Scanning User Guide



DocuColor 2240/1632 Printer/Copier

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3. User Guide (Scan)

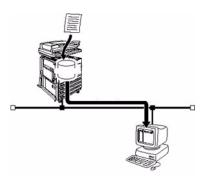
Scanning Overview

Your printer/copier can also be used as a scanner. You can either store your scanned job in a mailbox on the printer and retrieve it at your workstation, or you can select a template, that you have previously created using Internet services, on your desktop. The template will determine the characteristics of your scanned job and its destination.

Scanning Using Mailboxes

The scanner function is available when you are connected to the network environment using TCP/IP protocol.

You can scan your originals using the printer/copier and apply most of the features to scanned output, just as when making copies. The scans are stored in an electronic mailbox that has been created in the machine. The stored data can be retrieved on your client workstation if it has the appropriate scanning driver and if it has been connected to the network.



Scanning Using Templates

Job Templates can be created, edited, copied, and deleted using Internet Services. You can create these templates with different features and settings that will be applied to specified scan jobs on the machine. You can retrieve the job template by selecting the *Job Template* tab in Internet Services. Up to 250 job templates can be stored on the machine.

For more information on Job Templates, refer to the Internet Services Online help system.

For more information on Internet Services, refer to the User Guide (Print).

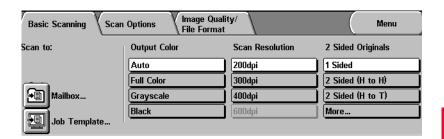
How to Scan Using Mailboxes

You can scan originals, and then store the scanned document in mailboxes. The scanned document can be saved in JPEG or TIFF format.

NOTE: In order to use this machine as a scanner, the IP address, Port, and mailboxes must be properly configured. Contact your System Administrator to set up a mailbox for you.



- 1 Place the document in the DADF or on the Document Glass.
- 2 Select **Scan** from the *Menu* screen. The *Basic Scanning* screen is displayed.



3 Select **Mailbox**. The *Mailbox* screen is displayed.



4 Select the mailbox where the scanned data is to be stored.

You can go to the previous screen by touching the **up** arrow, and the next screen by touching the **down** arrow. Or using the numeric keypad, you can enter numbers in the **Go to** box to go directly to a specific Mailbox.

Once a mailbox is selected, any documents stored in the box will be displayed in the **Number of Docs** box.



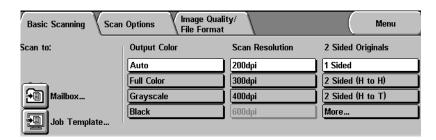
NOTE: If you select Mailbox and press **Document List**, you can check the documents stored in the Mailbox.

Press **Start** to begin scanning, or press **Close** to select additional scanning functions. The scan data will be saved in the specified mailbox.

For more information on scanning functions, refer to the following sections.

To view or retrieve scanned documents, refer to the Managing Scanned Documents section in this chapter.

Basic Scanning Tab



Below is a brief explanation of each feature available on the *Basic Scanning* tab. Each feature is explained in detail on the following pages.

Mailbox Allows you to scan originals and then store the scan data in mailboxes. The scan data can be saved in JPEG or TIFF format.

Job Template Allows you to apply preexisting job templates to jobs on the machine.

Output Color

Allows you to select the output color for specific types of originals.

You can choose from Auto, Full Color, Grayscale, or Black.

Scan Resolution Allows you to select the desired scan resolution. Select from 200

dpi, 300 dpi, 400 dpi, or 600 dpi.

2 Sided Originals You can scan both sides of 2-sided originals automatically.

Output Color

Output Color allows you to define the kind of original document you wish to scan. The default is Auto.

The following options are available:

Auto The Auto Color option enables the copier to determine if the

document is black and white or color.

The DADF must be closed for the Auto option to function.

In order for the scanner to accurately sense color on a document, the color area must be greater than 50 mm² (approximately 2 inches²). If the color area is less, select the Full Color option. Very dark colors may be sensed as black. In this case, select the Full Color option as well.

Full Color

Best used when scanning color originals. The text in the document will be clearer, and the color graduation will be represented in greater detail.

