fi-5530C2 Image Scanner
Operator's Guide

FUJITSU

CONTENTS

INTRODUCTION

Thank you for purchasing the fi-5530C2 Duplex Color Scanner.
This document describes how to handle the fi-5530C2 and basic operations. Before you start using the fi-5530C2, be sure to read this manual thoroughly to ensure correct use.
This document describes the basic operation methods to perform scanning by using ScandAll PRO. The version of ScandAll PRO bundled with this product is subject to change without notice, in which case the screenshots captured in this document may differ from the actual displayed image.
For more information about ScandAll PRO, refer to the separate [ScandAll PRO User's Guide].

Trademarks

Microsoft, Windows, Windows Server, Windows Vista, and SharePoint are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
ISIS is a registered trademark or trademark of EMC Corporation in the United States.
ABBYY™ FineReader™ Engine © ABBYY. OCR by ABBYY
ABBYY and FineReader are trademarks of ABBYY Software, Ltd. which may be registered in some jurisdictions.
ScanSnap, ScanSnap Manager, and PaperStream are registered trademarks of PFU LIMITED in Japan.
Other company names and product names are the registered trademarks or trademarks of the respective companies.

How Trademarks Are Indicated in This Manual

Operating systems (OS) are indicated as follows:

Windows XP:	Windows® XP Home Edition operating system
	Windows® XP Professional operating system (32-bit/64-bit)
Windows Server 2003:	Windows Server® 2003, Standard Edition (32-bit/64-bit)
	Windows Server® 2003 R2, Standard Edition (32-bit/64-bit)
Windows Vista:	Windows Vista® Home Basic operating system (32-bit/64-bit)
	Windows Vista® Home Premium operating system (32-bit/64-bit)
	Windows Vista® Business operating system (32-bit/64-bit)
	Windows Vista® Enterprise operating system (32-bit/64-bit)
	Windows Vista® Ultimate operating system (32-bit/64-bit)
Windows Server 2008:	Windows Server® 2008 Standard (32-bit/64-bit)
	Windows Server® 2008 R2 Standard
Windows 7:	Windows® 7 Home Premium operating system (32-bit/64-bit)
	Windows® 7 Professional operating system (32-bit/64-bit)
	Windows® 7 Enterprise operating system (32-bit/64-bit)
	Windows® 7 Ultimate operating system (32-bit/64-bit)

Manufacturer

PFU LIMITED

YOKOHAMA i-MARK PLACE, 4-4-5 Minatomirai, Nishi-ku, Yokohama, Kanagawa, 220-8567, Japan

© PFU LIMITED 2007-2014

About Maintenance

The user must not perform repairs on this scanner.
Contact the store where you purchased the scanner or an authorized FUJITSU Image Scanner service provider to make repairs to this product.

Safety Precautions

The attached "Safety Precautions" manual describes important details for users to use this product safely and correctly. Read the Safety Precautions thoroughly before you start using this product.

Warning Indications Used in This Manual

⚠ WARNING	This indication alerts operators to an operation that, if not strictly observed, may result in severe injury or death.

⚠ CAUTION	This indication alerts operators to an operation that, if not strictly observed, may result in safety hazards to personnel or damage to equipment.

Symbols Used In This Manual
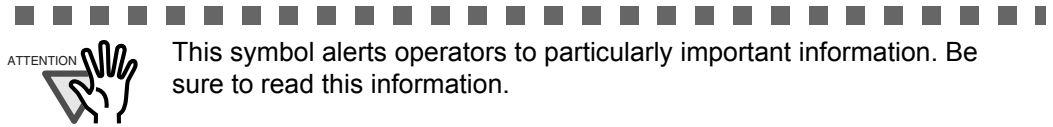
ATTENTION ✋ This symbol alerts operators to particularly important information. Be sure to read this information.

HINT 💡 This symbol alerts operators to helpful advice regarding operation.

Screen Examples In This Manual

The screen examples in this manual are subject to change without notice in the interest of product improvement. If the actual displayed screen differs from the screen examples in this manual, operate by following the actual displayed screen while referring to the User's Manual of the scanner application you are using.

The screen examples used in this manual are of the TWAIN driver, ISIS driver, and ScandAll PRO (image scanning application).

Chapter 1

BASIC SCANNER OPERATIONS

This chapter describes the basic operations of the scanner.

In this chapter, Windows XP screenshots are used as examples.
The screens and operations may differ slightly if the operating system (OS) you are using is not Windows XP.
In addition, when TWAIN is updated, the screens and operations provided in this chapter may be different from the actual ones.

1.1 Turning the Scanner ON

1. Press the power button on the operator panel.

 The scanner is turned on, and the green LED on the operator panel illuminates.
 During the initialization, the indication of the Function Number Display changes as follows:
 8 ⇨ P ⇨ 0 ⇨ 1
 A number "1" indicated on the operator panel shows that the scanner is in the ready status.
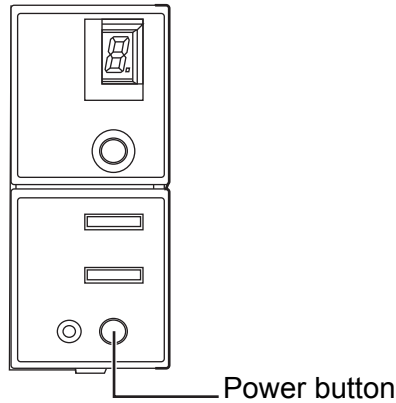
Power button

HINT	To turn the scanner off, hold the power button down for at least two seconds.

■ About Power ON/OFF Control

 You can select how to power the scanner on/off; by pressing the Power button, or by connecting/disconnecting the AC cable.
 The procedure is as follows:

1. Open the [Scanner Properties] dialog box.

 1) Turn on the scanner, and make sure that the scanner is connected to your personal computer. Refer to "2.2 Connecting the Scanner to a PC" in fi-5530C2 Getting Started contained in the DVD-ROM for information about how to connect the scanner to your personal computer.

 2) Double click the [Printer and Other Hardware] icon in Control Panel.
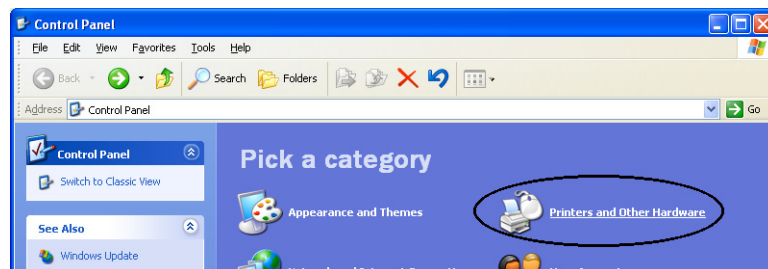
 ⇒ The [Printer and Other Hardware] window appears.

3) In the [Printers and Other Hardware] window, double click the [Scanners and Cameras] icon.
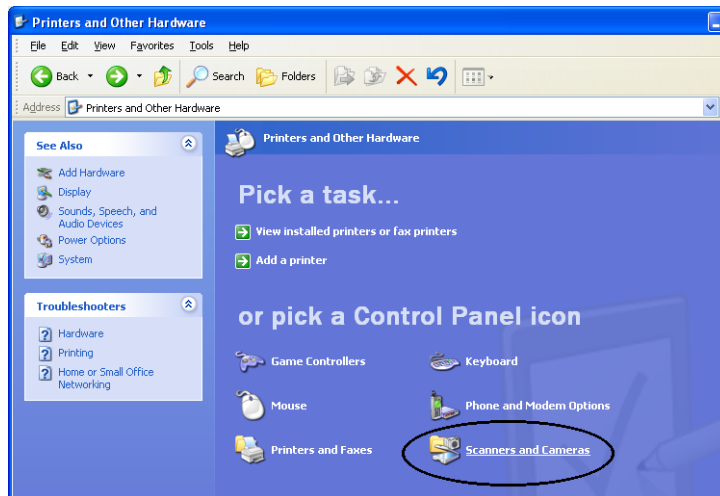
⇒ The [Scanners and Cameras] window appears.

4) Display the [fi-5530C2dj Properties] dialog box.
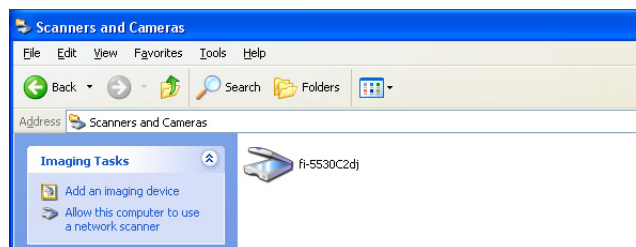
⇒ The [fi-5530C2dj Properties] dialog box appears.

5) Select the [Device Set] tab.
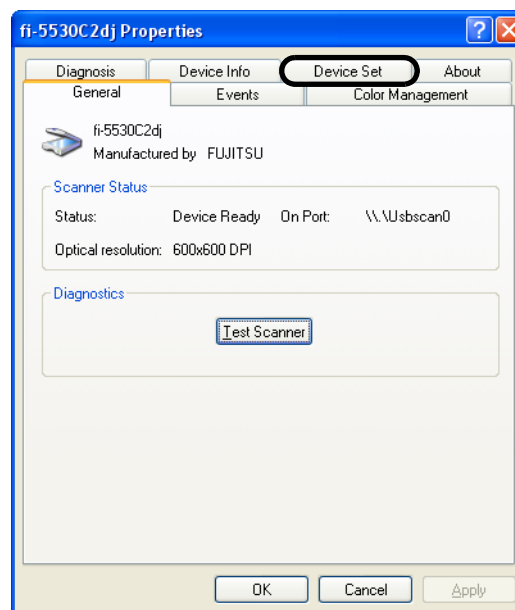
⇒ The dialog box shown below appears.
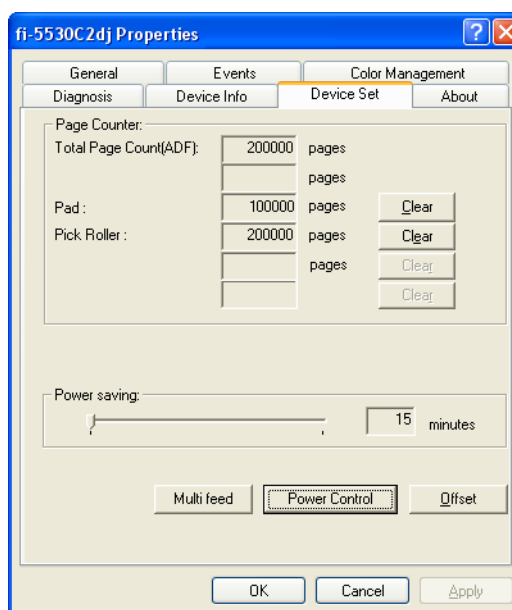
2. Click the [Power Control] button

⇒ The dialog box shown below appears.
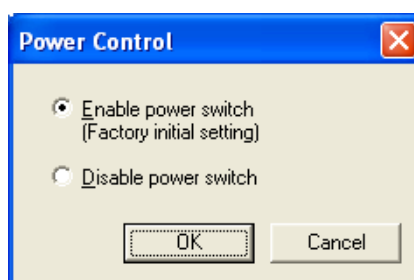
3. In this dialog box, do the following:

- To power on/off the scanner by pressing the Power button:
  ⇒ Select [Enable power switch].
- To power on/off the scanner by connecting/disconnecting the AC cable:
  ⇒ Select [Disable power switch].

■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■

ATTENTION If [Disable power switch] is selected, the scanner will not turn off even when the [Power off after a certain period of time] check box is selected in [Device Setting] of the Software Operation Panel.

■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■

■ **Power Save Mode**

The Power Save mode keeps the scanner in a low-powered state if no operation is performed on the scanner for 15 minutes after it has been turned on. The scanner is automatically switched to the Power Save mode.
In the Power Save mode, the indication of the Function Number Display on the operator panel goes out, while the green LED is kept lit.
To return the scanner from the Power Save mode, perform one of the following operations:

- Place documents on the ADF paper chute.
- Press any button on the operator panel.
  The scanner will be turned off when pressing down the power button for 2 seconds or longer.
- Execute a command from the scanner driver.

Also, the scanner can be set to turn itself off automatically when it is turned on and left unused for a certain period of time.
You can save the power consumption by having the scanner turn off automatically.
To enable this setting, select the [Power off after a certain period of time] check box in [Device Setting] of the Software Operation Panel.
To turn the scanner back on when it is automatically turned off, press the power button on the scanner.

ATTENTION
- Depending on the application you are using, the scanner may not be turned off automatically even when the [Power off after a certain period of time] check box is selected.
- If the scanner turns itself off automatically while you are using an image scanning application, close the application first, then turn the scanner back on.

1

BASIC SCANNER OPERATIONS

Follow the procedure below to enable auto power OFF.

1. Check that the scanner and the computer are connected and turned on.

2. Select [Start] menu ⇨ [All Programs] ⇨ [Scanner Utility for Microsoft Windows] and click [Software Operation Panel].

    ⇒ The Software Operation Panel appears.

3. Change the setting in the Software Operation Panel window below.
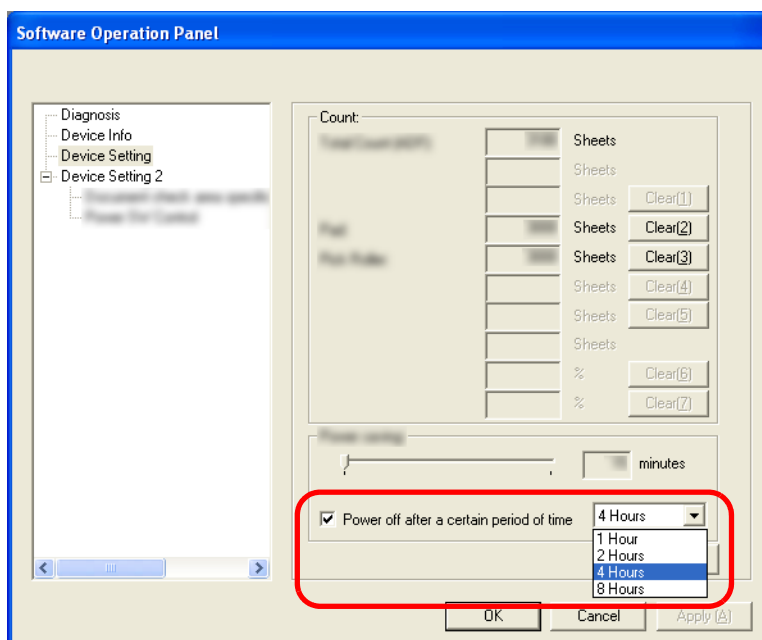
- Select the [Power off after a certain period of time] check box to enable this function.
- The time until auto-power off can be set to 1 Hour, 2 Hours, 4 Hours or 8 Hours.

HINT

The default setting of this function varies depending on the part number of the scanner.

Part No.	Default setting
PAxxxxx-Bxx**1**	Enabled (power off after 4 hours)
PAxxxxx-Bxx**2**	
PAxxxxx-Bxx**3**	Disabled
PAxxxxx-Bxx**5**	
PAxxxxx-Bxx**7**	

* Check the part number on the product label on the scanner.

1.2 Placing Documents on the ADF

> **HINT** For details about paper sizes and paper materials for the ADF to work properly, refer to Chapter 6 "DOCUMENT SPECIFICATIONS FOR ADF" (page 111).

1. Align the edges of sheets in the document.

   1) Confirm that all sheets have the same width.

   2) Check the number of the sheets in the document stack.
      The standard number of sheets that can be loaded on the scanner is as follows:
      - A4-size paper or smaller that makes a document stack of 10 mm or less (100 sheets at 80 g/m^2 or at 20 lb)
      - Over A4-size paper that makes a document stack of 5 mm or less (50 sheets at 80 g/m^2 or at 20 lb)

2. Fan the sheets as follows:

   1) Lightly hold the both ends of the stack with both hands, and bend it as shown in the figure below.
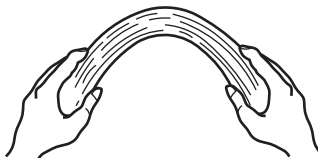
   2) Hold the stack firmly with both hands and bend them back so that the bent section rises up in the middle of the stack as shown in the figure below.
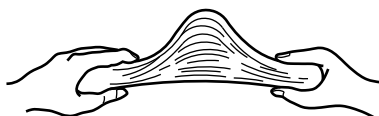
   3) Repeat steps 1) and 2) a couple of times.

   4) Rotate the document 90 degrees, and fan the stack again.

3. Align the top of the sheets.
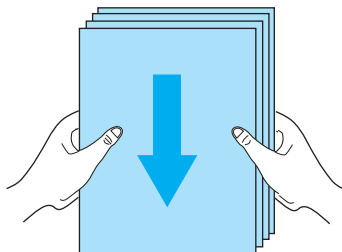
4. Place the document on the ADF paper chute.

Set the document face-down in the ADF paper chute (so that the side to be scanned faces toward the ADF paper chute).
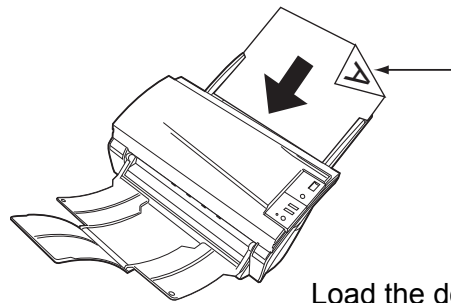
Load the documents facing the ADF paper chute.(face down)

ATTENTION

This scanner can scan ID cards through the ADF with the following precautions.
- Place one card at a time into the ADF.
- ID card feeding requires the card to be fed through the ADF in portrait mode as in the following figure.
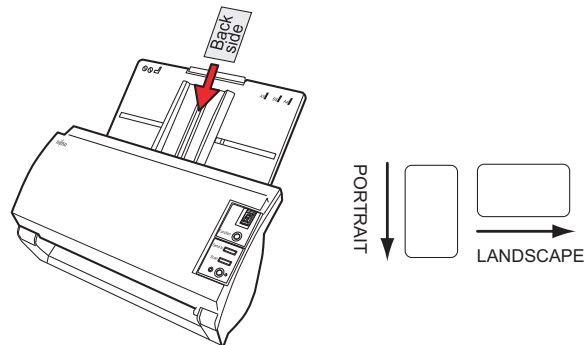
- Smooth cards should be placed face down in the ADF.
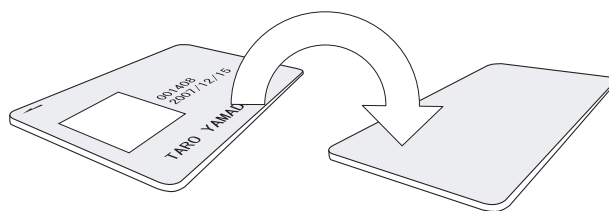
- The card to be scanned should be within the ISO7810 compliance, type ID-1.
  ISO7810-compliant, Type ID-1 card
    Material: PVC (Poly vinyl chloride) or PVCA (Polyvinyl chloride acetate)
    Dimensions: 3.4 inch (height) x 2.1 inch (width) / 86 mm x 54 mm
    Thickness: 0.03 ± 0.003inch / 0.76 ± 0.08mm
- Embossed cards (on which a raised effect is created) cannot be scanned.
- Cards that are excessively rigid or less flexible may not feed smoothly and excessive noise may occur.
- Cards should be clean from oil and without labels.
- Cards cannot be scanned when the imprinter is installed.

HINT

Before placing the document, pull out the ADF paper chute extension depending on the lengths of the document.

Extension

HINT
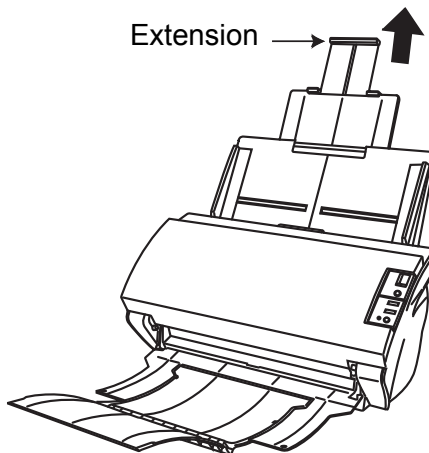
Place the document so that the height of the document will not surpass the line mark located at the side guide.
For A4-size paper or smaller, place the document so that the height of the document will not surpass the [Letter/A4/Smaller] line mark.
For paper larger than A4 size, place the document so that the height of the document will not surpass the [Over Letter/A4 Size] line mark.

Letter/A4/Smaller
Over Letter/A4 Size

1

BASIC SCANNER OPERATIONS
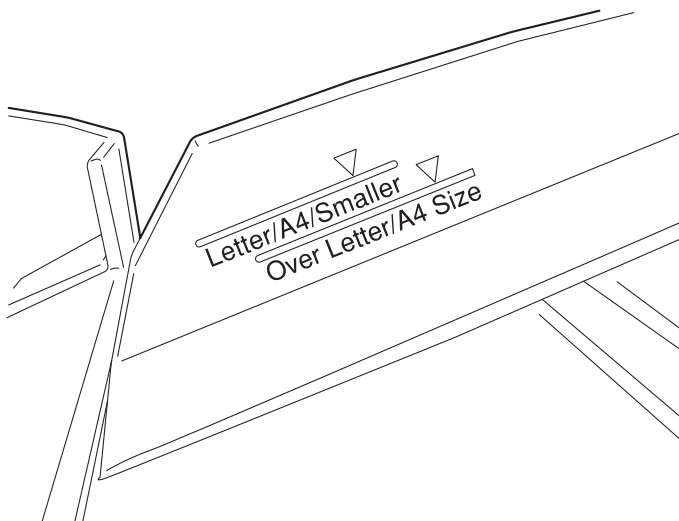
5. Adjust the side guides to the width of the document.

Move the side guides so that they touch both sides of the document.
If there is any clearance between the side guides and the edges of the document, the scanned image may be skewed.

Side guides

HINT
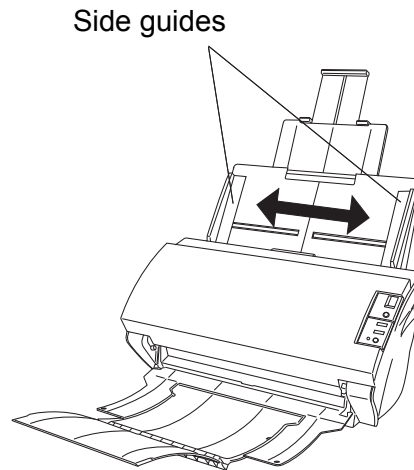
The stacker prevents document sheets from being scattered after they were scanned.
Use the stacker as follows:

1. Lift the stacker toward you by using your fingertips and the handle on the scanner.

handle
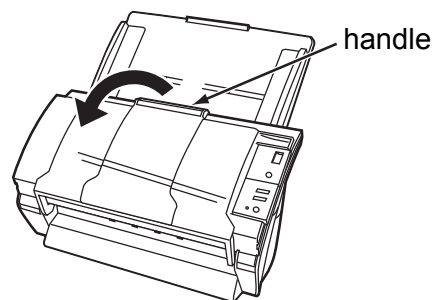
2. Lift the paper stop and extend it toward you by using your fingertips and the indentations on the stacker.

Indentation
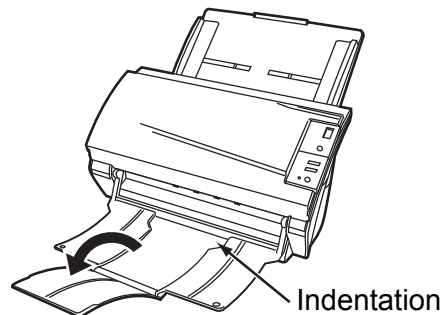
6. Start up the scanner application, and then scan the document.

For details on how to scan documents using the ScandAll PRO application, refer to "ScandAll PRO User's Guide".

