5 PRINTING

This chapter explains how to print your documents in Windows and how to use the print settings.

This chapter includes:

- **Printing a Document**
- **Setting Paper Properties**
- **Printing Multiple Pages on One Sheet of Paper (N-Up Printing)**
- **Printing a Reduced or Enlarged Document**
- **Fitting Your Document to a Selected Paper Size**
- **Printing Posters**
- **Using Watermarks**
- **Using Overlays**
- **Setting Graphic Properties**
- **Setting Up the Locally Shared Printer**

Printing a Document

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

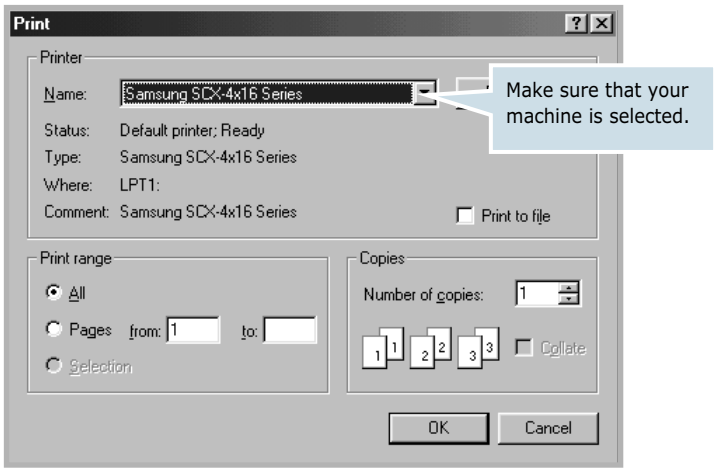
NOTE: For detailed information about printing from a Macintosh computer, see Appendix A.

1 Open the document you want to print.

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

The Print window is displayed. It may look slightly different depending on your application.

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



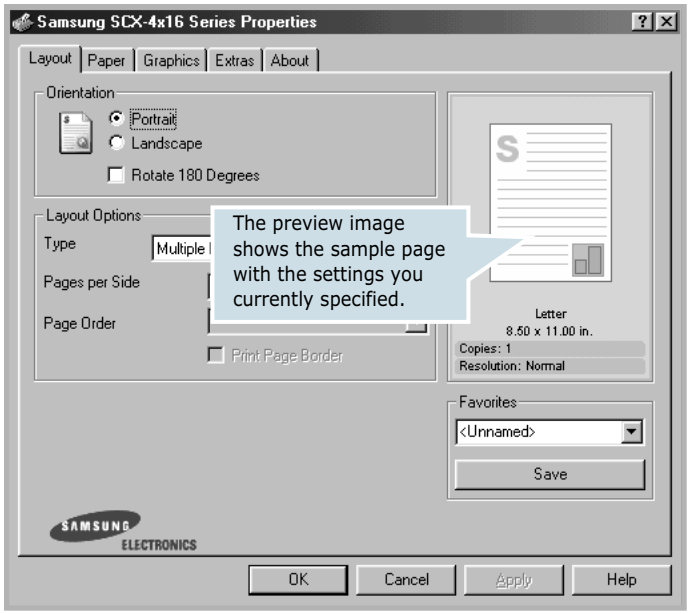
▲ Windows 98

3 To take advantage of the printer features provided by your machine, click **Properties** in the application's print window and go to Step 4.

If you see **Setup**, **Printer** or **Options**, click that button instead. Then click **Properties** in the next screen.

4 Now you see the Samsung SCX-4x16 Series Properties window, which allows you to access all of information you will need when using your machine.

The **Layout** tab is first displayed.



If necessary, select the **Orientation** option.

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

- **Portrait** prints across the width of the page, letter style.
- **Landscape** prints across the length of the page, spreadsheet style.
- If you want to rotate the page in 180 degrees, select **Rotate 180 Degrees**.

▲ Landscape

▲ Portrait

5 From the **Paper** tab, select the paper source, size and type. For further details, see page 5.7.

6 If necessary, you can set in what sequence the pages will be printed from the **Extra** tab. Select the required print order from the **Print Order** drop-down list.

- **Normal**: Your machine prints in normal order.
- **Reverse All Pages**: Your machine prints all pages in reversed order. This setting is helpful when you are using the rear output slot.
- **Print Odd Pages**: Your machine prints only the odd pages of the document.
- **Print Even Pages**: Your machine prints only the even pages of the document.

7 Click other tabs on the top of the Samsung SCX-4x16 Series Properties window to access other features, if needed.

8 When you finish setting the properties, click **OK** until the Print window is displayed.

9 Click **OK** to start printing.

Notes:

- Most Windows applications will override settings you specified in the printer driver. Change all of the print settings available in the software application first, and change any remaining settings using the printer driver.
- The settings you change remain in effect only while you are using the current program. To make your changes permanent, make them in the **Printers** folder. Follow these steps:
  1. Click the Windows **Start** menu.
  2. For Windows 95/98/Me/NT 4.0/2000, select **Settings** and then **Printers**.

     For Windows XP, select **Printers and Faxes**.
  3. Select the **Samsung SCX-4x16 Series** printer.
  4. Click the right mouse button on the printer icon and:
     - For Window 95/98/Me, select **Properties**.
     - For Windows 2000/XP, select **Print Setup** or select **Properties** and click **Printing Preferences**.
     - For Windows NT 4.0, select **Document Default**.
  5. Change the settings on each tab and click **OK**.

Canceling a Print Job

There are two ways to cancel a print job:

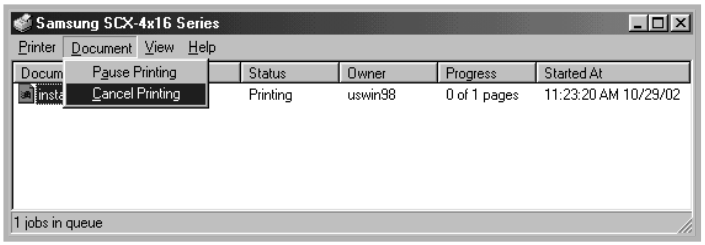
To stop a print job from the control panel:

Press the **Stop/Clear** button.

Your machine will finish printing the page that is moving through the machine and delete the rest of the print job. Pressing the button cancels only the current job. If more than one print job is in the machine's memory, you need to press the button once for each job.

To stop a print job from the Printers folder:

1. From the Windows **Start** menu, select **Settings**.
2. Select **Printers** to open the Printers window and double-click the **Samsung SCX-4x16 Series** icon.
3. From the **Document** menu, select **Cancel Printing** (Windows 9x/Me) or **Cancel** (Windows NT 4.0/2000/XP).



▲ Windows 98

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

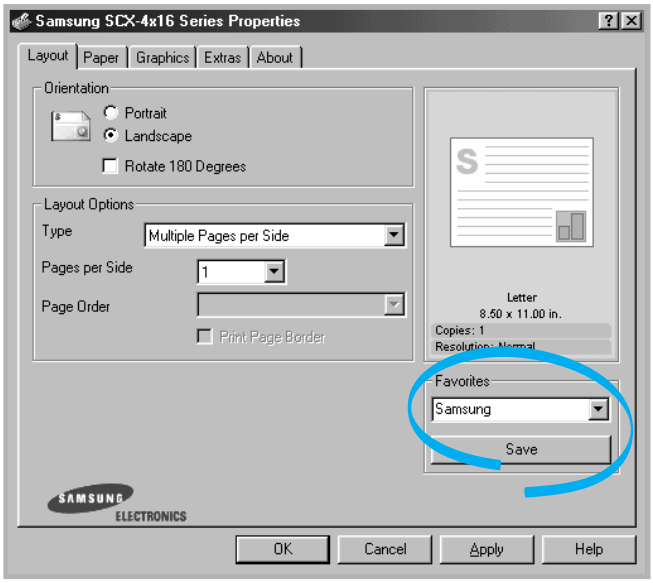
Using a Favorite Setting

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

To save a Favorites item:

1 Change the settings on each tab, as needed.

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



3 Click **Save**.

To use a saved setting, select it from the **Favorites** drop-down list.

To delete a favorite setting item, select it from the list and click **Delete**.

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

Using Help

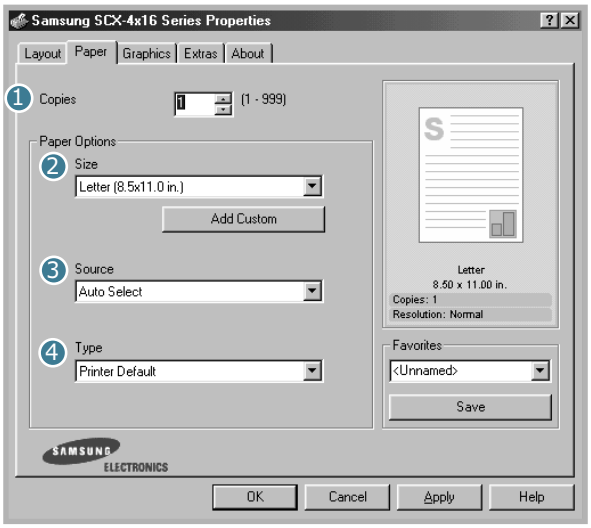
Your machine has a help screen that can be activated by the **Help** button in the printer's properties window. These help screens give detailed information about the printer features provided by the printer driver.

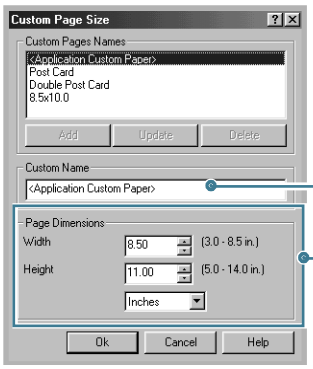
You can also click ? from the upper right hand corner, and then click on any setting.

Setting Paper Properties

Use the following options to set the paper handling needs when you access the printer properties. See page 5.2 for more information about accessing printer properties.

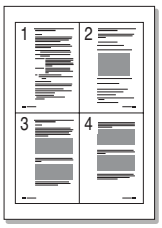
Click the **Paper** tab to access many paper properties.



Property	Description
❶ **Copies**	**Copies** allows you to choose the number of copies to be printed. You can enter up to 999.
❷ **Size**	The **Size** option allows you to choose the size of paper loaded in the tray. If the required size is not listed in the **Size** box, click **Add Custom**. When the Custom Page Size window appears, set the paper size and click **Ok**. The size setting appears in the Size list so that you can select it. 

Property	Description
❸ **Source**	Make sure that **Source** is set to the corresponding paper tray. The **Manual Feed** source is used when printing to special materials. You need to load one sheet at a time into the Bypass Tray. See page 3.8. If the paper source is set to **Auto Select**, the machine automatically picks up print materials according to the following order: the Bypass tray and the paper tray.
❹ **Type**	Make sure that **Type** is set to **Printer Default**. If you load a different type of print material, select the corresponding paper type. For more information on print materials, refer to Chapter 3, "Paper Handling."

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

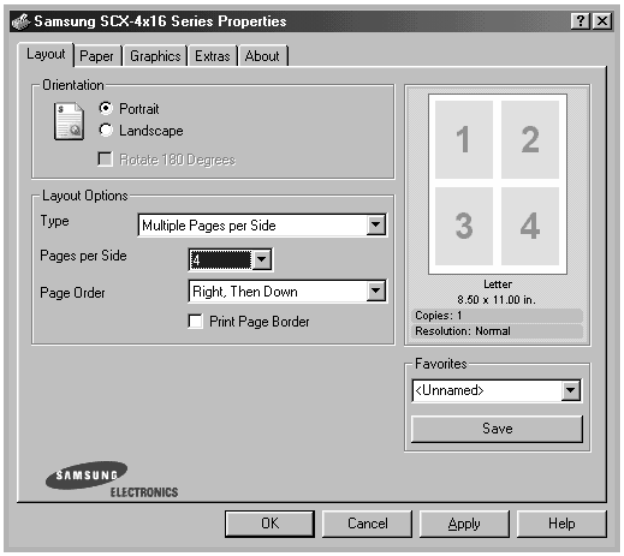


You can select the number of pages to print on a single sheet of paper. To print more than one page per sheet, the pages will appear decreased in size and arranged on the sheet. You can print up to 16 pages on one sheet.

