **Printers** tab link to the following functions:
		• **Settings:** Allows you to configure the settings for individual printer driver.
		  - **Set as default printer:** Sets the selected printer driver as the default printer. If the selected printer driver is already set as the default printer, then this option is not activated.
		  - **Printing preferences:** Allows you to configure the default print settings.
		  - **Device options:** Allows you to configure advanced options, such as the settings for optional devices and additional features.
		
		  ✎ The option allows you to modify the **Printer Status** and **Stylish User Interface** settings.
		
		  - **Change device:** Allows you to change the device into another device.
		  - **Properties:** Allows you to configure the printer driver properties, such as the name of the printer driver and its location, or add comments about the printer driver .
		• **Actions:** Allows you to use the scan feature (this option is enabled only if the selected device supports the scan feature).
		• **Management:** Allows you to manage the devices registered in the program.
		  - **Add a new printer / Remove printer:** Adds a new device or removes an existing device.
		  - **Diagnose printer:** Diagnoses problems in the selected device and suggests solutions.
		  - **Update software:** Downloads and applies the applicable software updates.

3	Printer information	Provides general information about the selected device, such as its model, IP address, port number, and status.

Scanner & Fax Tab

✎   • The screenshot may differ depending on operating system you are using.
    • Available for multifunction products only.

		Displays the fax and scanner driver installed on your computer. To add a fax or scanner driver to the list, click the (**Add Fax**) or (**Add Scanner**) button.
1	Printer list	

2	Quick links	Displays links to the functions available for managing fax or scanner drivers. The quick links in the **Scanner & Fax** tab offer the following features:
		
		📝 To use this feature, the scanner driver and fax driver must be installed on the computer.
		
		• **Settings:** Allows you to configure the settings for fax or scanner drivers.
		  - **Address Book (fax only):** Opens the Address Book.
		  - **Fax Transmission History (fax only):** Opens the fax transmission history.
		  - **Fax preferences (fax only):** Allows you to configure the default fax settings.
		  - **Change device:** Allows you to change the devices into another device.
		  - **Properties:** Allows you to configure the properties of a device, such as location and add comments about the device.
		• **Actions:** Allows you to use the scan feature.
		• **Management:** Allows you to manage the devices registered in the program.
		  - **Remove fax or Remove scan:** Removes the selected fax or scan driver.
		  - **Update software:** Downloads and applies the applicable software updates.

3	Printer information	Provides general information about the selected device, such as the model, IP address, port number, and machine status.

Using Samsung Easy Printer Manager

> 📝
> - Available for Windows and Mac OS users only.
> - For Windows, Internet Explorer 6.0 or higher is the minimum requirement for Samsung Easy Printer Manager.

Samsung Easy Printer Manager is an application that combines Samsung machine settings into one location. Samsung Easy Printer Manager combines device settings as well as printing environments, settings/actions and launching. All of these features provide a gateway to conveniently use your Samsung machine. Samsung Easy Printer Manager provides two different user interfaces for the user to choose from: the basic user interface and the advanced user interface. Switching between the two interfaces is easy: just click a button.

Also, **Easy Capture Manager** is installed automatically when you install the **Samsung Easy Printer Manager**. You can also launch **Easy Capture Manager** manually. Capture your screen and launch **Easy Capture Manager** by simply pressing the Print Screen key on the keyboard. Now you can easily print your captured screen as captured or edited.

Understanding Samsung Easy Printer Manager

To open the program:

For Windows,

Select **Start** > **Programs** or **All Programs** > **Samsung Printers** > **Samsung Easy Printer Manager**.
- For Windows 8
  From the **Charms**, select **Search** > **Apps** > **Samsung Printers** > **Samsung Printer Manager**.
- For Windows 10 / Windows Server 2016
  From task bar, type in **Samsung Printers** in **Search** input area. Press the enter key and then select **Samsung Printer Manager**.
  OR
  From the **Start**(⊞) icon, select **All apps** > **Samsung Printers** > **Samsung Printer Manager**.
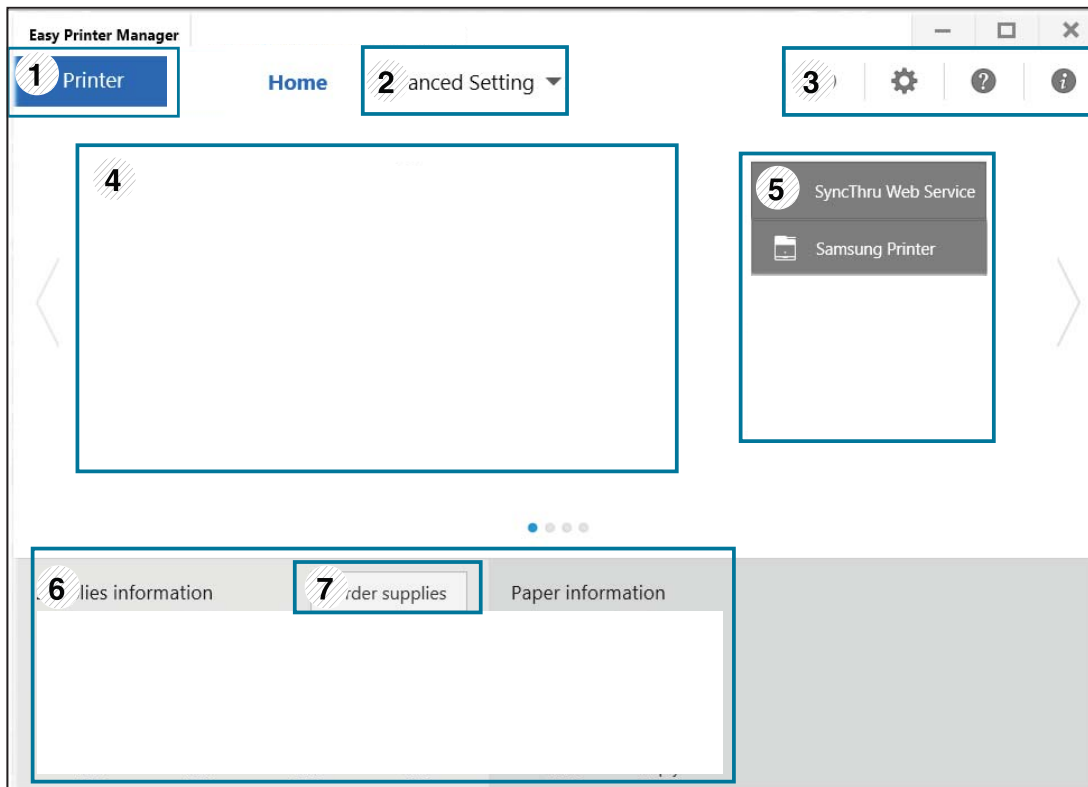
For Mac,

Open the **Applications** folder > **Samsung** folder > **Samsung Easy Printer Manager**.

The Samsung Easy Printer Manager interface is comprised of various basic sections as described in the table that follows:

> 📝
> The screenshot may differ depending on operating system, model, or options.

1	Printer list	The Printer List displays printers installed on your computer and network printers added by network discovery (Windows only).

2	Advanced Setting	The advanced user interface is intended to be used by the person responsible for managing the network and machines.
		
		🖉 Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine.
		
		• **Device Settings:** You can configure various machine settings such as machine setup, paper, layout, emulation, network, and print information.
		
		🖉 If you connect your machine to a network, the SyncThru™ Web Service icon is enabled.
		
		• **Scan to PC Settings:** This menu includes settings to create or delete scan to PC profiles.
		  - **Scan Activation:** Determines whether or not scanning is enabled on the device.
		  - **Basic tab:** Contains settings related general scan and device settings.
		• **Alert Settings (Windows only):** This menu includes settings related to error alerting.
		  - **Printer Alert:** Provides settings related to when alerts will be received.
		  - **Email Alert:** Provides options relating to receiving alerts via email.
		  - **Alert History:** Provides a history of device and toner related alerts.

3	Application information	Includes links for changing to the refresh, preference setting, help, and about.

4	Printer information	This area gives you general information about your machine. You can check information, such as the machine's model name, IP address (or Port name), and machine status. ![icon] This button opens the **Troubleshooting Guide** when an error occurs. You can directly open the troubleshooting section in the user guide.
5	Quick links	Displays **Quick links** to machine specific functions. This section also includes links to applications in the advanced settings. ![icon] If you connect your machine to a network, the SyncThru™ Web Service icon is enabled.
6	Contents area	Displays information about the selected machine, remaining toner level, and paper. The information will vary based on the machine selected. Some machines do not have this feature.
7	Order supplies	Click on the **Order** button from the supply ordering window. You can order replacement toner cartridge(s) from online.

![icon] Click the **Help** (![?]) button from the window, and then click on any option you want to know about.

Using Samsung Printer Status

The Samsung Printer Status is a program that monitors and informs you of the machine status.

> • The Samsung Printer Status window and its contents shown in this user guide may differ depending on the machine or operating system in use.
> • Check the operating system(s) that are compatible with your machine (see "System requirements" on page 286).
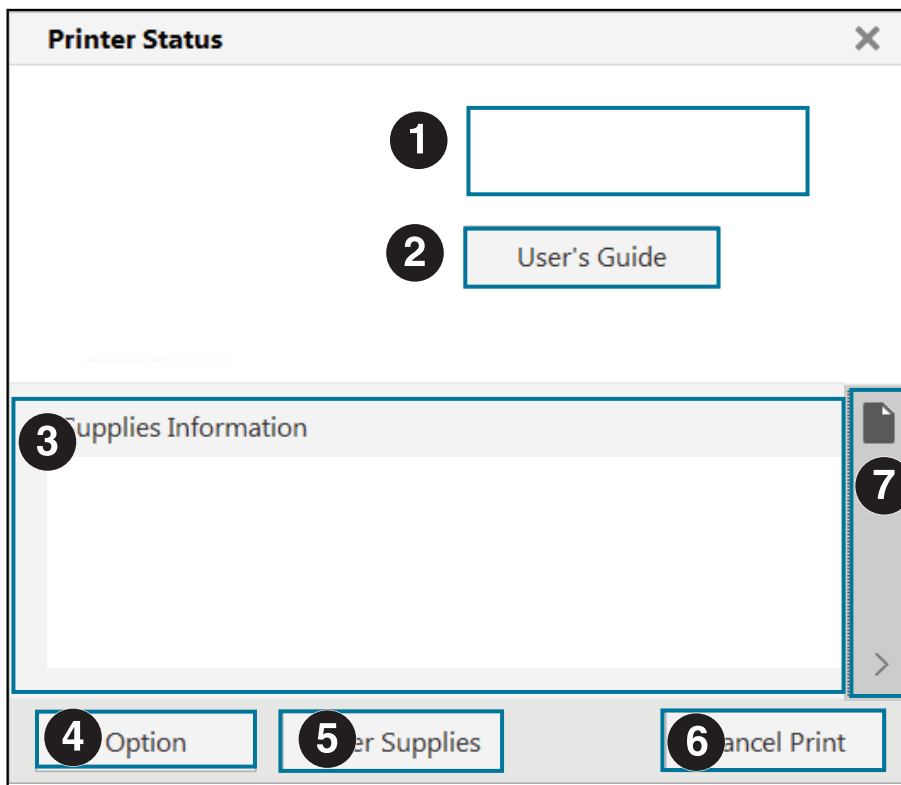> • Available for Windows OS users only.

Samsung Printer Status overview

If an error occurs while operating, you can check the error from the Samsung Printer Status. Samsung Printer Status is installed automatically when you install the machine software.

You can also launch Samsung Printer Status manually. Go to the **Printing Preferences**, click the **Printer Status** button.

These icons appear on the Windows task bar:

Icon	Mean	Description
	Normal	The machine is in ready mode and experiencing no errors or warnings.
	Warning	The machine is in a state where an error might occur in the future. For example, it might be in toner low status, which may lead to toner empty status.
	Error	The machine has at least one error.

1	Device Information	You can view the device information.
2	User's Guide	You can view the online User Guide. ✏ This button opens the **Troubleshooting Guide** when an error occurs. You can directly open the troubleshooting section in the user guide.
3	Supplies Information	You can view the percentage of toner remaining in each toner cartridge. The machine and the number of toner cartridge(s) shown in the above window may differ depending on the machine in use. Some machines do not have this feature.
4	Option	You can set printing job alert related settings.
5	Order Supplies	You can order replacement toner cartridge(s) from online.
6	Cancel Print or Close	• **Cancel Print:** If print job is waiting in the print queue or printer, cancel all user's print jobs in the print queue or the printer. • **Close:** Depending on the status of the machine or the supported functions, the **Close** button may appear to close the status window.
7	Toner/Paper Information	This button areas for paper and toner info will be available based on the device.

Using Samsung Printer Experience

Samsung Printer Experience is a Samsung application that combines Samsung machine settings and machine management into one location. You can set device settings, order supplies, open troubleshooting guides, visit Samsung's website, and check connected machine information. This application will be automatically downloaded from the Windows **Store** if the machine is connected to a computer with an Internet connection.

✎ Available for Windows 8 or higher users only.

Understanding the Samsung Printer Experience

To open the application,

From the **Start** screen or **Start**(⊞) icon, select the **Samsung Printer Experience** (🖨) tile.

The **Samsung Printer Experience** interface comprises various useful features as described in the following table:

✎ The screenshot may differ depending on operating system, model, or option.
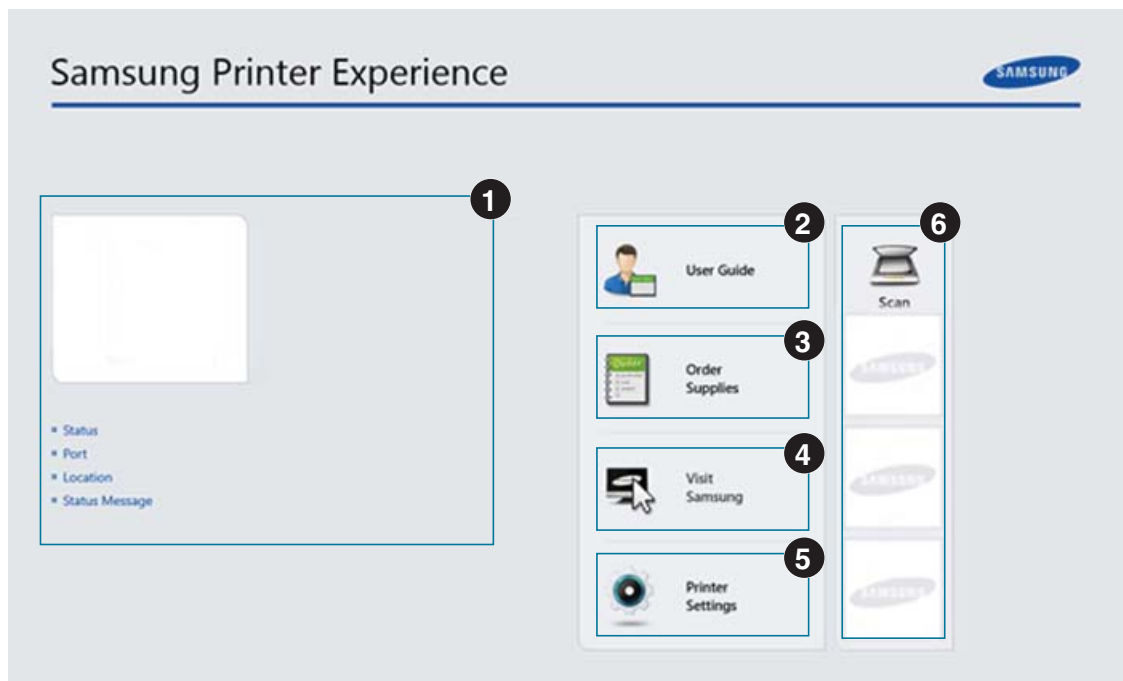
1	Printer Information	This area gives you general information about your machine. You can check information, such as the machine's status, location, IP address, and remaining toner level.

2	User Guide	You can view the online User Guide. You need to be connected to the Internet to use this feature. ✎ This button opens the **Troubleshooting Guide** when an error occurs. You can directly open the troubleshooting section in the user guide.
3	Order Supplies	Click on this button to order replacement toner cartridges online. You need to be connected to the Internet to use this feature.
4	Visit Samsung	Links to Samsung printer website. You need to be connected to the Internet to use this feature.
5	Printer Settings	You can configure various machine settings such as machine setup, paper, layout, emulation, networking, and print information through **SyncThru™ Web Service**. Your machine needs to be connected to a network. This button will be disabled if your machine is connected via USB cable.
6	Device List & Latest Scanned Image	The scan list displays devices that supports **Samsung Printer Experience**. Under the device, you can see the latest scanned images. Your machine needs to be connected to a network to scan from here. This section is for the users with multi-functional printers.

Adding/Deleting Printers

If you do not have any printer added to the **Samsung Printer Experience**, or if you want to add/delete a printer, follow the instructions below.

✎ You can only add/delete network connected printers.

Adding a printer

1 Right-click the **Samsung Printer Experience** page and select **Settings**.

2 Select **Add Printer**

3 Select the printer you want to add.

You can see the added printer.

✎ If you see ⊕ mark, you can also click ⊕ mark to add printers.