10

1.3 Scanning Documents

This section explains how to scan documents with this scanner.
The following is a basic procedure for scanning documents:

1. Place a document on the scanner.
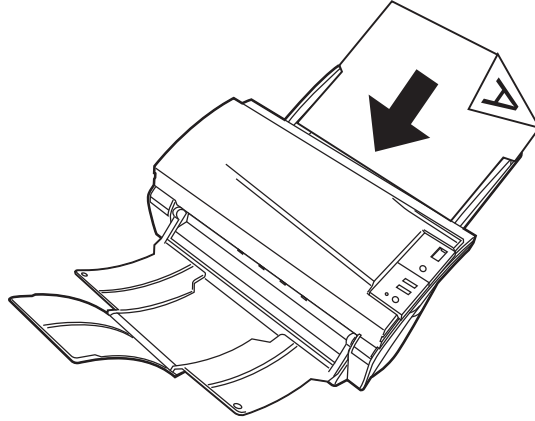
2. Launch an application you want to use for scanning.
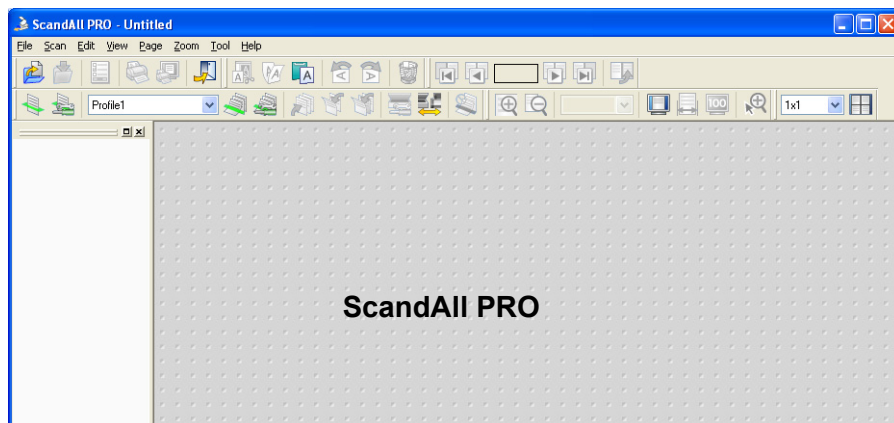
3. Select a scanner to use.

TWAIN   ISIS
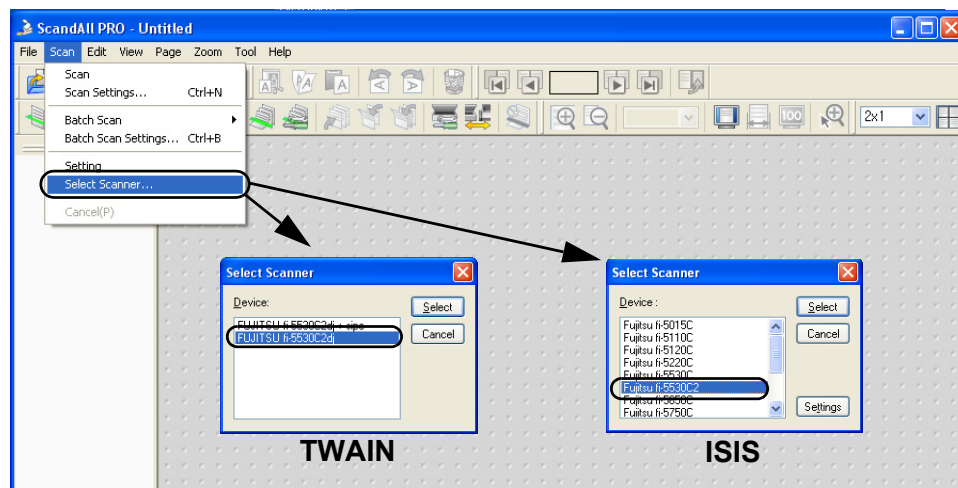
4. In the application, invoke a scanner driver.

TWAIN

ISIS
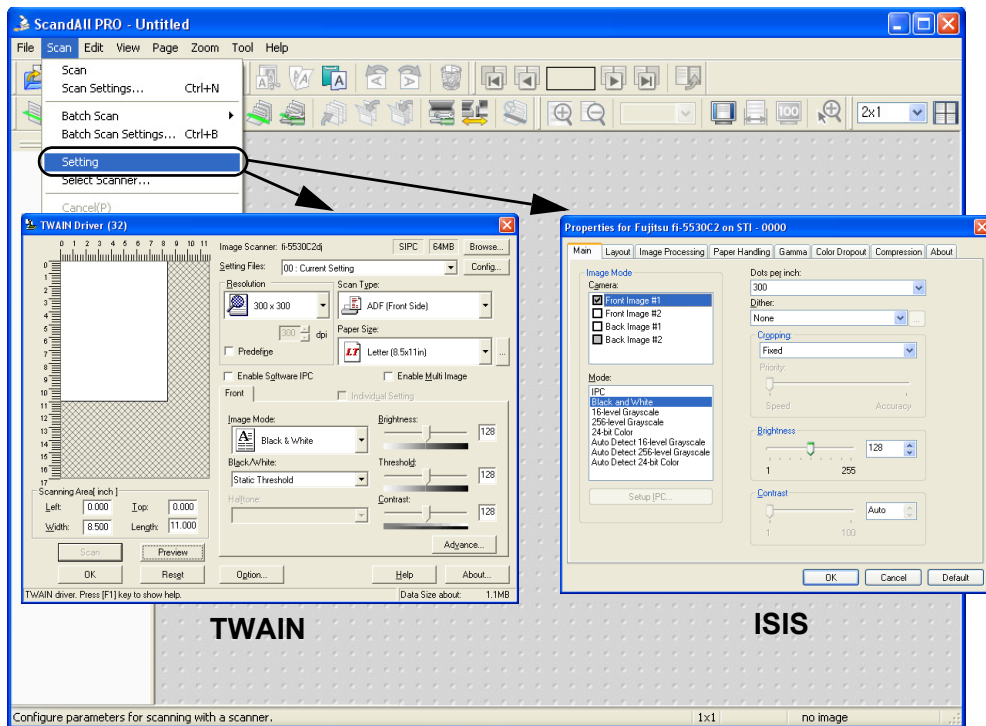
5. In the driver setup dialog box, configure settings for scanning.

6. Scan the document.
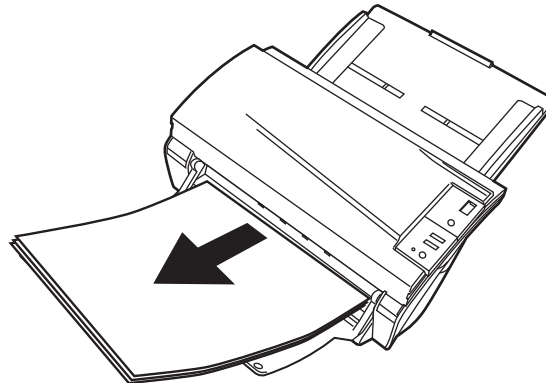
7. Save the scanned document image files.

HINT

- In this section, screenshots taken in ScandAll PRO are used as examples. Depending on the application you use, procedures and operations may differ from those examples herein.
- For more information about how to scan documents by using ScandAll PRO, refer to "ScandAll PRO User's Guide".
  If you want to use other applications for scanning, refer to the respective manuals that come with the applications.

1.4 How to Use Scanner Drivers

To scan documents with the scanner, a scanner driver and application supported by the driver are prerequisites. This scanner is accompanied with two drivers; one is a TWAIN-compliant driver, TWAIN Scanner Driver, and the other is an ISIS-compliant driver, ISIS Scanner Driver; and an application named ScandAll PRO, which supports both the drivers TWAIN and ISIS.

In this section, how to use these drivers is described.
For information about how to use ScandAll PRO and how to invoke a scanner driver via ScandAll PRO, refer to "ScandAll PRO User's Guide".

■ TWAIN Scanner Driver

TWAIN Scanner Driver is a driver for scanning documents with the scanner based on a TWAIN-compliant application.
Usually, you can configure the scanner settings in the scanner driver's setup dialog box, invoking a scanner driver via an application. (Depending on the application settings, this setup dialog box may not appear.)

> **HINT**
>
> How to invoke a scanner driver varies depending on the application. For details, refer to the manual or help of the application you use.
> For information about how to invoke a driver via ScandAll PRO, refer to "ScandAll PRO User's Guide".

TWAIN Scanner Driver Setup
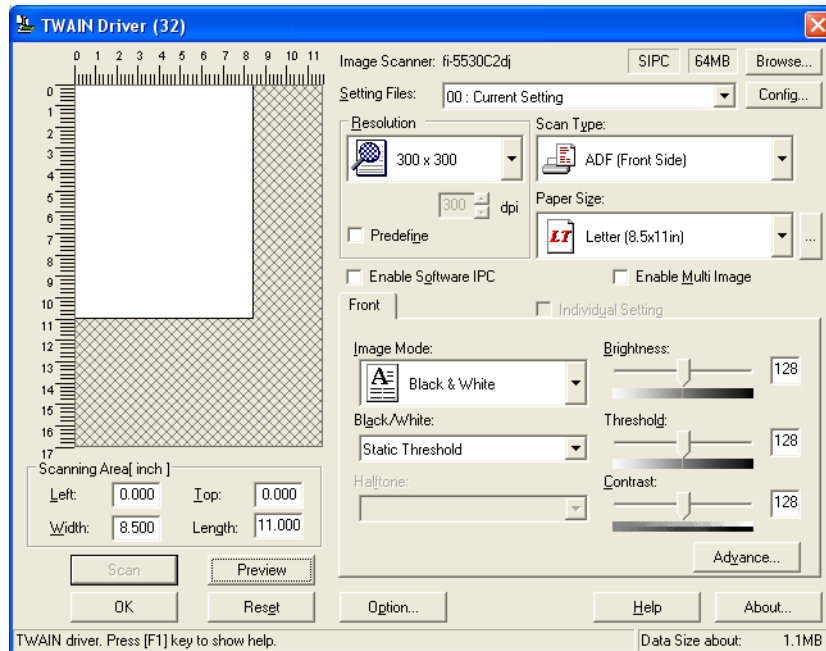
Configure TWAIN Scanner Driver settings in the dialog box above.
Major setting items are listed below.
* For details on each function, refer to "TWAIN Driver Help."

Resolution

You can specify the resolution for scanning images.

Default values are selectable from the drop-down list, and a [custom] value (can be specified in increments of 1 dpi from 50 to 600 dpi) can also be selected by clicking a pair of up/down buttons.

By marking the [Predefine] checkbox, you can select one of three predefined settings, [Best], [Better], and [Normal], and this allows you to scan documents simply and quickly. You can also set values of [Best], [Better], and [Normal] as desired in a window that appears when the [...] button is clicked.

Scan Type

You can specify the feeding method, the side(s) to be scanned (Front Side, Back Side, Duplex) or details of Long page (the size of documents longer than A3).

Paper Size

You can select the size of documents to be scanned from the list.

Windows for customizing the paper size will appear when you click the [...] button. You can save any document size as a customized setting (up to three) or for changing the order of paper sizes in the list.

Image Mode

You can specify the image type to output the scanned documents.

Black & White	Documents are scanned in binary (black and white) mode.
Halftone	Documents are scanned through halftone processing in binary (black and white) mode.
Grayscale	Documents are scanned in gradations from black to white. In this mode, you can select 256 gradations or 4 bit (16 gradations).
Color	Documents are scanned in color mode. In this mode, you can select 24 bit Color, 256 Color, or 8 Color.

[Scan] Button

Clicking this button starts scanning documents with the current settings.

[Preview] Button

Documents are scanned preliminarily before the actual scanning.

You can confirm the image of the documents in the preview window.

[OK]/[Close] Button

Clicking this button saves the current settings and closes this window.

[Reset] Button

This button is used to undo changes of settings.

[Help] Button

Clicking this button opens the [TWAIN Scanner Driver Help] window. The window also opens by pushing the [F1] key.

[About] Button
Clicking this button opens an information window about the TWAIN Scanner Driver's version.

[Option] Button
You can set options in the dialog box below.
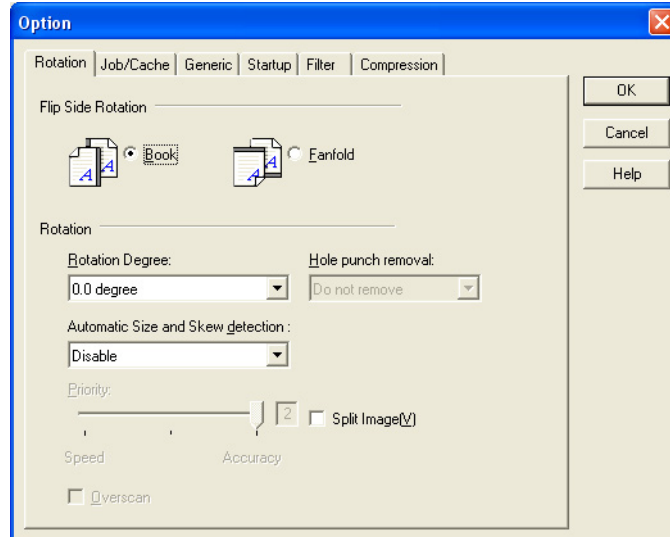
[Rotation] Tab
Select this tab when configuring settings for the image rotation, document size and skew detection, overscan, hole punch removal, and split image.

[Job/Cache] Tab
Select this tab when setting cache mode, multifeed detection, blank page skipping, etc.

[Imprinter (Endorser)] Tab
Includes print settings for the imprinter which is available separately.
Displayed only when the imprinter is installed.

[Generic] Tab
Select this tab to change the unit displayed in the Setting Window for the TWAIN Scanner Driver. Select [mm], [inch], or [pixel].

[Startup] Tab
Select this tab for configuring settings on the Scanner Operation Panel.

[Filter] Tab
Select this tab for setting the image processing filter(s).
Page Edge Filler: Fills up the margins of the scanned document images with a selected color.
Digital Endoser: A character string (alphanumerics) can be added in the scanned document.

[Compression] Tab
Select this tab for setting the compression rate of JPEG Transfer.

[Advance] Button
    Click this button for settings of the advanced image processing.
    You can set Edge Extract, Gamma Pattern, Dropout Color, Reverse, etc.

[Config] Button
    Click this button for configuring the Setting Files.
    You can save the changes made to a Setting File. From the next scanning, a set of
    settings are quickly switched by using these Setting Files.

 For details of each function, refer to the "TWAIN Scanner Driver Help."

■ ISIS Scanner Driver

ISIS Scanner Driver is a driver software used to scan documents with a scanner from an ISIS-compliant application.

Usually, you configure settings for scanning in the setup dialog box of the scanner driver, which is invoked from an application. (Depending on the application setting, the setup dialog box may not be displayed.)

> **HINT**
>
> How to invoke a scanner driver varies depending on the application. For details, refer to the manual or help of the application you use.
> For information about how to invoke a driver via ScandAll PRO, refer to "ScandAll PRO User's Guide".

ISIS Scanner Driver Setup
[Main] Tab
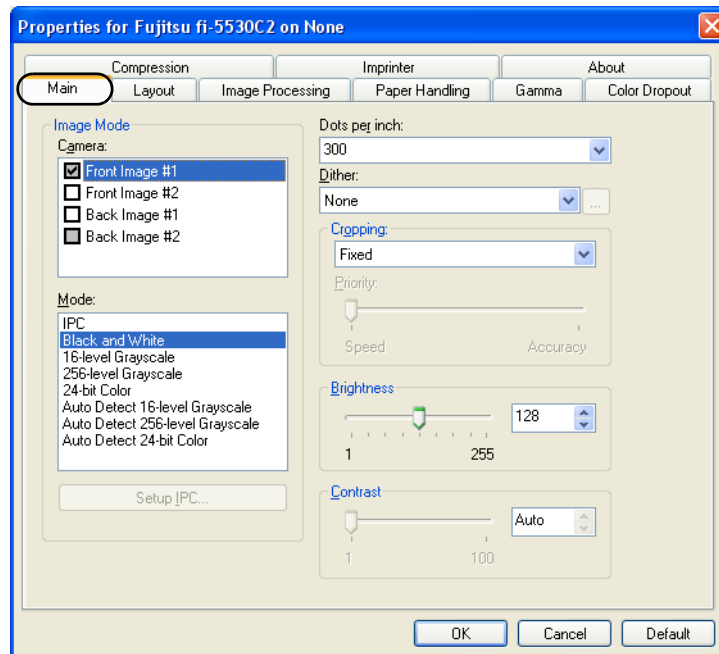
Camera

You can selects a side or sides to scan.

The marked checkbox side is targeted for scanning.

When you mark only the Front Image checkbox, simplex scanning is performed. When you mark both the Front Image and Back Image checkboxes, duplex scanning is performed.

You can also specify two settings (#1/#2), Color/Grayscale and Binary (black-and-white), for each side, and output two types of images at a scan (multi-image).

Settings configured in this dialog box take effect on the selected side or sides (Front Image #1/Front Image #2/Back Image #1/Back Image #2).

1

BASIC SCANNER OPERATIONS

Mode

You can select a color mode to use from the menu.

IPC : Documents are scanned in binary (black-and-white) mode with Image Processing Software Option. When this setting is selected, the [Setup IPC] button below becomes selectable. (This button is visible only if Image Processing Software Option is installed on the computer.)

Black & White : Documents are scanned according to a binary threshold. Black and white are distinguished based on this set threshold. This mode is suitable for scanning line drawings and text only documents.

16-level Grayscale : Documents are scanned in 16 gray levels. In this mode, each pixel uses 4 bits.

256-level Grayscale : Documents are scanned in 256 gray levels. In this mode, each pixel uses 8 bits.

24-bit Color : Documents are scanned as 24-bit full-color images. This mode is suitable for scanning color photographs. More memory is used than in Grayscale mode.

Auto Detect
16-level Grayscale
256-level Grayscale
24-bit Color
: This mode automatically detects whether the scanned documents are color or binary (black-and-white). In this mode, color documents are output as color or grayscale images, and monochrome documents are output as binary (black-and-white) images. Under [Camera], configure settings for detected-as-color documents with #1, and configure settings for detected-as-black-and-white documents with #2.

[Setup IPC] Button

Click this button when configuring settings for scanning with Image Processing Software Option.

Resolution

You can specify the number of pixels (dots) per inch.
Select a preset resolution from the list or type in any value (from 50 to 600, or 1200) in the box.
(If you enter a number from 601 to 1199, the resolution is automatically set to 300 dpi.)
The higher the resolution, the more memory is required.

Halftone

You can select a halftone pattern. This setting is available when [Black and White] is selected under [Mode].

Dither Pattern 0 :	This setting is suitable for scanning highly-colored photographs.
Dither Pattern 1 :	This setting is suitable for scanning highly-colored documents containing both text and photographs.
Dither Pattern 2 :	This setting is suitable for scanning lightly-colored photographs.
Dither Pattern 3 :	This setting is suitable for scanning lightly-colored documents containing both text and photographs.
Error Diffusion :	This function minimizes differences between a target pixel and pixels near the target.
Download :	This function processes gray tone images with the dithered pattern downloaded.

Cropping

Select how to crop scanned document images to output.

Fixed :	Scanned document images are output in a specified size.
Detect Length :	The rear end of a scanned document is detected and scanning is performed for the original length. When shorter sheets are included in a batch of documents to scan, output images are adjusted to their original size.
Automatic :	The page size of the scanned documents is automatically detected and the images are output in the detected page size. The skew of documents is also automatically detected and corrected to output correct images.

Brightness

You can set the brightness of the entire image. Specify a number from 1 (darkest) to 255 (brightest) as the brightness value. The higher the value, the brighter the image. The lower the value, the darker the image.

Contrast

You can set the contrast of the scanned image. Specify a number from 1 (low [soft]) to 100 (high [sharp]) to increase brightness for the entire image. Select a higher value to emphasize the difference in brightness between the light and dark areas of the image.

[Layout] Tab
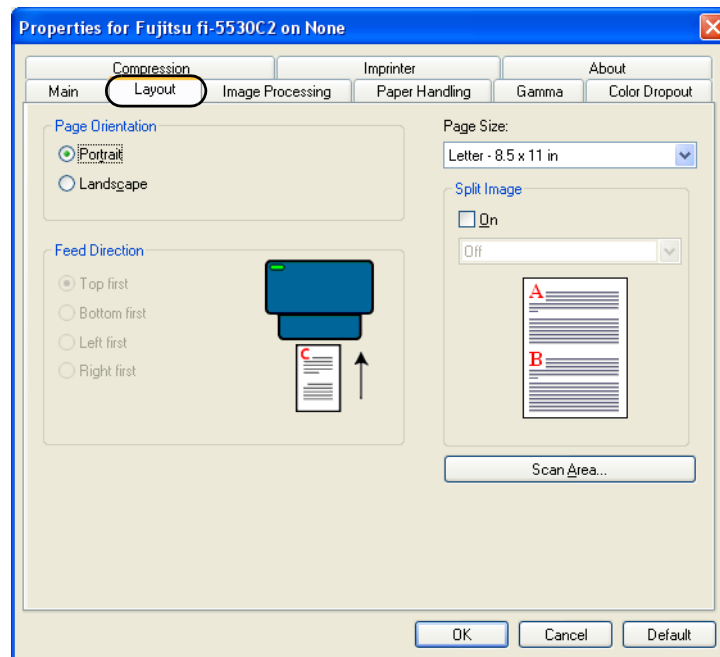
Page Orientation

    You can select the page orientation (Portrait or Landscape).

Page Size

    You can specify the paper size of documents to be scanned. Select a size from the drop-down list.

Split Image

    You can split a scanned image into two.

Scan Area

    Clicking this button displays the [Scan Area] dialog box.
    You can specify an area to be scanned for a page of the selected size. By dragging the rectangle on the page with the mouse, you can change the size of the area. You can also specify the area by typing in numbers in the boxes.

20
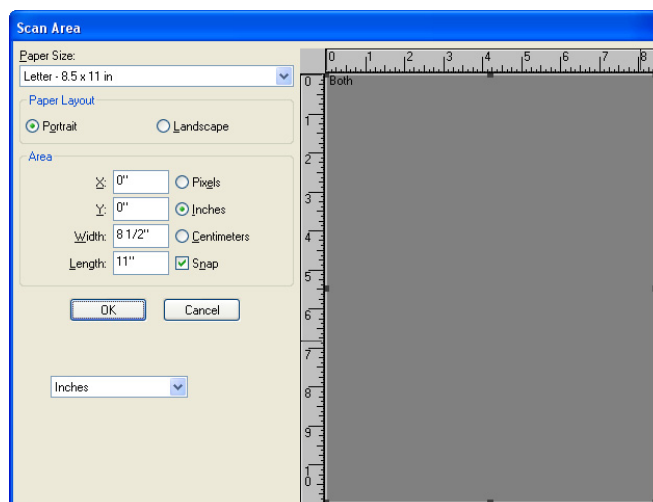
[Image Processing] Tab
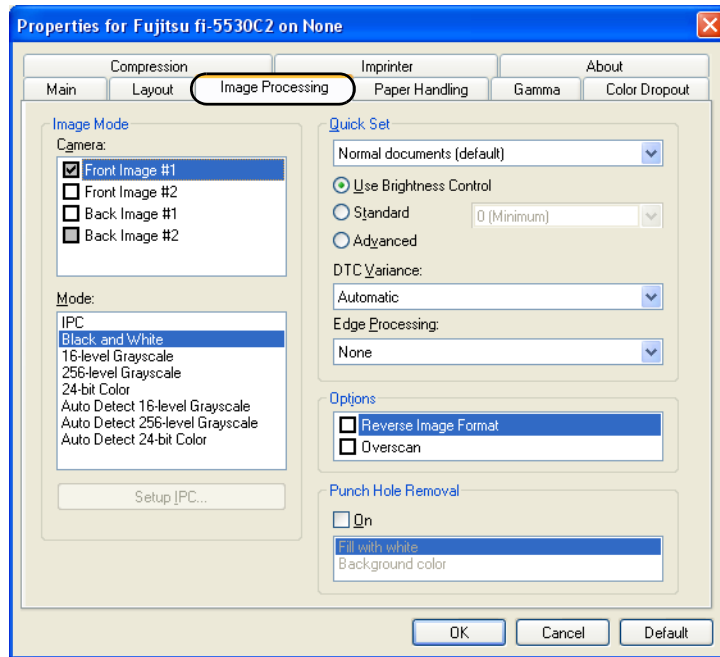
Quick Set

Some image-processing-related settings, which are commonly used, are readily available. Select a setting pattern, and you do not have to configure settings one by one. The following setting patterns are available (Selectable only when [Black and White] is selected under [Mode]):

Normal documents (default)	:	This setting pattern is suitable for scanning business documents often handled in the office.
Advanced DTC	:	Any types of documents are binarized in good conditions. Even if you scan documents containing light text, text on the colored background, and color charts, which do not lend themselves to scanning based on the ordinary binarization, you can obtain high-quality images.
NCR forms with background removed	:	You can remove the background and smooth out jaggies in the image.
Magazines, Brochures, etc.:		This setting pattern is suitable for scanning magazines and brochures, which contain both text and images.
Custom Settings	:	You can specify the following image-processing-related settings separately.

