Panasonic®

Image Capture Software Reference Manual

High Speed Scanner

Image Capture Software is a software application that is designed to scan high-quality images at high speed from Panasonic High Speed Scanners and create image files.
This manual explains how to use Image Capture Software.

Scanner models that support RTIV

KV-S7075C
KV-S7065C
KV-S4085CW
KV-S4085CL
KV-S4065CW
KV-S4065CL
KV-S3105C
KV-S3085
KV-S3065CW
KV-S3065CL
KV-S2048C
KV-S2046C
KV-S2028C
KV-S2026C
KV-S1025C
KV-S1020C

Abbreviations

- Windows® refers to the Microsoft® Windows® operating system.
- Windows® 2000 refers to the Microsoft® Windows® 2000 operating system.
- Windows® XP refers to the Microsoft® Windows® XP operating system.
- Windows® Vista refers to the Microsoft® Windows Vista® operating system.

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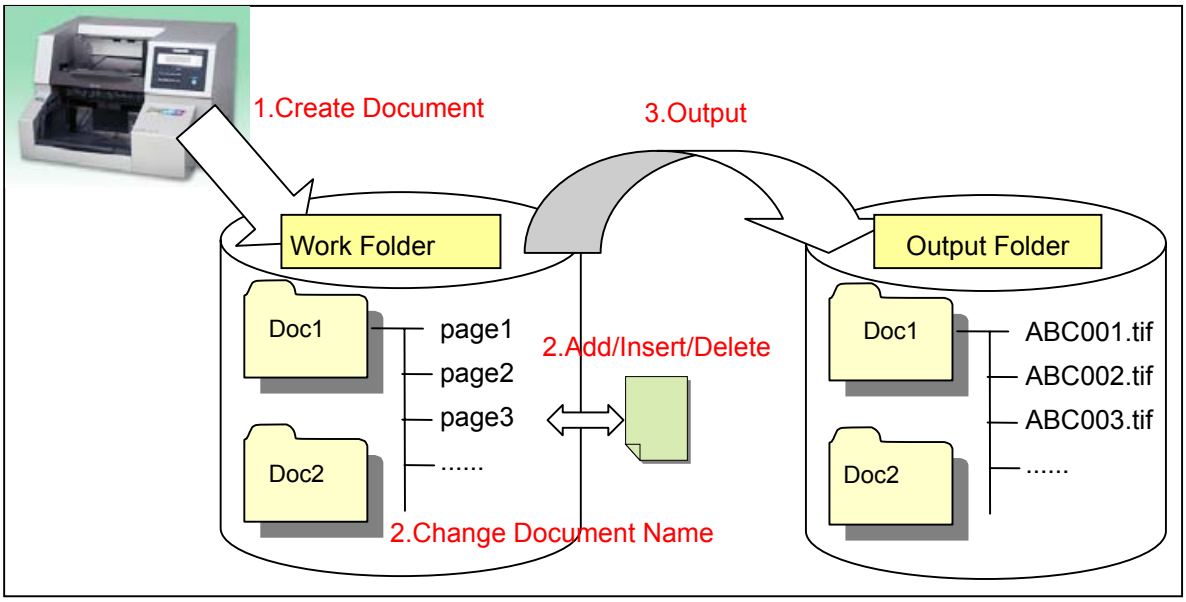
1. Introduction

This software treats a batch of the scanned images as a ‘Document’ in the Work Folder.
And then this software can output the image files from the Document.



1.Create Document

Create a document of scanned images or image files into the Work Folder.
One document consists of multi pages.
Multiple documents can be created in one Work Folder.

2.Edit Document

The Document can be edited.
Changing document name, Adding / Inserting the page, Deleting the page,
Moving the page, Deleting the document, Merging the document…

3.Output Document

After the document is edited and confirmed, the document can be output to image files.

#Work Folder:

Work Folder is a folder where documents are temporarily saved.
It is necessary to set it, to use this software.
When this software is started first time, Work Folder needs to be set.
Maximum number of documents in Work Folder is 999.
Maximum number of pages in one document is 9999.

Note

- Image Capture Software supports only the Panasonic High Speed Scanners (KV series).
- Depending on the model, version and installation options, it may not be possible to use some functions even with a scanner which is supported.
- Only the functions that can be used are displayed on each setting window.
- In this manual, screen shots are based on screens with KV-S7075C. However, depending on the function, screen shots using a model other than KV-S7075C are used.

2. System requirements

Item	Requirements
OS	Windows® 2000 SP4 or later Windows® XP SP1 or later Windows Vista® 32-bit Operating System*[1] Windows Vista® 64-bit Operating System*[1]
CPU	Pentium 4, 2 GHz and the above recommended
Memory	Windows® 2000 SP4 / Windows® XP SP1 Minimum 256 M byte Recommended 512 M byte or higher Windows Vista® 32-bit Operating System*[1] Windows Vista® 64-bit Operating System*[1] Minimum 512 M byte Recommended 1 G byte or higher
Display	65535 colors or higher
I/F	Please refer the Installation Manual bundled with the scanner. ASPI driver cannot be used Windows Vista® 32-bit / 64-bit Operating System.

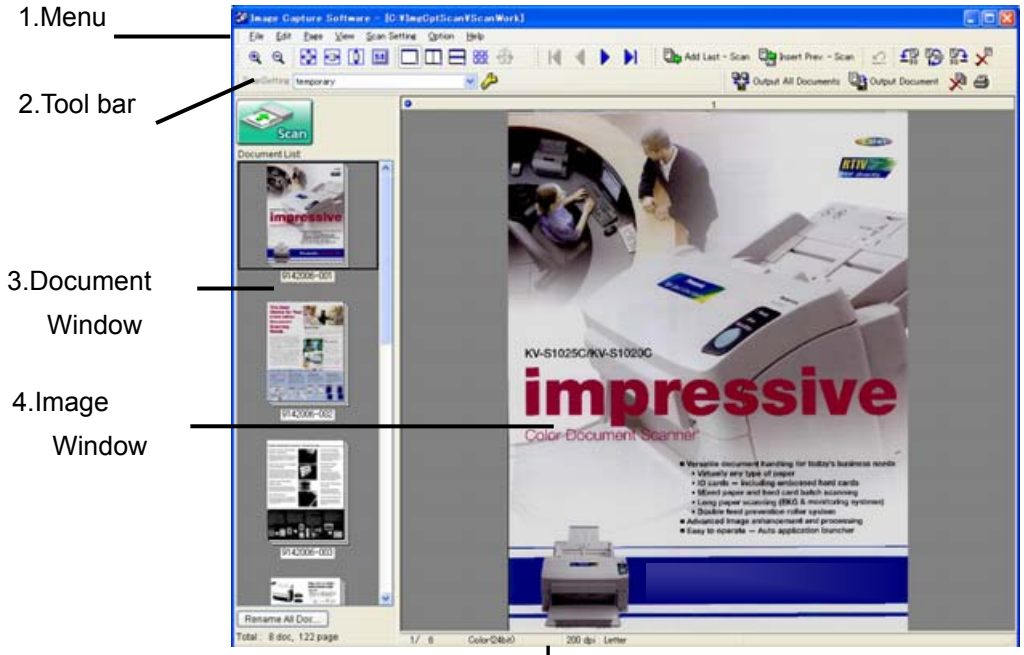
*[1] How to check your OS

1. Click [Start], and then click [Welcome Center] - [View computer details].
2. Check the [System type] on [View computer details] dialog.

- Please install the device driver and Multi Color Dropout Utility from CD-ROM which is bundled with the scanner.

3. Screen Configurations

3.1. Overview



1. Menu:

All the menu items are selected here.

2. Tool bar:

The frequently used menu items are displayed here in the form of buttons.

3. Document Window:

Selecting the current document. Select the [List View] or [Thumbnail View] window.

The first page of the document is displayed.(ex.The first page of the thumbnail image is displayed.)

The total document number and total page number appears of the current image.

4. Image Window:

Displaying the image of the page(s) that is selected document.

There are 4 modes, [1 Page View], [2 Page View Left-Right], [2 Page View Up-Down] and [Thumbnail View].

5. Status bar:

Information of the selected image is displayed here.

Page number, Image type, Resolution, Size of image, and Imprinted string are displayed.

3.2. ScanButton

Scanning the new document.

- Scan Button

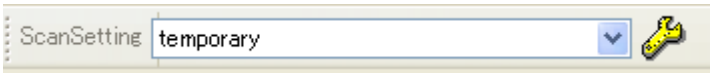
: Scanning the new document.

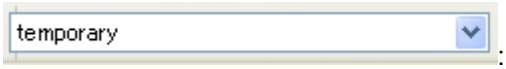
3.3. Toolbar

There are 5 toolbars, [ScanSetting], [View], [Edit], [Page] and [OutputSetting].

The setting of the display mode or non-display mode is available by right - clicking on the toolbar.

- [ScanSetting] toolbar





: Change the current scan settings.


: Display the scan setting window.

- [View] toolbar


: Zoom in on the image to enlarge the size of the image displayed.


: Zoom out the image to reduce the size of the image displayed.


: Fit the entire image in the image window.


: Display the image so that its width matches the width of the image window.


: Display the image so that its height matches the height of the image window.


: Display the image with one pixel of the image corresponding to one dot of the display.

 : Display only one page in the image window.

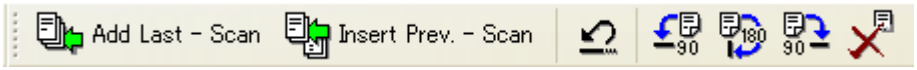
 : Split the image window into left and right to display images on two pages.

 : Split the image window into up and down to display images on two pages.

 : Display the images as thumbnail format.

 : Change the displayed image of the MultiStream document at the thumbnail view.

- [Edit] toolbar



 : Undo what was last edited.

 : Rotate the image counterclockwise by 90 degrees.

 : Rotate the image by 180 degrees.

 : Rotate the image clockwise by 90 degrees.

 : Delete the selected page(s).

- [OutputSetting] toolbar

: Output all documents.

: Output the selected document.

 : Delete the selected document.

 : Print the selected document.

- [Page] toolbar

 : Display the first page of the current document.

 : Display the previous page.

 : Display the next page.

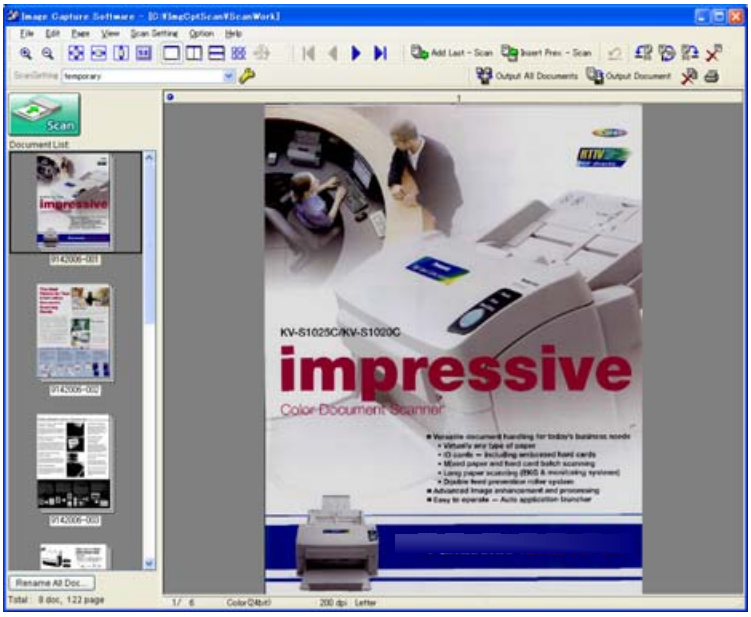
 : Display the last page of the current document.

3.4. Document List Window

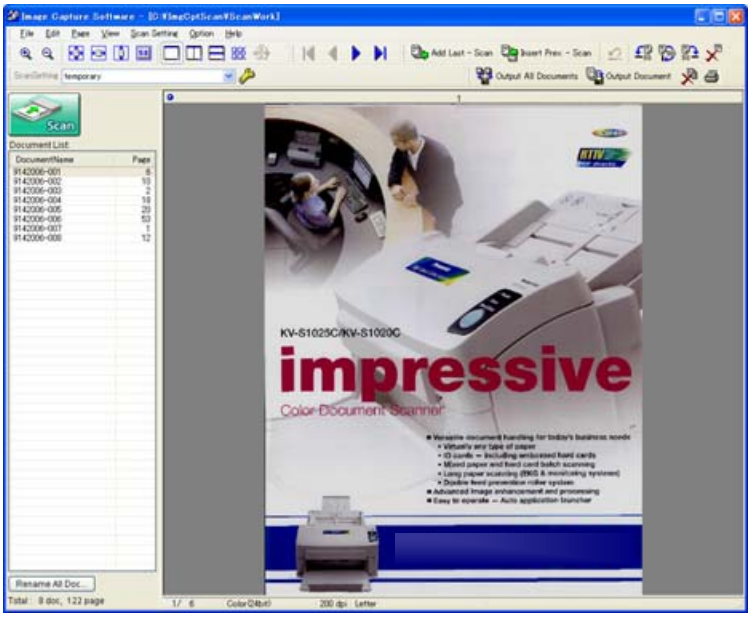
ListView (The scanned document is listed.)

It is available to switch the [Thumbnail View] mode or the [List View].

- [Thumbsnail View]



- [List View]

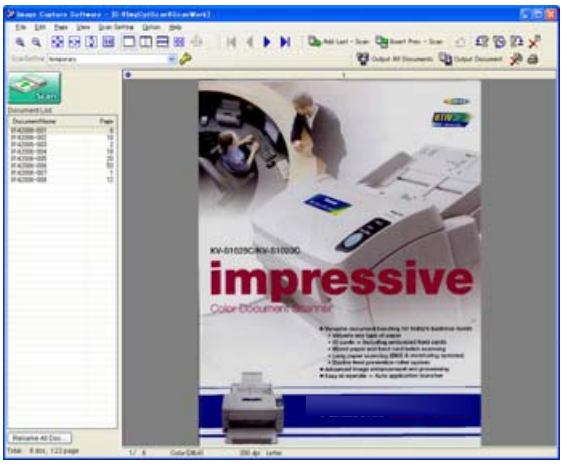


3.5. Image Window

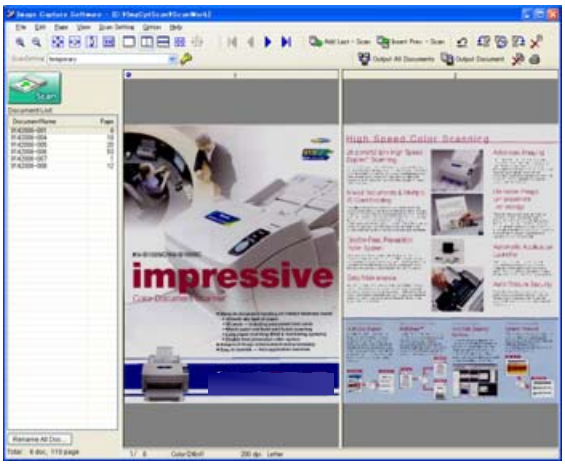
Displaying the image that is selected with the Document window.

There are 4 modes, [1 Page View], [2 Page View Left-Right], [2 Page View Up-Down] and [Thumbnail View].

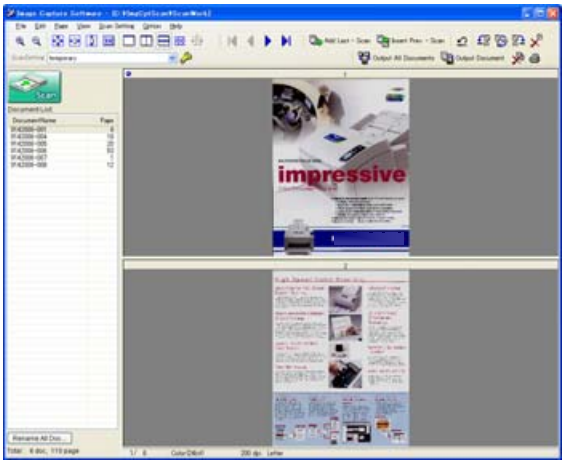
- [1 Page View]



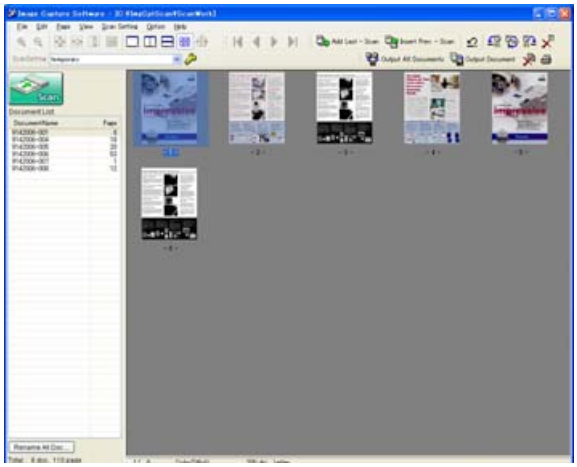
- [2 Page View Left-Right]



■ [2 Page View Up-Down]



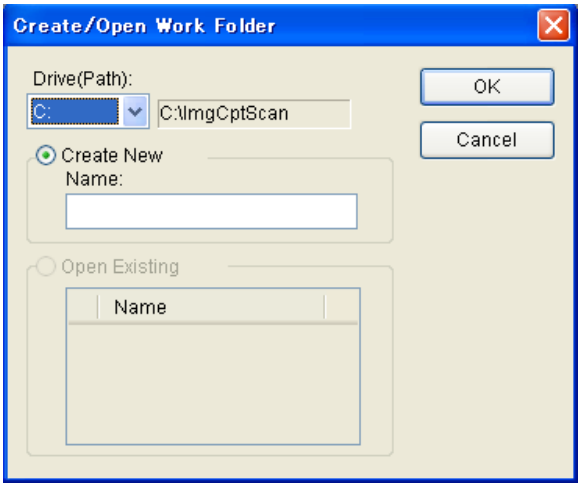
■ [Thumbnails View]



4. Startup and Setting of Work Folder

When this software is started first time, the [Create/Open Work Folder] dialog box is displayed. Please specify the drive and the name of Work Folder.
Once the Work Folder is created, the Work Folder is opened when the software is executed.

[Create/Open Work Folder] dialog box



- It is also possible to create a new Work Folder. [Create/Open Work Folder] dialog is displayed when [File] - [Work Folder] - [Create Work Folder] menu is selected.

- When you open another existing Work Folder, select [File] - [Work Folder] - [Open] menu and specify the existing Work Folder.

- The Work Folder can be created only on a local hard disk. The folder is created right under the drive by the name of "ImgCptScan", and the folder is created under “ImgCptScan” folder by the specified name.

- Please do not change by other software, and do not delete data in the Work Folder.

5. Create new document

5.1. Create new document by scanning

Scan and create new document.

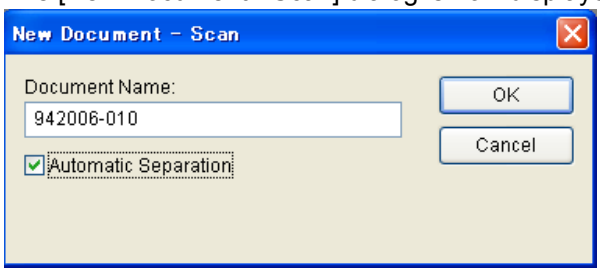
Operation

1. Select [File] - [Create New Document] - [Scan].

Or click 

button on the toolbar.

2. The [New Document - Scan] dialog is now displayed.



3. Set the suitable document name.
Click [OK] button.
Scanning now starts.

When the scanning ends, the [Continue Scanning] dialog box is displayed. Please set the documents on ADF and click the [Continue] button when you continue scanning. Please click the [End] button when you end the scanning.

- To set the scanning condition by [Scan Setting] - [Scan Setting] menu.
  Refer to **9. Setting the scanning conditions**.

- Maximum number of characters for document name is 100.

- The Default Document name is [Date - 3 digits counter]. It is available to change the document name after scanning.

- When [Automatic Separation] is checked, scanned documents are divided at separation sheet automatically.
  Separation sheet can not be used if [Margin] has been set.

- For use, print the separation sheet in the same size as the document pages to be scanned. Even when copying control sheets which have been output, do not enlarge or reduce them. It must be ensured that the patterns on the copied sheets have the same size as the original patterns.
- The separation sheet are stored as PDF files on the “Drivers & Utilities” CD-ROM provided with the scanner. Insert the CD-ROM into your CD/DVD drive on your computer, select the desired scanner, then select [Control Sheet]. For use, print the
  “File Separation” title is printed on the Separation Sheet.

- In case of using separation sheet, one digit counter such as “-1”, “-2”… is added to the document name which is set with [New Document - Scan] dialog.

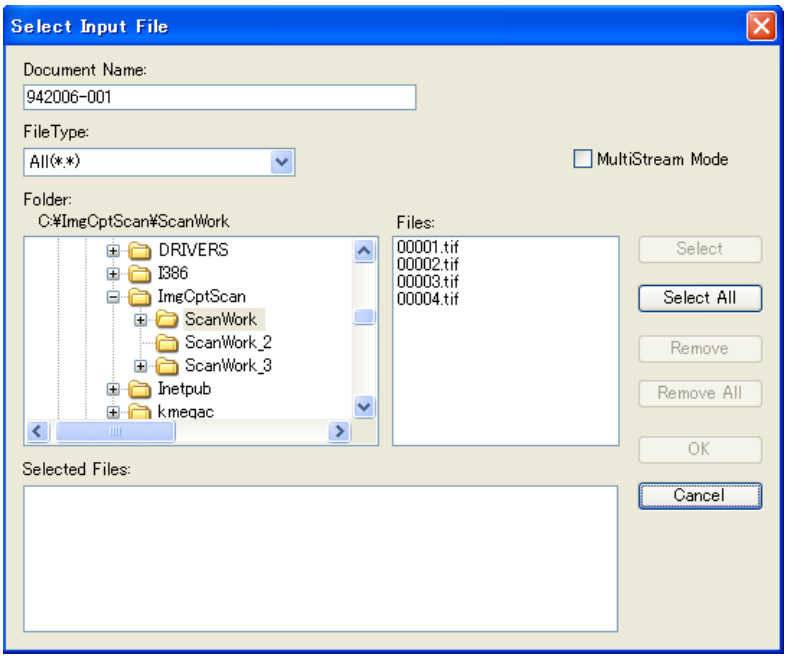
- [Imprinter Starting Number] can be specified when the counter is set in the imprinter string in the scanner settings.

5.2. Create new document from image file

Create new document from image file.

Operation

1. Select [File] - [Create New Document] - [File] menu.
[Select Input File] dialog box is now displayed.



2. Input the document name in the [Document Name] edit box in the [Select Input File] dialog box and select the filename to be saved in the document.

3. Click the [OK] button.

- The image files that are created with other software may not be imported correctly.
  Also the image files that are edited with other software may not be imported correctly even if it is created by this software.
- The “JPEG 2000” file could not be imported. “JPEG 2000” file type is supported on output only.
- The “PDF/A” file could not be imported. “PDF/A” file type is supported on output only.
- When the [MultiStream Mode] check box is checked in the [Select Input File] dialog box, the file whose file name is the specified file name plus “-C“ is imported with MultiStream mode.

6. Output document

Output the documents as image files from Work folder.

It is available to output one selected document or all documents.

The document name is applied for the filename as follows, so you should correct the document name before output.

■ In case of output the document as multi page file type:

The document name is applied for the filename.

■ In case of output the document as single page file type:

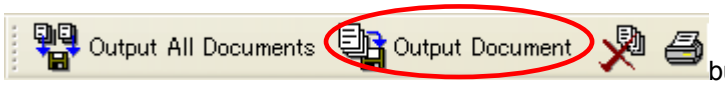
The document name is applied for the folder name or fixed part of the file name.

Operation

1. Click [Output Document…] (In case of output only selected document) or [Output All Documents…] (In case of output all documents) on the [File] menu.

Or click

button (In case of output all documents)



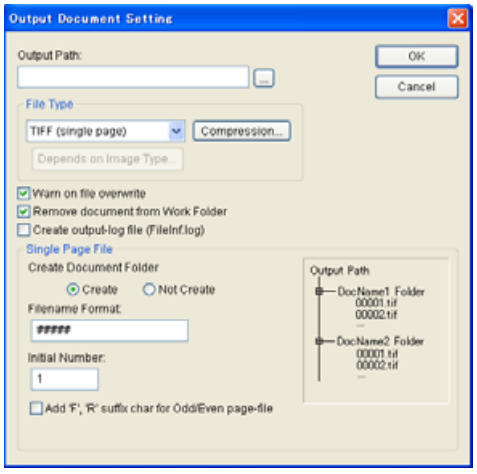
button (In case of output only selected document)

on the toolbar.

The [Output Document Setting] dialog box now appears.

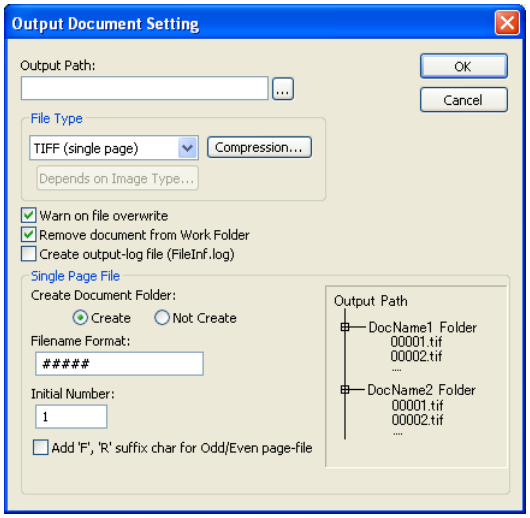
2. Click [OK] button after any settings and the image file is created to the output folder.

[Output Document Setting Dialog]



6.1. Output Document Setting

Explanation of the settings in the [Output Document Setting] dialog.



■ Output Path:

Specify the folder which the document is output. Click the beside button to display the [Browse For Folder] dialog box.

■ File Type

Select the file type for the output file. Click the [Compression…] button to set the compression settings.

■ Warn on file overwrite:

Specify if it is required to check the overwrite warning at the output.

■ Remove document from Work Folder:

Specify if the document in the Work Folder is deleted after output process.

■ Create output-log file (FileInf.log)

Create the log file for the output file to the Output Path.

The filename and the print information of the imprinter will be written.

The output-log file is created as “FileInf.log” filename to the folder that the image file is created.

The imprinter string will be written to the log file only when it is set to on. And also the imprinter string will be written to the log file only when the file is single page mode.

FileInf.log (Without the imprinter setting)

```
Filename1
Filename2
Filename3
…….
```

FileInf.log (With the imprinter setting and single page mode)

```
Filename1, Imprinter Strings
Filename2, Imprinter Strings
Filename3, Imprinter Strings
…….
```

The filename and the imprinter strings are separated by comma.

■ Single Page File:

■ Create Document Folder:

Set if the output folder for the file is created by the document at the single page file output.

If it is set to “Create”, the output folder is created to the output path and the folder name is same as the document name.

If it is set to “Not Create”, the document name will be applied to the top of the filename.

■ Filename Format:

Set the filename format. “#” string means the counter. “#####” strings mean 5 digit counter.

If no string is specified in the Filename Format edit box, it means 5 digits counter.

It is available to specify up to 7 digits counter.

■ Initial Number:

Set the initial number of the counter.

■ Add ‘F’, ‘R’ suffix char for Odd/Even page-file

The character of ‘F’ and ‘R’ is added at the end of the file name.

In case of this, the counter is increased every two pages.

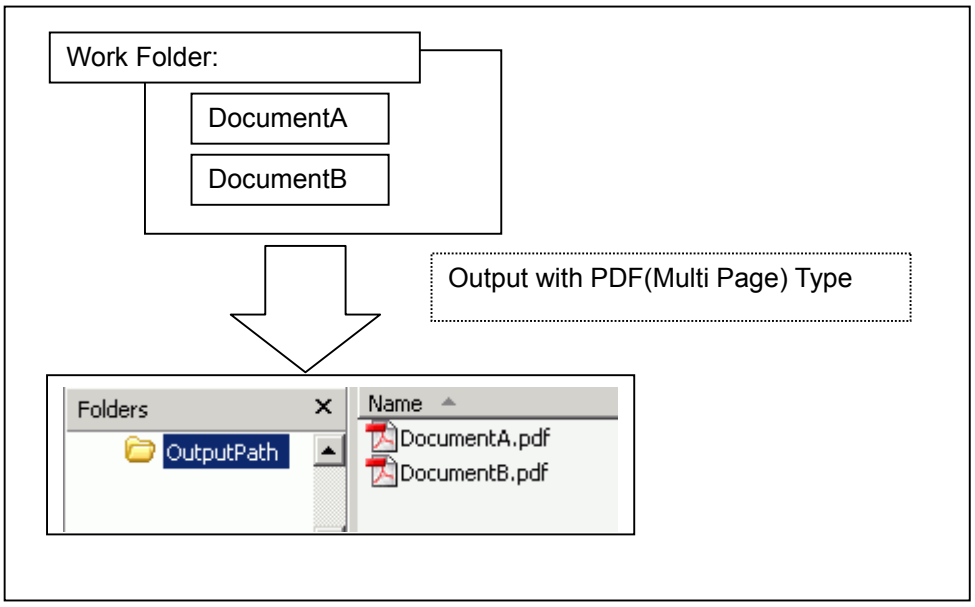
It is used for the duplex scanning because the counter is increased after back image is scanned.

Ex:) Output the four pages document with 4digits counter and [Add ‘F’, ‘R’ suffix char for Odd/Even page-file] check box set to on.

0001F.tif
0001R.tif
0002F.tif
0002R.tif

6.2. Sample of output setting: Output of the Multi Page Type

In case of output two documents (DocumentA and DocumentB) from work folder,
two files (DocumentA.pdf and DocumentB.pdf) are created under output folder when it is output by PDF (Multi Page) type.



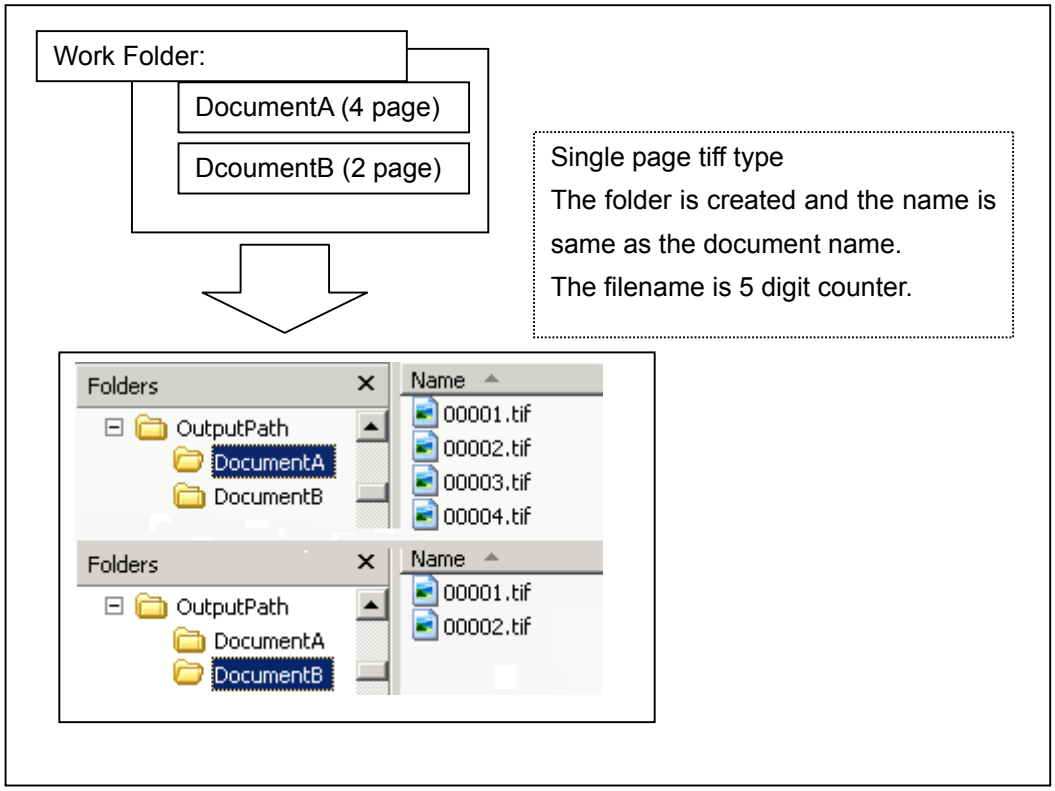
- If [Create output-log file] check box is set to on, FileInf.log file is created under output folder.

  Output filename is written in FileInf.log file as follows.

  DocumentA.pdf
  DocumentB.pdf

6.3. Sample of output setting: Single Page (Creating the folder by document name)

In case of output two documents (DocumentA and DocumentB) from work folder, two folders (DocumentA and DcoumentB) are created under the output folder and each page of the document is created as single page file.



- If [Create output-log file] check box is set to on, FileInf.log file is created under output folder. Output filename is written in FileInf.log file as follows.

DocumentA¥FileInf.log

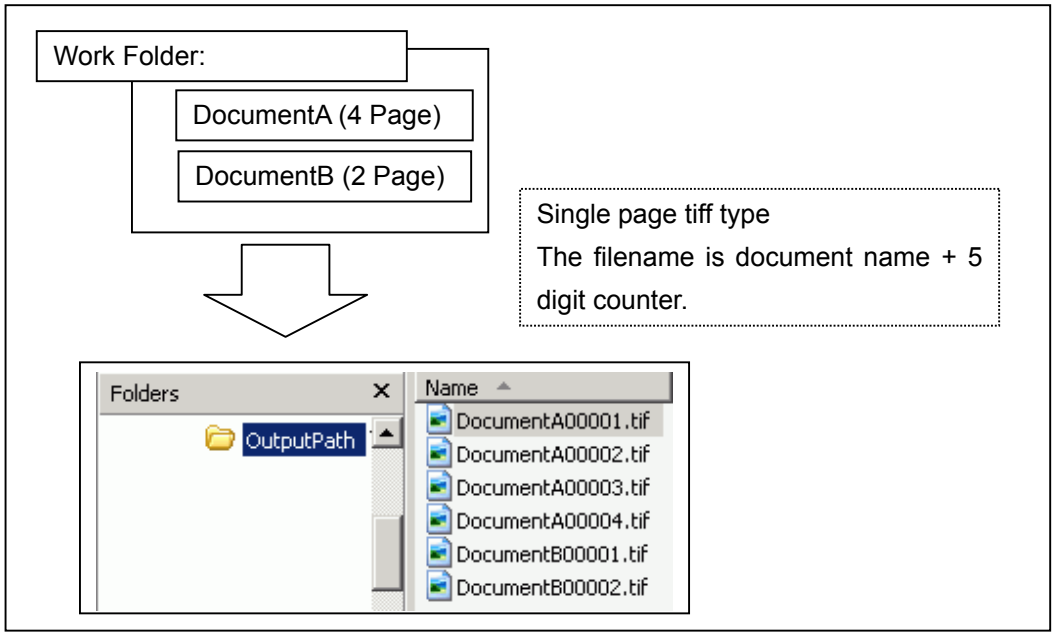
```
00001.tif
00002.tif
00003.tif
00004.tif
```

DcoumentB¥FileInf.log

```
00001.tif
00002.tif
```

6.4. Sample of output setting: Single Page (Without creating the folder by document name)

In case of output two documents (DocumentA and DocumentB) from work folder,
the file is created under output folder and filename is “document name + 5 digit counter.



- If [Create output-log file] check box is set to on, FileInf.log file is created under output folder.

Output filename is written in FileInf.log file as follows.

FileInf.log

```
DocumentA00001.tif
DocumentA00002.tif
DocumentA00003.tif
DocumentA00004.tif
DocumentB00001.tif
DocumentB00002.tif
```

7. Edit Document

7.1. Adding pages from the scanner

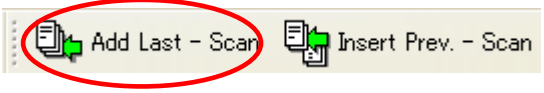
Pages can be added to the document from the scanner.

New pages are added to last on the current document.

Operation

1. Select the document is added the pages from [Document Window].

2. Place the sheets on the scanner. Select [Page] – [Add Last] – [Scan] menu.

Or click the 

button on the toolbar.

The scanning is started and the scanned image is added to the current document.

- When the counter setting is set in the imprinter strings in the Scan Setting, the dialog is to specify the initial number of the counter appears before start the scanning.

7.2. Inserting pages from the scanner

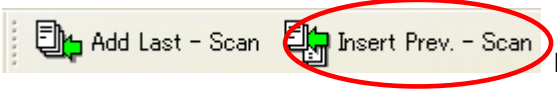
Pages can be inserted to the document from the scanner.

Operation

1. Select the document is inserted the pages from [Document Window].

2. Display the page which you want to insert as previous page in the [Image Window].
(In case of the Thumbnail View mode, select the page which you want to insert as previous page in the [Thumbnail View].)

3. Place the sheets on the scanner. Select [Page] – [Insert Prev.] – [Scan] menu.

Or click the 

button on the toolbar.

- When the counter setting is set in the imprinter strings in the Scan Setting, the dialog is to specify the initial number of the counter appears before start the scanning.

7.3. Adding pages from image file

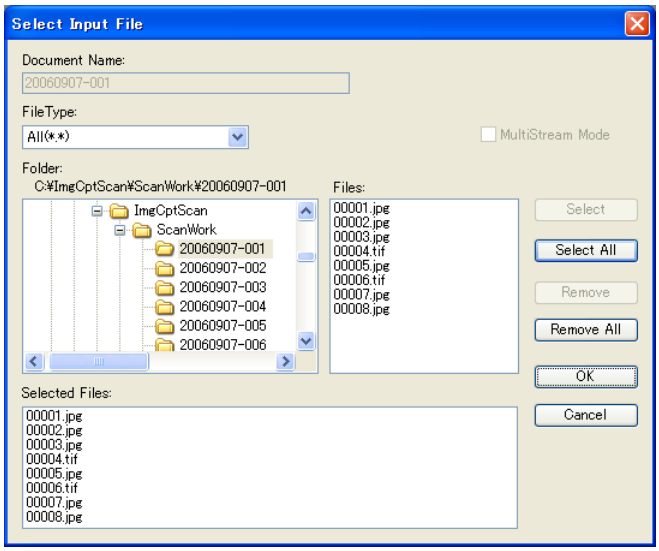
The image of the existing image file can be added to the document.

Operation

1. Select the document is added the pages from [Document Window].

2. Display the page which you want to insert as previous page in the [Image Window].
   (In case of the Thumbnail View mode, select the page which you want to insert as previous page in the [Thumbnail View].)

3. Select [Page] – [Add Last] – [File] menu.
   [Select Input File] dialog box now appears.



4. Select the image file in the [Files] list box in the [Select Input File] dialog.

5. Click the [OK] button.

- The image files that are created with other software may not be imported correctly.
  Also the image files that are edited with other software may not be imported correctly even if it is created by this software.
- The “JPEG 2000” file could not be imported. “JPEG 2000” file type is supported on output only.
- The “PDF/A” file could not be imported. “PDF/A” file type is supported on output only.

7.4. Inserting pages from image file

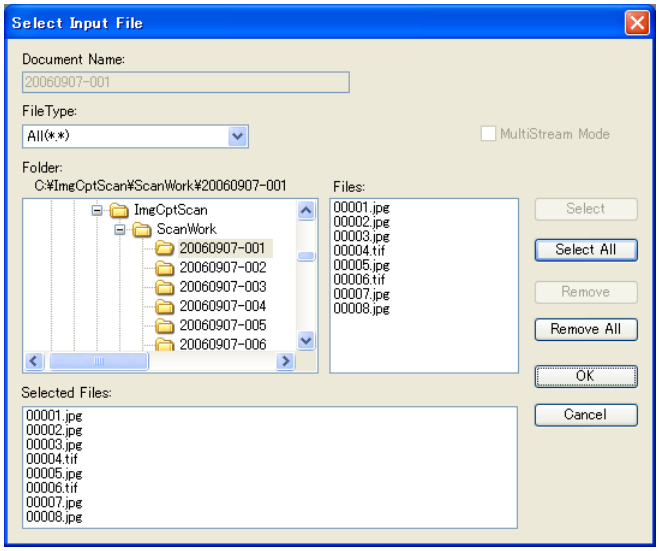
The image of the existing image file can be inserted to the existing document.