Deleting a printer

1 Right-click the **Samsung Printer Experience** page, and then click **Settings**.

2 Select **Remove Printer**.

3 Select the printer you want to delete.

4 Click **Yes**.

   You can see that the selected printer is removed from the screen.

Printing

This section explains common printing tasks from the **Start** screen.

The screenshot may differ depending on operating system, model, or option.

Basic printing

1 Open the document to print.

2 Select **Print** from the **File** menu.

3 Select your printer from the list.

4 Select the printer settings, such as the number of copies and orientation.

5 Click the **Print** button to start the print job.
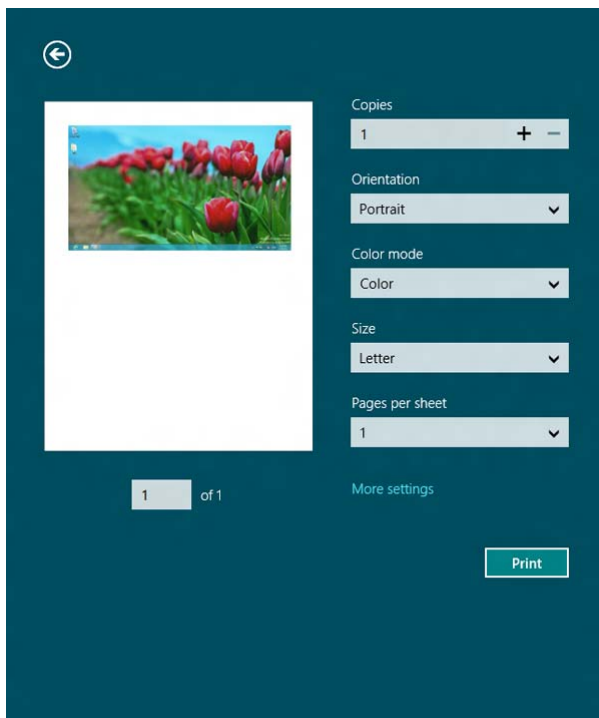
Cancelling a print job

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

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

- You can also cancel the current job by pressing ❌ (**Stop**) button on the control panel.

Opening more settings

✎　　The screen may appear somewhat different depending on the model or options.

You can set up more printing parameters.

1 Open the document you want to print.

2 Select **Print** from the **File** menu.

3 Select your printer from the list.

4 Click **More settings**.

Using the sharing feature

Samsung Printer Experience allows you to print from other applications installed on the computer using the sharing feature.

This feature is only available for printing jpeg, bmp, tiff, gif, and png file formats.

1 Select the content you want to print from other application.

2 Click **Share** or press Window key + **H**.

3 Select the printer settings, such as the number of copies and orientation.

4 Click the **Print** button to start the print job.

Scanning

This section is for the users with multi-functional printers.

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

Scanning from Samsung Printer Experience

The most frequently used printing menus are displayed for quick scanning.

1 Place a single document face down on the document glass, or load the documents face up into the document feeder.

2 Click the **Samsung Printer Experience** tile on the **Start** screen.

3 Click **Scan** ( ).

4 Set up the scanning parameters such as image type, document size, and resolution.

5 Click **Prescan** ( ) to check the image.

6 Adjust the prescanned image with scanning operation functions such as rotate and mirror.

7 Click **Scan** ( )and save the image.

- When you place the originals in the Dual Scan Document Feeder (DSDF), **Prescan** ( ) is not available.
- You can skip step 5, if the Prescan option is selected.

Using Box

Understanding the Box screen

Documents and images printed, scanned, downloaded and sent from computers can be stored in the **Box**. The **Box** is located on your machine's hard disk drive (HDD). It means the documents are stored on the HDD. You can create a password for a certain Stored Document, so unauthorized users cannot access it. Also, you can print stored documents by using a variety of printing features and send the documents to several destination such as email, server or fax. You can set a Stored Document and use the Stored Document feature with SyncThru™ Web Service.

- If important data is stored in the **Box**, we recommend you to backup the data regularly. Samsung disclaims all responsibility for damage or loss of data caused by misuse or failure of the machine.

- Tap [?] (**Help**) from the home screen or [≡] (quick menu) and then select on any option you want to know about.

Command keys

When you selected files, shows below menus.

- [📄] (**Print**) : Print files directly.

- [➤] (**Send**) : Send files to **Fax**, **Email**, **Server**, **Box**, or **USB**.

- [🗑] (**Delete**) : Delete folders and files.

Button	Name	Description
≡	**Quick Menu**	Open the quick menu.
☰	View Mode	Select the view type.
🔍	**Search**	Search for a desired menu or app.
★	**My Program**	Show my program list.

Button	Name	Description
	Sub menu (Action overflow)	Open the sub menu. • **Select All** : Select all folders and files. • **Print Options** : Set options for printing. • **Create folder** : Create a folder. • **Rename** : Rename a folder or a file. • **Delete** : Delete folders and files. • **Copy** : Copy folders and files. • **Move** : Move folders or files to other storage. • **Clear Browsing Info** : Clear browsing information. • **Detail** : View the detail information about a folder or a file. • **Filing Policy** : Select a filing policy. • **Format** : Formatting files or data.

Storage

Button	Name	Description
	Forward	Manage the forward data.
	Print	Manage the stored print data.
	Send	Manage the stored send data.
	Download	Manage the stored download data.
	USB	Use a USB memory.

Job progress

This menu appears whenever the machine is processing a job.

• **Detail:** Tap this button to see the status, type, and time of the job.
• **Preview Area:** Allows you to see a preview of the document being saved. The image in the Preview area indicates the current send settings, such as the orientation and size of the file.

Using Box

To use the **Box** feature, tap **Box** from the home screen or **Apps**.

Storage allows you to store the scanned data on HDD (your machine's hard disk drive) in your machine. The stored data can be sent to different destinations like **Fax**, **Email**, **Server**, **Box**, or **USB**.

Using multi check

> This function is not available in **Print** and **Send** storage.

Touch and hold a folder or file, then change the multi check mode.

Create private folder

> This function is not available in **Download** and **USB** storage.

- **Public:** All users can access to the files.
- **Private:** Set up the password to prevent unauthorized person from accessing.

1 Select the type of **Storage** (**Print** or **Send**) in which you want to create the folder.

2 Tap > **Create folder**.

3 Input the folder name and select **Set as Private**, and then tap **OK**.

4 Enter the appropriate information in the **ID**, **Password**, and **Confirm Password** fields, and then tap **OK**.

Using a USB Drive device

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

Understanding the USB screen

To use the **USB**feature, tap **Box** > **USB** from the home screen or **Apps**.

Documents and images printed, scanned, downloaded and sent from USB can be stored in the **Box** (see "Using Box" on page 220).

About USB Drive device

USB Drive devices are available with a variety of memory capacities to give you more room for storing documents, presentations, music and videos, high resolution photographs, or whatever other files you want to store or move.

You can do the following on your machine using a USB Drive device:

- Scan documents and save them on a USB Drive device.
- Print data stored on a USB Drive device.
- Format the USB Drive device.

Your machine supports USB Drive devices with FAT16/FAT32 and sector size of 512 bytes.

Check your USB Drive device's file system from your dealer.

You must use only an authorized USB Drive device with an A plug type connector.
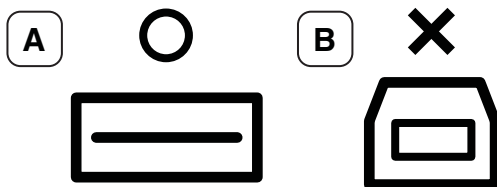
Use only a USB Drive device with metal-shielded connector.
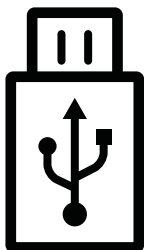
Only use a USB Drive device that has obtained compatibility certification; otherwise, the machine might not recognize it.

Insert a USB Drive device into the USB port on your machine.

Do not insert the USB Drive device to other ports except the ports which is as shown below the image. If you insert the USB Drive device to other ports, the machine shows warning message on the display screen.

- Do not remove the USB Drive device while it is in use. The machine warranty does not cover damage caused by a user's misuse.
- If your USB Drive device has certain features, such as security settings and password settings, your machine may not automatically detect it. For details about these features, see USB Drive device's User Guide.
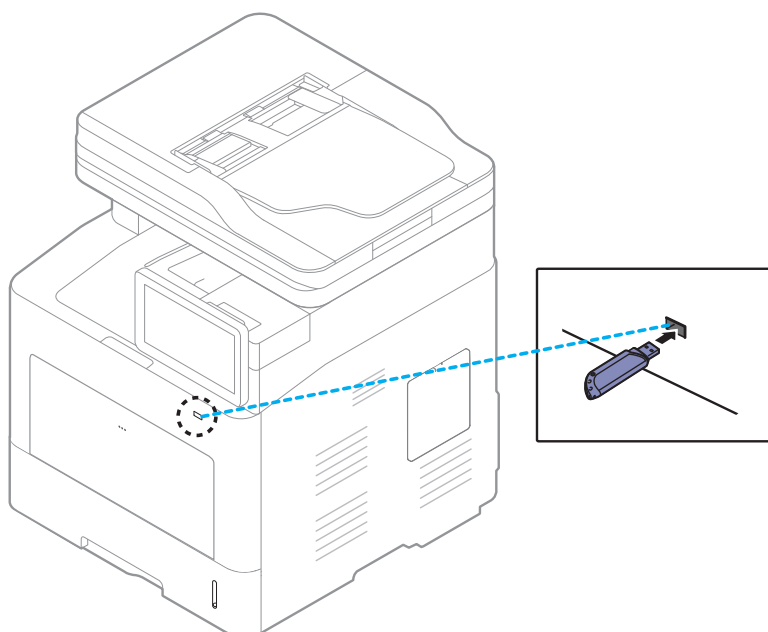
Printing from a USB Drive device

You can directly print files stored on a USB Drive device. You can print TIFF, JPEG and PRN files.

USB print option supported file types:

- **PRN:** Only files created by provided driver with your machine are compatible. PRN files can be created by selecting the **Print to file** check box when you print a document. The document will be saved as a PRN file, rather than printed on paper. Only PRN files created in this fashion can be printed directly from USB memory device.
- **TIFF:** TIFF 6.0 Baseline
- **JPEG:** JPEG Baseline
- **PDF:** PDF 1.7 and below
- **XPS:** XML Paper Specification 1.0

In case of 8bit CMYK JPEG files, Job could be cancelled.

To print a document from a USB Drive device:

1 Insert a USB Drive device into the USB port on your machine.

Your machine automatically detects the device and reads data stored on it (see "About USB Drive device" on page 223).

> • The machine cannot detect the unformatted USB Drive device. Format, and then reinsert the USB Drive device into the USB port on your machine.
> • If the machine did not detect your USB Drive when the machine is in power save mode. Wake up the device and wait until the machine returns to ready state. Then reinsert the USB Drive back into the USB port on the front of your device.

2 Tap **Box** > **USB** from the home screen or **Apps**.

3 The machine shows all files in the USB Drive device.

Select the document you want to print from the list.

> If the PDF file you selected is secured with a password, you have to know the password for printing. Enter the password when the machine requires the secure password. If you do not know the password, the print job will be cancelled.

4 Tap ⋮ > **Print Options**.

5 Select the appropriate option.
- **Copies:** Selects the number of copies.
- **Paper Source:** Select from which tray the paper is used.
- **Auto fit:** Allows you to scale your print job to the selected paper size in the tray regardless of the document size. Select a tray, and press **On**.

6 Tap 🖶 icon to begin printing.

7 After printing is completed, you can remove the USB Drive device from the machine.

Managing USB Drive device

You can delete image files stored on a USB Drive one-by-one or all at once by reformatting the device.

> After deleting files or reformatting a USB Drive device, files cannot be restored. Confirm that you no longer need the data before deleting it.

Deleting an image file

1 Insert a USB Drive device into the USB port on your machine.

2 Tap **Box** > **USB** from the home screen or **Apps**.

3 The machine shows all files in the USB Drive device.

Touch and hold folder or document you want to delete from the list.

> If the file is in a folder, press the folder name.

4 Tap [icon] > **Delete**.

5 Tap **Delete** when the confirmation window appears.

Formatting a USB Drive device

1 Insert a USB Drive device into the USB port on your machine.

2 Tap **Box** > **USB** from the home screen or **Apps**.

3 The machine shows all files in the USB Drive device.

Touch and hold folder or document you want to delete from the list.

> If the file is in a folder, press the folder name.

4 Tap [icon] > **Format**.

5 Tap **Format** when the confirmation window appears.

Maintenance

This chapter provides information about purchasing supplies, accessories and maintenance parts available for your machine.

Ordering supplies and accessories

> Available accessories may differ from country to country. Contact your sales representatives to obtain the list of available supplies, and maintenance parts.

To order Samsung-authorized supplies, accessories, and maintenance parts, contact your local Samsung dealer or the retailer where you purchased your machine. You can also visit **www.samsung.com/supplies**, and then select your country/region to obtain the contact information for service.

Available supplies

When supplies reach the end of their life spans, you can order the followings of supplies for your machine:

Type	Average yield	Part name
Toner cartridge[a]	Average continuous cartridge yield: Approx. 40,000 standard pages	MLT-D303E
Imaging unit[b]	Approx. 100,000 pages	MLT-R303

a.Declared yield value in accordance with ISO/IEC 19752. The number of pages may be affected by operating environment, printing interval, graphics, media type and media size.
b.Based on simplex 3 average A4/Letter-size pages per job (and above mentioned coverage pattern). The number of pages may be affected by operating environment, printing interval, graphics, media type and media size.

Depending on the options, percentage of image area and job mode used, the toner cartridge's lifespan may differ.

When purchasing new toner cartridges or other supplies, these must be purchased in the same country as the machine you are using. Otherwise, new toner cartridges or other supplies will be incompatible with your machine due to different configurations of toner cartridges and other supplies according to the specific country conditions.

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

Available accessories

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

Accessory	Function	Part name
Stand	You can easily move the machine using the stand with its wheels. When using the optional Stand, you must install the foot as shown in the Optional Stand Installation Guide. Otherwise, the machine could fall over if on incline and cause bodily injury.	SL-DSK003S
Optional trays (Tray 2, Tray 3, Tray 4)	If you are experiencing frequent paper supply problems, you can attach an additional 550[a] sheet trays.	SL-SCF4500
Wi-Fi/NFC kit	This kit lets you use your machine as a Wi-Fi and NFC(Near Field Communication) machine.	SL-NWE001X

a.Plain paper 75 g/m^2 (20 lbs bond).

Available maintenance parts

You need to replace the maintenance parts at specific intervals to keep the machine in the best condition and avoid print quality and paper feeding problems resulting from the worn-out parts. Maintenance parts are mostly rollers, belts and pads. However, the replacement period and parts may differ depending on the model. Replacing maintenance parts can be performed only by an authorized service provider, dealer, or the retailer where you bought the machine. To purchase maintenance parts, contact the retailer where you bought the machine. The replacement period for the maintenance parts is informed by the Samsung Printer Statusprogram. Or on the UI (User Interface) if your machine supports a display screen. The replacement period varies based on the operating system used, computing performance, application software, connecting method, paper type, paper size, and job complexity.

Storing the toner cartridge

Toner cartridges contain components that are sensitive to light, temperature and humidity. Samsung suggests users follow these recommendations to ensure optimal performance, highest quality, and longest life from your new Samsung toner cartridge.

Store the cartridge in the same environment in which the printer will be used. This should be in controlled temperature and humidity conditions. The toner cartridge should remain in its original and unopened package until installation – if original packaging is not available, cover the top opening of the cartridge with paper and store in a dark cabinet.

Opening the cartridge package prior to use dramatically shortens its useful shelf and operating life. Do not store on the floor. If the toner cartridge is removed from the printer, follow the instructions below to store the toner cartridge properly.

- Store the cartridge inside the protective bag from the original package.
- Store lying flat (not standing on end) with the same side facing up as if it were installed in the machine.
- Do not store consumables in any of the following conditions:
  - Temperature greater than 40 °C (104 °F).
  - Humidity range less than 20 % or greater than 80 %.
  - An environment with extreme changes in humidity or temperature.
  - Direct sunlight or room light.
  - Dusty places.
  - A car for a long period of time.
  - An environment where corrosive gases are present.
  - An environment with salty air.

Handling instructions

- Do not touch the surface of the photoconductive drum in the cartridge.
- Do not expose the cartridge to unnecessary vibrations or shock.
- Never manually rotate the drum, especially in the reverse direction; this can cause internal damage and toner spillage.

Toner cartridge usage

Samsung Electronics does not recommend or approve the use of non-Samsung brand toner cartridges in your printer including generic, store brand, refilled, or remanufactured toner cartridges.

⚠ Samsung's printer warranty does not cover damage to the machine caused by the use of refilled, remanufactured, or non-Samsung brand toner cartridges.