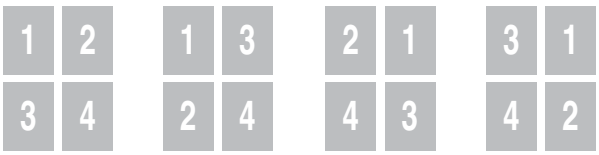
1. To change the print settings from your software application, access the printer properties. See page 5.2.

2. From the **Layout** tab, choose **Multiple Pages per Side** in the **Type** drop-down list.

3 Select the number of pages you want to print per sheet (1, 2, 4, 9 or 16) in the **Pages per Side** drop-down list.



4 Select the page order in the **Page Order** drop-down list, if necessary.



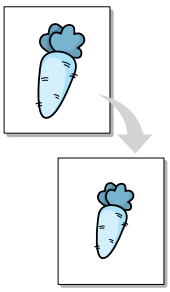
Right, Then Down | Down, Then Right | Left, Then Down | Down, Then Left

Check **Print Page Border** to print a border around each page on the sheet. **Print Page Border** is enabled only, if the pages per sheet is 2, 4, 9 or 16.

5 Click the **Paper** tab and select the paper source, size and type.

6 Click **OK** and print the document.

Printing a Reduced or Enlarged Document



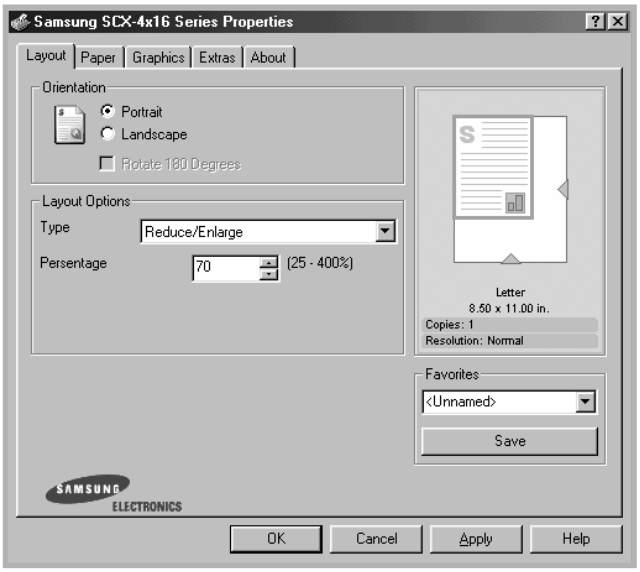
You can scale your print job on a page.

1 When you change the print settings from your software application, access the printer properties. See page 5.2.

2 From the **Layout** tab, select **Reduce/Enlarge** in the **Type** drop-down list.

3 Enter the desired scaling rate in the **Persentage** input box.

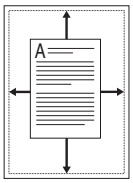
You can also click the ▲ or ▼ button.



4 Click the **Paper** tab and select the paper source, size and type.

5 Click **OK** and print the document.

Fitting Your Document to a Selected Paper Size

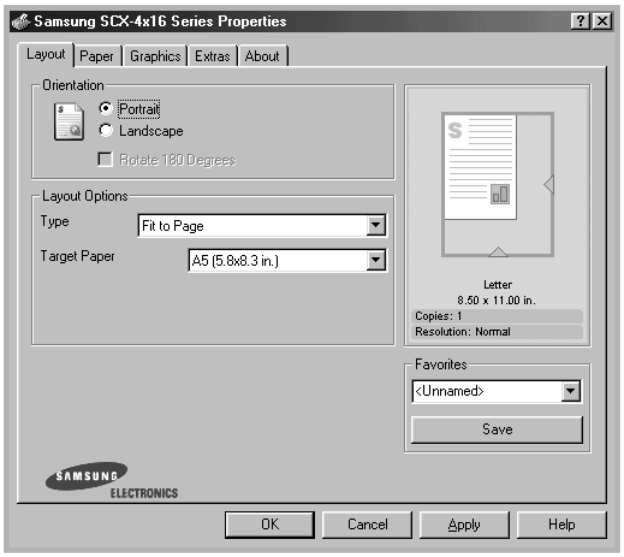


You can scale your print job to any selected paper size regardless of the digital document size. This can be useful when you want to check fine details on a small document.

1 When you change the print settings from your software application, access the printer properties. See page 5.2.

2 From the **Layout** tab, select **Fit to Page** in the **Type** drop-down list.

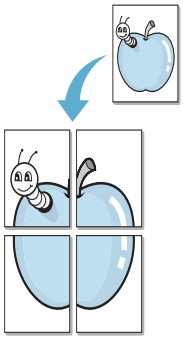
3 Select the correct size from the **Target Paper** drop-down list.



4 Click the **Paper** tab and select the paper source, size and type.

5 Click **OK** and print the document.

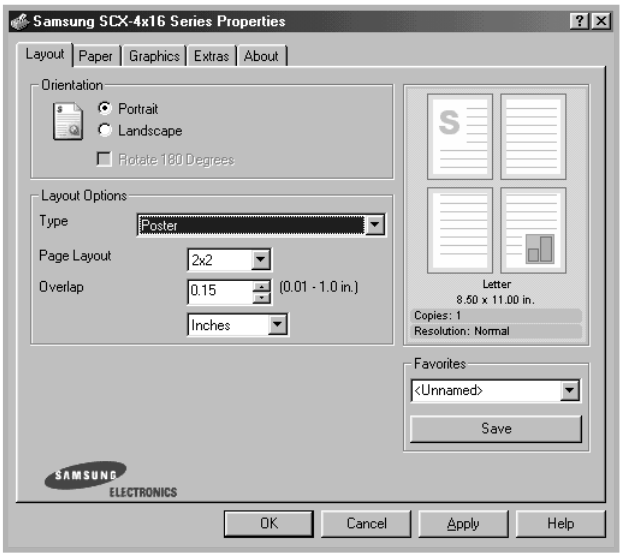
Printing Posters



You can 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.

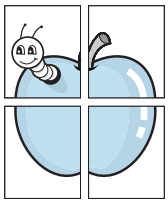
1 When you change the print settings from your software application, access the printer properties. See page page 5.2.

2 From the **Layout** tab, select **Poster** in the **Type** drop-down list.

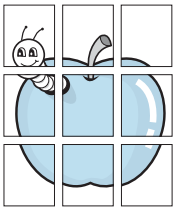


3 Configure the poster option:

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

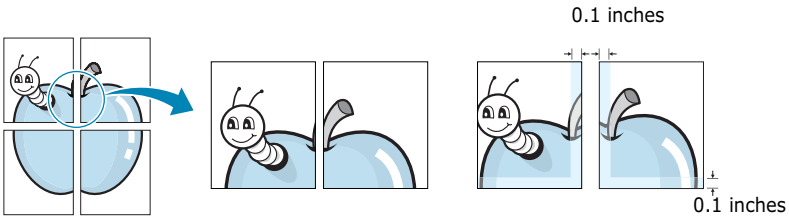


▲ 2 x 2



▲ 3 x 3

Specify an overlap in millimeters or inches to make it easier to reconstruct the resulting poster.



4 Click the **Paper** tab and select the paper source, size and type.

5 Click **OK** and print the document. You can complete the poster by reconstructing the results.

Using Watermarks

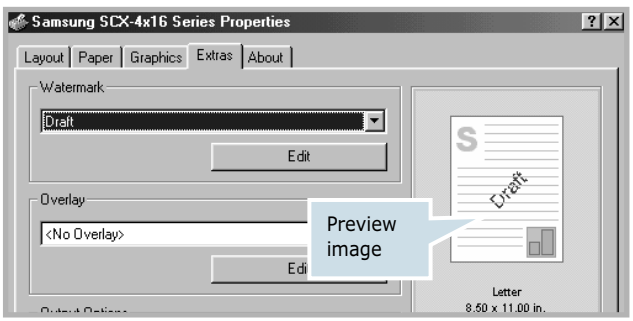
The Watermark option allows you to print text over an existing document. For example, you may want to have large gray letters reading "DRAFT" or "CONFIDENTIAL" printed diagonally across the first page or all pages of a document.

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

Using an Existing Watermark

1 When you change the print settings from your software application, access the printer properties. See page 5.2.

2 Click the **Extras** tab and select a watermark in the **Watermark** drop-down list. You will see the selected watermark in the preview image.

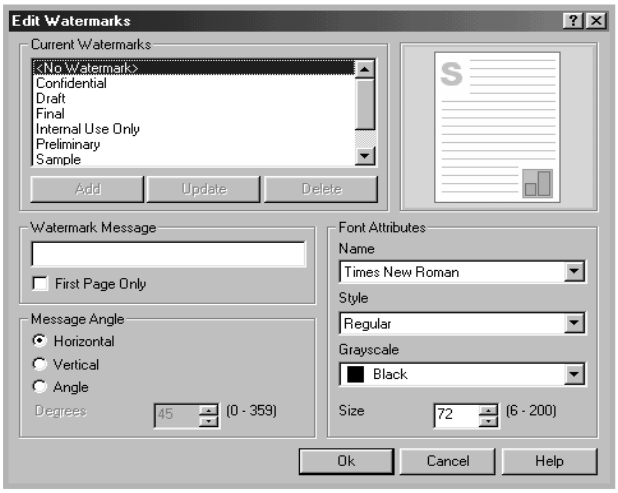


3 Click **Ok** and start printing.

Creating a Watermark

1 When you change the print settings from your software application, access the printer properties. See page 5.2.

2 Click the **Extras** tab and click the **Edit** button in the **Watermark** section. The Edit Watermarks window appears.



3 Enter the text message you want to print in the **Watermark Message** box.

The message will be displayed in the preview window. The preview image is provided so that you can see how the watermark will appear on the printed page.

If the **First Page Only** box is checked, the watermark will be printed on the first page only.

4 Select the desired watermark options.

You can select the font name, style and size and grayscale level from the **Font Attributes** section and set the angle of the watermark from the **Message Angle** section.

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

6 When you finish creating, click **Ok** and start printing.

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

Editing a Watermark

1. When you change the print settings from your software application, access the printer properties. See page 5.2.

2. Click the **Extras** tab and click the **Edit** button in the **Watermark** section. The Edit Watermarks window appears.

3. Select the watermark you want to edit in the **Current Watermarks** list, and change the watermark message and the options. Refer to "Creating a Watermark" on page 5.14.

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

5. Click **Ok**.

Deleting a Watermark

1. When you change the print settings from your software application, access the printer properties. See page 5.2.

2. From the **Extras** tab, click the **Edit** button in the **Watermark** section. The Edit Watermarks window appears.

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

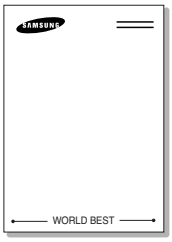
4. Click **Ok**.

Using Overlays

What is an Overlay?