Grayscale

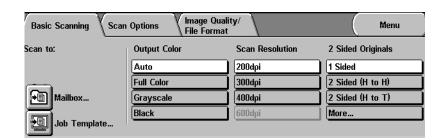
Select when scanning originals with different shades of black and white. This option can be used for originals that cannot be scanned in black and white only.

Black

Select when the desired output is a black and white copy. Black and white copies can be made from any original. With Black selected only Black toner is used.



- 1 Load your originals and select the mailbox where the scanned data is to be stored.
- 2 Select the **Output Color** from the *Basic Scanning* screen.



3 Select additional scanning features, or press **Start** to begin scanning.

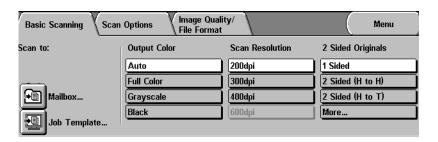
Scanning Resolution

Scan Resolution allows you to select the desired scan resolution. Select from 200 dpi, 300 dpi, 400 dpi, or 600 dpi.

The higher the scanning resolution, the larger the image file created.



- 1 Load your originals and select the mailbox where the scanned data is to be stored.
- 2 Select the desired Scan Resolution from the *Basic Scanning* screen.



3 Select additional scanning features, or press **Start** to begin scanning.

2 Sided Originals

2 Sided Originals allows you to select 1 Sided or 2 Sided originals and output. You can select 2-Sided options from the *Basic Scanning* tab or select the **More...** button to get a complete set of options.

The 2 Sided Originals feature can be set on the *Basic Scanning* tab and the *Scan Options* tab.

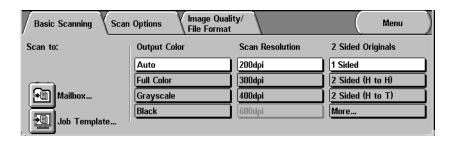
2 Sided (H to H) Select 2 Sided Head to Head if your originals are two-sided, head-to-head.

2 Sided (H to T) Select 2 Sided Head to Toe if your originals are two-sided, head-to-toe.

More... Select the **More...** button to get a complete set of options.



- 1 Load your originals and select the mailbox where the scanned data is to be stored.
- 2 Display the Basic Scanning screen.

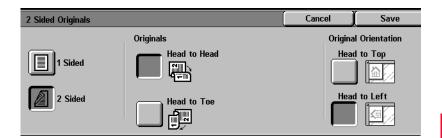


- 3 Select the desired option:
 - 2 Sided (Head to Head)
 - 2 Sided (Head to Toe)
 - More...

When **More...** is selected the 2 Sided Originals screen is displayed.

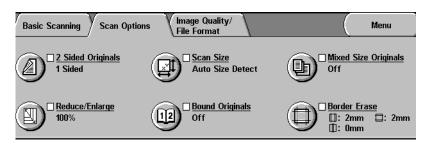


- 4 Select 1 Sided or 2 Sided.
 - If 1 Sided has been selected, proceed to the next step.
 - If 2 Sided has been selected, select Head to Head or Head to Toe for the Original.



- In Original Orientation, select the icon that most closely resembles the orientation for the loaded document(s), **Head to Top** or **Head to Left**.
- 6 Select additional scanning features, or press **Start** to begin scanning.

Scan Options Tab



Below is a brief explanation of each feature available on the *Scan Options* tab. Each feature is explained in detail on the following pages.

2 Sided Originals Use this setting to specify the original orientation when using the

DADF for scanning.

When the DADF is used for scanning, the original orientation must be set in order to specify the "Head" position of the document.

Reduce/Enlarge The Reduce/Enlarge feature allows you to copy the image at

different magnifications. Copies may be reduced/enlarged

between 25% - 400%.

Scan Size Allows you to scan the original for automatic size detection, or the

size may be input manually.

Bound Originals Allows you to scan the original for automatic size detection, or the

size may be input manually.

Mixed Size Originals
Automatically determines the correct paper size, based on the

original size and the selected reduction/enlargement.

Border Erase Allows you to erase unwanted edge markings from the original on

the scanned image.

