# **B** Copying

This chapter includes:

- "Basic Copying" on page 3-2
- "Adjusting Copying Options" on page 3-3
  - "Basic Settings" on page 3-4
  - "Image Adjustments" on page 3-8
  - "Image Placement Adjustments" on page 3-12
  - "Output Adjustments" on page 3-14
  - "Advanced Copying" on page 3-16
- "Managing Copy Functions" on page 3-18

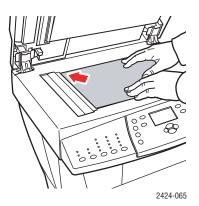
# **Basic Copying**

Follow these steps to make copies.

#### Note

To clear the settings from the previous job, press the Clear All button twice.

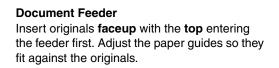
1. Load the originals to be copied. Use either the document glass or the document feeder.



#### **Document Glass**

Lift the document feeder, then place the original **facedown** on the back, left corner of the document glass.





- 2. On the control panel, press the **Copy** button.
- **3.** Use the keypad on the control panel to enter the desired number of copies. The number of copies appears in the upper, right corner of the display.
- 4. If you are making more than one copy, press the **Output** button to turn collation on or off.

#### Note

When Output is set to collate and you are copying from the document glass, the system copies the first page and then prompts you for **Another original to copy?**. If you do not want to see this message, press the **Output** button to select **Uncollated** before starting your copy job.

5. Press the **Start** button.

If you placed originals in the document feeder, copying continues until the document feeder is empty.

#### Note

Because the WorkCentre C2424 Copier-Printer is often used on networks, the system may be printing a job when you make copies. The system can be set up to allow copy jobs to interrupt print jobs. See page 3-18 for information on setting this option.

# **Adjusting Copying Options**

This section includes:

#### **Basic Settings**

- "Setting the Copy Default Tray" on page 3-4
- Specifying a Different Tray to Use" on page 3-4
- Selecting Color or Black and White Copies" on page 3-5
- Specifying 2-Sided Originals or Copies" on page 3-5
- "Selecting the Quality of the Copies" on page 3-6
- Specifying the Original Type" on page 3-7

#### **Image Adjustments**

- "Setting the Original Size" on page 3-8
- "Reducing or Enlarging the Image" on page 3-8
- Lightening or Darkening the Image" on page 3-9
- Adjusting the Contrast of the Image" on page 3-9
- "Automatically Suppressing Background Variations" on page 3-9
- Adjusting the Color Balance" on page 3-10
- "Erasing the Edges of Copy Documents" on page 3-10

#### **Image Placement Adjustments**

- "Printing Multiple Images on a Sheet (N-Up)" on page 3-12
- "Repeating Images on a Sheet" on page 3-12
- "Centering the Image" on page 3-13
- "Shifting the Image" on page 3-13

#### **Output Adjustments**

- "Collating Copies" on page 3-14
- "Making Copy Documents with Covers" on page 3-15
- "Using Blank Separators" on page 3-15

#### **Advanced Copying**

- Copying Books" on page 3-16
- Creating Booklets" on page 3-17

# **Basic Settings**

This section includes:

- "Setting the Copy Default Tray" on page 3-4
- "Specifying a Different Tray to Use" on page 3-4
- "Selecting Color or Black and White Copies" on page 3-5
- "Specifying 2-Sided Originals or Copies" on page 3-5
- Selecting the Quality of the Copies" on page 3-6
- Specifying the Original Type" on page 3-7

## Setting the Copy Default Tray

To set the default paper supply tray for copy jobs:

- 1. On the control panel, press the System Setup button.
- 2. In the menu, select Job Defaults Setup, then press the Enter button.
- 3. Select Copy Defaults Setup, then press the Enter button.
- 4. Select **Paper Supply**, then press the **Enter** button.
- 5. Scroll to the desired tray or Auto Select.
- 6. Press the Enter button to save the changes.

## **Specifying a Different Tray to Use**

In some cases, you may want to make copies on letterhead, colored paper, or transparencies. After loading the special paper in the tray, select that tray for use for your copies. To do this:

- 1. On the control panel, press the **Copy** button.
- 2. In the menu, select Paper Supply, then press the Enter button.