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

Creating a New Page Overlay

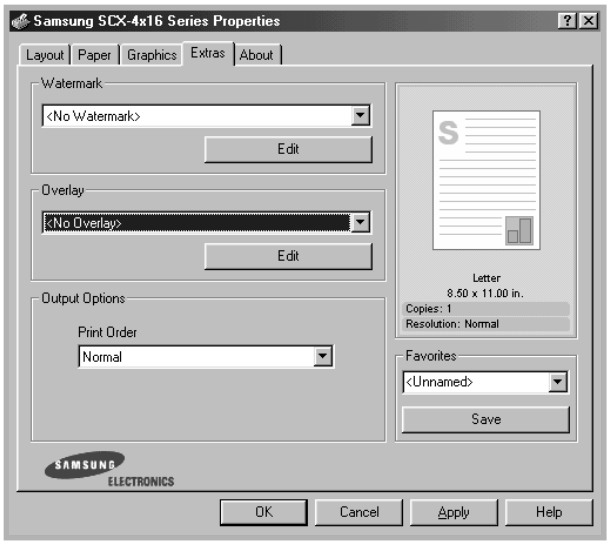


To use a page overlay, you must create a new page overlay containing your logo or image.

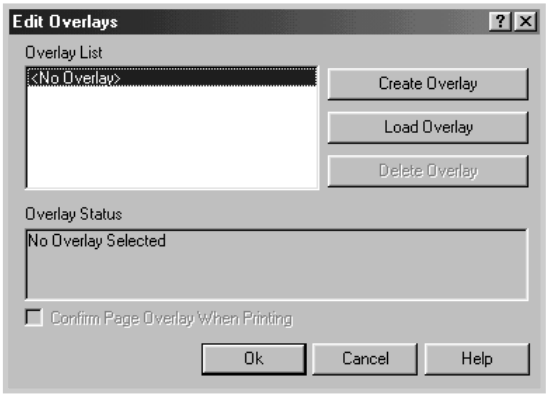
1. Create or open a document containing text or an image for use in a new page overlay. Position the items exactly as you wish them to appear when printed as an overlay. If needed, save the file for later use.

2. When you change the print settings from your software application, access the printer properties. See page 5.2.

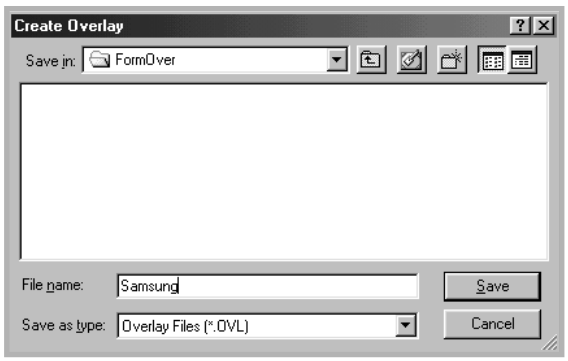
3. Click the **Extras** tab and click **Edit** button in the **Overlay** section.



4 In the Edit Overlays window, click **Create Overlay**.



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



6 Click **Save**. You can see the name in **Overlay List**.

7 Click **OK** or **Yes** until you complete creating.

The file is not printed out. Instead it will be stored on your computer HDD disk.

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

Using a Page Overlay

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

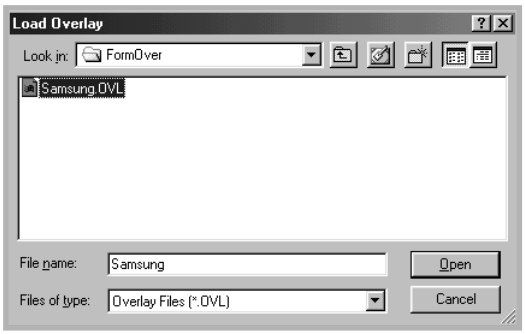
1. Create or open the document you want to print.

2. When you change the print settings from your software application, access the printer properties. See page 5.2.

3. Click the **Extras** tab.

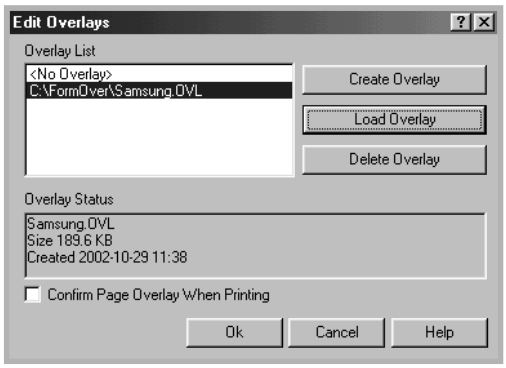
4. Select the overlay you want to print from the **Overlay** drop-down list box.

5. If the desired overlay file does not appear in the **Overlay** list, click the **Edit** button and **Load Overlay**, and select the overlay file.



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

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



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

Answering **Yes** to the window means that the selected overlay will be printed with your document. Answering **No** to the window cancels overlay printing.

If this box is empty and an overlay has been selected, the overlay will be automatically printed with your document.

7 Click **OK** or **Yes** until the printing starts.

The selected overlay will be downloaded with your print job and printed on your document.

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

Deleting a Page Overlay

You can delete page overlays that are no longer used.

1 In the printer properties window, click the **Extras** tab.

2 Click **Edit** in the **Overlay** section.

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

4 Click **Delete Overlay**.

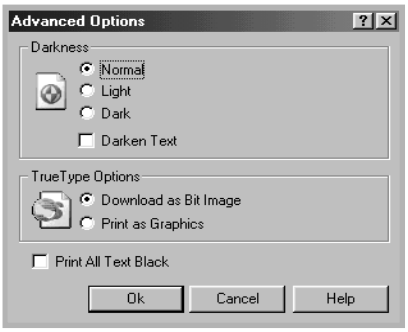
5 Click **OK** until you exit the Print window.

Setting Graphic Properties

Use the following graphic options to adjust the print quality for your specific printing needs. See page 5.2 for more information about accessing printer properties.

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

Property	Description
❶ **Resolution**	You can select the printing resolution by choosing from **600 dpi (Normal)** or **300 dpi (Draft)**. The higher the setting, the sharper the clarity of printed characters and graphics. Higher settings may increase time it takes to print a document.
❷ **Toner Save**	Selecting this option will extend the life of your toner cartridge and reduce your cost per page without a significant reduction in the print quality. • **Printer Setting**: If you select this option, the Toner Save feature is determined by the setting you've made on the control panel of the printer. • **On**: Select this option to allow the printer to use less toner on each page. • **Off**: If you do not need to save toner to print a document, select this option.

Property	Description
❸ **Advanced Options**	You can set advanced settings by clicking the **Advanced Options** button.  **Darkness** Use this option to lighten or darken the image appearance in your print. • **Normal**: This setting is for normal documents. • **Light**: This setting is for bolder line widths or darker gray-scale images. • **Dark**: This setting is for finer line width, higher definition in graphics and lighter gray-scale images. When the **Darken Text** option is checked, all text in your document is allowed to print darker than a normal document. **Print All Text Black** When the **Print All Text Black** option is checked, all text in your document is allowed to print solid black, regardless of the color it appears on the screen. When it is not checked, colored text is allowed to print in shades of gray.

Property	Description
❸ **Advanced Options** (continued)	**True Type Options** This option determines what the driver tells the machine about how to image the text in your document. Select the appropriate setting according to the status of your document. • **Download as Bit Image**: When this option is selected, the driver will download the font data as bitmap images. Documents with complicated fonts, such as Korean or Chinese, or various types of fonts will print faster in this setting. • **Print as Graphics**: When this option is selected, the driver will download any fonts as graphics. When printing documents with high graphic content and relatively few TrueType fonts, printing performance (speed) may be enhanced in this setting.

Setting Up the Locally Shared Printer

You can connect the machine directly to a selected computer, which is called "host computer," on the network. Your machine can be shared by other users on the network through a Windows 9x, Me, 2000, XP or NT 4.0 network printer connection.

In Windows 9x/Me

Setting Up the Host Computer

1 Start Windows.

2 From the **Start** menu, select **Control Panel** and double-click on the **Network** icon.

3 Check the **File and Print Sharing** box and click **OK**.

4 Click **Start** and select **Printers** from **Settings**. Double-click your printer name.

5 Select **Properties** in the **Printer** menu.

6 Click the **Sharing** tab and check the **Shared As** box. Fill in the **Shared Name** field and then click **OK**.

Setting Up the Client Computer

1 Right-click **Start** and select **Explorer**.

2 Open your network folder in the left column.

3 Right-click the shared name and select **Capture Printer Port**.

4 Select the port you want, check the **Reconnect at log on** box and then click **OK**.

5 From the **Start** menu, select **Settings** and then **Printers**.

6 Double-click your printer icon.

7 From the **Printer** menu, select **Properties**.

8 From the **Details** tab, select the printer port and click **OK**.

In Windows NT 4.0/2000/XP

Setting Up the Host Computer

1 Start Windows.

2 For Windows NT 4.0/2000, from the **Start** menu, select **Settings** and then **Printers**.

For Windows XP, from the **Start** menu, select **Printers and Faxes**.

3 Double-click your printer icon.

4 From the **Printer** menu, select **Sharing**.

5 For Windows NT 4.0, check the **Shared** box.

For Windows 2000, check the **Shared As** box.

For Windows XP, check the **Share this printer** box.

6 For Windows NT 4.0, fill in the **Share Name** field and click **OK**.

For Windows 2000/XP, fill in the **Shared Name** field and click **OK**.

Setting Up the Client Computer

1 Right-click **Start** and select **Explorer**.

2 Open your network folder in the left column.

3 Click the shared name.

4 For Windows NT 4.0/2000, from the **Start** menu, select **Settings** and **Printers**.

For Windows XP, from the **Start** menu, select **Printers and Faxes**.

5 Double-click your printer icon.

6 From the **Printer** menu, select **Properties**.

7 Press the **Ports** tab and click **Add Port**.

8 Select **Local Port** and click **New Port**.

9 Fill in the **Enter a port name** field and enter the shared name.

10 Click **OK** and click **Close**.

11 For Windows NT 4.0, click **OK**.

For Windows 2000/XP, click **Apply** and click **OK**.

6 SCANNING

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

This chapter includes:

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

Scanning Basics

Your machine offers two ways to begin scanning:

- From the Samsung SmarThru software: Launch Samsung SmarThru and open the Scan Wizard to begin scanning. See below.
- From TWAIN-compliant software: You can use other software including Adobe PhotoDeluxe and Adobe Photoshop. See page 6.5.

NOTES:

- To scan with your machine, you must install the MFP driver.
- Scanning is done through the same LPT or USB port currently assigned for your printer port.

Scanning Using the Samsung SmarThru

Samsung SmarThru is the accompanying software for your machine. With the SmarThru, scanning becomes a pleasure.

Follow these steps to start scanning using the SmarThru:

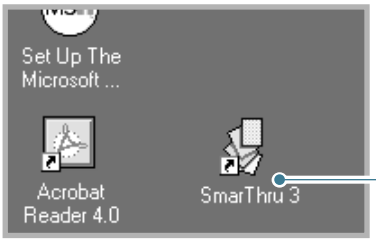
1. Make sure that your machine and computer are turned on and properly connected to each other.

2. Place a single document **face down** on the document glass then close the cover. For further details, see page 4.2.

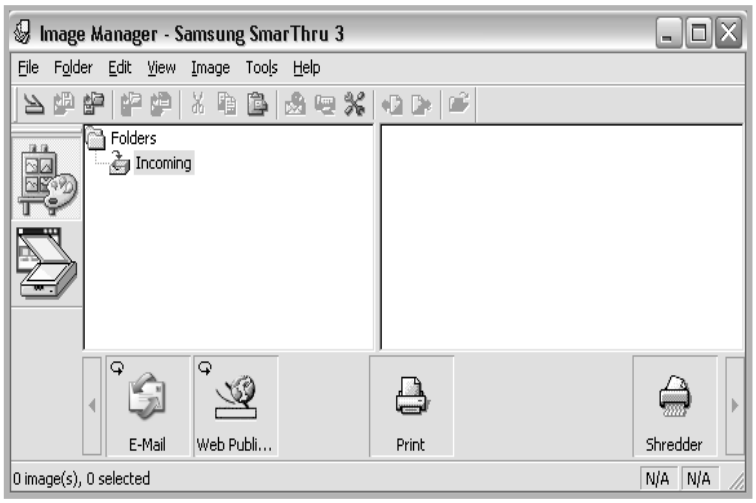
   OR

   Load the document(s) to be scanned **face up** into the ADF (Automatic Document Feeder). For further details, see page 4.4.