Estimated cartridge life

Estimated cartridge life (the life of the toner cartridge yield) depends on the amount of toner that print jobs require. The actual print yield may vary depending on the print density of the pages you print on, operating environment, percentage of image area, printing interval, media type and/or media size. For example, if you print a lot of graphics, the consumption of the toner is higher and 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 and/or density varies from side to side.
- The toner-related message saying that the toner is low may appear on the display.
- The computer's Samsung Printing Status program window appears on the computer telling you which cartridge is low on toner (see "Using Samsung Printer Status" on page 212).
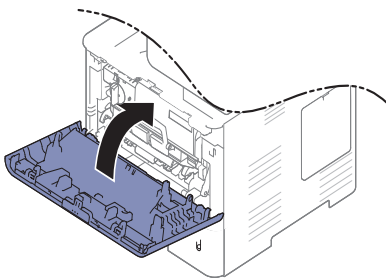
If this happens, you can temporarily improve print quality by redistributing the remaining toner in the cartridge. In some cases, white streaks or light printing will still occur even after you have redistributed the toner.

Illustrations on this user guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 17).

- To prevent damage to the toner cartridge, 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 area of the toner cartridge. Use the handle on the cartridge to avoid touching this area.
- Do not use sharp objects such as a knife or scissors to open the toner cartridge package. They might scratch the drum of the cartridge.
- If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.

Replacing the toner cartridge

A toner cartridge has almost reached its estimated cartridge life:

- The status LED and the toner-related message on the display indicate when the toner cartridge should be replaced.
- The computer's Samsung Printing Status Program window appears on the computer telling you which cartridge is empty on toner (see "Using Samsung Printer Status" on page 212).
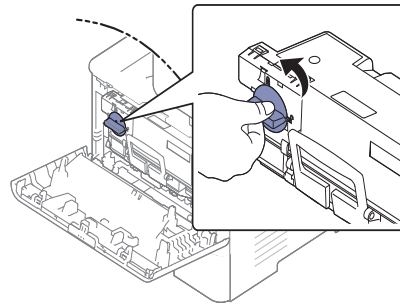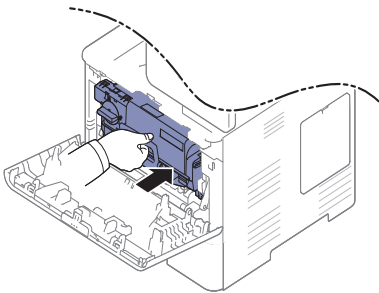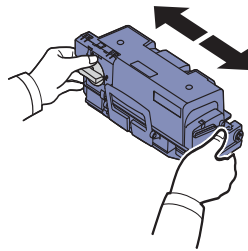
Check the type of the toner cartridge for your machine (see "Available supplies" on page 229).

- Shake the toner cartridge thoroughly, it will increase the initial print quality.
- Illustrations on this user guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 17).

- To prevent damage to the toner cartridge, 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 area of the toner cartridge. Use the handle on the cartridge to avoid touching this area.
- Do not use sharp objects such as a knife or scissors to open the toner cartridge package. They might scratch the drum of the cartridge.
- If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.
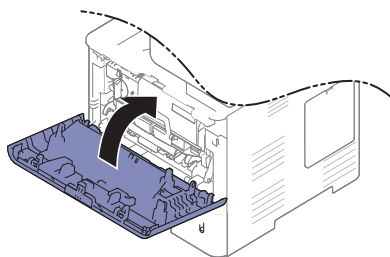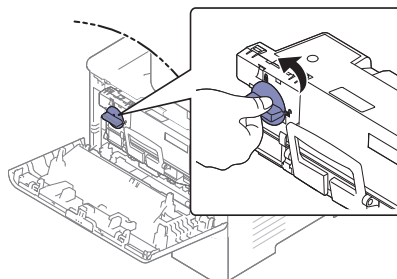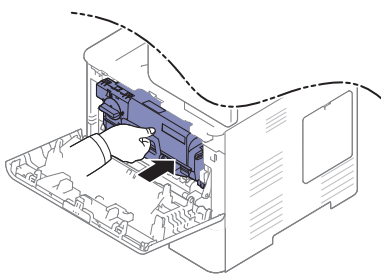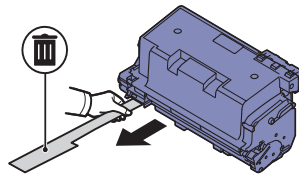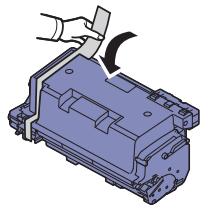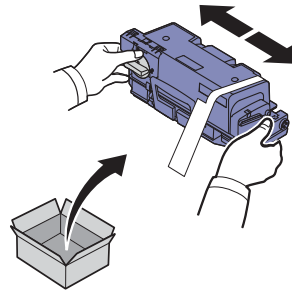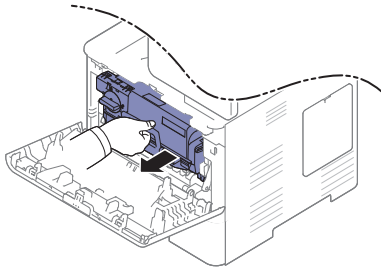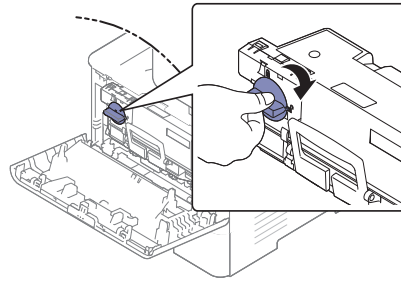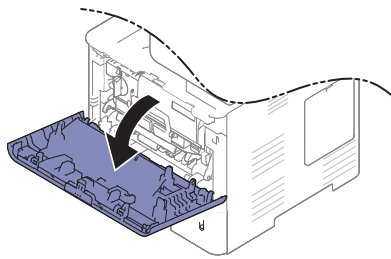
Replacing the imaging unit

Installing accessories

Precautions

- Disconnect the power cord

  Never remove the control board cover while the power is turned on.
  To avoid the possibility of an electrical shock, always disconnect the power cord when installing or removing ANY internal or external accessories.

- Discharge static electricity

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

> ⚠ When installing accessories, the battery inside the machine is a service component. Do not change it by yourself. There is a risk of an explosion if battery is replaced by an incorrect type. Your service provider should remove the old battery from your device and dispose of it in accordance with the relevant regulations in your country.

Setting Device Options

When you install the optional devices such as optional tray, memory, etc, this machine automatically detects and sets the optional devices. If you cannot use the optional devices you installed in this driver, you can set the optional devices in **Device Options**.

1 For Windows XP Service Pack 3/Server 2003, from the **Start** menu, select **Printer and Faxes**.

- For Windows Server 2008/Vista, from the **Start** menu, select **Control Panel** > **Hardware and Sound**> **Printers**.
- For Windows 7, from the **Start** menu, select **Control Panel** > **Devices and Printers**.
  For Windows 8, from the **Charms**, select **Search** > **Settings** > **Control Panel** > **Devices and Printers**.
- For Windows Server 2008 R2, select **Control Panel** > **Hardware**> **Devices and Printers**.
- For Windows 10 / Windows Server 2016
  From task bar, type in **Devices and Printers** in **Search** input area. Press the Enter key.
  OR
  From the **Start** (⊞) icon, select **Settings** > **Devices**> **Printers & scanners**>**Devices and Printers**.

> ✎ Right-click the **Start** (⊞) icon, you can select **Control Panel** > **Devices and Printers**.

2 Right-click your machine.

3 For Windows XP Service Pack 3/2003/2008/Vista, press **Properties**.

For Windows 7/Windows 8/Windows Server 2008 R2/Windows 10 / Windows Server 2016, from context menus, select the **Printer properties**.

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

4 Select **Device Options**.

> The **Properties** window may differ depending on the driver or operating system you are using.

5 Select the appropriate option.

> Some menus may not appear in the display depending on options or models. if so, it is not applicable to your machine.

- **Tray Options:** Select the optional tray you installed. You can select the tray.
- **Storage Options:** Select the optional memory you installed. If this feature is checked, you can select the **Print Mode**.
- **Printer Configuration:** Select the printer language for the print job.
- **Administrator Settings:** You can select the **Printer Status** and **EMF Spooling**.
- **Admin Job Accounting:** Allows you to associate user and account identification information with each document you print.
  - **User permission:** If you check this option, only users with user permission can start a print job.
  - **Group permission:** If you check this option, only groups with group permission can start a print job.

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

- **Custom Paper Size Settings:** You can specify custom paper size.

6 Click **OK** until you exit the **Properties** or **Printer properties** window.

Monitoring the supplies life

You can easily check remaining life of the supplies on the Notification Bar. (see "Notification Bar" on page 28). Check remaining life of the supplies and prepare the supplies in advance.

You can also print the supplies life report. Select **Supplies Information** in the **Report** feature (see "Report" on page 190).

From the machine

1 Tap **Settings** > **Management** > **Supplies Life** from the home screen or **Apps**.

2 Check the supplies life.

> We recommend you prepare new supplies or those that you have used over 90 % of their average yield (see "Replacing the toner cartridge" on page 236).

From the SyncThru™ Web Service

1 From the SyncThru™ Web Service, select the **Information** tab > **Supplies**.

2 Check the remaining percentage.

> We recommend you prepare new supplies if the remaining percentage is less than 10 % (see "Replacing the toner cartridge" on page 236).

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 prolong the life of your machine.

⚠ • 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 or the display screen

Clean the machine cabinet or the display screen 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.

- To prevent damage to the toner cartridge, 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 area of the toner cartridge. Use the handle on the cartridge to avoid touching this area.
- 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.

- Use a dry lint-free cloth to clean the machine.
- Turn the machine off and unplug the power cord. Wait for the machine to cool down. If your machine has a power switch, turn the power switch off before cleaning the machine.
- Illustrations on this user guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 17).
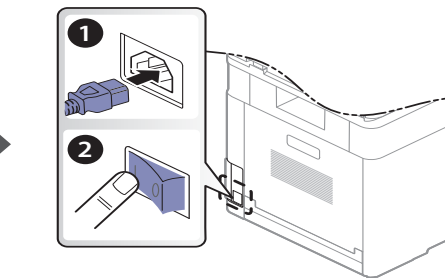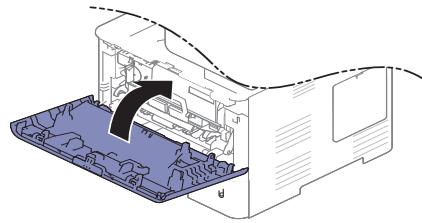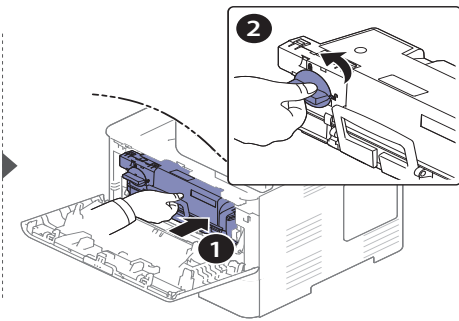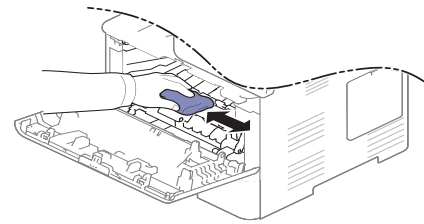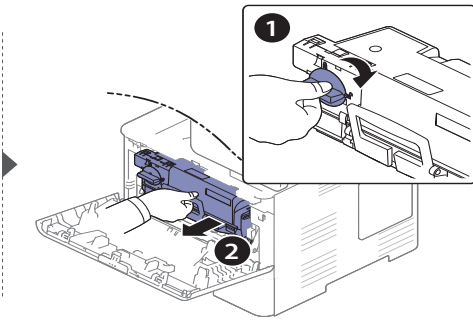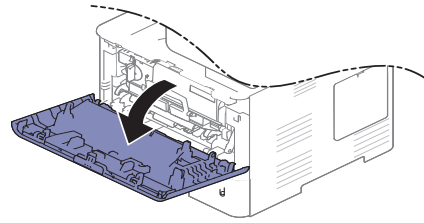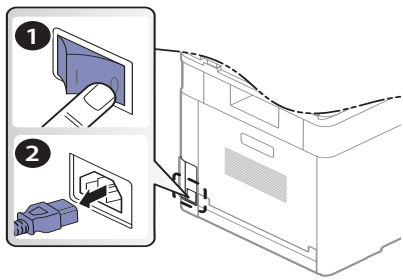
Cleaning the pickup roller

✎
- Turn the machine off and unplug the power cord. Wait for the machine to cool down. If your machine has a power switch, turn the power switch off before cleaning the machine.
- Illustrations on this user guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 17).
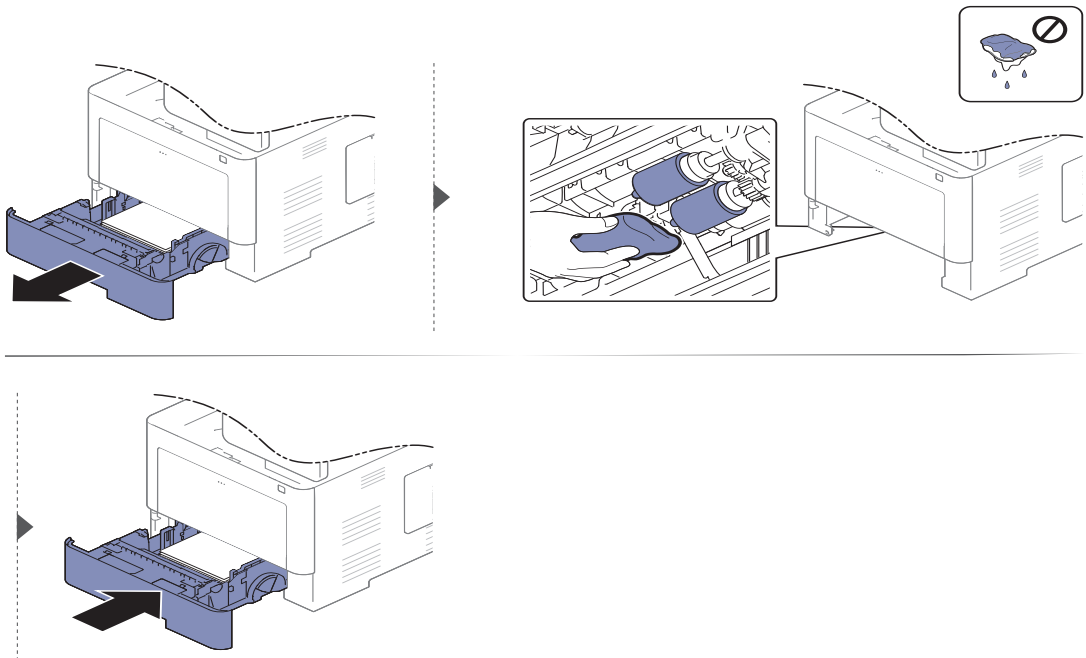
Cleaning the scan unit

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.

🖉
- Turn the machine off and unplug the power cord. Wait for the machine to cool down. If your machine has a power switch, turn the power switch off before cleaning the machine.
- Illustrations on this user guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 17).

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1 Slightly dampen a soft, lint-free cloth or paper towel with water.

2 Lift and open the Dual Scan Document Feeder (DSDF).

3 Wipe the surface of the scanner until it is clean and dry.
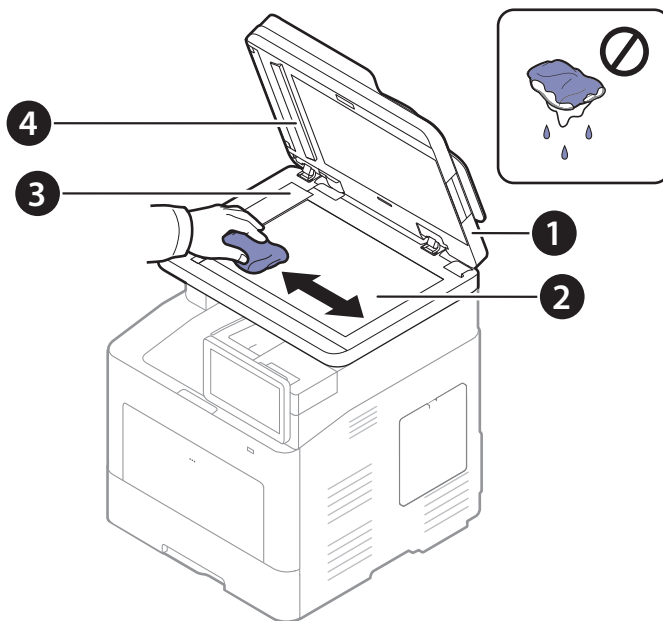
1. Dual Scan Document Feeder (DSDF)
2. Scanner glass
3. Document feeder glass
4. White bar and CIS(Contact Image Sensor)

4 Close the Dual Scan Document Feeder (DSDF).

Tips for moving & storing the machine

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

Troubleshooting

This chapter gives helpful information for what to do if you encounter an error. If you cannot find a solution in the User 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 46).
- 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 type and size in a tray.
- Use only recommended print media (see "Print media specifications" on page 282).