Operation

1. Select the document is inserted the pages from [Document Window].

2. Display the page which you want to insert as previous page in the [Image Window].
   (In case of the Thumbnail View mode, select the page which you want to insert as previous page in the [Thumbnail View].)

3. Select [Page] – [Insert Prev.] – [File] menu.
   [Select Input File] dialog now appears.



4. Select the image files in the [Files] list box in the [Select Input File] dialog.

5. Click the [OK] button.

- The image files that are created with other software may not be imported correctly.
  Also the image files that are edited with other software may not be imported correctly even if it is created by this software.
- The “JPEG 2000” file could not be imported. “JPEG 2000” file type is supported on output only.
- The “PDF/A” file could not be imported. “PDF/A” file type is supported on output only.

7.5. Deleting page

The pages are deleted from the document.

Operation

1. Select the pages are deleted from the [Image Window].

2. Select [Page] – [Delete Page] menu.

   Or click the  button on the toolbar.

- In case of Thumbnail View mode, when the multi pages are selected and execute the [Delete Page], all selected pages are deleted.

- It is available to delete the page with selecting the [Delete] key after select the page which is deleted.

- It is available to undo this process with [Edit] – [Undo] menu.

7.6. Moving page

The pages are moved.

It is available to move the pages in the document and between the documents.

It is available when the [Image Window] is Thumbnail View mode.

Operation

1. Change view mode to thumbnail. Select the page wants to move with the mouse.
It is available to select the multi pages.

2. Drag and Drop the page to the position that wants to move.

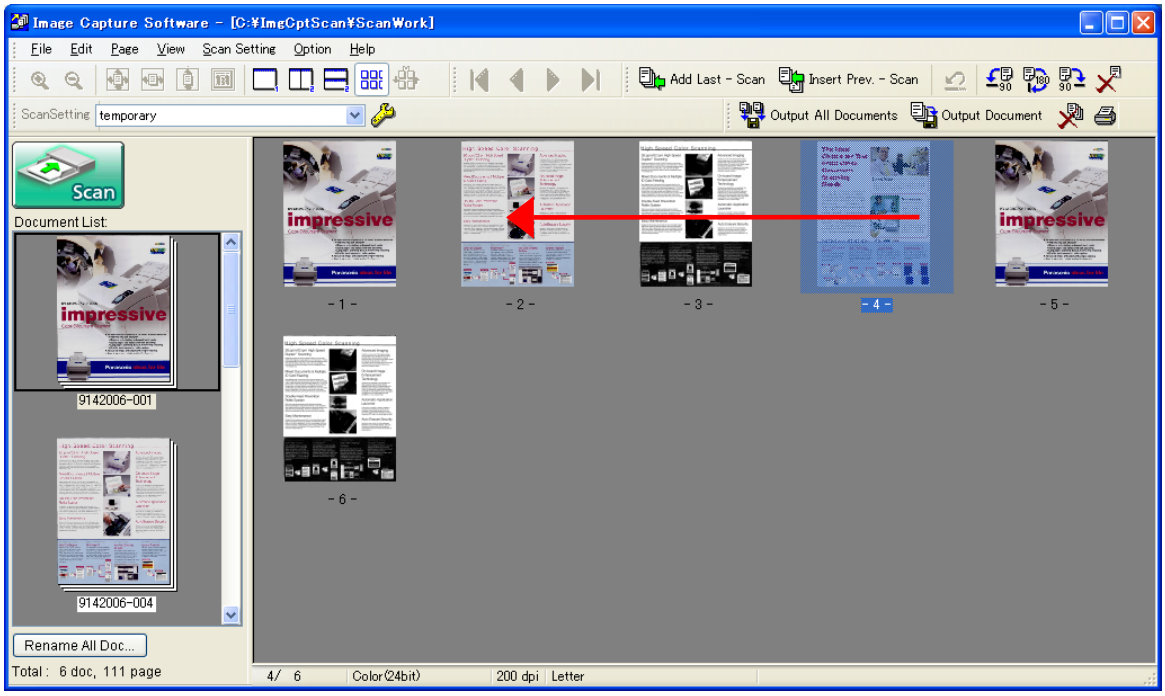
During the moving, the mouse cursor changes  or  .

Example of the operation

■ Moving page in the document.

Select the fourth pages and drag and drop on the second pages.

The page moves to the second pages.

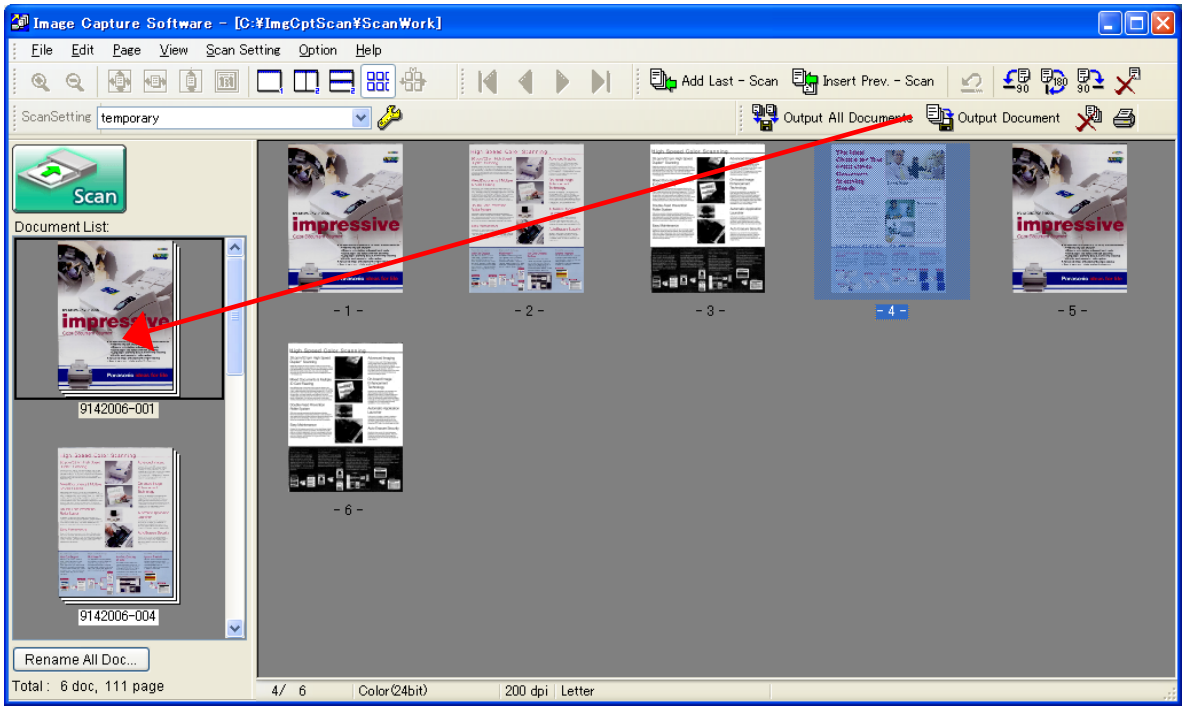


■ Moving page between the documents

When the page is done the drag and drop to the [Document Window], the page moves to the last page of the dropped document.

When the second pages of the “Document 1” are dropped to the “Document 2”, the second pages of the “Document 1” moves to the last page of the “Document 2”.

In case of moving to the other document, the mouse cursor changes  on the target document.



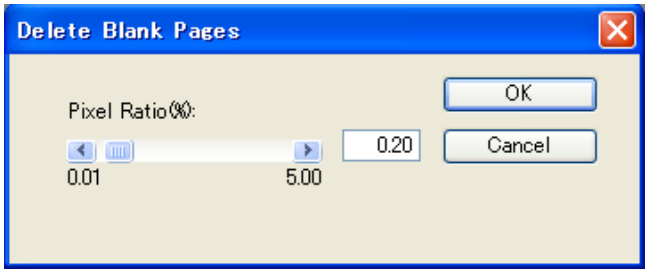
- It is available to select the multi pages for the moving.
- It is not available to copy the page with Moving Page mode.
- It is available to undo this process with [Edit] – [Undo] menu.

7.7. Deleting blank pages

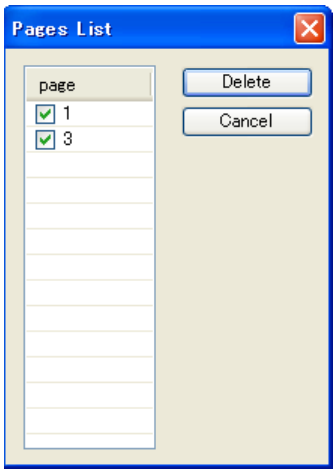
The blank page is removed from the current document.

Operation

1. Select the document wants to remove the blank pages in the [Document Window]
2. Select [Page] – [Delete Blank Pages] menu.
   [Delete Blank Pages] dialog box now appears.



3. Click [OK] button.
   If the blank pages exist in the document, the [Pages List] dialog box appears.



   Click the page number on the list to confirm the page in the [Image Window].
   It is available to remove from the deletion page by removing the check mark at the list head.

4. Click [Delete] button.

- If desired blank pages are not displayed in the [Pages List] dialog box, use the [Pixel Ratio (%)] slider to set the ratio to a higher value and repeat the operation from No.2.
- It is available to undo this process with [Edit] – [Undo] menu.

7.8. Changing document name

The document name is changed.

Operation

1. Select the document name in the [Document Window].
Or select [File] – [Change Document Name] menu.

2. Change the document name and fix the document name with [Enter] key.

- Maximum number of characters for document name is 100.
- It is available to change the document name by F2 key.

7.9. Rename all documents name

The all document name is renamed.

All the documents is displayed in the [Document Window] are renamed to the specified document name.

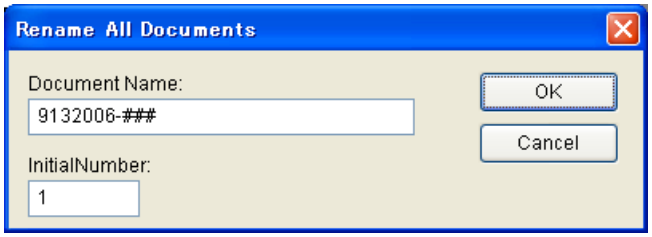
Changed the specified document name, all the documents displayed in the [Document Window].

Operation

1. Select [File] – [Rename All Doc…] menu.
Or Click the 

button.

2. Diplayed the [Rename All Doc…] the dialog.



3. The Default Document name is [Date - 3 digits counter]. It is available to change the document name after scanning.
Click [OK] button, changed the specified document name.

- Maximum number of characters for document name is 100.
- “#” string means the counter. “##” strings mean 2 digit counter.
- If no string is specified in the Document Name edit box, it means 3 digits counter.
- It is available to specify up to 3 digits counter.
- It is not available to execute [Undo] mode.

7.10. Merging documents

Two documents are merged to one document.

Operation

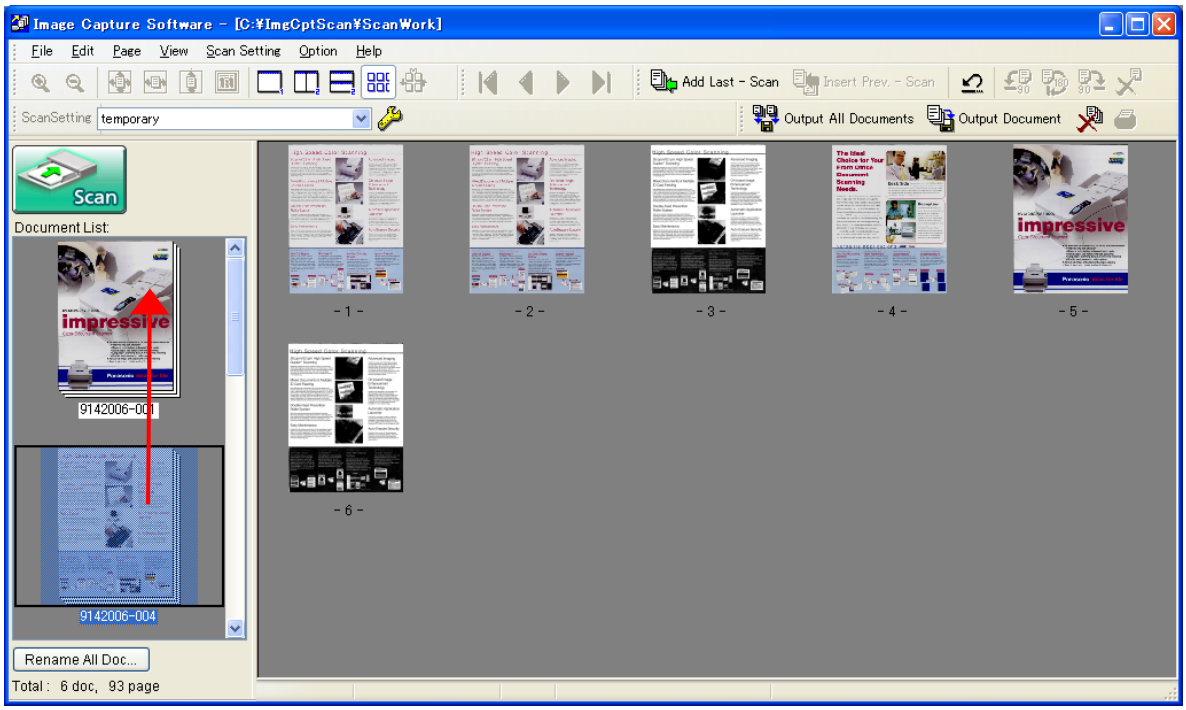
1. Select the document is merged in the [Document Window].

2. Drag the selected document and drop it on the target document.
   All pages of the source document are added to the last page of the target document.

Example of the operation

Select the source document and drag and drop to the target document in the [Document View].

At the position of the merge, the mouse cursor changes  on the target document.



- The document is scanned with MultiStream mode and the documents with no MultiStream mode cannot be merged.
- It is available to undo this process with [Edit] – [Undo] menu.

7.11. Dividing documents

The document is divided at the selected page.

It is available to divide the document when it is thumbnail view mode.

Operation

1. Change view mode to thumbnail. Select the page wants to divide in the [Image Window].

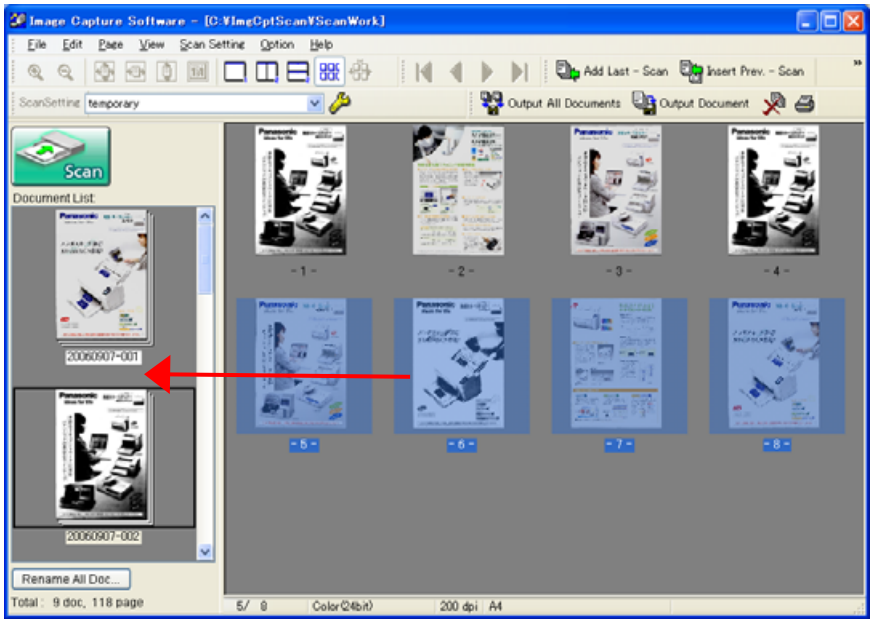
2. Drag the selected page in the [Document Window] and drop it to the space area in the [Document Window].

The mouse cursor changes  on the dividable area in the [Document Window].

Drop the page at the position that the mouse cursor changes  .

Example of the operation

From page 5 to 8 is divided as another document in the following examples.



- The document is created by the dividing is applied the new document name is added '-1' to original document name.
- It is available to undo this process with [Edit] – [Undo] menu.

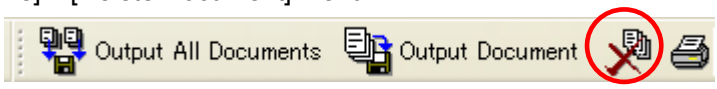
7.12. Deleting document

An unnecessary document is deleted from the work folder.

Operation

1. Select the document is deleted in the [Document Window].

2. Select [File] – [Delete Document] menu.

Or click 

button on the toolbar.

- It is available to undo this process with [Edit] – [Undo] menu.

7.13. Rotating images (90,-90,180 degrees)

Images can be rotated.

Operation

1. Select the page is rotated in the [Image Window].

2. Select [Edit] – [Rotate 90] menu.
Select either of the following menus depends on the angle that wants to rotate.

[Rotate 90]: Rotate 90 degree to the clockwise.
[Rotate -90]: Rotate 90 degree to the counterclockwise.
[Rotate 180]: Rotate 180 degree.

Or click 

button on the toolbar.

- It is available to rotate all selected pages when view mode is thumbnail.
- It is available to undo this process with [Edit] – [Undo] menu.
- When MultiStream image is rotated, the both image color (gray) and binary is rotated.

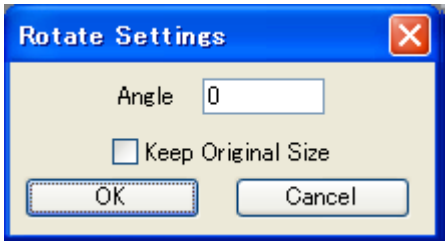
7.14. Rotating images (specified angle)

Image can be rotated.

Operation

1. Select the image is rotated in the [Image Window].

2. Select [Edit] – [Rotate..] menu.
The [Rotate Settings] dialog box now appears.
[Rotate Settings] dialog box



3. Input the angle in the [Angle] edit box.
When it is rotated with original image size, select the [Keep Original Size] check box.

4. Click the [OK] button.

- It is available to rotate all selected pages when view mode is thumbnail.
- Specify '-' character in front of the angle value if it is rotated with counterclockwise.
- It is available to specify the angle by 0.01 degree.
- It is available to undo this process with [Edit] – [Undo] menu.

7.15. Cropping parts of images

The image is cropped to the size that the user specified.

It is available to operate when the [Image Window] is [1 page View] or [2 Page View] mode.

Operation

1. Select the page wants to crop.

2. Select [Edit] – [Crop] menu.
   The [Crop] dialog now appears.

3. Specify the area wants to crop with mouse.

4. Click [OK] button in the [Crop] dialog.

- It is available to undo this process with [Edit] – [Undo] menu.

8. Changing the display

8.1. Changing the document list mode

The diplay mode of the document is changed. The [List View] or [Thumbnail View] mode is selectable.

Operation

1. Select either of the following menus in the [View] - [Document List] menu.
[List View]
[Thumbnail View]

8.2. Changing the display mode

The display mode of the image is changed. [1 Page View], [2 Page View Left-Right], [2 Page View Up-Down] and [Thumbnail View] display mode are available.

Operation

1. Select either of the following menus in the [View] menu.
Or click either of the following button on the toolbar.

[1 Page View]: 

[2 Page View Left-Right]: 

[2 Page View Up-Down]: 

[Thumbnail View]: 

- In case of [Thumbnail View] mode, it is available to change the thumbnail size by [View] – [Thumbnail Size] menu.

- In case of [Thumbnail View] mode, the view mode can be switched to the [1 Page View] mode with double click of the image.

- It is not available to select [1 Page View] mode, when it is the MultiStream document.
  ■ Image Window of the MultiStream document
  [2 Page View Left-Right]:
  The color (or gray) image is displayed on the left window and the binary image is displayed on the right image.
  [2 Page View Up-Down]:
  The color (or gray) image is displayed on the top window and the binary image is displayed on the bottom image.
  [Thumbnail View]:
  Either of the color (or gray) or binary image is displayed as the thumbnail view.
  The displayed image can be switched with [View] – [Switch Multi Stream Image] menu.

8.3. Changing the page

The displayed image of the [1 Page View], [2 Page View Left-Right] and [2 Page View Up-Down] is scrolled.

The displayed image is scrolled to the [Prev. Page], [Next Page], [First Page] and [Last Page].

Operation

1. Select either of the following menus in the [Page] menu.
Or click the either of the following button on the toolbar.

[Prev. Page]: 

The previous page of the current page is displayed.

[Next Page]: 

The next page of the current page is displayed.

[First Page]: 

The first page of the current document is displayed.

[Last Page]: 

The last page of the current document is displayed.

- In case of the [2 Page View Left-Right] and [2 Page View Up-Down] mode, the page is scrolled by two pages.

8.4. Zoom-in/out

The image is zoomed-in and zoomed-out.

It is not available to change the zoom, when it is [Thumbnail View] mode.

Operation

1. Select either of the following menu in the [View] menu.
Or click either of the following button on the toolbar.

[Zoom In]: 

The displayed image is zoomed in.

[Zoom Out]: 

The displayed image is zoomed out.

[Fit Window]: 

The displayed image size is adjusted to fit the [Image Window].

[Fit Width]: 

The displayed image size is adjusted to fit the width of the [Image Window].

[Fit Length]: 

The displayed image size is adjusted to fit the length of the [Image Window].

[1:1]: 

The displayed image size is adjusted to fit the 1 pixel of the image to the 1 dot of the display.

8.5. Printing document

All images of the document are printed.

Operation

1. Select the document is printed in the [Document Window].
2. Select either of the following print menu in the [File] menu.

   [Page Size Print]

   Print the document with adjusting the paper size.

   [Actual Size Print]

   Print the document with scanned document size.

3. Select [File] – [Print] menu.
4. Click [OK] button after setting the print in the [Print] dialog.

9. Setting the scanning conditions

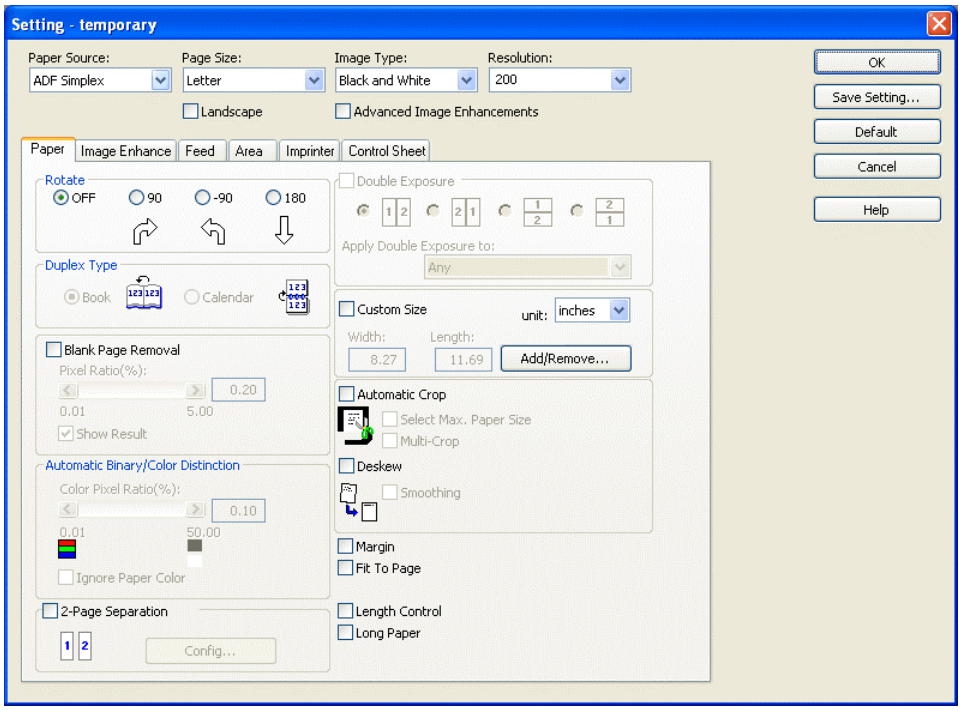
Proceed to set the scanning conditions.

Operations

1. Select [Scan Setting...] on the [Scan Setting] menu.

Alternatively, press the  button on the toolbar.

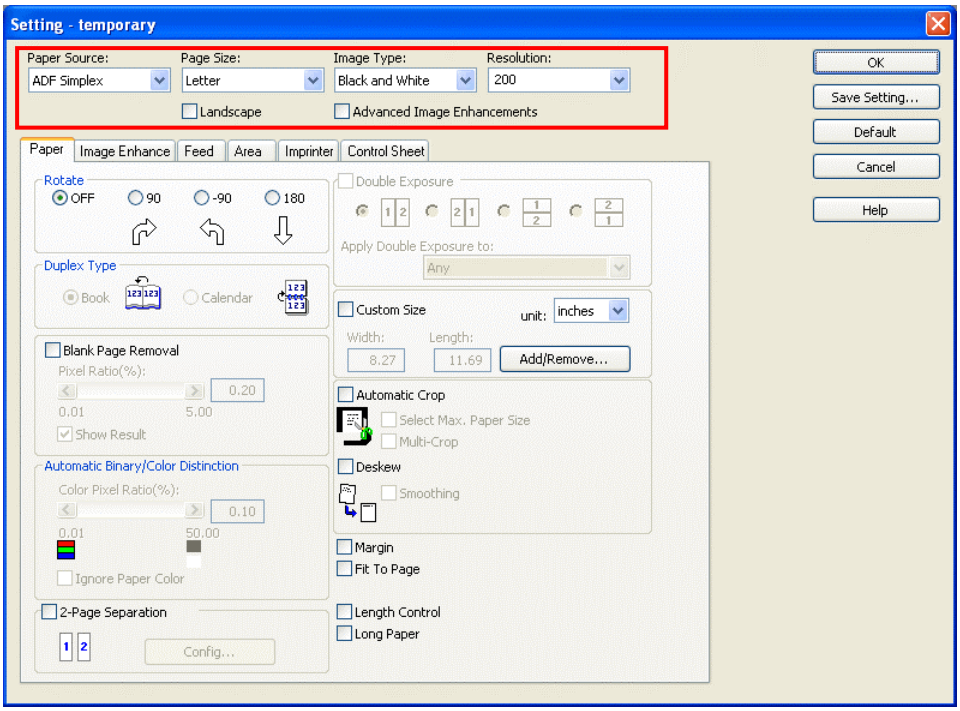
The Scan Setting window now opens.



2. When any of the scanning conditions are changed and the [OK] button is pressed, the conditions are automatically saved as temporary.

- Names can be given to the scan settings which can then be saved under these names.
- The Scan Setting screen does not open if the scanner has not been connected or if the power is not on.
- The functions which can be used differ depending on the scanner model which has been connected.

9.1. Basic settings

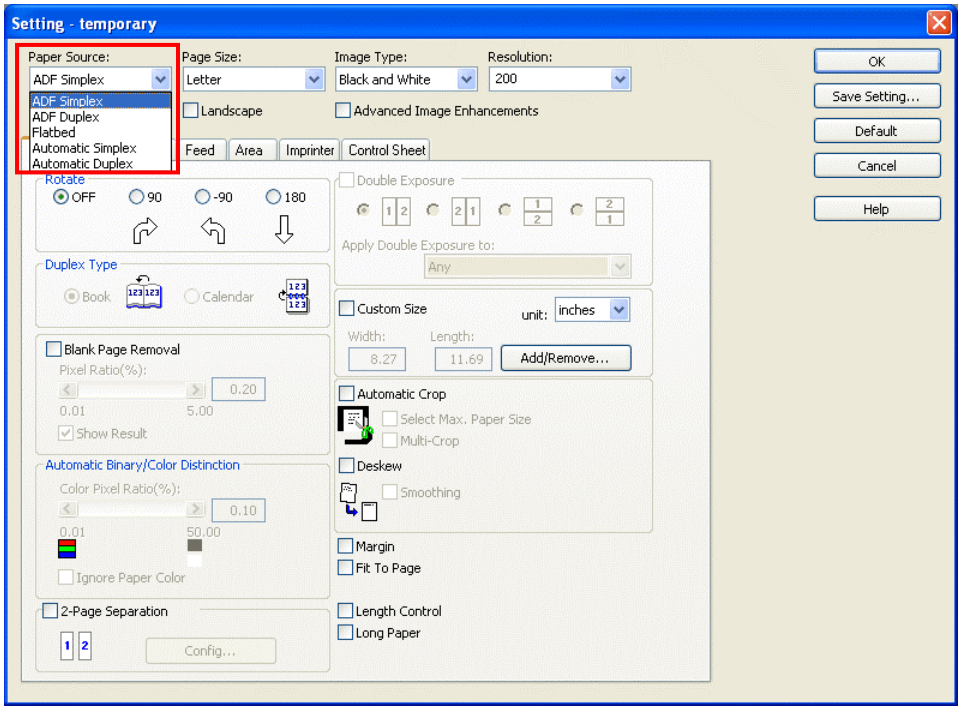


Paper Source	Set the side or sides of the sheets to be scanned.
Page Size	Specify the size of the paper to be scanned.
Landscape	In this mode, the paper is placed in such a way that its width is greater than its height.
Image Type	Select the scanning mode here.
Advanced Image Enhancements	Select the display status of the [Image Enhance] tab.
Resolution	The main scanning and sub scanning resolution is specified here.

9.1.1. Paper Source

Set the side or sides of the sheets to be scanned.

If the scanner comes with a flatbed, [Flatbed] can also be selected.



Operation

1. Select [ADF Simplex], [ADF Duplex], [Flatbed], [Automatic Simplex] or [Automatic Duplex] in the [Paper Source] list box.

- With simplex scanning, only the front sides of the document sheets are scanned in sequence.
- With duplex scanning, both sides of the document sheets are scanned simultaneously and output in the sequence of front side followed by back side.
- Duplex scanning may not be possible with some scanner models.
- For [Automatic Simplex] and [Automatic Duplex], if there is a document in the ADF, scanning will be performed from the ADF. If there is no document in the ADF, scanning will be performed from the Flatbed.

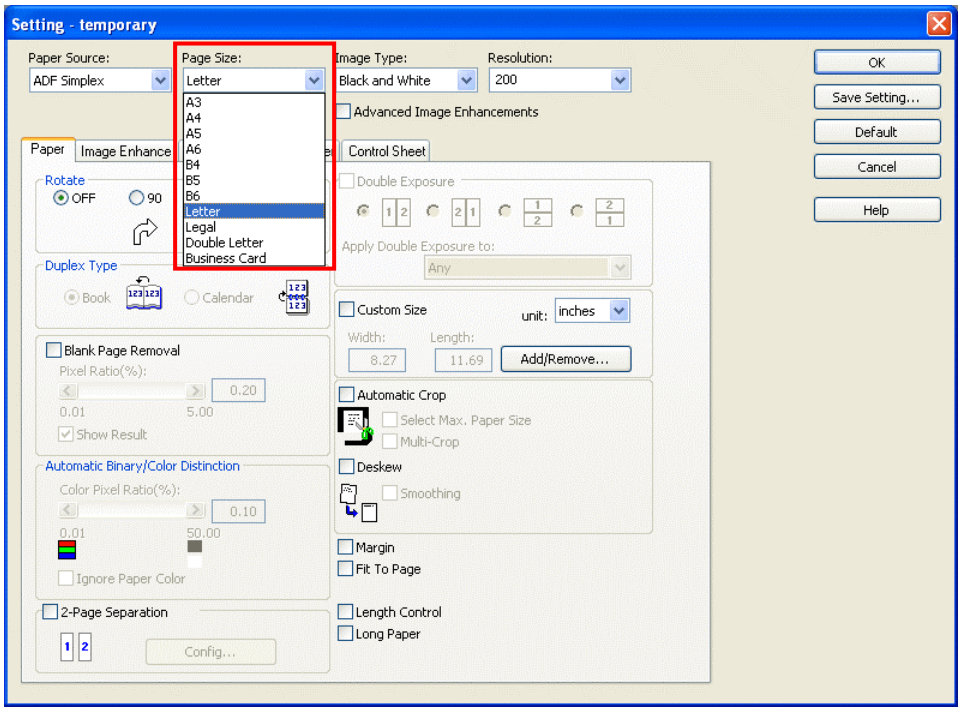
  Available functions when scanning from the ADF:
  - Length Control
  - Margin
  - Detect Double Feed
  - Double Exposure
  - Long Paper
  - Skew Stop
  - Imprinter
  - Separation
  - Control Sheets
  - Feeding Speed

  Available functions when scanning from the Flatbed:
  - Multi-Crop
- When [Automatic Simplex] or [Automatic Duplex] is selected, [Detect Paper Width] cannot be used.

9.1.2. Page Size

Specify the size of the paper to be scanned. Since the paper sizes which can be scanned differ depending on the scanner model used, refer to the scanner's instruction manuals.

- Double Letter [279 x 432 mm (11 x 17 inch)]
- Letter [216 x 279 mm (8.5 x 11 inch)]
- Legal [216 x 356 mm (8.5 x 14 inch)]
- A3 [297 x 420 mm (11.7 x 16.5 inch)]
- A4 [210 x 297 mm (8.3 x 11.7 inch)]
- A5 [148 x 210 mm (5.8 x 8.3 inch)]
- A6 [105 x 148 mm (4.1 x 5.8 inch)]
- A7 [74 x 105 mm (2.9 x 4.1 in.)]
- A8 [52 x 74 mm (2.0 x 2.9 in.)]
- B4 [257 x 364 mm (10.1 x 14.3 inch)]
- B5 [182 x 257 mm (7.2 x 10.1 inch)]
- B6 [128 x 182 mm (5.0 x 7.2 inch)]
- B7 [91 x 128 mm (3.6 x 5.0 inch)]
- B8 [64 x 91 mm (2.5 x 3.6 inch)]
- Check [69.9 x 152.4 mm (2.75 x 6.0 inch)]
- Card [54 x 85.6 mm (2.13 x 3.37 inch)]
- Business Card [55 x 91 mm (2.2 x 3.6 inch)]



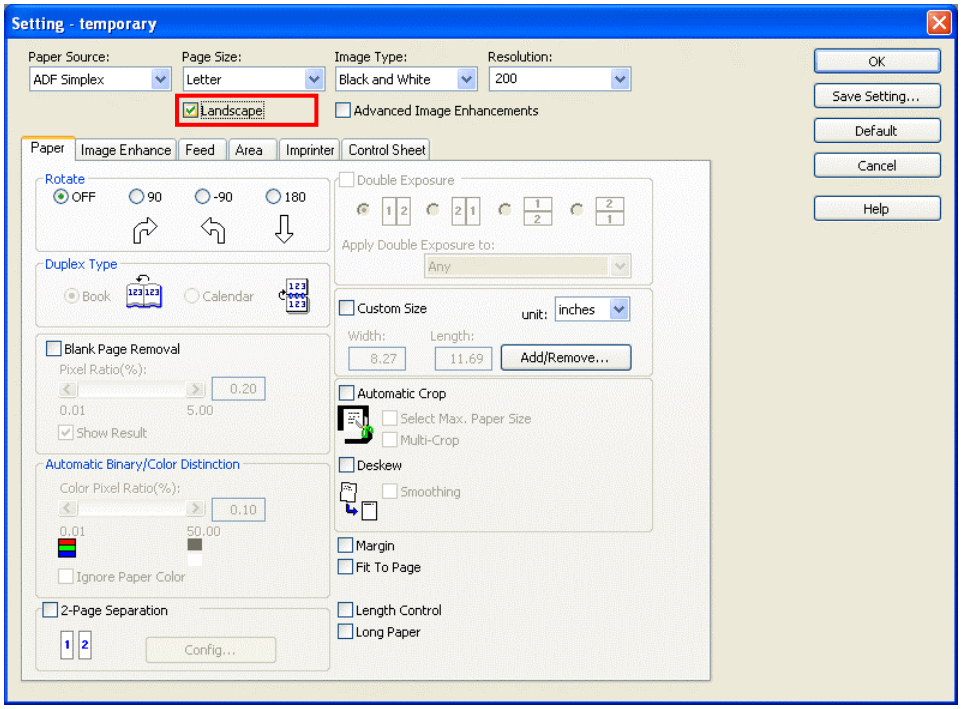
Operation

1. Select the paper size from the [Page Size] list box.

- The paper sizes which can be scanned differ depending on the scanner mode.
- A new size can be set as well. For more details, refer to **9.2.7. Custom Size**.
- When the paper size is changed, the Scan Area is set to the selected paper size, and the Sub Area is initialized. Set these items ahead of time.
- If Automatic Crop or Detect Paper Width has been set or [Custom Size] check box is set to On, the paper size cannot be set.
- The document which the paper size exceeds A3/Double Letter may not be possible to scan in the high resolution mode due to the memory limitation of the computer.

9.1.3. Landscape

In this mode, the paper is placed in such a way that its width is greater than its height.



Operation

1. Set the [Landscape] check box to On.

2. Place the paper in such a way that it is wider than its height.

- Scanning documents in the Landscape mode using Rotate (by 90 degrees clockwise or counterclockwise) in the [Paper] tab is sometimes faster than scanning with the documents placed in the Portrait mode.

9.1.4. Image Type

Select the scanning mode here. Select the Black and White mode to obtain black and white data, the Grayscale mode to obtain 16-level or 256-level data or the Color mode to obtain color data.

Color mode

Gray scale mode

Black and White mode

MultiStream mode (Binary&Gray mode)

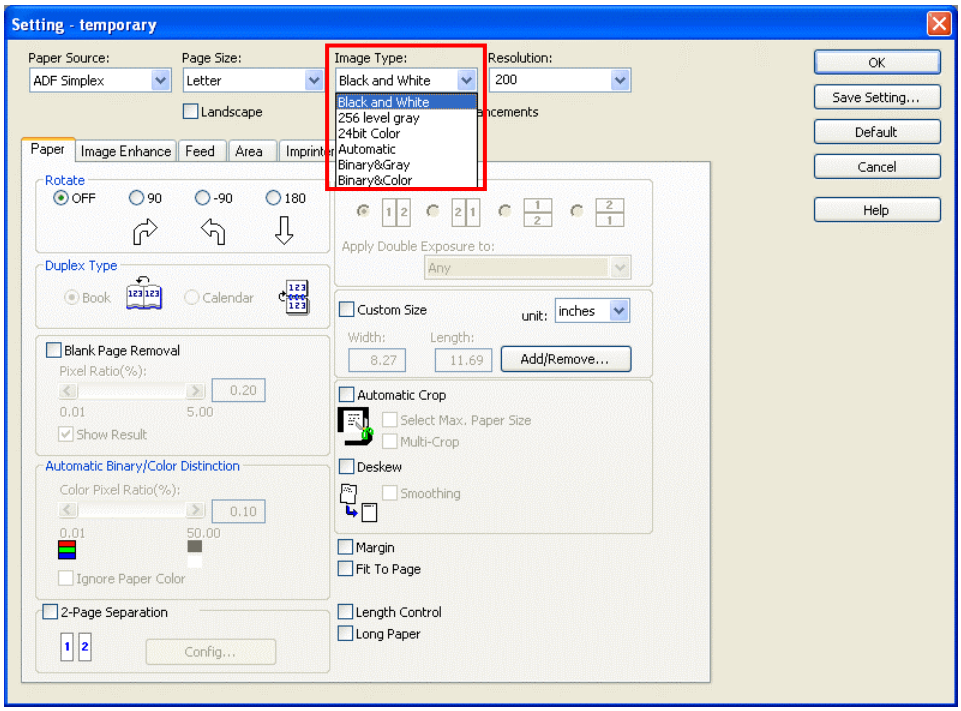
MultiStream mode (Binary&Color mode)

Modes	
Black and White mode	[Black and White]
Grayscale mode (4-bit gray)	[16 level gray]
Grayscale mode (8-bit gray)	[256 level gray]
Color mode	[24bit Color]
MultiStream (Binary&Gray) mode	[Binary&Gray]
MultiStream (Binary&Color) mode	[Binary&Color]
Automatic mode	[Automatic]

The Color mode and Grayscale mode enable photos and other images with halftones to be scanned at a high level of quality, but a large memory and a lengthy scanning time are required. (If images with halftones are to be captured in the Black and White mode, refer to **9.3.2. Halftone**.)