3 Once you have installed Samsung software, you see the SmarThru icon on the desktop window. Double-click the **SmarThru 3** icon.



The SmarThru 3 window opens.



4 To open the Scan Wizard, click the **Scan Wizard** icon in the plugin bar on the left of the SmarThru 3 window.

The Scan Wizard lets you use the following services:

- **Scan**
  Lets you scan the original documents and save them in the Image Manager of the Samsung SmarThru system. The Image Manager is an image database manager and image editor program.

- **Copy**
  Lets you use your machine to produce professional quality copies. You can adjust the image size and select advanced settings.

- **Scan to Email**
  Lets you scan the original documents and then launches a default mail program of your system, such as Microsoft Outlook Express, so that you can send the scanned image attached to a new mail. To send e-mail using the Samsung SmarThru system, you need to enable the Internet Gate and configure an e-mail account in SmarThru Configuration. Refer to the SmarThru User's Guide.

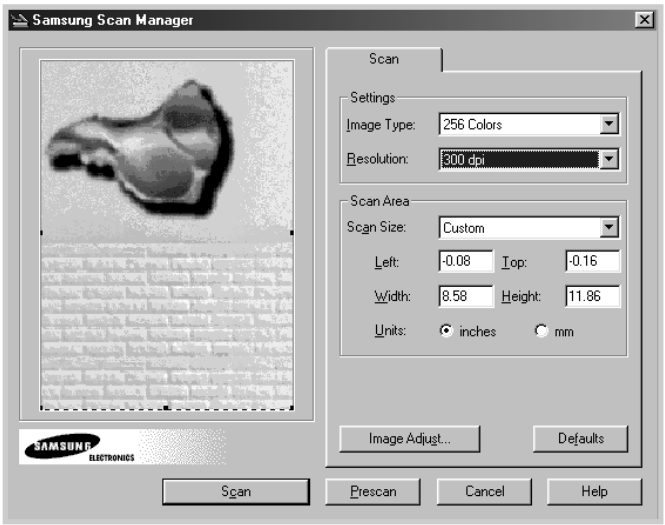
- **Scan to FAX**
  Lets you scan the original documents and then launches a New Fax form which helps you to send them as a fax image. This service is available only when you enable and configure the Fax Gate in SmarThru Configuration. Refer to the SmarThru User's Guide.

- **Scan to WEB**
  Lets you scan the original documents for further publishing to the Web.

- **Scan to OCR**
  Lets you scan the original documents and pass them to the OCR program. OCR (Optical Character Recognition) is the process of converting a scanned image into text that you can edit in a word processing program. After you scan your document, the software processes or "recognizes" it. Then you can change it and either save the file or open it in any word processing program on your computer.

5 Click the desired service icon.

6 The Samsung Scan Manager opens for the selected service. Adjust the scan settings. You can use the **Help** button to receive on-line help.



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

For more information, please refer to the SmarThru User's Guide which came with your machine.

NOTE: If you want to cancel the scan job, press the **Stop/Clear** button on the control panel.

Scanning Process with TWAIN-enabled Software

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

The basic scanning process involves a number of steps:

- Place your photograph or page on the document glass.
- Open an application, such as PhotoDeluxe or Photoshop.
- Open the TWAIN window and set the scan options.
- Scan and save your scanned image.

You need to follow the program's instructions for acquiring an image. Please refer to the application's User's Guide.

MEMO

7 MAINTENANCE

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

This chapter includes:

- **Clearing the Memory**
- **Cleaning Your Machine**
- **Maintaining the Toner Cartridge**
- **Consumables and Replacement Parts**

Clearing the Memory

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

1 Press **Menu** on the control panel until "Maintenance" appears on the top line of the display.

2 Press the scroll button (◄ or ►) until you see "Clear Memory" on the bottom line and press **Enter**.

The first available menu item, "Paper Setting," displays on the bottom line.

3 Press the scroll button (◄ or ►) until you see the item you want to clear.

- Paper Setting: Restores all of the Paper Setting options to the factory default.
- Copy Setup: Restores all of the Copy Setup options to the factory default.
- Fax Setup: (only for SCX-4216F) Restores all of the Fax Setup options to the factory default.
- Fax Feature: (only for SCX-4216F) Cancels all of the scheduled fax jobs in the machine's memory.
- Advanced Fax: (only for SCX-4216F) Restores all of the Advanced Fax setting options to the factory default.
- Sent Report: (only for SCX-4216F) Clears all of records of your faxes sent.
- RCV Report: (only for SCX-4216F) Clears all of records of your faxes received.
- Phone Book: (only for SCX-4216F) Clears the speed dial or group dial numbers stored in the memory.

4 Press **Enter**. The selected memory is cleared and the display asks you to continue clearing the next item.

5 Repeat steps 2 and 3 to clear another item.

OR

To return to the standby mode, press **Stop/Clear**.

Cleaning Your Machine

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

CAUTIONS:

- Do not pour or spray water directly onto any part of your machine.
- Do not use ammonia-based cleaners or volatile solvents, such as thinner, on or around the machine. These can damage the machine.
- While cleaning the inside of the machine, be careful not to touch the transfer roller, which is located underneath the toner cartridge. Oil from your fingers can cause print quality problems.

Cleaning the Outside

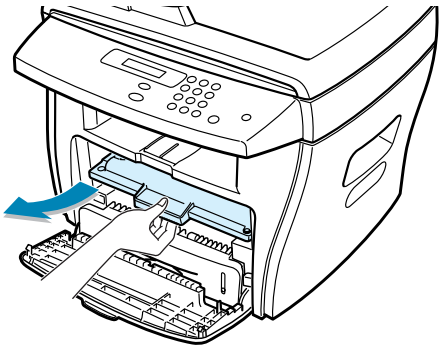
Wipe the outside surface of the machine with a soft, clean and lint-free cloth. You can dampen the cloth slightly with water, but be careful not to be let any water drip onto the machine or the inside of it.

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 will clear or reduce these problems.

1. Turn the machine off and unplug the power cord. Wait for the machine to cool down.

2. Open the front cover and pull the toner cartridge out, lightly pushing it down.



3 With a dry and lint-free cloth, wipe away any dust and spilled toner from the toner cartridge area and the toner cartridge cavity.

CAUTION: To prevent damage to the toner cartridge, do not expose it to light for more than a few minute. Cover it with a piece of paper, if necessary. Do not touch the black transfer roller inside the machine.

4 Reinsert the toner cartridge and close the cover.

5 Plug in the power cord and turn the machine on.

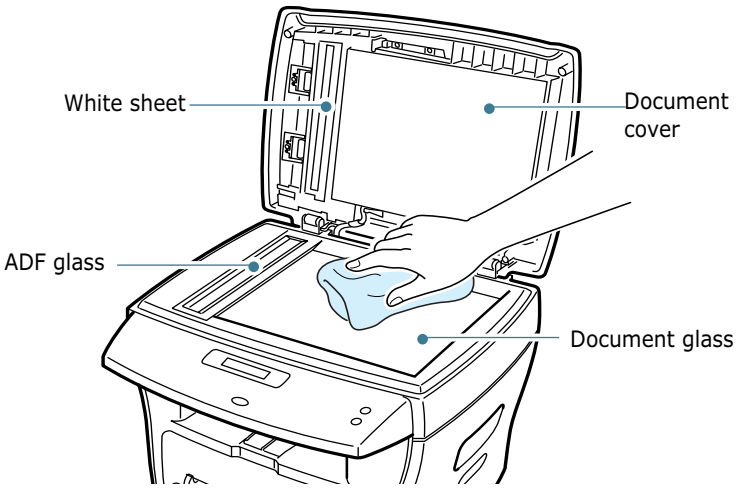
Cleaning the Scan Unit

Keeping the scan unit clean helps ensure the best possible copies. We suggest that you clean the scan unit at the start of each day and during the day, as needed.

1 Slightly dampen a soft lint-free cloth or paper towel with water.

2 Open the document cover.

3 Wipe the surface of the document glass and ADF glass (for SCX-4116/4216F) until it is clean and dry.



4 Wipe the underside of the white document cover and white sheet (for SCX-4116/4216F) until it is clean and dry.

5 Close the document cover.

Maintaining the Toner Cartridge

Toner cartridge storage

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

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

Saving toner

To save toner, press the **Toner Save** button on the printer control panel; see page 1.19. The button backlight will be lit. Using this feature will extend the life of the toner cartridge and reduce your cost per page, but it will reduce the print quality.

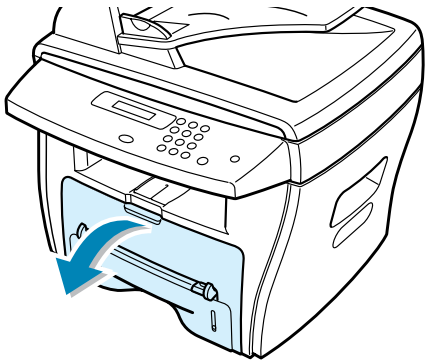
Expected Cartridge Life

The life of the toner cartridge depends on the amount of toner that print jobs require. When printing text at IDC 5% coverage, a new toner cartridge lasts an average of 3,000 pages. (The original toner cartridge supplied with the printer lasts an average of 1,000 pages.) The actual number may be different depending on the print density of the page you print. If you print a lot of graphics, you may need to change the cartridge more often.

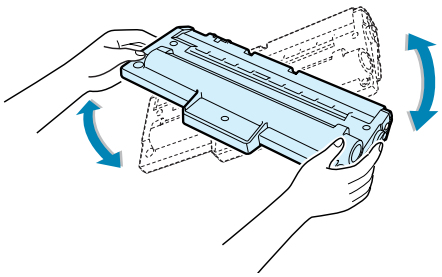
Redistributing Toner

When the toner cartridge is near the end of its life, white streaks or light print will occur. The LCD displays the warning message "Toner Low." You can temporarily reestablish the print quality by redistributing the remaining toner in the cartridge.

1 Open the front cover.



2 Pull the toner cartridge out and gently shake the cartridge to distribute the toner evenly inside the cartridge.



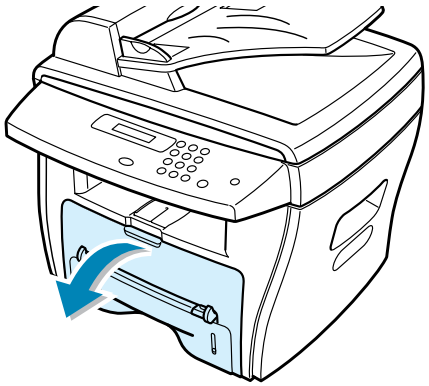
NOTE: If the toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets the toner into fabric.

3 Reinstall the cartridge and close the front cover.

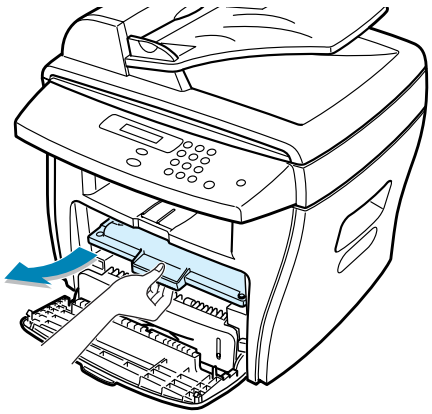
Replacing the Toner Cartridge

If the toner eventually runs out, only blank pages will print when a print job is sent or when a fax is received. At this stage, the toner cartridge needs to be replaced. The display shows the warning message, "Toner Empty" and the indicator on the control panel turns on.