DTC Variance

You can select a DTC Variance setting depending on the brightness of the image.

Edge Processing

You can select a setting depending on how sharp you want to make the image.

Low, Mid, High: Outlines of images are emphasized. Select a setting from Low, Mid, and High.

Smoothing : Jaggies are smoothed.

Hole Punch Removal

When scanning punched documents that have punch holes on them, their images are output with punch holes removed.

Fill with white : Punch hole marks are filled with white.

Background color : Punch hole marks are filled with the most used color around the punch holes.

When scanning a color document, select [Background color]. If you select [Fill with white], punch holes will be filled with white.

Reverse Image Format

You can output reversed images.

Overscan

You can set the overscan function. Documents are scanned in a paper size larger than the one specified in the [Paper Size] drop-down list.

[Paper Handling] Tab
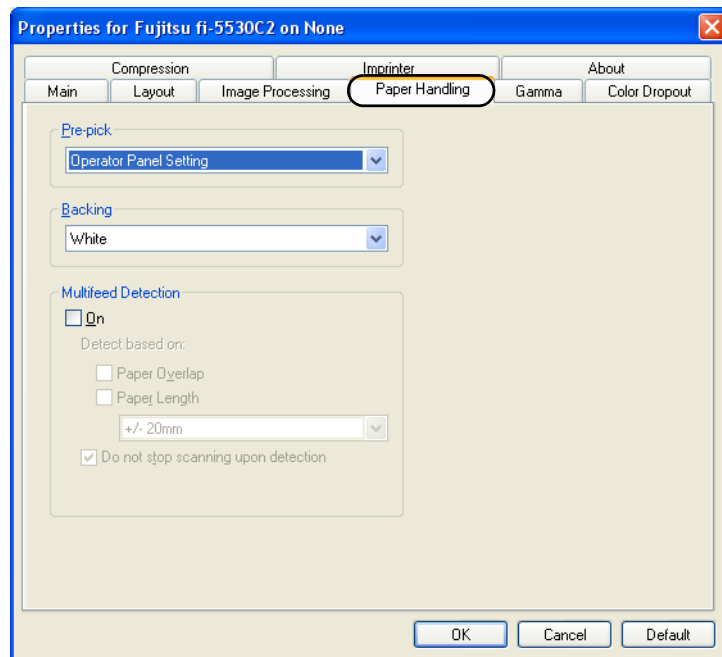
Pre-pick
> Pre-picking is a function that prepares the next document for scanning, feeding it to the position at which the scanning starts beforehand. You can specify whether you want to enable Pre-picking or not from this drop-down list.

Backing
> You can specify the background color, white or black.

Multifeed Detection
> Multifeed refers to an error that occurs when more than one sheet of paper is fed into the ADF at the same time. You can specify based on what (overlap or length) a multifeed error can be detected so that you can stop scanning at error detection and receive an error message.

Do not stop scanning upon detection
> If this checkbox is marked, the scanner ignores multifeed errors and continues scanning.

[Gamma] Tab
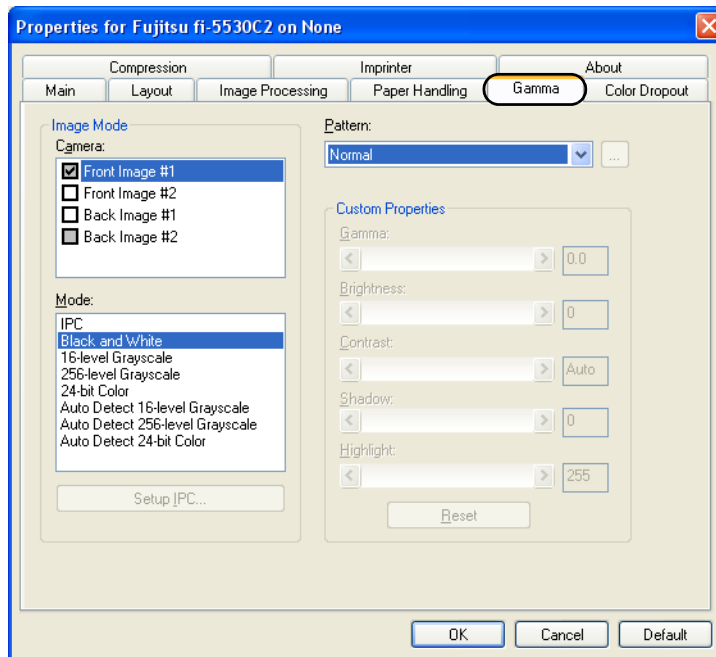
Pattern

Specifies how to correct Gamma. You can select a pattern from [Normal], [Soft], [Sharp], [Custom], [Download] and [Bright].

Custom Properties

You can specify custom properties (Gamma, Brightness, Contrast, Shadow, and Highlight) only when you select [Custom] as a Gamma pattern. Type in a numerical value in each box or click the forward/backward arrows to increase/decrease the numerical value. Of those items, [Shadow] and [Highlight] can be specified only when a Color or Grayscale setting is selected under [Mode].

[Color Dropout] Tab
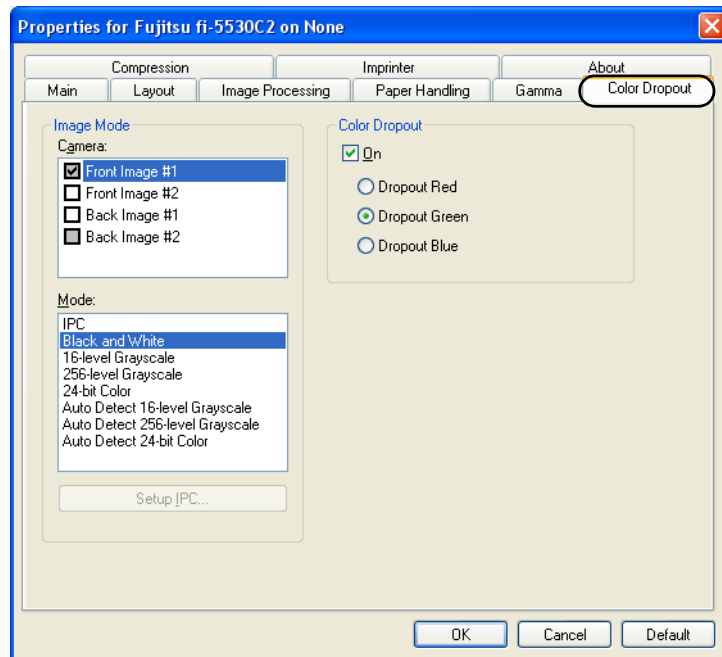
Color Dropout

Any of three primary colors (red-green-blue) can be dropped out from document images. For example, when scanning text in black with the red frame, selecting red color scans only text in black.

This setting is available only when Black and White or a Grayscale setting is selected.

[Compression] Tab
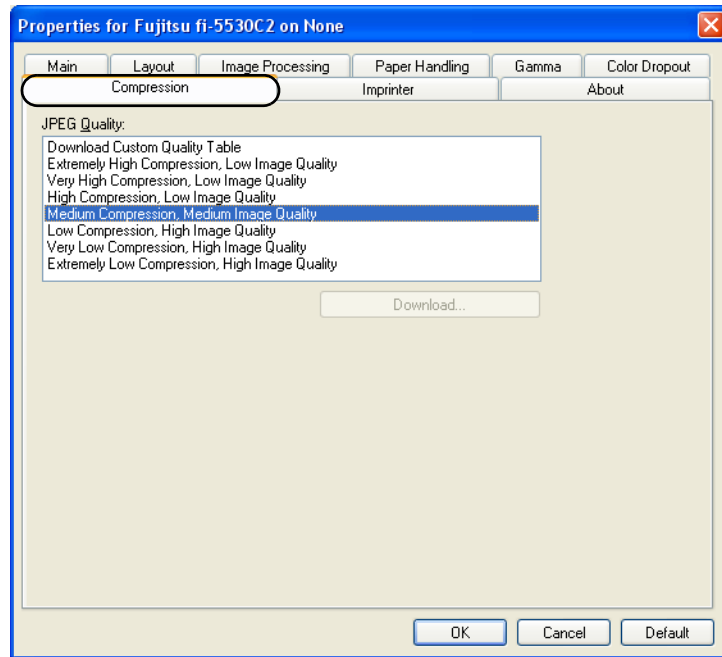
JPEG Quality

You can specify compression levels and image quality for scanning in Color or Grayscale mode.

[Imprinter] Tab

You can configure settings for using the imprinter option (to be purchased separately). This tab is not displayed unless the imprinter option is installed.
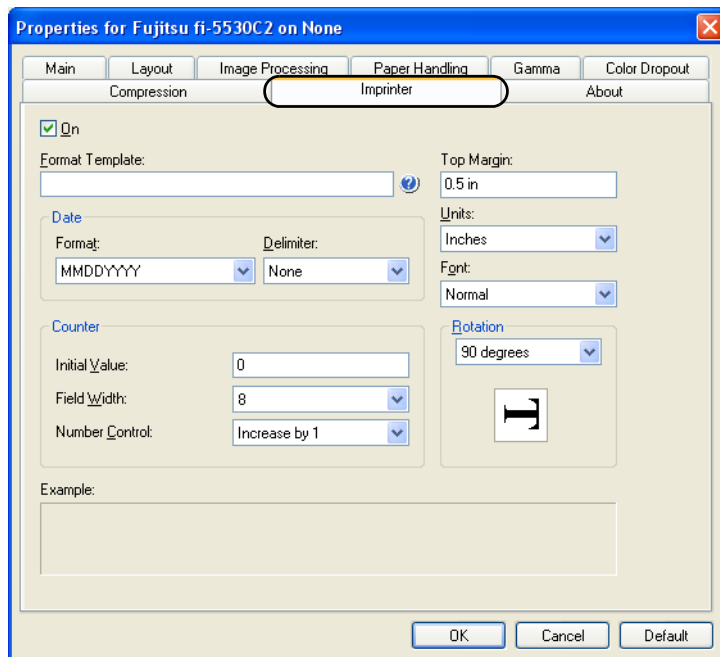
[ON] Checkbox

Marking this checkbox enables the imprinter function.

Format Template

Characters typed in this box are printed on documents. You can use the following characters:

Alphabet	:	A to Z / a to z (single-width)
Numerics	:	0, 1 to 9 (single-width)
Symbols	:	! " $ # % & ' ( ) * + , - . / : ; < = > ? @ [\ ] ^ _ ' { | } (single-width)
Year/Month/Day	:	%Y
Time (HH:MM)	:	%T
Counter	:	%S (Select from 3 to 8 as the number of digits.)
Other	:	<single-width space>

You can type in up to 43 characters.

ATTENTION

To print characters # and % , you have to type in ## and %% respectively because these are special characters. Take note that typing in only one character (#) displays the counter.

Date

You can specify how to indicate the date format.

Format	:	Type in the initial value.
Delimiter	:	Select a delimiter, which is a character that identifies the beginning or the end of a character string.

Counter

You can specify the rule to display the counter.

Initial Value	:	Set the initial value of the counter.
Field Width	:	Select the number of digits from 3 to 8.
Number Control	:	Select the increment of the counter value.

Top Margin

You can set the distance between the top of the page and the top of the first line printed on the page with a numeric.

Range	:	0.5 to 10.5 in. (1.27 to 26.7 cm)
Minimum unit	:	0.1 in. (0.01 cm)

Units

You can specify the unit of the top margin; in inch, in cm, or in pixel.

Font

You can specify the font style from Normal, Bold, and Narrow for printing characters.

Rotation

You can specify the text direction for printing characters.

[About] Tab
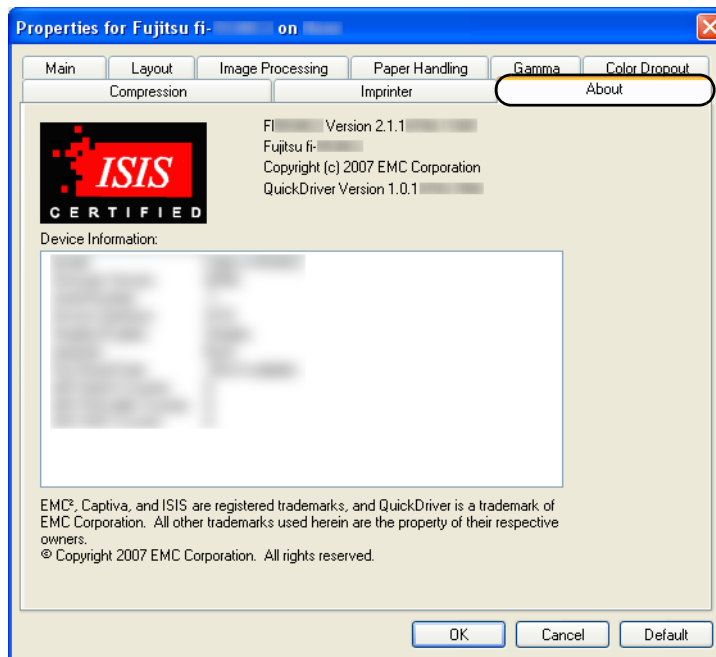
On this tab, you can view the information about the ISIS driver and the scanner connected to your personal computer.

1

BASIC SCANNER OPERATIONS

1.5 Image Scanning Application

This section explains about the bundled "ScandAll PRO" image scanning application, which is used as an example to explain the procedures in this manual.

ScandAll PRO supports both TWAIN and ISIS drivers. By defining scan settings as profiles, you can customize the settings according to your preference.

explains how to scan different types of documents by using examples of the TWAIN driver started via ScandAll PRO. For more details about ScandAll PRO, refer to "ScandAll PRO User's Guide".

1.6 Centralized Management of Scanners

This section explains about managing a large number of scanners in a unified manner by providing the following capabilities.

- Simultaneously update settings for multiple scanners and their drivers.
  Because there is no need to update each scanner one by one, a significant reduction is achieved in the time required to update a large number of scanners.
- Monitor scanners to check for any consumable parts that require replacement, or the occurrence of errors.
  The alerts for consumable part replacement and errors are provided by scanners, which provides an easy way of checking the operating status of scanners.

To enable the above functions, "Scanner Central Admin" is required which consists of four applications bundled with this product:

- Scanner Central Admin Server
  Install this application in the main computer that is used for the centralized management of scanners.
  By registering scanners on the Scanner Central Admin Server, you can build a system to run a unified management for all scanners.
- Scanner Central Admin Console
  Install this application in a computer to upload update modules and to monitor the operating status of the scanners.
  The administrators can perform these tasks from the Scanner Central Admin Console window, where they can also check the alerts for consumable replacement and errors sent from the scanners.
- Scanner Central Admin Agent
  Install this application in a computer connected to a scanner. It allows scanners to link with the Scanner Central Admin Server.
  Linking with the Scanner Central Admin Server will enable you to apply updates on scanner settings, and the scanner can also send alerts on consumable replacement and errors.
- SCAModule Creator
  Use this application to create update modules to upload onto the Scanner Central Admin Server.
  It is only required for creating update modules.
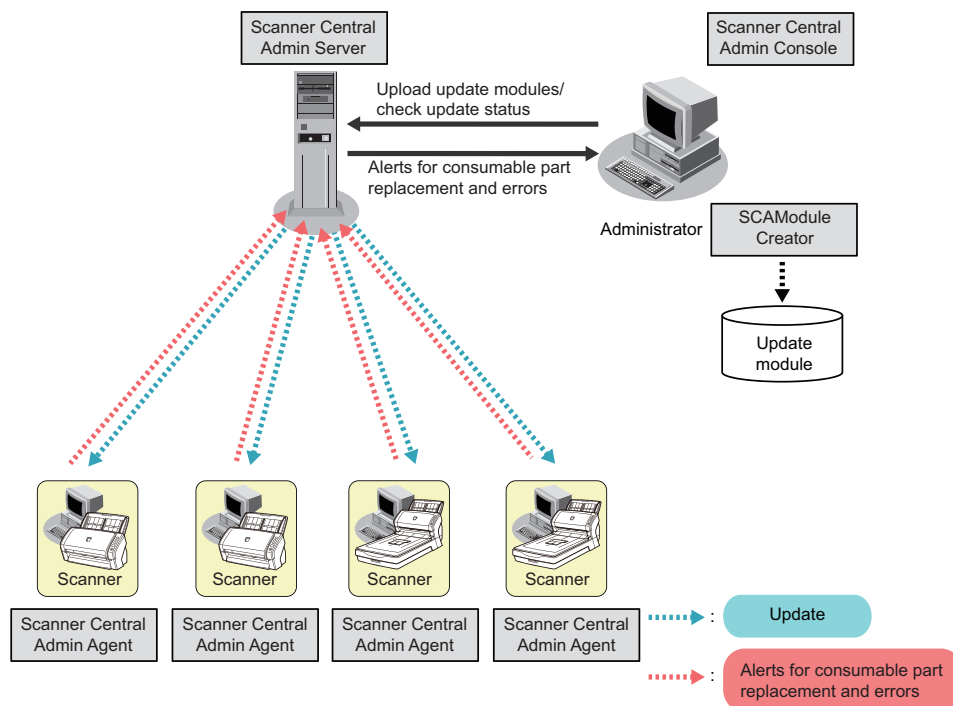
For more details, refer to the Scanner Central Admin User's Guide.

SCANNING VARIOUS TYPES OF DOCUMENTS

2

This chapter describes how to scan various types of documents, using the combination of ScandAll PRO and TWAIN Scanner Driver as an example.

In this chapter, Windows XP screenshots are used as examples.
The screens and operations provided herein may be different from actual ones if the operating system you are using is not Windows XP.
Please take note that, when TWAIN is updated, the screens and operations herein may also be slightly different.
If so, refer to the document provided with the update.
For information on how to scan documents in the following methods, refer to "ScandAll PRO User's Guide".

- Saving Scanned Image in PDF File Format
- Dividing a Multipage Document Using Patch Codes
- Dividing a Multipage Document Using Barcodes
- Specifying the Result of Zone OCR as a File Name
- Specifying the Result of Barcode Recognition as a File Name
- Creating Saving Folders for Each Batch Scan
- Saving Scanned Images from a Batch Scan to Microsoft SharePoint Server
- Restarting a Suspended Batch Scan
- Outputting Indexing Information File and Linking with an Application

2.1 Scanning Double-Sided Documents

1. Place the document on the ADF paper chute.

   For details on how to place documents, refer to "1.2 Placing Documents on the ADF" on page 7.

2. Launch ScandAll PRO.

   From the [Start] menu, select [All Programs] ⇨ [Fujitsu ScandAll PRO] ⇨ [ScandAll PRO] in the order presented. Then, ScandAll PRO starts up.

3. From ScandAll PRO, display the setup dialog box of TWAIN.

   For information about how to display the scanner driver's setup dialog box, refer to "ScandAll PRO User's Guide".

4. Select [Duplex] under [Scan Type].
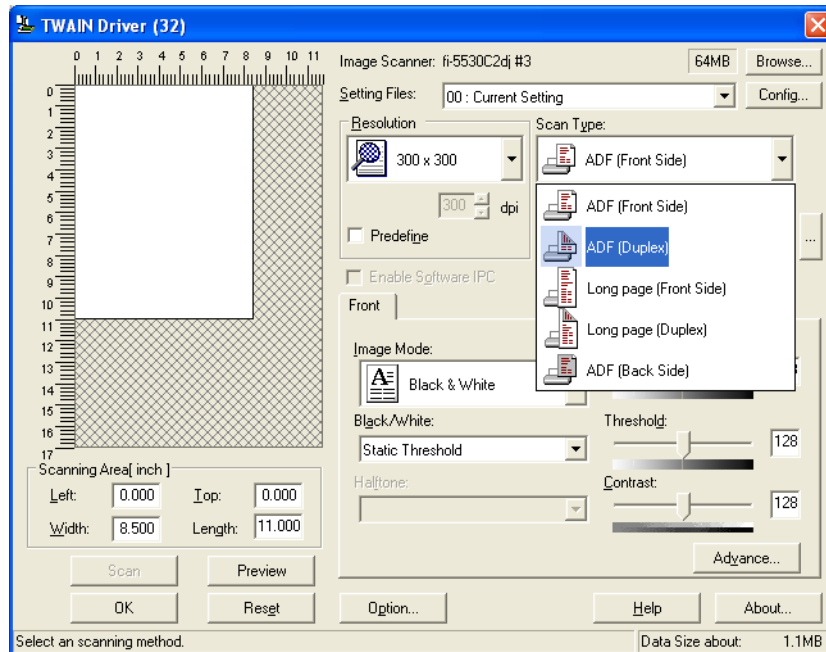
5. Click the [OK] button.

   ⇒ Changes made on this dialog box are saved and the setup dialog box of TWAIN closes.

6. From the ScandAll PRO window, perform a scan.

   For information about how to scan documents, refer to "ScandAll PRO User's Guide".
   ⇒ Scanned document images are displayed in the ScandAll PRO window.

2

SCANNING VARIOUS TYPES OF DOCUMENTS

2.2 Scanning Documents of Different Widths

When you scan documents of different widths at one time from the ADF, some documents that are small in paper size may be skewed or may not be fed into the scanner. It is recommended that only documents of the same width be scanned at one time.

In the case where you have to scan documents of different widths together, scan them, following the procedure below.

1. To prevent images from skewing, select [Automatic Page Size Detection] from the [Automatic Size and Skew Detection] drop-down list. (For details, refer to "2.9 Correcting Skew" on page 51.)

2. Center all documents as shown in the figure below.

3. Place the documents on the ADF paper chute, and then adjust the side guides so that they lightly touch the widest sheets of paper.

ATTENTION When placing the stack of documents on the scanner, make sure that all documents are directly under the pick roller. Off-center documents, which are not under the pick roller, cannot be fed into the scanner.

----

4. Scan the documents.

   For information about how to scan documents, refer to "ScandAll PRO User's Guide".

2.3   Scanning Thin Documents

When you scan a batch of thin documents (which are out of specifications with under 52g/m² of thickness), document jams (Multifeed) and mis-picking may occur. If you have to scan such documents, switch the lever to "Thin" side.

1. Make sure that the thin documents meet the requirements described in section "6.2 Document Quality" on page 113.

2. Shift the position of the paper thickness switch to the "Thin" position (the factory default is "Normal" position).

Paper Thickness Switch

"Normal"

"Thin"
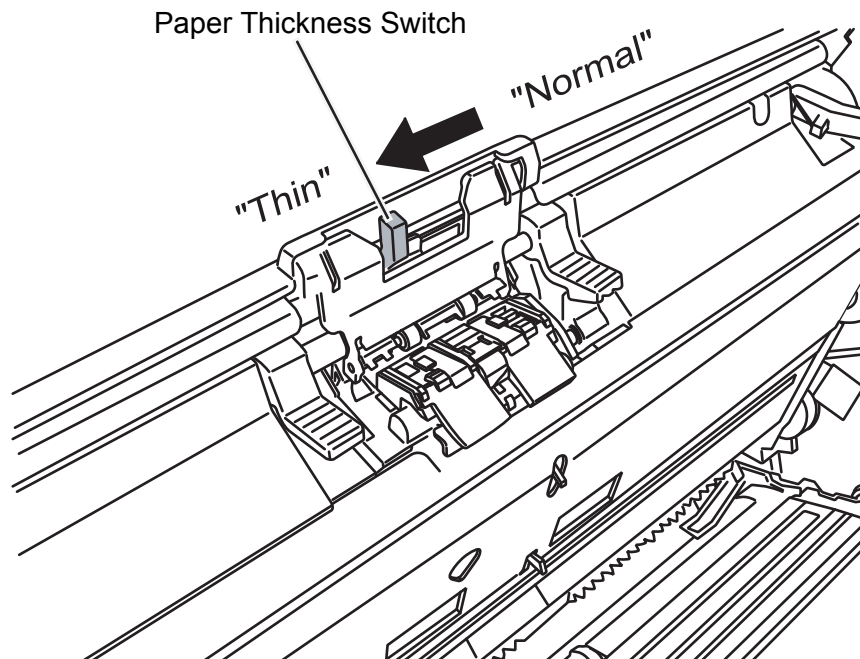
3. Scan the documents, following the procedure in section "1.3 Scanning Documents" (page 11).

For information about how to scan documents, refer to "ScandAll PRO User's Guide".

■ ■

ATTENTION Move the Paper Thickness Switch to "Normal" position when scanning documents of standard thickness. Move the switch to "Thin" position only when you scan thin paper, which is of non-standard thickness (less than 52g/m²).
Note that feeding performance may be degraded when you scan documents of non-standard paper.