KV-S7075C, KV-S7065C, KV-S4085CW, KV-S4085CL, KV-S4065CW, KV-S4065CL, KV-S3105C, KV-S3085, KV-S3065CW, KV-S3065CL, KV-S1025C, and KV-S1020C come with the MultiStream mode. In the MultiStream (Binary&Gray or Binary&Color) mode, color images or grayscale images and black and white images are output at the same time by a single scanning operation. When scanning on the Color, Binary&Color or Automatic mode, KV-S3085 requires installing the optional "Color Upgrade Kit (KV-SS029)".

In the Automatic mode, whether the document is in black and white or color is identified automatically: with black and white pages, the pages are scanned in the Black and White mode, and with color pages, they are scanned in the Color mode.



Operation

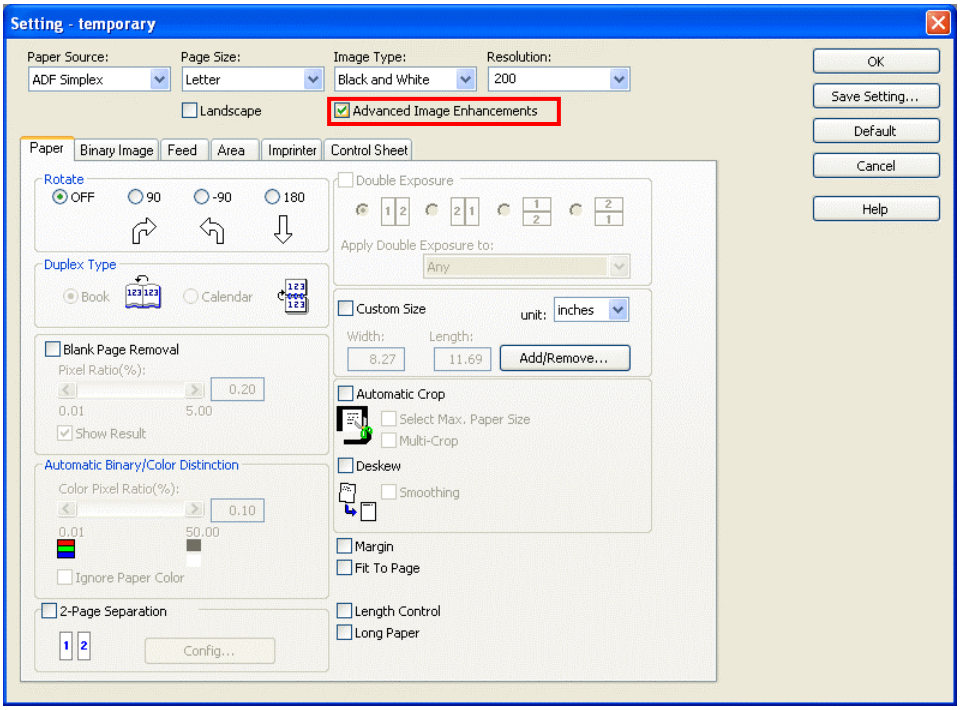
1. Select the Image Type to be specified from the [Image Type] list box.

- If configurations requiring a lot of memory (high resolution, Color mode, etc.) are used with KV-S7075C, KV-S7065C, KV-S4085CW, KV-S4085CL, KV-S4065CW, KV-S4065CL, KV-S3065CW, KV-S3065CL, KV-S2048C, KV-S2028C, KV-S2046C, KV-S2026C, KV-S1025C, or KV-S1020C, the scanning will be suspended intermittently while the data is being transferred to the computer. As a result, the images may be disrupted slightly due to the effect of suspending the scanning.
  In cases like this, the scanning speed will be increased, and the image quality improved by installing additional memory inside the scanner (KV-S7075C, KV-S7065C, KV-S4085CW, KV-S4085CL, KV-S4065CW, KV-S4065CL, KV-S3065CW, and KV-S3065CL only).
- The 16-level grayscale mode cannot be used with KV-S7075C, KV-S7065C, KV-S4085CW, KV-S4085CL, KV-S4065CW, KV-S4065CL, KV-S3105C, KV-S3085, KV-S3065CW, KV-S3065CL, KV-S1025C or KV-S1020C.
- The scanning speed decreases when the Automatic mode is used.
- The hue of images scanned in the Automatic mode may differ slightly from the hue of images scanned in the regular Black and White or Color mode.
- For more details on the Automatic mode, refer to **9.2.4. Automatic Binary/Color Distinction**.

9.1.5. Advanced Image Enhancements

Select the display status of the [Image Enhance] tab.

When the [Advanced Image Enhancements] check box has been set to On, more detailed image scanning conditions can be set.



Operation

1. Set the [Advanced Image Enhancements] check box to On.

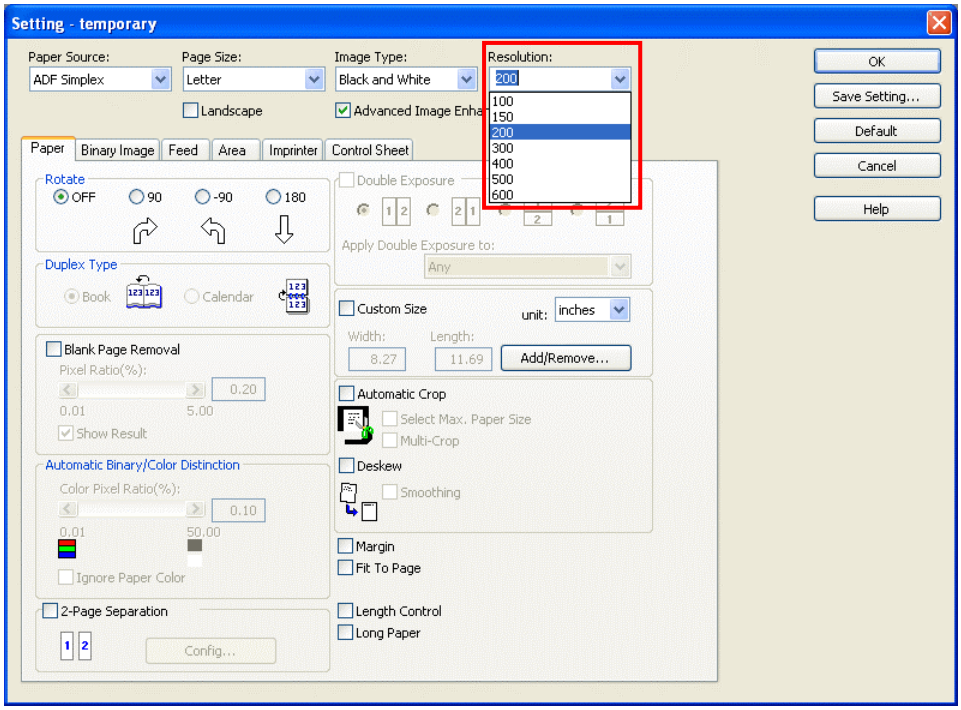
- The [Image Enhance] tab display is cleared, and the [Binary Image], [Gray Image], or [Color Image] tab corresponding to the Image Type is displayed.
- When the [Advanced Image Enhancements] check box is set to OFF, all items (other than Halftone, Automatic, Brightness, Contrast, Image Emphasis, and Drop Out) displayed on the [Image Enhance] tab are returned to their default values.

9.1.6. Resolution

The main scanning and sub scanning resolution is specified here.

DPI (Dots per inch) are used as the resolution unit, and 200 dpi are equivalent to about 8 pixels per millimeter.

When the resolution is increased, the image becomes clearer but proportionately more memory, disk space, and processing time are required.

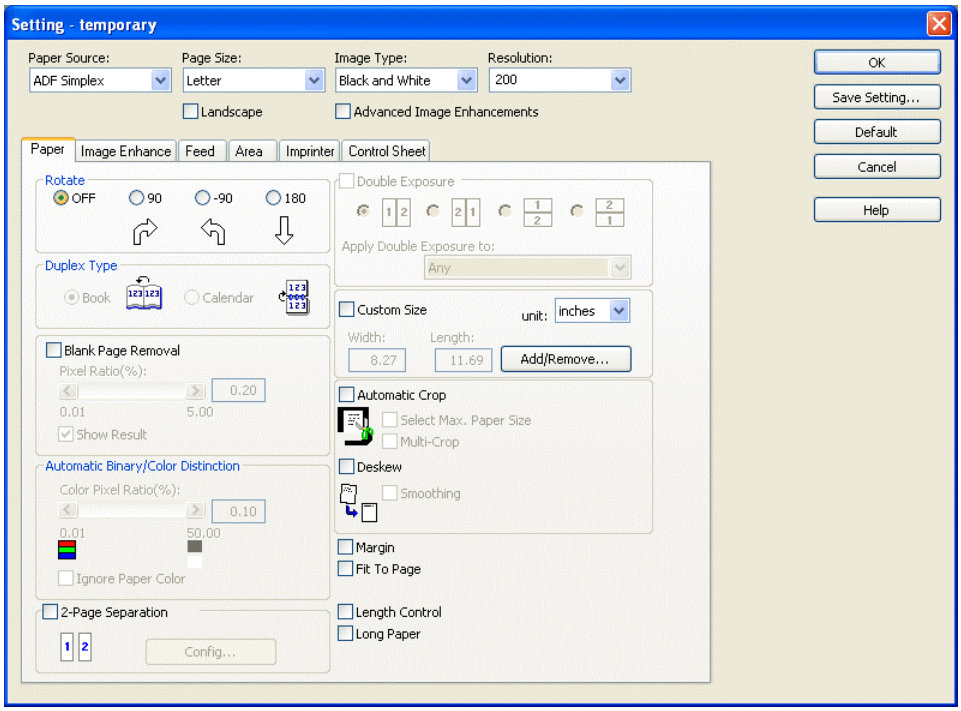


Operation

1. Select the resolution in the [Resolution] list box.
2. To specify a resolution which is not on the list, write the desired value directly into the edit box.

- Main scanning and sub scanning are performed to produce the same resolution.
- The resolution which can be specified differs depending on the scanner model.
- In the MultiStream (Binary&Gray or Binary&Color) mode or Automatic mode, the Color Image or Gray Image Resolution can be set to a ratio of 1/1, 1/2, 1/3 or 1/4 of the Black and White resolution.

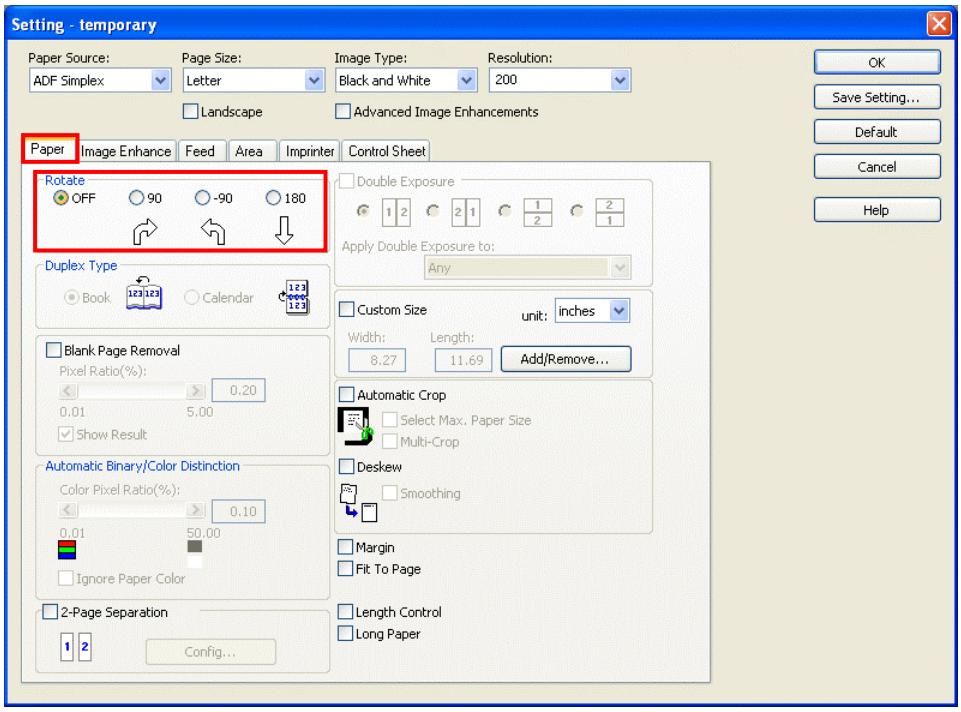
9.2. Paper settings



Rotate	Scanned images can be displayed and saved after rotating them.
Duplex Type	The direction of the images on the back sides of duplex scanned images is specified here.
Blank Page Removal	Skipping the scanning of pages with no text or images (perfectly white, perfectly black or plain) is specified here.
Automatic Binary/Color Distinction	The ratio of black and white to color pages is set here.
2-Page Separation	Separate 1 page (image) into 2 pages in the specified order.
Double Exposure	The direction of the double exposure of duplex scanned images is specified here.
Custom Size	Paper sizes which are not on the [Page Size] list are set here. Up to 50 sizes can be registered.
Automatic Crop	This function automatically recognizes and crops the image size.
Deskew	This function corrects the skew in scanned images, restoring the images to the upright position.
Margin	When Margin is selected, documents are scanned over a slightly larger area at their tops and bottoms than the size specified by Scanning Size.
Fit To Page	The Fit To Page scans the image of an area slightly larger than the specified scanning area while reducing it so that it has the same dimensions as the scanning area.
Detect Paper Width	Using this function, the scanner automatically detects the paper size.
Length Control	When the Length Control function is selected, the scanner scans the documents in the size that corresponds to their length.
Long Paper	This scans long documents.

9.2.1. Rotate

Scanned images can be displayed and saved after rotating them.

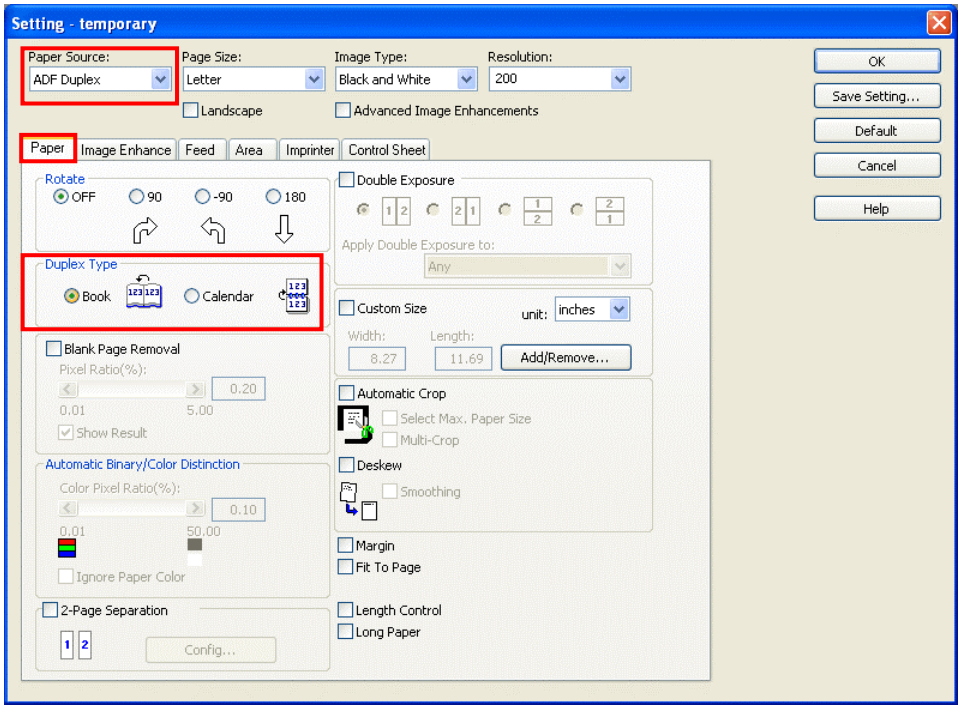


Operation

1. Click the [Paper] tab.
2. Under [Rotate], click the [OFF] button if the function is not going to be used or the [90], [-90] or [180] button to select how far and in which direction the image is to be rotated.

9.2.2. Duplex Type

The direction of the images on the back sides of duplex scanned images is specified here.



Operation

1. Click the [Paper] tab.
2. Under [Duplex Type], select the [Book] or [Calendar] button by clicking it.

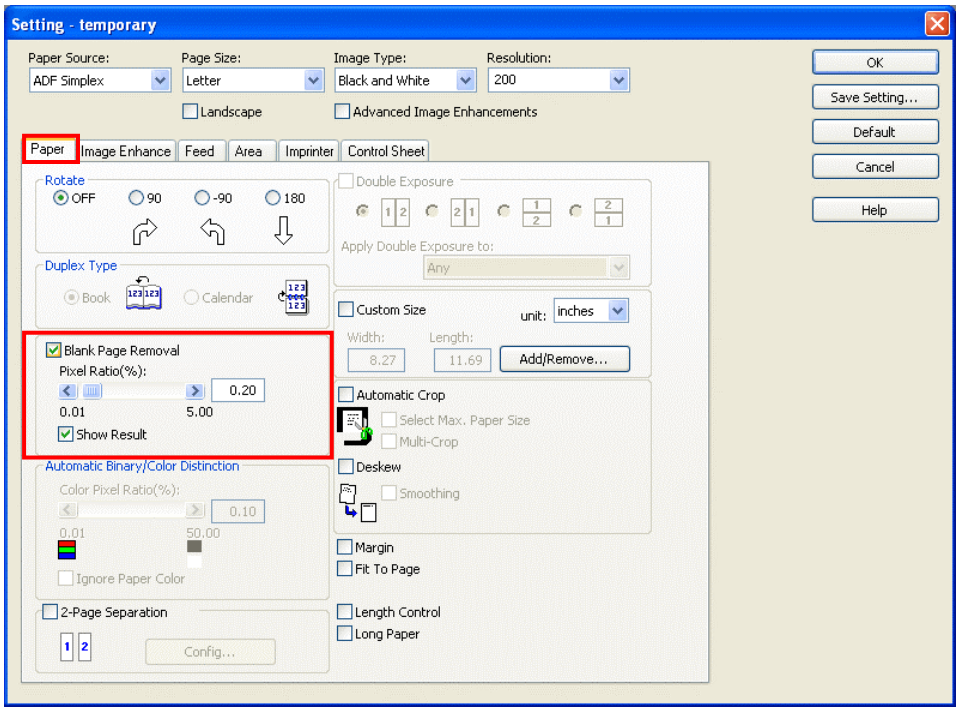
Duplex Type	Document	Image
Book:	A (Front side) B (Back side) →	A (Front side) B (Back side)
Calendar:	A (Front side) ɐ (Back side) →	A (Front side) B (Back side)

- This function is enabled only with duplex scanning.

9.2.3. Blank Page Removal

Skipping the scanning of pages with no text or images (perfectly white, perfectly black or plain) is specified here.

It enables you to scan a batch of documents that contain blank pages without wasting hard disk space by removing the blank pages.



Operation

1. Click the [Paper] tab.
2. Set the [Blank Page Removal] check box to On.
3. If blank pages are still scanned, use the [Pixel Ratio (%)] slider to set the ratio to a higher value; conversely, if pages which are not blank are skipped, set it to a lower value.
4. When the [Show Result] check box is set to On, a log is displayed after scanning.

Example:

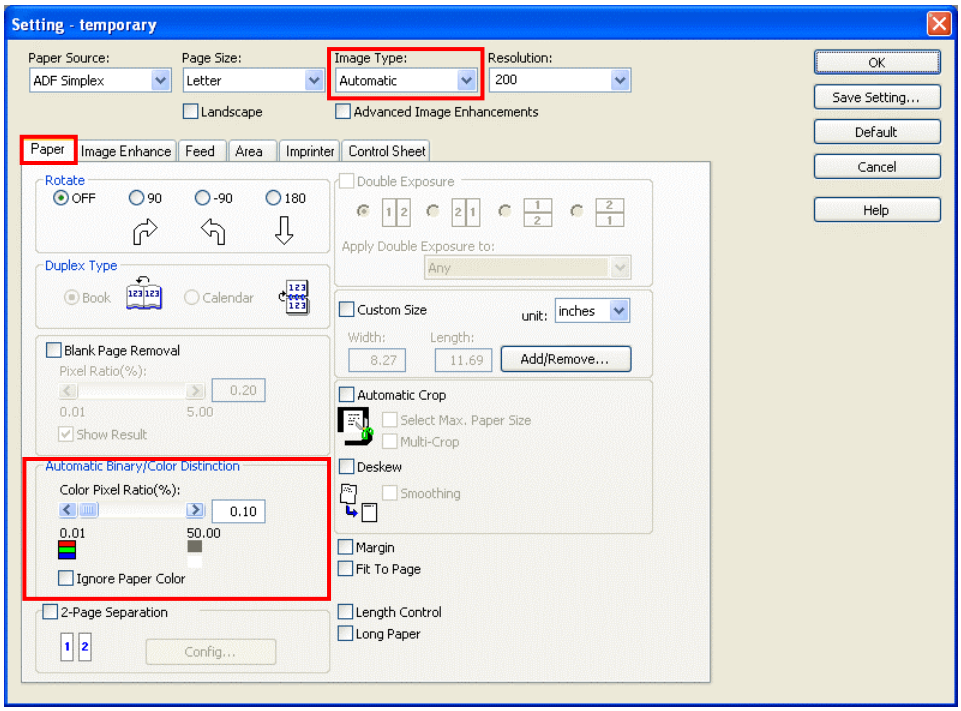
```
Removed Page List 2004.9.8 15:31:8
 2 Page - Back
 4 Page - Front
```

- Some documents containing minimal information may be mistaken as blank pages, in which case they will be treated as a blank page and removed. In such case please adjust Pixel Ratio (%) accordingly.
- When scanning important documents, therefore, check after scanning that all the pages that should have been scanned have in fact been scanned.
- This function cannot be used with flatbed scanning.
- You may remove blank pages after scanning instead of using this Blank Page Removal function (refer to **7.7. Deleting blank pages**).

9.2.4. Automatic Binary/Color Distinction

The ratio of black and white to color pages is set here.

In the Automatic mode, whether the pages are black and white or color is differentiated automatically, and the pages are scanned in their respective modes.



Operation

1. Select [Automatic] in the [Image Type] list box.
2. Click the [Paper] tab.
3. Use the mouse to drag the [Color Pixel Ratio(%)] slider.

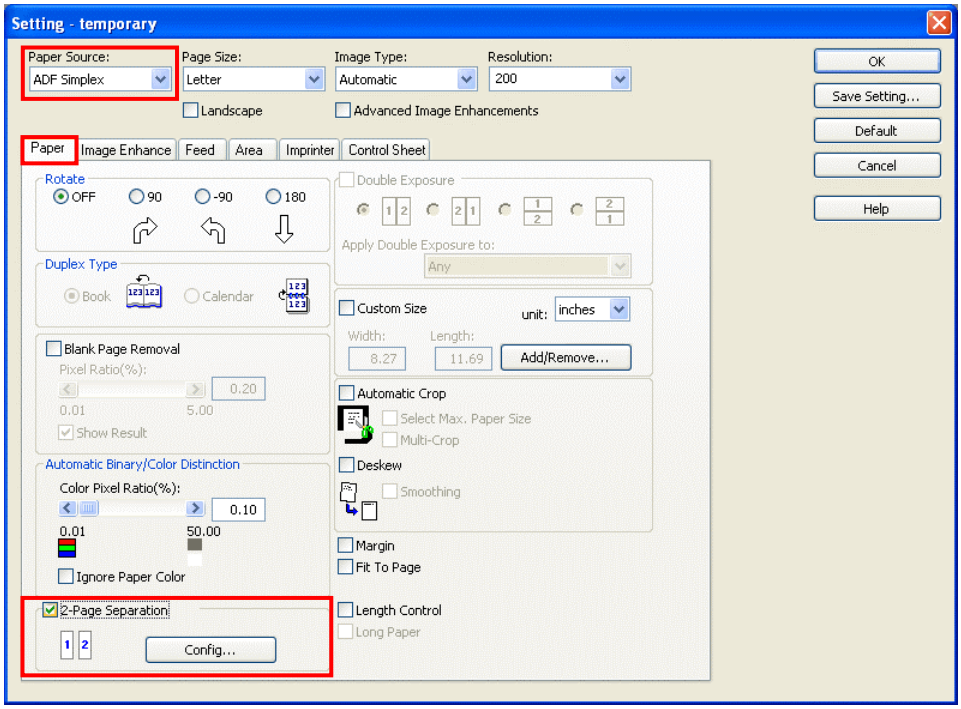
   The scanner differentiates color and binary pages by analyzing the ratio of color pixels to black pixels.

   To change this ratio, move the slider to the left to decrease the required percentage of color pixels to denote a color page. Move the slider to the right to increase the percentage of pixels required to denote a color page.

   The desired value can also be input directly into the edit box on the right.
4. When the [Ignore Paper Color] check box is set to On, the document printed on colored paper in black is identified with black and white pages.
5. Click the [Image Enhance] tab.
6. In the [Rate with Binary Image] list box, select the ratio of the Color Image resolution to the Binary Image resolution. If the 1/2 ratio is selected with 200 dpi serving as the Binary Image resolution, for instance, the Color Image resolution is set to 100 dpi.

9.2.5. 2-Page Separation

Separate 1 page (image) into 2 pages in the specified order.

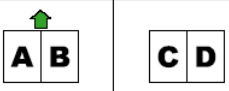
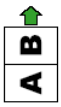


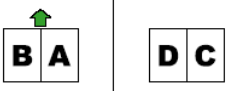
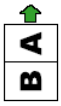
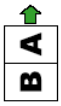
Operation

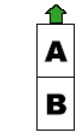
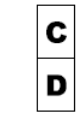
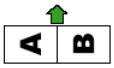
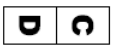
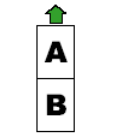
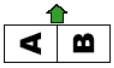
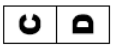
1. Click the [Paper] tab.
2. Set the [2-Page Separation] check box to On.
3. Click the [Config...] button.
4. Select the [Page Order] button.
5. Click the [OK] button.

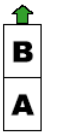
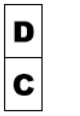
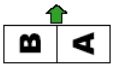
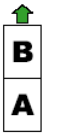
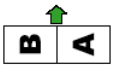
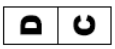
- This function cannot be used at the same time as Double Exposure, Long Paper, Scanning Area, or Multi-Crop.

- The 2-page separation images generated by duplex scanning will vary according to the combination of document and scanning direction, page order settings, rotation, and duplex type of the source material scanned. Consult the following tables to decide which individual settings to use in order to achieve your desired image output.

Output Image	Document and scanning direction		2-Page Separation	Rotate	Duplex Type
	Front side	Back side			
				OFF	
				90	
				OFF	
				90	

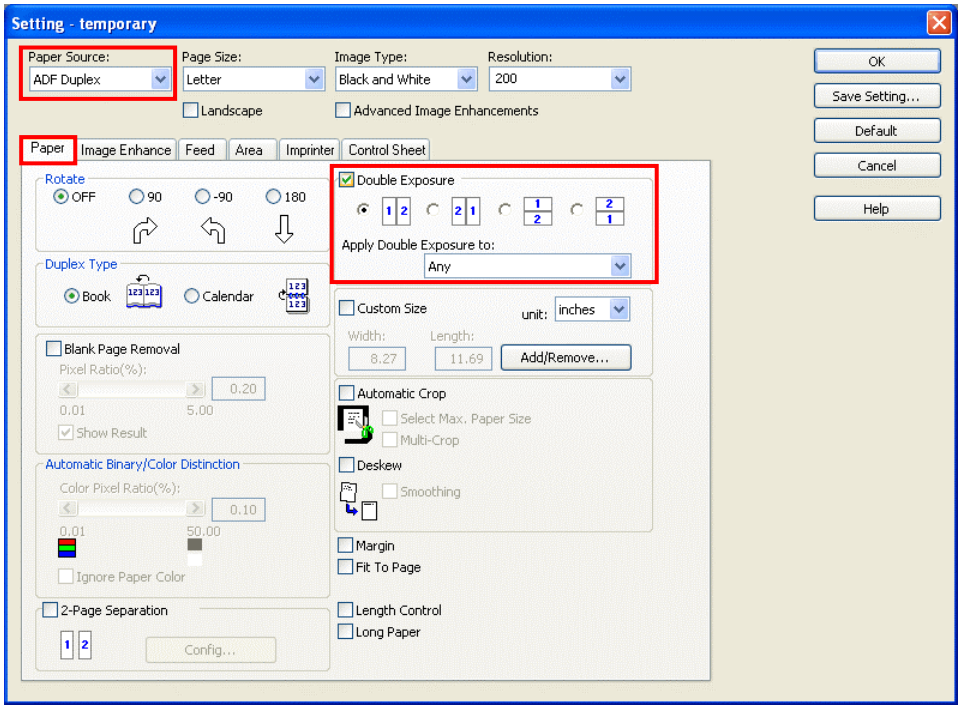
Output Image	Document and scanning direction		2-Page Separation	Rotate	Duplex Type
	Front side	Back side			
				OFF	
				90	
				OFF	
				90	

Output Image	Document and scanning direction		2-Page Separation	Rotate	Duplex Type
	Front side	Back side			
				OFF	
				90	
				OFF	
				90	

Output Image	Document and scanning direction		2-Page Separation	Rotate	Duplex Type
	Front side	Back side			
				OFF	
				90	
				OFF	
				90	

9.2.6. Double Exposure

The direction of the double exposure of duplex scanned images is specified here.



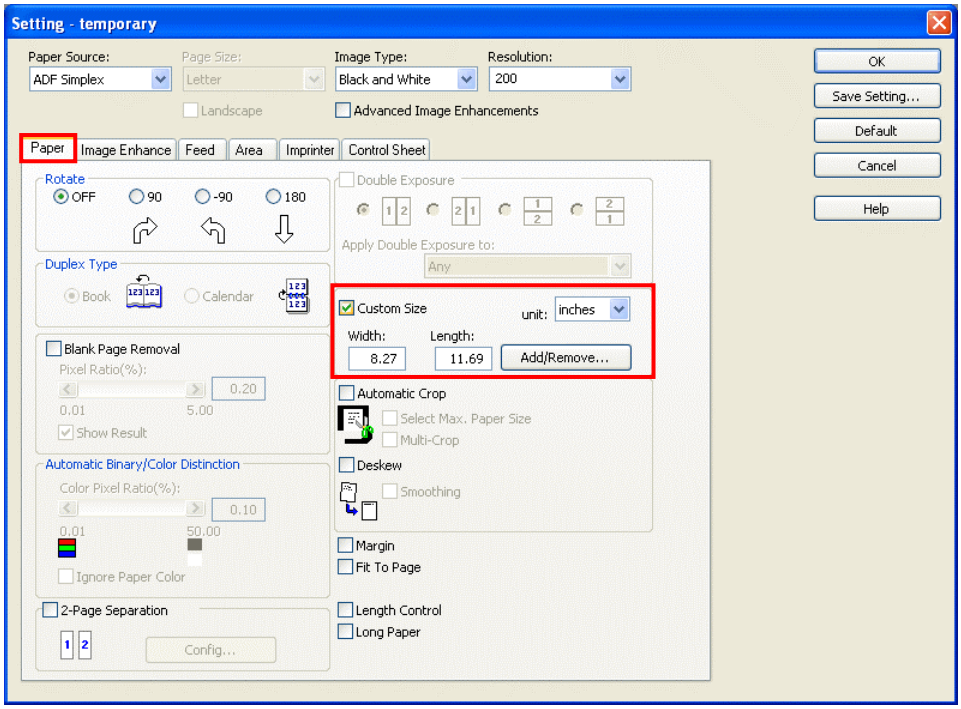
Operation

1. Click the [Paper] tab.
2. Set the [Double Exposure] check box to On.
3. Under [Double Exposure], select the desired button by clicking it.
4. If you are scanning documents of mixed sizes including double-sided documents, and want the double-sided documents combined into one page, select the size of the double-sided documents from the [Apply Double Exposure to] list. That way, documents smaller than the selected size are scanned into one page.

- This function cannot be used with some scanners.
- This function cannot be used if the paper size width exceeds A3 or the paper size length exceeds Double Letter.
- This function cannot be used at the same time as when documents are scanned using Control Sheet.
- Choices in the [Apply Double Exposure to] list are the document size before scanning.
- Set either [Automatic Crop] or [Length Control] check box on when scanning documents of mixed sizes using [Double Exposure].

9.2.7. Custom Size

Paper sizes which are not on the [Page Size] list are set here. Up to 50 sizes can be registered.



Operation

1. Click the [Paper] tab.
2. Set the [Custom Size] check box to On.
3. Specify the Unit, and input the Width and Length.

Registration method

Operation

1. Press the [Add/Remove...] button.
   The [Custom Paper Size] dialog box is now displayed.
2. In the [Custom Paper Size] dialog box, input the Name, Width, and Length, and select the Unit in the [Custom Paper Name/Size] section.
3. When the [Save] button is pressed, the paper size is registered as a new paper size.
4. Click the [Close] button.

Deletion method

Operation

1. Press the [Add/Remove...] button.
   The [Custom Paper Size] dialog box is now displayed.
2. In the [Custom Paper Size] dialog box, select the size to be deleted from the [Add Paper Size List].
3. When the [Delete] button is pressed and [OK] is clicked, the specified paper size information is deleted from the [Add Paper Size List].
4. Click the [Close] button.

- When the [Save] button is pressed, the registered name appears in the [Page Size] list box.
- Input up to 32 characters for the name.
- The width and length which can be specified differ depending on the scanner concerned.

9.2.8. Automatic Crop

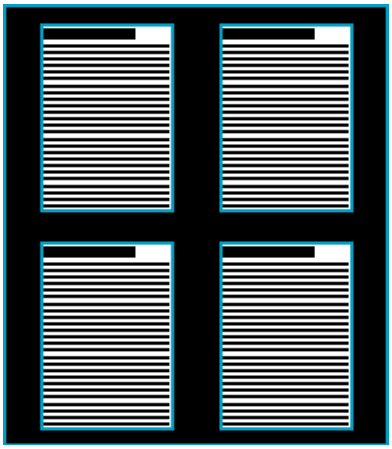
This function automatically recognizes and crops the image size.

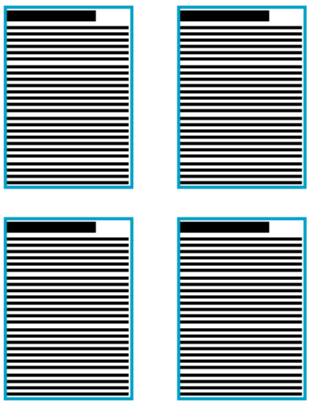
When using this function to scan documents of different sizes in one session, the documents are scanned in the respective sizes, and no memory is wasted.

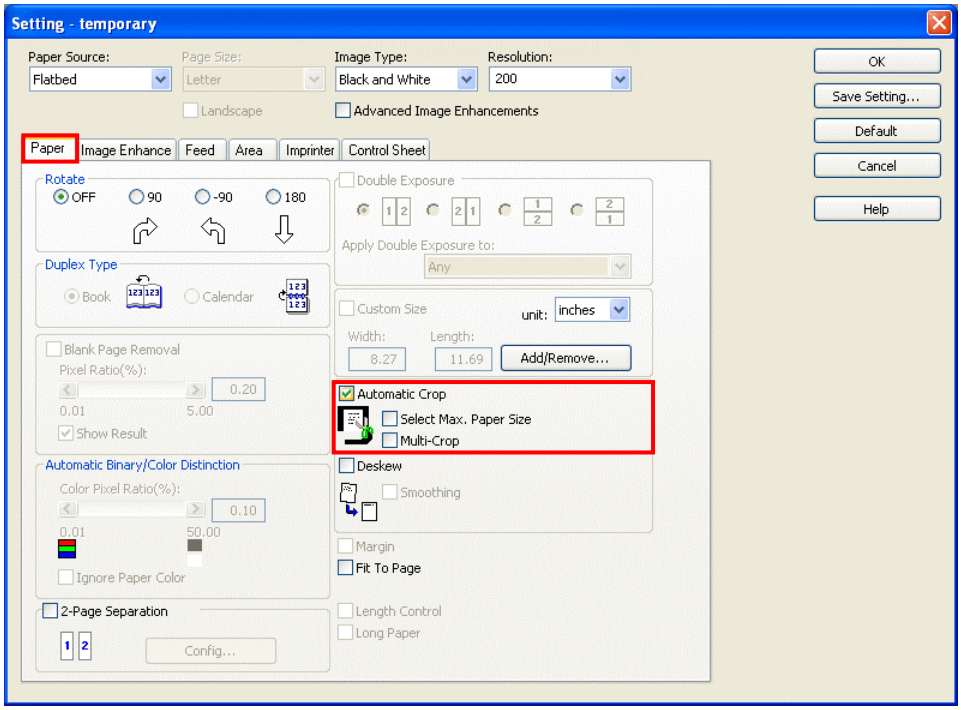
Before Automatic Crop **After Automatic Crop**

By using the Flatbed, you can scan multiple documents at once. The image size for each document is automatically detected and the images are cropped accordingly.

Before Multi-Crop After Multi-Crop







Operation

1. Click the [Paper] tab.
2. Set the [Automatic Crop] check box to On.
3. When using this function to scan documents of same size in one session or increase scanning speed by specifying maximum paper size, set the [Select Max. Paper Size] check box to On.
4. If you are scanning and cropping multiple documents at once using the Flatbed, set the [Multi-Crop] check box to On.

- When the [Select Max. Paper Size] check box is set to On, documents can be cropped over a slightly larger size than the definite size.
- When the [Select Max. Paper Size] check box is set to On, scanning speed can be increased by specifying a slightly larger maximum paper size in the batch.
- If the [Select Max. Paper Size] check box is set to OFF, the maximum paper sizes that can be scanned using the Automatic Crop function are given below:

  KV-S7075C, KV-S7065C, KV-S4085CW, KV-S4065CW, KV-S3105C, KV-S3085, KV-S3065CW

  Maximum length: 431.8 mm (17.00 inch.)

  Maximum width: 302 mm (11.89 inch.)

  KV-S4085CL, KV-S4065CL, KV-S3065CL

  Maximum length: 431.8 mm (17.00 inch.)

  Maximum width: 227 mm (8.94 inch.)

  KV-S2048C, KV-S2028C, KV-S2046C, KV-S2026C

  Maximum length: 355.6 mm (14.00 inch.)

  Maximum width: 216 mm (8.50 inch.)

  KV-S1025C, KV-S1020C

  Maximum length: 355.6 mm (14.00 inch.)

  Maximum width: 218 mm (8.58 inch.)