1 Open the front cover.

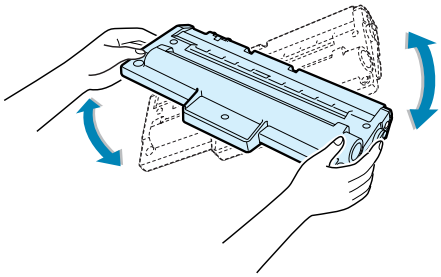


2 Lightly pushing the used cartridge down, pull it out.



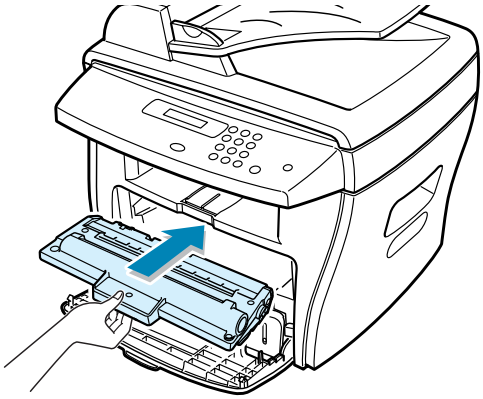
NOTE: Help the environment by recycling your used toner cartridge. Refer to the recycling brochure packed with the toner cartridge for details.

3 Unpack the new toner cartridge and gently shake it horizontally four or five times to distribute the toner evenly inside the cartridge.

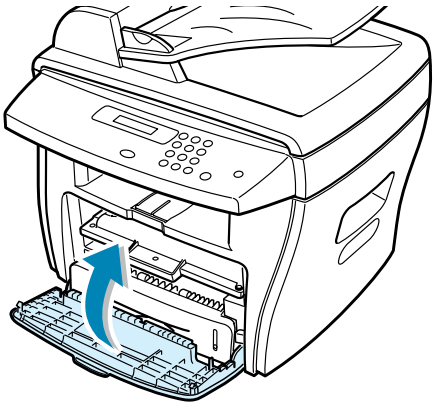


Save the box and the cover for shipping.

4 Slide the new toner cartridge in until it locks into place.



5 Close the front cover.



Setting the Notify Toner Option

(For SCX-4216F)

If you have set the Notify Toner menu option to "On", your machine automatically sends a fax to your service company or the dealer to notify them that your machine requires a new toner cartridge when the toner cartridge needs to be replaced. The fax number is preset by your dealer when you bought your machine.

1. Press **Menu** on the control panel until "Maintenance" appears on the top line of the display. The first available menu item, "Clean Drum," displays on the bottom line.

2. Press the scroll button (◄ or ►) to display "Notify Toner" on the bottom line and press **Enter**.

3. Press the scroll button (◄ or ►) to change the setting.

   Select "On" to enable this feature. Selecting "Off" disables this feature.

4. Press **Enter** to save the selection.

Cleaning the Drum

If there are streaks or spots on your print, the OPC drum of the cartridge may require cleaning.

1. Before setting the cleaning procedure, make sure that paper is loaded in the machine.

2. Press **Menu** on the control panel until "Maintenance" appears on the top line of the display. The first available menu item, "Clean Drum," displays on the bottom line.

3. Press **Enter**.

   The display confirms your selection.

4. Press **Enter** to accept "Yes."

   The machine prints out a cleaning page. Toner particles on the drum surface are affixed to the paper.

5. If the problem remains, repeat steps 1 through 4.

Consumables and Replacement Parts

From time to time, you will need to replace the toner cartridge, roller, and fuser unit to maintain top performance and to avoid print quality problems and paper feed problems resulting from worn parts.

The following items should be replaced after you have printed a specified number of pages. See the table below.

Items	Yield (Average)
ADF rubber pad	20,000
ADF roller	60,000
Paper feeding roller	60,000
Transfer roller	60,000
Fuser unit	60,000

To purchase the consumables and replacement parts, contact your Samsung dealer or the retailer where you bought your machine. We strongly recommend that items be installed by a trained service professional, except for the toner cartridge.

8 TROUBLESHOOTING

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

This chapter includes:

- **Clearing Document Jams (For SCX-4116/4216F)**
- **Clearing Paper Jams**
- **Clearing LCD Error Messages**
- **Solving Problems**

Clearing Document Jams *(For SCX-4116/4216F)*

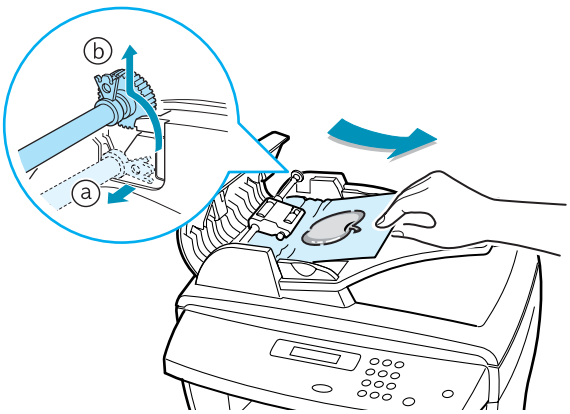
If a document jams while it is feeding through the ADF (Automatic Document Feeder), "Document Jam" appears on the display.

Input Misfeed

1 Remove the remaining documents from the ADF.

2 Open the ADF top cover.

3 Push the bushing on one end of the ADF roller inward (ⓐ) and rotate it to the left (ⓑ). Then remove the roller from the slot and pull the document gently to the right and out of the ADF.



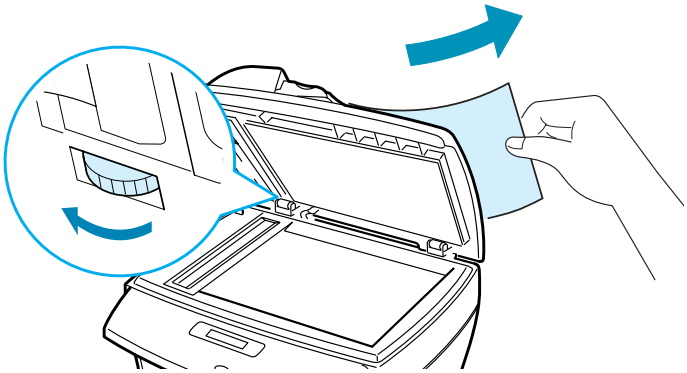
4 Close the ADF top cover. Then load the documents back into the ADF.

NOTE: To prevent document jams, use the document glass for thick, thin or mixed documents.

Exit Misfeed

1 Remove the remaining documents from the ADF.

2 Open the document cover and turn the release knob to remove the misfed documents from the document output tray.



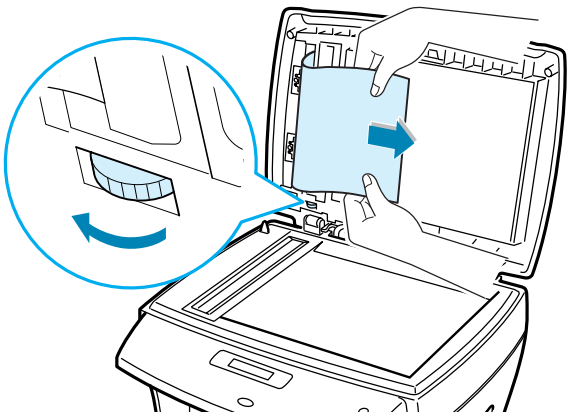
3 Close the document cover. Then load the documents back into the ADF.

Roller Misfeed

1 Remove the remaining documents from the ADF.

2 Open the document cover.

3 Turn the release knob so that you can easily seize the misfed document, and remove the document from the roller or the feed area by carefully pulling it to the right by using both hands.



4 Close the document cover. Then load the documents back into the ADF.

Clearing Paper Jams

If paper jams occur, “Paper Jam” appears on the display. Refer to the table below to locate and clear the paper jam.

Message	Location of Jam	Go to
Paper Jam 0	In the paper feed area	below
Paper Jam 1	In the paper exit area	page 8.5
Paper Jam 2	In the fuser area or around the toner cartridge	page 8.7
Bypass Jam	In the Bypass tray	page 8.8

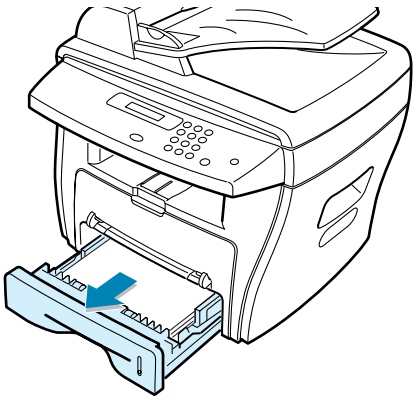
To avoid tearing the paper, pull the jammed paper out gently and slowly. Follow the steps below to clear a jam.

In the Paper Feed Area

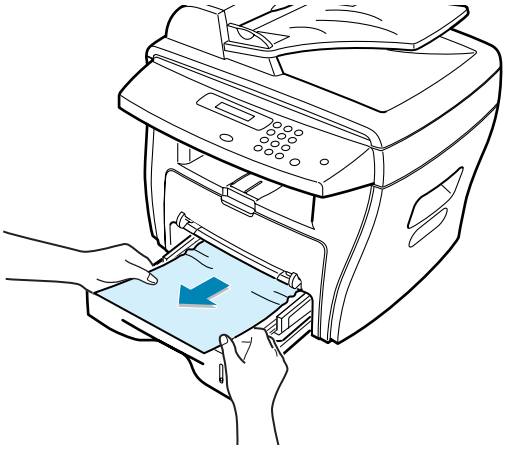
1 Open and close the front cover. The jammed paper automatically exits the machine.

If the paper does not exit, continue to Step 2.

2 Pull the paper tray open.

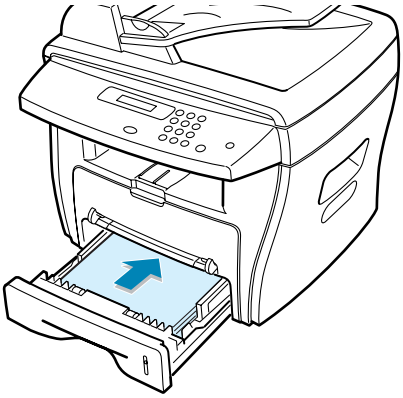


3 Remove the jammed paper by gently pulling it straight out.



If there is any resistance and the paper does not move when you pull or if you cannot see the paper in this area, skip to the fuser area around the toner cartridge; see page 8.7.

4 Insert the paper tray into the machine until it snaps into place.



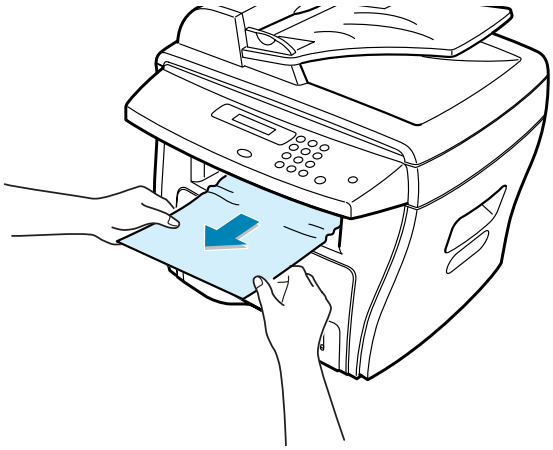
5 Open and close the front cover to resume printing.

In the Paper Exit Area

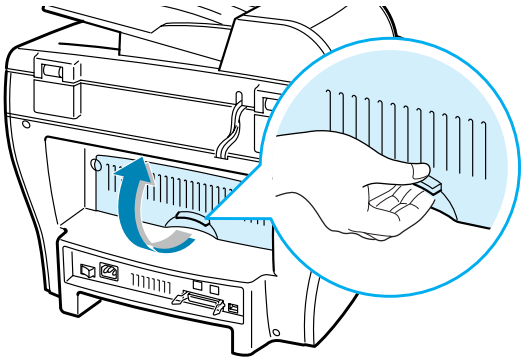
1 Open and close the front cover. The jammed paper automatically exits the machine.