Clearing paper jams

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

In tray1

✎ Illustrations on this user guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 17).
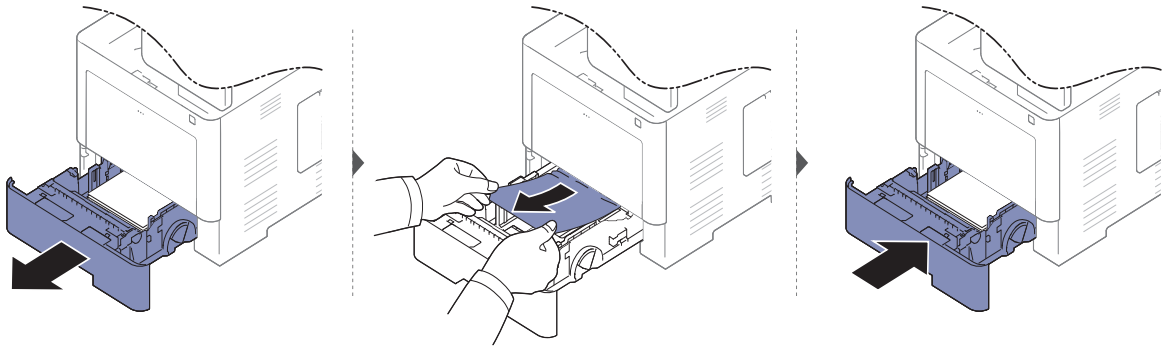
In optional tray

✎ The procedure is same for all optional trays.
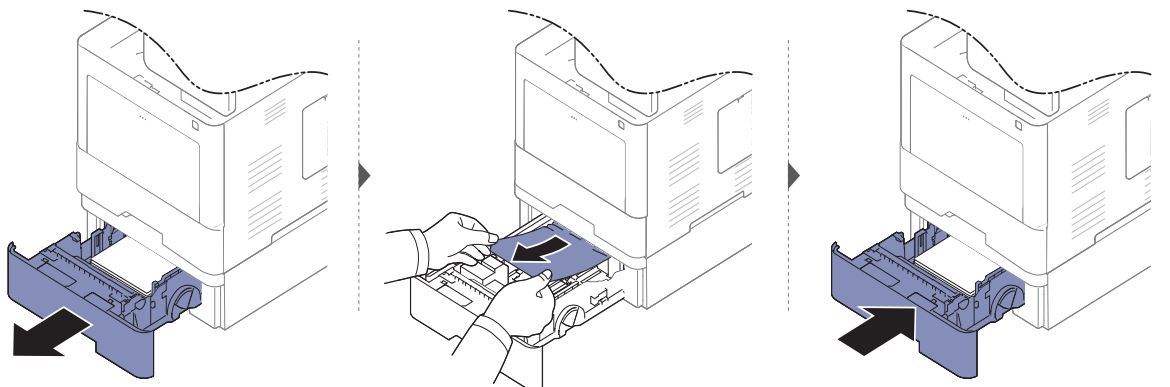
If you do not see the paper in this area, stop and go to next step:
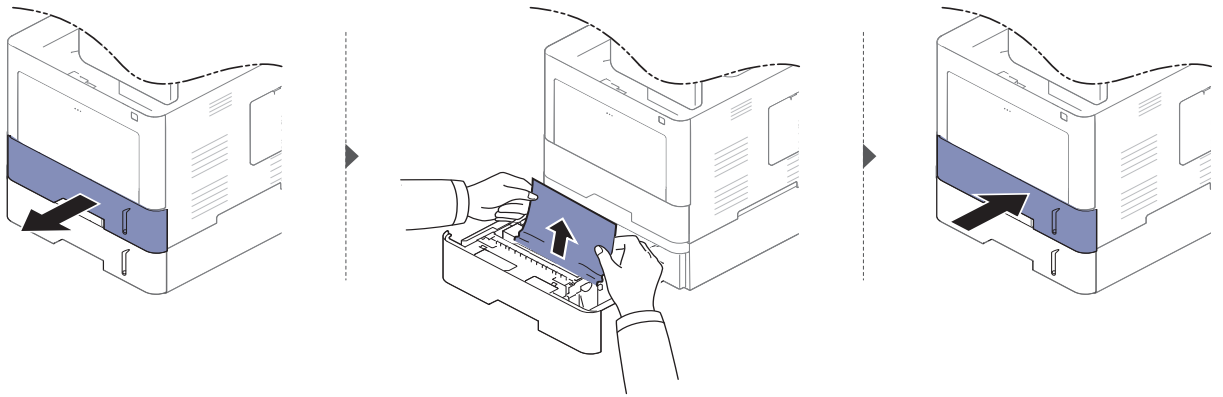
If you do not see the paper in this area, stop and go to next step:
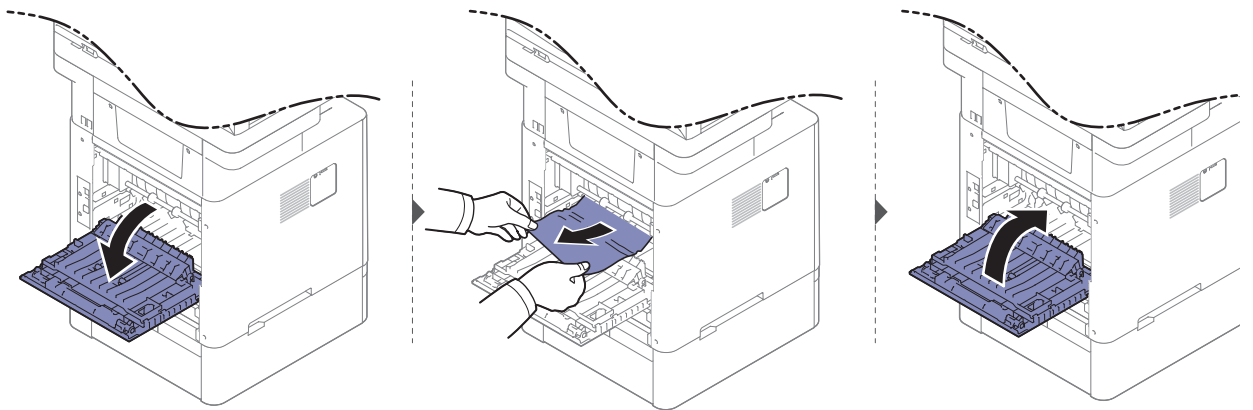
In the multi-purpose tray
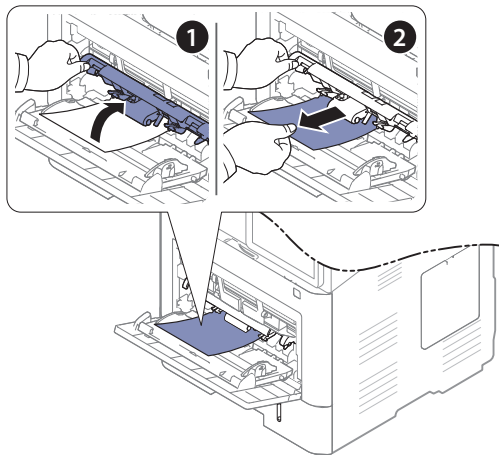
Inside the machine

⚠️ The fuser area is hot. Take care when removing paper from the machine in this area.

✎ Illustrations on this user guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 17).
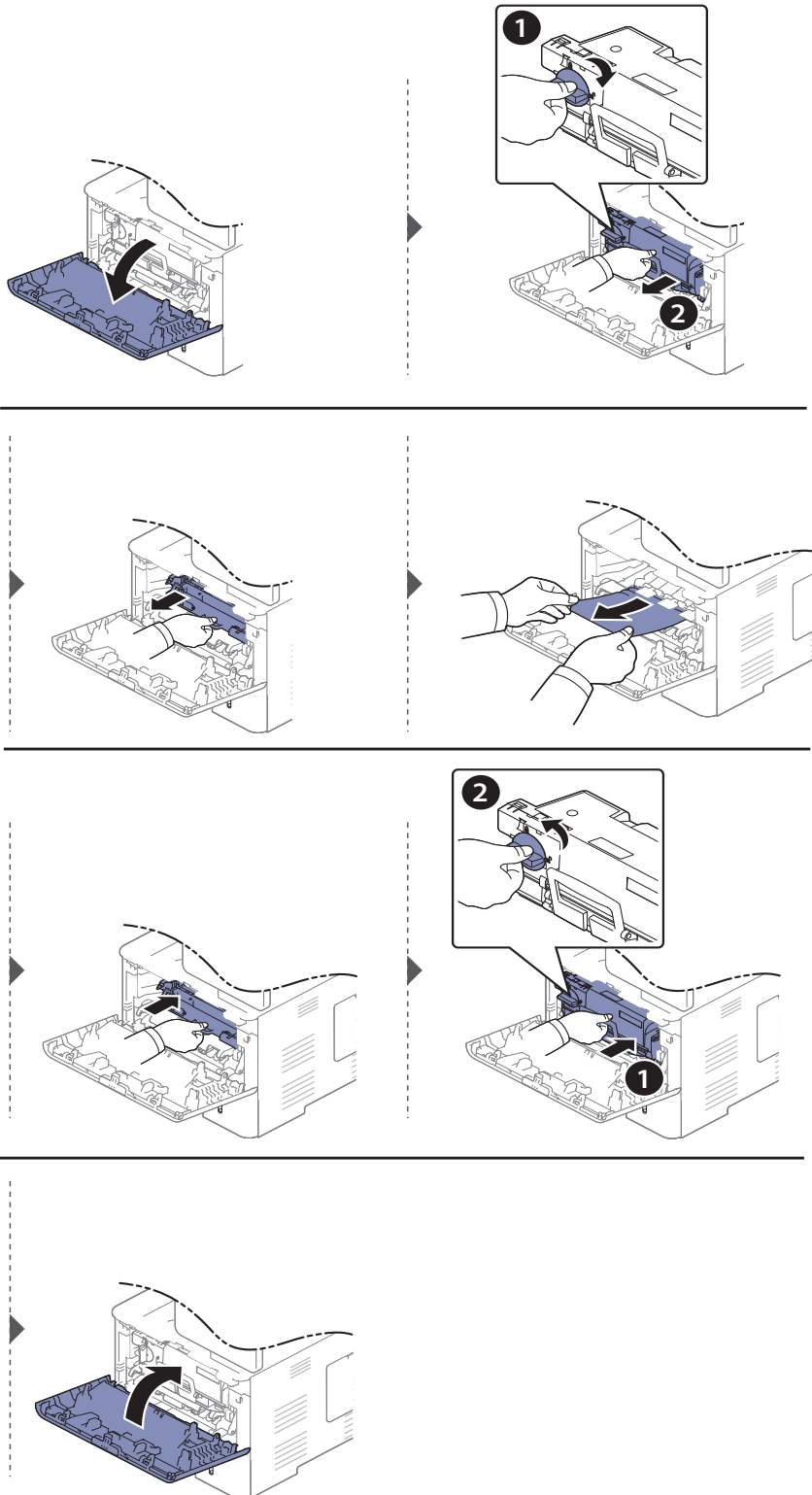
If you do not see the paper in this area, stop and go to next step:
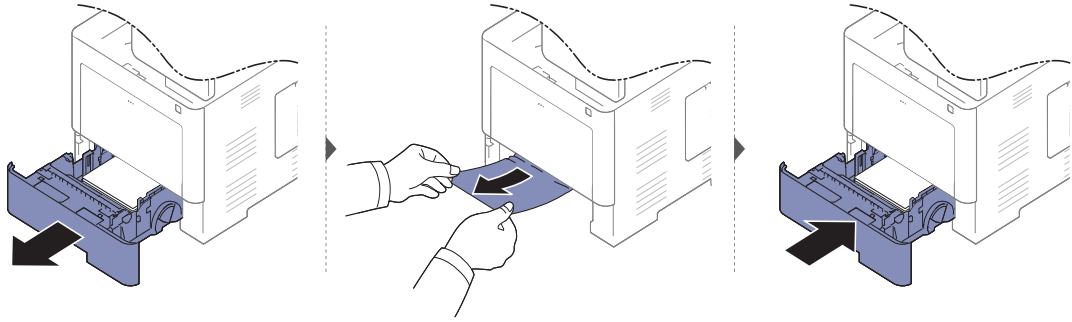
If you do not see the paper in this area, stop and go to next step:
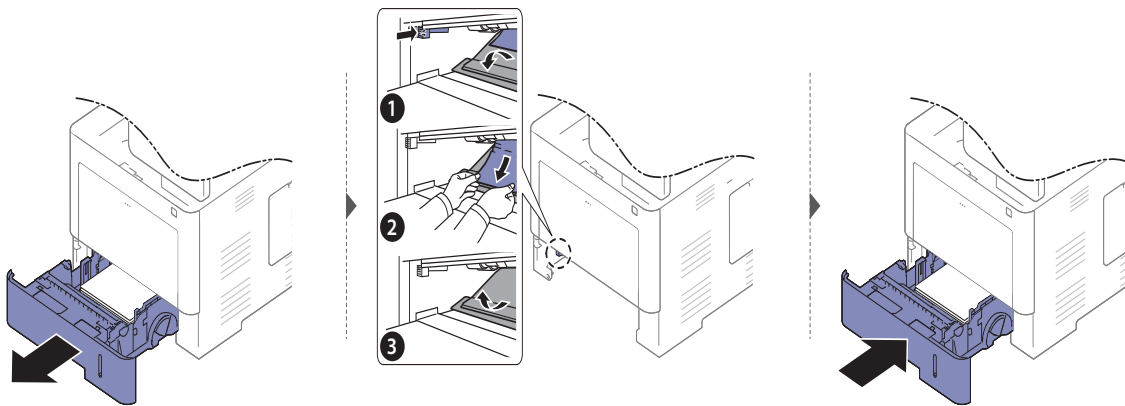
In the exit area

⚠ The fuser area is hot. Take care when removing paper from the machine in this area.
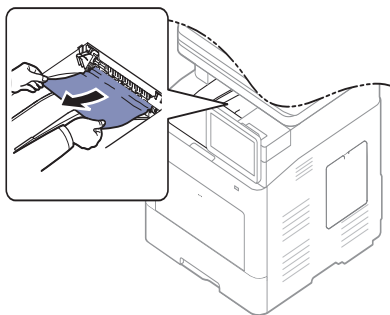
If you do not see the paper in this area, stop and go to next step:
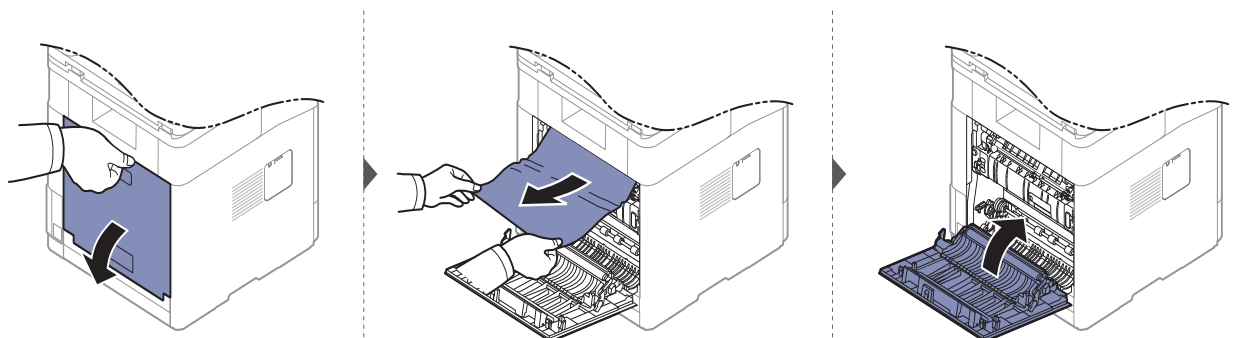
In the duplex unit area
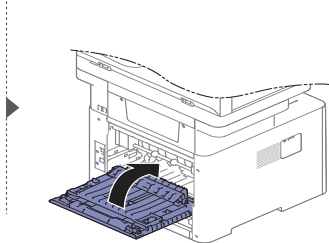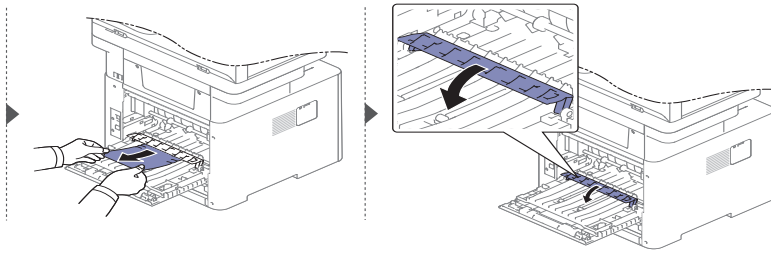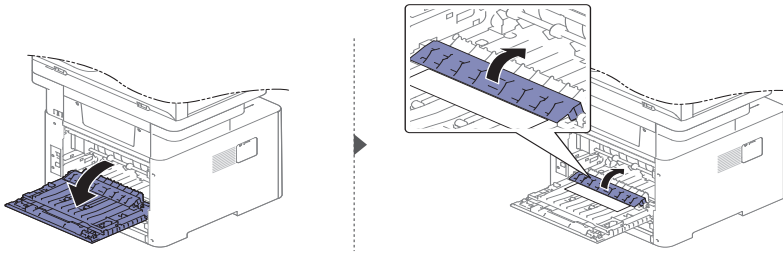
If you do not see the paper in this area, stop and go to next step:
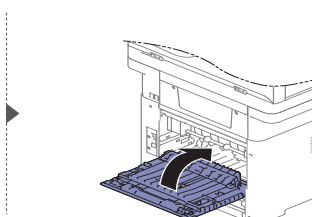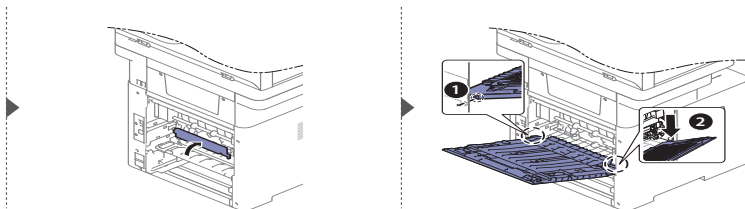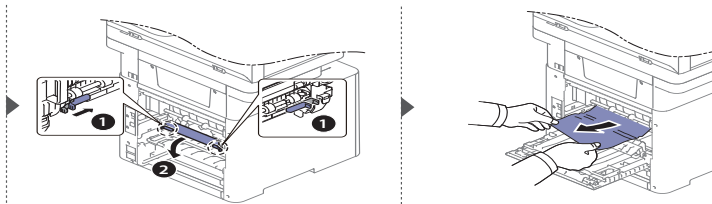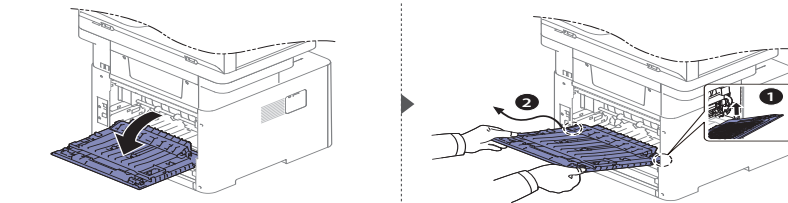
Clearing original document jams

✎ To prevent document jams, use the scanner glass for thick, thin or mixed paper originals (see "Preparing originals" on page 40).