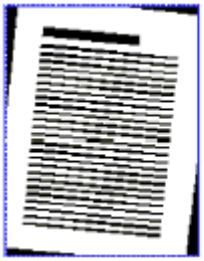
- If there are dark areas at the periphery of a document, these areas may be removed as well.
- Set the reference plate/roller and/or flatbed sheet to black when using the Automatic Crop function. For more details on the reference plate/roller and/or flatbed sheet, refer to the following section in the instruction manuals of the scanner.
  KV-S7075C, KV-S7065C, KV-S3105C, KV-S3085, KV-S3065CW, KV-S3065CL
  - Changing the Reference Plate Setting
  KV-S4085CW, KV-S4085CL, KV-S4065CW, KV-S4065CL
  - Changing the Scan Background Color
- The function may not work properly with some scanned images.
- The maximum paper size which can be cropped differs depending on the scanner.
- The function may not work properly if there is any foreign matter on the reference plate/roller and/or flatbed sheet when documents are scanned. In a case like this, clean the reference plate/roller and/or flatbed sheet.
- If, with KV-S2046C, KV-S2026C, KV-S1025C, and KV-S1020C, Automatic Crop is On, Detect Double Feed functions only when the doubly fed sheets are longer than the legal size (355.6 mm [14 inches]).
- When using [Multi-Crop], place the documents at least 10 mm (0.39 in.) from the edges of the Flatbed glass. Also, separate documents by at least 10 mm (0.39 in.).

9.2.9. Deskew

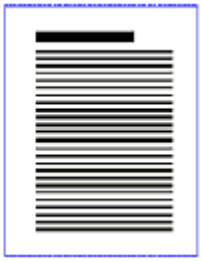
This function corrects the skew in scanned images, restoring the images to the upright position. In order to use it, the scanner must have a black scanning background.

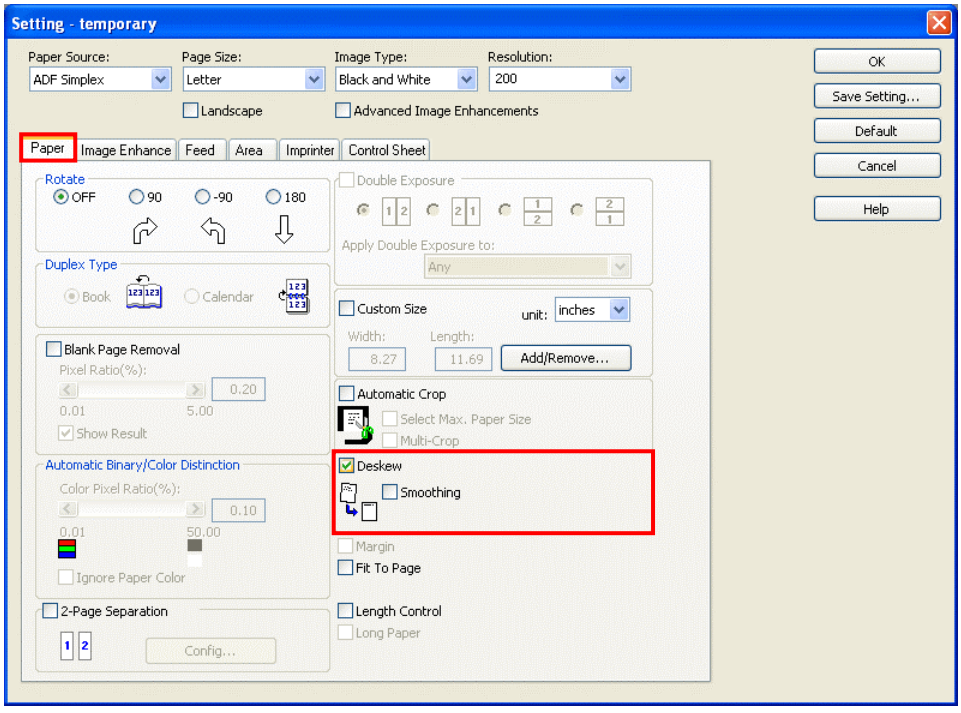
Deskewed images (text or graphics) may appear serrated. In a case like this, this serration in the image can be smoothed out by setting Smoothing to on.

Before Deskew



After Deskew





Operation

1. Click the [Paper] tab.
2. Set the [Deskew] check box to On.

- The scanning speed may decrease when Smoothing is set to on.
- With KV-S4085CW and KV-S4085CL, deskewed images are automatically smoothed out without setting Smoothing to on.
- Depending on the images to be scanned, the function may not work satisfactorily.
- The function may not work properly if there is any foreign matter on the reference plate/roller and/or flatbed sheet when documents are scanned. In a case like this, clean the reference plate/roller and/or flatbed sheet. For more details on the reference plate/roller and/or flatbed sheet, refer to the following section in the instruction manuals of the scanner.
  KV-S7075C, KV-S7065C, KV-S3105C, KV-S3085, KV-S3065CW, KV-S3065CL
  - Changing the Reference Plate Setting
  KV-S4085CW, KV-S4085CL, KV-S4065CW, KV-S4065CL
  - Changing the Scan Background Color

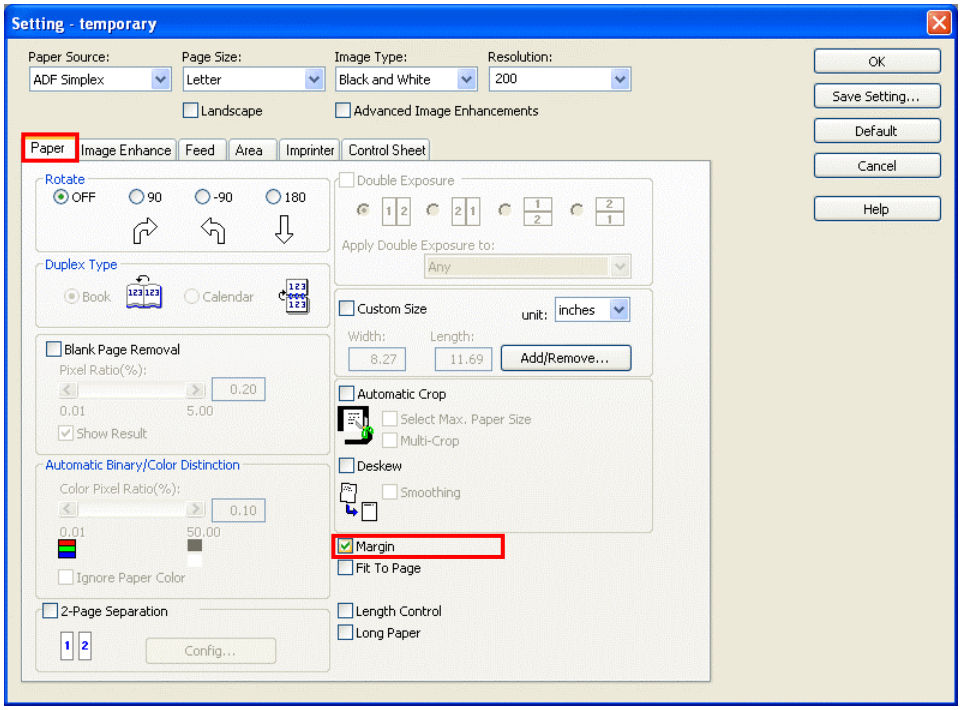
9.2.10. Margin

When Margin is selected, documents are scanned over a slightly larger area at their tops and bottoms than the size specified by Scanning Size.

By setting Margin and Image Width which is a little wider than the actual document width, the documents can be scanned without missing any parts of the document images even when the paper is skewed.

The dimensions of the margin differ depending on the scanner.

Scanner	Top	Bottom
KV-S7065C KV-S3065CW KV-S3065CL	20 mm (0.79 inch)	20 mm (0.79 inch)
KV-S7075C KV-S4085CW KV-S4085CL KV-S4065CW KV-S4065CL KV-S3105C KV-S3085	18 mm (0.71 inch)	18 mm (0.71 inch)
KV-S2048C KV-S2028C KV-S2046C KV-S2026C	15 mm (0.59 inch)	15 mm (0.59 inch)
KV-S1025C KV-S1020C	10mm (0.39 inch)	10mm (0.39 inch)



Operation

1. Click the [Paper] tab.
2. Set the [Margin] check box to On.

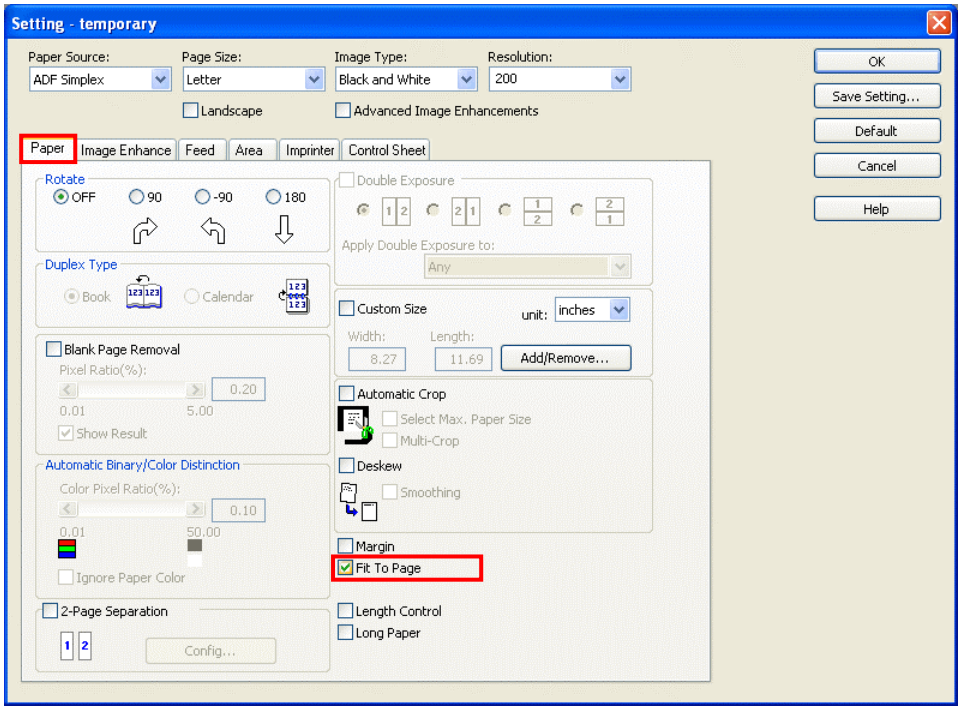
- The Margin function cannot be used at the same time as when documents are scanned using Scanning Area, Sub Area, White Level From Paper, Control Sheet, Separation Sheet, Patchcode, Automatic Crop, Deskew or Flatbed.

9.2.11. Fit To Page

The Fit To Page scans the image of an area slightly larger than the specified scanning area while reducing it so that it has the same dimensions as the scanning area.

Normally, the scanner scans an area which is 100 % of the actual paper size. When this is the case, depending on whether the paper is skewed and how the sheets are stacked, the paper may shift out of the scanning range so that some places along the edges of the image may be missing. When the Fit To Page mode is used, the image produced by scanning is slightly smaller than the actual size, but the whole image will be scanned right down to the edges without missing any places.

Normal mode **Fit To Page mode**

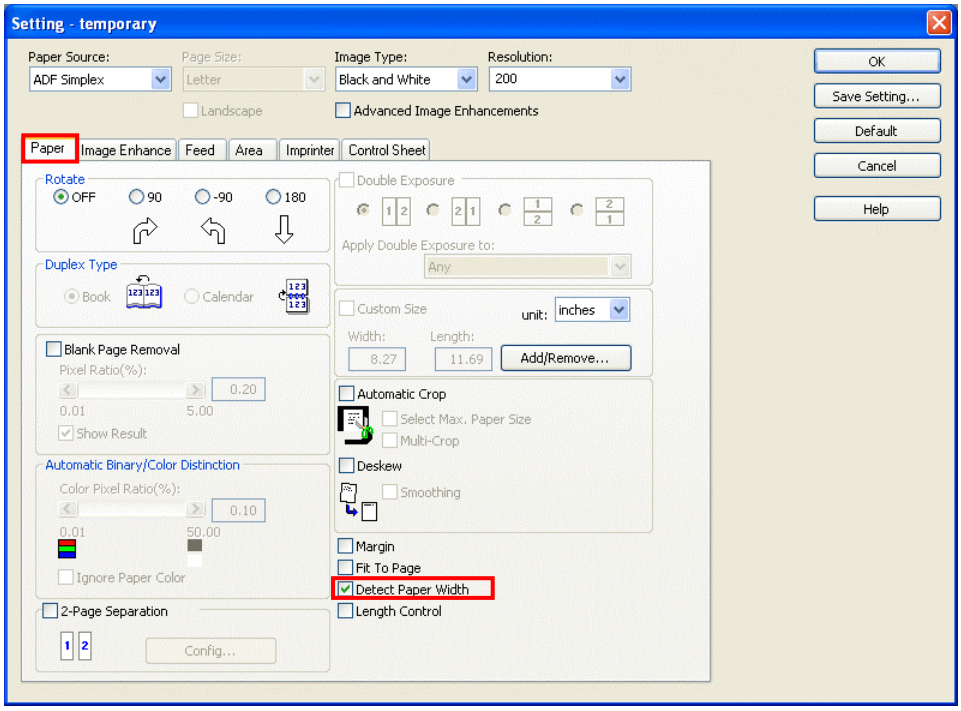


Operation

1. Click the [Paper] tab.
2. Set the [Fit To Page] check box to On.

9.2.12. Detect Paper Width

Using this function, the scanner automatically detects the paper size. When it is used, the Size and Page Layout specified by Page Size are ignored, and the scanner sets the paper size as determined by the paper guide position.



Operation

1. Click the [Paper] tab.
2. Set the [Detect Paper Width] check box to On.

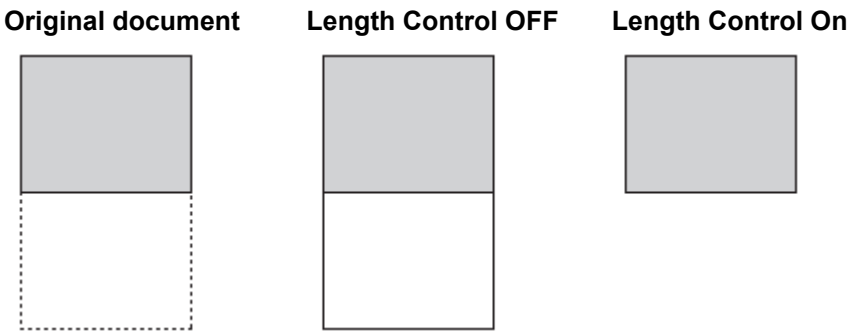
- The sizes of paper which can be detected are A3, A4(Letter), A5, A6, B4, B5, B6, and Business Card in the Portrait mode. (This differs depending on the scanner model.)
- This function cannot be used with some scanners.
- This function cannot be used at the same time as when documents are scanned using Automatic Crop or Manual Feed Mode.

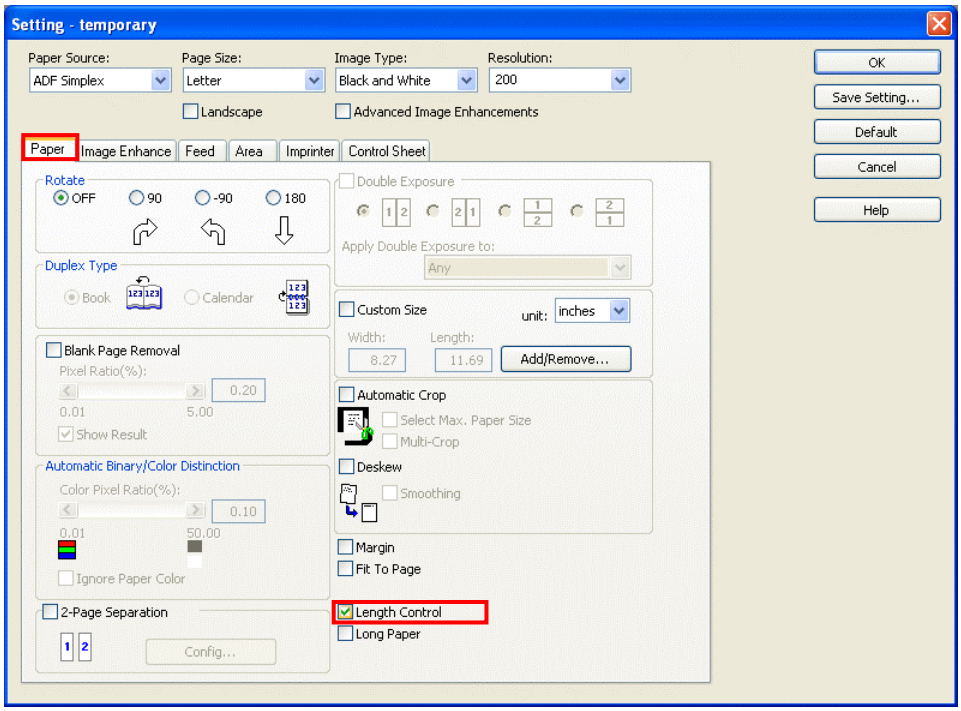
9.2.13. Length Control

When the Length Control function is selected, the scanner scans the documents in the size that corresponds to their length.

If, for instance, Length Control is set to OFF when A4 and A5 width paper documents are to be scanned continuously, the documents with the A5 width will also be scanned in the A4 size, and the roller will be scanned for the parts corresponding to their bottom halves.

Conversely, if Length Control is set to On, and some A4 documents and some width A5 documents are scanned in the same session, the A4 documents will be scanned in the A4 size, and the A5 width documents will be scanned in the A5 width size, and no memory will be wasted.





Operation

1. Click the [Paper] tab.

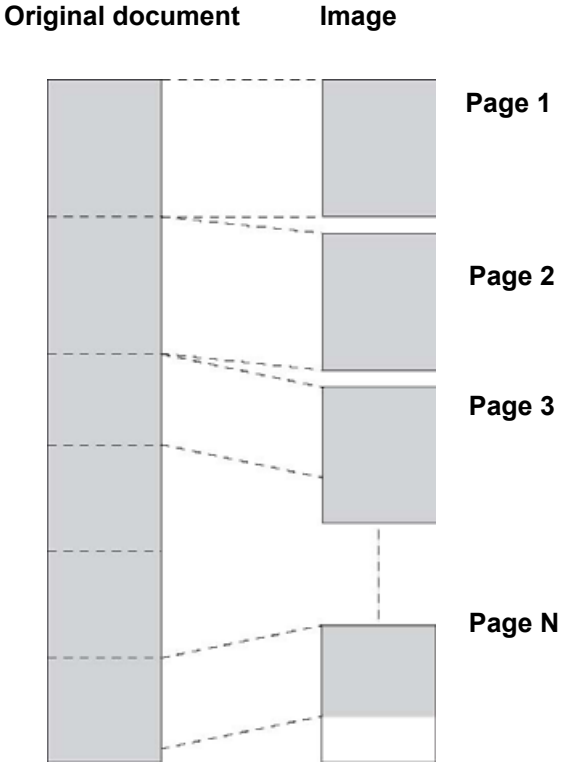
2. Set the [Length Control] check box to On.

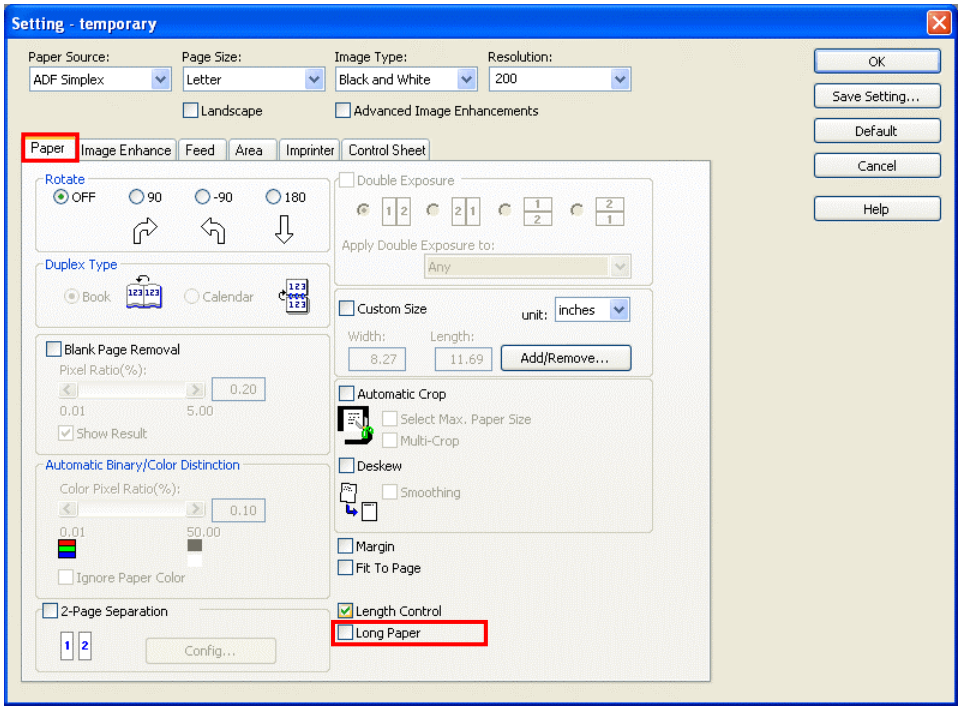
- If, with KV-S2046C, KV-S2026C, KV-S1025C, or KV-S1020C, Length Control is on, Detect Double Feed functions only when the doubly fed sheets are longer than the length currently set for the paper size.
- This function cannot be used at the same time as when documents are scanned using Automatic Crop.

9.2.14. Long Paper

This scans long documents.

The scanned image is split into a number of images in the size specified by Page Size and filed. The document length which can be scanned varies according to the size of the memory installed inside the scanner.





(KV-S3065CW)

Operation

1. Click the [Paper] tab.
2. Set the [Long Paper] check box to On.

- When the Long Paper mode is specified, the paper is fed slower than usual, and paper jam detection is no longer performed.
- It is recommended that the scanner be set to the straight path mode by operating the lever if the Long Paper mode is to be used. (For details on how to make this selection, refer to the instruction manuals of the scanner.)
- This function cannot be used with some scanners.
- This function cannot be used at the same time as when documents are scanned using Automatic Crop, Deskew, Detect Double Feed, Control Sheet, MultiStream, or 2-Page Separation.
- KV-S3105C, KV-S3085, KV-S3065CW, and KV-S3065CL have the following restrictions:
  - The length of the documents that can be scanned (up to 200 pages) is determined by the size of the scanner's memory. Refer to the table in Maximum length that can be scanned.
  - Lengths roughly equivalent to 1/8 of the values in these tables can be scanned in the Grayscale mode and lengths roughly equivalent to 1/24 can be scanned in the Color mode.
  - Depending on the size specified in **9.1.2. Page Size**, the scannable length may be slightly shorter.
  - The values given in the tables are theoretical values and, they are not meant to serve as guaranteed values for feed performance.

9.3. Image Enhance

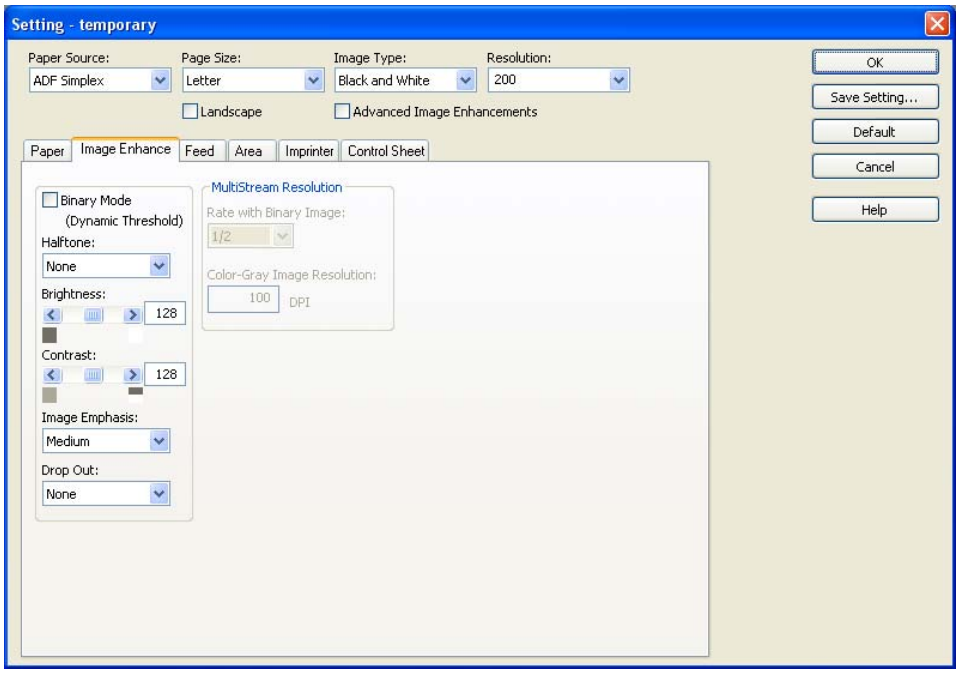
Use the [Image Enhance] tab to set the image scanning conditions. For more detailed settings, use the [Binary Image], [Gray Image], or [Color Image] tab by setting the [Advanced Image Enhancements] check box to On.

Front/Back Same Settings	This is used to set the front and back sides of the document sheet to the same setting.
Halftone	This function is used to reproduce images with halftones such as photos in the Black and White mode.
Binary Mode	This function enables the binary mode.
Brightness	This function adjusts the brightness of the scanned images.
Contrast	This function sets the contrast between the white and black in the dither mode, Grayscale mode or Color mode.
Chroma*1	This function is used to adjust the color scanning vividness.
Image Emphasis	This function adjusts the image quality.
Drop Out	This function scans documents while deleting the text and illustrations on documents printed in the specified colors of red, blue, and green.
Multi Color Drop Out*1	With KV-S7075C, KV-S7065C, KV-S4085CW, KV-S4085CL, KV-S4065CW, KV-S4065CL, KV-S3105C, KV-S3085 with KV-SS029 installed, KV-S3065CW, KV-S3065CL, KV-S1025C, and KV-S1020C, the Multi Color Drop Out function can be used to specify the colors which are to be deleted.
Gamma*1	This function selects the gamma curve (shading adjustment curve).
Custom Gamma	Gamma curves customized to the individual user can be created.
Dynamic Threshold	The Dynamic Threshold mode function is useful for documents with areas whose background is in color.
MultiStream Resolution*1	This function is used to set the resolution in dots per inch with MultiStream for displaying a single image as a black and white and gray image or as a black and white and color image.

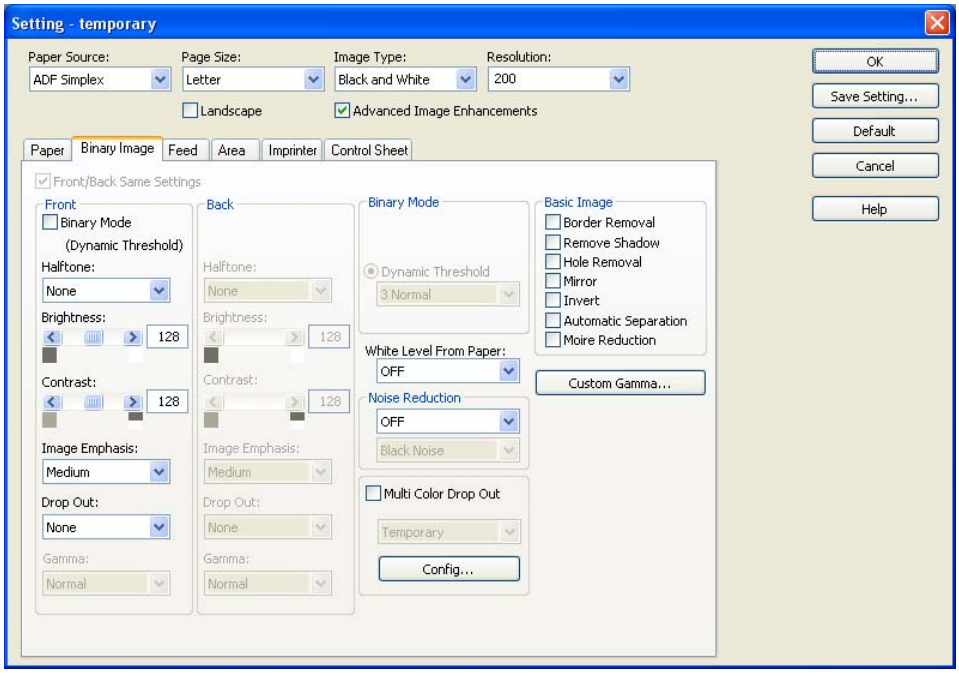
Automatic Resolution	This function is used to set the resolution in dots per inch with Automatic for displaying a single image as a black and white and color image.
White Level From Paper	This function uses white as the reference for the colors in the background of documents when scanning.
Noise Reduction	This function reduces the black or white spots (noise) which appear in scanned images.
Color Matching*1	This function provides color matching with other equipment.
Border Removal	This function removes the black borders, formed during scanning or copying, from around the images.
Mirror	This function produces a mirror image with the left of the scanned image appearing on the right and vice versa.
Remove Shadow	This function removes the shadows cast by the paper itself at its top and bottom edges.
Invert	This function inverts the white and black of the scanned images.
Automatic Separation	This function enables the scanner to automatically differentiate between text areas and photo areas, and scan them accordingly.
Moire Reduction	When magazines and other printed matter or documents printed in color using a printer are scanned, moire (a wavy effect produced by superimposing different geometric patterns) sometimes appears in the images. Setting the Moire Reduction function to On reduces the moire effect.
Smooth Background	This function detects the background color of documents when scanning and increases image compression rate by using it as the reference.
Hole Removal	This function removes the punch hole marks from the scanned image.

*[1] When scanning on the Color, Binary&Color or Automatic mode, KV-S3085 requires the optional "Color Upgrade Kit (KV-SS029)".

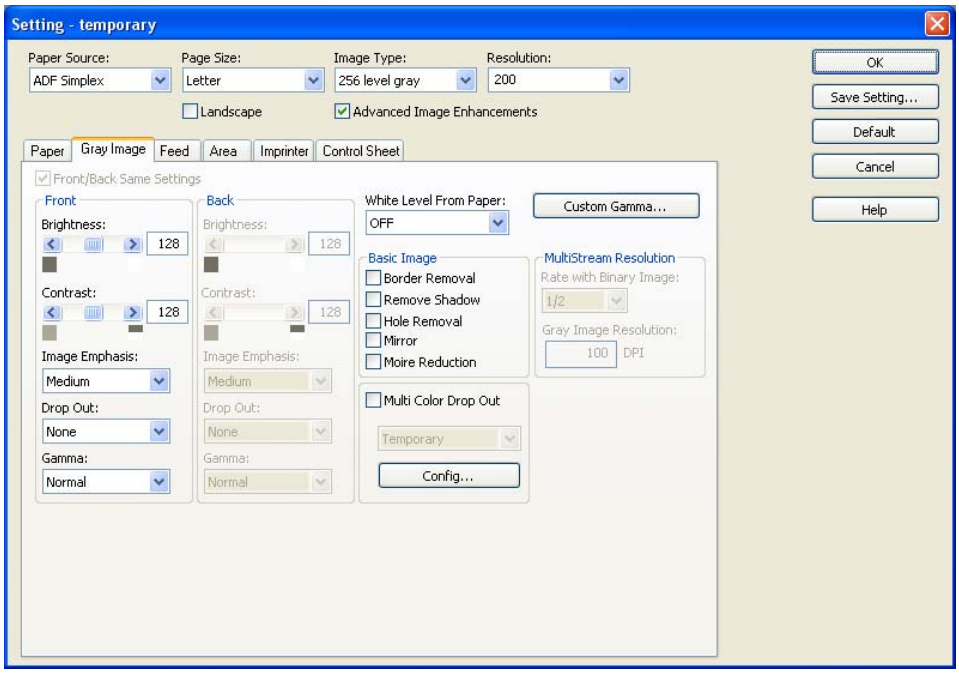
[Image Enhance] tab



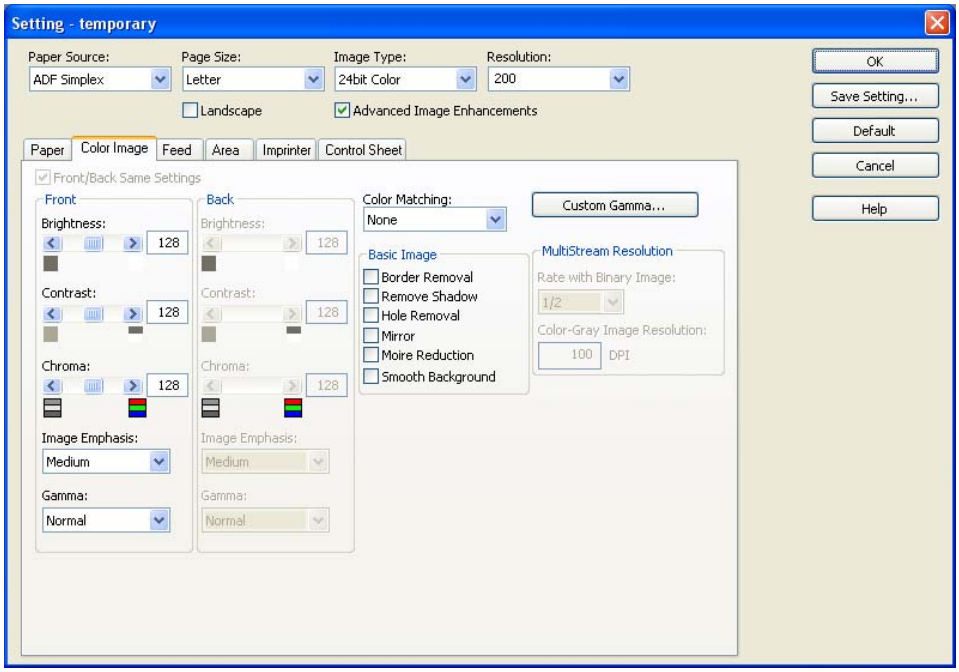
[Binary Image] tab



[Gray Image] tab

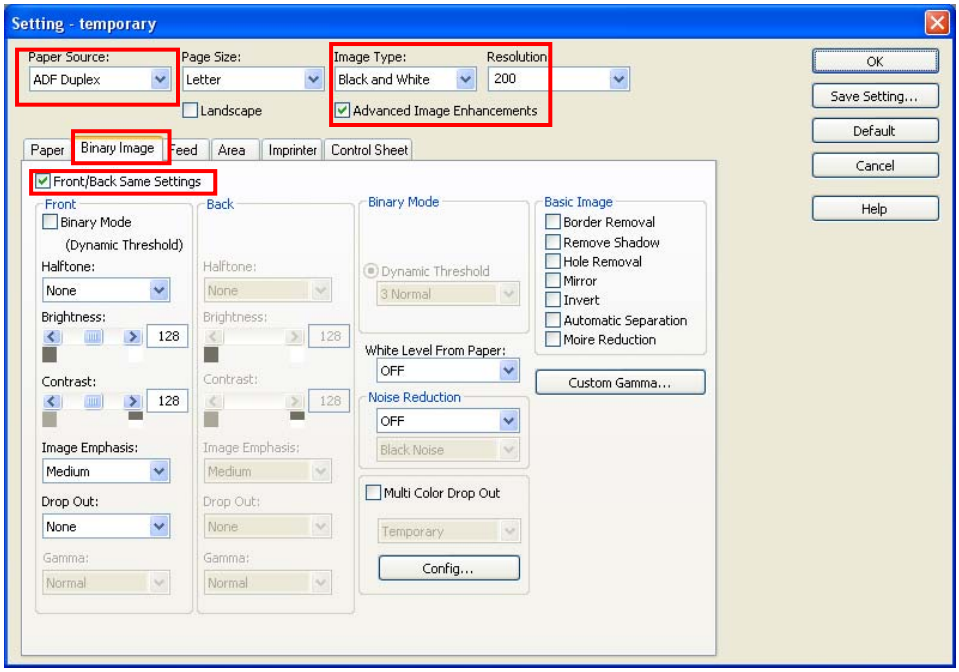


[Color Image] tab



9.3.1. Front/Back Same Settings

This is used to set the front and back sides of the document sheet to the same setting.



Operation

1. Select [ADF Duplex] or [Automatic Duplex] in the [Paper Source] list box.
2. In the [Image Type] list box, select [Black and White], [16 level gray], [256 level gray], [24bit Color], [Binary&Gray], [Binary&Color], or [Automatic].
3. Set the [Advanced Image Enhancements] check box to On.
4. Click the [Binary Image], [Gray Image], or [Color Image] tab.
5. Set the [Front/Back Same Settings] check box to On.

9.3.2. Halftone

This function is used to reproduce images with halftones such as photos in the Black and White mode.

By using Halftone in the Black and White mode, photo images can be scanned faster and with less memory than in the Grayscale mode.

Original

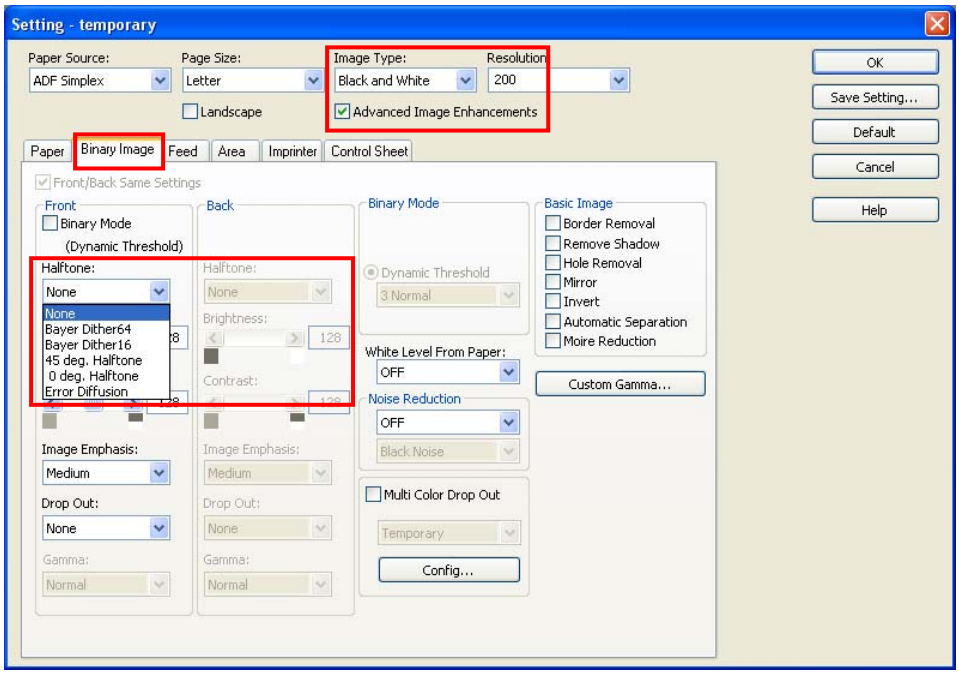
Error Diffusion

Bayer Dither 64-Levels

Bayer Dither 16-Levels

45 deg. Halftone

0 deg. Halftone



Operation

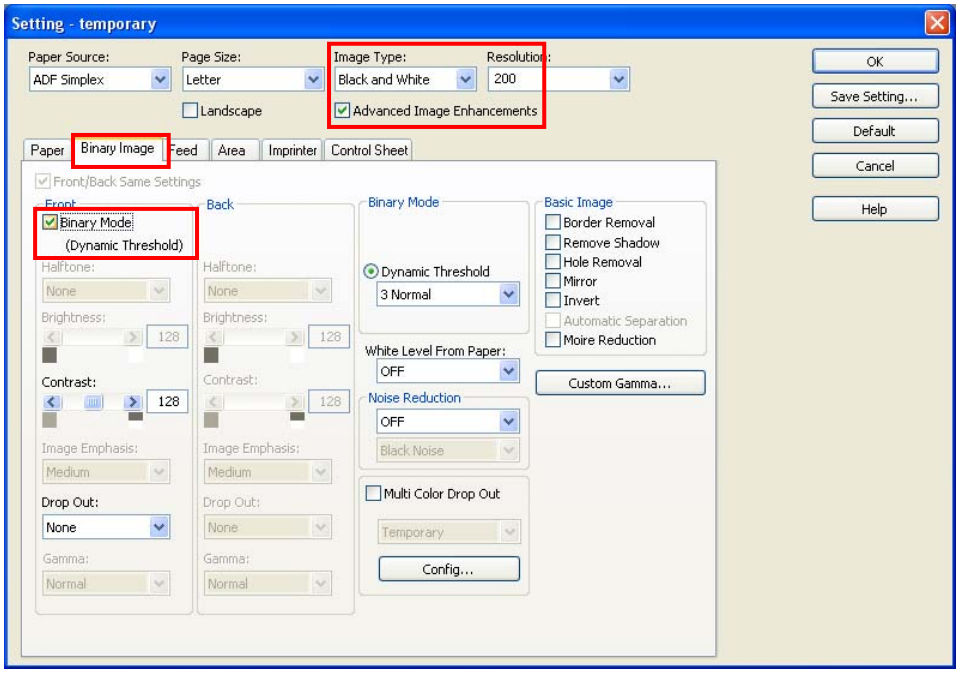
1. Select [Black and White], [Binary&Gray], [Binary&Color], or [Automatic] from the [Image Type] list box.
2. Select the [Image Enhance] tab or set the [Advanced Image Enhancements] check box to On, and click the [Binary Image] tab.
3. Select the target pattern from the [Halftone] list box.