If the paper does not exit, continue to Step 2.

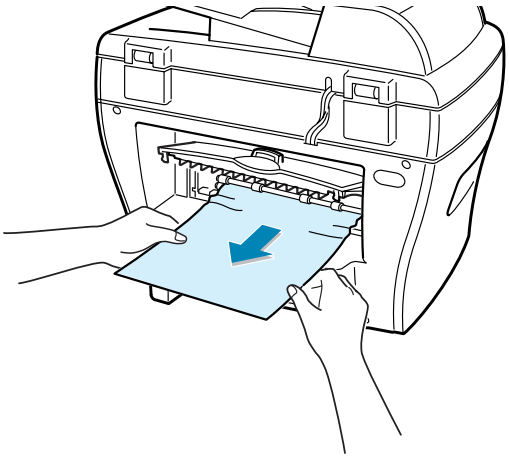
2 Gently pull the paper out of the front output tray. Skip to Step 6.



3 If there is any resistance and the paper does not move when you pull or if you cannot see the paper in the front output tray, open the rear cover.



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



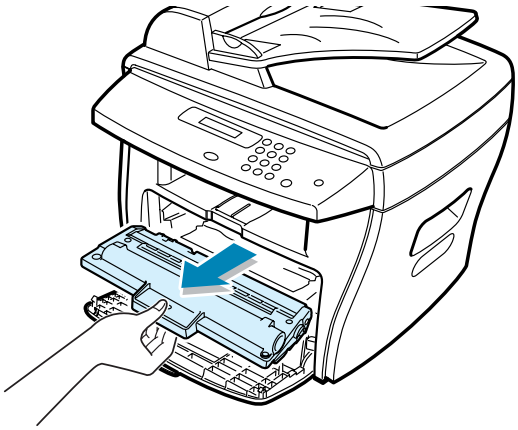
5 Close the rear cover.

6 Open and close the front cover to resume printing.

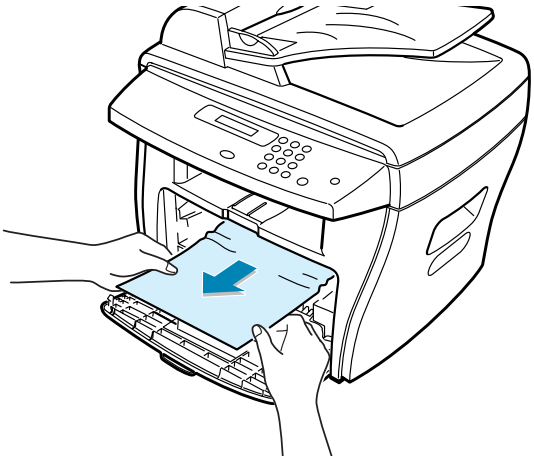
In the Fuser Area or Around the Toner Cartridge

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

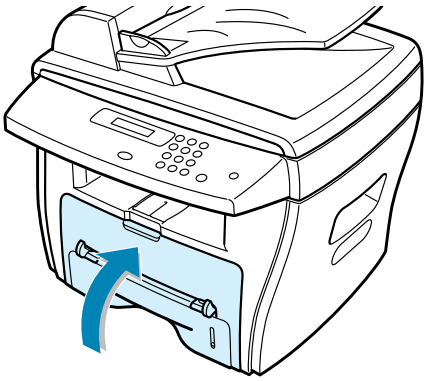
1 Open the front cover and pull the toner cartridge out, lightly pushing it down.



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



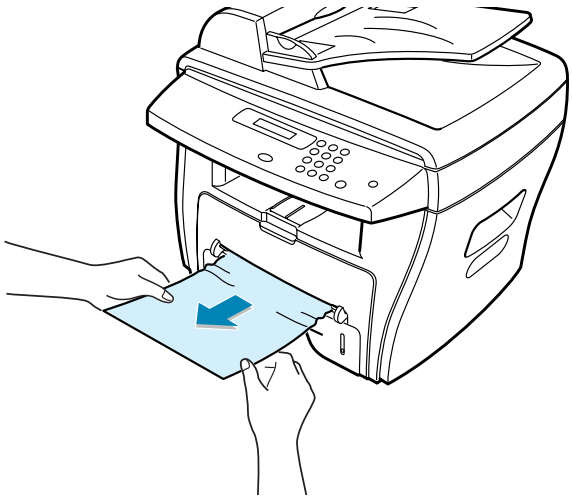
3 Replace the toner cartridge and close the front cover. Printing automatically resumes.



In the Bypass Tray

"Bypass Jam" appears on the display when you try to print using the Bypass tray and when the machine does not detect paper due to no paper or improper paper loading.

"Bypass Jam" also may occur when the paper is not properly fed into the machine through the Bypass tray. In that case, pull the paper out of the machine.



Tips for Avoiding Paper Jams

By selecting the correct paper types, most paper jams can be avoided. If a paper jam occurs, follow the steps outlined in "Clearing Paper Jams" on page 8.4.

- Follow the procedures in "Loading Paper" on page 1.12. Ensure that the adjustable guides are positioned correctly.
- Do not overload the paper tray. Ensure that the paper is below the paper capacity mark on the inside wall of the paper tray.
- Do not remove the paper from the tray while your machine is printing.
- Flex, fan and straighten the paper before loading.
- Do not use creased, damp or highly curled paper.
- Do not mix paper types in the paper tray.
- Use only recommended print materials. See "Paper Specifications" on page B.6.
- Ensure that the recommended print side of print materials is facing down in the paper tray and facing up in the Bypass tray.

Clearing LCD Error Messages

Display	Meaning	Suggested solutions
Bypass Jam	Your machine detects non feeding from the Bypass tray.	Load paper in the Bypass tray. Or remove the jammed paper from the Bypass tray.
Cancel ? 1:Yes 2:No	Your machine's memory is full during the machine stores the document into the memory.	To cancel the fax job, press the **1** button to accept "Yes." If you want to send the pages were stored, press the **2** button to accept "No." You should send the remaining pages later when the memory is available.
Comm. Error *(only for SCX-4216F)*	The machine has a communication problem.	Ask the sender to try again.
Document Jam *(only for SCX-4116/ 4216F)*	The loaded document has jammed in the ADF (Automatic Document Feeder).	Clear the document jam. See page 8.2.
Door Open	The front or rear cover is not securely latched.	Close the cover until it locks in place.
CRU Fuser Error	There is a problem in the fuser unit.	Unplug the power cord and plug it back in. If the problem persists, please call for service.
Heating Error		
Open Heat Error		
Over Heat		
Group Not Available *(only for SCX-4216F)*	You have tried to select a group location number where only a single location number can be used, such as when adding locations for a broadcasting operation.	Just use a speed dial number or dial a number manually using the number keypad.

Display	Meaning	Suggested solutions
Incompatible *(only for SCX-4216F)*	The remote machine did not have the requested feature, such as a delayed transmission. It also occurs if the remote machine does not have enough memory space to complete the operation you are attempting.	Reconfirm the remote machine's features.
Invalid Cartridge	You have used unauthorized cartridge.	You must use a Samsung approved cartridge.
Line Busy *(only for SCX-4216F)*	The remote party did not answer or the line is already engaged.	Try again after a few minutes.
Line Error *(only for SCX-4216F)*	Your machine cannot connect with the remote machine or has lost contact because of a problem with the phone line.	Try again. If the problem persists, wait an hour or so for the line to clear and try again. Or, turn the ECM mode on. See the Facsimile User's Guide.
Load Document	You have attempted to set up a copy or fax operation with no document loaded.	Load a document and try again.
LSU Error	A problem has occurred in the LSU (Laser Scanning Unit).	Unplug the power cord and plug it back in. If the problem persists, please call for service.
Memory Full *(only for SCX-4216F)*	The memory is full.	Delete unnecessary documents, retransmit after more memory becomes available or split the transmission into more than one operation.
No Answer *(only for SCX-4216F)*	The remote fax machine has not answered after several redial attempts.	Try again. Make sure that the remote machine is operational.
No Cartridge	The toner cartridge is not installed.	Install the toner cartridge. See page 1.10.
No. Not Assigned *(only for SCX-4216F)*	The speed dial location you tried to use has no number assigned to it.	Dial the number manually using the number keypad or assign the number. See the Facsimile User's Guide.

Display	Meaning	Suggested solutions
No Paper	The paper in the paper tray has run out.	Load paper in the paper tray. See page 1.12.
Operation Not Assigned *(only for SCX-4216F)*	You are doing in the Add/ Cancel operation, but there is no jobs waiting.	Check the display to see if there is any scheduled job. The display should indicate them in the standby mode, for example, Delay Fax.
Paper Jam 0	Paper has jammed in the feeding area of the paper tray.	Clear the jam. See page 8.4.
Paper Jam 1	Paper has jammed in the paper exit area.	Clear the jam. See page 8.5.
Paper Jam 2	Paper has jammed in the fuser area.	Clear the jam. See page 8.7.
Power Failure	Power has turned off then on and the machine's memory has not been saved.	You need to start again the job which you were trying to do before the power failure.
Retry Redial? *(only for SCX-4216F)*	The machine is waiting for a specified time interval to redial a previously busy station.	You can press **Enter** to immediately redial, or **Stop/Clear** to cancel the redial operation.
Stop Pressed	The **Stop/Clear** button is pressed during a copy or fax operation.	Try again.
Toner Empty	The toner cartridge has run out. The machine stops.	Replace with a new toner cartridge. See page 7.7.
Toner Low	The toner is almost empty.	Take out the toner cartridge and gently shake it. By doing this, you can temporarily reestablish printing operations.

Solving Problems

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

Paper Feeding Problems

Condition	Suggested solutions
Paper is jammed during printing.	Clear the paper jam. See page 8.4.
Paper sticks together.	• Ensure that there is not too much paper in the paper tray. The paper tray can hold up to 250 sheets of paper, depending on the thickness of your paper. • Make sure that you are using the correct type of paper. See "Paper Specifications" on page B.6. • Remove paper from the paper 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 paper tray. Load the paper of only one type, size and weight. • If multiple sheets have caused a paper jam, clear the paper jam. See page 8.4.
Paper does not feed into the machine.	• Remove any obstructions 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 paper tray. Remove excess paper from the tray. • The paper is too thick. Use only paper that meets the specifications required by the machine. See "Paper Specifications" on page B.6.
The paper keeps jamming.	• There is too much paper in the paper tray. Remove excess paper from the tray. If you are printing on special materials, use the Bypass tray. • An incorrect type of paper is being used. Use only paper that meets the specifications required by the machine. See "Paper Specifications" on page B.6. • There may be debris inside the machine. Open the front cover and remove the debris.
Transparencies stick together in the paper exit.	Use only the transparencies specifically designed for a laser printer. Remove each transparency as it exits from the machine.

Condition	Suggested solutions
Envelopes skew or fail to feed correctly.	Ensure that the paper guide is against both sides of the envelopes.