⚠ To avoid tearing the document, remove the jammed document slowly and carefully.

Original paper jam in front of scanner

✎ Illustrations in this user guide may differ from your machine depending on the model and options installed. Check your machine type (see "Front view" on page 17).
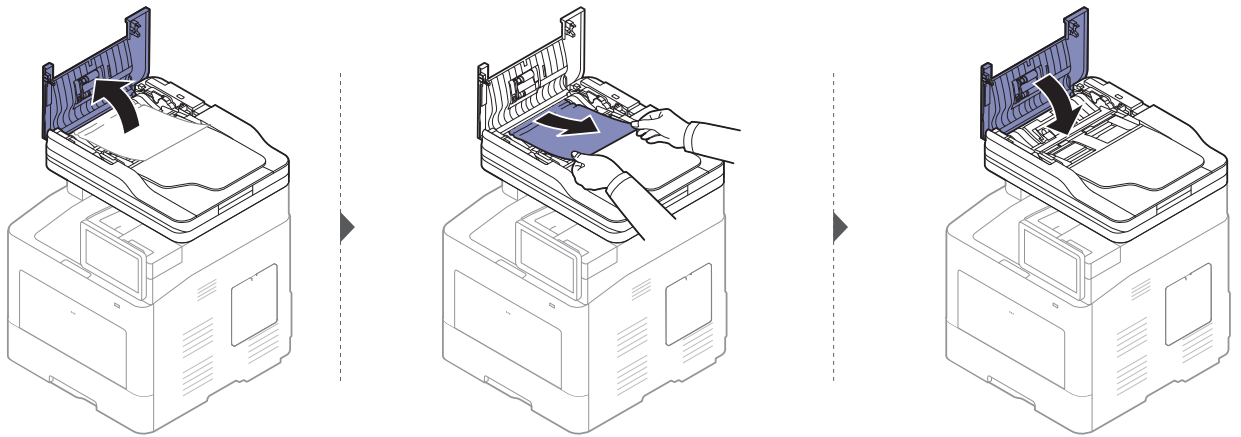
Original paper jam inside of scanner

Illustrations in this user guide may differ from your machine depending on the model and options installed. Check your machine type (see "Front view" on page 17).
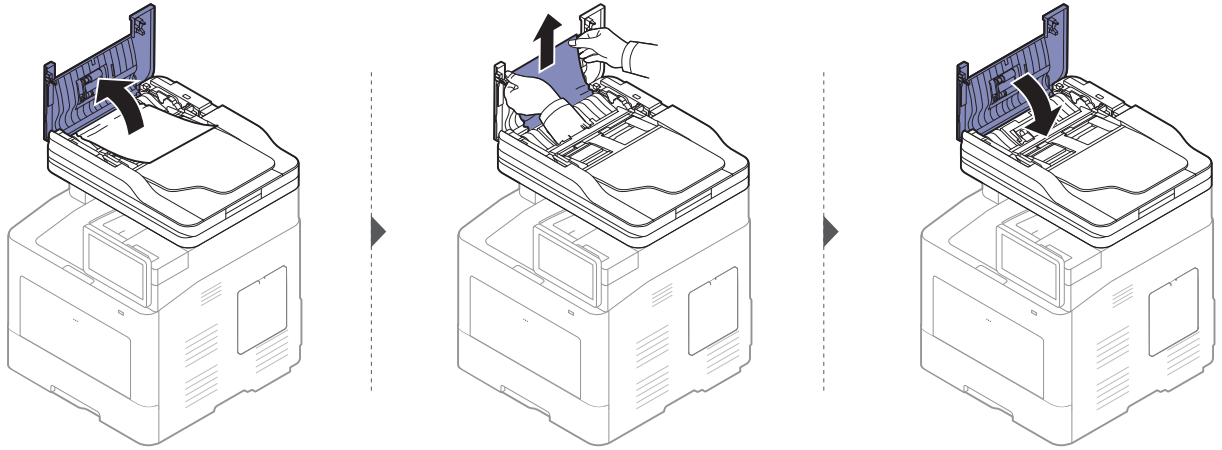
If you do not see the paper in this area, stop and go to next step:
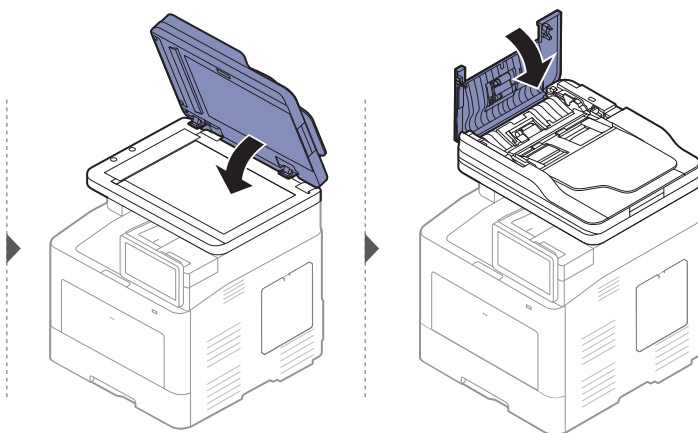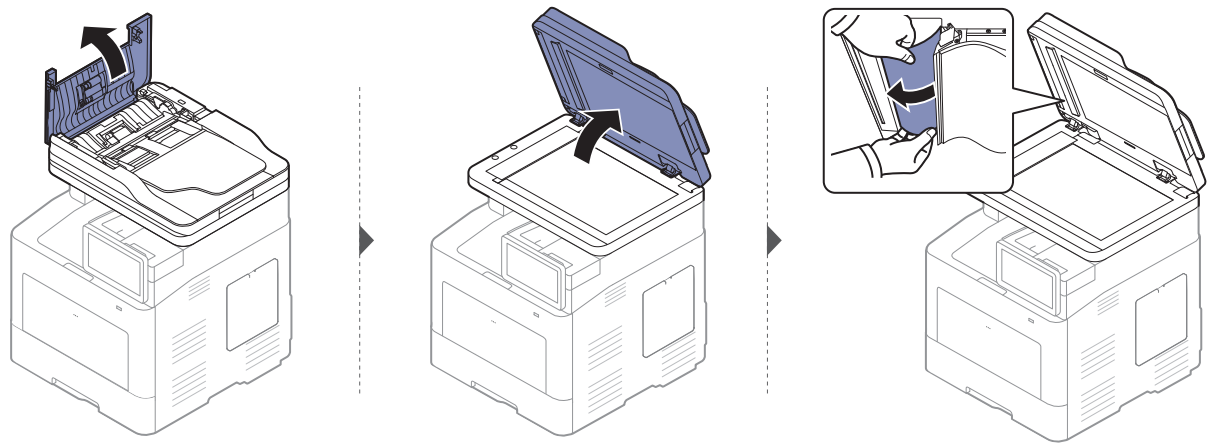
Original paper jam in exit area of scanner

✎ • Illustrations in this user 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 "Front view" on page 17).
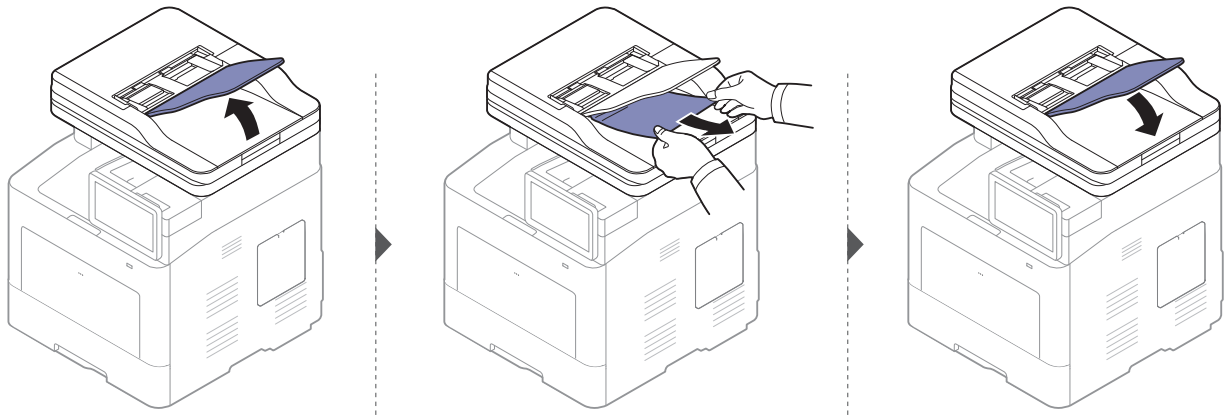
Understanding display messages

Messages appear on the display screen to indicate the machine's status or errors. Some error messages are shown with graphics to help you troubleshoot problem. 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 212).
> • 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 number] indicates the tray number.
> • [media type] indicates the media type.
> • [media size] indicates the media size.
> • [unit type] indicates the unit type.

Message	Meaning	Suggested solutions
Did not supply enough toner. Remove seal tape of toner cartridge or shake it. Call for service if the problem persists	The machine cannot detect a toner cartridge. Or the seal tape was not removed from the toner cartridge.	Remove the sealing tape from the toner cartridge. Refer to Quick Install Guide.
End of life. Replace with new imaging unit	The indicated imaging unit has reached its estimated imaging unit life[a].	Replace the imaging unit with a Samsung-genuine imaging unit (see "Replacing the imaging unit" on page 238).
End of life. Replace with new toner cartridge	The indicated toner cartridge has reached its estimated cartridge life [a].	Replace the toner cartridge with a Samsung- genuine toner cartridge[b] (see "Replacing the toner cartridge" on page 236).
Engine System Failure [error number]. Turn off then on.	There is a problem in the engine system.	Turn the machine off and back on again. If the problem persists, call for service.
Engine Failure [error number]. Call for service if the problem persists.		

Message	Meaning	Suggested solutions
Fan Failure: [error number]. Turn off then on. Call for service if the problem persists.	There is a problem in the fan system.	Turn the machine off and back on again. If the problem persists, call for service.
Front door is open. Close it.	The door is not securely latched.	Close the door until it locks into place.
Fuser Failure [error number]. Turn off then on.	There is a problem in the fuser unit.	Turn the machine off and back on again. If the problem persists, call for service.
Fuser Unit Failure [error number]. Turn off then on.		
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.
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.
Imaging unit is not compatible. Check users guide	The imaging unit you have installed is not for your machine.	Install a Samsung-genuine imaging unit, designed for your machine (see "Available supplies" on page 229).
Input System Failure [error number]:Check [tray number] connection.	There is a problem in the tray	Open and close the tray. If the problem persists, call for service.
Input System Failure [error number]:Pull [tray number] out and insert it.	There is a problem in the tray.	Open and close the tray. If the problem persists, call for service.
Lamp Failure: [error number]. Open the door, then close it. Call for service if the problem persists	There is a problem in the lamp.	Open the door, then close it. If the problem persists, call for service.
Load Manual with [Letter], [Plain] paper	Thepapersize specified in the printer properties does not match the paper you are loading.	Load the correct paper in the tray.

Message	Meaning	Suggested solutions
LSU Failure: [error number]. Please turn off then on	There is a problem in the LSU.	Turn the machine off and back on again. If the problem persists, call for service.
LSU Failure: [error number]. Turn off then on. Call for service if the problem persists.		Turn the machine off and back on again. If the problem persists, call for service.
Motor Failure: [error number]. Turn off then on. Call for service if the problem persists.	There is a problem in the motor system.	Turn the machine off and back on again. If the problem persists, call for service.
Original paper jam in front of the scanner	The originals are jammed in Dual scan document feeder.	Clear the jam (see "Original paper jam in front of scanner" on page 255).
Original paper jam inside of the scanner	The originals are jammed in Dual scan document feeder.	Clear the jam (see "Original paper jam inside of scanner" on page 256).
Paper in output bin is full. Remove printed paper	The output tray is full.	Remove printouts from the output tray, the machine resumes printing.
Paper is empty in [tray number]. Load paper.	There is no paper in the tray.	Load paper in the 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.
Paper is low in [tray number]. Load paper.	Running out of paper in the tray.	Load paper in the tray.
Paper Jam at the bottom of duplex path	Paper has jammed during duplex printing.	Clear the jam (see "In the duplex unit area" on page 254).
Paper Jam inside of duplex path		
Paper Jam at the top of duplex path		
Paper Jam in exit area.	Paper has jammed in the exit area.	Clear the jam (see "In the exit area" on page 253).
Paper Jam inside of machine	Paper has jammed inside of the machine.	Clear the jam (see "In tray1" on page 250 or "In optional tray" on page 250 or "Inside the machine" on page 252).
Paper jam in tray 1	Paper has jammed in the feeding area of the tray.	Clear the jam (see "In tray1" on page 250).

Message	Meaning	Suggested solutions
Paper jam in Tray 2	Paper has jammed in the optional tray.	Clear the jam (see "In optional tray" on page 250).
Paper jam in Tray 3		
Paper jam in Tray 4		
Prepare new imaging unit	The estimated life [a] of the imaging unit is close.	Prepare a new imaging unit for a replacement (see "Replacing the imaging unit" on page 238).
Prepare new toner cartridge	The estimated cartridge life [a] 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 234).
Rear door is open. Close the door	The door is not securely latched.	Close the door until it locks into place.
Replace with new toner cartridge	The indicated toner cartridge has almost reached its estimated cartridge life [a].	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 236). If the machine stops printing, replace the toner cartridge (see "Replacing the toner cartridge" on page 236).
Replace with new imaging unit	The indicated imaging unit has almost reached its estimated imaging unit life [a].	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 238).
Scanner locked or another problem occurred.	The CCD (Charged Couple Device) lock has been locked.	Unlock the CCD lock. Or turn the machine off and back on again. If the problem persists, call for service.
Sensor Failure: [error number]. Turn off then on. Call for service if the problem persists.	There is a problem in the sensor system.	Turn the machine off and back on again. If the problem persists, call for service.