3-10

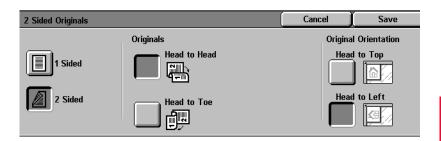
2 Sided Originals

When the DADF is used for scanning, the original orientation must be set in order to specify the "Head" position of the document.

2 Sided Originals can be set on the *Basic Scanning* tab and the *Scan Options* tab.



- 1 Load your originals and select the mailbox where the scanned data is to be stored.
- 2 Display the Scan Options screen.
- 3 Select **2 Sided Originals** from *Scan Options* screen. The *2 Sided Originals* screen is displayed.



- 4 Select 1 Sided or 2 Sided on the 2 Sided Originals screen.
- 5 Based on how the originals are loaded, select either Head to Top or Head to Left from Original Orientation.
- 6 Select additional scanning features, or press **Start** to begin scanning.

Reduce/Enlarge

The Reduce/Enlarge feature allows you to copy the image at different magnifications. Copies may be reduced/enlarged between 25% - 400%.

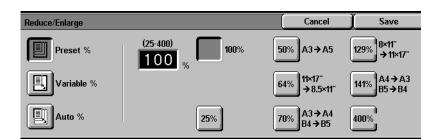
The following options are available:

- Preset % There are 7 preset percentages to choose from. The selected percentage displays in the value box on the *Reduce/Enlarge* screen. These presets can be changed in System Settings mode.
- Variable % Select the Variable% option to enter the desired percentage for Reduce/Enlarge. Use either the up and down arrows or the number buttons that display on the Touch Screen. Copies may be reduced/enlarged between 25% 400%, in 1% increments.
 - Auto % This option automatically reduces or enlarges the copy, based on the size and orientation of the document and the paper supply selected. This option is applied only to standard size documents.

Using Presets



- 1 Load your originals and select the mailbox for saving the scanned data.
- 2 On the *Scan Options* screen, select **Reduce/Enlarge**. The *Reduce/Enlarge* screen is displayed.



- 3 Select Preset %.
- 4 Select the desired percentage.
- 5 Select additional scanning features, or press **Start** to begin scanning.

Using Variable%



- 1 Load your originals and select the mailbox for saving the scanned data.
- On the *Scan Options* screen, select **Reduce/Enlarge**. The *Reduce/Enlarge* screen is displayed.

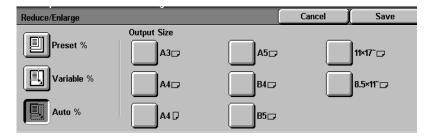


- 3 Select Variable%.
- 4 Perform one of the following:
 - Press the up arrow to increase the percentage value in increments of 1.
 - Press the down arrow to decrease the percentage value in decrements of 1.
 - Use the Numeric Keypad on the Control Panel to enter a specific percentage from 25% - 400%. Use C to clear the value entered.
- 5 Select additional scanning features, or press **Start** to begin scanning.

Using Auto %



- 1 Load your originals and select the mailbox for saving the scanned data.
- 2 On the *Scan Options* screen, select **Reduce/Enlarge**. The *Reduce/Enlarge* screen is displayed.



- 3 Select Auto %.
- 4 Select the desired Output Size.
- 5 Select additional scanning features, or press **Start** to begin scanning.

Scan Size

The Scan Size feature lets you to specify how the size of the original document is determined.

Auto Size Detect

The copier automatically recognizes the size of standard originals in the DADF. This is the default setting.

Standard Sizes

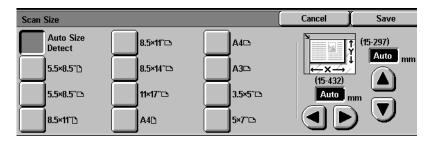
Select the document size from one of the 11 preset sizes. These presets can be changed in System Settings mode. You must place the original on the Document Glass.

Non-standard Sizes

Allows you to manually enter the size of the document placed on the Document Glass.



- 1 Load your originals and select the mailbox for saving the scanned data.
- 2 Select **Scan Size** from the *Scan Options* screen. The *Scan Size Input* screen is displayed.