- Halftone patterns can be set separately for the front and back sides of the document sheets.
- The Halftone function cannot be used at the same time as Deskew, Automatic Crop, Dynamic Threshold, or Noise Reduction.

9.3.3. Binary Mode

This function enables the binary mode.

(Refer to 9.3.12. Dynamic Threshold.)



Operation

1. Select [Black and White], [Binary&Gray], [Binary&Color], or [Automatic] from the [Image Type] list box.
2. Select the [Image Enhance] tab or set the [Advanced Image Enhancements] check box to On, and click the [Binary Image] tab.
3. Set the [Binary Mode (Dynamic Threshold)] check box to On.

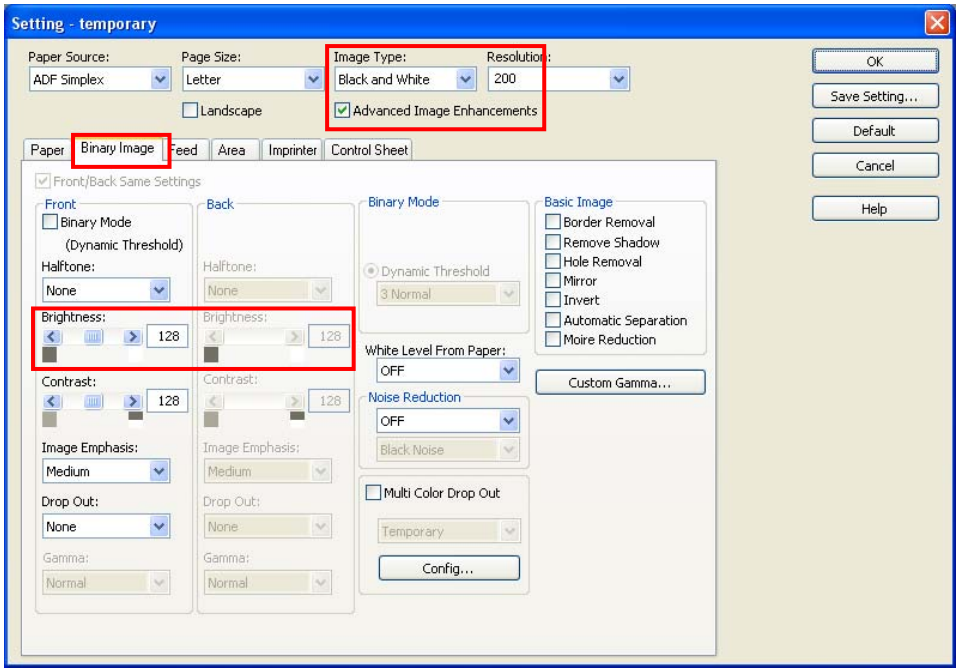
- The Binary Mode setting applies to both the front and back sides of the document sheets.
- Binary Mode can be used in the Black and White mode only.
- Dynamic Threshold is valid only in the Black and White mode or MultiStream (Binary&Gray or Binary&Color) mode.
- In the MultiStream (Binary&Gray or Binary&Color) mode, Dynamic Threshold is valid only for binary images.

9.3.4. Brightness

This function adjusts the brightness of the scanned images.

Any value from 1 to 255 can be set, and the default setting is 128. The lower the value, the darker will be the scanned result.

Brightness setting 51 **Brightness setting 128** **Brightness setting 205**



Operation

1. In the [Image Type] list box, select [Black and White], [16 level gray], [256 level gray], [24bit Color], [Binary&Gray], [Binary&Color], or [Automatic].
2. Select the [Image Enhance] tab or, for more detailed settings, set the [Advanced Image Enhancements] check box to On, and click the [Binary Image], [Gray Image], or [Color Image] tab.
3. Adjust the brightness by using the mouse to drag the [Brightness] slider. The setting (any value from 1 to 255) can be written directly into the [Brightness] edit box.
4. Read the document and check the brightness.

- The brightness can be set independently for the front and back sides of document sheets when the [Binary Image], [Gray Image], or [Color Image] tab is used. When selecting different settings for the front and back sides, set the [Front/Back Same Settings] check box to OFF.
- For details on how to set the scanning brightness automatically in the Black and White mode, refer to **9.3.12. Dynamic Threshold**.

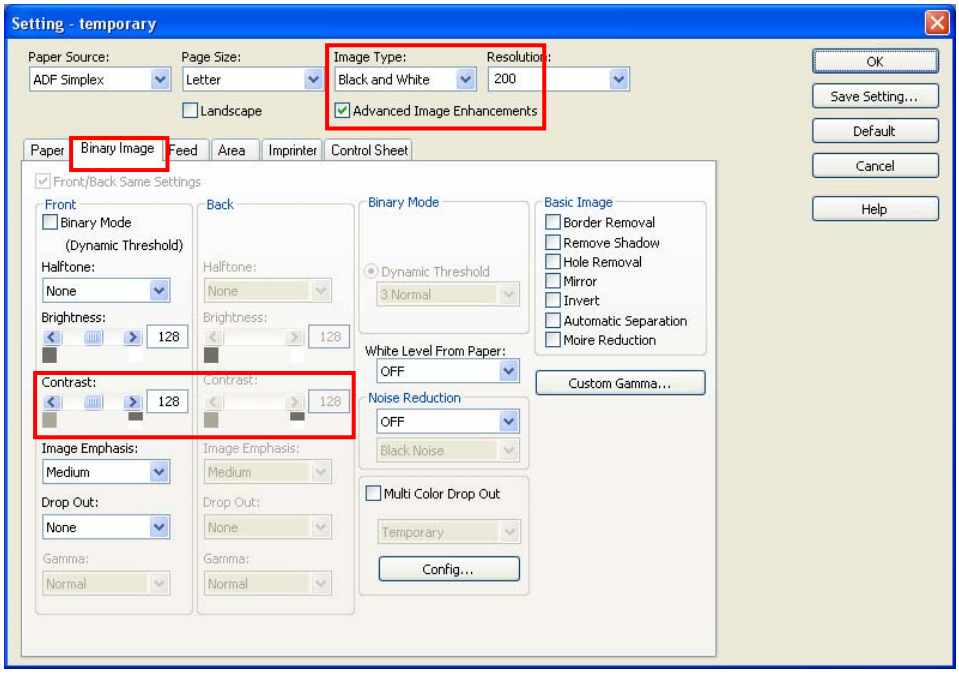
9.3.5. Contrast

This function sets the contrast between the white and black in the dither mode, Grayscale mode or Color mode.

Any value from 1 to 255 can be set, and the default setting is 128. The lower the contrast value, the softer will be the images with less difference between the white and black. Conversely, the higher the contrast value, the sharper will be the images with more difference between the white and black.

Contrast setting 51 **Contrast setting 128** **Contrast setting 205**





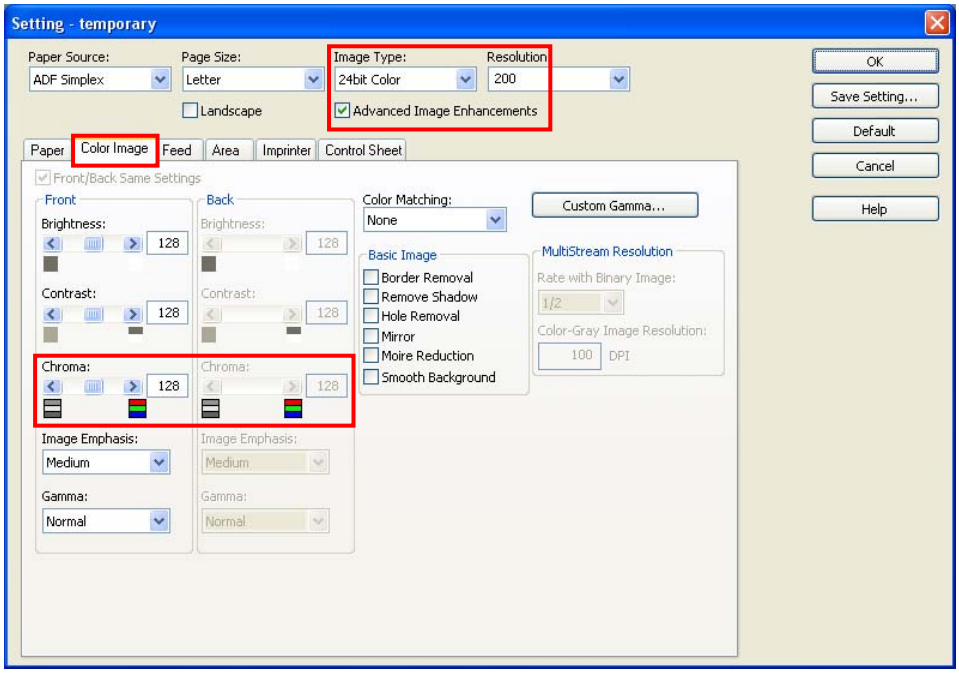
Operation

1. In the [Image Type] list box, select [Black and White], [16 level gray], [256 level gray], [24bit Color], [Binary&Gray], [Binary&Color], or [Automatic].
2. Select the [Image Enhance] tab or, for more detailed settings, set the [Advanced Image Enhancements] check box to On, and click the [Binary Image], [Gray Image], or [Color Image] tab.
3. Adjust the Contrast by using the mouse to drag the [Contrast] slider.
   The setting (any value from 1 to 255) can be written directly into the [Contrast] edit box.
4. Read the document and check the contrast.

- The contrast can be set independently for the front and back sides of document sheets when the [Binary Image], [Gray Image], or [Color Image] tab is used. When selecting different settings for the front and back sides, set the [Front/Back Same Settings] check box to OFF.

9.3.6. Chroma

This function is used to adjust the color scanning vividness.



Operation

1. In the [Image Type] list box, select [24bit Color], [Binary&Color] or [Automatic].
2. Set the [Advanced Image Enhancements] check box to On.
3. Click the [Color Image] tab.
4. Use the mouse to click and move the [Chroma] slider.
   When the slider is moved to the right, the colors become more vivid; when it is moved to the left, they become grayer.
5. A numerical value can also be input directly into the edit box on the right.

- This function can be set independently for the front and back sides of document sheets.
- It takes effect only for color images in the Color mode or MultiStream mode.
- This function cannot be used if [Color Matching] is set to [sRGB].
- This function cannot be used with some scanners.

9.3.7. Image Emphasis

This function adjusts the image quality.

One of five level settings—[Smooth], [None], [Low], [Medium], and [High]—can be selected. When the Smooth setting is selected, the image becomes softer, and noise (black spots) generation is minimized. Conversely, when the High setting is selected, the image becomes crisper, and details such as narrow lines become sharper. [Medium] serves as the default setting.

Original document

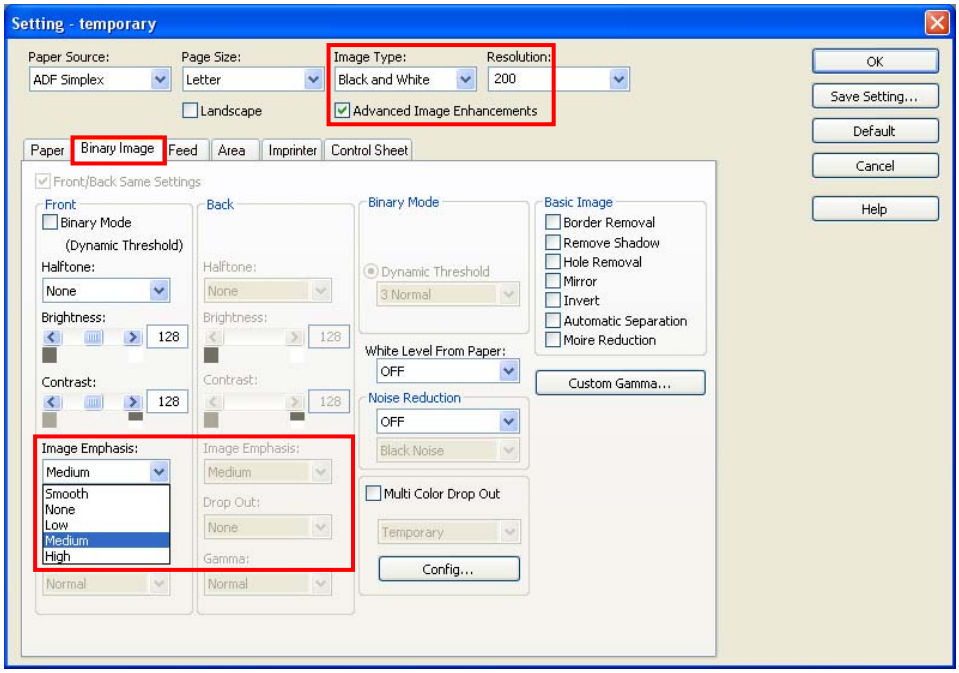
Smooth

None

Low

Medium

High



Operation

1. In the [Image Type] list box, select [Black and White], [16 level gray], [256 level gray], [24 bit Color], [Binary&Gray], [Binary&Color], or [Automatic].
2. Select the [Image Enhance] tab or, for more detailed settings, set the [Advanced Image Enhancements] check box to On, and click the [Binary Image], [Gray Image], or [Color Image] tab.
3. Select the level in the [Image Emphasis] list box.

- When the [Binary Image], [Gray Image], or [Color Image] tab is selected, the image emphasis can be set independently for the front and back sides of document sheets. If different settings are selected for the front and back sides, set the [Front/Back Same Settings] check box to OFF.
- This function cannot be used at the same time as when Binary Mode (Dynamic Treshold) is set.

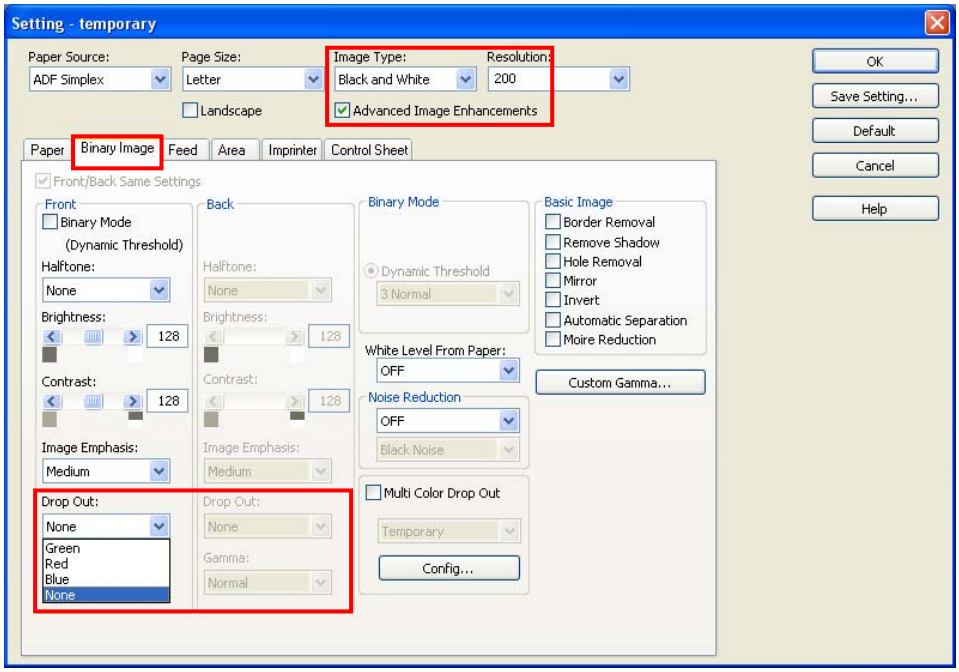
9.3.8. Drop Out

This function scans documents while deleting the text and illustrations on documents printed in the specified colors of red, blue, and green.

It is used, for instance, to facilitate OCR processing by deleting the red frame around OCR forms.

The Multi Color Drop Out function can be used to specify and delete up to three colors.

With KV-S7075C, KV-S7065C, KV-S4085CW, KV-S4085CL, KV-S4065CW, KV-S4065CL, KV-S3105C, KV-S3085 with KV-SS029 installed, KV-S3065CW, KV-S3065CL, KV-S1025C, and KV-S1020C, it is possible to specify the colors for which Multi Color Drop Out is to be executed.



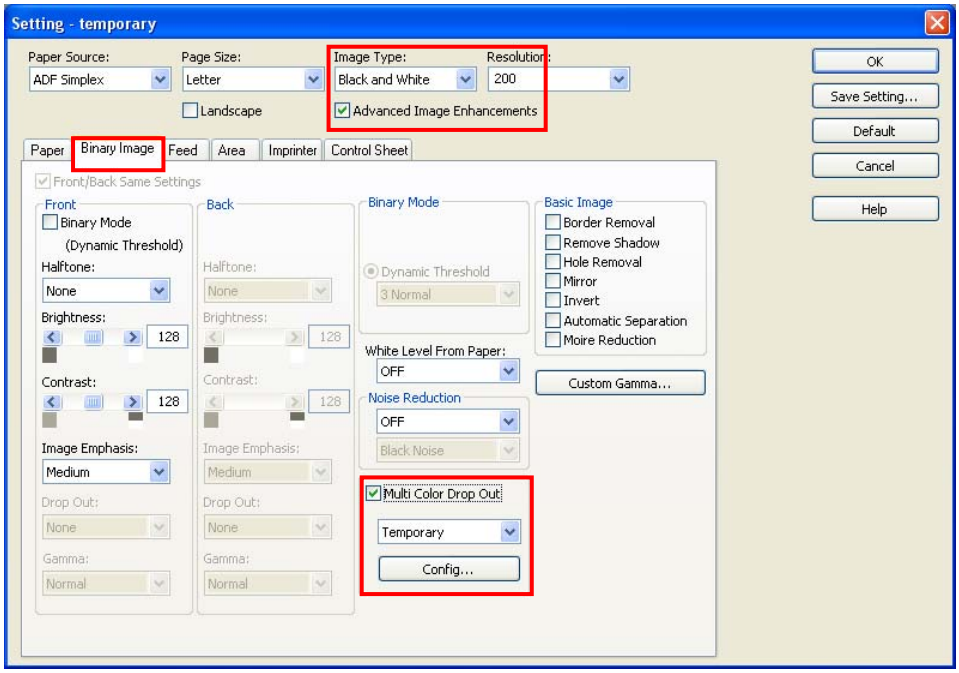
Operation

1. In the [Image Type] list box, select [Black and White], [16 level gray], [256 level gray], or [Binary&Color].
2. Select the [Image Enhance] tab or, for more detailed settings, set the [Advanced Image Enhancements] check box to On, and click the [Binary Image] or [Gray Image] tab.
3. Select the colors in the [Drop Out] list box.

- The Drop Out function can be set independently for the front and back sides of document sheets.
- Depending on the scanning conditions and colors, it may not be possible to delete the specified colors completely.
- The function can be used only with Black and White, Gray or binary images in the MultiStream (Binary&Color) mode.
- This function cannot be used with some scanners.

9.3.9. Multi Color Drop Out

With KV-S7075C, KV-S7065C, KV-S4085CW, KV-S4085CL, KV-S4065CW, KV-S4065CL, KV-S3105C, KV-S3085 with KV-SS029 installed, KV-S3065CW, KV-S3065CL, KV-S1025C, and KV-S1020C, the Multi Color Drop Out function can be used to specify the colors which are to be deleted.



Operation

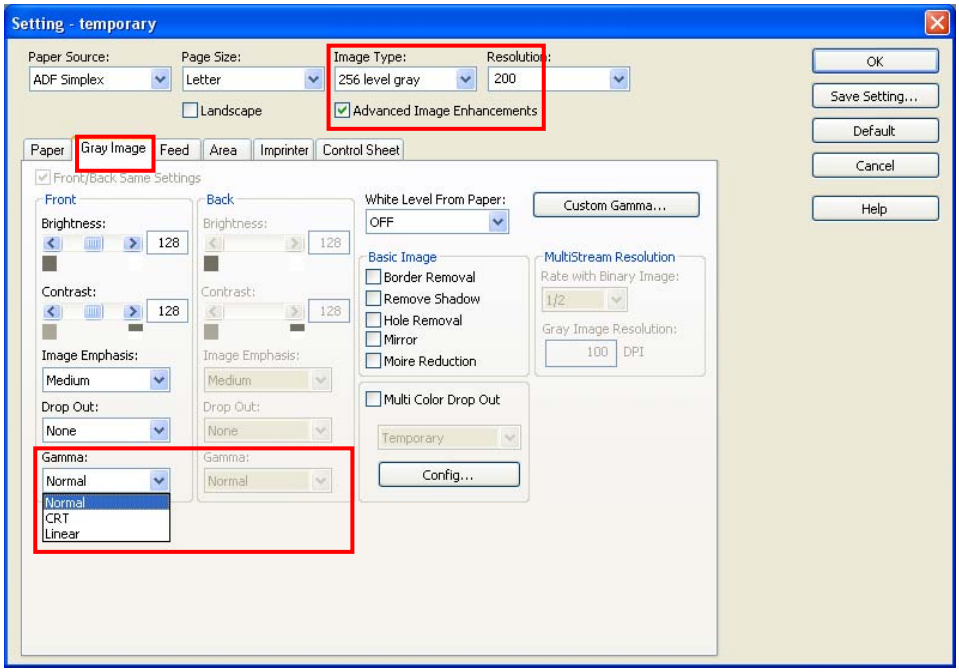
1. In the [Image Type] list box, select [Black and White], [16 level gray], [256 level gray], or [Binary&Color].
2. Set the [Advanced Image Enhancements] check box to On.
3. Click the [Binary Image] or [Gray Image] tab.
4. Set the [Multi Color Drop Out] check box to On.
5. Press the [Config...] button to start the Multicolor Drop Out Utility.
6. Select the name from the settings in the [Multi Color Drop Out] list box.

- When [Keep] in the [Selected Color] section is selected in the Multicolor Drop Out Utility with KV-S7075C, KV-S7065C, KV-S3105C, KV-S3085 with KV-SS029 installed, KV-S3065CW and KV-S3065CL, Color Settings 2-3 are ignored. Color Drop Out is executed for the parts which do not satisfy the condition in Color Setting 1.
- Color Drop Out except the dark-colored sections such as black or dark blue can be executed by selecting [Keep Dark Color] from the [Multi Color Drop Out] list box.
- Color Drop Out except black parts can be executed by selecting [Keep Black Color] from the [Multi Color Drop Out] list box.
- The Color Drop Out conditions [Keep Dark Color] and [Keep Black Color] cannot be deleted.
- The function can be used only with Black and White, Gray or binary images in the MultiStream (Binary&Color) mode.

9.3.10. Gamma

This function selects the gamma curve (shading adjustment curve).

Three settings are available for the gamma curve: [Normal], [CRT], and [Linear].



Operation

1. In the [Image Type] list box, select [Black and White], [16 level gray], [256 level gray], [24bit Color], [Binary&Gray], [Binary&Color], or [Automatic].

2. Set the [Advanced Image Enhancements] check box to On, and click the [Binary Image], [Gray Image], or [Color Image] tab.

3. Select the type of gamma curve in the [Gamma] list box.

[Normal]

This is the recommended setting when scanning in color, grayscale or halftone mode. This is the most suitable setting when scanning business documents. Select [CRT] when scanning the kind of document most of whose pages consist of photos.

[CRT]

This is the recommended setting if the primary objective of scanning documents is to view them on the display.

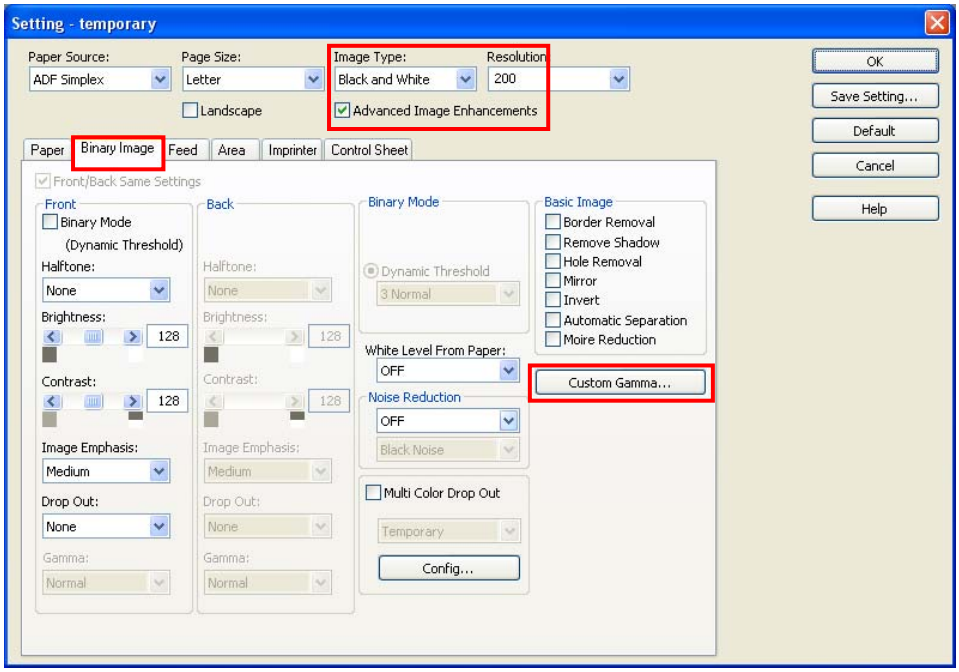
[Linear]

This is the mode that gamma correction is not used.

- Gamma curves customized to the individual user can be created. For more details, refer to **9.3.11. Custom Gamma**.
- When the [Binary Image], [Gray Image], or [Color Image] tab is selected, the Gamma can be set independently for the front and back sides of document sheets. When selecting different settings for the front and back sides, set the [Front/Back Same Settings] check box to OFF.
- The gamma can be set for the following Image Types:
  - Color mode
  - Grayscale mode
  - Halftone (dither) or Error Diffusion in Black and White mode
- Gamma cannot be used when [sRGB] has been selected by Color Matching.

9.3.11. Custom Gamma

Gamma curves customized to the individual user can be created. Up to 50 gamma curves can be registered.

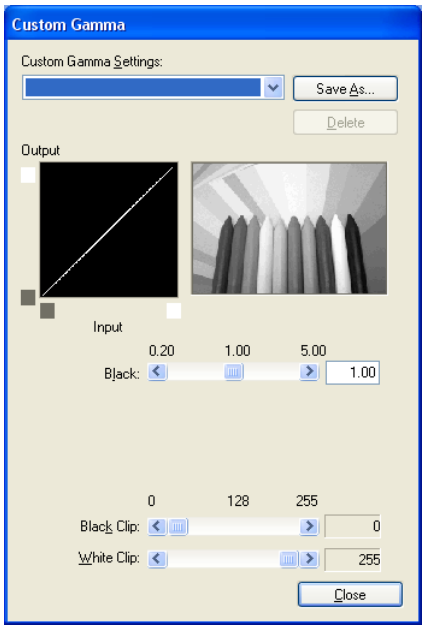


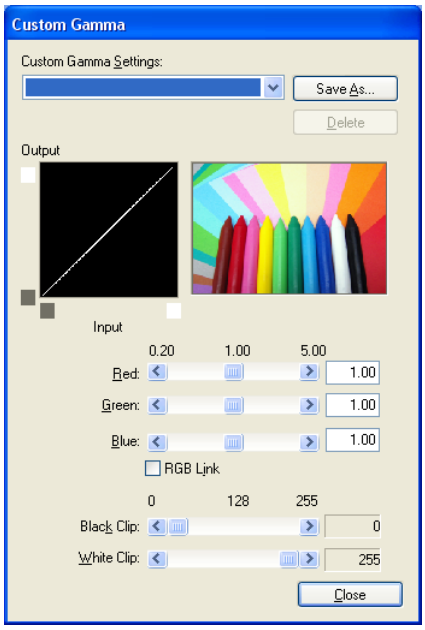
Registration method

Operation

1. In the [Image Type] list box, select [Black and White], [16 level gray], [256 level gray], [24bit Color], [Binary&Gray], [Binary&Color] or [Automatic].
2. Set the [Advanced Image Enhancements] check box to On.
3. Click the [Binary Image], [Gray Image], or [Color Image] tab.
4. When the [Custom Gamma...] button is pressed, the [Custom Gamma] dialog box is opened.

   The Black and White slider is displayed in the Black and White or Grayscale mode; the Red, Green, and Blue sliders are displayed in the Color mode.





5. Select the gamma curves by operating the Black and White slider or the Red, Green, and Blue sliders.

[Red] [Green] [Blue]	Set the gamma curve values for the [Red], [Green], and [Blue] color components (RGB). The higher the value, the whiter the image obtained.
[RGB Link]	When [RGB Link] is set to On, the same values are set for the Red, Green and Blue gamma curves.
[Black]	The gray gamma curve value is set here. The higher the value, the whiter the image obtained.
[Black Clip]	The level at which the dark-colored sections are to be set to black is set here. The higher the value, the darker the image.
[White Clip]	The level at which the light-colored sections are to be set to white is set here. The lower the value, the lighter the image.

6. Upon completion of all the settings, press the [Save As...] button. Give a name to the settings, and press the [OK] button. Input up to 32 characters for the name.

7. Press the [Close] button to exit the screen.

Deletion method

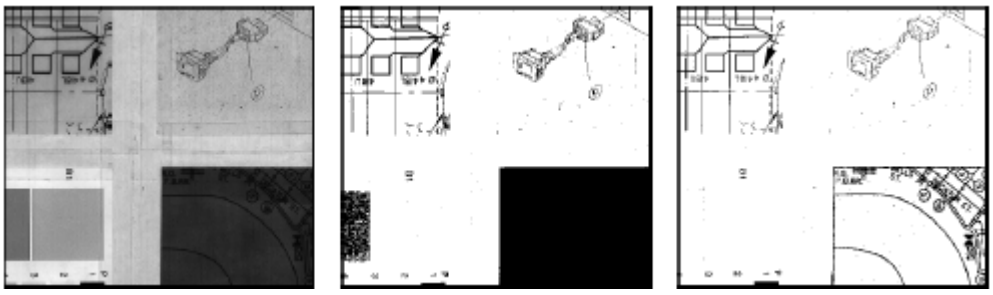
Operation

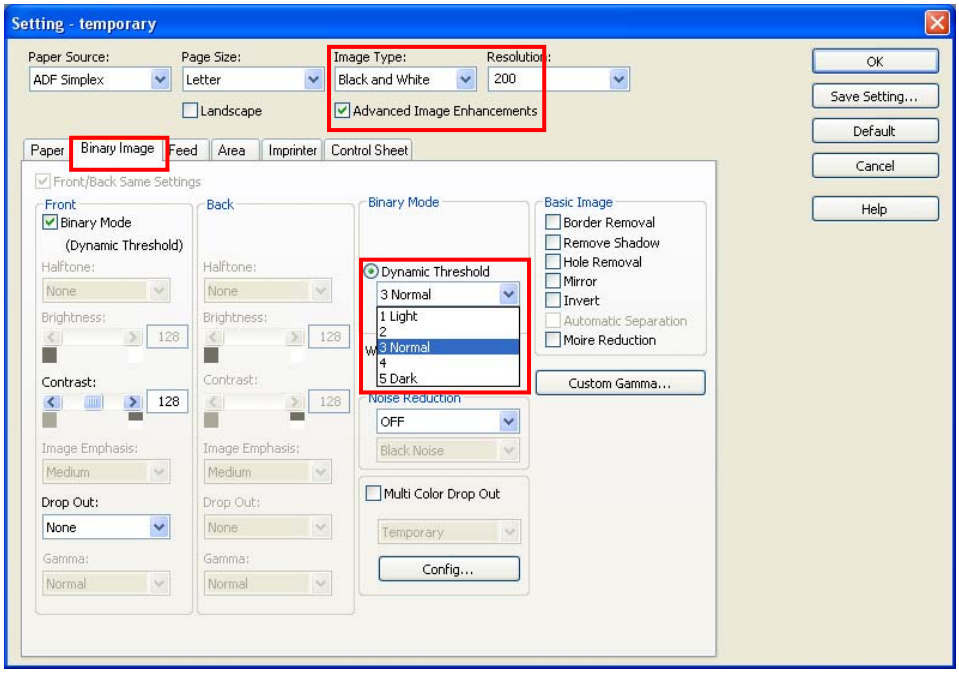
1. On the [Custom Gamma Settings] list box, select the setting to be deleted.
2. The setting is deleted from the list by pressing the [Delete] button now.

9.3.12. Dynamic Threshold

The Dynamic Threshold mode function is useful for documents with areas whose background is in color.

Original **Binary** **Dynamic Threshold**





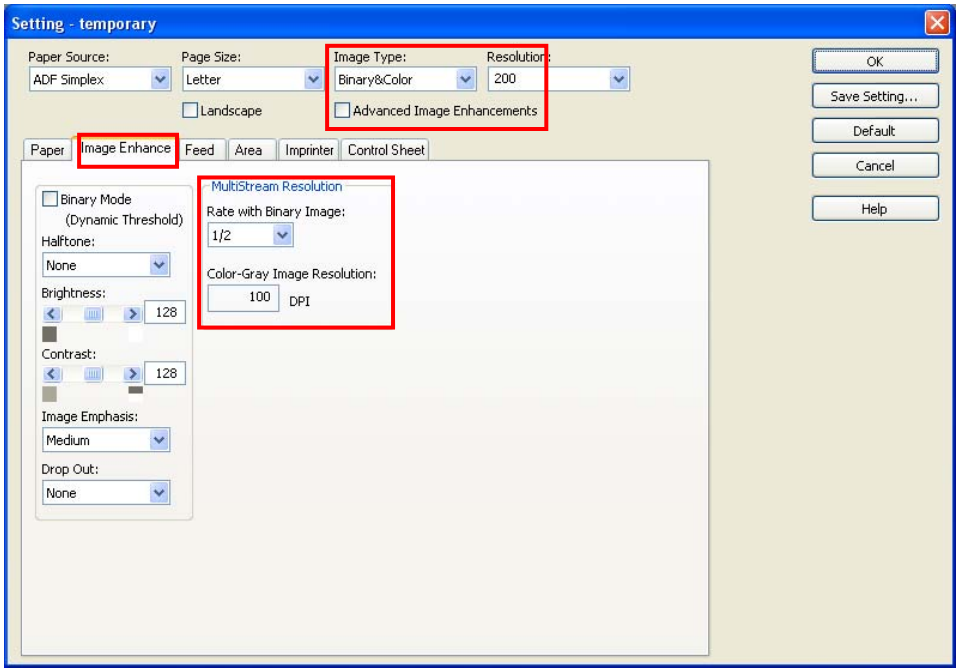
Operation

1. In the [Image Type] list box, select [Black and White], [Binary&Gray], [Binary&Color], or [Automatic].
2. Set the [Advanced Image Enhancements] check box to On.
3. Click the [Binary Image] tab.
4. In the Front settings, set the [Binary Mode (Dynamic Threshold)] check box to On.
5. Click the [Dynamic Threshold] button.
6. Select the threshold level in the [Dynamic Threshold] list box.

- The Dynamic Threshold setting is applied to both the front and back sides of the document sheets.
- The Dynamic Threshold mode function is valid only in the Black and White mode. Settings such as Halftone, Sub Area, Image Emphasis, Gamma, and Automatic Separation cannot be used. (Even if they are set, the settings will be ignored.)

9.3.13. MultiStream Resolution

This function is used to set the resolution in dots per inch with MultiStream for displaying a single image as a black and white and gray image or as a black and white and color image.



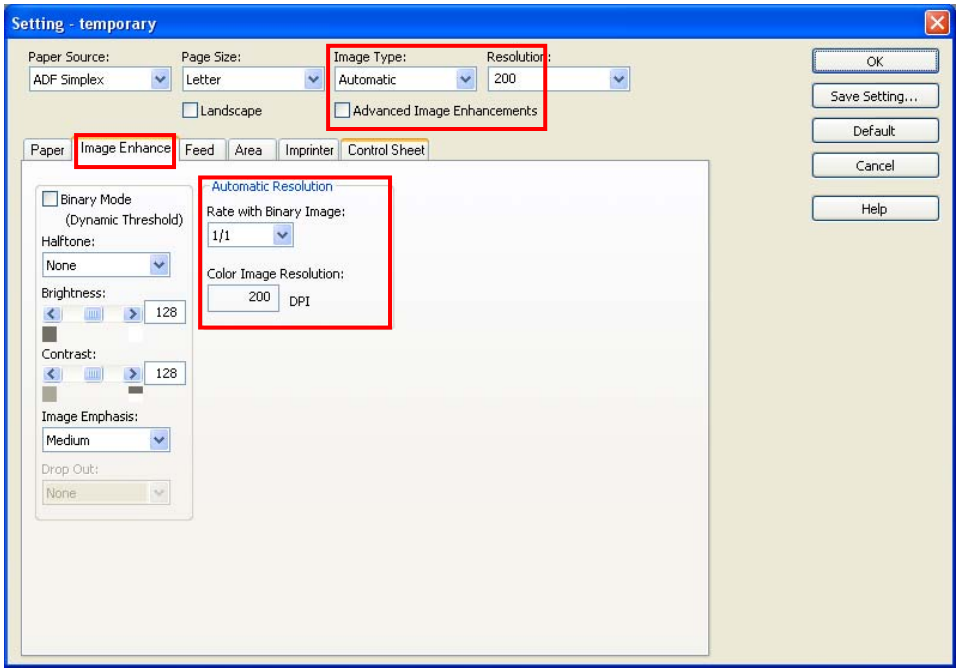
Operation

1. In the [Image Type] list box, select [Binary&Gray] or [Binary&Color].
2. Click the [Image Enhance] tab.
3. In the [Rate with Binary Image] list box, select the ratio of the color or gray image resolution to the binary image resolution.
   For instance, if 1/2 is selected with a binary image resolution of 200 dpi, the color or gray image resolution will be 100 dpi.

- The color or gray image resolution can be set to a ratio of 1/1, 1/2, 1/3 or 1/4 of the binary image resolution.

9.3.14. Automatic Resolution

This function is used to set the resolution in dots per inch with Automatic for displaying a single image as a black and white and color image.



Operation

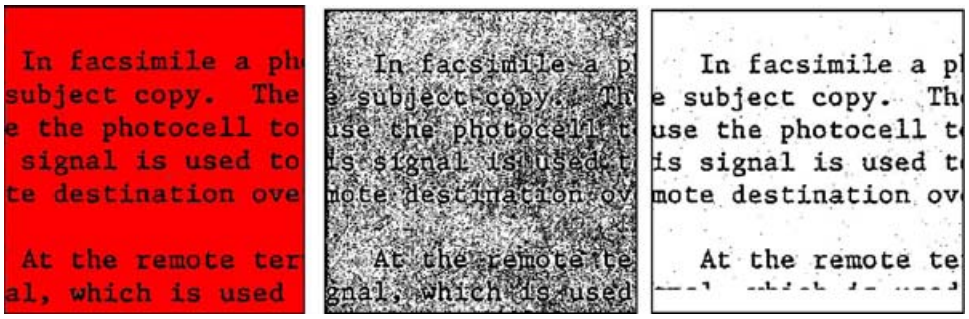
1. In the [Image Type] list box, select Automatic.
2. Click the [Color Image] tab.
3. In the [Rate with Binary Image] list box, select the ratio of the color image resolution to the binary image resolution.
   For instance, if 1/2 is selected with a binary image resolution of 200 dpi, the color image resolution will be 100 dpi.