Message	Meaning	Suggested solutions
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 234).
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 234). If the problem persists, call for service.
The room temperature is not suitable for this set use. Please adjust room temperature	The machine is in a room with improper room temperature.	Please adjust room temperature (see "Specifications" on page 281).
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 cartridge is not installed. Install the cartridge	A toner cartridge is not installed.	Reinstall the toner cartridge.
Toner cartridge is not compatible. Check users guide	The imaging unit you have installed is not for your machine.	Install a Samsung-genuine imaging unit, designed for your machine (see "Available supplies" on page 229).
Top door of scanner is open	The Dual scan document feeder cover is not securely latched.	Close the cover until it locks into place.
[tray number] cassette is pulled out. Insert insert it properly.	The tray is not securely latched.	Close the tray until it locks into place.

a. 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.
b. 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.
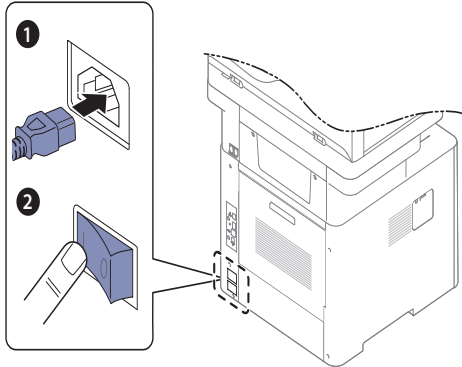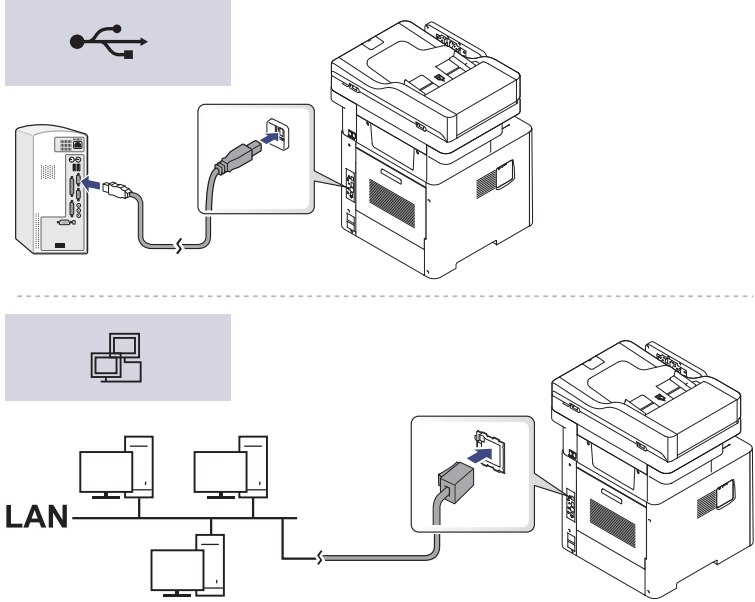
Paper feeding problems

Condition	Suggested solutions
Paper jams during printing.	Clear the paper jam.
Paper sticks together.	• Check the maximum paper capacity of the tray. • Make sure that you are using the correct type of paper. • 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.
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.
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 manual feeding in tray. • An incorrect type of paper is being used. Use only paper that meets the specifications required by the machine. • There may be debris inside the machine. Open the front cover and remove any debris.
Envelopes skew or fail to feed correctly.	Ensure that the paper guides are against both sides of the envelopes.

Power and cable connecting problems

Reboot the power. If the problem persists, please call for service.

Condition	Suggested solutions
The machine is not receiving power, or the connection cable between the computer and the machine is not connected properly.	1. Connect the machine to the electricity supply first. 2. Check the USB cable or network cable in the machine's rear. 3. Disconnect the USB cable or network cable in the machine's rear and then, reconnect it.

Printing problems
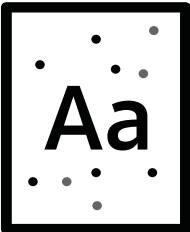
Condition	Suggested solutions
The machine does not print.	Connect the machine to the electricity supply first. If the machine has a ⏻(**Power/Wakeup**) button on the control, press it.
	Select your machine as your default machine in Windows.
	Check the machine for the following: • The cover is not closed. Close the cover. • Paper is jammed. Clear the paper jam (see "Clearing paper jams" on page 250). • No paper is loaded. Load paper (see "Loading paper in the tray" on page 46). • The toner cartridge is not installed. Install the toner cartridge (see "Replacing the toner cartridge" on page 236). • Make sure the protect cover and sheets are removed from the toner cartridge (see "Replacing the toner cartridge" on page 236). If a system error occurs, contact your service representative.
	Disconnect the machine cable and reconnect it (see "Rear view" on page 18).
	If possible, attach the cable to another computer that is working properly and print a job. You can also try using a different machine cable.
	Check the Windows printer settings to make sure that the print job is sent to the correct port. If the computer has more than one port, make sure that the machine is attached to the correct one.
	Check the **Printing Preferences** to ensure that all of the print settings are correct.
	Uninstall and reinstall the machine's driver.
	Check the display message on the control panel to see if the machine is indicating a system error. Contact a service representative.
	Get more hard disk space and print the document again.
	Once the paper is removed from the output tray, the machine resumes printing.
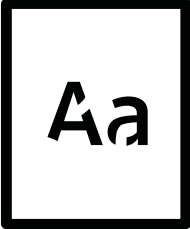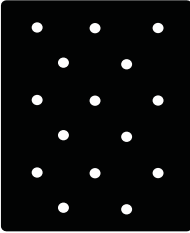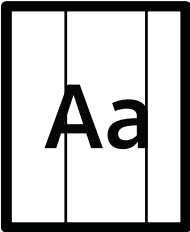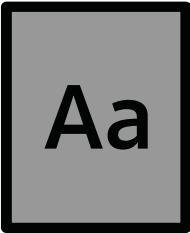
Condition	Suggested solutions
The machine selects print materials from the wrong paper source.	For many software applications, the paper source selection is found under the **Paper** tab within the **Printing Preferences** (see "Opening printing preferences" on page 61). Select the correct paper source. See the printer driver help screen (see "Using help" on page 67).
A print job is extremely slow.	Reduce the complexity of the page or try adjusting the print quality settings.
Half the page is blank.	Change the page orientation in your application (see "Opening printing preferences" on page 61). See the printer driver help screen (see "Using help" on page 67).
	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 (see "Opening printing preferences" on page 61).
The machine prints, but the text is wrong, garbled, or incomplete.	Disconnect the machine cable and reconnect. Try a print job that you have already printed successfully. If possible, attach the cable and the machine to another computer that you know works and try a print job. Finally, try a new machine cable.
	Check the application's printer selection menu to ensure that your machine is selected.
	Try printing a job from another application.
	The operating system is malfunctioning. Exit Windows and reboot the computer. Turn the machine off and back on again.
Pages print, but they are blank.	Redistribute the toner, if necessary. If necessary, replace the toner cartridge. • See "Redistributing toner" on page 234. • See "Replacing the toner cartridge" on page 236.
	Check the file to ensure that it does not contain blank pages.
	Contact a service representative.
The machine does not print PDF files correctly. Some parts of graphics, text, or illustrations are missing.	Printing the PDF file as an image may enable the file to print. Turn on **Print As Image** from the Acrobat printing options. 🖉 It will take longer to print when you print a PDF file as an image.
The print quality of photos is not good. Images are not clear.	Reduce the photo size. If you increase the photo size in the software application, the resolution will be reduced.
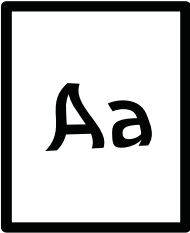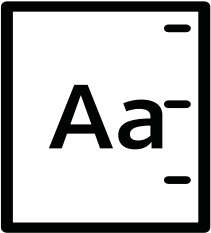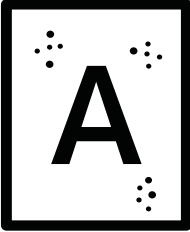
Condition	Suggested solutions
Before printing, the machine emits vapor near the output tray.	Using damp/wet paper can cause vapor [white smoke] during printing. This is not a problem, just keep printing. If you are bothered by the smoke [vapor], then replace the paper with fresh paper from an unopened ream.
The machine does not print custom-sized paper, such as billing paper.	Set the correct paper size in the **Custom** in **Paper** tab in **Printing Preferences** (see "Opening printing preferences" on page 61).
The printed billing paper is curled.	The paper type setting does not match. Change the printer option and try again. Go to **Printing Preferences**, click **Paper** tab, and set type to **Thin** (see "Opening printing preferences" on page 61).
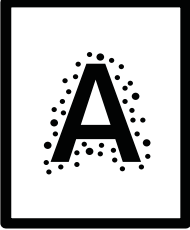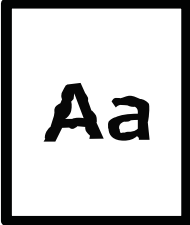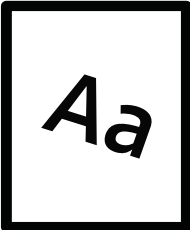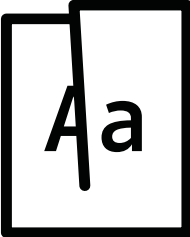
Printing quality problems
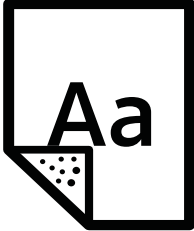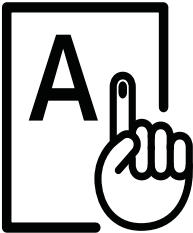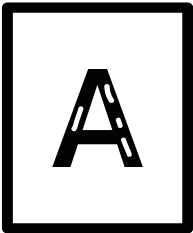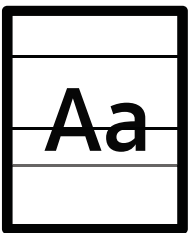
If the inside of the machine is dirty or paper has been loaded improperly, there might be a reduction in print quality. See the table below to clear the problem.

Condition	Suggested solutions
Light or faded print	• If a vertical white streak or faded area appears on the page, the toner supply is low. Install a new toner cartridge (see "Replacing the toner cartridge" on page 236). • The paper may not meet paper specifications; for example, the paper may be too moist or rough. • If the entire page is light, the print resolution setting is too low or the toner save mode is on. Adjust the print resolution and turn the toner save mode off. See the help screen of the printer driver. • A combination of faded or smeared defects may indicate that the toner cartridge needs cleaning. Clean the inside of your machine (see "Cleaning the machine" on page 242). • The surface of the LSU part inside the machine may be dirty. Clean the inside of your machine (see "Cleaning the machine" on page 242). If these steps do not correct the problem, contact a service representative.
The top half of the paper is printed lighter than the rest of the paper	**The toner might not adhere properly to this type of paper.** • Change the printer option and try again. Go to **Printing Preferences**, click the **Paper** tab, and set the paper type to **Recycled** (see "Opening printing preferences" on page 61).
Toner specks	• The paper may not meet specifications; for example, the paper may be too moist or rough. • The transfer roller may be dirty. Clean the inside of your machine (see "Cleaning the machine" on page 242). • The paper path may need cleaning. Contact a service representative (see "Cleaning the machine" on page 242).

Condition	Suggested solutions
Dropouts Aa	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. • The paper lot is bad. The manufacturing processes can cause some areas to reject toner. Try a different kind or brand of paper. • Change the printer option and try again. Go to **Printing Preferences**, click the **Paper** tab, and set type to **Thick** (see "Opening printing preferences" on page 61). If these steps do not correct the problem, contact a service representative.
White Spots	If white spots appear on the page: • The paper is too rough and a lot of dirt from paper falls to the inner components within the machine, so the transfer roller may be dirty. Clean the inside of your machine (see "Cleaning the machine" on page 242). • The paper path may need cleaning. Clean the inside of your machine (see "Cleaning the machine" on page 242). If these steps do not correct the problem, contact a service representative.
Vertical lines Aa	If black vertical streaks appear on the page: • The surface (drum part) of the toner cartridge inside the machine has probably been scratched. Remove the toner cartridge and install a new one (see "Replacing the toner cartridge" on page 236). If white vertical streaks appear on the page: • The surface of the LSU part inside the machine may be dirty. Clean the inside of your machine (see "Cleaning the machine" on page 242). If these steps do not correct the problem, contact a service representative.
Black or color background Aa	If the amount of background shading becomes unacceptable: • Change to a lighter weight paper. • Check the environmental conditions: very dry conditions or a high level of humidity (higher than 80 % RH) can increase the amount of background shading. • Remove the old toner cartridge and install a new one (see "Replacing the toner cartridge" on page 236). • Thoroughly redistribute the toner (see "Redistributing toner" on page 234).

Condition	Suggested solutions
Toner smear	• Clean the inside of the machine (see "Cleaning the machine" on page 242). • Check the paper type and quality. • Remove the toner cartridge and install a new one (see "Replacing the toner cartridge" on page 236).
Vertical repetitive defects	If marks repeatedly appear on the printed side of the page at even intervals: • The toner cartridge may be damaged. If you still have the same problem, remove the toner cartridge and, install a new one (see "Replacing the toner cartridge" on page 236). • 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.
Background scatter	Background scatter results from bits of toner randomly distributed on the printed page. • The paper may be too damp. Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture. • If background scatter occurs on an envelope, change the printing layout to avoid printing over areas that have overlapping seams on the reverse side. Printing on seams can cause problems. Or select **Thick** from the **Printing Preferences** window (see "Opening printing preferences" on page 61). • If background scatter covers the entire surface area of a printed page, adjust the print resolution through your software application or in **Printing Preferences** (see "Opening printing preferences" on page 61). Ensure the correct paper type is selected. For example: If Thicker Paper is selected, but Plain Paper actually used, an overcharging can occur causing this copy quality problem. • If you are using a new toner cartridge, redistribute the toner first (see "Redistributing toner" on page 234).

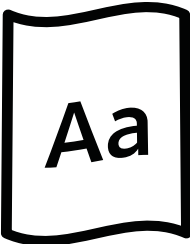| Condition	Suggested solutions
Toner particles are around bold characters or pictures	The toner might not adhere properly to this type of paper. • Change the printer option and try again. Go to **Printing Preferences**, click the **Paper** tab, and set the paper type to **Recycled** (see "Opening printing preferences" on page 61). • Ensure the correct paper type is selected. For example: If Thicker Paper is selected, but Plain Paper actually used, an overcharging can occur causing this copy quality problem.
Misformed characters	• If characters are improperly formed and producing hollow images, the paper stock may be too slick. Try different paper.
Page skew	• Ensure that the paper is loaded properly. • Check the paper type and quality. • Ensure that the paper guides are not too tight or too loose against the paper stack.
Curl or wave	• Ensure that the paper is loaded properly. • Check the paper type and quality. Both high temperature and humidity can cause paper curl. • Turn the stack of paper over in the tray. Also try rotating the paper 180° in the tray.
Wrinkles or creases	• Ensure that the paper is loaded properly. • Check the paper type and quality. • Turn the stack of paper over in the tray. Also try rotating the paper 180° in the tray.

Condition	Suggested solutions
Back of printouts are dirty	• Check for leaking toner. Clean the inside of the machine (see "Cleaning the machine" on page 242).
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. Remove the toner cartridge and install a new one (see "Replacing the toner cartridge" on page 236). • The machine may require repairing. Contact a service representative.
Loose toner	• Clean the inside of the machine (see "Cleaning the machine" on page 242). • Check the paper type, thickness, and quality. • Remove the toner cartridge and then, install a new one (see "Replacing the toner cartridge" on page 236). 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: • 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.
Horizontal stripes	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 "Replacing the toner cartridge" on page 236). If the problem persists, the machine may require repairing. Contact a service representative.

Condition	Suggested solutions
Curl Aa	If the printed paper is curled or paper does not feed into the machine: • Turn the stack of paper over in the tray. Also try rotating the paper 180° in the tray. • Change the printer's paper option and try again. Go to **Printing Preferences**, click the **Paper** tab, and set type to **Thin** (see "Opening printing preferences" on page 61).
• An unknown image repetitively appears on a few sheets • Loose toner • Light print or contamination occurs	Your machine is probably being used at an altitude of 1,000 m (3,281 ft) or above.The high altitude may affect the print quality, such as loose toner or light imaging. Change the altitude setting for your machine (see "Admin Settings" on page 182).

Copying problems

Condition	Suggested solutions
Copies are too light or too dark.	Adjust the darkness in copy feature to lighten or darken the backgrounds of copies.
Smears, lines, marks, or spots appear on copies.	• If the defects are on the original, adjust darkness in copy feature to lighten the background of your copies. • If there are no defects on the original, clean the scan unit (see "Cleaning the scan unit" on page 246).
Copy image is skewed.	• Ensure that the original is aligned with the registration guide. • The transfer roller may be dirty. Clean the inside of your machine (see "Cleaning the machine" on page 242). • The skew caused by Dual Scan Document Feeder (DSDF) need to adjust the hinges. Contact a service representative.
Blank copies print out.	Ensure that the original is face down on the scanner glass or face up in the document feeder. If these steps do not correct the problem, contact a service representative.
Image rubs off the copy easily.	• Replace the paper in the tray with paper from a new package. • In high humidity areas, do not leave paper in the machine for extended periods of time.
Frequent copy paper jams occur.	• Fan the paper, then turn it over in the tray. Replace the paper in the tray with a fresh supply. Check/adjust the paper guides, if necessary. • Ensure that the paper is the proper type and weight (see "Print media specifications" on page 282). • 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 Dual Scan Document Feeder (DSDF) may be left open while copies are being made. • Turn the machine off and back on.

Scanning problems

Condition	Suggested solutions
The scanner does not work.	• Make sure that you place the original to be scanned face down on the scanner glass, or face up in the document feeder (see "Loading originals" on page 41). • There may not be enough available memory to hold the document you want to scan. Try the Prescan function to see if that works. Try lowering the scan resolution rate. • Check that the machine printer cable is connected properly. • Make sure that the machine printer cable is not defective. Switch the printer cable with a known good cable. If necessary, replace the printer cable. • Check that the scanner is configured correctly. Check scan setting in the application you want to use to make certain that the scanner job is being sent to the correct port (for example, USB001).
The unit scans very slowly.	• 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 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. Try your job again when that job is finished. • The selected port is currently being used. Restart your computer and try again. • The machine printer cable may be improperly connected or the power may be off. • The scanner driver is not installed or the operating environment is not set up properly. • Ensure that the machine is properly connected and the power is on, then restart your computer. • The USB cable may be improperly connected or the power may be off.