#### Note

You can press the **Paper Supply** shortcut button on the control panel to skip Steps 1 and 2.

- **3.** Select one of the following trays to use for the copies, then press the **Enter** button.
  - Tray 1
  - **Tray 2** (factory default value)
  - **Tray 3** (if available on your system)
  - **Tray 4** (if available on your system)

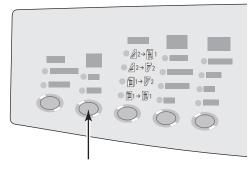
#### Note

For best results, specify the size and type of paper if using Tray 1. Specify the paper type if using Tray 2, 3, or 4.

## **Selecting Color or Black and White Copies**

If the original has color, you can create copies in color or in black and white.

Press the Color Mode button on the control panel to change the selection to Color or B/W.



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If you select **Color** and the system prompts you for a password, use the numeric keypad to enter the password, then press the **Enter** button.

#### Note

An administrator can limit the use of the color copy function by setting a password. For more information, see "Using a Color Copy Password" on page 3-19.

#### **Specifying 2-Sided Originals or Copies**

When you use the document feeder with 2-sided originals, one or both sides can be scanned for copying. You can also choose whether to create 1-sided or 2-sided copies.

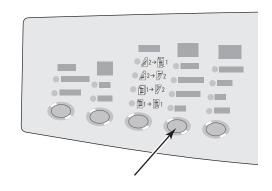
Press the 2-Sided button on the control panel to change the selection to:

- 1 to 1 Scans just one side of the originals and produces 1-sided copies. (factory default value)
- 1 to 2 Scans just one side of the originals and produces 2-sided copies.
- 2 to 2 Scans both sides of the originals and produces 2-sided copies.
- 2 to 1 Scans both sides of the originals and produces 1-sided copies.

# Selecting the Quality of the Copies

Press the **Output Quality** button on the control panel to select one of the following outputquality modes:

Output-Quality Mode	Type of Copy Job
Hi-Res	Highest-quality mode for color copies. Provides the best detail and smoothness for photographic images. Produces highest-quality color copies, with the best text resolution and smoothest light colors. This mode takes longer to process and print than the other modes.
Enhanced (factory default setting)	Best mode for business presentations. Produces superior text resolution and very smooth light colors. This mode takes longer to process and print than Standard or Fast.
Standard	General-purpose mode for full-color copies. Produces crisp, bright copies at high speed. Recommended for vibrant, saturated color prints.
Fast	Fastest full-color mode, useful for many images and previewing your work. Rapidly produces review documents; useful for rush jobs. Not recommended for documents containing small text, fine detail, or large areas of bright solid fill.

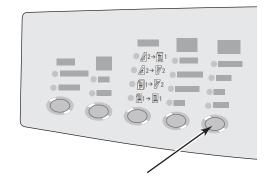


## **Specifying the Original Type**

The scanner optimizes the appearance of the output according to the contents of the original.

Press the **Original Type** button on the control panel to change the selection to:

- **Photo** Optimizes for photograph prints.
- **Graphics** Optimizes for constant-colored areas.
- **Mixed** Optimizes for magazines and newspaper photographs.
- **Text** Optimizes for black and white or colored text.



# **Image Adjustments**

This section includes:

- "Setting the Original Size" on page 3-8
- "Reducing or Enlarging the Image" on page 3-8
- Lightening or Darkening the Image" on page 3-9
- "Adjusting the Contrast of the Image" on page 3-9
- "Automatically Suppressing Background Variations" on page 3-9
- "Adjusting the Color Balance" on page 3-10
- "Erasing the Edges of Copy Documents" on page 3-10

## **Setting the Original Size**

You can specify the size of the original so that the correct area is copied. To do this:

- 1. On the control panel, press the **Copy** button.
- 2. In the menu, select Original Size, then press the Enter button.

#### Note

You can press the **Original Size** shortcut button on the control panel to skip Steps 1 and 2.