■ ■

2

SCANNING VARIOUS TYPES OF DOCUMENTS

2.4 Scanning Documents Longer Than A3 Size

1. Place the document on the ADF.

   For details, refer to "1.2 Placing Documents on the ADF" (page 7).

2. Launch ScandAll PRO.

   From the [Start] menu, select [All Programs] ⇨ [Fujitsu ScandAll PRO] ⇨ [ScandAll PRO] in the order presented. ScandAll PRO starts up.

3. From the ScandAll PRO window, display the setup dialog box of TWAIN.

   For information about how to display the setup dialog box of the scanner driver, refer to "ScandAll PRO User's Guide".

4. Select [Long page (Front Side)] or [Long page (Duplex)] from the [Scan Type] drop-down list.
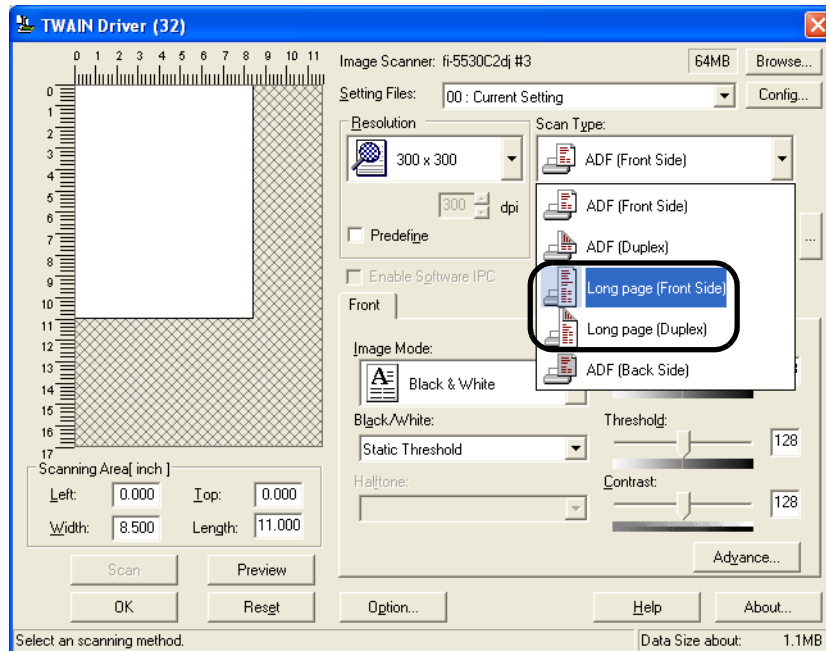
   ⇒ The [Long Page Paper Size Setting] dialog box appears.

5. Specify a document length, and then click the [OK] button.

6. Click the [OK] button in the setup dialog box of TWAIN.

    ⇒ Changes made in this dialog box are saved and the setup dialog box closes.

7. Scan the document with ScandAll PRO.

    For information about how to scan documents, refer to "ScandAll PRO User's Guide".
    ⇒ The document is scanned, and the scanned document image is displayed in the ScandAll

      PRO window.

    ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪

    ATTENTION The combined use of the following functions is not possible.
    *   Multi Image Output (page 53)
    *   Auto Color Detection (page 56)

    ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪

2

SCANNING VARIOUS TYPES OF DOCUMENTS

2.5 Excluding a Color from Images (Dropout Color)

You can select a color from primary colors (red, green, and blue) to remove (drop out) from a scanned document image. For example, when you scan a document containing black text with green background, you can output an image of only black text.

Enable the dropout color setting in the setup dialog box of the scanner driver.

Original　　　　　　　　**Created image**
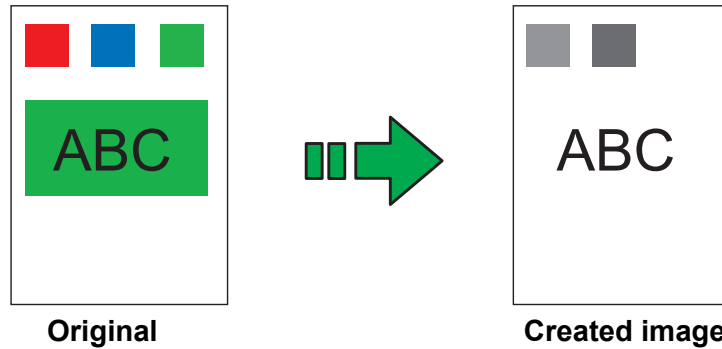
Example: When green is selected as a dropout color

The following shows the procedure to change settings in the setup dialog box of TWAIN Scanner Driver.

1. From ScandAll PRO, display the setup dialog box of TWAIN.

   For information about how to display the setup dialog box of the scanner driver, refer to "ScandAll PRO User's Guide".

2. In the TWAIN Driver dialog box, click the [Advance] button.
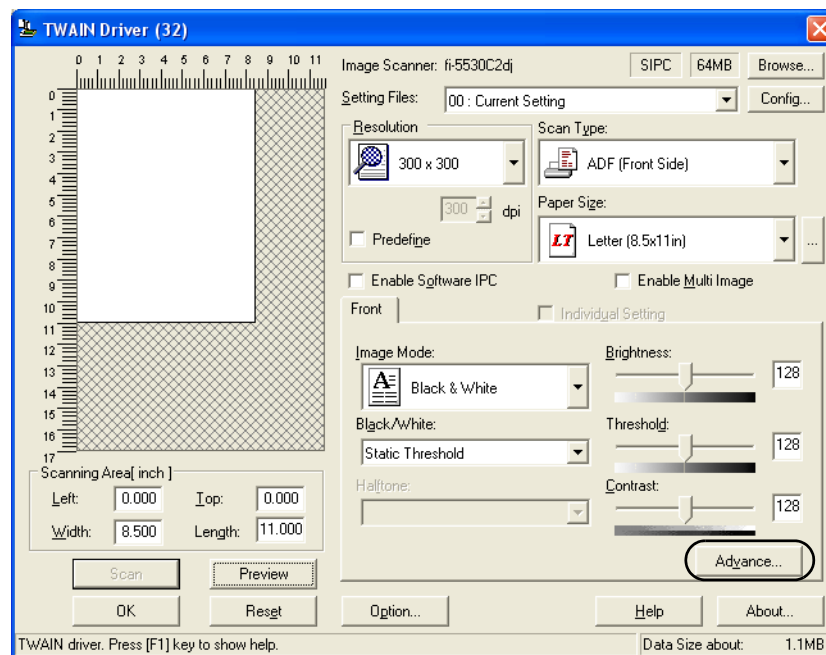
   ⇒ The [Advance] dialog box appears.

3. Select a color you want to remove, from the [Dropout Color] drop-down list under [More].

    For example, when you want to obtain only black text image from a document containing black text outlined in green, select [Green] from the list.
    If you want no color to be dropped out, select [None].
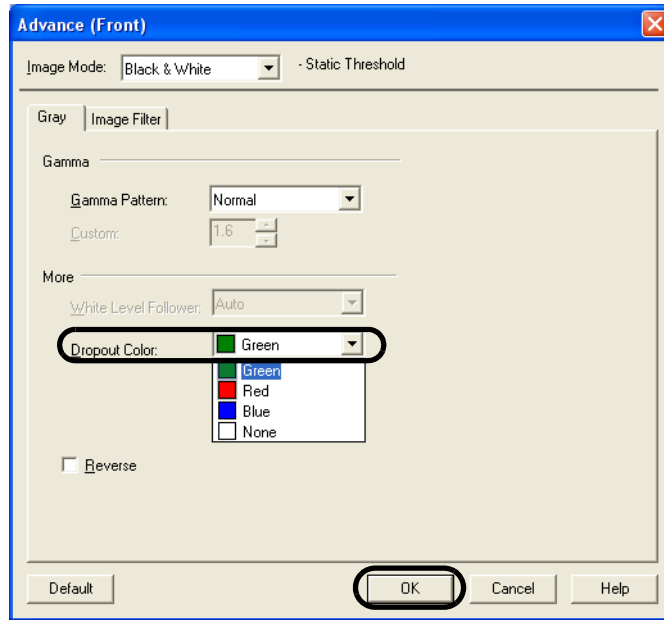
4. Click the [OK] button.

    ⇒ You are returned to the [TWAIN Driver] dialog box.

5. In the [TWAIN Driver] dialog box, click the [OK] button.

    ⇒ Changes made are saved and the [TWAIN Driver] dialog box closes.

    Continue scanning in ScandAll PRO.
    For information about how to scan documents, refer to "ScandAll PRO User's Guide".

2

SCANNING VARIOUS TYPES OF DOCUMENTS

2.6 Skipping Blank Pages

Blank pages in a document are detected and removed automatically. For example, when scanning both double-sided and single-sided documents together in duplex mode, you can obtain the scanned document images without blank pages. Configure the setting in the setup dialog box of the scanner driver.

1. From ScandAll PRO, display the setup dialog box of TWAIN.

   For information about how to display the setup dialog box of the scanner driver, refer to "ScandAll PRO User's Guide".

2. In the TWAIN Driver dialog box, click the [Option] button.
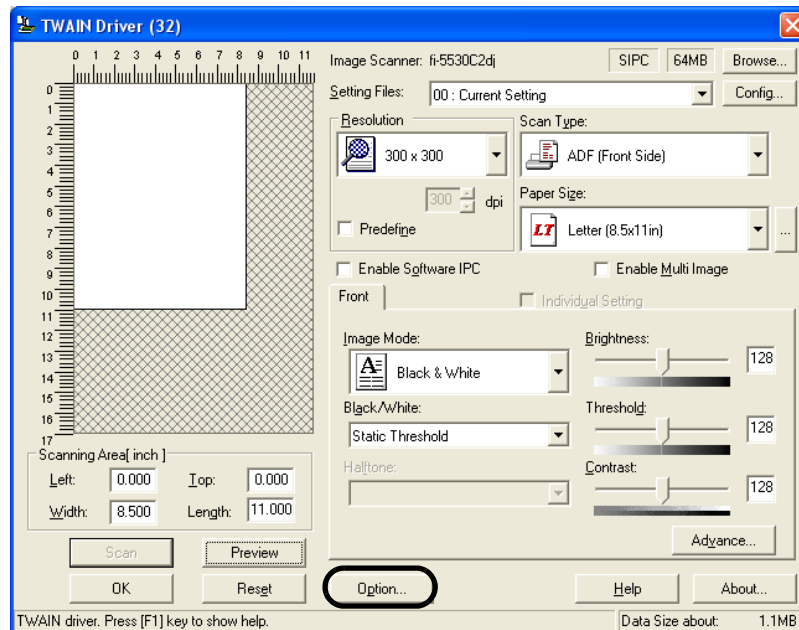
   ⇒ The [Option] dialog box appears.

3. Select the [Job/Cache] tab.

4. Mark the [Blank Page Skip] checkbox.
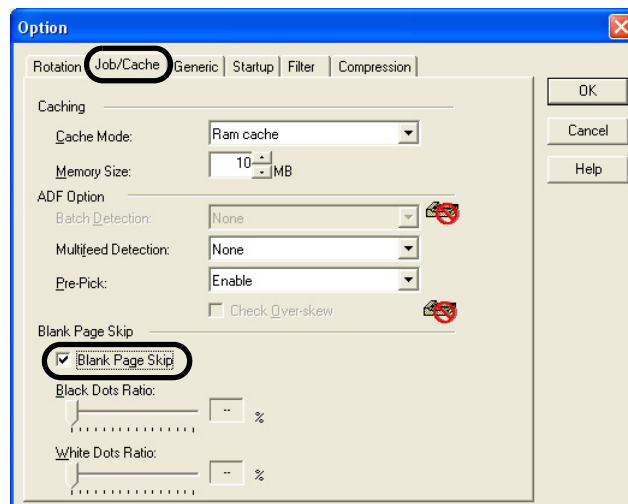
If this checkbox is marked, cache mode is automatically changed to [Ram cache].

5. With the slider control under [Blank Page Skip], specify the Blank Page Skip degree.

<In Binary/Halftone mode>
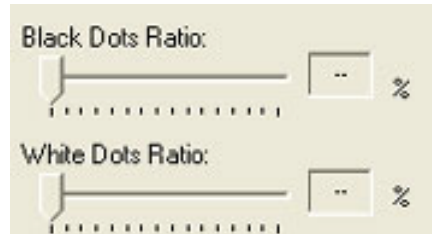
For white pages, use the [Black Dots Ratio] slider bar to specify a degree of accuracy needed to skip blank pages. For black pages, use the [White Dots Ratio] scroll bar to specify a degree of accuracy needed to skip blank pages.
The value displayed to the right of the slider bar shows a noise (dots) ratio(*1). If a scanned page includes dots less than this value, the page is recognized as blank. You can select OFF(- -) or a value from 0.2% to 3.0% (in increments of 0.2%).
*1: Ratio of black dots included in a scanned area. (for white pages)

<In Color/Grayscale mode>

Use the slider bar to specify a level in five levels from 1 to 5. The larger the number, the higher the accuracy.

6. Click the [OK] button.

⇒ You are returned to the [TWAIN Driver] dialog box.

7. In the [TWAIN Driver] dialog box, click the [OK] button.

⇒ Changes made are saved and the [TWAIN Driver] dialog box closes.
Continue scanning in ScandAll PRO.
For information about how to scan documents, refer to "ScandAll PRO User's Guide".

2

SCANNING VARIOUS TYPES OF DOCUMENTS

2.7   Scanning the Image Brighter

The brightness of the scanned image can be increased for scanning in grayscale or color.
The following shows the procedure to change settings in the setup dialog box of TWAIN Scanner
Driver.

1. From ScandAll PRO, display the setup dialog box of TWAIN.

    For information about how to display the setup dialog box of the scanner driver, refer to
    "ScandAll PRO User's Guide".

2. Select grayscale or color in [Image Mode].
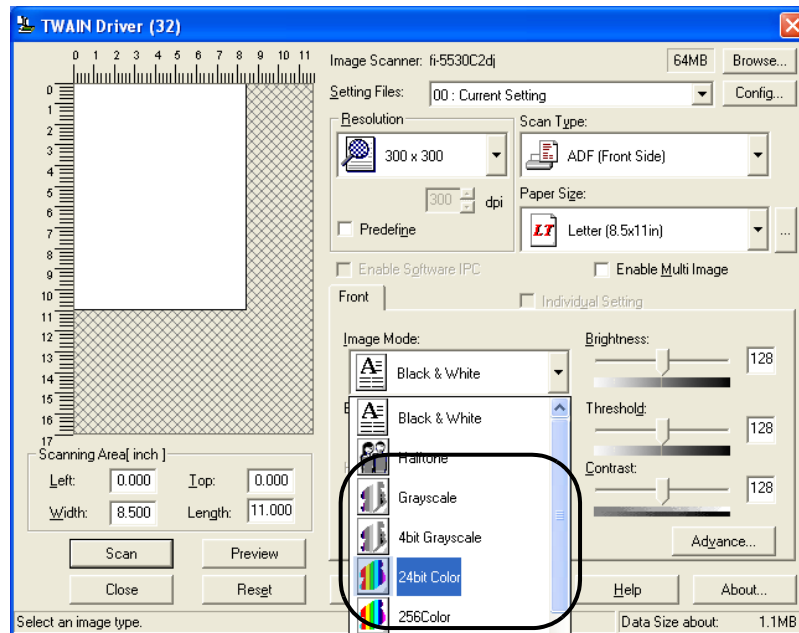
3. In the TWAIN Driver dialog box, click the [Advance] button.
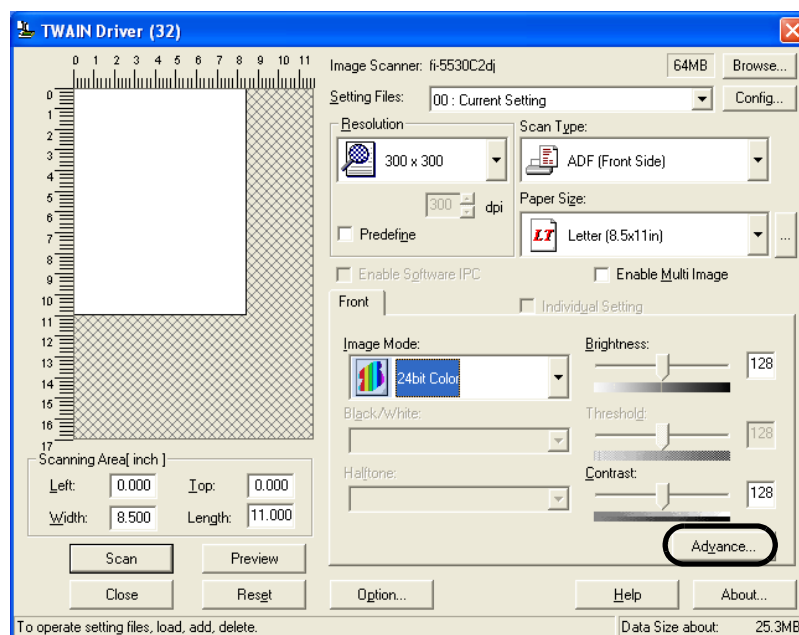
⇒ The [Advance] dialog box appears.

4. Click the [Color] tab, and then select [Bright] in [Preset Gamma].
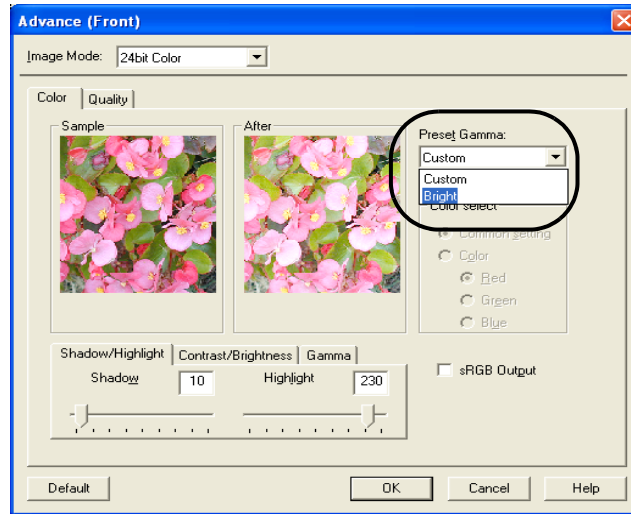
5. Click the [OK] button.

⇒ You are returned to the [TWAIN Driver] dialog box.

6. In the [TWAIN Driver] dialog box, click the [OK] button.

⇒ Changes made are saved and the [TWAIN Driver] dialog box closes.

Continue scanning in ScandAll PRO.
For information about how to scan documents, refer to "ScandAll PRO User's Guide".

HINT

When using applications other than ScandAll PRO, you can also increase the default brightness of the TWAIN driver. Select [Tools] - [FtSwtGmm] - [Twain] in the Setup DVD-ROM and double-click "FtSwtGmm.exe", and then select [Bright) in the [Default scan setting (TWAIN)] dialog box.

2

SCANNING VARIOUS TYPES OF DOCUMENTS
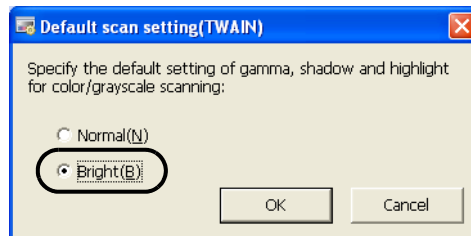
2.8   Detecting Multifeeds

"Multifeed" is an error that occurs when two or more sheets are accidentally fed into the ADF at the same time. By changing a setting, you can receive an error message when the scanner detects a multifeed.
To enable multifeed detection, change the setting in the setup dialog box of a scanner driver.

The following shows the procedure to change settings in TWAIN Scanner Driver.

1. From ScandAll PRO, display the setup dialog box of TWAIN.
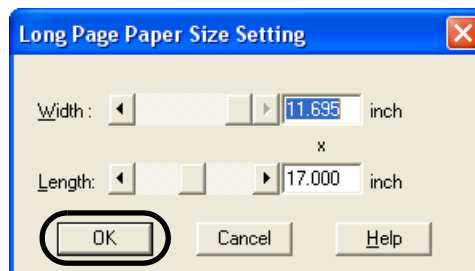
    For information about how to display the setup dialog box of the scanner driver, refer to "ScandAll PRO User's Guide".

2. In the TWAIN Driver dialog box, click the [Option] button.
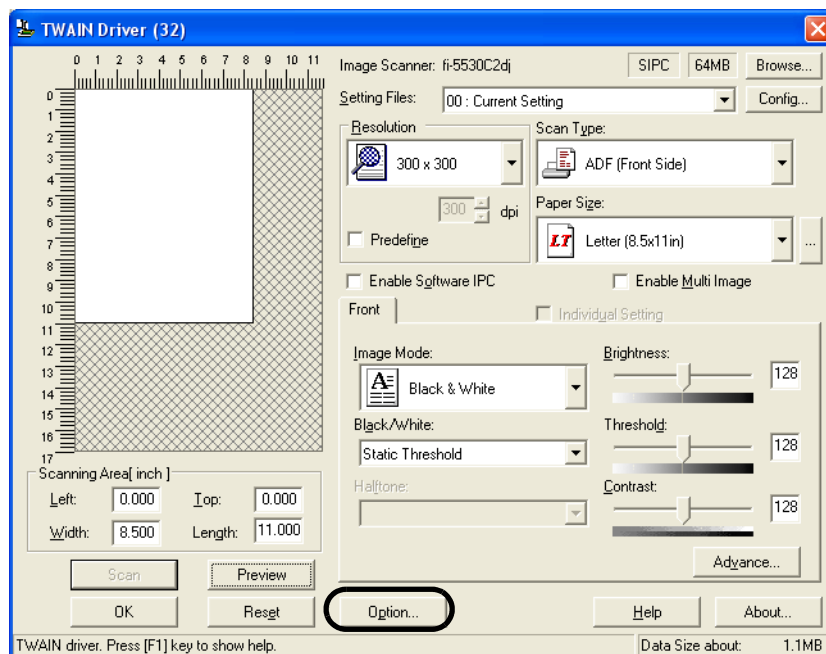
    ⇒ The [Option] dialog box appears.

3. Select the [Job/Cache] tab.

4. Select how to detect multifeeds from the [Multifeed Detection] drop-down list under [ADF Option].
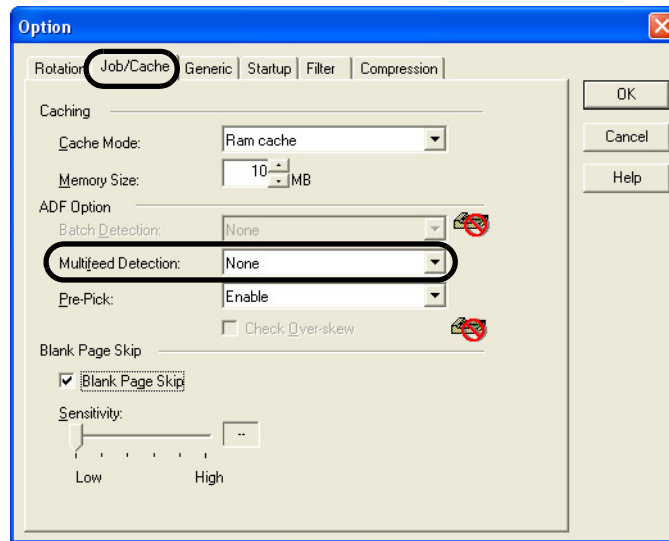
The following are how to detect multifeeds:

None	:	Multifeed detection is not performed
Check overlapping	:	The scanner monitors the thickness of fed documents. The scanner detects a multifeed based on an increased thickness when multiple sheets are fed simultaneously.
Check length	:	The scanner monitors the length of fed documents. The scanner detects a multifeed based on an increased length when multiple sheets are fed simultaneously.
Check overlapping and length	:	The scanner monitors both document thickness and length to detect multifeeds.

For more information on multifeed detection, refer to "6.5 Specifying How to Detect Multifeed" on page 119.

5. Click the [OK] button.

⇒ You are returned to the [TWAIN Driver] dialog box.

6. In the [TWAIN Driver] dialog box, click the [OK] button.

⇒ Changes made are saved and the [TWAIN Driver] dialog box closes.

Continue scanning in ScandAll PRO.
For information about how to scan documents, refer to "ScandAll PRO User's Guide".