- The color image resolution can be set to a ratio of 1/1, 1/2, 1/3 or 1/4 of the binary image resolution.

9.3.15. White Level From Paper

This function uses white as reference when documents with color background are scanned. Normally, when text written on paper with colored background such as red, blue, or some other color is scanned, the resulting image will have a great deal of noise. When the White Level From Paper function is used, the color background of the paper is ignored, and a clear image is obtained.

Original document (red) **Function OFF** **Function On**



[OFF]

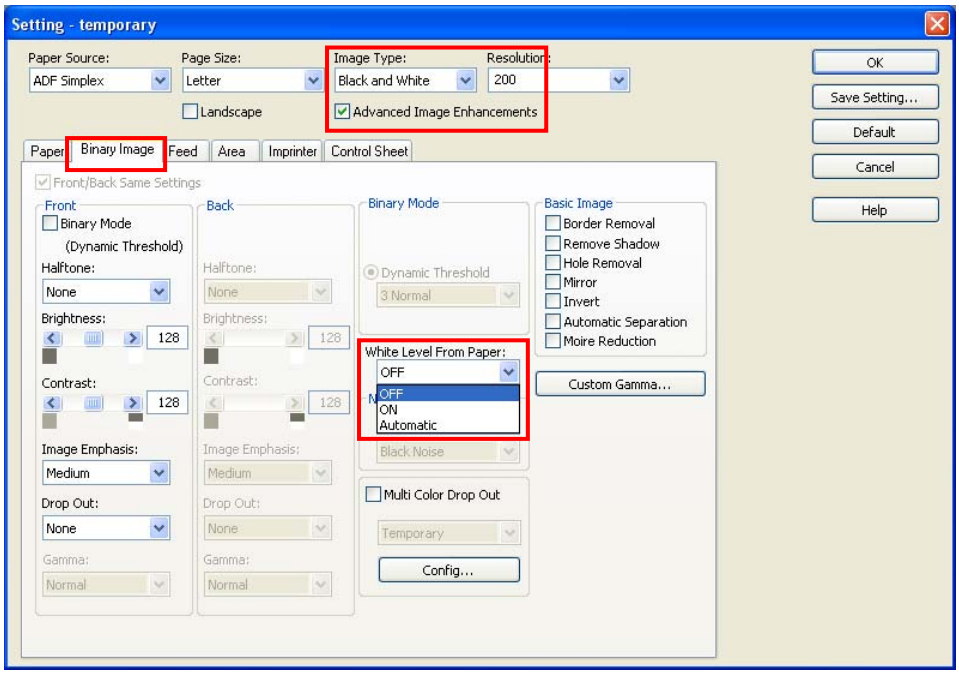
The White Level From Paper function is set to Off.

[ON]

The White Level From Paper function is set to On.

[Automatic]

The White Level From Paper function is set to On only in the Black and White mode when [None] is selected as the Dither setting.



Operation

1. In the [Image Type] list box, select [Black and White], [16 level gray], or [256 level gray].
2. Set the [Advanced Image Enhancements] check box to On.
3. Click the [Binary Image] or [Gray Image] tab.
4. Select the mode in the [White Level From Paper] list box.

- The White Level From Paper function detects the color at a position of 3 mm or so along the top edge of the paper. It will not work properly if the colors in other areas of the paper differ from the color at this position.
- When White Level From Paper is used, the background of the scanned image will become white for the 3 mm or so (up to 10 mm depending on the scanning conditions) from the top edge of the paper. However, if the reference plate/roller and/or flatbed sheet is set to black, this area will not become white. (With KV-S2048C, KV-S2028C, KV-S2046C, and KV-S2026C, it will not become white no matter what the reference roller color is.)
- White Level From Paper cannot be used at the same time as Automatic Crop, Deskew or Margin.
- White Level From Paper cannot be used in the Color mode, MultiStream (Binary&Gray or Binary&Color) mode or Automatic mode.

9.3.16. Noise Reduction

This function reduces the black or white spots (noise) which appear in scanned images.

If there is a large amount of noise in the scanned images, the size of the file concerned after compression may be increased and/or the OCR recognition rate decreased.

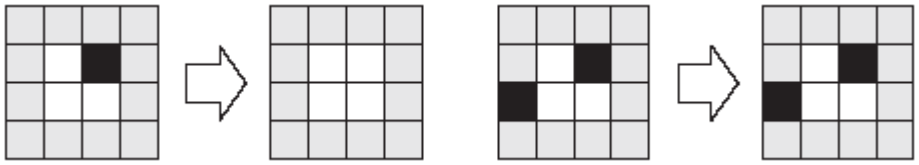
There are seven Noise Reduction settings:

- OFF
- 1x1
- 2x2
- 3x3
- 4x4
- 5x5
- 6x6

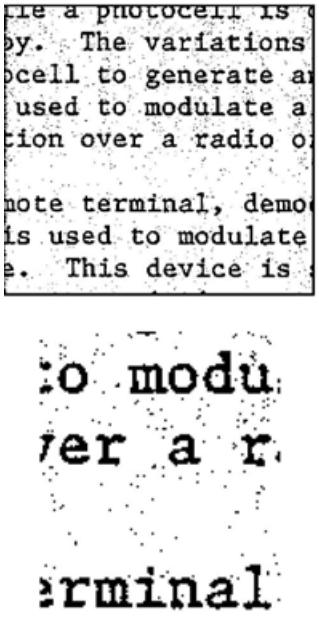
Example: Reducing black noise with the 2x2 matrix setting

If all the squares surrounding the 2x2 pixels are white, the black noise will be cleared.

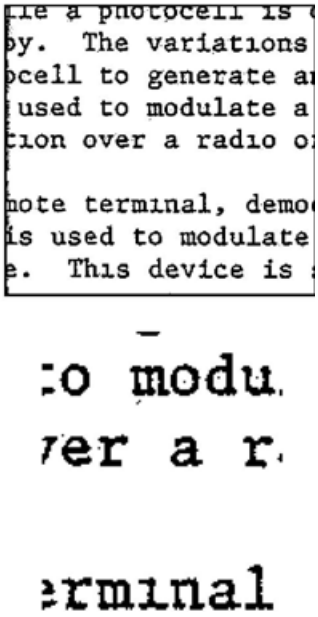
If any of the squares surrounding the 2x2 pixels is black, it will not be cleared.

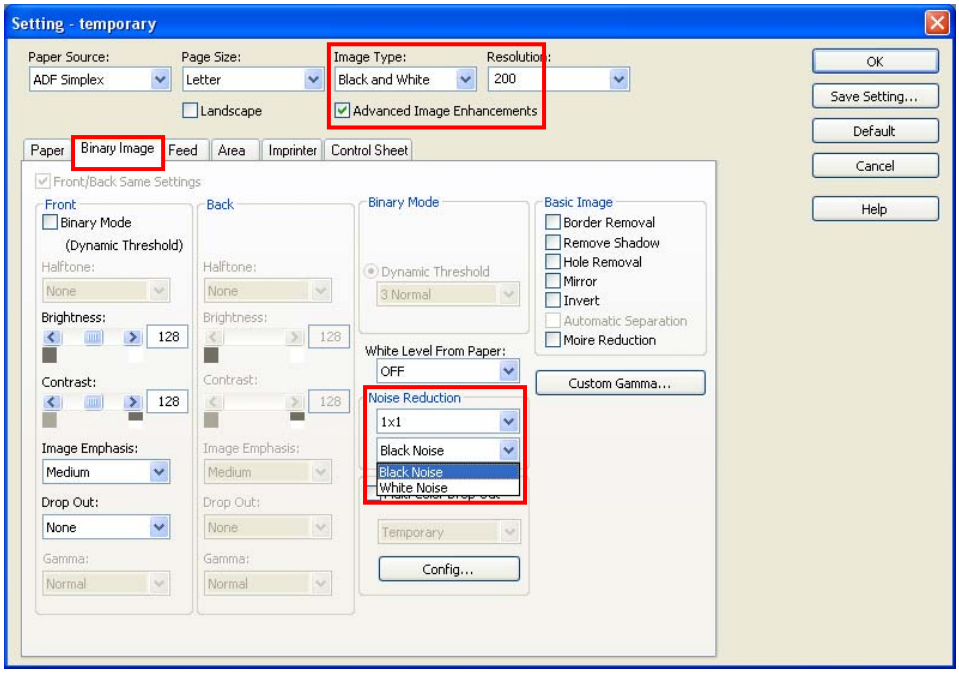


Noise Reduction at None setting



Noise Reduction at 4x4 matrix setting





Operation

1. In the [Image Type] list box, select [Black and White], [Binary&Gray], [Binary&Color], or [Automatic].
2. Set the [Advanced Image Enhancements] check box to On.
3. Click the [Binary Image] tab.
4. Select the matrix and noise in the [Noise Reduction] list box.

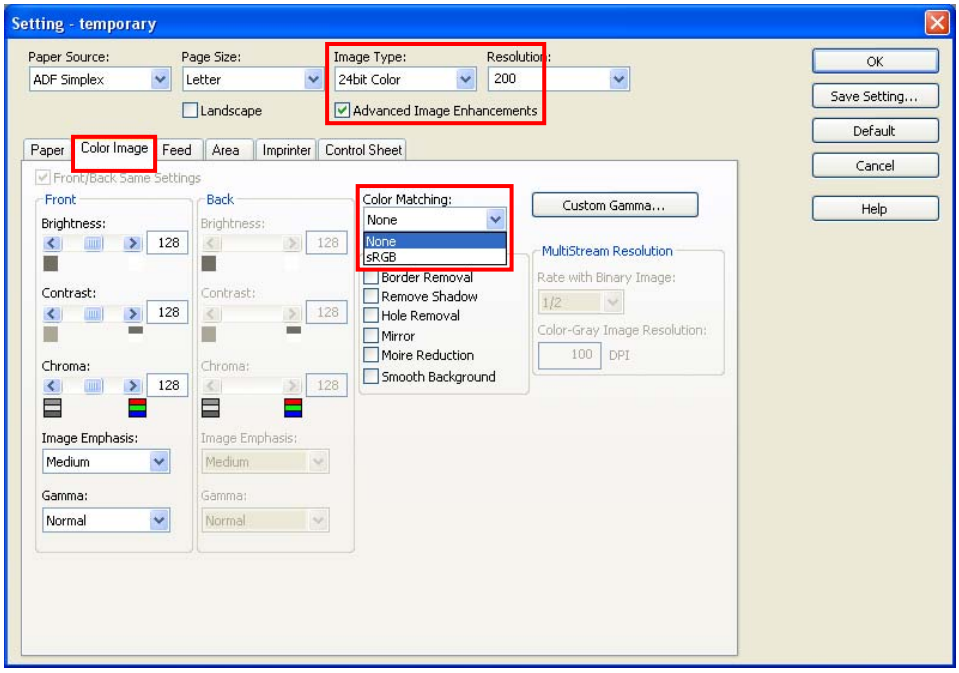
- The larger the matrix, the greater the amount of noise which can be reduced but punctuation marks (such as periods and commas) and other text-related details may also become invisible.
- Noise Reduction can be used only for binary images when the Black and White mode or MultiStream (Binary&Gray or Binary&Color) mode has been selected as the Image Type. It cannot be used at the same time as Halftone or Automatic Separation is used.
- With some scanners, it may not be possible to use the function to reduce white noise.

9.3.17. Color Matching

This function provides color matching with other equipment.

"sRGB" is an international standard for correctly reproducing colors between computer displays, printers and scanners.

When it is specified, the reproduction of the colors between the equipment is improved, but the number of colors which can be reproduced is lowered.



Operation

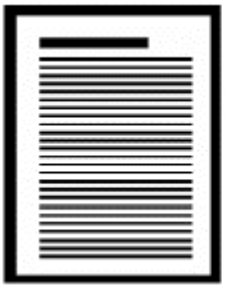
1. In the [Image Type] list box, select [24bit Color], [Binary&Color] or [Automatic].
2. Set the [Advanced Image Enhancements] check box to On.
3. Click the [Color Image] tab.
4. Make a selection in the [Color Matching] list box.

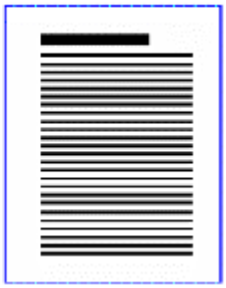
- When [sRGB] has been specified, it is not possible to specify Gamma or set Chroma.
- This function is valid only for color images in the Color mode or MultiStream mode.
- This function cannot be used with some scanners.

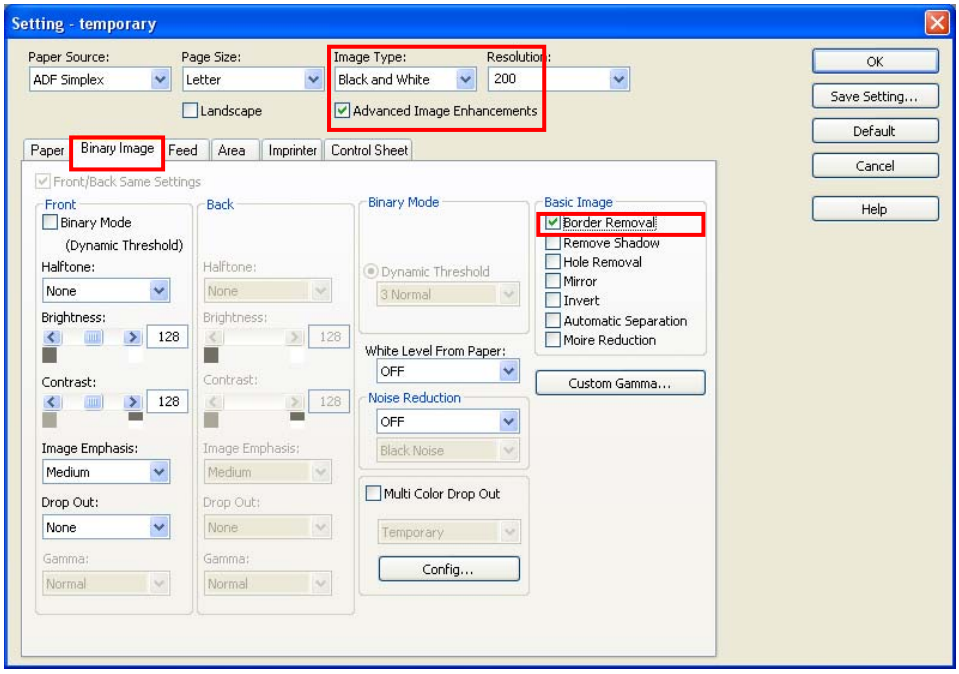
9.3.18. Border Removal

This function removes the black borders, formed during scanning or copying, from around the images.

Before Border Removal **After Border Removal**







Operation

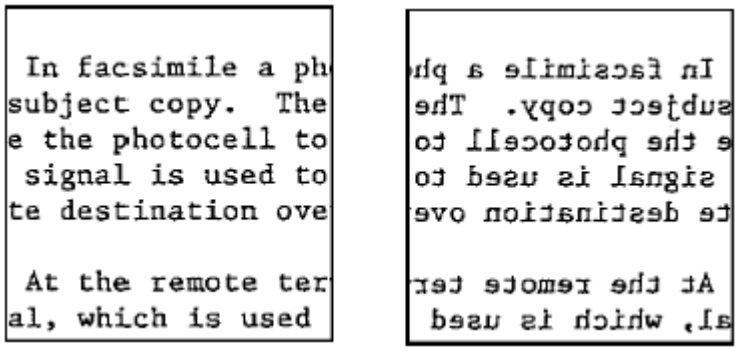
1. In the [Image Type] list box, select [Black and White], [16 level gray], [256 level gray], [24bit Color], [Binary&Gray], [Binary&Color], or [Automatic].
2. Set the [Advanced Image Enhancements] check box to On.
3. Click the [Binary Image], [Gray Image], or [Color Image] tab.
4. Set the [Border Removal] check box to On.

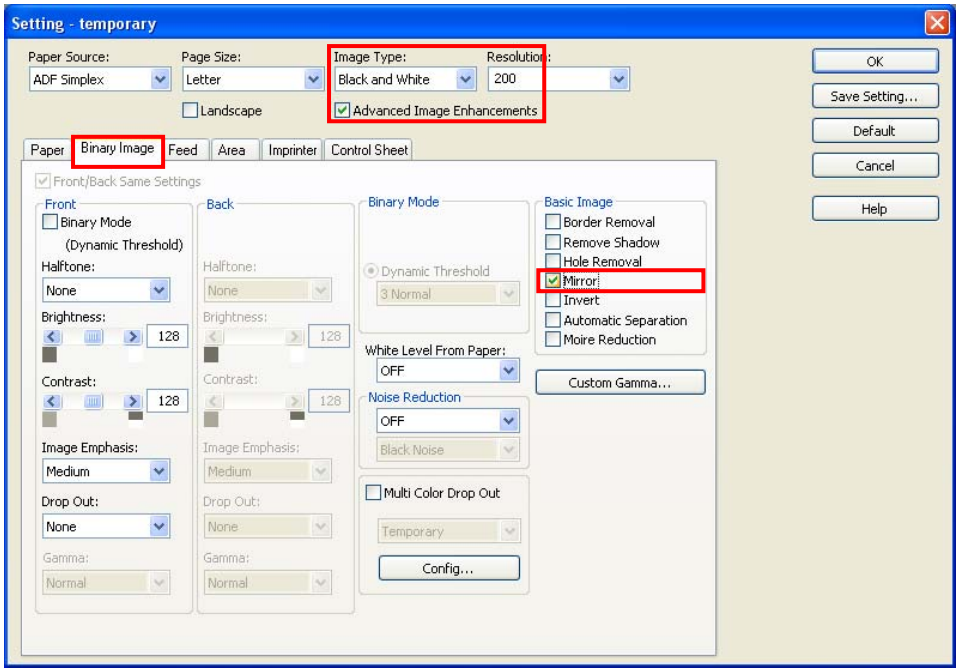
- Set the reference plate/roller and/or flatbed sheet to black when using the Border Removal function. For more details on the reference plate/roller and/or flatbed sheet, refer to the following section in the instruction manuals of the scanner.
  KV-S7075C, KV-S7065C, KV-S3105C, KV-S3085, KV-S3065CW, KV-S3065CL
  - Changing the Reference Plate Setting
  KV-S4085CW, KV-S4085CL, KV-S4065CW, KV-S4065CL
  - Changing the Scan Background Color
- Depending on the images to be scanned, the function may not work satisfactorily.
- If there are dark areas at the periphery of a document, these areas may be removed as well.
- The function may not work properly if there is any foreign matter on the reference plate/roller and/or flatbed sheet when documents are scanned by the scanner. In a case like this, clean the reference plate/roller and/or flatbed sheet.
- This function cannot be used with some scanners.

9.3.19. Mirror

This function produces a mirror image with the left of the scanned image appearing on the right and vice versa.

Original document **Mirror image**





Operation

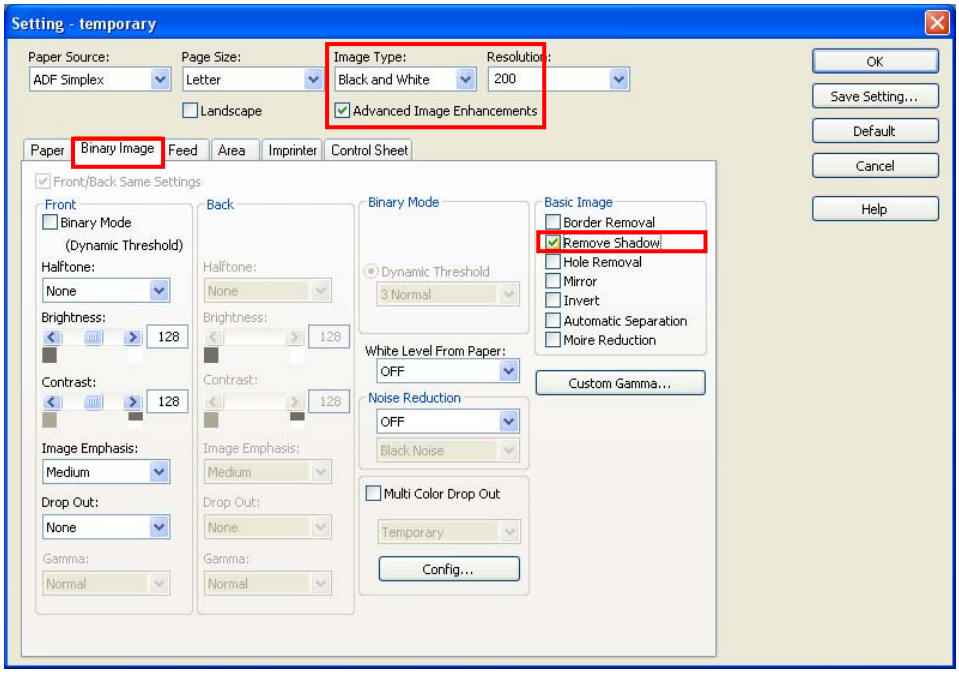
1. In the [Image Type] list box, select [Black and White], [16 level gray], [256 level gray], [24bit Color], [Binary&Gray], [Binary&Color], or [Automatic].
2. Set the [Advanced Image Enhancements] check box to On.
3. Click the [Binary Image], [Gray Image], or [Color Image] tab.
4. Set the [Mirror] check box to On.

- This function cannot be used with some scanners.

9.3.20. Remove Shadow

This function removes the shadows cast by the paper itself at its top and bottom edges.

When it is used, about 3 mm at the top, bottom, left, and right edges of the paper are forcibly turned white.



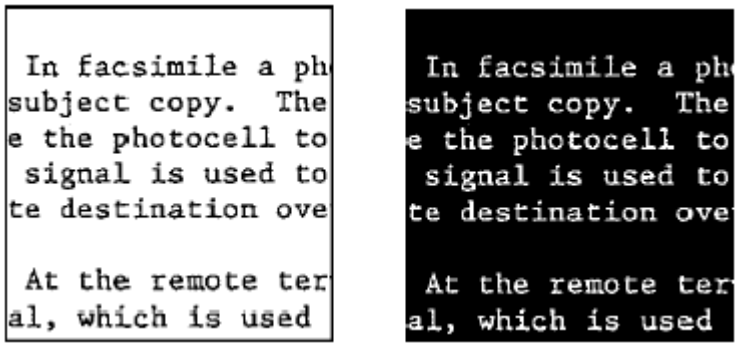
Operation

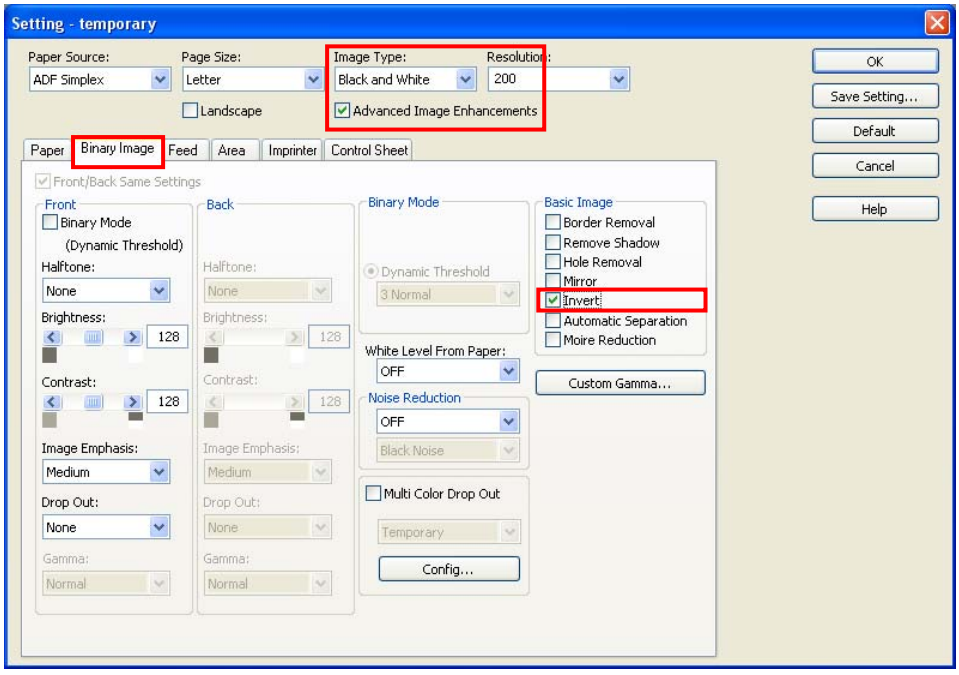
1. In the [Image Type] list box, select [Black and White], [16 level gray], [256 level gray], [24bit Color], [Binary&Gray], [Binary&Color], or [Automatic].
2. Set the [Advanced Image Enhancements] check box to on.
3. Click the [Binary Image] or [Gray Image] tab.
4. Set the [Remove Shadow] check box to On.

9.3.21. Invert

This function inverts the white and black of the scanned images.

Original document **Invert**





Operation

1. In the [Image Type] list box, select [Black and White], [Binary&Gray], [Binary&Color], or [Automatic].
2. Set the [Advanced Image Enhancements] check box to On.
3. Click the [Binary Image] tab.
4. Set the [Invert] check box to On.

- This function cannot be used with some scanners.
- It takes effect only for Binary Images and Binary mode in the MultiStream mode.

9.3.22. Automatic Separation

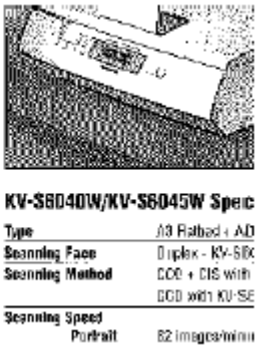
This function enables the scanner to automatically differentiate between text areas and photo areas, and scan them accordingly.

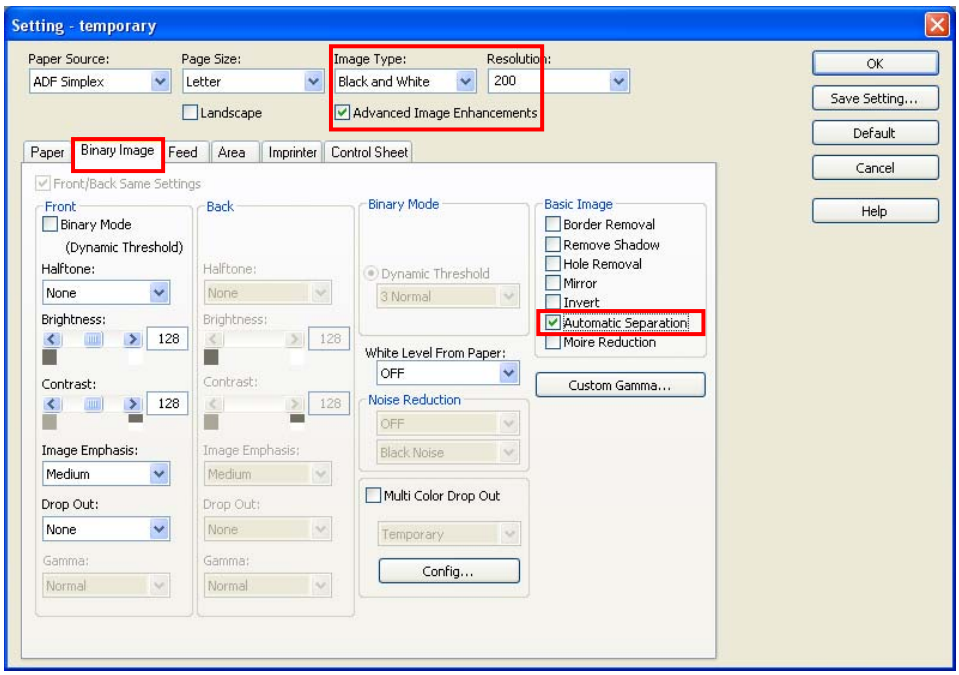
Text areas are scanned in the binary mode whereas photo areas are scanned using the dither pattern specified in Halftone.

Original document

Error Diffusion

Automatic Separation On





Operation

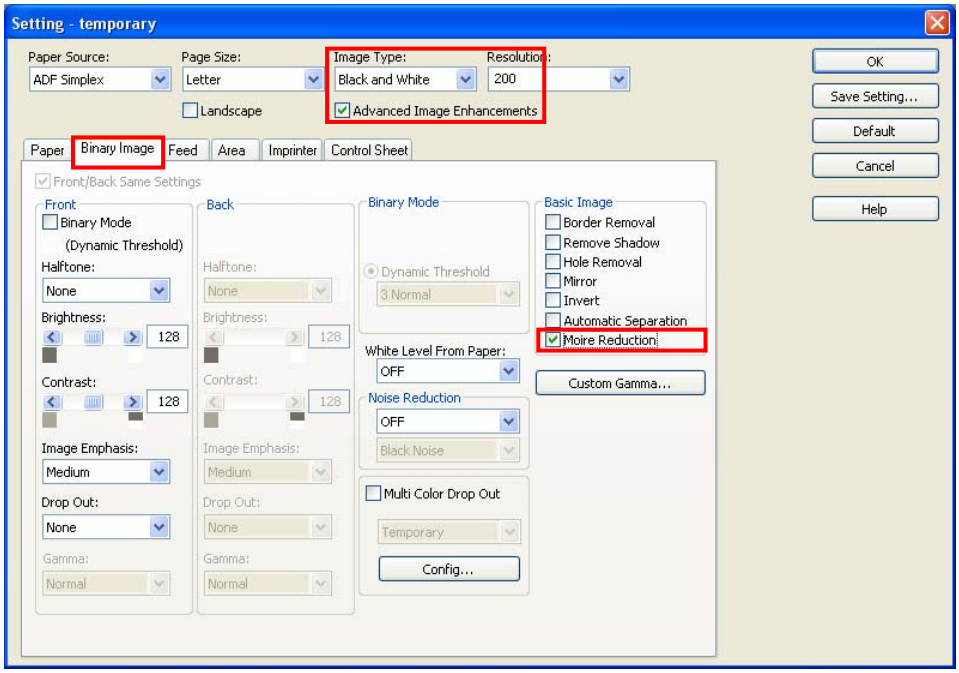
1. In the [Image Type] list box, select [Black and White].
2. Set the [Advanced Image Enhancements] check box to On.
3. Click the [Binary Image] tab.
4. In the [Halftone] list box, select the pattern for the photo area.
5. Set the [Automatic Separation] check box to On.

- When both sides of documents sheets are to be scanned, both sides are processed at the same time. If the None setting has been selected for Halftone, Error Diffusion is selected automatically.
- Depending on the scanner model concerned, the Halftone setting is ignored, and [Error Diffusion] is selected.
- The Automatic Separation function is valid only in the binary mode. It cannot be used at the same time as Noise Reduction, Sub Area, Dynamic Threshold, Automatic Crop, Deskew, Automatic mode or MultiStream mode.
- With some documents, it may not be possible to separate the text and photos completely. To continuously scan documents whose photo areas are invariably positioned in the same places, use the sub area function described in **9.5.2. Specifying the Sub Area** for better results.

9.3.23. Moire Reduction

When magazines and other printed matter or documents printed in color using a printer are scanned, moire (a wavy effect produced by superimposing different geometric patterns) sometimes appears in the images.

Setting the Moire Reduction function to On reduces the moire effect.



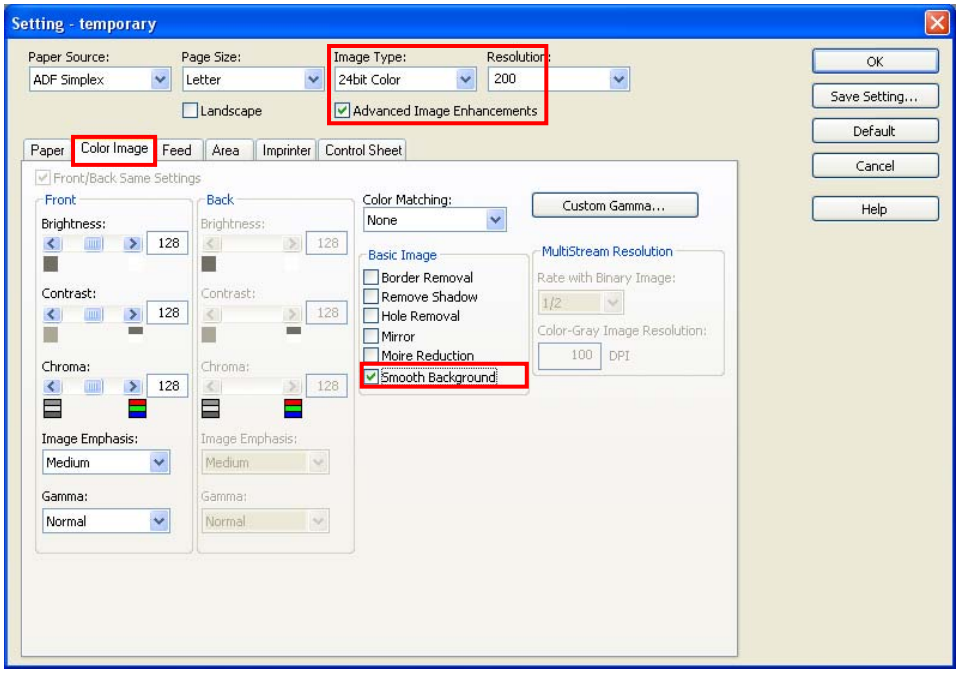
Operation

1. In the [Image Type] list box, select [Black and White], [256 level gray], [24bit Color], or [Automatic].
2. Set the [Advanced Image Enhancements] check box to On.
3. Click the [Binary Image], [Gray Image], or [Color Image] tab.
4. Set the [Moire Reduction] check box to On.

- This function cannot be used with some scanners.
- The scanning speed decreases when the Moire Reduction function is selected.
- The Moire Reduction function cannot be used in the MultiStream (Binary&Gray or Binary&Color) mode.
- This function may not work properly when documents are scanned by the scanner if the scanning resolution exceeds 300 dpi and the document length is longer than 1270 mm (50 inches).
  (KV-S7065C, KV-S3065CW, and KV-S3065CL only)
- This function may not work properly when documents are scanned by the scanner if the scanning resolution exceeds 300 dpi.
  (KV-S3105C and KV-S3085 only)

9.3.24. Smooth Background

This function detects the background color of documents when scanning and increases image compression rate by using it as the reference.



Operation

1. In the [Image Type] list box, select [24bit Color], [Automatic], or [Binary&Color].
2. Set the [Advanced Image Enhancements] check box to On.
3. Click the [Color Image] tab.
4. Set the [Smooth Background] check box to On.

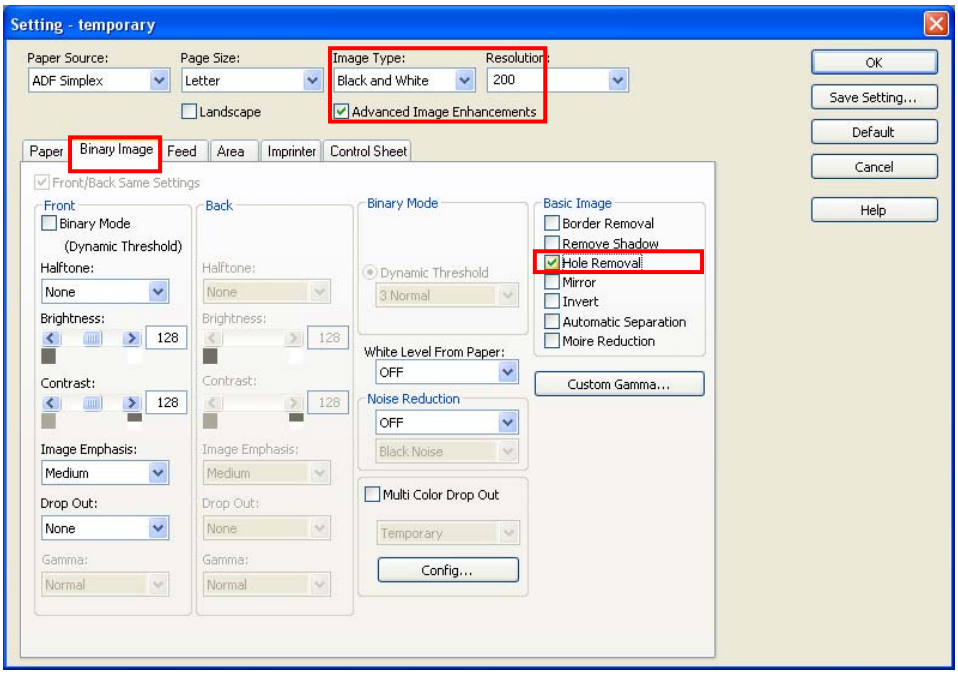
9.3.25. Hole Removal

This function removes the punch hole marks from the scanned image. Round or square black shapes around the edges are replaced with a color closest to the document. It may also removes patterns which resemble punched holes.

This feature detects hole punch artifacts that are between 1 to 25.4 mm from each edge of the scanned document.

Rectangular and round artifacts that are between 4 to 12 mm wide can be detected.

Before Hole Removal **After Hole Removal**

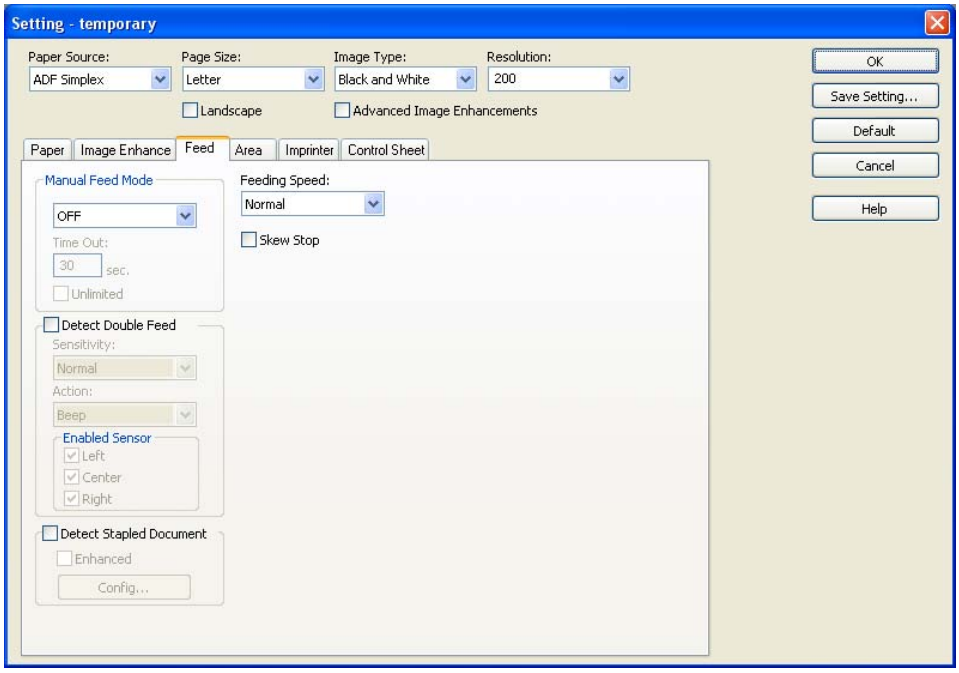


Operation

1. In the [Image Type] list box, select [Black and White], [16 level gray], [256 level gray], [24bit Color], [Binary&Gray], [Binary&Color], or [Automatic].
2. Set the [Advanced Image Enhancements] check box to on.
3. Click the [Binary Image], [Gray Image], or [Color Image] tab.
4. Set the [Hole Removal] check box to On.