- **3.** Select one of the preset sizes or **Tray/Auto** (the factory default), then press the **Enter** button.
  - For copies from the document glass, Tray/Auto works with the Book Copy, Auto Reduce/Enlarge, Poster 4x4, Edge Erase, and Auto Center options to pre-scan each original to determine its size. Otherwise, the copy area is the same size as the copy paper.
  - For copies from the document feeder, Tray/Auto sets the copied area to the same size as the copy paper.

#### **Reducing or Enlarging the Image**

You can reduce the image down to 25% of its original size or enlarge it up to 400% of its original size. If desired, the images can be enlarged and printed on sixteen pages so you can assemble them into a poster.

To reduce or enlarge the image:

- 1. On the control panel, press the **Copy** button.
- 2. In the menu, select **Reduce/Enlarge**, then press the **Enter** button.

#### Note

You can press the **Reduce/Enlarge** shortcut button on the control panel to skip Steps 1 and 2.

- **3.** Select one of the following, then press the **Enter** button:
  - 100% Keeps the copy image the same size as the original. (Factory default value).
  - Auto Reduces or enlarges the image as needed to fit the full size of the copy paper.
  - **Preset** Reduces or enlarges the image as needed to fit a selected copy paper size.
  - **25%-400%** Reduces or enlarges the image by a selected percentage.
  - Poster 4x4 Enlarges the image to fit onto 16 copy pages so that it can be assembled into a 4x4 poster.
- 4. If you selected **Preset**, select the preset value, the size of the original followed by the size of the copy paper.
- 5. If you selected 25%-400%, use the keypad to enter a value from 25% to 400% (in 1% increments) or press the Up Arrow or Down Arrow button to scroll to the desired value, then press the Enter button.

#### Lightening or Darkening the Image

To lighten or darken the image when it is copied:

- 1. On the control panel, press the **Copy** button.
- 2. In the menu, select Lighten/Darken, then press the Enter button.

#### Note

You can press the **Lighten/Darken** shortcut button on the control panel to skip Steps 1 and 2.

Press the Up Arrow or Down Arrow button to scroll to a whole number from Darkest (+3) to Lightest (-3), then press the Enter button.

#### Adjusting the Contrast of the Image

To reduce or increase the contrast of the image when it is copied:

- 1. On the control panel, press the **Copy** button.
- 2. In the menu, select **Contrast**, then press the **Enter** button.
- Press the Up Arrow or Down Arrow button to scroll to a whole number from Highest (+3) to Lowest (-3), then press the Enter button. The factory default is 0.

#### Automatically Suppressing Background Variations

Sometimes, two-sided originals on thin paper show some of the text or images from the back side of the paper. To improve your copies from this type of original, use the **Auto Suppression** setting to minimize the sensitivity of the scanner to variations in light background colors.

To change this setting:

- **1.** On the control panel, press the **Copy** button.
- 2. In the menu, select Auto Suppression, then press the Enter button.
- 3. Select either On or Off, then press the Enter button. The factory default is Off.

# **Adjusting the Color Balance**

Sometimes the colors on the original are not optimal. You can adjust the levels of each primary color: cyan, magenta, yellow, and black.

To adjust these color levels:

- **1.** On the control panel, press the **Copy** button.
- 2. In the menu, select **Color Balance**, then press the **Enter** button.
- **3.** To adjust the level of cyan:
  - a. Select Cyan Color Balance, then press the Enter button.
  - b. Press the Up Arrow or Down Arrow button to a whole number from Darkest (+3) to Lightest (-3), then press the Enter button.
- **4.** To adjust the level of magenta:
  - a. Select Magenta Color Balance, then press the Enter button.
  - b. Press the Up Arrow or Down Arrow button to a whole number from Darkest (+3) to Lightest (-3), then press the Enter button.
- **5.** To adjust the level of yellow:
  - a. Select Yellow Color Balance, then press the Enter button.
  - b. Press the Up Arrow or Down Arrow button to a whole number from Darkest (+3) to Lightest (-3), then press the Enter button.
- **6.** To adjust the level of black:
  - a. Select **Black Color Balance**, then press the **Enter** button.
  - b. Press the Up Arrow or Down Arrow button to a whole number from Darkest (+3) to Lightest (-3), then press the Enter button.