2

SCANNING VARIOUS TYPES OF DOCUMENTS

■ To Specify the Area for Multifeed Detection

Normally, the multifeed detection function monitors paper overlaps at the central part of sheets (width: 35mm). Therefore, some types of documents, such as the resume and postcard, on which a photograph or stamp is pasted, may be accidently recognized as multi-fed documents.
When scanning these types of documents, you can prevent multifeed errors by narrowing down the area to be detected. Enable this function, following the procedure below.

1. Open the Scanner's Properties dialog box.

   1) Turn on your scanner, and then check that the scanner is connected to a personal computer. For information about how to connect the scanner to your personal computer, refer to "2.2 Connecting the Scanner to a PC" in fi-5530C2 Getting Started on the DVD-ROM .

   2) Double-click on the [Printer and Other Hardware] icon in Control Panel.
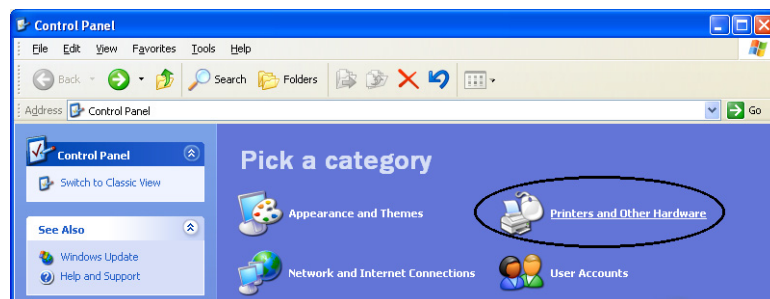
   ⇒ The [Printer and Other Hardware] window appears.

   3) In the [Printers and Other Hardware] window, double-click on the [Scanners and Cameras] icon.

   ⇒ The [Scanners and Cameras] window is displayed.

4) Display the [fi-5530C2dj Properties] dialog box.

⇒ The [fi-5530C2dj Properties] dialog box appears.

5) Select the [Device Set] tab.

⇒ The following dialog box appears.

2
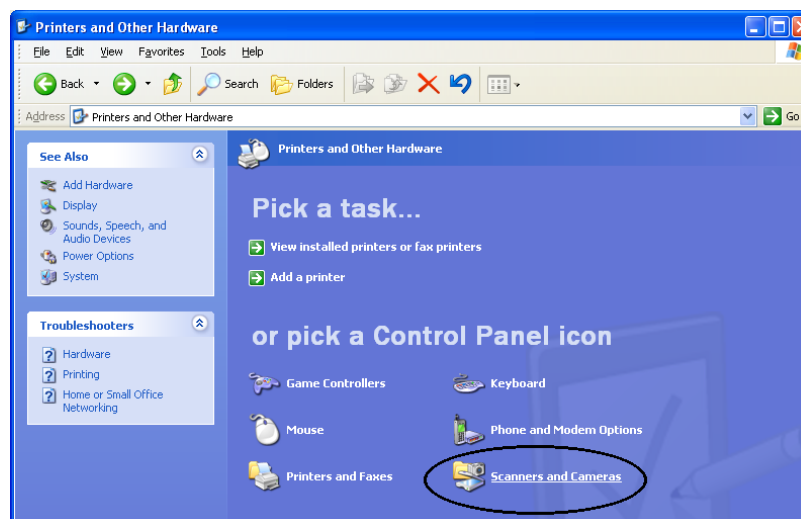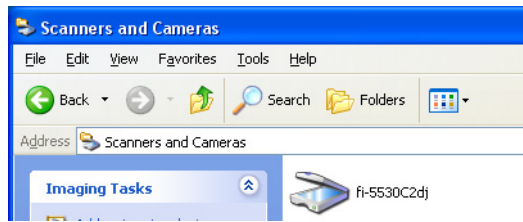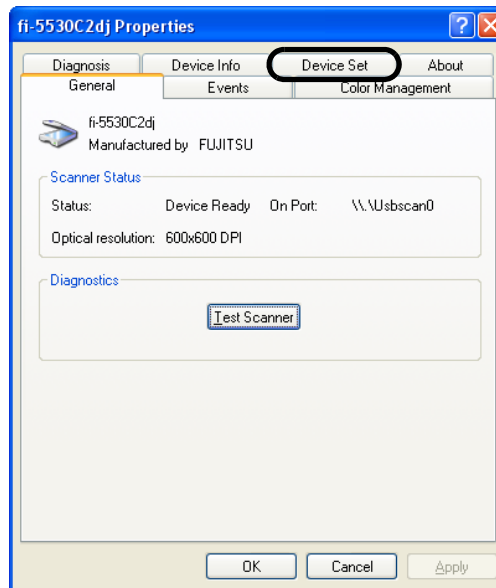
SCANNING VARIOUS TYPES OF DOCUMENTS
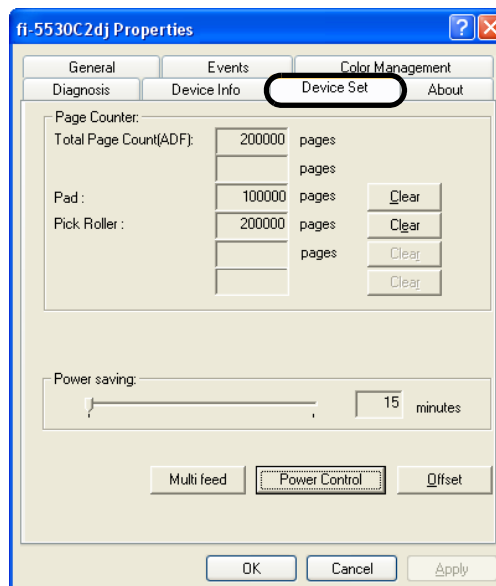
2. Click the [Multifeed] button.

⇒ The following dialog box appears.

Specify Area for Multi feed Detect...

☑ Enable

○ Select area for applying Multi feed Detection

⦿ Select area for not applying Multi feed Detection

Start
From the top of document: [0] mm

End
From the top of document: [0] mm

[OK]   [Cancel]
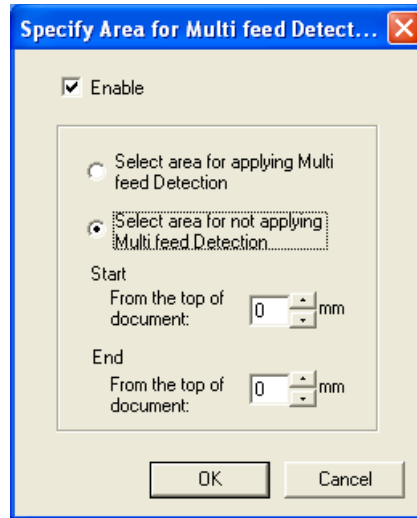
3. Configure settings in the [Specify Area for Multifeed Detection] dialog box.

1) Mark the [Enable] check box.

> HINT
> - You can specify an area in the direction of the length of the document for detecting multifeed errors.
> - Unless the [Enable] checkbox is marked, the area of [Select area for applying Multifeed Detection] or [Select area for not applying Multifeed Detection] cannot be specified. In this case, normal multifeed detection described above is performed. (Refer to "6.5 Specifying How to Detect Multifeed" on page 119.)

2) Select whether you want to specify an area to enable or disable multifeed detection.
- To specify an area for which the Multifeed Detection is performed:
  ⇒ Select the [Select area for applying Multifeed Detection] button.
- To specify an area for which the Multifeed Detection is NOT performed:
  ⇒ Select the [Select area for not applying Multifeed Detection] radio button.

3) Specify the [Start] position in the area.
Enter a distance from the top of the document as a starting position in millimeter.
(Select an even number from 0 mm to 510 mm)

4) Specify the [End] position in the area.
Enter a distance from the the top of the document. (Select an even number from 0 mm to 510 mm)

> ATTENTION
> The number you enter as the [End] position must be larger than that of the [Start] position.

2.9   Correcting Skew

The skew of documents can be detected and corrected automatically by enabling the automatic deskew function.
Change the setting in the setup dialog box of the scanner driver.

The following shows the procedure to change settings in the setup dialog box of TWAIN Scanner Driver.

1. From ScandAll PRO, display the setup dialog box of TWAIN.

   For information about how to display the setup dialog box of the scanner driver, refer to "ScandAll PRO User's Guide".

2. In the TWAIN Driver dialog box, click the [Option] button.

    ⇒ The [Option] dialog box appears.

3. Select the [Rotation] tab.

4. Select [Automatic Page Size Detection] from the [Automatic Size and Skew Detection] drop-down list.

. . . .

HINT
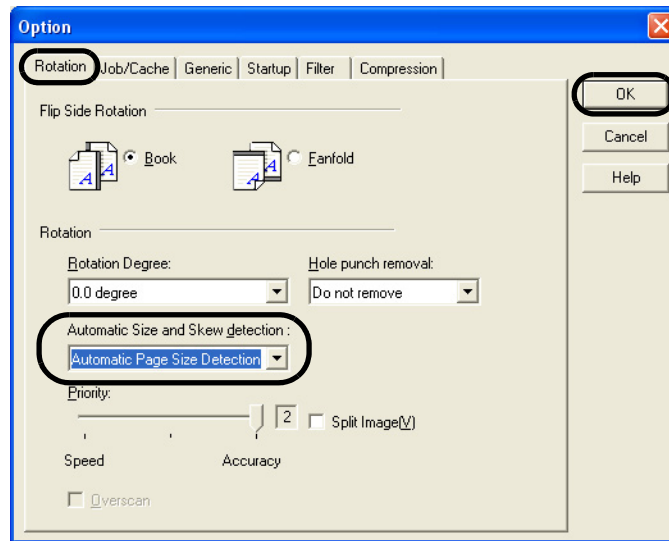
With the [Priority] slider control, you can change the accuracy of Automatic Page Size Detection.
- Move the slider to right to improve the detection accuracy. Note that the higher the accuracy, the longer the processing time, and the scanning speed becomes slower.
- When detecting paper sizes of index sheets or documents to which sticky notes or index tabs are attached, set the Priority to 2.

. . . .

■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■

ATTENTION
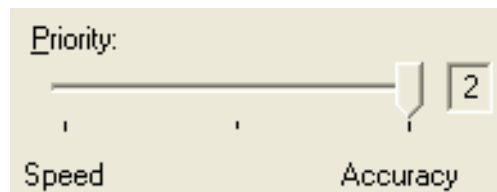
If one of the following conditions is met, the Automatic Page Size Detection may not work properly.

1. Paper is $52g/m^2$ or less in weight
2. Documents are not rectangular
3. The margin of pages is filled with dark color

■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■

5. Click the [OK] button.

⇒ You are returned to the [TWAIN Driver] dialog box.

6. In the [TWAIN Driver] dialog box, click the [OK] button.

⇒ Changes made are saved and the [TWAIN Driver] dialog box closes.

Continue scanning in ScandAll PRO.

For information about how to scan documents, refer to "ScandAll PRO User's Guide".

2.10 To Output Multi-Images

You can obtain both color/grayscale and black-and-white images at a scan (Multi Image Output).

* Depending on the application to use, this function may not work properly.

Configure Multi Image settings using the scanner driver.

Original   **Created image**

Example: When the color document is scanned
with Multi Image Output being set

The following shows the procedure to change settings in the setup dialog box of TWAIN Scanner Driver.

1. From ScandAll PRO, display the setup dialog box of TWAIN.

    For information about how to display the setup dialog box of the scanner driver, refer to "ScandAll PRO User's Guide".

2. In the TWAIN Driver dialog box, mark the [Enable Multi Image] checkbox.

    * When you select [Long page] under [Scan Type], this checkbox is not available.

SCANNING VARIOUS TYPES OF DOCUMENTS

2

$\Rightarrow$ The [Multi Image] dialog box appears.

Multi Image

Output mode
- ● Multi Image Output
- ○ Auto Color Detection

Order (for Multi Image Output)
- ○ Primary: Color/Grayscale
  Secondary: Binary
- ● Primary: Binary
  Secondary: Color/Grayscale

Select Current Image Setting
- ● Front: Primary
- ○ Front: Secondary
- ○ Back: Primary
- ○ Back: Secondary

3. Select [Multi Image Output] under [Output mode].

Output mode
- ● Multi Image Output
- ○ Auto Color Detection

4. Select the order to output multi-images under [Order (for Multi Image Output)].

Order (for Multi Image Output)
- ○ Primary: Color/Grayscale
  Secondary: Binary
- ● Primary: Binary
  Secondary: Color/Grayscale

Primary: Color/Grayscale - Secondary: Binary
First, a Color or Grayscale image is output, and then a Black-and-White image.
Primary: Binary - Secondary: Color/Grayscale
First, a Black-and-White image is output, and then a Color or Grayscale image.

5. Under [Select Current Image Setting], select a side, and then configure settings for each side in the [TWAIN Driver] dialog box.

Select Current Image Setting
- ● Front: Primary
- ○ Front: Secondary
- ○ Back: Primary
- ○ Back: Secondary

ATTENTION   When scanning in duplex mode, the same [Image Mode] must be selected
              for both the front and back sides.

----

6. In the [TWAIN Driver] dialog box, click the [OK] button.

    $\Rightarrow$ Changes made are saved and the [TWAIN Driver] dialog box closes.

    Continue scanning in ScandAll PRO.
    For information about how to scan documents, refer to "ScandAll PRO User's Guide".

2

SCANNING VARIOUS TYPES OF DOCUMENTS

2.11 Color/Monochrome Auto Detection

This scanner features automatic detection of color or black-and-white document scans (the term "scan," in this case, refers to a produced image by scanning).
Scanning color documents produces color (or grayscale) images, and scanning black-and-white documents produces black-and-white images.
* Depending on the application to use, this function may not work properly.
Configure Multi Image settings using the scanner driver.

The following shows the procedure to change settings in the setup dialog box of TWAIN Scanner Driver.

1. From ScandAll PRO, display the setup dialog box of TWAIN.

    For information about how to display the setup dialog box of the scanner driver, refer to "ScandAll PRO User's Guide".

2. In the TWAIN Driver dialog box, mark the [Enable Multi Image] checkbox.

    * When you select [Long page] under [Scan Type], this checkbox is not available.

⇒ The [Multi Image] dialog box appears.

3. Select [Auto Color Detection] under [Output mode].

4. Under [Select Current Image Setting], select a side, and then configure settings for each side in the [TWAIN Driver] dialog box.

> ᴬᵀᵀᴱᴺᵀᴵᴼᴺ ✋ When scanning in duplex mode, the same [Image Mode] must be selected for both the front and back sides.

5. In the [TWAIN Driver] dialog box, click the [OK] button.

⇒ Changes made are saved and the [TWAIN Driver] dialog box closes.

Continue scanning in ScandAll PRO.
For information about how to scan documents, refer to "ScandAll PRO User's Guide".

2

SCANNING VARIOUS TYPES OF DOCUMENTS
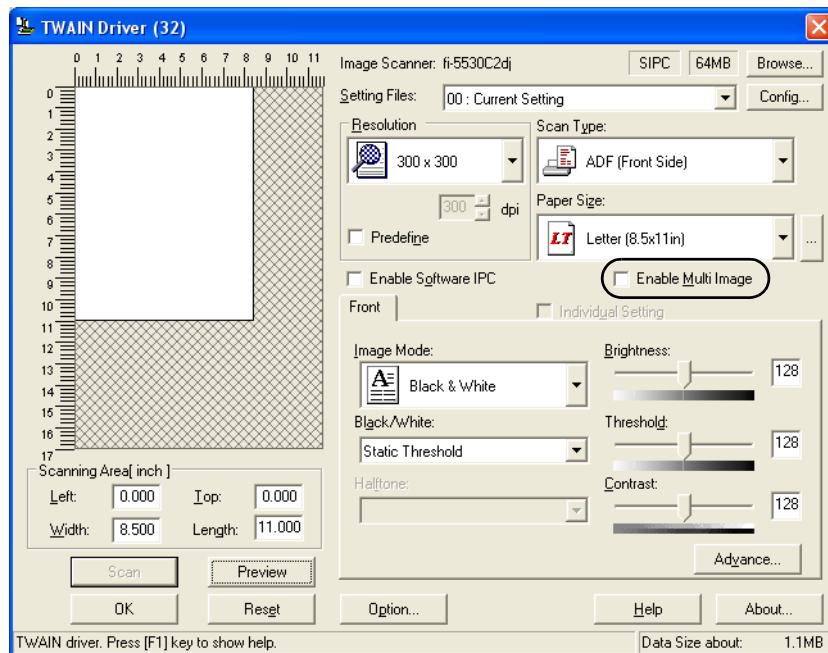
2.12 Splitting a Page in Two Pages

You can obtain two images by horizontally splitting a scanned page image.
* Depending on the application to use, this function may not work properly.
  Enable the Split Image function in the setup dialog box of the scanner driver.
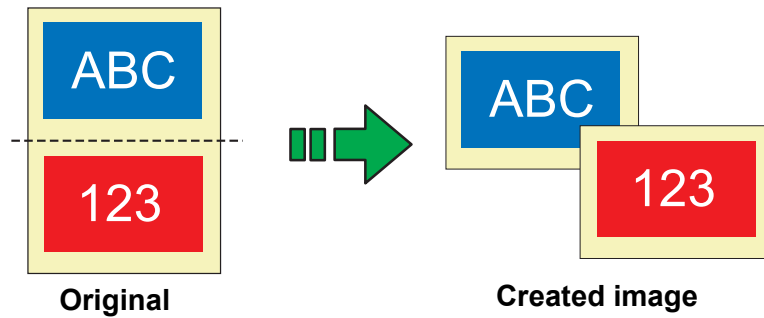
Original   **Created image**

The following shows the procedure to change settings in the setup dialog box of TWAIN Scanner Driver.

1. From ScandAll PRO, display the setup dialog box of TWAIN.

   For information about how to display the setup dialog box of the scanner driver, refer to "ScandAll PRO User's Guide".

2. In the TWAIN Driver dialog box, mark the [Option] checkbox.
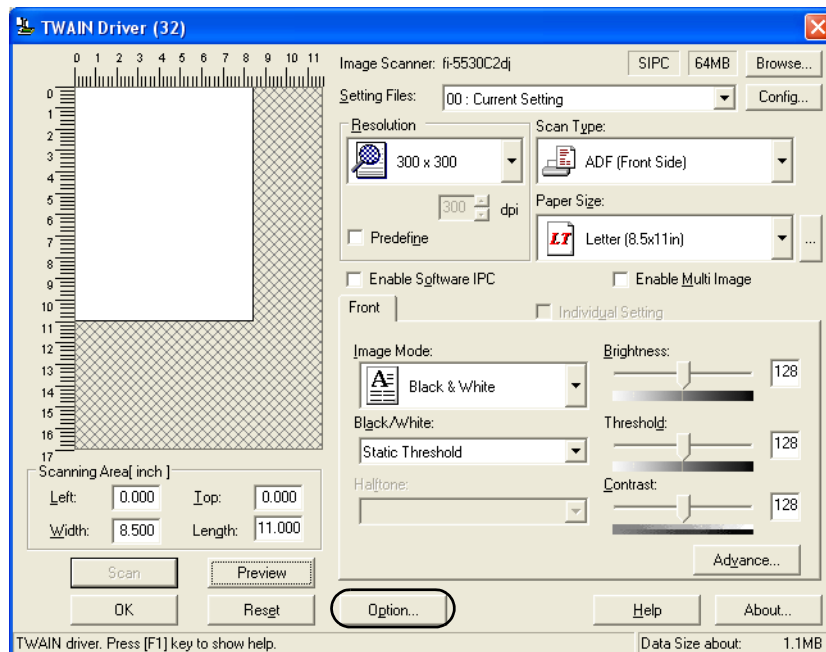
   ⇒ The [Option] dialog box appears.

3. Select the [Rotation] tab.

4. Mark the [Split Image] checkbox.

2

SCANNING VARIOUS TYPES OF DOCUMENTS

HINT
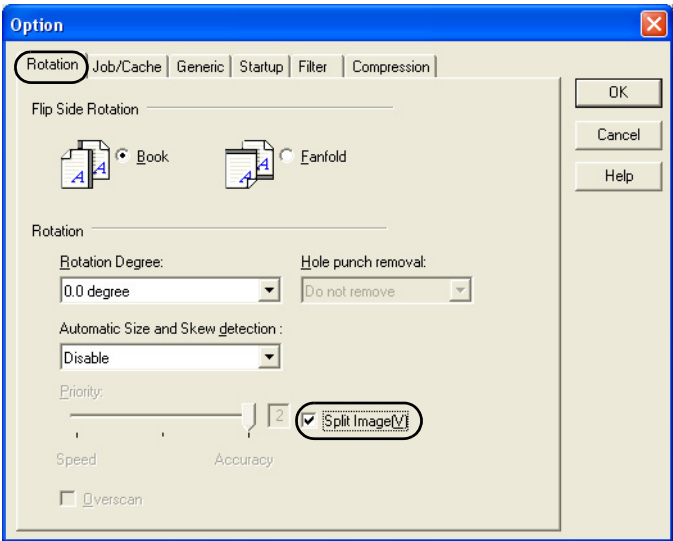
When a double-sided document is scanned in Duplex mode, the scanned document image is output according to the [Flip Side Rotation] setting in the order presented below:
- Book: Upper half ⇨ Lower half
- Fanfold: Lower half ⇨ Upper half

ATTENTION

If one of the following settings is set, this function is not available.
1. Multi Image Output (page 53)
2. Color/Monochrome Auto Detection (page 56)
3. The resolution is set to 1200dpi

5. Click the [OK] button.

⇒ You are returned to the [TWAIN Driver] dialog box.

6. In the [TWAIN Driver] dialog box, click the [OK] button.

⇒ Changes made are saved and the [TWAIN Driver] dialog box closes.

Continue scanning in ScandAll PRO.
For information about how to scan documents, refer to "ScandAll PRO User's Guide".

2.13 Removing Punch Holes from Images

You can remove (obscure) punch holes (black dots) from scanned document images when scanning punched documents.
Configure the Hole Punch Removal settings using the scanner driver.
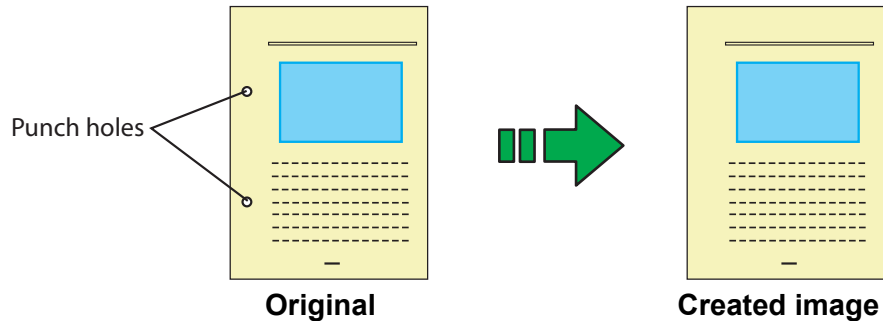
Original   **Created image**

The following shows the procedure to change settings in the setup dialog box of TWAIN Scanner Driver.

1. From ScandAll PRO, display the setup dialog box of TWAIN.

    For information about how to display the setup dialog box of the scanner driver, refer to "ScandAll PRO User's Guide".

2. In the TWAIN Driver dialog box, click the [Option] button.
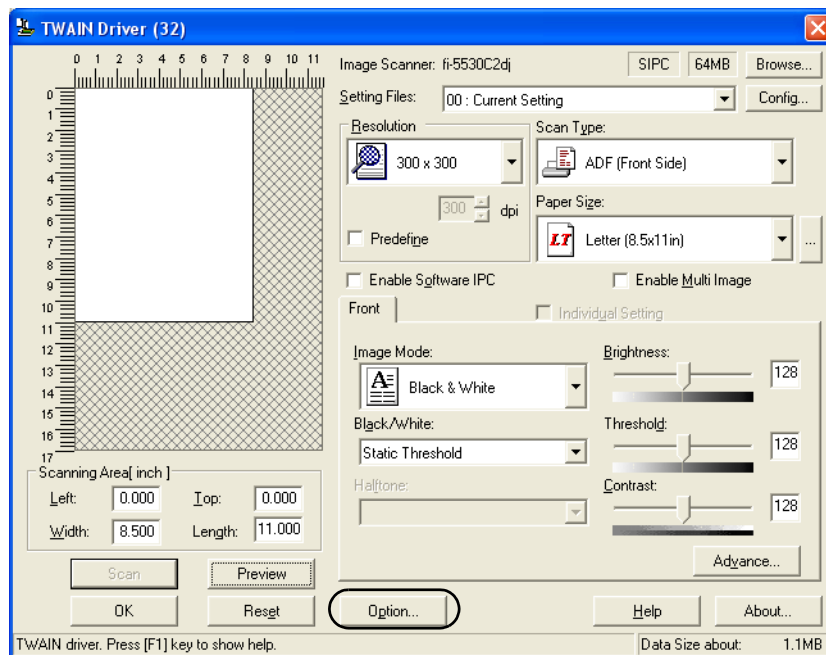
   ⇒ The [Option] dialog box appears.