Faxing problems

Condition	Suggested solutions
The machine is not working, there is no display, or the buttons are not working.	• Unplug the power cord and plug it in again. • Ensure that there is power being supplied to the electrical outlet. • Ensure that the power is turned on.
No dial tone.	• Check that the phone line is properly connected (see "Rear view" on page 18). • Check that the phone socket on the wall is working by plugging in another phone.
The numbers stored in memory do not dial correctly.	Make sure that the numbers are stored in memory correctly. To check that, print an address book list.
The original does not feed into the machine.	• Make sure that the paper is not wrinkled and you are inserting it in correctly. Check that the original is the right size, not too thick or thin. • Make sure that the document feeder is firmly closed. • The document feeder rubber pad may need to be replaced. Contact a service representative (see "Available maintenance parts" on page 231).
Faxes are not received automatically.	• The receiving mode should be set to fax (see "Changing Receive Mode" on page 116). • Make sure that there is paper in the tray (see "Print media specifications" on page 282). • 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 document feeder or on the scanner glass. • Check the fax machine you are sending to, to see if it can receive your fax.
The incoming fax has blank spaces or is of poor-quality.	• The fax machine sending you the fax may be faulty. • A noisy phone line can cause line errors. • Check your machine by making a copy. • A toner cartridge has almost reached its estimated cartridge life. Replace the toner cartridge (see "Replacing the toner cartridge" on page 236).
Some of the words on an incoming fax are stretched.	The fax machine sending the fax had a temporary document jam.

Condition	Suggested solutions
There are lines on the originals you sent.	Check your scan unit for marks and clean it (see "Cleaning the scan unit" on page 246).
The machine dials a number, but the connection with the other fax machine fails.	The other fax machine may be turned off, out of paper, or cannot answer incoming calls. Speak with the other machine operator and ask them to solve the problem on their side.
Faxes do not store in memory.	There may not be enough memory space to store the fax. If the display indicating the memory status shows, delete any faxes you no longer need from the memory, and then try to store the fax again. Call for service.
Blank areas appear at the bottom of each page or on other pages, with a small strip of text at the top.	You may have chosen the wrong paper settings in the user option setting. Check the paper size and type again.

Operating system problems

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.
"General Protection Fault", "Exception OE", "Spool 32", or "Illegal Operation" messages appear.	Close all other applications, reboot Windows and try printing again.
"Fail To Print", "A printer timeout error occurred" message appear.	These messages may appear during printing. Just keep waiting until the machine finishes printing. If the message appears in ready mode or after printing has completed, check the connection and/or whether an error has occurred.
Samsung Printer Experience is not shown when you click more settings.	**Samsung Printer Experience** is not installed. Download the app from the Windows **Store** and install it.
Machine information is not displayed when you click the device in the Devices and Printers.	Check the **Printer properties**. Click the **Ports** tab. (**Control Panel** > **Devices and Printers** > Right-click on your printer icon and select **Printer properties**) If the port is set to File or LPT, uncheck them and select TCP/IP, USB, or WSD.

> Refer to the Microsoft Windows User Guide that came with your computer for further information on Windows error messages.

Wireless network problems

If problems occur while using the machine on a network, check the following:

> For information on the access point (or wireless router), refer to its own user guide.

- Your computer, access point (or wireless router), or machine may not be turned on.
- Check the wireless reception around the machine. If the router is far from the machine or there is an obstacle, you might have difficulty receiving the signal.
- Cycle the power for the access point (or wireless router), machine, and computer. Sometimes cycling the power can recover network communication.
- Check whether firewall software (V3 or Norton) is blocking the communication.
  If the computer and the machine are connected on the same network and it cannot be found when searching, firewall software might be blocking the communication. Refer to the user guide for the software to turn it off and try searching for the machine again.
- Check the machine's IP address. Reinstall the machine driver and change the settings to connect to the machine on the network. Due to the characteristics of DHCP, the allocated IP address could change if the machine is not used for a long time or if the access point has been reset.
  Register the product's MAC address when you configure the DHCP server on the access point (or wireless router). Then you can always use the IP address that is set with the MAC address. You can identify the Mac address of your machine by printing a network configuration report.
- Check whether the machine's IP address is allocated correctly. You can check the IP address by printing the network configuration report.D
- Check whether the access point (or wireless router) has a configured security (password). If it has a password, refer to the access point (or wireless router) administrator.
- Check the wireless environment. You might not be able to connect to the network in the infrastructure environment where you need to type in a user's information before connecting to the access point (or wireless router).
- This machine only supports IEEE 802.11 b/g/n and Wi-Fi. Other wireless communication types (e.g., Bluetooth) are not supported.
- The machine is within the range of the wireless network.
- The machine is located away from obstacles that could block the wireless signal.
  Remove any large metal objects between the access point (or wireless router) and the machine. Make sure the machine and wireless access point (or wireless router) are not separated by poles, walls, or support columns containing metal or concrete.
- The machine is located away from other electronic devices that may interfere with the wireless signal.
  Many devices can interfere with the wireless signal, including a microwave oven and some Bluetooth devices.
- Whenever the configuration of your access point (or wireless router) changes, you must do the product's wireless network setup again.
- The maximum number of devices that can be connected via Wi-Fi Direct is 4.
- If the access point is set to work with the 802.11n standard only, it may not connect to your machine.

Appendix

This chapter provides product specifications and information concerning applicable regulations.

Specifications

General specifications

✎ These specifications are subject to change without notice. To see additional specifications and information about changes to the specifications, please visit, **www.samsung.com**.

Items		Description
Dimension[a]	Width x Depth x Height	• **M456x Series:** 433.0 x 459.5 x 573.8 mm (17.05 x 18.09 x 22.59 inches) • **M4562 Series:** 531.2 x 459.5 x 625.3 mm (20.91 x 18.09 x 24.62 inches)
Weight [a]	Machine with supplies	• **M456x Series:** 29.08 kg (64.11 lbs) • **M4562 Series:** 30.56 kg (67.37 lbs)
Noise Level[bc]	Ready mode	Less than 30 dB (A)
	Print mode	Less than 54 dB (A)
	Copy mode	Less than 57 dB (A)
	Scan mode — Scanner glass	Less than 49 dB (A)
	Scan mode — Document feeder	Less than 53 dB (A)
Temperature	Operation	10 to 32 °C (50 to 89.6 °F)
	Storage (packed)	-20 to 40 °C (-4 to 104 °F)
Humidity	Operation	10 to 80 % RH
	Storage (packed)	10 to 80 % RH
Power rating[d]	110 volt models	AC 110 - 127 V
	220 volt models	AC 220 - 240 V
Power consumption[e]	Average operating mode	Less than 900 W
	Ready mode	Less than 30 W
	Power save mode	Less than 1.8 W
	Power off mode[f]	Less than 0.45 W

a.Dimensions and weight are measured without a 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.

Print media specifications

✎   We recommend using recycled paper for saving energy.

Type	Size	Dimensions	print media weight[a]/Capacity[b]	
			Tray1 / Tray2, 3, 4	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) • 550 sheets of 75 g/m^2 (20 lb bond)	70 to 90 g/m^2 (19 to 24 lb bond) • 100 sheets of 75 g/m^2 (20 lb bond)
	Legal	216 x 356 mm (8.5 x 14 inches)		
	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.	

| Type | Size | Dimensions | print media weight[a]/Capacity[b] | |
			Tray1 / Tray2, 3, 4	Multi-purpose tray
Envelope[cd]	Envelope Monarch	98 x 191 mm (3.87 x 7.5 inches)	75 to 90 g/m² (20 to 24 lb bond) • 50 sheets of 75 g/m² (20 lb bond)	75 to 90 g/m² (20 to 24 lb bond) • 10 sheets of 75 g/m² (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)		
	Envelope C6	114 x 162 mm (4.48 x 6.38 inches)		
Thick paper[e f]	Refer to the Plain paper section	Refer to the Plain paper section	91 to 105 g/m² (24 to 28 lb bond)	91 to 105 g/m² (24 to 28 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/m² (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/m² (16 to 19 lb bond) • 550 sheets	60 to 69 g/m² (16 to 19 lb bond) • 100 sheets
Labels[g h]	Letter, Legal, Oficio, US Folio, A4, JIS B5, ISO B5, Executive, A5, A6, Statement	Refer to the Plain paper section	120 to 150 g/m² (32 to 40 lb bond) • 50 sheets	120 to 150 g/m² (32 to 40 lb bond) • 10 sheets

Type	Size	Dimensions	print media weight[a]/Capacity[b]	
			Tray1 / Tray2, 3, 4	Multi-purpose tray
Card stock e h	Refer to the Plain paper section	Refer to the Plain paper section	106 to 163 g/m^2 (28 to 43lb bond) • 50 sheets	106 to 163 g/m^2 (28 to 43lb bond) • 10 sheets
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)

Type	Size	Dimensions	print media weight[a]/Capacity[b]	
			Tray1 / Tray2, 3, 4	Multi-purpose tray
Letterhead [h]	Letter, Legal, Oficio, US Folio, A4, JIS B5, ISO B5, Executive, A5, A6, 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)
Archive [f]	Letter, Legal, US Folio, A4, JIS B5, ISO B5, Executive, A5, A6, 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)		• **Tray1 / Optional tray:** 98.6 X 148.5mm (3.88 x 5.85 inches) • **Multi-purpose tray:** 76.2 x 127 mm (3 x 5 inches)	60 to 163 g/m^2 (16 to 43 lb bond)	60 to 220 g/m^2 (16 to 59 lb bond)
Maximum size (custom)		216 x 356 mm (8.5 x 14 inches)		

a.If media weight is over 105 g/m^2 (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 supported only multi-purpose tray/tray1.
d.Envelope No.10, Envelope No.9, Envelope DL and Envelope C5 are supported only multi-purpose tray/tray1/tray2.
e.Index Card is supported only multi-purpose tray.
f.A6, PostCard 4 x 6, and PostCard 100 x 148 are supported only multi-purpose tray/tray1.
g.Smoothness: 100 to 250 (sheffield)
h.A6 is supported only multi-purpose tray/tray1.

System requirements

✎ Printer software are occasionally updated due to release of new operating system and etc. If needed, download the latest version from the Samsung website.

Microsoft® Windows®

Operating system	Requirement (recommended)		
	CPU	RAM	Free HDD space
Windows® XP Service Pack 3	Intel® Pentium® IV 1 GHz (Pentium IV 2 GHz)	128 MB (256 MB)	1.5 GB
Windows Server® 2003	Intel® Pentium® IV 1 GHz (Pentium IV 2 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 1.4 GHz (x64) processors (2 GHz or faster)	512 MB (2 GB)	10 GB
Windows® 8 Windows® 8.1 Windows® 10 Windows Server® 2016	Intel® Pentium® IV 1 GHz 32-bit or 64-bit processor or higher	2 GB (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 1.4 GHz (x64) processors (2 GHz or faster)	512 MB (2 GB)	32 GB

✎ • 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.

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/EN 60825-1:2014.

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:

Below the warning label of Laser is attached on LSU cover.

For 110 volt models , "**This product complies with 21 CFR Chapter 1, subchapter J.**" is written on the label of rear cover. And for 220 volt models, below image is applied on the label of rear cover.

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.

Perchlorate warning

This Perchlorate warning applies only to primary CR (Manganese Dioxide) Lithium coin cells in the product sold or distributed ONLY in California USA.

Perchlorate Material - special handling may apply.

See www.dtsc.ca.gov/hazardouswaste/perchlorate. (U.S.A. only)

Power saver

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

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

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

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

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.

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

EU REACH SVHC Declaration

For information on Samsung's environmental commitments and product specific regulatory obligations e.g. REACH visit:
www.samsung.com/uk/aboutsamsung/samsungelectronics/corporatecitizenship/data_corner.html.

State of California Proposition 65 Warning (USA 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 exposure to such chemicals.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. This appliance and its accessories can cause low-level exposure to chemicals during operation, which can be reduced by operating the appliance in a well ventilated area, and low-level exposure to chemicals through other use or handling.

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.

- This device must accept any interference received, including interference that may cause undesired operation.

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

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

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

Canadian radio interference regulations

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

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

United States of America

Federal Communications Commission (FCC)

Intentional emitter per FCC Part 15

Low power, Radio LAN 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.

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

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

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

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

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

FCC Statement for Wireless LAN use:

⚠️ While installing and operating this transmitter and antenna combination the radio frequency exposure limit of $1\,mW/cm^2$ 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.

RFID (Radio Frequency Interface Device)

RFID operation is subject to the following two conditions:(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. (U.S.A., France, Taiwan only)

Taiwan only

警告使用者：

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

警告

　　本電池如果更換不正確會有爆炸的危險
　　請依製造商說明書處理用過之電池

低功率電波輻射性電機管理辦法

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

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

Russia / Kazakhstan / Belarus only

EAC

Изготовитель: «Самсунг Электроникс Ко., Лтд.»
(Мэтан-донг) 129, Самсунг-ро, Енгтонг-гу, г. Сувон, Кёнги-до, Республика Корея
Импортер: ООО «Самсунг Электроникс Рус Компани»
Адрес: 125009, г. Москва, ул. Воздвиженка 10

Самсунг Электроникс Ко. Лтд
(Мэтан-донг) 129, Самсунг-ро, Енгтонг-гу, Сувон қ., Кёнги-до, Корея Республикасы
«САМСУНГ ЭЛЕКТРОНИКС КЗ ЭНД ЦЕНТРАЛ ЭЙЖА» ЖШС
Заңды мекен-жайы:Қазақстан Республикасы, Алматы қ., Әл-Фараби даңғылы, 36, 3,4-қабаттар

Germany only

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

Das Gerät kann der Bildschirmarbeitsverordnung unterliegen und in
diesem Zusammenhang Abweichungen von an Bildschirmarbeitsplätze
zu stellenden Anforderungen (Zeichengröße auf Bildschirmgerät und Tastatur)
aufweisen. Es ist daher für Tätigkeiten nicht geeignet, bei denen Beschäftigte
das Gerät für einen nicht unwesentlichen Teil ihrer normalen Arbeit mit
Bildschirmarbeit benutzen.

Bei Aufstellung des Gerätes darauf achten, dass Blendungen durch in der
Anzeige spiegelnde Lichtquellen vermieden werden.

Turkey only

• Bu ürünün ortalama yaşam süresi 7 yıl, garanti suresi 2 yildir.

Canada only

This product meets the applicable Innovation, Science and Economic Development Canada
technical speci cations. / Le present produit est conforme aux speci cations techniques
applicables d'Innovation, Sciences et Developpement economique Canada.

Product Marketing Name (PMN): Multi Function Printer with Facsimile function /Nom de marque
de produit (NMP): Imprimantes Multifonctions avec fonctions de telecopie

The Ringer Equivalence Number (REN) is an indication of the maximum number of devices
allowed to be connected to a telephone interface. The termination of an interface may consist of
any combination of devices subject only to the requirement that the sum of the RENs of all the
devices not exceed five. / L'indice d'equivalence de la sonnerie (IES) sert a indiquer le nombre
maximal de terminaux qui peuvent etre raccordes a une interface telephonique. La terminaison
d'une interface peut consister en une combinaison quelconque de dispositifs, a la seule condition
que la somme d'indices d'equivalence de la sonnerie de tous les dispositifs n'excede pas cinq.

Ringer Equivalence Number : 0.1/ Indice REN : 0.1

Thailand only

This telecommunication equipment conforms to NTC technical requirement.

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.

Fax Board : SSF336_MODEM

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 s of equipment on the same telephone line may result in problems making and receiving telephone calls, especially ringing when your line is called. The sum of all Ringer Equivalence Numbers of the equipment on your telephone line should be less than five in order to assure proper service from the telephone company. In some cases, a sum of five may not be usable on your line. If any of your telephone equipment is not operating properly, you should immediately remove it from your telephone line, as it may cause harm to the telephone network.

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

⚠ FCC Regulations state that changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment. In the event that terminal equipment causes harm to the telephone network, the

telephone company should notify the customer that service may be stopped. However, where prior notice is impractical, the company may temporarily cease service, providing that they:

a. promptly notify the customer.

b. give the customer an opportunity to correct the equipment problem.

c. inform the customer of the right to bring a complaint to the Federal Communication Commission pursuant to procedures set out in FCC Rules and Regulations Subpart E of Part 68.

You should also know that:

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

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

Replacing the Fitted Plug (for UK Only)

Important

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

Contact the people from you purchased the machine.

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

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

Important warning:

You must earth this machine.

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

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

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

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

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

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

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

European Class A Warning

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

Declaration of conformity (European countries)

Approvals and Certifications

Hereby, Samsung Electronics, declares that this [M456x Series] is in compliance with the essential requirements and other relevant provisions of Low Voltage Directive (2014/35/EU), EMC Directive (2014/30/EU).

Hereby, Samsung Electronics, declares that this [M456x Series] is in compliance with the essential requirements and other relevant provisions of Radio Equipment Directive (2014/53/EU).

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.

Council Directive 2014/35/EU, Approximation of the laws of the member states related to low voltage equipment.

Council Directive 2014/30/EU, Approximation of the laws of the Member States related to electromagnetic compatibility.

Council Directive 2014/53/EU 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

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. 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 band, may be present (embedded) in your printer system which is intended for home or office use. This section is only applicable if these devices are present. Refer to the system label to verify the presence of wireless devices.