Printing Problems

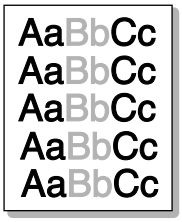
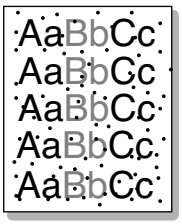
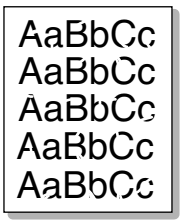
Condition	Possible cause	Suggested solutions
The machine does not print.	The machine is not receiving power.	Check the power cord connections. Check the power switch and the power source.
	The machine is not selected as the default printer.	Select **Samsung SCX-4x16 Series** as your default printer in your Windows.
	Check the machine for the following:	• The front or rear cover is not closed. • Paper is jammed. • No paper is loaded. • The toner cartridge is not installed. If a printer system error occurs, contact your service representative.
	The connection cable between the computer and the machine is not connected properly.	Disconnect the printer cable and reconnect it.
	The connection cable between the computer and the machine is defective.	If possible, attach the cable to another computer that is working properly and print a job. You can also try using a different printer cable.
	The port setting is incorrect.	Check the Windows printer setting to make sure that the print job is sent to the correct port, for example, LPT1. If the computer has more than one port, make sure that the machine is attached to the correct one.
	The machine may be configured incorrectly.	Check the printer properties to ensure that all of the print settings are correct.
	The printer driver may be incorrectly installed.	Remove the printer driver and then reinstall it; see page 2.9 and page 2.4 respectively.
	The machine is malfunctioning.	Check the display message on the control panel to see if the machine is indicating a system error.

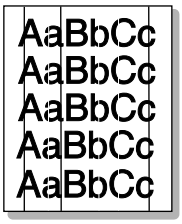
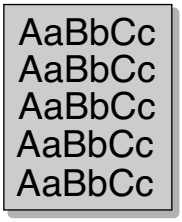
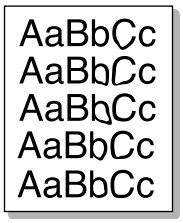
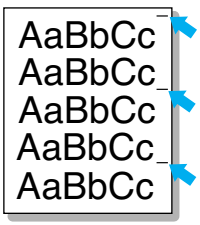
Condition	Possible cause	Suggested solutions
The machine selects print materials from the wrong paper source.	The paper source selection in the printer properties may be incorrect.	For many software applications, the paper source selection is found under the **Paper** tab within the printer properties. Select the correct paper source. See page 5.8.
Print job is extremely slow.	The job may be very complex.	Reduce the complexity of the page or try adjusting the print quality settings. The maximum print speed of your machine is 17 PPM for Letter-sized paper.
	If you are using Windows 9x/Me, the Spooling Setting may be set incorrectly.	From the **Start** menu, choose **Settings** and **Printers**. Right-click the **Samsung SCX-4x16 Series** printer icon, choose **Properties**, click the **Details** tab, and then choose the **Spool Settings** button. Select the desired spool setting.
Half the page is blank.	The page orientation setting may be incorrect.	Change the page orientation in your application. See page 5.3.
	The paper size and the paper size settings do not match.	Ensure that the paper size in the printer driver settings matches the paper in the tray.
The machine prints, but the text is wrong, garbled, or incomplete.	The printer cable is loose or defective.	Disconnect the printer cable and reconnect. Try a print job that you have already printed successfully. If possible, attach the cable and the machine to another computer and try a print job that you know works. Finally, try a new printer cable.
	The wrong printer driver was selected.	Check the application's printer selection menu to ensure that your machine is selected.
	The software application is malfunctioning.	Try printing a job from another application.
	The operating system is malfunctioning.	Exit Windows and reboot the computer. Turn the machine off and then back on again.

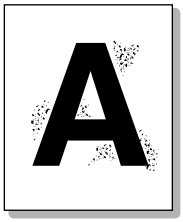
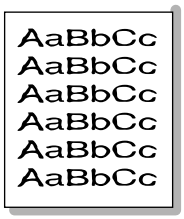
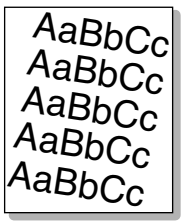
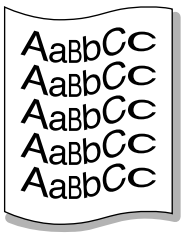
Condition	Possible cause	Suggested solutions
Pages print, but are blank.	The toner cartridge is defective or out of toner.	Redistribute the toner. if necessary. See page 7.6. If necessary, replace the toner cartridge.
	The file may have blank pages.	Check the file to ensure that it does not contain blank pages.
Pages print, but are blank. *(continued)*	Some parts, such as the controller or the board, may be defective.	Contact a service representative.
The illustrations print incorrectly in Adobe Illustrator.	The setting in the software application is wrong.	Print the document with selecting **Download as Bit Image** in the **Advanced Options** window of the Graphic properties.
An error occurs repeatedly when you are printing with the USB connection.	When the USB mode is set to "Fast," some PC users may experience poor USB communication.	Change the USB mode to "Slow." To do so, follow these steps: 1. Press **Menu** on the control panel until "Machine Setup" appears on the top line of the display. 2. Press the scroll button (◄ or ►) until "USB Mode" appears on the bottom line, and press **Enter**. 3. Press the scroll button (◄ or ►) to select "Slow." 4. Press **Enter** to save the selection. 5. Press **Stop/Clear** to return to the standby mode.

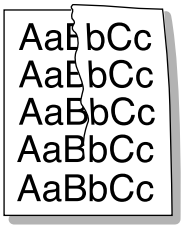
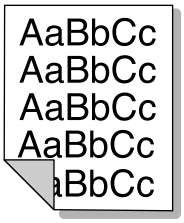
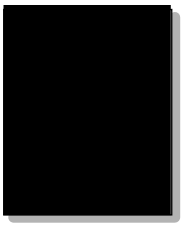
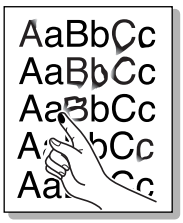
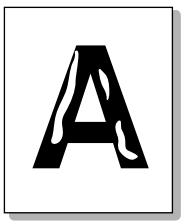
Printing Quality Problems

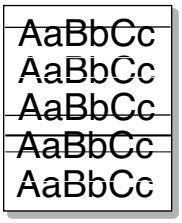
The dirty inside of the machine or improper paper loading may reduce the print quality. See the table below to troubleshoot the problem.

Condition	Suggested solutions
Light or faded print  	If a vertical white streak or faded area appears on the page: • The toner supply is low. You may be able to temporarily extend the toner cartridge life. See "Redistributing Toner" on page 7.6. If this does not improve the print quality, install a new toner cartridge. • The paper may not meet paper specifications; for example, the paper is too moist or too rough. See "Paper Specifications" on page B.6. • If the entire page is light, the print resolution setting is too low or Toner Save mode is on. Adjust the print resolution and turn the Toner Save mode off. See page 5.20 and page 1.19 respectively. • A combination of faded or smeared defects may indicate that the toner cartridge needs cleaning. See "Cleaning the Drum" on page 7.9.
Toner specs  	• The paper may not meet specifications; for example, the paper is too moist or too rough. See "Paper Specifications" on page B.6. • The transfer roller may be dirty. Clean the inside of your machine. See page 7.3. • The paper path may need cleaning. See "Cleaning the Drum" on page 7.9.
Dropouts  	If faded areas, generally rounded, occur randomly on the page: • A single sheet of paper may be defective. Try reprinting the job. • The moisture content of the paper is uneven or the paper has moist spots on its surface. Try a different brand of paper. See "Paper Specifications" on page B.6. • The paper lot is bad. The manufacturing processes can cause some areas to reject toner. Try a different kind or brand of paper. • The toner cartridge may be defective. See "Vertical repetitive defects" on the next page. • If these steps do not correct the problems, contact a service representative.

Condition	Suggested solutions
Vertical lines  	If black vertical streaks appear on the page: • The drum inside the toner cartridge has probably been scratched. Install a new toner cartridge. See "Installing the Toner Cartridge" on page 1.10.
Gray background  	If the amount of background shading becomes unacceptable: • Change to a lighter weight pages. See "Paper Specifications" on page B.6. • Check the machine's environment; very dry (low humidity) or high humidity (higher than 80% RH) conditions can increase the amount of background shading. • Remove the old toner cartridge and install a new one. See "Installing the Toner Cartridge" on page 1.10.
Toner smear  	• Clean the inside of the machine. See page 7.3. • Check the paper type and quality. See "Paper Specifications" on page B.6. • Remove the toner cartridge and install a new one. See "Installing the Toner Cartridge" on page 1.10.
Vertical repetitive defects  	If marks repeatedly appear on the printed side of the page at even intervals: • The toner cartridge may be damaged. If a repetitive mark occurs on the page, print a cleaning sheet several times to clean the cartridge; see "Cleaning the Drum" on page 7.9. After the printout, if you still have the same problems, install a new toner cartridge. See "Installing the Toner Cartridge" on page 1.10. • Parts of the machine may have toner on them. If the defects occur on the back of the page, the problem will likely correct itself after a few more pages. • The fusing assembly may be damaged. Contact a service representative.

Condition	Suggested solutions
Background scatter 	Background scatter results from bits of toner distributed on the printed page. • The paper may be too damp. Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture. • If background scatter occurs on an envelope, change the printing layout to avoid printing over areas that have overlapping seams on the reverse side. Printing on seams can cause problems. • If background scatter covers the entire surface area of a printed page, adjust the print resolution through your software application or the printer properties.
Misformed characters 	• If characters are improperly formed and producing hollow images, the paper stock may be too slick. Try a different paper. See "Paper Specifications" on page B.6. • If characters are improperly formed and producing a wavy effect, the scanner unit may need service. For service, contact a service representative.
Page skew 	• Ensure that the paper is loaded properly. • Check the paper type and quality. See "Paper Specifications" on page B.6. • Ensure that the paper or other material is loaded correctly and the guides are not too tight or too loose against the paper stack.
Curl or wave 	• Ensure that the paper is loaded properly. • Check the paper type and quality. Both high temperature and humidity can cause paper curl. See "Paper Specifications" on page B.6. • Turn over the stack of paper in the paper tray. Also try rotating the paper 180° in the tray.

Condition	Suggested solutions
Wrinkles or creases 	• Ensure that the paper is loaded properly. • Check the paper type and quality. See "Paper Specifications" on page B.6. • Turn over the stack of paper in the paper tray. Also try rotating the paper 180° in the tray.
Back of printouts are dirty 	Check for leaking toner. Clean the inside of the machine. See page 7.3.
Black pages 	• The toner cartridge may not be installed properly. Remove the cartridge and reinsert. • The toner cartridge may be defective and need replacing. Install a new toner cartridge. See "Installing the Toner Cartridge" on page 1.10. • The machine may require repair. Contact a service representative.
Loose toner 	• Clean the inside of the machine. See page 7.3. • Check the paper type and quality. See "Paper Specifications" on page B.6. • Install a new toner cartridge. See "Installing the Toner Cartridge" on page 1.10. • If the problem persists, the machine may require repair. Contact a service representative.
Character Voids 	Character voids are white areas within the parts of characters that should be solid black: • If you are using transparencies, try another type of transparency. Because of the composition of the transparency, some character voids are normal. • You may be printing on the wrong surface on the paper. Remove the paper and turn it around. • The paper may not meet paper specifications. See "Paper Specifications" on page B.6.

Condition	Suggested solutions
Horizontal stripes  	If horizontally aligned black streaks or smears appear: • The toner cartridge may be installed improperly. Remove the cartridge and reinsert. • The toner cartridge may be defective. Install a new toner cartridge. See "Installing the Toner Cartridge" on page 1.10. • If the problem persists, the machine may require repair. Contact a service representative.

Fax Problems *(For SCX-4216F)*

Condition	Suggested solutions
The machine is not working, there is no display and the buttons are not working.	• Unplug the power cord and plug it in again. • Ensure that there is power to the electrical receptacle.
No dial tone sounds.	• Check that the phone line is connected properly. • Check that the phone socket in the wall is working by plugging in another phone.
The numbers stored in the memory do not dial correctly.	Make sure that the numbers are stored in the memory correctly. Print a Phonebook list, referring to the Facsimile User's Guide.
The document does not feed into the machine.	• Make sure that the document is not wrinkled and you are putting it in correctly. Check that the document is the right size, not too thick or thin. • Make sure that the ADF (Automatic Document Feeder) cover is firmly closed.
Faxes are not received automatically.	• The FAX mode should be selected. • Make sure that there is paper in the tray. • Check to see if the display shows "Memory Full."
The machine does not send.	• Make sure that the document is loaded in the ADF or on the document glass. • "TX" should show up on the display. • Check the other fax machine you are sending to, to see if it can receive your fax.