3. Select the [Rotation] tab.

4. Select [Automatic Page Size Detection] or [Black Background] from the [Automatic Size and Skew detection] drop-down list.

    If you select a setting other than [Automatic Page Size Detection] or [Black Background], [Hole Punch Removal] is not available.
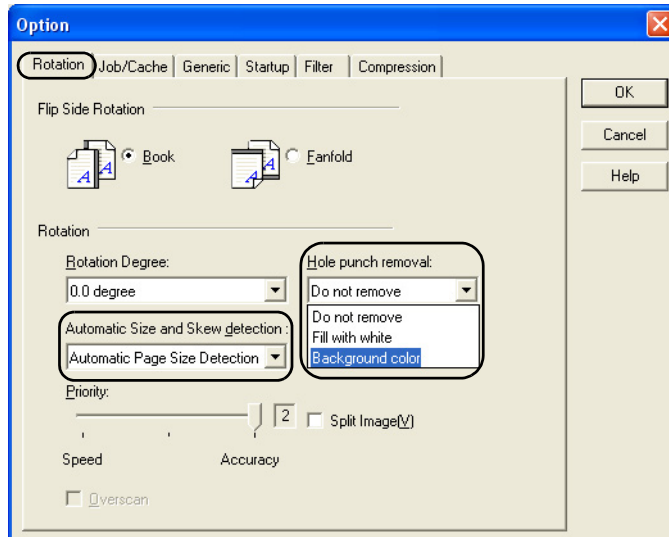
5. Select [Fill with white] or [Background color] from the [Hole punch removal] drop-down list.

    Fill with white: Punch hole marks are filled with white
    Background color: Punch hole marks are filled with a color most used around the holes.

    When scanning a color document, select [Background color]. If you select [Fill with white], punch holes will be filled with white.

6. Click the [OK] button.

    ⇒ You are returned to the [TWAIN Driver] dialog box.

7. In the [TWAIN Driver] dialog box, click the [OK] button.

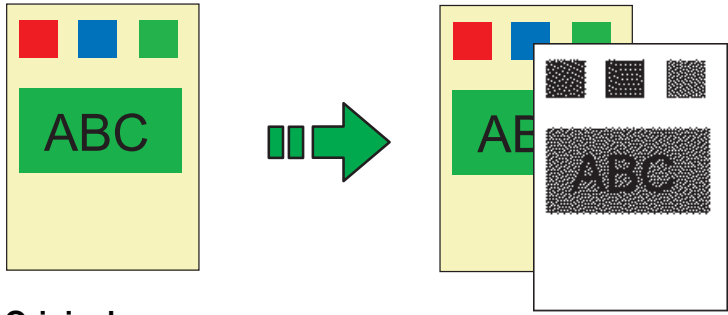   ⇒ Changes made are saved and the [TWAIN Driver] dialog box closes.

    Continue scanning in ScandAll PRO.
    For information about how to scan documents, refer to "ScandAll PRO User's Guide".

2

SCANNING VARIOUS TYPES OF DOCUMENTS

▪▪▪

ATTENTION

Punch hole marks cannot be removed when:
- Hole marks are not aligned along with the edge of the document.
- Hole mark sizes vary or hole marks appear at various intervals.
- The document is not rectangular.
- The document of dark-colored background is scanned.
- Characters or figures exist at the edge of the document, or characters or figures overlap with hole marks.
- With [Automatic Page Size Detection] enabled, the document of a size larger than the specified page size is scanned.
- With [Black Background] selected, the document of a different size from the specified page size is scanned.

▪▪▪

2.14   Scanning by Pressing the Scan Button on the Scanner

The [Scan] and [Send to] buttons on the operator panel can be configured to perform scanning by simply pressing one of these buttons.
To configure this setting, you first need to assign an application to be launched from each button.

The following shows the procedure to do so.

1. From the [Start] menu, select [Control Panel].

2. Select [Scanners and Cameras].

3. Display the [fi-5530C2dj Properties] dialog box.

4. Select the [Events] tab.

5. Select a button to use for an event.

    In Windows XP, from the [Select an event] drop-down list, select an event to launch the application.
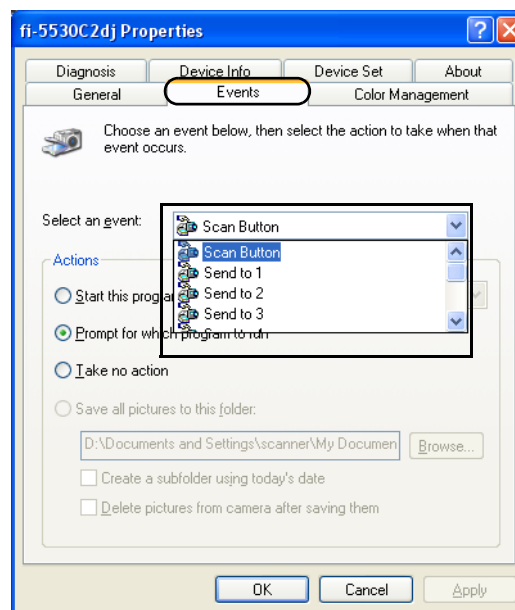
The following events can be selected:
  - •Scan Button (Press the [Scan] button)
  - •Send to 1 to 9 (With a number from 1 to 9 displayed on the Function Number Display, press the [Send to] button)

2

SCANNING VARIOUS TYPES OF DOCUMENTS

6. Select an action and an application to be launched by the scanner button event.

   In Windows XP, select an application from the [Start this program] drop-down list under [Actions].
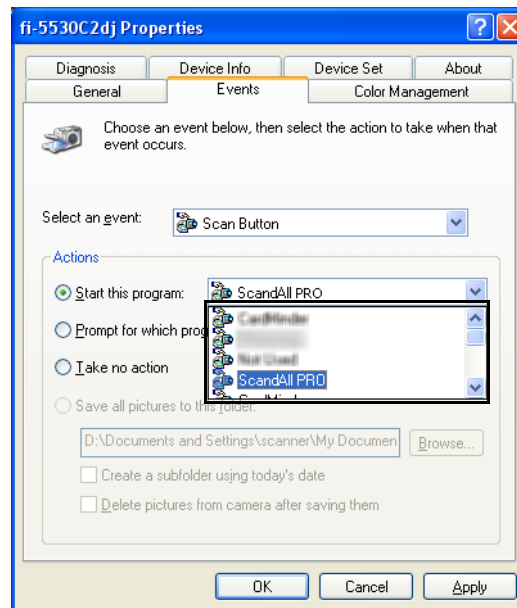
7. Click the [OK] button.

   If you are using ScandAll PRO, refer to "ScandAll PRO User's Guide".
   If you are using an application other than ScandAll PRO, the setup of the computer is completed here.

   ●

   HINT   To link another button, perform steps 3 to 7 again.

   ●

HINT

Use the [Send to] button, following the procedure below:

1. Press the [Function] button, and change a number displayed on the Function Number Display.

2. When the displayed number and the event number you have selected in step 5 (Send to 1 - 9) matches, stop pressing the [Function] button.

3. Press the [Send to] button.

Function Number Display

Function

Send to

Scan

2

SCANNING VARIOUS TYPES OF DOCUMENTS
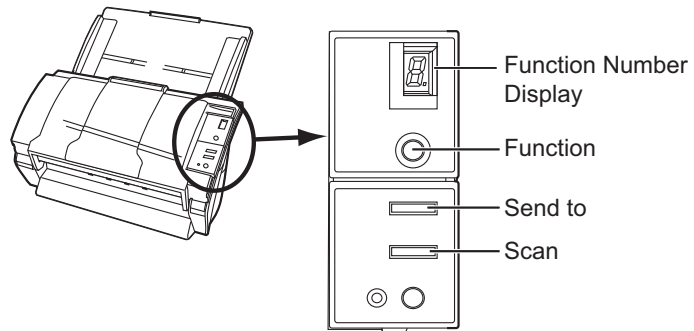
Chapter 3

DAILY CARE

This chapter describes how to clean the scanner.
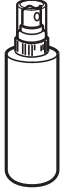
3

WARNING	The glass surface inside the ADF becomes hot during the operation of the scanner. Before you start cleaning the inner parts of the scanner, disconnect the AC adapter from the power outlet, and wait at least 15 minutes.
	Do not turn off the scanner when you clean the Feed and Eject Rollers.

3.1 Cleaning Materials and Locations requiring Cleaning

■ Cleaning Materials

Cleaning Materials	Parts Number	Remarks
Cleaner F1	PA03950-0352 (*1)	1 bottle Moisten a cloth with this fluid and wipe the scanner clean.
Cleaning Wipe	PA03950-0419	24 sheets/pack Pre-moistened with Cleaner F1, Cleaning Wipes are used instead of moistened cloths.
Lint-free dry cloth	- Commercially available one	

For details about the cleaning materials, contact the FUJITSU scanner dealer where you purchased the scanner.

*1) It may take long before the cleaner vaporizes if a large quantity is used. When cleaning the scanner parts, dampen a cloth with modest quantities of the cleaner. In addition, wipe off the cleaner completely with a soft lint-free cloth to leave no residue on the surface of the cleaned parts.

■ Locations and Cycle for Cleaning

The following table shows a standard cycle provided as a guide for cleaning each location.

Part to clean	Standard Cleaning Cycle
Pad ASSY	Clean these parts after every 5,000 scans.
Pick roller	
Feed rollers	
Plastic rollers	
Eject rollers	
Sheet guides	
Glass	
Ultra sonic sensor	

▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪

ATTENTION The scanner must be cleaned more frequently if you scan any of the following type of sheets:
- Documents of coated paper
- Documents containing printed text or graphics all over the page
- Chemically treated documents such as carbonless paper
- Documents containing a large amount of calcium carbonate
- A large volume of documents written with pencil
- Documents on which the toner is not fused sufficiently

▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪

3

DAILY CARE

3.2 Cleaning the ADF

As a guideline, clean the ADF after every 5,000 scans. Note that this guideline varies according to the type of documents you scan. For example, it may be necessary to clean the ADF more frequently when you scan documents on which the toner is not firmly fixed on.

⚠ WARNING	The glass surface inside the ADF becomes hot during the operation of the scanner. Before you start to clean the inner parts of the scanner, disconnect the AC adapter from the power outlet, and wait at least 15 minutes. Do not turn off the scanner when you clean the Feed and Eject Rollers.

■ Cleaning Method

1. Open the ADF while pushing down the ADF button.

ADF
Button
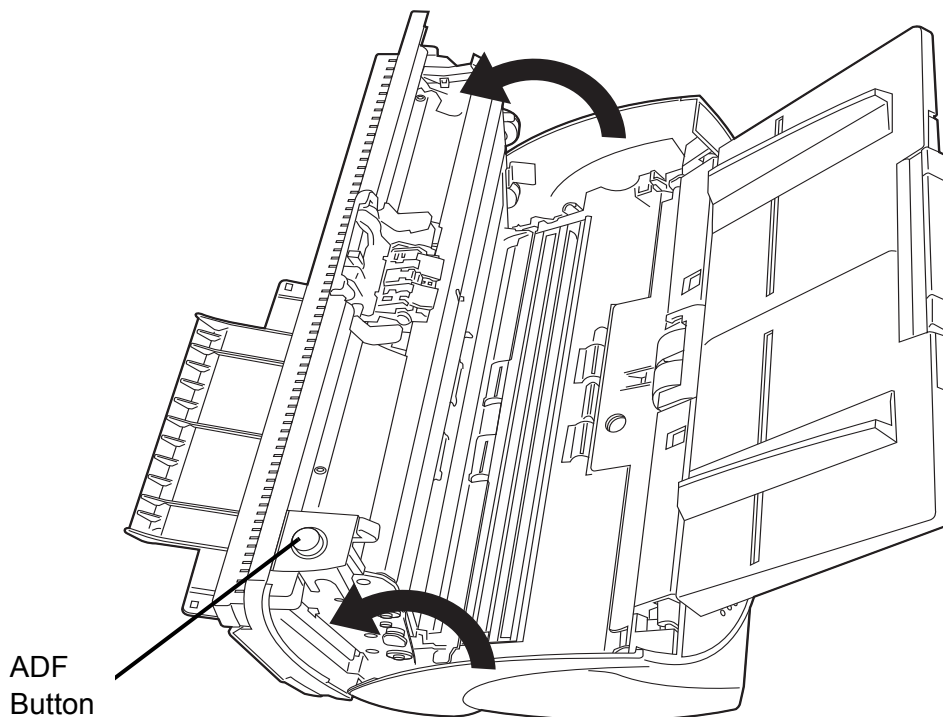
⚠ CAUTION	Be careful, the ADF cover may close suddenly and pinch your fingers.

2. Clean the following locations with a lint-free cloth moistened with Cleaner F1.
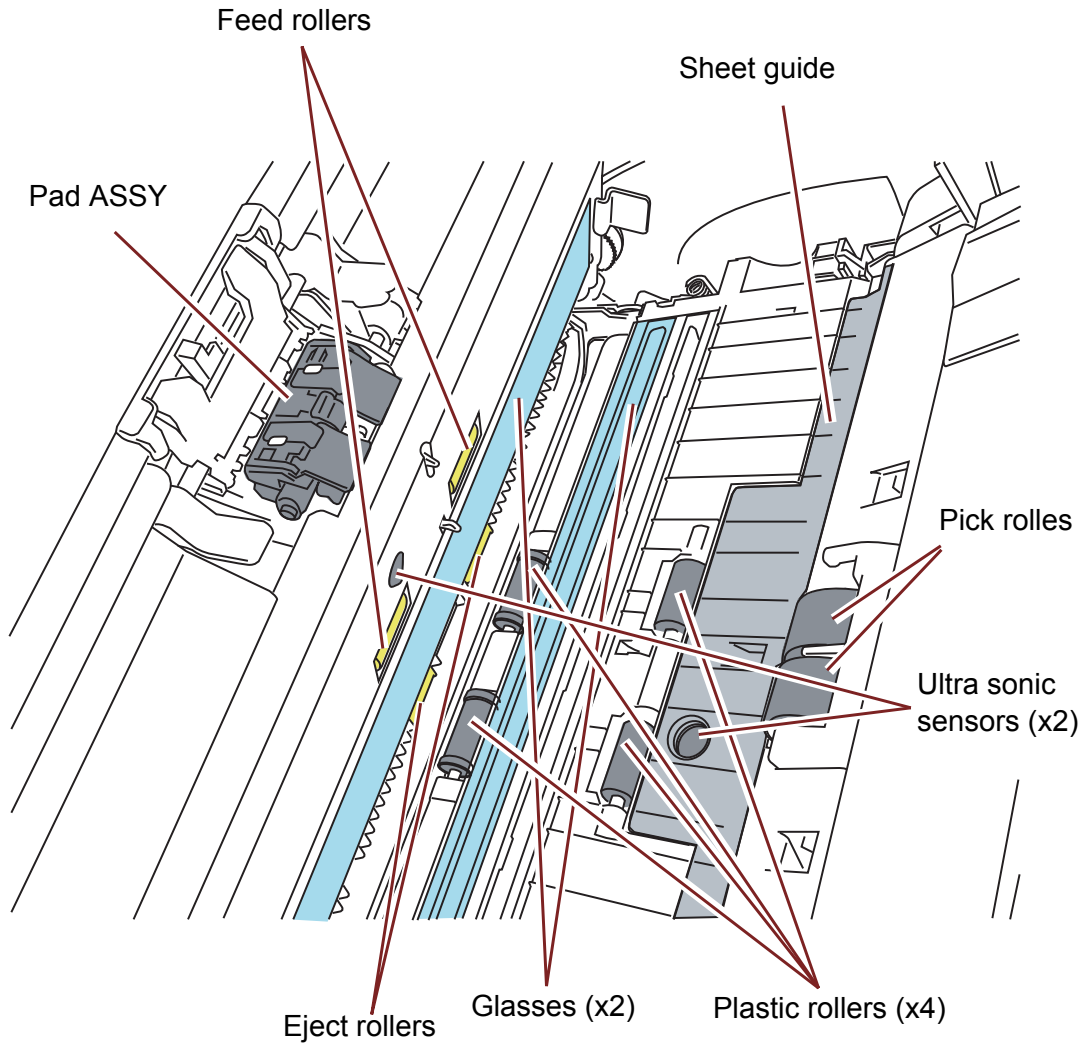
Feed rollers

Sheet guide

Pad ASSY

3

DAILY CARE

Pick rolles

Ultra sonic
sensors (x2)

Eject rollers

Glasses (x2)

Plastic rollers (x4)

ATTENTION It may take long before the cleaner vaporizes if a large quantity is used. When cleaning the scanner parts, dampen a cloth with modest quantities of the cleaner. In addition, wipe off the cleaner completely with a soft lint-free cloth to leave no residue on the surface of the cleaned parts.

- Pad ASSY
  Clean the Pad ASSY (rubber surface) downward (in the direction of the arrow).

Areas to be cleaned
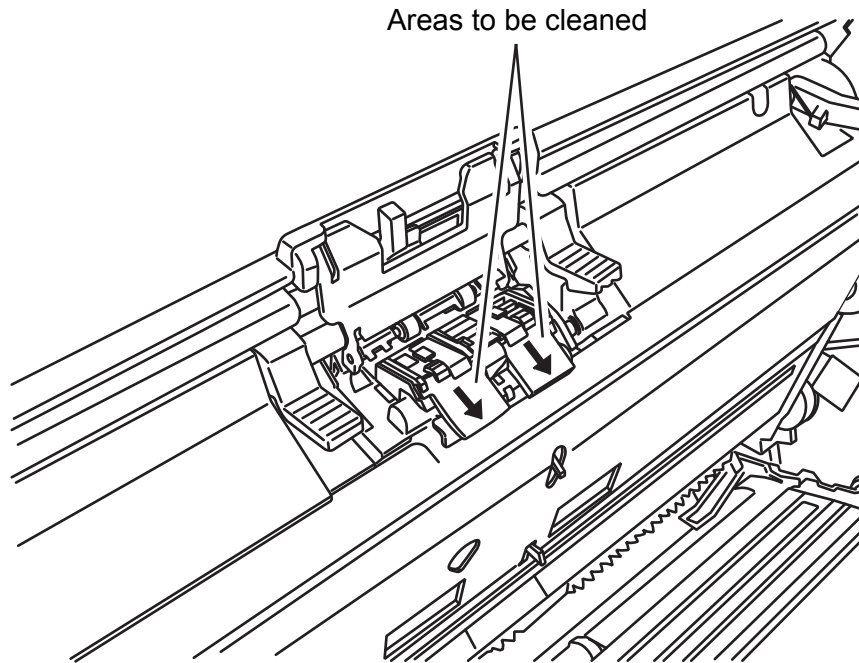
- Pick rollers
  Clean the Pick rollers lightly preventing scratches on the rollers' surface. Take particular care in cleaning these rollers as black debris on them adversely affects the pickup performance.

Pick rollers

- Feed and Eject rollers

    1) Open the ADF when "P" or "0" is not indicated on the Function Number display.
        If you open the ADF when "P" or "0" is indicated on the Function Number display,
        the Feed/Eject rollers will not rotate even if you perform step 2) below.

    2) Simultaneously hold down the [Send to] and [Scan] buttons on the operator panel.
        The Feed/Eject rollers start rotating slowly.

    3) Put a soft cloth moistened with cleaning fluid to the surface of the rotating Feed/
        Eject rollers lightly so that the surface of the rollers is cleaned.
        As a guideline, seven presses of the [Send to] and [Scan] buttons make the Feed/
        Eject rollers to rotate one full turn.

Function No. display
Function
Send to
Scan
Power button
LED

⚠ CAUTION	In step 2), the Feed rollers turn at the same time while rotating the Eject rollers. When cleaning the Eject rollers, be careful not to touch the Feed rollers and vice versa.

- Plastic rollers
  Clean the Plastic rollers lightly, preventing scratches on the roller surfaces. Take particular
  care in cleaning these rollers as black debris on them adversely affects the pickup
  performance. Be careful not to damage the sponges beside the rollers.

- Sheet guides
  Wipe clean lightly.

- Glass
  Wipe clean lightly.

> ATTENTION
> If the glass gets dirty, vertical black streaks may appear in the scanned images.

- Ultra sonic sensor
  Wipe clean lightly with a dry cloth.

3
DAILY CARE

3. Push the ADF at its center to return it to its original position and lock the ADF button.

Push the center of the ADF

ATTENTION Close the ADF until you hear it click. Paper jams or feeding errors may occur if the ADF is not closed firmly.

Chapter 4

REPLACING CONSUMABLES

This chapter describes how to replace scanner consumables.

In this chapter, Windows XP screenshots are used as examples.
The screens and operations provided herein may be different from actual ones if the operating system you are using is not Windows XP.
Please take note that, when TWAIN is updated, the screens and operations herein may also be slightly different.
If so, refer to the document provided with the update.

4

⚠WARNING	When operating the scanner, the glass inside the ADF becomes very hot. Before you replace the consumables, turn off the power and unplug the AC adapter from the outlet, and wait for at least 15 minutes.

4.1 Consumable and Replacement Cycle

The following table shows the specifications of consumables and guidelines for the replacement cycle.

Description	Parts Number	Standard Replacement Cycle
Pad ASSY	PA03334-0002	After 100,000 scans or one year
Pick roller	PA03334-0001	After 200,000 sheets or one year

The replacement cycles above are rough guidelines for the use of A4/Letter woodfree or wood containing paper 80 g/m^2 (17 lb). This cycle varies according to the type of the scanned paper and how frequently the scanner is used and cleaned.

> ATTENTION Use only the specified consumables to avoid document feeding trouble.
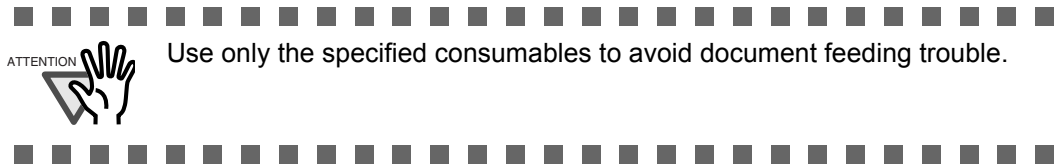
■ Guidelines for Consumable Replacement Cycle

With this product, you can check how many times the consumables have been used for you to replace them with new ones at a right timing.

1. When turning on the power, make sure that the scanner is connected to your personal computer.

    Refer to "2.2 Connecting the Scanner to a PC" in fi-5530C2 Getting Started on the DVD-ROM for information about connecting the scanner to your personal computer.

2. Double-click on the [Printer and Other Hardware] icon on the Control panel of your personal computer.
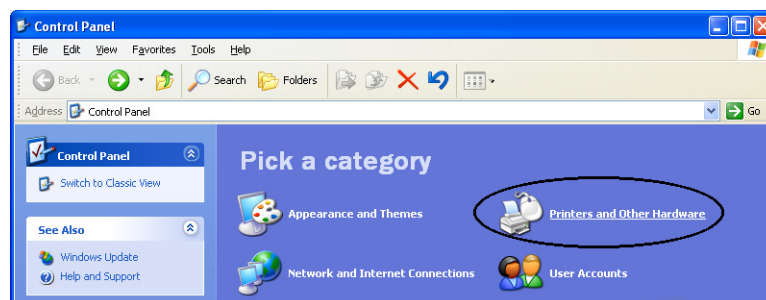
    ⇒ The [Printer and Other Hardware] window appears.

3. In the [Printers and Other Hardware] window, double-click on the [Scanners and Cameras] icon.
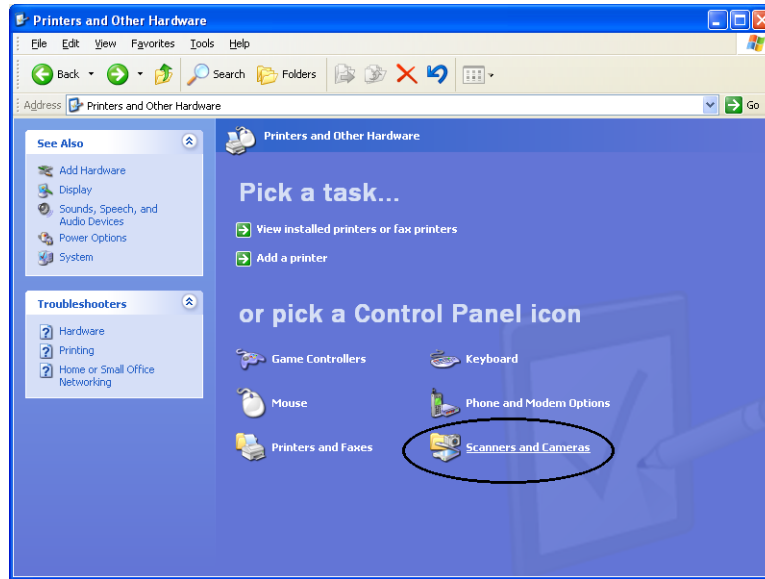
⇒ The [Scanners and Cameras] window is displayed.