- 3 Select the desired option:
 - Select Auto Size Detect to have the machine identify the size of the original document.
 - Select the appropriate size from one of the preset buttons.
 - Enter the width (x) and the length (y) dimensions of the original document.

Press the left or right arrows to decrease or increase the x dimension. X dimensions range from 15 to 432 mm in 1 mm increments.

Press the up or down arrows to increase or decrease the Y dimension. Y dimensions range from 15 to 297 mm in 1 mm increments.

4 Select additional scanning features, or press **Start** to begin scanning.

Bound Originals

The Bound Originals feature enables you to scan bound originals such as books, magazines or journals, notebooks, glued forms, or stapled sets.

When this feature is selected, each page is scanned into a separate file.

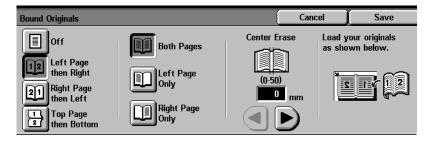
The pages of the book may be any size up to 8.5 x 11 inches (A4).

The **Center Erase** option allows you to remove the shadow caused by the center binding of bound originals when they are scanned.

CAUTION: Do not force the DADF down onto the book. Forcing the DADF down could damage it. Instead, leave the DADF open and apply a slight pressure with your hand to the book to keep it flat against the Document Glass.



- 1 Load your originals and select the mailbox for saving the scanned data.
- 2 Select **Bound Originals** from the *Scan Options* screen. The *Bound Originals* screen is displayed.



- 3 Select the desired option:
 - Left Page then Right
 - Right Page then Left
 - Top Page then Bottom

- 4 Select the pages that you want scanned:
 - Both Pages
 - Left Page only
 - Right Page only
- **5** Enter the value for the Center Erase, if necessary.
 - Center Erase is used to delete the center shadow from the output. Use the arrows to adjust the amount of erase.
 Center Erase values range from 0 to 50 mm.
- 6 Place the open document face down with the upper outside corner of the right page in the upper left corner of the document glass.
- 7 Select additional scanning features, or press **Start** to begin scanning.

Mixed Size Originals

This feature automatically determines the correct paper size when scanning different size documents. The correct paper size will be determined based on the original size and the selected reduction/enlargement.



- 1 Load your originals and select the mailbox for saving the scanned data.
- 2 Select **Mixed Size Originals** on the *Scan Options* screen. The *Mixed Size Originals* screen is displayed.



- 3 Select On.
- 4 Select additional scanning features, or press **Start** to begin scanning.

Border Erase

The Border Erase feature enables you to eliminate unwanted marks near the edges of the original from the output copy. The range for Border Erase is 0 through 50 mm in 1mm increments.

Border Erase offers the following options which can be used individually or combined together:

Top & Bottom
Left & Right
Center (Gutter)

The default is 5mm.

The default is 5mm.

The default is 5mm.

The selected settings are applied to both Side 1 and Side 2 of 2-sided copies.

When the image is reduced or enlarged, the selected percentage will be applied to the border erase.

When making copies the copier always automatically adds a border erase of 2mm to the top, bottom, left and right. This cannot be eliminated.

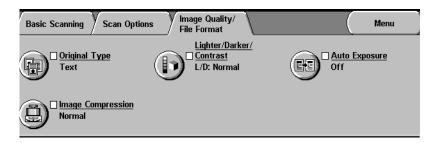


- 1 Load your originals and select the mailbox for saving the scanned data.
- 2 On the *Scan Options* tab select **Border Erase**. The *Border Erase* screen is displayed.



- 3 Select Normal or Variable Erase.
- 4 Press the up or down arrows to increase or decrease the Border Erase amount for Top & Bottom, Left & Right, and Center.
- 5 Select the icon that most closely resembles the Original Orientation.
- 6 Select additional scanning features, or press **Start** to begin scanning.

Image Quality / File Format Tab



Original Type

When the Original Type is specified, the machine automatically

makes adjustments to optimize the copy quality.

Image Compression

Selecting this feature saves the scanned data in either high, normal, or low compression rates.

Lighter/Darker/Contrast

Allows you to adjust the lightness, darkness and contrast of the

scanned original.