Condition	Suggested solutions
The incoming fax has blank spaces or is received with a poor-quality.	• The fax machine sending you the fax may be faulty. • A noisy phone line can cause line errors. • Check your machine by making a copy. • The toner cartridge may be empty. Replace the toner cartridge, referring to page 7.7.
Some of the words on a incoming fax are stretched.	The fax machine sending you the fax had a temporary document jam.
There are lines on the documents you send.	Check your scan glass for marks and clean it. See page 7.4.
The machine dials a number, but a connection with another fax machine fails.	The other fax machine may be turned off, out of paper, or cannot answer incoming calls. Speak with the other machine operator and ask her/him to sort out the problem.
Documents are not stored in the memory.	There may not be enough memory to store the document. If the display shows a "Memory Full" message, delete any documents you no longer need from the memory and then restore the document.
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. See page 1.18 for the paper tray and page 3.10 for the Bypass tray.

Copying Problems

Condition	Suggested solutions
Copies are too light or too dark.	• If the original is light, use the **Contrast** button to darken the background of the copies. • If the original is dark, use the **Contrast** button to lighten the background of the copies.
Smears, lines, marks or spots appears on copies.	• If defects are on the original, press the **Contrast** button to lighten the background of your copies. • If no defects are on the original, clean the document glass and underside of the document cover. See page 7.4.
Copy image is skewed.	• Ensure that the original is positioned correctly on document glass. • Check that the copy paper is loaded correctly.
Blank copies print out.	Ensure that the original is face down on the document glass or face up in the Automatic Document Feeder (for SCX-4116/4216F only).
Image rubs off the copy easily.	• Replace the paper in the paper tray with paper from a new package. • In high humidity areas, do not leave paper in the machine for the extended periods of time.
Frequent copy paper jams occurs.	• Fan the stack of paper, then turn it over in the paper tray. Replace the paper in the tray with a fresh supply. Check/adjust the paper guides, if necessary. • Ensure that the paper is the proper paper weight. 75 g/m^2 (20 lb) bond paper is recommended. • Check for copy paper or pieces of copy paper remaining in the machine after a paper jam has been cleared.
Fewer copies from the toner cartridge than expected prints out.	• Your originals may contain pictures, solids or heavy lines. For example, your originals may be forms, newsletters, books or other documents that use more toner. • The machine may be turned frequently on and off. • The document cover may be left open while copies are being made.

Scanning Problems

Condition	Suggested solutions
The scanner does not work.	• Make sure that you place the document to be scanned face down on the document glass, or face up in the Automatic Document Feeder (for SCX-4116/4216F). • There may not be enough available memory to hold the document you want to scan. Try the Prescan function to see if that works. Try lowering the scan resolution rate. • Check that the USB or parallel cable is connected properly. • Make sure that the USB or parallel cable is not defective. Switch the cable with a known good cable. If necessary, replace the cable. • If you are using a parallel cable, ensure that it is compliant with the IEEE 1284 standard. • Check that the scanner is configured correctly. Check scan setting in the SmarThru Configuration or the application you want to use to make certain that the scanner job is being sent to the correct port, for example, LPT1.
The unit scans very slowly.	• Check if the machine is printing received data. Scan the document after the current job is completed. • Graphics are scanned more slowly than text. • Communication speed becomes slow in scan mode because of the large amount of memory required to analyze and reproduce the scanned image. Set your computer to ECP printer mode through BIOS setting. It will help to increase the speed. For details on how to set BIOS, refer to your computer User's Guide.
Message appears on your computer screen: "Scanner is busy receiving or printing data. When the current job is completed, try again."	There may be a copying or printing job in progress. When the current job is complete, try the job again.

Common Macintosh Problems

Problem	Possible Cause and Solution
The printer driver icon does not appear in Chooser.	Software is not installed correctly. Reinstall the software; see page A.2.
The printer name does not appear in the **Connect to** box in the Chooser.	• Make sure that the cables are connected correctly and the printer is turned on. • Check if "Ready" appears on the display of the control panel. If not, clear the problem depending on the error message; see page 8.10. • Make sure that the correct printer driver has been selected in Chooser.
You cannot use the computer while the printer is printing.	Background Printing has not been selected. • Select **Background** in the **Background Printing** tab of the Samsung SPL II Printer window.

MEMO

A

Printing From a Macintosh

This chapter includes:

- **Installing Software for Macintosh**
- **Printing a Document**
- **Using Advanced Printing Features**

Installing Software for Macintosh

Your machine supports Macintosh systems with a built-in USB interface. When you print a file from a Macintosh computer, you can use the SPL driver to support your machine's major printing features.

System Requirements

To use your machine and its software with a Macintosh, your system should have:

Macintosh Hardware Requirement:

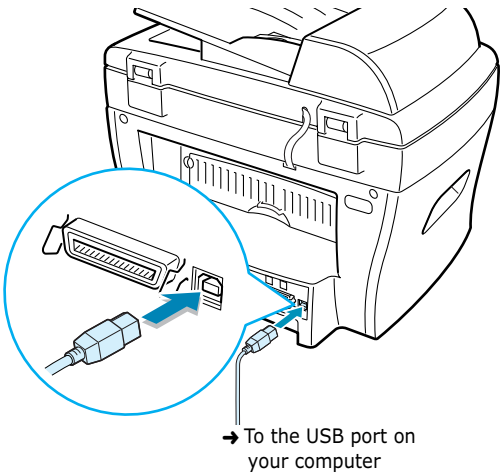
- One of the following Macintosh models:
  - Power Macintosh series
  - Power Macintosh G3, G4
  - iMac series
  - PowerBook series
  - iBook series
- USB interface

Macintosh System Requirement:

System 8.6 or later

Installing Software

1 Connecting the machine to the USB port of the computer requires a certified USB cable. You will need to buy a USB 1.1 compliant cable that is within 3 m in length. Connect it to the USB connector on your machine.



NOTE: If you are using a USB hub, connect the machine's cable to the first tier of the hub, or the machine may malfunction. If the machine doesn't work with the hub, connect it directly to the USB port.

2 Turn on your computer and machine.

3 Insert the CD-ROM which came with your machine into the CD-ROM drive.

4 Double-click **SCX-4x16** on your Macintosh desktop.

5 Double-click the **West** folder.

6 Double-click the **Samsung Laser Printer Installer** icon next to each language to select the correct one.

7 Click **Continue**, and then click **Continue**.

8 The Samsung Laser Printer Installer window opens. Select the installation type.

The window provides the following two options for software installation:

- **Easy Install** (recommended method): This option installs the SPL driver.
- **Custom Install** : This option allows you to choose which components will be installed, the SPL driver or the Adobe Acrobat Reader program for opening the User's Guide.

9 Click **Install**.

If other programs are operating, the alert message appears. Click **Continue** to install the software or click **Cancel**, close other programs and install the software.

10 After the installation is finished, click **Restart**.

Choosing Your Printer

1 From the **Apple** menu, select **Chooser**.

2 From the left pane of the Chooser window, click **SAMSUNG SPL II**. Then your printer name will appear in the right pane of the Chooser window.

3 Click **SAMSUNG SPL II** and close the Chooser window.

4 The message window indicating that you have changed your current printer appears. Click **OK**.

5 An SAMSUNG SPL II printer icon will be created on your desktop.

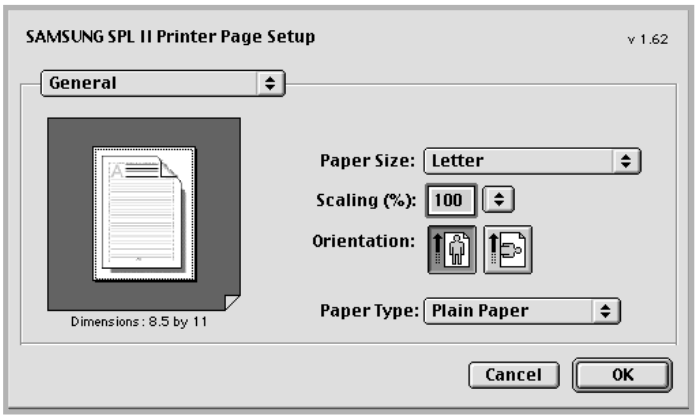
Printing a Document

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

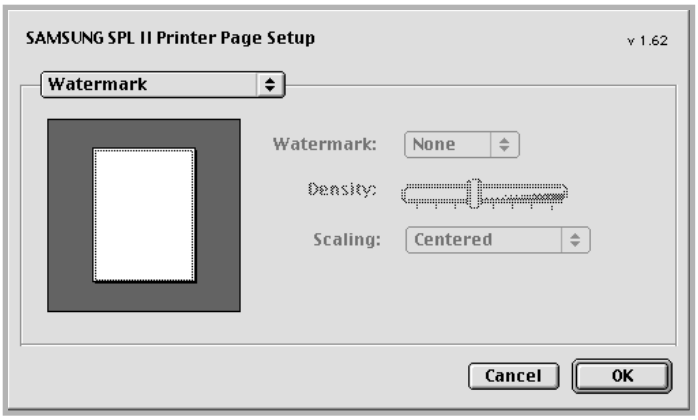
1 Open a Macintosh application and select a file you want to print.

2 Open the **File** menu, and click **Page Setup** (**Document Setup** in some applications).

3 Choose your paper size, orientation, paper type and other options and click **OK**.

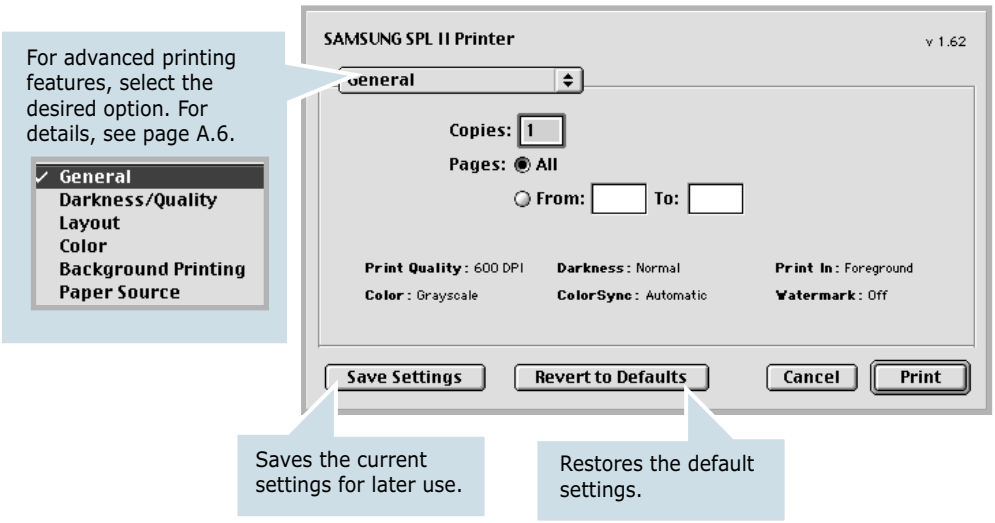


Choose **Watermark** to add a watermark to each page in your document to emphasize its purpose or indicate how it should be handled. For details on the watermark options, see page 5.13.



4 Open the **File** menu and click **Print**. You will see the SAMSUNG SPL II Printer window.

5 Choose the number of copies and indicate which pages you want to print.



6 Click **Print** when you finish setting the options.