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

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

European states qualified under wireless approvals:

EU countries

European states with restrictions on use:

EU

In France, this equipment may only be used indoors.

EEA/EFTA countries

No limitations at this time

Regulatory compliance statements

Wireless guidance

Low power, Radio LAN 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.

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

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

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

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

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

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

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

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

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

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

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

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。

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

产品中有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr^{6+})	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
塑料	O	O	O	O	O	O
金属（机箱）	X	O	O	O	O	O
印刷电路部件 (PCA)	X	O	O	O	O	O
电缆 / 连接器	X	O	O	O	O	O
电源设备	X	O	O	O	O	O
电源线	X	O	O	O	O	O
机械部件	X	O	O	O	O	O
卡盒部件	X	O	O	O	O	O
定影部件	X	O	O	O	O	O
扫描仪部件 - CCD（如果有）	X	X	O	O	O	O
扫描仪部件 - 其它（如果有）	X	O	O	O	O	O
印刷电路板部件 (PBA)	X	O	O	O	O	O
墨粉	O	O	O	O	O	O
滚筒	O	O	O	O	O	O

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REV. 1.00

Glossary

	The following glossary helps you get familiar with the product by understanding the terminologies commonly used with printing as well as mentioned in this user guide.

802.11

802.11 is a set of standards for wireless local area network (WLAN) communication, developed by the IEEE LAN/MAN Standards Committee (IEEE 802).

802.11b/g/n

802.11b/g/n can share same hardware and use the 2.4 GHz band. 802.11b supports bandwidth up to 11 Mbps, 802.11n supports bandwidth up to 150 Mbps. 802.11b/g/n devices may occasionally suffer interference from microwave ovens, cordless telephones, and Bluetooth devices.

Access point

Access Point or Wireless Access Point (AP or WAP) is a device that connects wireless communication devices together on wireless local area networks (WLAN), and acts as a central transmitter and receiver of WLAN radio signals.

ADF

An Automatic Document Feeder (ADF) is a scanning unit that will automatically feed an original sheet of paper so that the machine can scan some amount of the paper at once.

BIT Depth

A computer graphics term describing the number of bits used to represent the color of a single pixel in a bitmapped image. Higher color depth gives a broader range of distinct colors. As the number of bits increases, the number of possible colors becomes impractically large for a color map. 1-bit color is commonly called as monochrome or black and white.

BMP

A bitmapped graphics format used internally by the Microsoft Windows graphics subsystem (GDI), and used commonly as a simple graphics file format on that platform.

BOOTP

Bootstrap Protocol. A network protocol used by a network client to obtain its IP address automatically. This is usually done in the bootstrap process of computers or operating systems running on them. The BOOTP servers assign the IP address from a pool of addresses to each client. BOOTP enables 'diskless workstation' computers to obtain an IP address prior to loading any advanced operating system.

CCD

Charge Coupled Device (CCD) is a hardware which enables the scan job. CCD Locking mechanism is also used to hold the CCD module to prevent any damage when you move the machine.

Collation

Collation is a process of printing a multiple-copy job in sets. When collation is selected, the device prints an entire set before printing additional copies.

Control Panel

A control panel is a flat, typically vertical, area where control or monitoring instruments are displayed. They are typically found in front of the machine.

Coverage

It is the printing term used for a toner usage measurement on printing. For example, 5 % coverage means that an A4 sided paper has about 5 % image or text on it. So, if the paper or original has complicated images or lots of text on it, the coverage will be higher and at the same time, a toner usage will be as much as the coverage.

CSV

Comma Separated Values (CSV). A type of file format, CSV is used to exchange data between disparate applications. The file format, as it is used in Microsoft Excel, has become a de facto standard throughout the industry, even among non-Microsoft platforms.

Dual Scan Document Feeder (DSDF)

A Dual Scan Document Feeder (DSDF) is a scanning unit that will automatically feed and turn over an original sheet of paper so that the machine can scan on both sides of the paper.

Default

The value or setting that is in effect when taking a printer out of its box state, reset, or initialized.

DHCP

A Dynamic Host Configuration Protocol (DHCP) is a client-server networking protocol. A DHCP server provides configuration parameters specific to the DHCP client host requesting, generally, information required by the client host to participate on an IP network. DHCP also provides a mechanism for allocation of IP addresses to client hosts.

DIMM

Dual Inline Memory Module (DIMM), a small circuit board that holds memory. DIMM stores all the data within the machine like printing data, received fax data.

DNS

The Domain Name Server (DNS) is a system that stores information associated with domain names in a distributed database on networks, such as the Internet.

Dot Matrix Printer

A dot matrix printer refers to a type of computer printer with a print head that runs back and forth on the page and prints by impact, striking an ink-soaked cloth ribbon against the paper, much like a typewriter.

DPI

Dots Per Inch (DPI) is a measurement of resolution that is used for scanning and printing. Generally, higher DPI results in a higher resolution, more visible detail in the image, and a larger file size.

DRPD

Distinctive Ring Pattern Detection. Distinctive Ring is a telephone company service which enables a user to use a single telephone line to answer several different telephone numbers.

Duplex

A mechanism that will automatically turn over a sheet of paper so that the machine can print (or scan) on both sides of the paper. A printer equipped with a Duplex Unit can print on both sides of paper during one print cycle.

Duty Cycle

Duty cycle is the page quantity which does not affect printer performance for a month. Generally the printer has the lifespan limitation such as pages per year. The lifespan means the average capacity of print-outs, usually within the warranty period. For example, if the duty cycle is 48,000 pages per month assuming 20 working days, a printer limits 2,400 pages a day.

ECM

Error Correction Mode (ECM) is an optional transmission mode built into Class 1 fax machines or fax modems. It automatically detects and corrects errors in the fax transmission process that are sometimes caused by telephone line noise.

Emulation

Emulation is a technique of one machine obtaining the same results as another.
An emulator duplicates the functions of one system with a different system, so that the second system behaves like the first system. Emulation focuses on exact reproduction of external behavior, which is in contrast to simulation, which concerns an abstract model of the system being simulated, often considering its internal state.

Ethernet

Ethernet is a frame-based computer networking technology for local area networks (LANs). It defines wiring and signaling for the physical layer, and frame formats and protocols for the media access control (MAC)/data link layer of the OSI model. Ethernet is mostly standardized as IEEE 802.3. It has become the most widespread LAN technology in use during the 1990s to the present.

FDI

Foreign Device Interface (FDI) is a card installed inside the machine to allow a third party device such as a coin operated device or a card reader. Those devices allow the pay-for-print service on your machine.

FTP

A File Transfer Protocol (FTP) is a commonly used protocol for exchanging files over any network that supports the TCP/IP protocol (such as the Internet or an intranet).

Fuser Unit

The part of a laser printer that fuses the toner onto the print media. It consists of a heat roller and a pressure roller. After toner is transferred onto the paper, the fuser unit applies heat and pressure to ensure that the toner stays on the paper permanently, which is why paper is warm when it comes out of a laser printer.

Gateway

A connection between computer networks, or between a computer network and a telephone line. It is very popular, as it is a computer or a network that allows access to another computer or network.

Grayscale

A shades of gray that represent light and dark portions of an image when color images are converted to grayscale; colors are represented by various shades of gray.

Halftone

An image type that simulates grayscale by varying the number of dots. Highly colored areas consist of a large number of dots, while lighter areas consist of a smaller number of dots.

Mass storage device (HDD)

Mass storage device (HDD), commonly referred to as a hard drive or hard disk, is a non-volatile storage device which stores digitally-encoded data on rapidly rotating platters with magnetic surfaces.

IEEE

The Institute of Electrical and Electronics Engineers (IEEE) is an international non-profit, professional organization for the advancement of technology related to electricity.

Internet Fax(T.37)

This feature allows users to send and receive fax documents using theInternet. Documents are transmitted in E-mail messages as attached TIFF files. Users can send the documents to Internet Fax devices or other user E-mail Box. Internet Fax device also can print out the documents without user's intervention. This document describes behavior of Internet Fax using T.37 protocol.

Intranet

A private network that uses Internet Protocols, network connectivity, and possibly the public telecommunication system to securely share part of an organization's information or operations with its employees. Sometimes the term refers only to the most visible service, the internal website.

IP address

An Internet Protocol (IP) address is a unique number that devices use in order to identify and communicate with each other on a network utilizing the Internet Protocol standard.

IPM

The Images Per Minute (IPM) is a way of measuring the speed of a printer. An IPM rate indicates the number of single-sided sheets a printer can complete within one minute.

IPP

The Internet Printing Protocol (IPP) defines a standard protocol for printing as well as managing print jobs, media size, resolution, and so forth. IPP can be used locally or over the Internet to hundreds of printers, and also supports access control, authentication, and encryption, making it a much more capable and secure printing solution than older ones.

ISO

The International Organization for Standardization (ISO) is an international standard-setting body composed of representatives from national standards bodies. It produces world-wide industrial and commercial standards.

ITU-T

The International Telecommunication Union is an international organization established to standardize and regulate international radio and telecommunications. Its main tasks include standardization, allocation of the radio spectrum, and organizing interconnection arrangements between different countries to allow international phone calls. A -T out of ITU-T indicates telecommunication.

ITU-T No. 1 chart

Standardized test chart published by ITU-T for document facsimile transmissions.

JBIG

Joint Bi-level Image Experts Group (JBIG) is an image compression standard with no loss of accuracy or quality, which was designed for compression of binary images, particularly for faxes, but can also be used on other images.

JPEG

Joint Photographic Experts Group (JPEG) is a most commonly used standard method of lossy compression for photographic images. It is the format used for storing and transmitting photographs on the World Wide Web.

LDAP

The Lightweight Directory Access Protocol (LDAP) is a networking protocol for querying and modifying directory services running over TCP/IP.

LED

A Light-Emitting Diode (LED) is a semiconductor device that indicates the status of a machine.

MAC address

Media Access Control (MAC) address is a unique identifier associated with a network adapter. MAC address is a unique 48-bit identifier usually written as 12 hexadecimal characters grouped in pairs (e. g.,

00-00-0c-34-11-4e). This address is usually hard-coded into a Network Interface Card (NIC) by its manufacturer, and used as an aid for routers trying to locate machines on large networks.

MFP

Multi Function Peripheral (MFP) is an office machine that includes the following functionality in one physical body, so as to have a printer, a copier, a fax, a scanner and etc.

MH

Modified Huffman (MH) is a compression method for decreasing the amount of data that needs to be transmitted between the fax machines to transfer the image recommended by ITU-T T.4. MH is a codebook-based run-length encoding scheme optimized to efficiently compress white space. As most faxes consist mostly of white space, this minimizes the transmission time of most faxes.

MMR

Modified Modified READ (MMR) is a compression method recommended by ITU-T T.6.

Modem

A device that modulates a carrier signal to encode digital information, and also demodulates such a carrier signal to decode transmitted information.

MR

Modified Read (MR) is a compression method recommended by ITU-T T.4. MR encodes the first scanned line using MH. The next line is compared to the first, the differences determined, and then the differences are encoded and transmitted.

OPC

Organic Photo Conductor (OPC) is a mechanism that makes a virtual image for print using a laser beam emitted from a laser printer, and it is usually green or rust colored and has a cylinder shape.
An imaging unit containing a drum slowly wears the drum surface by its usage in the printer, and it should be replaced appropriately since it gets worn from contact with the cartridge development brush, cleaning mechanism, and paper.

Originals

The first example of something, such as a document, photograph or text, etc, which is copied, reproduced or translated to produce others, but which is not itself copied or derived from something else.

OSI

Open Systems Interconnection (OSI) is a model developed by the International Organization for Standardization (ISO) for communications. OSI offers a standard, modular approach to network design that divides the required set of complex functions into manageable, self-contained, functional layers. The layers are, from top to bottom, Application, Presentation, Session, Transport, Network, Data Link and Physical.

PABX

A private automatic branch exchange (PABX) is an automatic telephone switching system within a private enterprise.

PCL

Printer Command Language (PCL) is a Page Description Language (PDL) developed by HP as a printer protocol and has become an industry standard. Originally developed for early inkjet printers, PCL has been released in varying levels for thermal, dot matrix printer, and laser printers.

PDF

Portable Document Format (PDF) is a proprietary file format developed by Adobe Systems for representing two dimensional documents in a device independent and resolution independent format.

PostScript

PostScript (PS) is a page description language and programming language used primarily in the electronic and desktop publishing areas. - that is run in an interpreter to generate an image.

Printer Driver

A program used to send commands and transfer data from the computer to the printer.

Print Media

The media like paper, envelopes, labels, and transparencies which can be used in a printer, a scanner, a fax or, a copier.

PPM

Pages Per Minute (PPM) is a method of measurement for determining how fast a printer works, meaning the number of pages a printer can produce in one minute.

PRN file

An interface for a device driver, this allows software to interact with the device driver using standard input/output system calls, which simplifies many tasks.

Protocol

A convention or standard that controls or enables the connection, communication, and data transfer between two computing endpoints.

PS

See PostScript.

PSTN

The Public-Switched Telephone Network (PSTN) is the network of the world's public circuit-switched telephone networks which, on industrial premises, is usually routed through the switchboard.

Resolution

The sharpness of an image, measured in Dots Per Inch (DPI). The higher the dpi, the greater the resolution.

SMB

Server Message Block (SMB) is a network protocol mainly applied to share files, printers, serial ports, and miscellaneous communications between nodes on a network. It also provides an authenticated Inter-process communication mechanism.

SMTP

Simple Mail Transfer Protocol (SMTP) is the standard for e-mail transmissions across the Internet. SMTP is a relatively simple, text-based protocol, where one or more recipients of a message are specified, and then the message text is transferred. It is a client-server protocol, where the client transmits an email message to the server.

SSID

Service Set Identifier (SSID) is a name of a wireless local area network (WLAN). All wireless devices in a WLAN use the same SSID in order to communicate with each other. The SSIDs are case-sensitive and have a maximum length of 32 characters.

Subnet Mask

The subnet mask is used in conjunction with the network address to determine which part of the address is the network address and which part is the host address.

TCP/IP

The Transmission Control Protocol (TCP) and the Internet Protocol (IP); the set of communications protocols that implement the protocol stack on which the Internet and most commercial networks run.

TCR

Transmission Confirmation Report (TCR) provides details of each transmission such as job status, transmission result and number of pages sent. This report can be set to print after each job or only after failed transmissions.

TIFF

Tagged Image File Format (TIFF) is a variable-resolution bitmapped image format. TIFF describes image data that typically come from scanners. TIFF images make use of tags, keywords defining the characteristics of the image that is included in the file. This flexible and platform-independent format can be used for pictures that have been made by various image processing applications.

Toner Cartridge

A kind of bottle or container used in a machine like a printer which contains toner. Toner is a powder used in laser printers and photocopiers, which forms the text and images on the printed paper. Toner can be fused by by a combination of heat/pressure from the fuser, causing it to bind to the fibers in the paper.

TWAIN

An industry standard for scanners and software. By using a TWAIN-compliant scanner with a TWAIN-compliant program, a scan can be initiated from within the program. It is an image capture API for Microsoft Windows and Apple Macintosh operating systems.

UNC Path

Uniform Naming Convention (UNC) is a standard way to access network shares in Window NT and other Microsoft products. The format of a UNC path is: \\<servername>\<sharename>\<Additional directory>

URL

Uniform Resource Locator (URL) is the global address of documents and resources on the Internet. The first part of the address indicates what protocol to use, the second part specifies the IP address or the domain name where the resource is located.

USB

Universal Serial Bus (USB) is a standard that was developed by the USB Implementers Forum, Inc., to connect computers and peripherals. Unlike the parallel port, USB is designed to concurrently connect a single computer USB port to multiple peripherals.

Watermark

A watermark is a recognizable image or pattern in paper that appears lighter when viewed by transmitted light. Watermarks were first introduced in Bologna, Italy in 1282; they have been used by papermakers to identify their product, and also on postage stamps, currency, and other government documents to discourage counterfeiting.

WEP

Wired Equivalent Privacy (WEP) is a security protocol specified in IEEE 802.11 to provide the same level of security as that of a wired LAN. WEP provides security by encrypting data over radio so that it is protected as it is transmitted from one end point to another.

WIA

Windows Imaging Architecture (WIA) is an imaging architecture that is originally introduced in Windows Me and Windows XP. A scan can be initiated from within these operating systems by using a WIA-compliant scanner.

WPA

Wi-Fi Protected Access (WPA) is a class of systems to secure wireless (Wi-Fi) computer networks, which was created to improve upon the security features of WEP.

WPA-PSK

WPA-PSK (WPA Pre-Shared Key) is special mode of WPA for small business or home users. A shared key, or password, is configured in the wireless access point (WAP) and any wireless laptop or desktop devices. WPA-PSK generates a unique key for each session between a wireless client and the associated WAP for more advanced security.

WPS

The Wi-Fi Protected Setup (WPS) is a standard for establishing a wireless home network. If your wireless access point supports WPS, you can configure the wireless network connection easily without a computer.

XPS

XML Paper Specification (XPS) is a specification for a Page Description Language (PDL) and a new document format, which has benefits for portable document and electronic document, developed by Microsoft. It is an XML-based specification, based on a new print path and a vector-based device-independent document format.

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