Auto Exposure

Prevents undesired marks or images that are printed on the back

of an original from appearing on the scanned images.

Original Type

Original Type enables you to define the kind of original document you wish to scan. The machine automatically makes adjustments to optimize the copy quality based on the original type. The following types are available:

Text & Photo

Use for originals that contain pictures and printed text, as in magazines or professional journals.

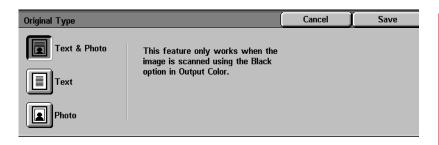
Text

Use for text originals composed of fine line characters or other high contrast originals with bright, dense colors. Selecting this option suppresses background color.

Photo Use for photographs or lithographs.



- 1 Load your originals and select the mailbox for saving the scanned data.
- 2 On the *Image Quality/File Format* tab, select **Original Type**. The *Original Type* screen is displayed.



- 3 Select the desired option:
 - Text & Photo
 - Text
 - Photo
- 4 Select additional scanning features, or press **Start** to begin scanning.

Image Compression

When Full Color or Grayscale has been selected for Output Color, you can select how to compress full color originals.

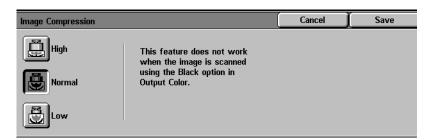
High Files will be saved at a high compression rate. The file size will be small, but may impact image quality.

Normal Files will be saved at a standard compression rate. This is the best balance between image quality and file size.

Low Files will be saved at a low compression rate. Image quality will be optimum, but file size will be large.



- 1 Load your originals and select the mailbox for saving the scanned data.
- 2 Select Image Compression from the Image Quality/File Format tab. The Image Compression screen is displayed.



- 3 Press the desired compression rate.
- 4 Select additional scanning features, or press **Start** to begin scanning.

Lighter/Darker/Contrast

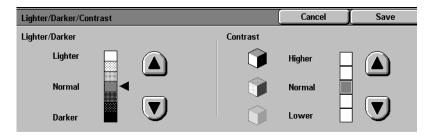
Lighter/Darker enables you to adjust the overall lightness or darkness of the output image.

NOTE: If Full Color or Gray Scale is selected in Output Color, the contrast level can be set as well.

Contrast allows you to adjust the clarity of the image. If you increase the Contrast, the copy appears sharp & vivid. If you decrease the Contrast, the copy is softer.



- 1 Load your originals and select the mailbox for saving the scanned data.
- Select Lighter/Darker/Contrast from the Image Quality/File Format tab. The Lighter/Darker/Contrast screen is displayed.



- 3 Press the up or down arrow to lighten or darken the original.
- 4 Press the up and down arrow to adjust the Contrast of the original.

 NOTE: Contrast can only be set when Full Color or Gray Scale is selected in Output Color.
- 5 Select additional scanning features, or press **Start** to begin scanning.

Auto Exposure

Auto Exposure automatically reduces or eliminates undesired marks or images that are printed on the back of an original from appearing on the scanned image.



- 1 Load your originals and select the mailbox for saving the scanned data.
- 2 Select **Auto Exposure** from the *Image Quality/File Format* tab. The *Auto Exposure* screen is displayed.



- 3 Select On
- 4 Select additional scanning features, or press **Start** to begin scanning.

How to Pause or Cancel a Scanning Job

You can cancel a scan job during the scanning process or delete scan jobs that are stored in the machine. In order to pause or cancel a scan job the procedure below:



- 1 Press **Stop** to pause scanning. The machine will stop.
- 2 Press **Stop** to end scanning, or press **Start** to resume scanning.

How to Cancel Scanning Jobs from the Workstation

You can use Internet Services to cancel scanning from the workstation.

For more information on how to cancel a scanned document refer to the User Guide (Print).

Checking or Deleting a Scan Job on the Machine

This section explains how to check or delete documents saved in the mailbox using the Control Panel.

Checking a Scan Job



1 Select the mailbox where the job is stored.



- Select Document List. The screen for the selected mailbox is displayed.
- 3 Check the document or select the document to be deleted. Select the up or down arrow to view your document.