4. Display the [fi-5530C2dj Properties] dialog box.
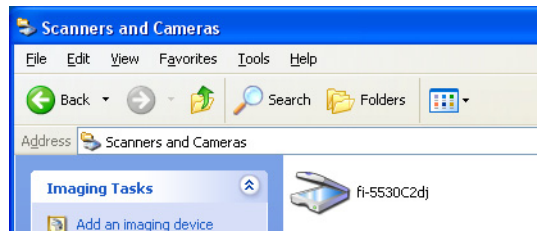
⇒ The [fi-5530C2 Properties] dialog box appears.

4

REPLACING CONSUMABLES
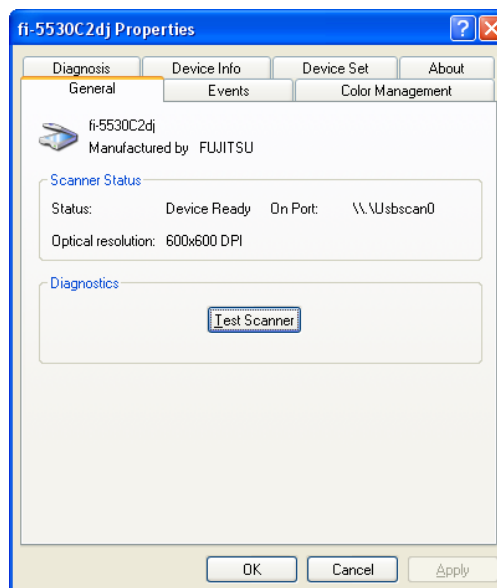
5. Click the [Device Set] tab.

⇒ The following panel appears.
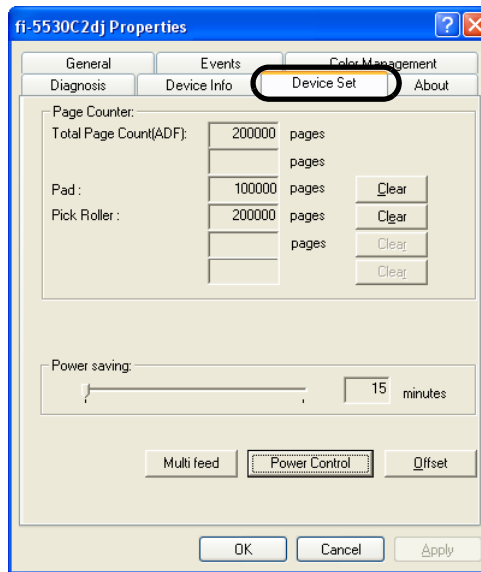
You can check the following information in this panel:
- Total number of scans
- Pad counter (approximate number of scans after resetting the pad counter)
- Pick roller counter (approximate number of scans after resetting the Pick roller counter)
- Remaining ink (When the imprinter is connected, the remaining ink in the imprinter is indicated.)

The following message may appear during use of the scanner:
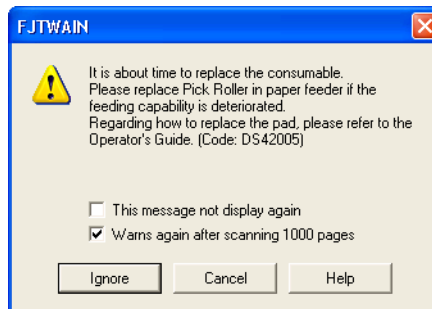
Replace consumables when you see this message.
Click the [Ignore] button to hide this message and continue scanning.
It is recommended that the consumable be replaced at your early convenience.
By default, this message will appear again after another 1,000 scans. If you do not wish to see this message, mark the [This message not display again] checkbox.
To replace the consumable, stop scanning by clicking the [Cancel] button.

4.2   Replacing the Pad ASSY

1.   Remove all documents from the ADF paper chute.

2.   Open the ADF by pushing down the ADF button.

ADF button
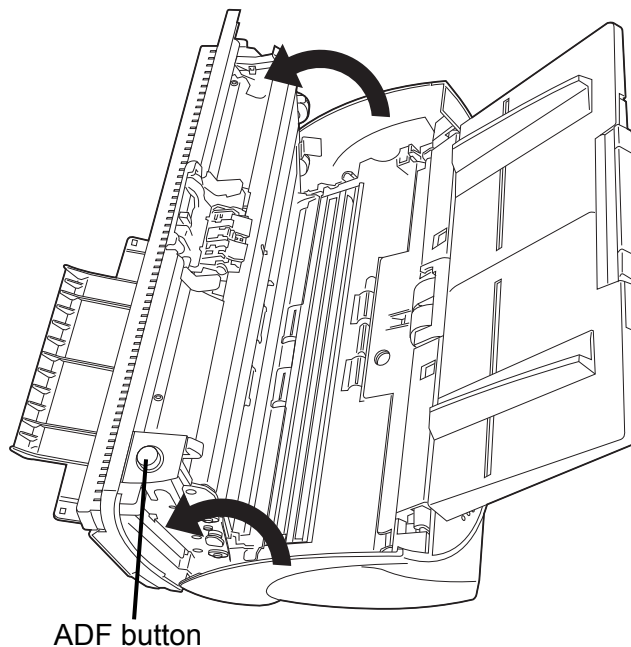
| ⚠ CAUTION | Be careful, the ADF cover may close suddenly and pinch your fingers. |

3.   Remove the Pad ASSY.

Pinch the Pad ASSY and slide it to the arrow direction, and then remove it.

4

REPLACING CONSUMABLES

4. Attach a new Pad ASSY.

Insert the claws of the Pad ASSY into the holes on the ADF.

Claws

While pressing down the Pad ASSY, slide it to the direction "A" and install it.

■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■

ATTENTION Make sure that the Pad ASSY is firmly attached. If the Pad ASSY is not correctly attached, document jams or other feeding errors may occur.

■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■

5. Push the ADF at its center to close it, and lock the ADF.

Push the center of the ADF

6. Reset the pad counter.

    1) Check that the scanner is connected to your personal computer and turn on the scanner.
    2) Open [Scanners and Cameras] from the control panel on your computer.
    3) Select [Properties] of [fi-5530C2dj].
        ⇒ The [fi-5530C2dj Properties] dialog box appears.
    4) Select the [Device Set] tab.
        ⇒ The following dialog box appears.
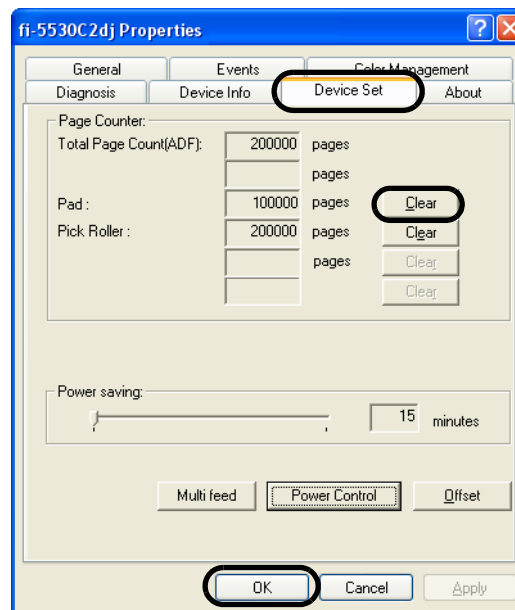
    5) Click the [Clear] button of [Pad] under [Page Counter], and then the [OK] button.
        ⇒ The following message appears.
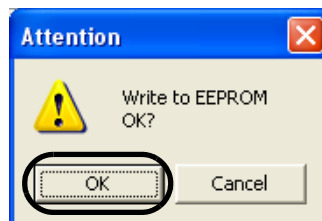
    Click the [OK] button.
    The Pad counter is reset to "0".

4

REPLACING CONSUMABLES

4.3   Replacing the Pick Roller

1. Remove all documents from the ADF paper chute.

2. Remove the ADF paper chute.

ADF paper chute
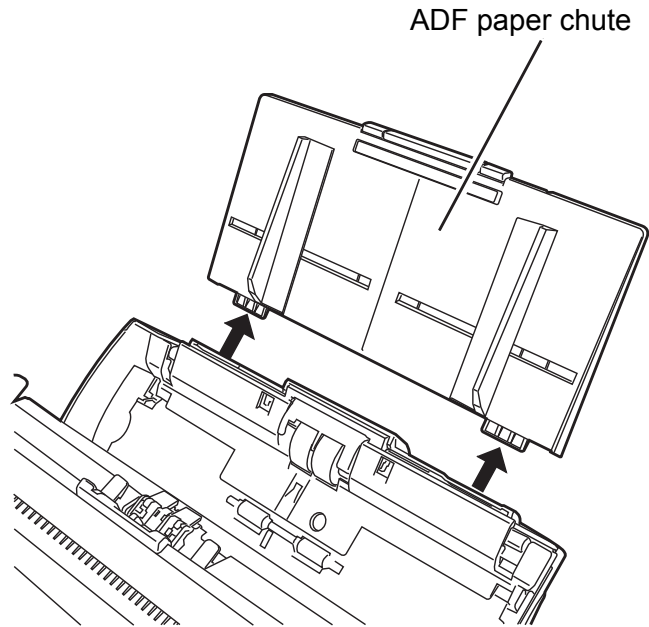
3. Open the ADF by pushing down the ADF button.

ADF button
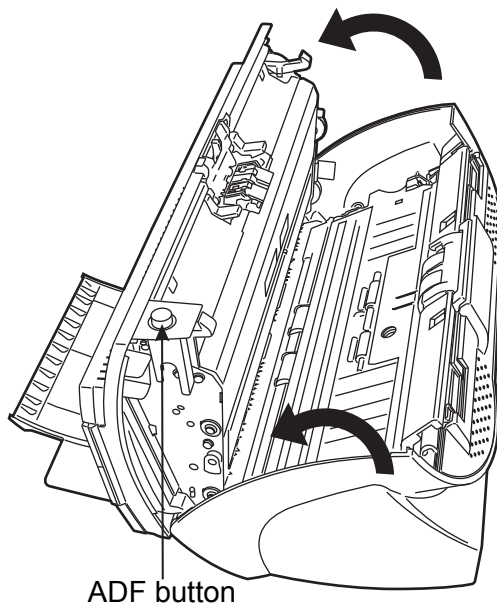
| ⚠ CAUTION | Be careful, the ADF cover may close and pinch your fingers. |

4. Remove the Pick roller from the scanner.

   1) Pinch the knobs on the sheet guide and lift up the sheet guide to remove it.

Sheet guide
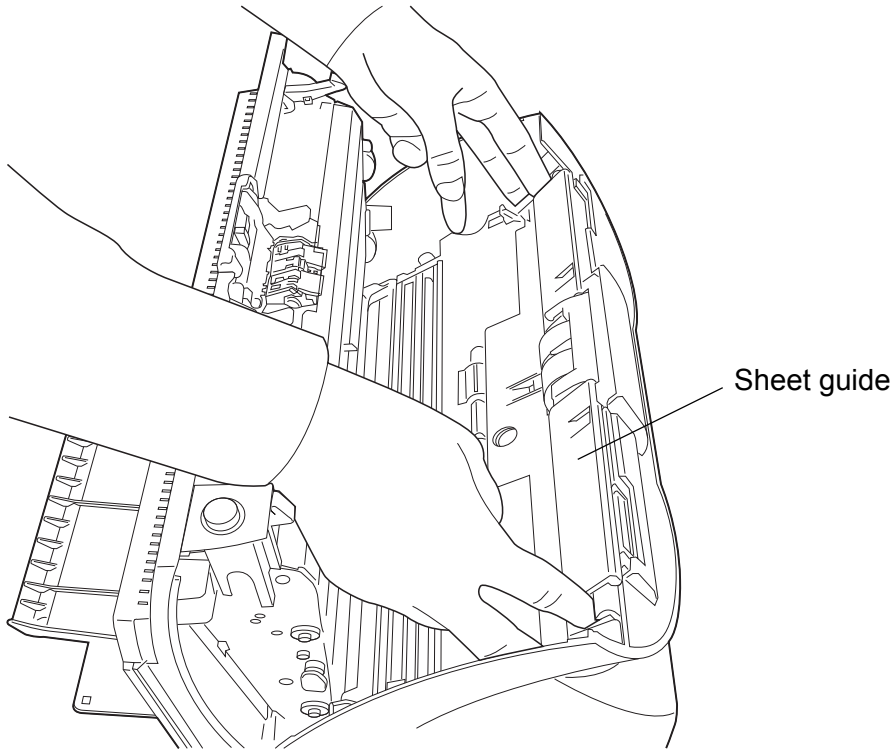
   2) Rotate the Pick roller bushing in the direction of the arrow.

Pick roller bushing

4

REPLACING CONSUMABLES
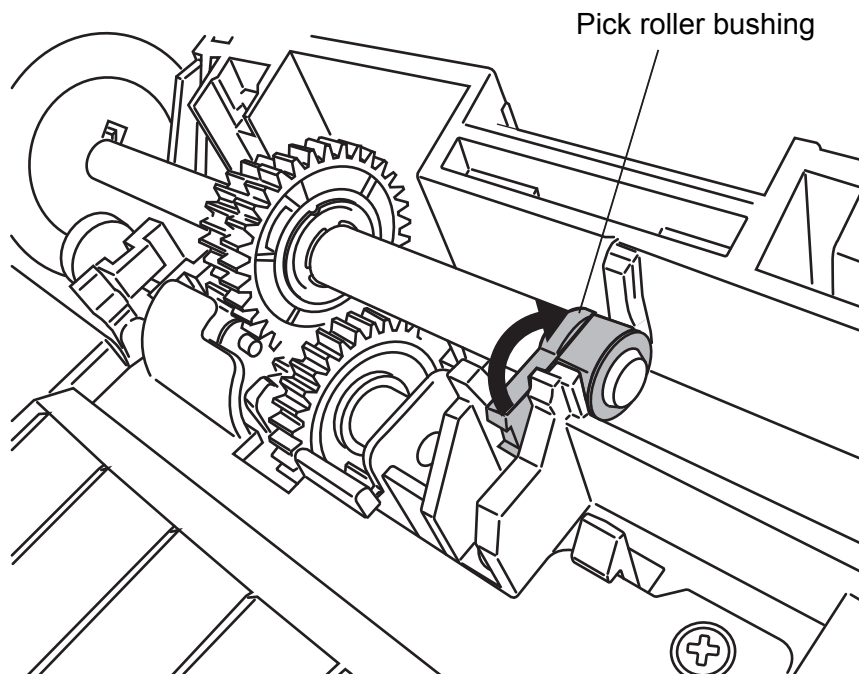
3) Remove the Pick roller shaft while lifting it up in the direction of the arrow.
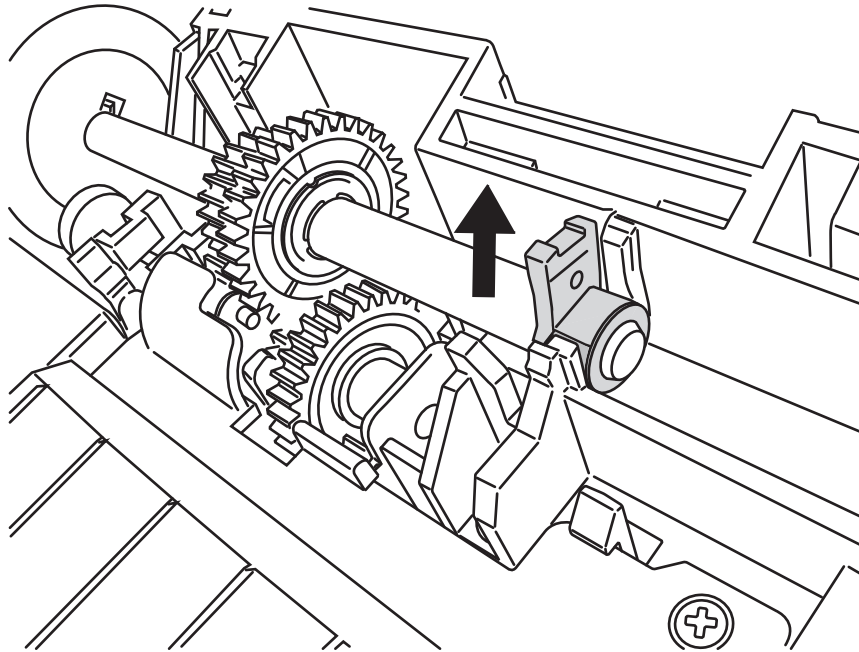
⚠ CAUTION	As the Pick roller bushing is firmly fixed, do not try to turn the roller bushing with your fingernails. Use a paper clip for turning the roller bushing if you cannot rotate it with your finger.

5. Remove the Pick roller from the shaft while lifting up the tab on the Pick roller.

Tab

Shaft

Pick Roller
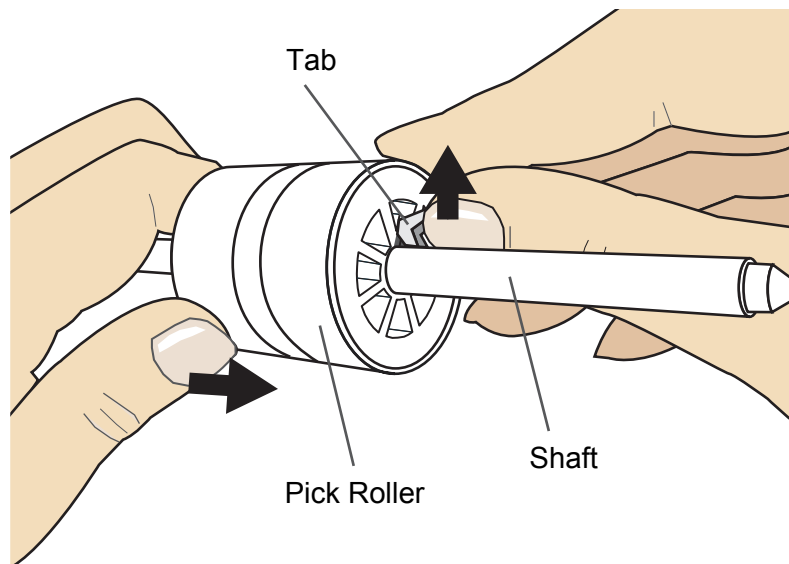
⚠ CAUTION	If you lift the pick roller tab with your fingernail, it may hurt your fingernail. Use a paper clip to lift the pick roller tab if you cannot do it with your finger.
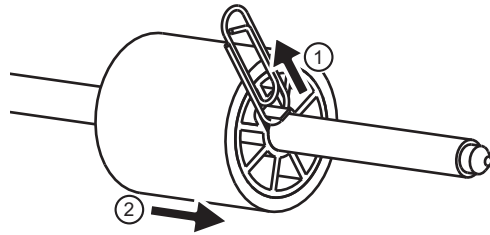
6.   Attach new Pick roller.

Insert new Pick roller aligning the screw on the shaft with the slot in the Pick roller.
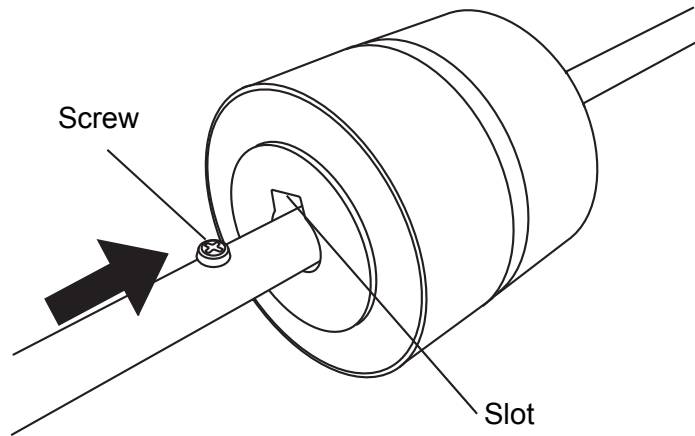
ATTENTION   Make sure that the Pick roller is correctly attached. The incompletely-attached Pick roller might cause document jams or other feed errors. When attaching the Pick roller to the shaft, make sure that the roller's tab clicks in to place.

"Click"

4

REPLACING CONSUMABLES
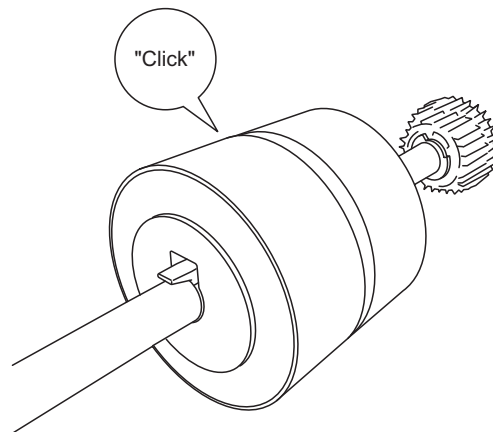
7. Attach the Pick roller shaft to the scanner.

   Attach the Pick roller shaft to the scanner in reverse order of removing.

   1) Set the Pick roller inserting an end of shaft into the shaft hole.

   Shaft hole

   Shaft
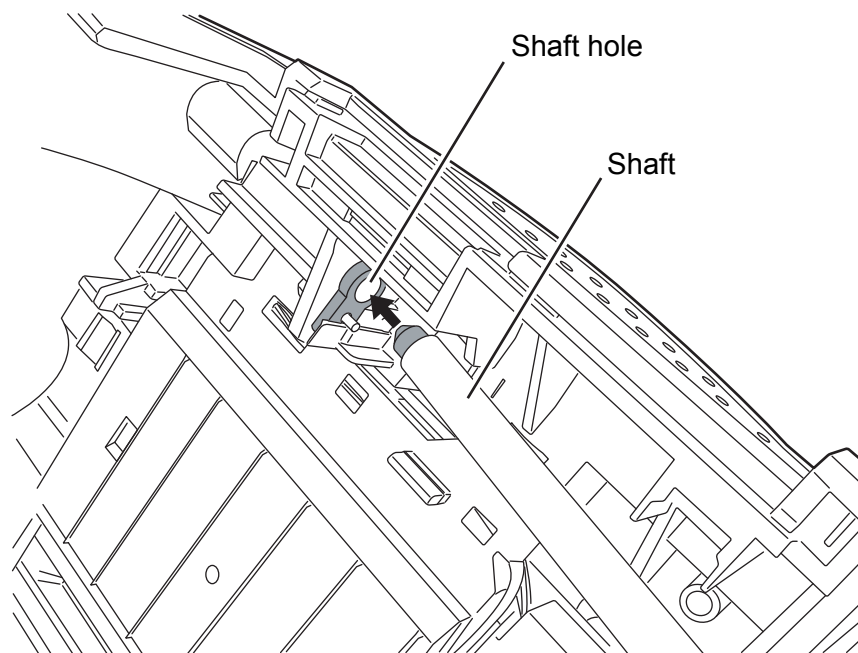
   2) Turn the Pick roller bushing in the direction of the arrow.