- Set the reference plate and flatbed sheet to black when using the Hole Removal function.
  Refer to the following section in the instruction manuals of the scanner.
  KV-S7075C, KV-S7065C, KV-S3105C, KV-S3085, KV-S3065CW, KV-S3065CL
  - Changing the Reference Plate Setting
  KV-S4085CW, KV-S4085CL, KV-S4065CW, KV-S4065CL
  - Changing the Scan Background Color
- The Hole Removal function may not work properly when the punch holes are made on top of texts or pictures.
- If holes are made in an area of the scanned document containing a straight line, the artefacts of the hole are removed and the line is reconstructed.
  If a line is close to the edge of a hole or intersects with text or pictures, the artifacts of the hole may not be detected or removed.

9.4. Paper Feed



(KV-S4085CW)

Manual Feed Mode	When the Manual Feed Mode is used, every time one sheet has been scanned, the next sheet can be scanned without instructing the scanner to scan it.
Detect Double Feed	This function detects the feeding of more than one sheet of the document at a time.
Detect Stapled Document	This function stops the scanning when documents are stapled together.
Feeding Speed	This function enables the feeding speed at which documents are scanned to be changed.
Skew Stop	This function stops the scanning when the paper fed by ADF is significantly skewed.

9.4.1. Manual Feed Mode

When the Manual Feed Mode is used, every time one sheet has been scanned, the next sheet can be scanned without instructing the scanner to scan it.

[ON]

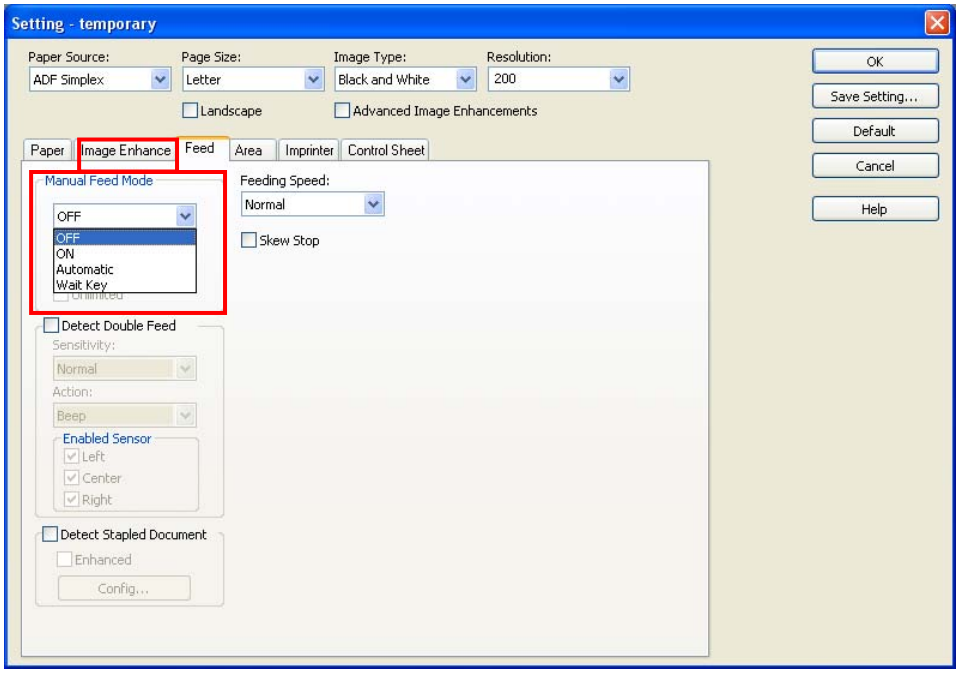
The sheets are inserted manually one sheet at a time. In this mode, scanning starts when a sheet is inserted.

[Automatic]

In this mode, scanning starts automatically when the sheets are inserted.

[Wait Key]

In this mode, scanning starts when the sheets are inserted and the Start/Stop key on the scanner's operation panel is pressed.



(KV-S4085CW)

Operation

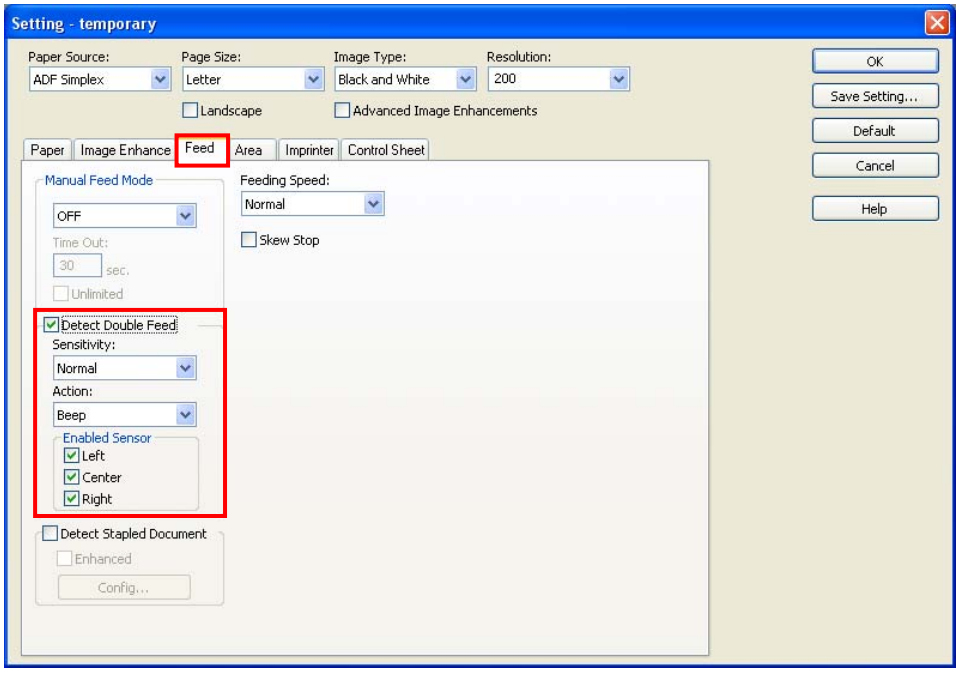
1. Click the [Feed] tab.
2. Select the mode in the [Manual Feed Mode] list box.
3. In the [Time Out] edit box, input the time allowed to elapse after no sheets have been inserted before the processing is aborted.

- Depending on the scanner used, [Manual Feed Mode] may not be supported.
- KV-S2048C, KV-S2028C, KV-S2046C, KV-S2026C, KV-S1025C, KV-S1020C do not support the [ON] mode.
- The [Unlimited] check box is enabled only when the [Manual Feed Mode] is [Wait Key] or [Automatic].
- If the [Unlimited] check box is set to On, the waiting time is set to unlimited.
- The [Unlimited] function cannot be used with some scanners.
- If the scanning method is set to [Automatic Simplex] or [Automatic Duplex], Manual Feed Mode will operate as [Wait Key], regardless of whether you have selected [ON], [Wait Key], or [Automatic].

9.4.2. Detect Double Feed

This function detects the feeding of more than one sheet of the document at a time.

This function sends ultrasonic waves to the document so as to detect double feed by the level at which the waves pass through the sheets. It can detect double feed even when sheets are superimposed exactly on top of each other, but it may not detect it properly with some paper thicknesses and when creasing and other factors are present.



(KV-S4085CW)

Operation

1. Click the [Feed] tab.

2. Select the [Detect Double Feed] check box.

3. Select the detection sensitivity in the [Sensitivity] list box.

If the Detect Double Feed function operates incorrectly, adjust the sensitivity level by selecting one of the levels in the [Sensitivity] list box.

[High] Select this when double feed cannot be detected even when more than one sheet was fed at a time.

[Low] Select this when double feed is detected even when only one sheet was fed at a time.

4. In the [Action] list box, select the operation to be performed in the event that double feed has been detected.

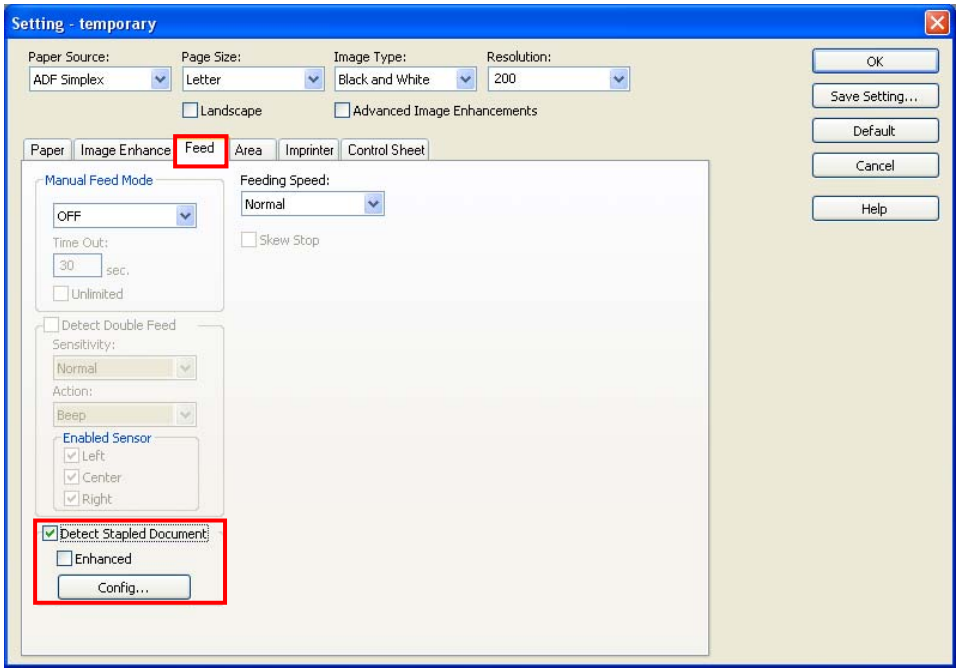
Either [Beep] or [Stop Scanning] can be selected when double feed is to be detected.

- Depending on the scanner used, [Detect Double Feed] may not be supported. Also, the sensitivity, action, and enabled sensor settings may differ.
- KV-S4085CW and KV-S4085CL can specify the sensor position that is used for double feed detection under [Enabled Sensor].
- KV-S2046C, KV-S2026C, KV-S1025C, and KV-S1020C detect double feed by the paper length. Double feed is identified if the length of the paper being fed is longer than the selected Page Size setting.

  Consequently, the Sensitivity is not set. Also, in the event that double feed has been detected, the only action performed is to stop the scanning.
- When important documents are to be scanned, check the number of document pages and the number of scanned image pages.
- When scanning a document containing paper in different sizes, double feed can be detected when this function is left at On.
- Labels, Stickers or Tape may cause a false "Detect Double Feed".
- This function is valid only when the document length is less than 14 inches (355.6 mm). (KV-S1025C and KV-S1020C only)
- This function is valid only when the document length is less than 25 inches (635 mm). (KV-S2046C and KV-S2026C only)
- This function cannot be used at the same time as Detect Stapled Document.

9.4.3. Detect Stapled Document

This function stops the scanning when documents are stapled together.



(KV-S4085CW)

Operation

1. Click the [Feed] tab.
2. Select the [Detect Stapled Document] check box.
3. In the Enhanced Scanning settings, select the [Enhanced] check box.
   On: This setting will detect documents that are skewed, doubly fed, or bent.
   Off: This setting will detect documents that are doubly fed, or bent.
4. Click the [Config...] button.
   The [Double-feed sensor settings] dialog box appears.
5. Select the double feed detection sensitivity in the [Sensitivity] list box.
   If the Detect Double Feed function operates incorrectly, adjust the sensitivity level by selecting one of the levels in the [Sensitivity] list box.
   [High]
   Select this when double feed cannot be detected even when more than one sheet was fed at a time.
   [Low]
   Select this when double feed is detected even when only one sheet was fed at a time.

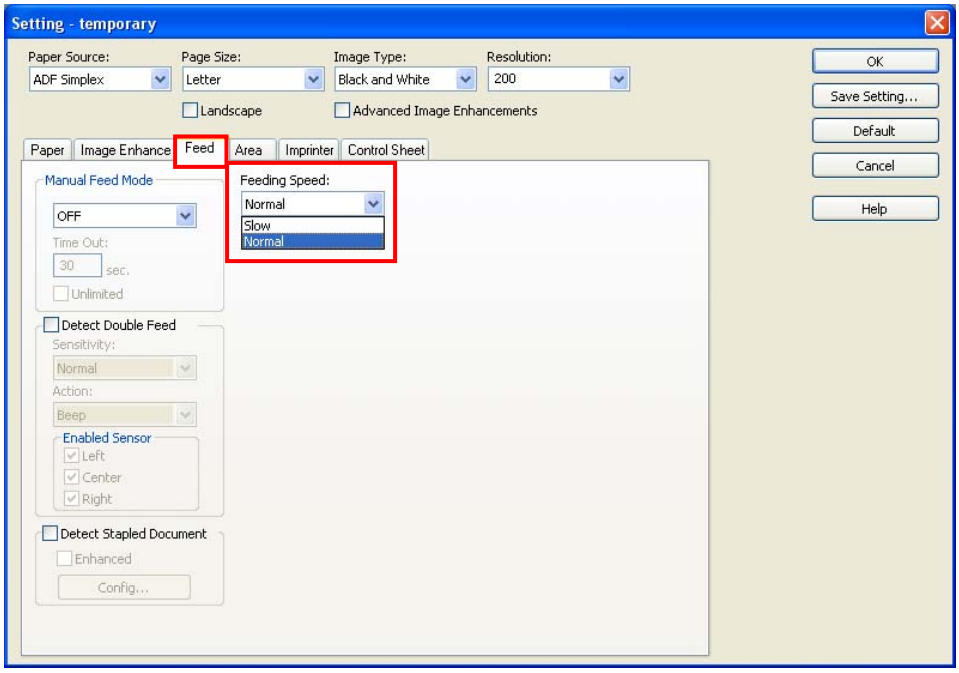
- Depending on the scanner used, [Detect Stapled Document] may not be supported.
  Also, the sensitivity, action, and enabled sensor settings may differ.
- KV-S4085CW and KV-S4085CL can specify the sensor position that is used for double feed detection under [Enabled Sensor].
- This function cannot be used at the same time as Skew Stop or Detect Double Feed.

9.4.4. Feeding Speed

This function enables the feeding speed at which documents are scanned to be changed.

It is set to the slow mode when thin paper, badly creased paper, fragile paper, etc. is to be scanned by ADF.

In the slow mode, documents are fed at about one-half of the normal speed. Depending on the scanner model used, the scanning speed may remain unchanged from the Normal mode even when the Slow mode has been set if a low resolution has been selected.



(KV-S4085CW)

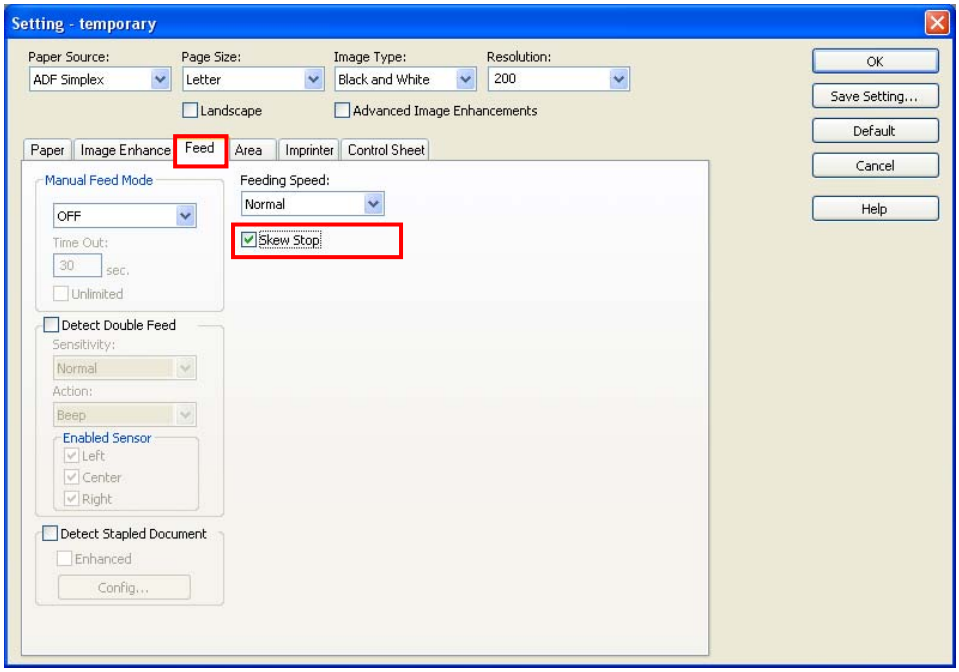
Operation

1. Click the [Feed] tab.
2. Select the scanning speed in the [Feeding Speed] list box.

- It may not be possible to use the Slow mode or Fast mode with some scanners.
- KV-S2048C, KV-S2028C, KV-S2046C, and KV-S2026C do not support the Slow mode, and they support the Fast mode only for color images.
- This function cannot be used with flatbed scanning.

9.4.5. Skew Stop

This function stops the scanning when the paper fed by ADF is significantly skewed.



(KV-S4085CW)

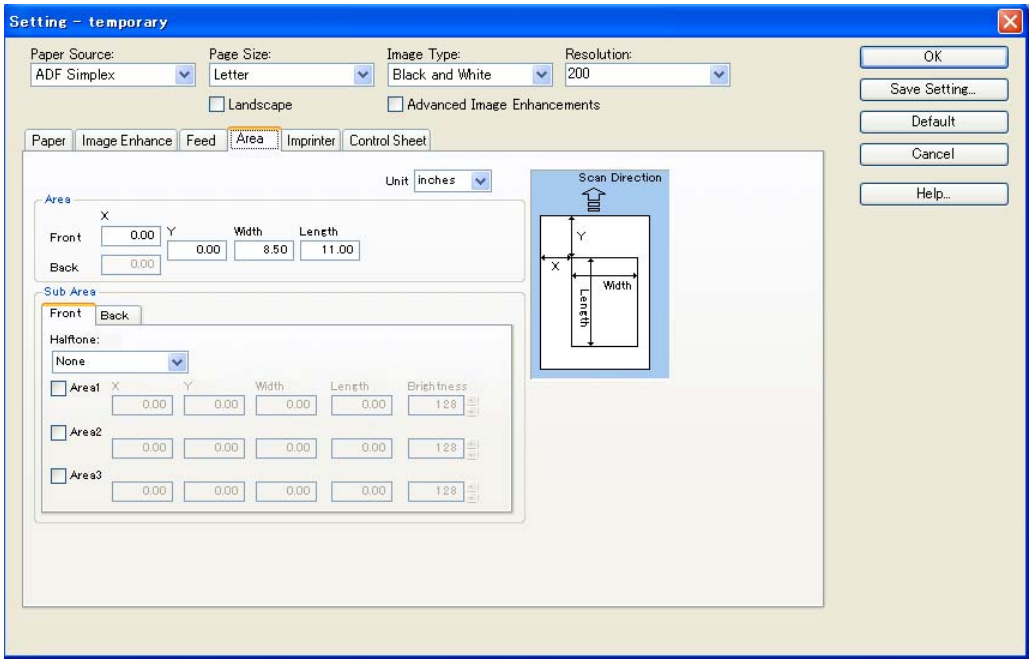
Operation

1. Click the [Feed] tab.
2. Set the [Skew Stop] check box to On.

- This function cannot be used with some scanners.
- The function may not work if the paper width is less than 148 mm (5.8 inches).
- When Skew Stop has been activated, open the scanner door, and remove the documents remaining inside.

  Then compare the documents against the actually scanned data, and re-install the documents starting with the appropriate page. Scanning may not have been completed for some of the documents remaining inside the scanner.
- This function cannot be used at the same time as Detect Stapled Document.

9.5. Scanning Area



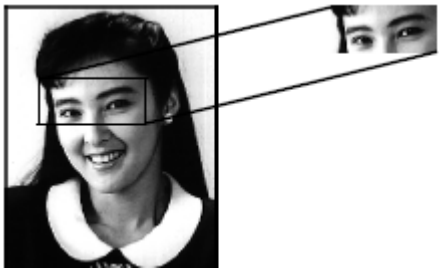
Specifying the area	This function scans parts of documents.
Specifying the Sub Area	This function enables separate scanning conditions to be set in one part of the scanning range.

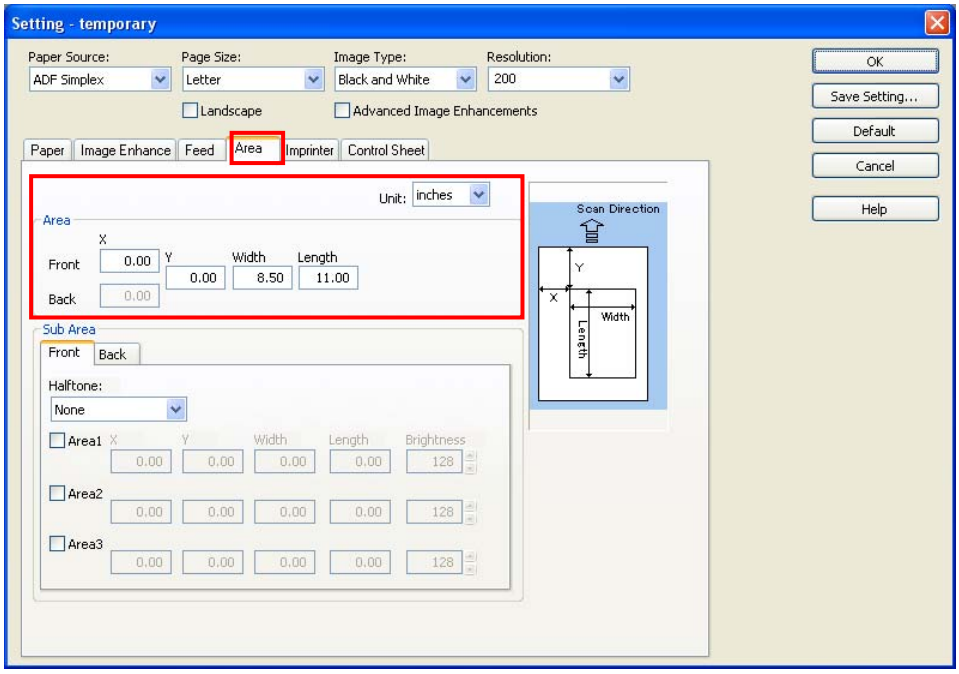
9.5.1. Specifying the area

This function scans parts of documents.

The scanning area is specified by the start position (X: horizontal, Y: vertical) from the top left corner of the paper, and the image width and height (length).

Paper **What is scanned**





Operation

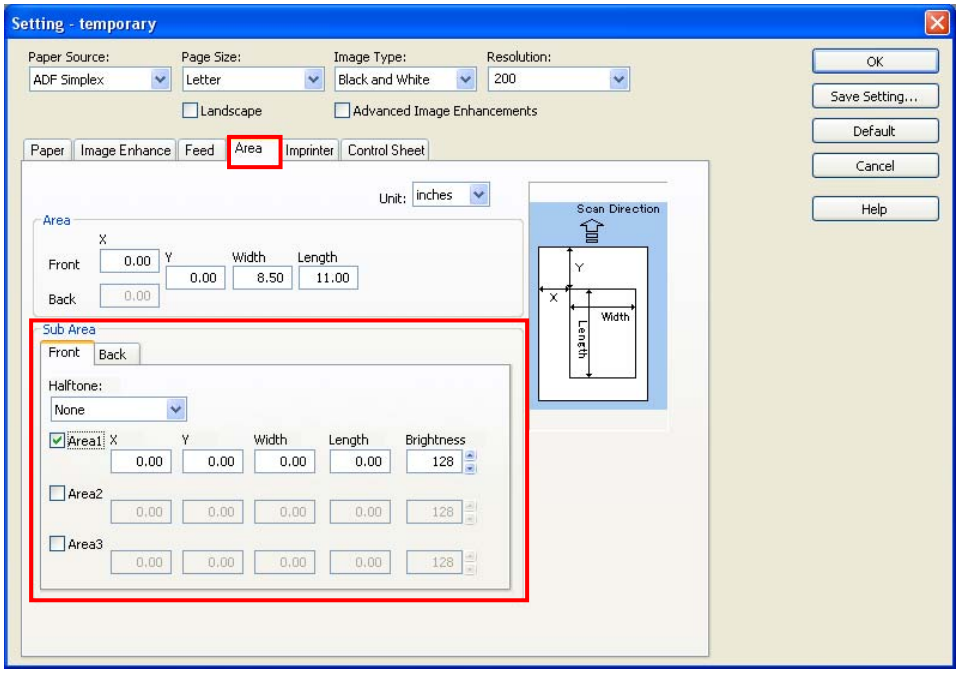
1. Click the [Area] tab.
2. In the [Unit] list box, select the unit used to specify the size. [mm] (millimeters) or [inches] can be specified as the unit.
3. Input values into [X], [Y], [Width], and [Length] edit boxes.
   For [X] and [Y], input the values representing the position of the top left corner of [Area] relative to the position of the top left of the Page Size selected.

- Only [X] can be changed for the scanning area on the back sides of document sheets. The [Y], [Width], and [Length] settings are the same as for the front sides.
- The scanning area function cannot be used at the same time as Detect Paper Width, Automatic Crop, Deskew, Margin, Control Sheet, or Length Control, or 2-Page Separation.
- With duplex scanning, only [X] can be set separately for the front and back sides of the document sheets.
- When the paper size is changed in Page Size, Landscape or Custom Size, the Scanning Area is set to the selected paper size and initialized. When the Scanning Area is to be used, set the paper size ahead of time.

9.5.2. Specifying the Sub Area

This function enables separate scanning conditions to be set in one part of the scanning range. If, for instance, there is a photo in part of a page consisting mainly of text, excellent scanning results can be obtained by specifying the whole page in the Black and White mode and then specifying the photo area as a Halftone (dither) pattern.

Setting a 45deg.Halftone sub area within what is to be scanned in the binary mode

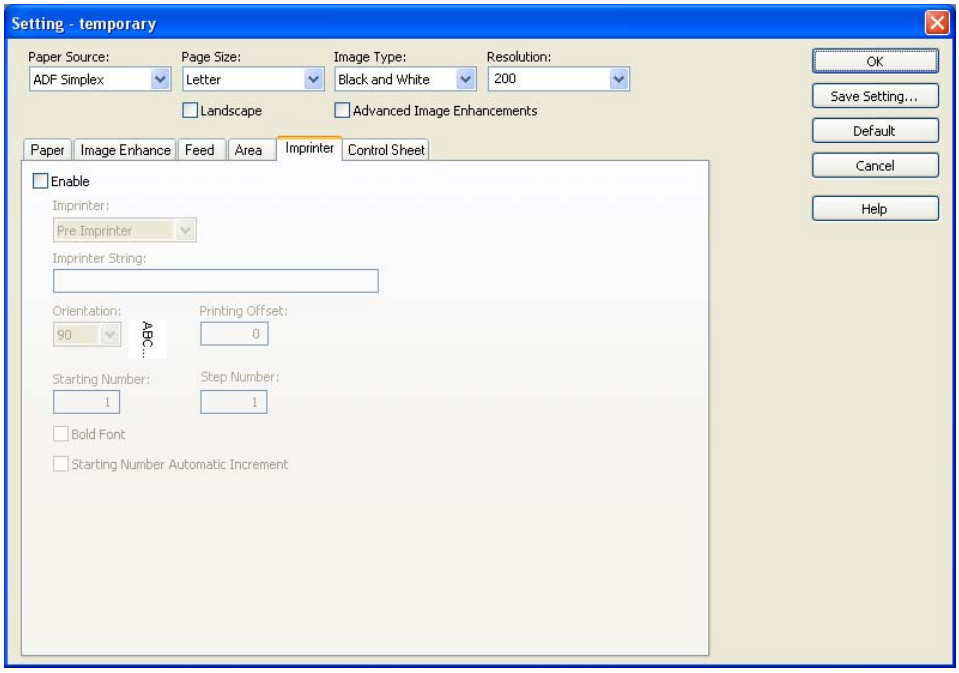


Operation

1. Click the [Area] tab.
2. In the [Unit] list box, select the unit used to specify the size. [mm] (millimeters) or [inches] can be specified as the unit.
3. Click the [Front] or [Back] tab.
4. Select the sub window area mode in the [Halftone] list box.
5. Set the [Area1] check box to On.
6. Input values into the [X], [Y], [Width], [Length], and [Brightness] edit boxes.
   For [X] and [Y], input the values representing the position of the top left corner of [Area1] relative to the position of the top left of the Page Size selected.
7. Repeat the above steps for [Area2] and [Area3].

- Three areas can be specified for each scanning side.
- The sub area function can be used only when the Black and White mode is selected as the Image Type.
- The function cannot be used when Detect Paper Width, Dynamic Threshold, Automatic Separation, Automatic Crop, Deskew, Length Control, Long Paper or Margin is used. (Even if it is set, the setting will be ignored.)
- Only one type of Halftone (dither) pattern can be set.
- When the paper size is changed in Page Size, Landscape or Custom Size, the Sub Area is initialized.
  When the Sub Area is to be used, set the paper size ahead of time.

9.6. Imprinter



Selecting the Imprinter	This function prints on the documents to be scanned.
Imprinter String	The character strings to be printed by the imprinter are specified here.
Orientation	The direction of the characters to be printed is specified here.
Printing Offset	The position where printing is to be started is specified here.
Counter	This is used to specify the initial number and step number of the printing counter.
Bold Font	This function is used to select the type (thickness) of the font used to print the characters by the imprinter.
Starting Number Automatic Increment	This function updates the counter reading (Initial Number) upon completion of scanning to the value when scanning is started + (number of sheets scanned) x Step Number.

9.6.1. Selecting the Imprinter

This function prints on the documents to be scanned.

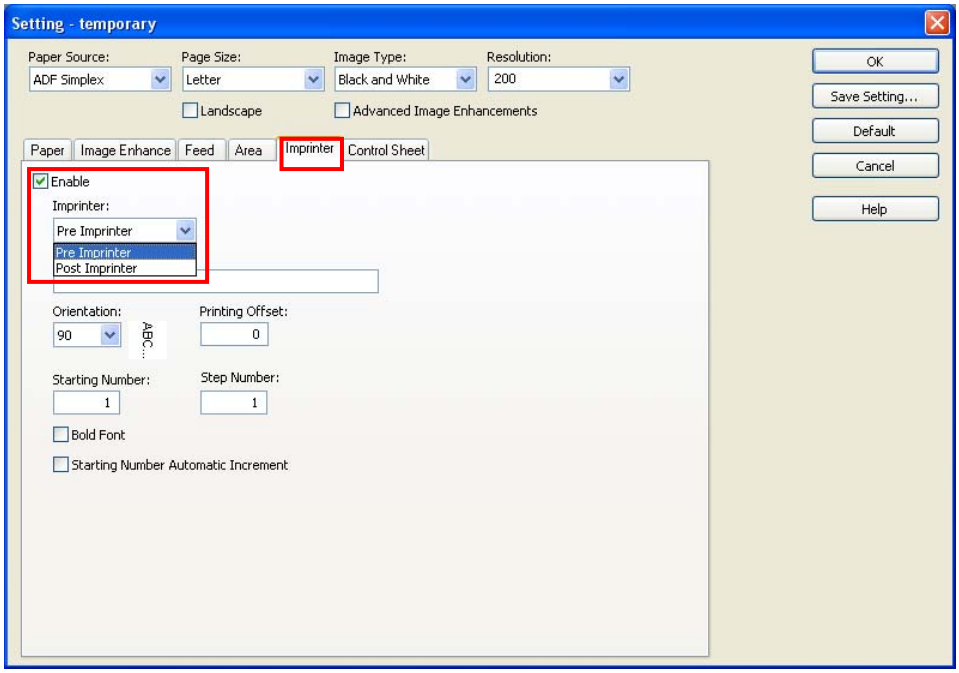
There are two types of imprinter.

[Pre Imprinter]

This type prints on the front sides of document sheets before they are scanned. The printed results are also reflected on the scanned images.

[Post Imprinter]

This type prints on the back sides of document sheets after they are scanned. The printed results are not reflected on the scanned images.



(KV-S4085CW)

Operation

1. Click the [Imprinter] tab.
2. Set the [Enable] check box to On.
3. Select [Pre Imprinter] or [Post Imprinter] in the [Imprinter] list box.

- Imprinter is an optional function. It cannot be used with some scanners.
- Depending on the scanner, Pre Imprinter and Post Imprinter can be incorporated at the same time, but it is not possible to print on both sides simultaneously.
- A Starting Number Automatic Increment function is provided. When this is used, the starting number is increased to the number at the start of scanning + (number of sheets scanned x step number) upon completion of scanning.

9.6.2. Imprinter String

The character strings to be printed by the imprinter are specified here.

Upper- and lower-case letters, numbers and symbols can be printed. Information such as the date, time, and sheet counter can also be printed.

Example:

Counter printing (#)

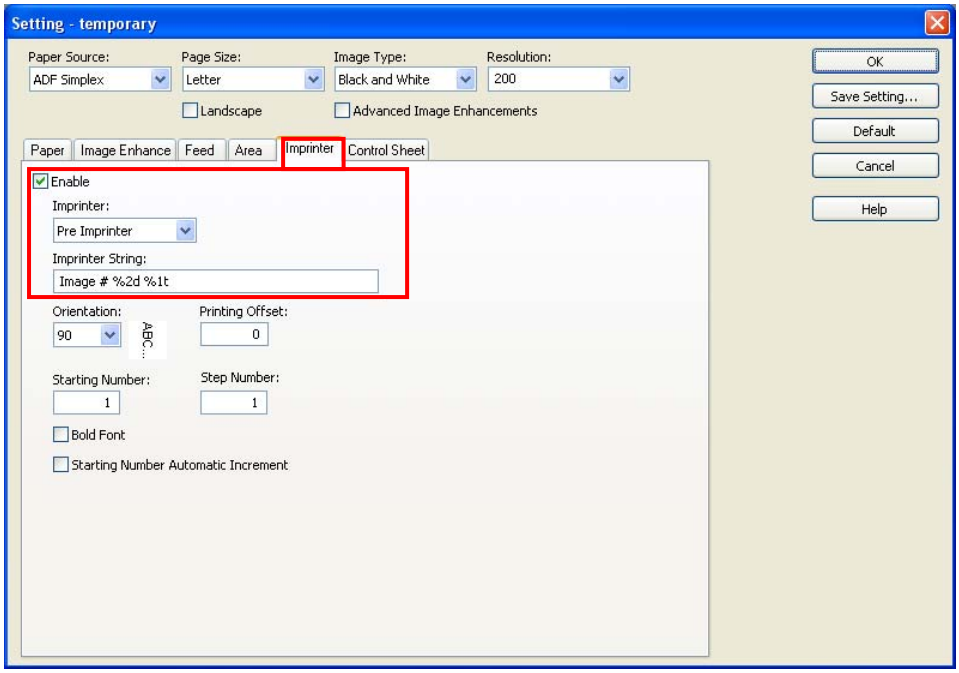
%0#:	0000001
#:	SSSSSS1 (S=space)
%3#:	SS1
%05#:	00001

Date printing (%Xd)

%1d:	YY/MM/DD
%2d:	YYYY/MM/DD
%3d:	MM/DD/YY
	DD month abbreviation, YYYY
%4d:	Example: %4d -> 21 Dec., 1997

Time printing (%Xt)

%1t:	HH:MM
%2t:	HH:MM:SS



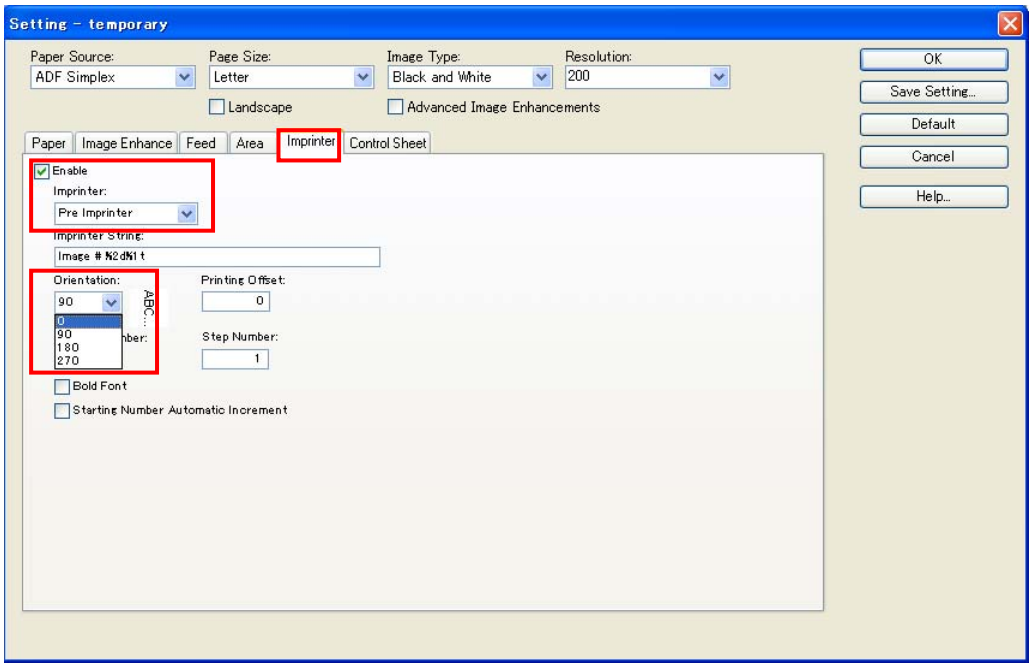
Operation

1. Click the [Imprinter] tab.
2. Set the [Enable] check box to On.
3. Select [Pre Imprinter] or [Post Imprinter] in the [Imprinter] list box.
4. Input the character string to be printed in the [Imprinter String] edit box.

- Imprinter is an optional function. It cannot be used with some scanners.
- Depending on the scanner or imprinter, it may not be possible to specify Rotate, bold characters, Digit, Counter zero fill-in, etc.
- The date and time of the computer connected to the scanner are used.

9.6.3. Orientation

The direction of the characters to be printed is specified here.



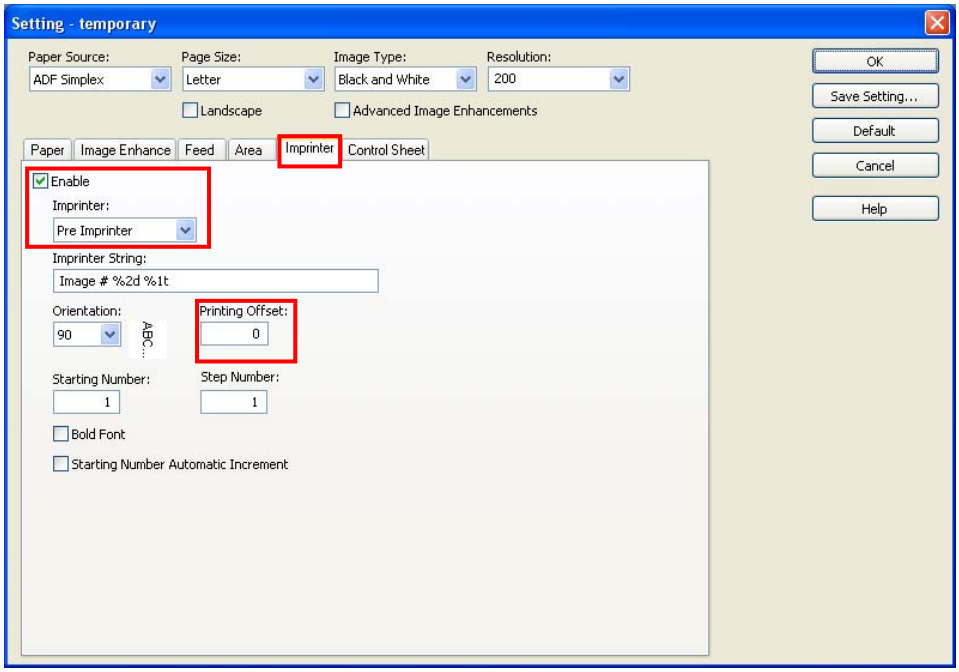
Operation

1. Click the [Imprinter] tab.
2. Set the [Enable] check box to On.
3. Select [Pre Imprinter] or [Post Imprinter] in the [Imprinter] list box.
4. In the [Orientation] list box, select the direction of the characters to be printed.