#### Note

The factory default is **Off**; (**0** adjustment for each color).

## **Erasing the Edges of Copy Documents**

You can clean the edges of your copies, eliminating unwanted material from printing, by specifying the amount to erase on the right, left, top, and/or bottom edge. To do this:

- **1.** On the control panel, press the **Copy** button.
- 2. In the menu, select **Edge Erase**, then press the **Enter** button.
- **3.** To erase the left edge of the original page:
  - **a.** Select **Left**, then press the **Enter** button.
  - b. Press the Up Arrow or Down Arrow button to scroll to a number from 0.0 through 1.0 inches (in 0.1 inch increments) or from 0 through 25 mm (in 1 mm increments), then press the Enter button.
- **4.** To erase the right edge of the original page:
  - **a.** Select **Right**, then press the **Enter** button.
  - b. Scroll to a number from 0.0 through 1.0 inches (in 0.1 inch increments) or from 0 through 25 mm (in 1 mm increments), then press the Enter button.

- **5.** To erase the top edge of the original page:
  - **a.** Select **Top**, then press the **Enter** button.
  - b. Scroll to a number from 0.0 through 1.0 inches (in 0.1 inch increments) or from 0 through 25 mm (in 1 mm increments), then press the Enter button.
- **6.** To erase the bottom edge of the original page:
  - **a.** Select **Bottom**, then press the **Enter** button.
  - b. Scroll to a number from 0.0 through 1.0 inches (in 0.1 inch increments) or from 0 through 25 mm (in 1 mm increments), then press the Enter button.

When you select **Edge Erase**, the right side of the control panel display has a page icon with shading along the edges that have an edge erase setting.

#### Note

The factory default is **Off**; (edge erase of **0** on all sides).

# **Image Placement Adjustments**

This section includes:

- "Printing Multiple Images on a Sheet (N-Up)" on page 3-12
- "Repeating Images on a Sheet" on page 3-12
- "Centering the Image" on page 3-13
- "Shifting the Image" on page 3-13

## Printing Multiple Images on a Sheet (N-Up)

You can have two or four original page images copied onto one side of a sheet of paper. The size of the images are reduced proportionally to fit on the selected paper.

To select an N-Up option:

- 1. On the control panel, press the **Copy** button.
- 2. In the menu, select **N-Up**, then press the **Enter** button.
- **3.** Select one of the following, then press the **Enter** button.
  - Off Copies one original page image onto one side of a sheet of paper. (Factory default value)
  - 2-Up Portrait Copies two portrait original images onto one side of a sheet of paper, as shown
  - 2-Up Landscape Copies two landscape original images onto one side of a sheet of paper, with the first page above the second, as shown.
  - 4-Up Portrait Copies four portrait original images onto one side of a sheet of paper, with the first and second image above the third and fourth, as shown.
  - 4-Up Landscape Copies four landscape page images onto one side of a sheet of paper, with the first and second image above the third and fourth, as shown.

#### Note

The copies do not begin printing until the system has scanned all of the originals for the first page.

#### **Repeating Images on a Sheet**

You can have several copies of one original image copied onto one side of a sheet of paper. This is useful when you want to make multiple copies of a small image.

To have the image repeated on a sheet:

- 1. On the control panel, press the **Copy** button.
- 2. In the menu, select **Repeat Image**, then press the **Enter** button.





- **3.** To have the image repeated in several rows:
  - **a.** Select **Rows**, then press the **Enter** button.
  - **b.** Press the **Up Arrow** or **Down Arrow** button to scroll to a number from **1** to **10**, then press the **Enter** button.
- 4. To have the image repeated in several columns:
  - **a.** Select **Columns**, then press the **Enter** button.
  - **b.** Press the **Up Arrow** or **Down Arrow** button to scroll to a number from **1** to **10**, then press the **Enter** button.

The factory default is **Off**; (**1** row and **1** column).