Deleting a Scan Job

Select the document to be deleted, and then select **Delete**.

NOTE: You can delete all documents listed by selecting the **Select All** button.

The *Confirmation* screen is displayed.



Check the contents on the screen, and then select Yes.

Select **Close** repeatedly to return to the *Basic Scanning* tab.

Scanning in Batches

This section describes how to scan multiple originals as one scan job if you have more originals to be scanned than can fit into the DADF.



1 Begin scanning your first original, then select **Next Original**.

NOTE:

- When using the DADF, wait until the machine has completed scanning the first batch of originals before loading the next batch.
- If no action is carried out after the above screen has been displayed, the machine will assume that there are no more originals to be scanned and end the job.
- 2 Load the next original and then press Start.
- 3 Select Last Original after all originals have been scanned.

Managing Scanned Documents

NOTE: In order to manage scanned documents, the Scan Driver must be loaded on your client workstation.

For more information about the Scan Driver, refer to the section entitled, Installing the Network Scanner Utility, in this chapter.

Retrieving/Deleting Scanned Documents

Images can be viewed, retrieved, or deleted from Mailboxes using the Printer's Internet Services.

Retrieving a Scanned Document

To retrieve a scanned document perform the following:

- To retrieve the entire document, select the Retrieve button.
- To retrieve specific pages of the document, put a check in the Enable box, type in the Page Number, then select the Retrieve button.
- Open or Save the scanned document.

Deleting a Scanned Document

Select the document you want to delete, then select **Delete**.

Configuring the Client for Scanning

You need to install the scanner driver on your client workstation to retrieve scanned documents directly from the Printer's Mailboxes into an image editing application.

Installing the Network Scanner Utility

Network Scanner Utility allows you to access stored data in the mailbox from a client. This section describes the installation and uninstallation of the Network Scanner Utility using the Driver/Network Utility CD.

Required Environment

To install Network Scanner Utility, a client must meet the following requirements:

Target Operating System

- Microsoft Windows 95/98/ME
- Microsoft Windows NT version 4.0/2000/XP

NOTE: Windows NT Server TSE (Terminal Server Edition) and Windows 2000 Server/Advanced Server Terminal Service are not compatible with this feature.

Client Workstation

- i486DX4/100 MHz processor or above (Pentium 100 MHz or above is recommended.
- 32 MB memory.
- 40 MB or more of free hard disk space (not including space for scanned data).

Network

A client must be connected to a network and be able to communicate with the TCP/IP protocol.

Target Application Software

To import the data stored in the mailbox to application software, the software must be compatible with the TWAIN interface.

Installation

Network Scanner Driver

The Network Scanner Utility includes the following software:

Scan driver to import the data stored in the mailbox of the machine to software compatible with TWAIN.



- 1 Insert the Driver/Network Utility (Windows) CD into your client's CD-ROM drive.
- Open Windows Explorer, select the drive letter for your CD-ROM drive and open **SCN\Disk1**.
- 3 Double click **Setup.exe** and follow the instructions displayed on the screen.

Uninstallation

This section describes the procedure to remove the Network Scanner Utility.



- 1 Double click My Computer > Control Panel. Select Add/ Remove Programs.
- 2 Select Network Scanner Utility, then select Add/Remove.
- 3 Select Yes.

Changing Network Scanner Utility Settings

For help in changing the configuration of Network Scanner driver settings, select Help in the driver (e.g., TWAIN) portion of your image editing application.

Importing Scanned Data

This section describes how to import data in the mailbox of the machine to the computer.

Import data saved in a mailbox to an application.

Importing to an Application



1 Start the application program.

NOTE: The application must support TWAIN.

- 2 From the *File* menu, select the command for selecting scan source (TWAIN source).
- 3 Select **DocuColor 2240/1632** from *Sources*, then select **OK**.
- 4 From the *File* menu, select the command to import the image from the scanner. For example, select **Import**, then select **TWAIN**.
- Select the scanner for connection from the list, then select **Scanner**, or double click the displayed scanner name.
- 6 Enter the mailbox password, and select **Open Mailbox**.
- 7 Select the desired document, and select **Import**.