- Imprinter is an optional function. It cannot be used with some scanners.
- Depending on the scanner or imprinter, it may not be possible to set the Orientation.

9.6.4. Printing Offset

The position where printing is to be started is specified here.



Operation

1. Click the [Imprinter] tab.
2. Set the [Enable] check box to On.
3. Select [Pre Imprinter] or [Post Imprinter] in the [Imprinter] list box.
4. In the [Printing Offset] edit box, input the printing offset from the paper edge.

A 10 mm offset is always added to this value.

KV-S7075C, KV-S7065C, KV-S4085CW, KV-S4085CL, KV-S4065CW, KV-S4065CL, KV-S3105C, KV-S3085, KV-S3065CW, KV-S3065CL, KV-S2048C, KV-S2046C

Unit: 2.38 mm per increment (printing orientation: 90, 270)

(Example) 5: 10 mm + (5 x 2.38 mm) = 21.9 mm

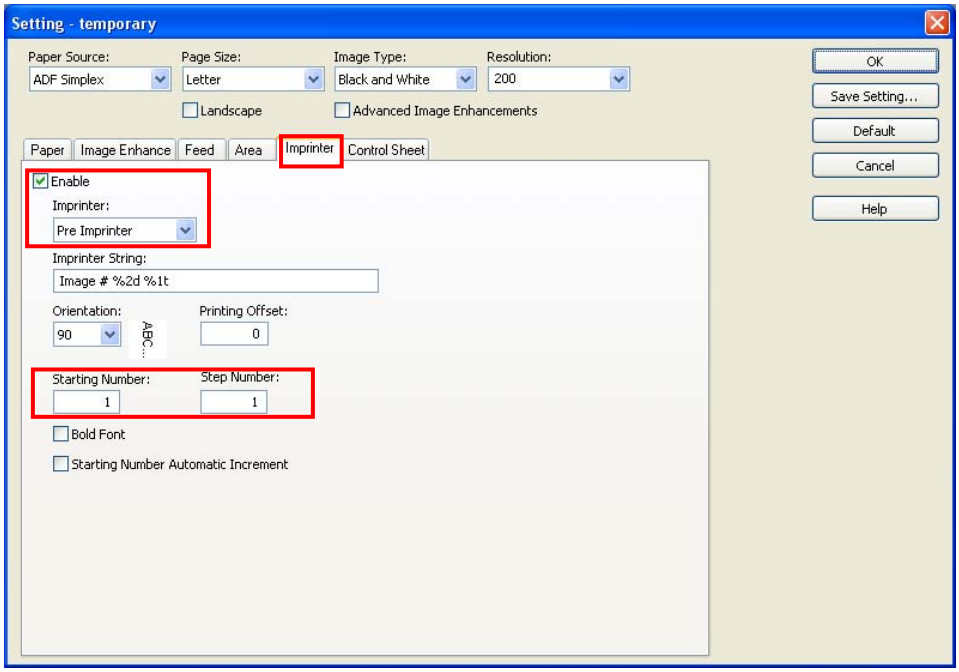
Unit: 3.44 mm per increment (printing orientation: 0, 180)

(Example) 5: 10 mm + (5 x 3.44 mm) = 27.2 mm

- Imprinter is an optional function. It cannot be used with some scanners.

9.6.5. Counter

This is used to specify the initial number and step number of the printing counter.



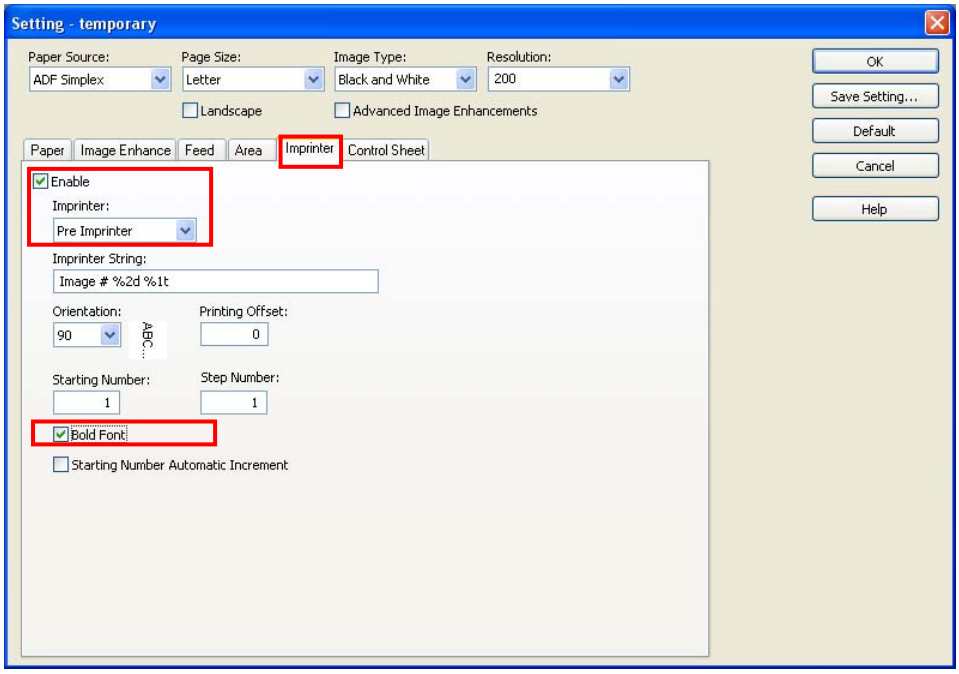
Operation

1. Click the [Imprinter] tab.
2. Set the [Enable] check box to On.
3. Select [Pre Imprinter] or [Post Imprinter] in the [Imprinter] list box.
4. In the [Starting Number] edit box, input the initial number of the counter.
5. In the [Step Number] edit box, set the step number of the counter.

- Imprinter is an optional function. It cannot be used with some scanners.
- Input "#" in Imprinter String to specify the counter (refer to 9.6.2. Imprinter String).

9.6.6. Bold Font

This function is used to select the type (thickness) of the font used to print the characters by the imprinter.



Operation

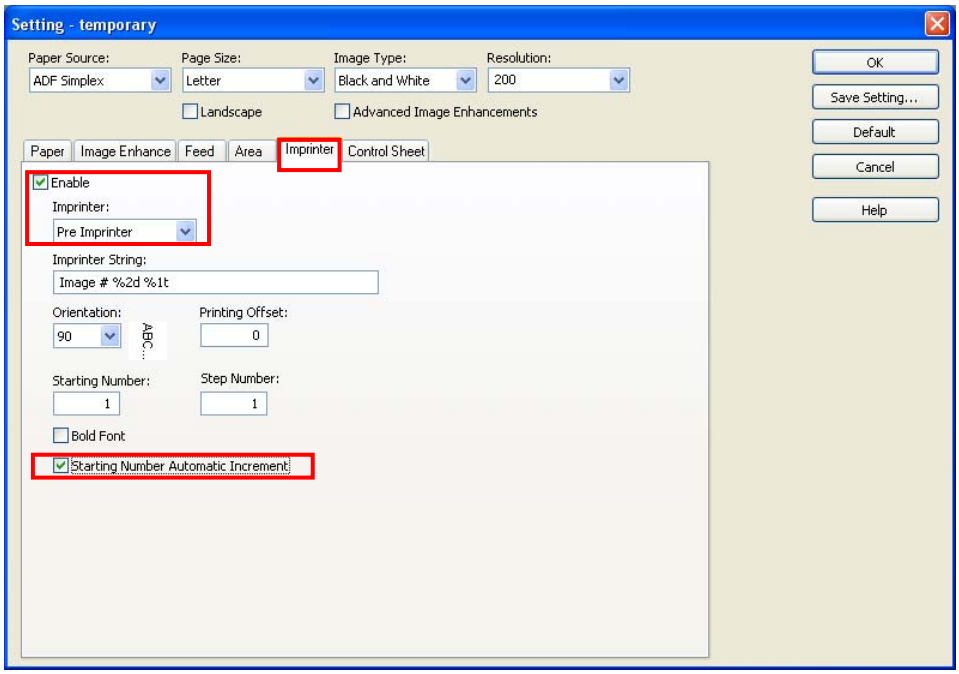
1. Click the [Imprinter] tab.
2. Set the [Enable] check box to On.
3. Select [Pre Imprinter] or [Post Imprinter] in the [Imprinter] list box.
4. Click the [Bold Font] check box, and select the thickness of the characters to be printed.

- Imprinter is an optional function. It cannot be used with some scanners.
- Depending on the scanner or imprinter, it may not be possible to specify the thickness of the characters.

9.6.7. Starting Number Automatic Increment

This function updates the counter reading (Initial Number) upon completion of scanning to the following value:

Value when scanning is started + (number of sheets scanned x step number)

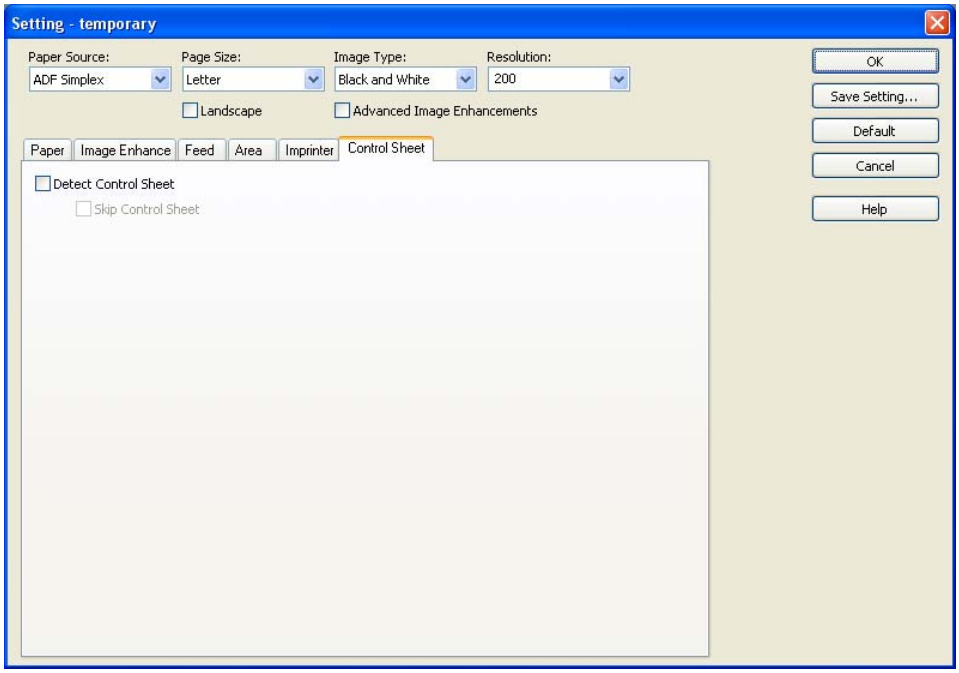


Operation

1. Click the [Imprinter] tab.
2. Set the [Enable] check box to On.
3. Set the [Starting Number Automatic Increment] check box to On.

- Imprinter is an optional function. It cannot be used with some scanners.

9.7. Control Sheets

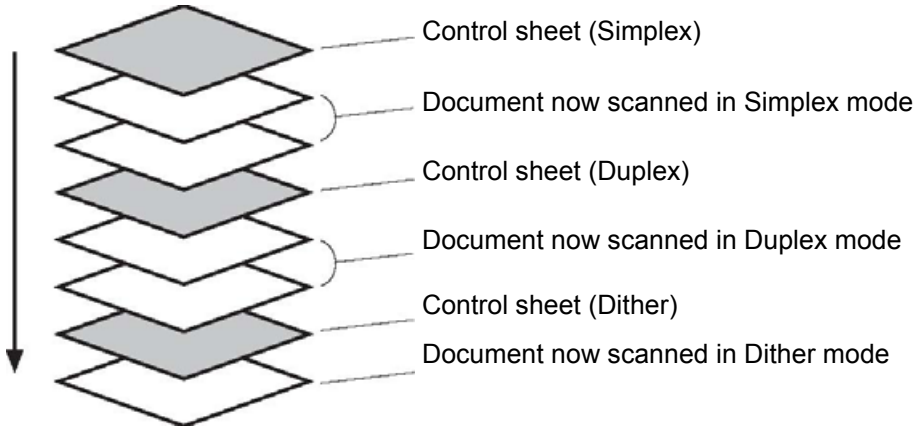


Detect Control Sheet	Use of control sheets enables the scan setting to be changed at any time while scanning is in progress.

9.7.1. Detect Control Sheet

Use of control sheets enables the scan setting to be changed at any time while scanning is in progress.

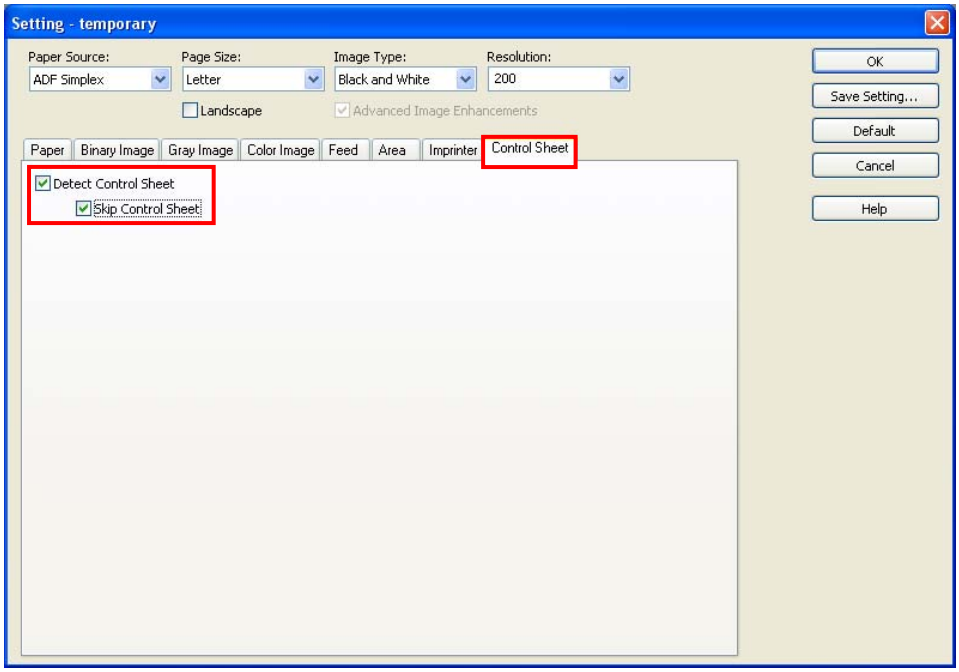
When control sheets are inserted between the sheets of the document to be scanned, the scan setting are changed starting with the document sheet that comes after each control sheet.



Types of control sheets

- Simplex
- Duplex
- Binary
- 256 level Gray
- Color
- Dynamic Threshold
- Dither
- Error Diffusion
- Function #1
- Function #2
- Function #3
- Function #4
- Function #5
- Function #6
- Function #7
- Function #8
- Function #9

- The following types of control sheets are available: Simplex, Duplex, Binary, Dither, Error Diffusion, Dynamic Threshold, 256 level Gray, Color, or user control sheets (Function #1, 2, 3, 4, 5, 6, 7, 8, 9).
- The control sheets are stored as PDF files on the “Drivers & Utilities” CD-ROM provided with the scanner. Insert the CD-ROM into your CD/DVD drive on your computer, select the desiredscanner, then select [Control Sheet]. For use, print the control sheets in the same size as the document pages to be scanned.
- Even when copying control sheets which have been output, do not enlarge or reduce them. It must be ensured that the patterns on the copied sheets have the same size as the original patterns.
- Adjust the brightness of the copier so that the copy patterns will not be fuzzy or blotchy.
- Ensure that the copied barcode pattern is positioned in such a way that its top edge is 25 mm from the top edge of the paper, and that the pattern is midway between the left and right edges.



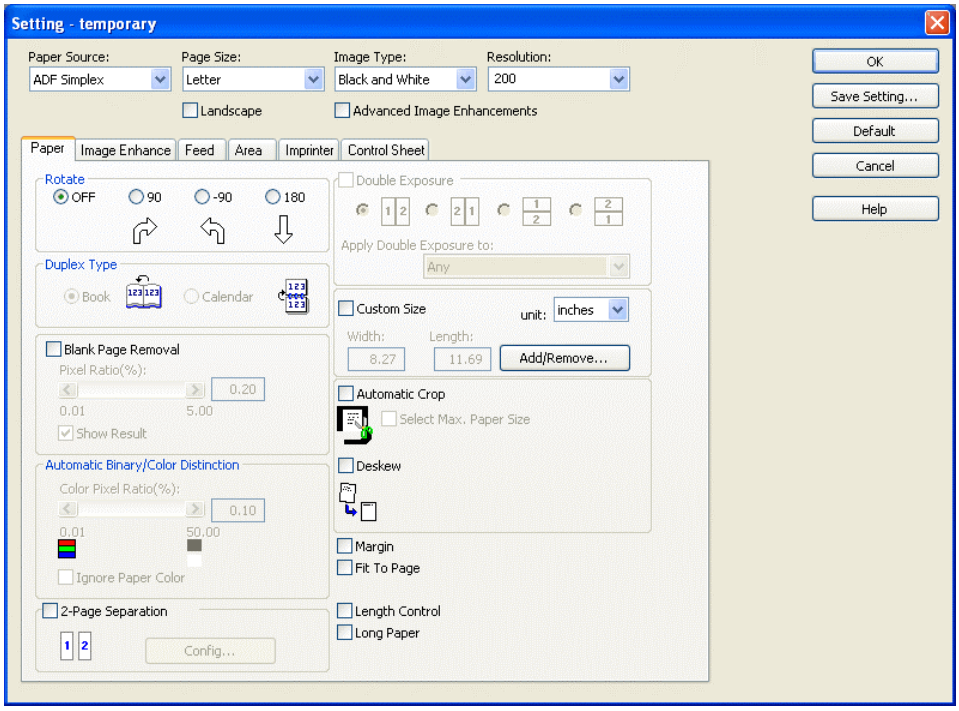
Operation

1. Click the [Control Sheet] tab.
2. Set the [Detect Control Sheet] check box to On.
3. If the images on the control sheets themselves are not to be scanned, set the [Skip Control Sheet] check box to On.

- Depending on the scanner, it may not be possible to use some or all of the control sheets.
- The Detect Control Sheet function cannot be used at the same time as Automatic Crop, Deskew, Margin, MultiStream, Scan Area, Sub Area, Automatic Binary/Color Distinction, Double Exposure or Flatbed.
- When the Detect Control Sheet function is used, the scanning speed decreases.
- The function cannot be used to scan paper in sizes smaller than A6 [105 x 148 mm (4.1 x 5.8 in.)].

10. Saving the scan setting

Names can be given to the scan settings which can then be saved under these names.



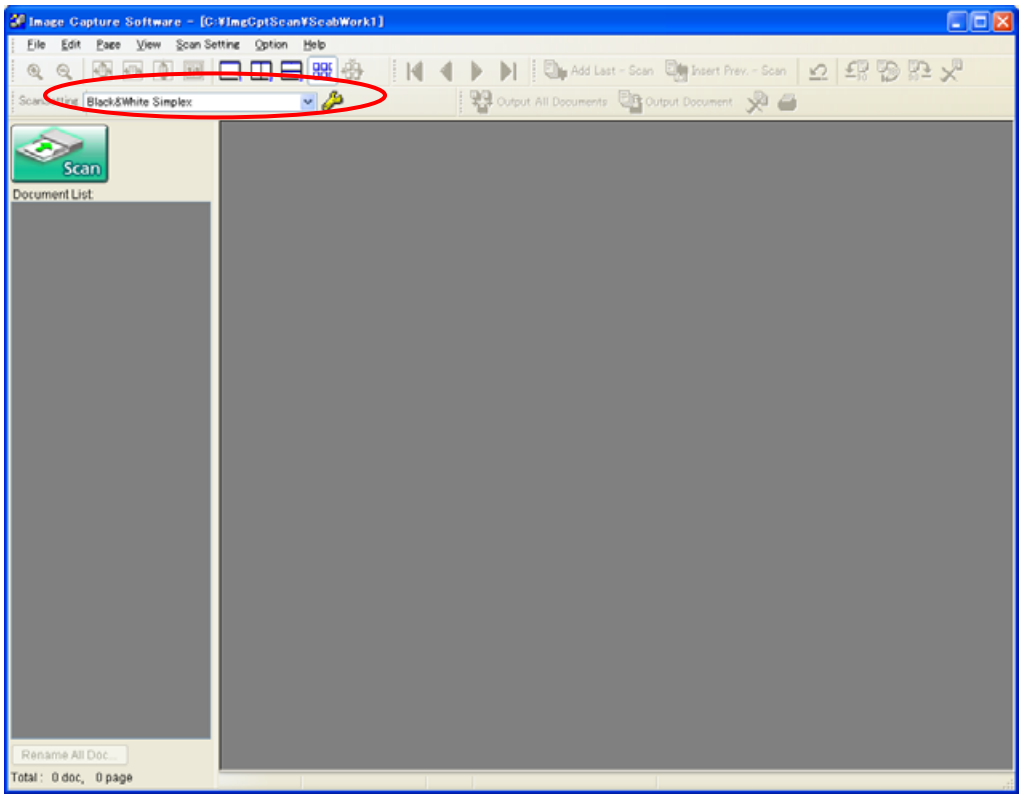
Operation

1. Press the [Save Setting...] button on the Scan Setting window.
2. Give a name to the scan setting which have been set.
3. Press the [OK] button.

- When the [OK] button on the Scan Setting window has been pressed without first specifying a name, the conditions will be saved under the name temporary.
- Up to 50 scan setting can be saved.
- The scan setting is saved even if the application is closed.

11. Selecting the scan setting

The scan setting to be used can be selected from among the ones which have been saved.



Operation

1. Use the mouse to click Scan Setting list  on the scanning toolbar.

2. Click the condition to be selected from the ones displayed on the list.

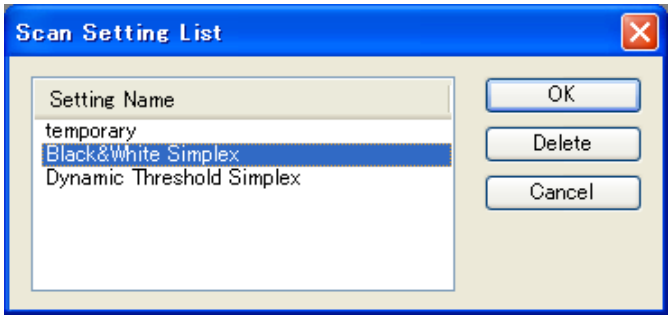
- If another scanner has been connected after the scan settings have been saved, it may not be possible to set some items due to the difference in the functions between the scanners. In a case like this, an error message is displayed when scanning is instructed. Select [Yes] to automatically change the items which cannot be set and execute scanning.

12. Deleting the scan settings

The scan settings which have been set can be deleted.

Operation

1. Select the [Scan Setting List...] from the [Scan] menu.



2. Click the condition to be deleted from the ones displayed on the list.
3. Press the [Delete] button, and click [OK].
4. Click [OK].

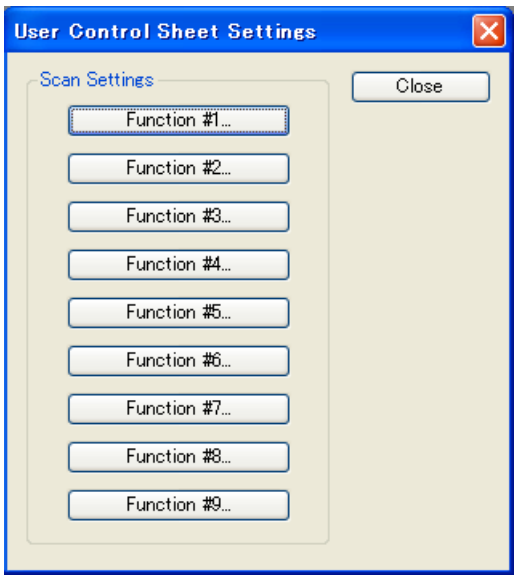
13. Scanning using the user control sheets

If Detect Control Sheet has been set in [Scan Setting] and the scanner has detected one of the user control sheets (Function #1, 2, 3, 4, 5, 6, 7, 8, 9), the scanning conditions after the control sheet are automatically changed to the scanning conditions which were set ahead of time by the user.

The definitions of the scanning conditions for the user control sheets (Function #1, 2, 3, 4, 5, 6, 7, 8, 9) can be set by taking the following step.

Operation

1. Select [User Control Sheet Setting...] on the [Scan] menu.
The [Use Control Sheet Setting] dialog box is now displayed.



2. Press the [Function #1...] button you want to define the scanning settings.
The scanning setting dialog box is displayed.

3. Click the [OK] button after setting the scanning conditions.

4. Repeat the above steps for [Function #2...], [Function #3...],..., [Function #9...].

- For the detailed information about control sheets, refer to **9.7. Control Sheets**.
- The user control sheets cannot be used at the same time as Automatic Binary/Color Distinction, MultiStream, Double Exposure, Automatic Crop, Deskew, Margin, Area, Sub Area, or Flatbed.

14. Scanning with using the imprinter

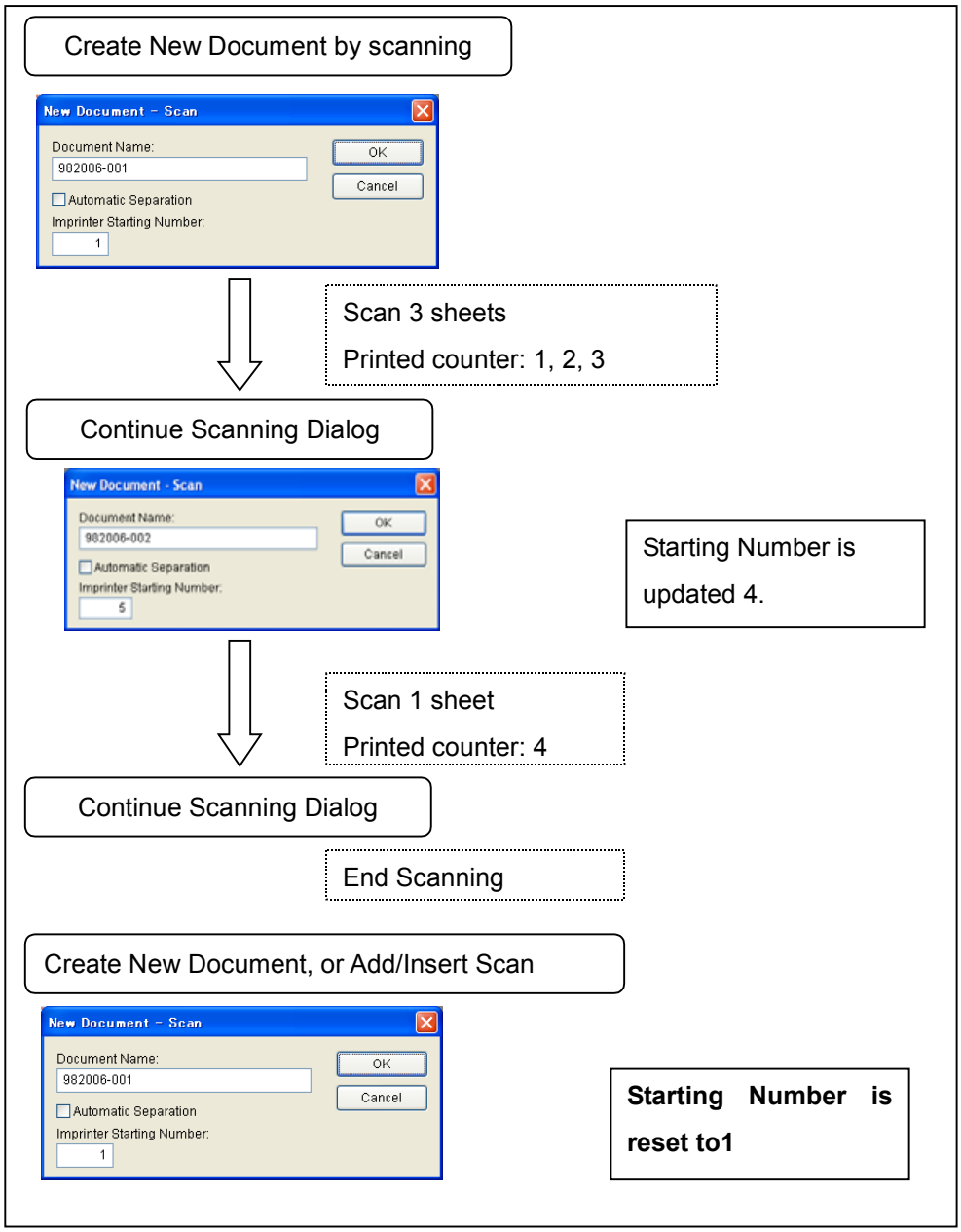
14.1. Starting number of the imprinter

Setting counter to imprinter string, you can set the starting number of the counter before scanning.

The starting number of the counter depends on setting of [Starting Number Automatic Increment].

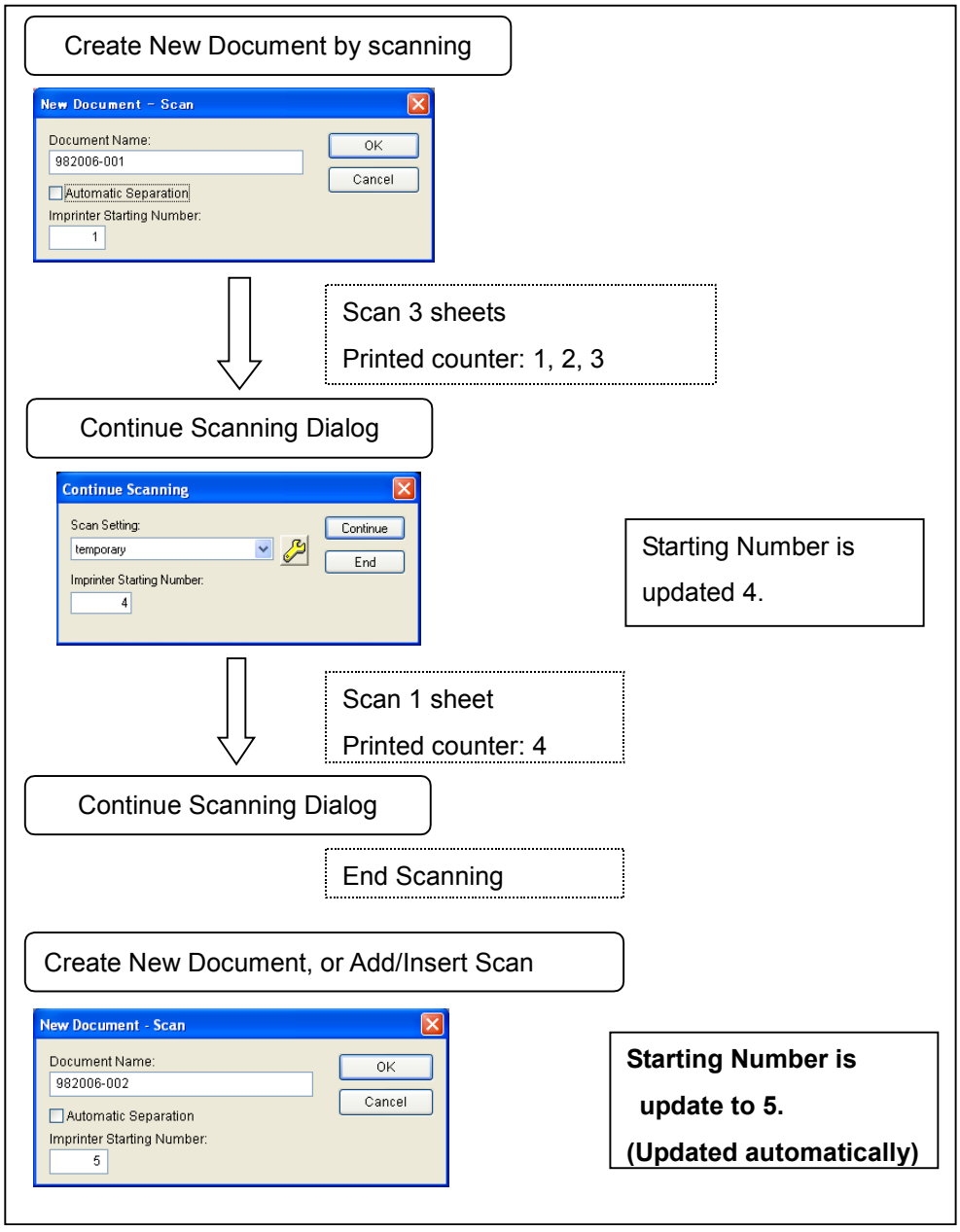
- [Starting Number Automatic Increment]:OFF

  [Example] Starting Number =1



- **[Starting Number Automatic Increment]:ON**

  [Example] Starting Number =1



14.2. Information of the imprinted strings

Setting [Create output-log file (FileInf.log)] check box to ON in the [Output Document Setting] dialog box, the Imprinter String is outputted to 'FileInf.log' file with image file name.

And when the image file type is TIFF or JPEG, the Imprinter String Data is stored as a comment in the file. If you output the images as these file types and input them by this software, the imprinter strings data is inherited. If you output other file types, the imprinter strings data is not inherited.

- In case of setting the imprinter string to "%1t" or "%2t" (printing time), the imprinter string data may not be same as actual string that is imprinted by scanner.

15. Other functions

15.1. Image compression setting in the Work Folder

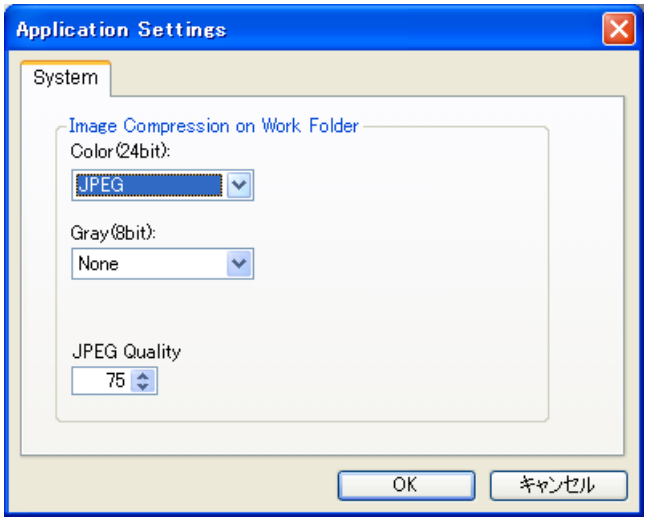
Setting the image compression in the Work Folder.

In the work folder, the color image is treated as JPEG compression data, the gray (8bit) image is treated as uncompression or JPEG compression data.

Operation

1. Click [Application Setting...] on the [Option] menu.

The [Application Settings] dialog box now appears.



2. Click the [System] tab, Click the [OK] button after setting the compression.

[Color (24bit)]:

Compression for 24-bit color image, JPEG is only supported.

[Gray (8bit)]:

Compression for 256-level (8-bit) gray image, JPEG and None (uncompression) are supported.

[JPEG Quality]:

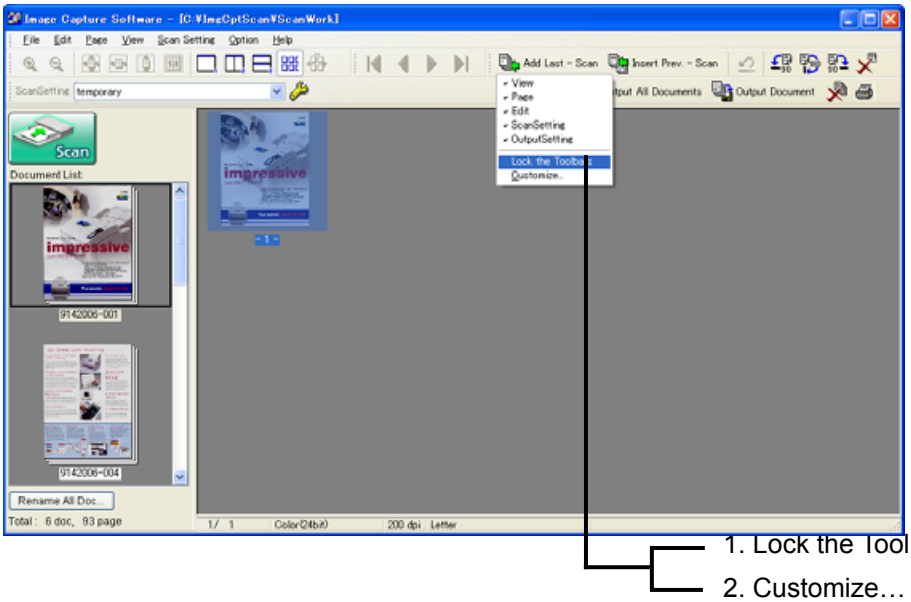
Setting for JPEG quality.

The lower the value, the smaller the file size but the greater the deterioration in the image quality. Factory default value is 75.

- If you output 256-level gray image as JPEG compression format, setting [Gray 8bit] to [JPEG] becomes faster scanning, displaying image.

15.2. Customize of ToolBar

It is available to change the toolbar operation by right –clicking on the toolbar.



[Lock the Toolbars] menu

Display the toolbar with the fixed position.

[Customize…] menu

Display the [Customize Toolbar] dialog.

(It is available to change the toolbar button by right click menu.

[Scan Setting] toolbar button is not available to be changed.)

It is available to change the toolbar button as follows.

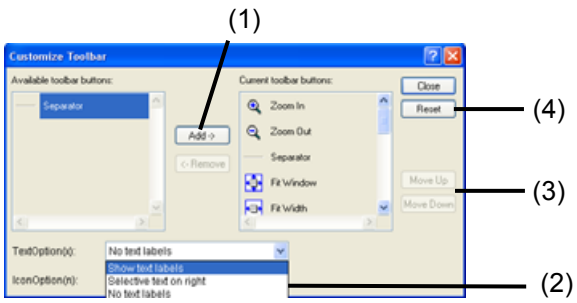
(1) [Add] / [Remove] of the toolbar button.

(2) [Show text labels] / [Selective text on right] / [No tex labels] mode changing of the toolbar button.

(3) [Move Up] / [Move Down] of the toolbar button order.

(4) [Reset] of Customize Toolbar setting.

Example [View] toolbar Dialog



15.3. About version

The version of this application can be displayed.

Operation

1. Click [About...] on the [Help] menu.
   The [About] window now opens.
2. Click [More...] for related library information.

16. Image file fromat

This application can output image file of the following file-format.

■ TIFF (Singe-page / Multi-page)

Compression:

MH (Binary)

MMR (Binary)

PackBits

LZW

JPEG (256-Level Gray, 24bit Color)

■ PDF(Singe-page / Multi-page)

Compression:

MMR (Binary)

JPEG (256-Level Gray, 24bit Color)

■ PDF/A(Singe-page / Multi-page)

[PDF/A -1b compilance. It is supported on output only.]

Compression:

MMR (Binary)

JPEG (256-Level Gray, 24bit Color)

■ JPEG(Single-page)

Compression Parameter

Quality: 1 – 100 (default : 75)

■ JPEG 2000

[JPEG2000: part 1 compilance, file-extention is “jp2”. It is supported on output only.]

Compression

Lossless

Lossy (Quality: 1 – 100, default : 50)

■ Bitmap(Single-page)

- You can set the file fomat for each image-type, when selecting [Depeneds on Image Type] on [Output Document Setting] dialog box.
- Binary images and 16-level gray images are translated to 256-level gray image, when output as “JPEG” or “JPEG 2000” file.
- 16-level gray images are translated to 256-level gray image, when output as PDF file.