#### **Centering the Image**

You can automatically center the copy image on the page, or within each area of a page that has multiple copy images (N-Up). To do this:

- 1. On the control panel, press the **Copy** button.
- 2. In the menu, select **Auto Center**, then press the **Enter** button.
- **3.** Select either **On** (to automatically center the image) or **Off**, then press the **Enter** button. The factory default is **Off**.

#### Shifting the Image

In some cases, you may want to make copies on letterhead, colored paper, or transparencies. After loading the special paper in the tray, select that tray for use for your copies. To do this:

- 1. On the control panel, press the **Copy** button.
- 2. In the menu, select Margin Shift, then press the Enter button.
- **3.** To increase the margin on the long edge of the copy:
  - **a.** Select **Long Edge**, then press the **Enter** button.
  - b. Press the Up Arrow or Down Arrow button to scroll to a number from 0 through 2.0 inches (in 0.1 inch increments) or from 0 through 50 mm (in 1 mm increments), then press the Enter button.
- **4.** To increase the margin on the short edge of the copy:
  - **a.** Select **Short Edge**, then press the **Enter** button.
  - b. Press the Up Arrow or Down Arrow button to scroll to a number from 0 through 2.0 inches (in 0.1 inch increments) or from 0 through 50 mm (in 1 mm increments), then press the Enter button.

When you select margin shift, the right side of the control panel display has a page icon with arrows showing the direction that the image shifts.

The factory default is **Off**; (long edge margin of **0** and short edge margin of **0**).

# **Output Adjustments**

This section includes:

- "Collating Copies" on page 3-14
- "Making Copy Documents with Covers" on page 3-15
- "Using Blank Separators" on page 3-15

## **Collating Copies**

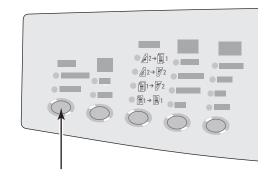
When you are making several copies of a multi-page original, you can automatically collate the output. For example, if you are making three single-sided copies of a six page original and select collated, the copies are printed in this order:

1, 2, 3, 4, 5, 6, 1, 2, 3, 4, 5, 6, 1, 2, 3, 4, 5, 6

If you select uncollated, the copies are printed in this order:

1, 1, 1, 2, 2, 2, 3, 3, 3, 4, 4, 4, 5, 5, 5, 6, 6, 6

Press the **Output** button on the control panel to change the selection to **Collated** or **Uncollated**.



## **Making Copy Documents with Covers**

You can have the first and/or last pages of your copy job printed on paper from another tray. That tray could contain colored paper or card stock.

To select the type of covers and the tray to use for the cover paper:

- **1.** On the control panel, press the **Copy** button.
- 2. In the menu, select **Covers**, then press the **Enter** button.
- **3.** Select one of the following, then press the **Enter** button.
  - Off Prints all pages of your copy job on the same paper. (Factory default value)
  - **Front** Prints the first page of your copy job on paper from another tray.
  - **Back** Prints the last page of your copy job on paper from another tray.
  - Front & Back Prints the first and last pages of your copy job on paper from another tray.
- 4. If you selected cover pages, **Cover Tray** displays. Select a tray to use for the cover pages, then press the **Enter** button.

When you select cover pages, the right side of the control panel display has a cover page icon.

#### **Using Blank Separators**

When you create copies on transparencies or other special media, you may want to insert blank separator pages between each copy.

After you select the tray that contains the media you want to use for the copies (see "Setting the Copy Default Tray" on page 3-4), use the control panel to turn on blank separators and select the tray to use for the separation pages:

- 1. On the control panel, press the **Copy** button.
- 2. In the menu, select **Blank Separators**, then press the **Enter** button.
- **3.** Select one of the following, then press the **Enter** button.
  - Off Does not insert separation pages between your copies. (Factory default value)
  - On Inserts a blank separation page between every page of the copy job.
- 4. If you selected **On**, select the tray to use for the blank separators, then press the **Enter** button.

# **Advanced Copying**

This section includes:

- Copying Books" on page 3-16
- "Creating Booklets" on page 3-17

## **Copying Books**

When copying from a book, you have many choices. You can copy the left and/or right pages from an open book as separate images or you can copy just the left page or just the right page.

#### Note

You must use the document glass to make copies from books.

To select special book copying:

- **1.** On the control panel, press the **Copy** button.
- 2. In the menu, select **Book Copy**, then press the **Enter** button.
- **3.** Select one of the following, then press the **Enter** button.
  - Off Copies an open book as one image. (Factory default value)
  - **Both Pages** Copies the left and the right pages of an open book as two images.
  - **Left Page Only** Copies just the left page of an open book.
  - **Right Page Only** Copies just the right page of an open book.
- If you selected book copy, Gutter Erase displays so you can specify the measurement of the gutter (the distance between the left and right pages). Press the Up Arrow or Down Arrow button to scroll to either:
  - A value from **0.0** to **2.0** inches (in 0.1 inch increments), then press the **Enter** button.
  - A value from 0 to 50 mm (in 1 mm increments), then press the Enter button.

# **Creating Booklets**

You can have two original pages copied onto each side of a sheet of paper in the correct order so that you can fold the copy pages into a booklet. The size of the images are reduced proportionally to fit on the selected paper. You can combine this feature with the **Book Copy** option to reproduce bound documents.

To select booklet copies:

- 1. On the control panel, press the **Copy** button.
- 2. In the menu, select **Create Booklet**, then press the **Enter** button.
- **3.** Select one of the following, then press the **Enter** button.
  - Off Does not create a booklet. (Factory default value)
  - **1-Sided Original** Creates a booklet from 1-sided originals.
  - **2-Sided Original** Creates a booklet from 2-sided originals.

When you select a booklet option, the right side of the control panel display has a booklet icon.

#### Note

The system does not print the copies until it has scanned all of the originals.

#### Note

When you create a booklet, the output is automatically set to 2-sided with no blank separators.

# **Managing Copy Functions**

This section includes:

- Setting Whether a Copy Job Interrupts a Print Job" on page 3-18
- "Using a Color Copy Password" on page 3-19

# Setting Whether a Copy Job Interrupts a Print Job

Normally, the system interrupts print jobs when users make copies. Printing continues while the system scans the originals. When the copies are ready to print, the print job pauses, the copies print, then the print job resumes.

Set the print interrupt option at the control panel.

- 1. On the control panel, press the **System Setup** button.
- 2. In the menu, select **General Setup**, then press the **Enter** button.
- 3. Select System Controls, then press the Enter button.
- 4. Select **Print Job Interrupt**, then press the **Enter** button.
- **5.** Select one of the following, then press the **Enter** button:
  - On Interrupts print jobs when you make copies. (Factory default value)
  - Off Allows print jobs to finish before printing copies.

For more information about system controls, see the Features chapter of this guide.

# **Using a Color Copy Password**

You can set a password to limit access to the color copy function. The system prompts users to enter the password when they press the **Color Mode** button to select color copies.

Use the control panel to enable, disable, or change the color copy password.

- 1. On the control panel, press the **System Setup** button.
- 2. In the menu, select **General Setup**, then press the **Enter** button.
- 3. Select System Controls, then press the Enter button.
- 4. Select Color Copy Password, then press the Enter button.
- **5.** Select one of the following, then press the **Enter** button:
  - Enable Password Sets a color copy password. At the prompt, use the numeric keypad to enter a 4-digit password, then press the Enter button.
  - Disable Password Allows color copies without a password. At the prompt, use the numeric keypad to enter the current color copy password, then press the Enter button.
  - Change Password Changes the existing color copy password. At the prompt, use the numeric keypad to enter the current color copy password, press the Enter button, enter a new 4-digit password, then press the Enter button.

#### Note

The Disable and Change Password options are only available when a password has already been enabled.

#### Note

If you forget your color copy password, you can reset the system controls to disable the password. Select **General Setup**, then press the **Enter** button, select **System Controls**, then press the **Enter** button, select **Reset System Controls**, and then press the **Enter** button. For more information about system controls, see the Features chapter of this guide.