   Pick roller bushing
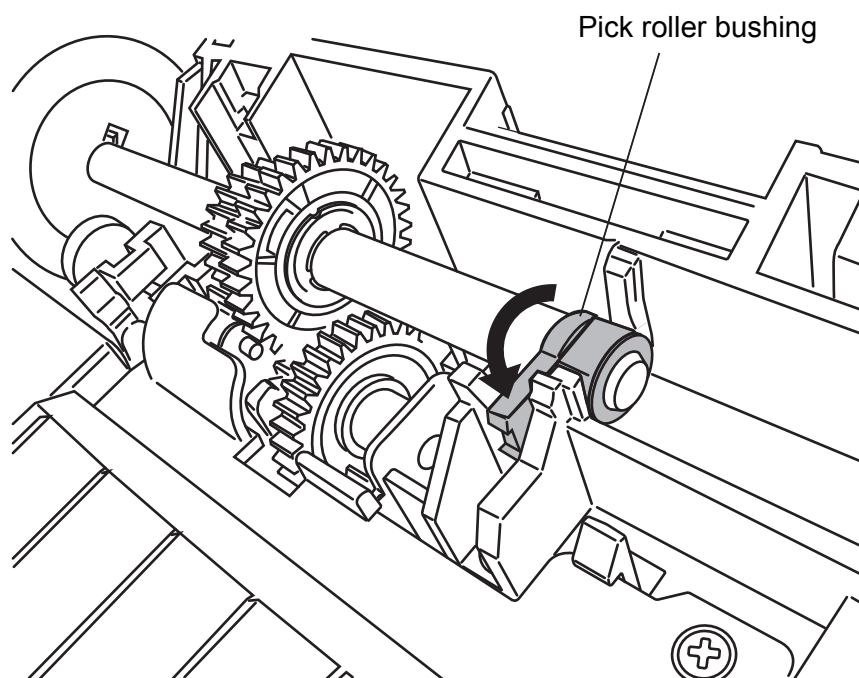
   3) Attach the sheet guide.

8. Push in the center of the ADF to close it until the ADF button is locked.

Press the center
of the ADF
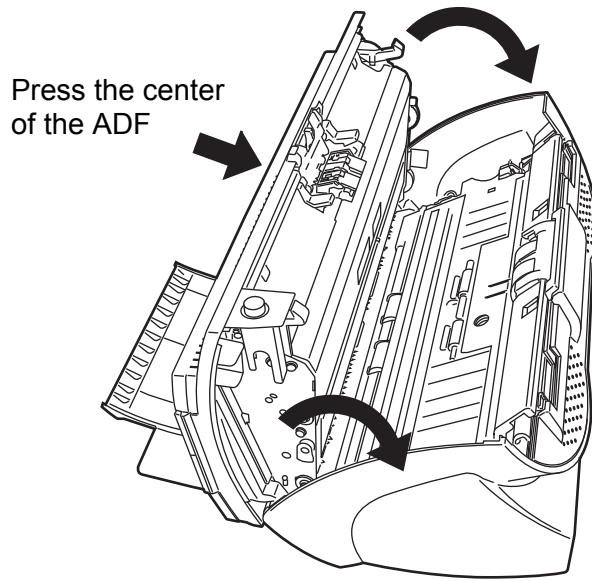
9. Attach the ADF paper chute to the scanner.

ADF Paper Chute
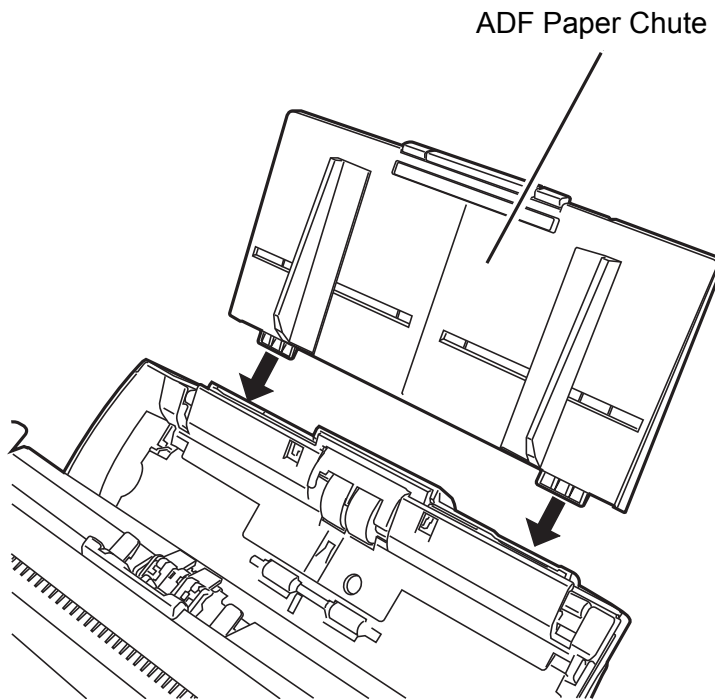
10. Reset the pick counter.

1) When turning on the power, check that the scanner is connected to your personal computer.
2) Open the [Scanners and Cameras] from the control panel of your personal computer.
3) Open the [Properties] of [fi-5530C2dj] from the [Scanners and Cameras].
   $\Rightarrow$ The [Properties of fi-5530C2dj] dialog box is displayed.
4) Click the [Device Set] tab.
   $\Rightarrow$ The following window appears.
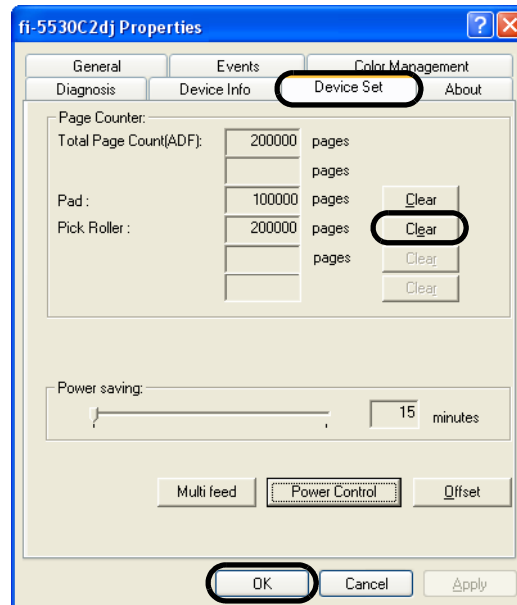
5) After clicking the [Clear] button beside [Pick Roller] in [Page Counter], click the [OK] button.
   $\Rightarrow$ The following window appears.
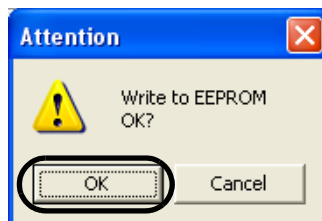
Click the [OK] button.
The Pick roller counter returns to "0".

Chapter 5

TROUBLESHOOTING

This chapter describes what to do when a paper jam occurs, how to troubleshoot, and items to check before contacting an agent at which you bought the scanner, as well as what the labels on the scanner indicate.

5

5.1 Removing Jammed Documents

If a document jam occurred, follow the procedure below to remove the jammed documents.

⚠ CAUTION	• Take care not to get injured when removing the jammed documents. • Be careful not to get neckties, necklaces, etc. entangled in the scanner when removing the jammed documents. • The surface of the glass may become hot during operation. Take care not to get burned.

1. Remove all documents from the ADF paper chute.

2. Open the ADF by pushing down the ADF button.

ADF Button
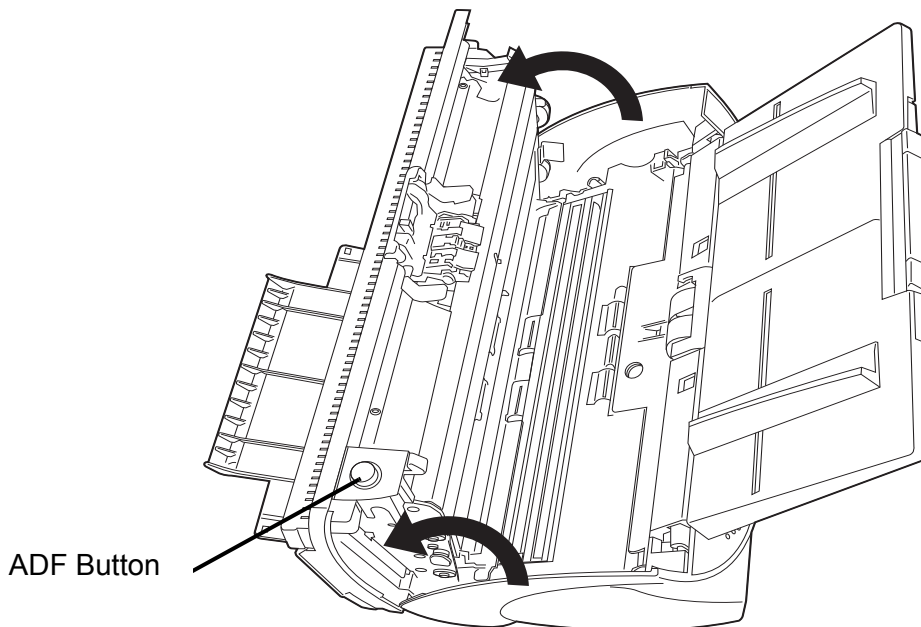
⚠ CAUTION	The ADF cover may close accidentally. Be careful not to pinch your fingers.

3.   Remove the jammed documents.

■ ■

ATTENTION Staples, paper clips, etc. cause document jams. Be sure to fully check the document and feed path, and remove any small metal objects such as these.
Also, before you start scanning, be sure to remove any staples, clips, etc. from the document.

■ ■

4.   Push in the center of the ADF to close it until the ADF button is locked.

Push the center of the ADF

■ ■
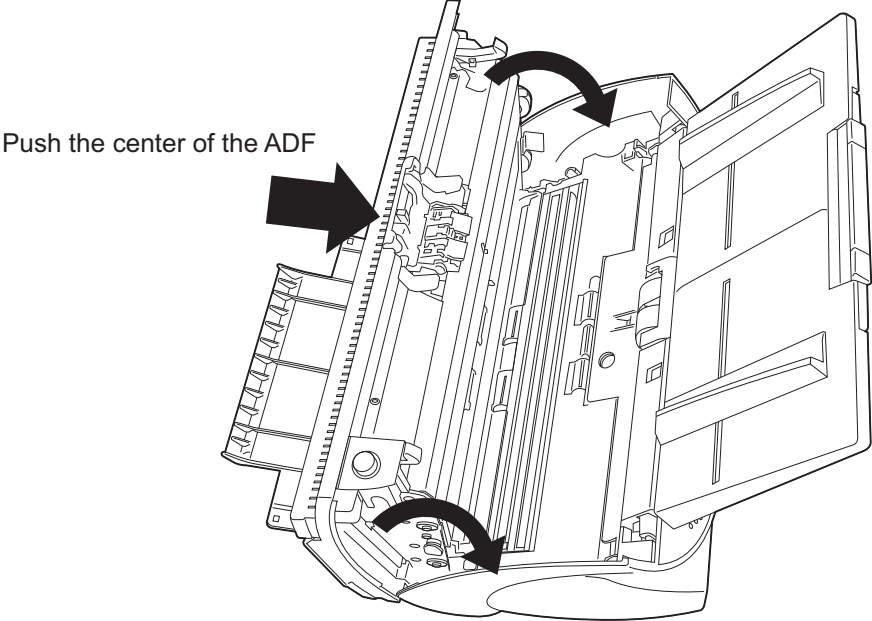
ATTENTION
•   Make sure that the ADF is completely closed. When it is not completely closed, document jams or feeding errors may occur.
•   When the scanning is completed at the pre-determined sheet or canceled, the document might remain inside the ADF even though any error message is not displayed.
    Follow the procedure below to remove the documents remaining in the ADF.
    1.   Remove all documents from the ADF paper chute.
    2.   Open the ADF by pushing down the ADF button.
    3.   Remove the remaining documents.
    4.   Push in the center of the ADF to close it until the ADF button is locked.

■ ■

5

TROUBLESHOOTING

5.2 Error Indications in the Function Number Display

When any error occurs, the operator panel indicates "U" followed by a number alternately for temporary errors, or "E" followed by a number for device alarms (permanent error).
Temporary errors can be resolved by the operator, but the device alarm requires recovery works by support engineers.
When the Error Recovery Guide is installed on your personal computer and if any error or device alarm has occurred, this software displays information such as error names and error codes regarding the error/alarm. Take notes of the information and click [Details] on its window to learn detailed information for troubleshooting.

■ Temporary Errors:

A number appearing in alternation following the "U" refers to the following type of errors:

Indication	Meaning	Solution
U1	A paper feed error occurred.	Remove the jammed documents. (Refer to "5.1 Removing Jammed Documents" on page 90.) Confirm that the document meet the paper conditions for scanning. (Refer to "6.2 Document Quality" on page 113.)
U2	A multifeed error occurred.	Press the [Send to] button on the Operator Panel. The papers that were multi fed will be ejected.
U6	The print cartridge is not set.	This is a temporary error related with the Imprinter option (sold separately). For details refer to fi-553PR Operator's Guide, chapter "5 Error Message".

> **HINT**
> The Error Recovery Guide is stored in Setup DVD-ROM. For installing the application software, refer to "2.3 Installing the Scanner Application" in fi-5530C2 Getting Started.

■ Device alarms:

A number appearing in alternation following the "E" refers to the following type of device alarms:

Indication	Meaning	Solution
E2	Trouble in the optical system (front).	When you encounter any alarm, turn off and on the scanner. If the alarm is still displayed on the Function Number Display, contact the dealer where you purchased the scanner or an authorized FUJITSU scanner service provider.
E3	Trouble in the optical system (back).	
E4	The motor fuse has blown out.	
E6	Trouble in the operator panel.	
E7	Trouble occurred in the internal memory (EEPROM).	
E8	The SCSI interface fuse has blown out.	
E9	An error in the image memory.	
Ec	An alarm in the memory.	
Ed	Trouble in the SCSI interface controller	
EF	Trouble in the Background switching mechanism	

5

TROUBLESHOOTING

5.3 Remedying Common Troubles

This section describes troubles that may occur during scanning and how to remedy them.
Before you ask for repair service, check the following flowcharts.
If you cannot solve the problem after checking the remedies in the flowcharts, check the items in "5.4 Items to check before contacting the agent where you bought the scanner" (page 107) and then contact the agent at which you bought the scanner or an authorized FUJITSU scanner service provider.

Symptom 1	Scanner cannot be turned ON.

Are power cable and AC adapter correctly connected?
→ NO → Correctly connect power cable.
↓ YES

Are you using the correct AC cable and AC adapter supplied with the scanner from the manufacturer?
→ NO → You must use the AC adapter and cable supplied with your scanner by the manufacturer. Please get the correct AC adapter and cable to connect to your scanner.
↓ YES

Did you push the power button?
→ NO → Press power button.(*)
↓ YES

If you cannot solve the problem after taking measures, check the items in "5.4 Items to check before contacting the dealer where you bought the scanner" and contact the dealer or an authorized FUJITSU service provider.

*) For details about how to turn the scanner on, refer to "1.1 Turning the Scanner ON" on page 2.

| Symptom 2 | Indication on the Function Number Display goes out. |

Has a long time passed since you used the scanner for the last time?

YES → The scanner is in the Power Save mode. Press any button on the control panel to start up the scanner.

NO ↓

Does the display remain blank even after you have turned on the power again?

NO → The scanner operation is normal.

YES ↓

If you cannot solve the problem after taking measures, check the items in "5.4 Items to check before contacting the dealer where you bought the scanner" and contact the dealer or an authorized FUJITSU service provider.

5

TROUBLESHOOTING

Symptom 3	The scanning does not start.

Is the document loaded correctly on the ADF paper chute? — NO → Load document correctly on ADF paper chute.

YES ↓

Is the ADF closed completely? — NO → Close the ADF completely.

YES ↓

Is the interface cable connected correctly? — NO → Connect interface cable correctly. (*)

YES ↓

Is the connector of interface cable broken? — YES → Use a new interface cable and correctly connect it.

NO ↓

**(when using scanner on SCSI interface)
Is the SCSI ID set correctly?** — NO → Turn OFF the scanner and set the SCSI ID correctly, then turn ON the scanner again. (*)

YES ↓

Does the scanning start after running ON the scanner again? — YES → The scanner operation is normal.

NO ↓

If you cannot solve the problem after taking measures, check the items in "5.4 Items to check before contacting the dealer where you bought the scanner" and contact the dealer or an authorized FUJITSU service provider.

*) For details, refer to Getting Started "2.2 Connecting the scanner to your PC".

Symptom 4	Quality of scanned pictures or photos is not satisfactory.

Did you select halftoning or dithering?

NO → Select halftoning or dithering on your PC.

YES ↓

Are the upper/lower glasses inside the ADF clean?

NO → Clean dirty locations. (*)

YES ↓

If you cannot solve the problem after taking measures, check the items in "5.4 Items to check before contacting the dealer where you bought the scanner" and contact the dealer or an authorized FUJITSU service provider.

*) For details on how to clean dirty locations, refer to "3 DAILY CARE" on page 67.

5

TROUBLESHOOTING

| Symptom 5 | Quality of scanned text or lines is unsatisfactory. |

Are the upper/lower glasses inside the ADF clean?

NO → Clean dirty locations. (*)

YES

If you cannot solve the problem after taking measures, check the items in "5.4 Items to check before contacting the dealer where you bought the scanner" and contact the dealer or an authorized FUJITSU service provider.

*) For details on how to clean dirty locations, refer to "3 DAILY CARE" on page 67.

Symptom 6	Images are distorted or blurred.

Are the upper/lower glasses inside the ADF clean? — **NO** → Clean dirty locations. (*)

YES

Is the ADF cover pressed down or heavy object placed on the ADF during scanning? — **YES** → Do not press down the ADF or place heavy object on the ADF during scanning.

NO

Is something causing the scanner to vibrate during scanning? — **YES** → Do not allow anything to cause the scanner to vibrate while scanning.

NO

Is the scanner installed on a flat, level surface or four rubber feet are attached to the scanner? — **NO** → Install the scanner on a flat, level surface, or attach rubber feet to the scanner.

YES

If you cannot solve the problem after taking measures, check the items in "5.4 Items to check before contacting the dealer where you bought the scanner" and contact the dealer or an authorized FUJITSU service provider.

*) For details on how to clean dirty locations, refer to "3 DAILY CARE" on page 67.

5

TROUBLESHOOTING

| Symptom 7 | Vertical lines appear in the scanned image. |

Do the lines appear on the same part of images?

YES → Clean the upper/lower glasses inside the ADF.(*)

NO ↓

Do the lines disappear on images with low resolution settings?

YES → Scan the documents with low resolution settings.

NO ↓

If you cannot solve the problem after taking measures, check the items in "5.4 Items to check before contacting the dealer where you bought the scanner" and contact the dealer or an authorized FUJITSU service provider.

*) The ADF glass, refer to "3.2 Cleaning the ADF" on page 70.

Symptom 8 | The Function Number Display indicates an alarm after the scanner is turned ON

Does the Function No. display indicate any alarm after turning ON the scanner again?

NO → The scanner operation is normal.

YES

If you cannot solve the problem after taking measures, check the items in "5.4 Items to check before contacting the dealer where you bought the scanner" and contact the dealer or an authorized FUJITSU service provider.

5

TROUBLESHOOTING

| Symptom 9 | Do paper jams (multi feed errors) occur frequently? |

Do the documents satisfy the conditions described under the "Precautions" in "6.2 Document Paper Quality"?

— NO → Use documents that satisfy the requirements. (*1)

↓ YES

When the multi feed detection is ON, are the multi feed detection conditions fulfilled?(*2)

— NO → Fulfill the multi feed detection conditions. (*2)

↓ YES

Have you scanned a very thick paper or plastic document?

— YES → When scanning documents like this, disable the multifeed detection.

↓ NO

Were the documents fanned before loaded on the ADF paper chute?

— NO → Fan the documents before loading, or reduce the number of sheets of the documents.

↓ YES

Have the documents just been printed out by a copier or laser printer?

— YES → Fan the documents 3 or 4 times to remove static electricity from the paper.

↓ NO

Is the paper thickness switch set on the "Normal" position?

— NO → Set the paper thickness switch to the "Normal" position. (*3)

↓ YES

Is there any debris on the rollers in the ADF?

— YES → Remove debris from the rollers (*4).

↓ NO

Is the ultrasonic sensor covered with paper dust?

— YES → Clean the ultrasonic sensor. (*5)

↓ NO

Continued from the previous page

Is the document stack 10mm (A4)/ 5mm (A3) or less? — NO → Reduce the number of sheets in the stack.

↓ YES

Is the Pad ASSY attached correctly? — NO → Attach the Pad ASSY correctly.(*6)

↓ YES

Is the Pad ASSY dirty? — YES → Clean the Pad ASSY.(*7)

↓ NO

Is the Pad ASSY worn out? — YES → Replace the Pad ASSY.(*6)

↓ NO

If you cannot solve the problem after taking measures, check the items in "5.4 Items to check before contacting the dealer where you bought the scanner" and contact the dealer or an authorized FUJITSU service provider.

*1) For details on the requirements, refer to "6.2 Document Quality" on page 113.
*2) For details on multifeeds, refer to "6.5 Specifying How to Detect Multifeed" on page 119.
*3) For details on how to set paper thickness switch, refer to "2.3 Scanning Thin Documents" on page 37.
*4) For details on how to clean the rollers, refer to "3.2 Cleaning the ADF" on page 70.
*5) For details on how to clean the Ultrasonic sensor, refer to the "3.2 Cleaning the ADF" on page 70.
*6) For details on how to replace (or attach) the Pad ASSY, refer to "4.2 Replacing the Pad ASSY" on page 79.
*7) For details on how to clean the Pad ASSY, refer to "3.2 Cleaning the ADF" on page 70.

5

TROUBLESHOOTING

| Symptom10 | The ADF have frequent troubles not picking documents. |

Do the documents satisfy the conditions described under the "Precautions" in "6.2 Document Paper Quality"?
→ NO → Use documents that satisfy the requirements. (*1)

↓ YES

Were the documents fanned before loading into the ADF paper chute?
→ NO → Fan the documents before loading, or reduce the number of sheets of the documents.

↓ YES

Is the paper thickness switch set on the "Normal" position?
→ NO → Set the paper thickness switch to the "Normal" position. (*2)

↓ YES

Are all the consumables (Pick roller and Pad ASSY) installed correctly?
→ NO → Correctly install the consumable(Pick roller and Pad ASSY), if needed. (*3)

↓ YES

Is any of consumables (Pick roller, Pad ASSY) dirty?
→ YES → Clean the dirty consumable. (*4)

↓ NO

Is any of consumables (Pick roller and Pad ASSY) worn out? (Check the consumable counter)
→ YES → Replace the consumable, if needed. (*3)

↓ NO

If you cannot solve the problem after taking measures, check the items in "5.4 Items to check before contacting the dealer where you bought the scanner" and contact the dealer or an authorized FUJITSU service provider.

*1) For details, refer to "6.2 Document Quality" on page 113.
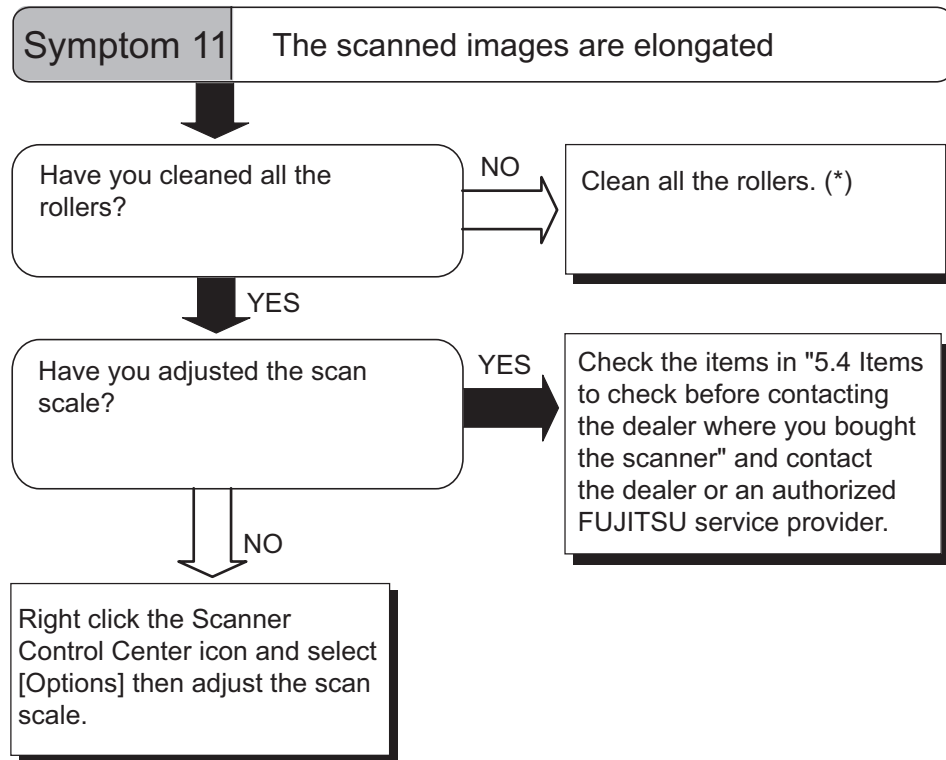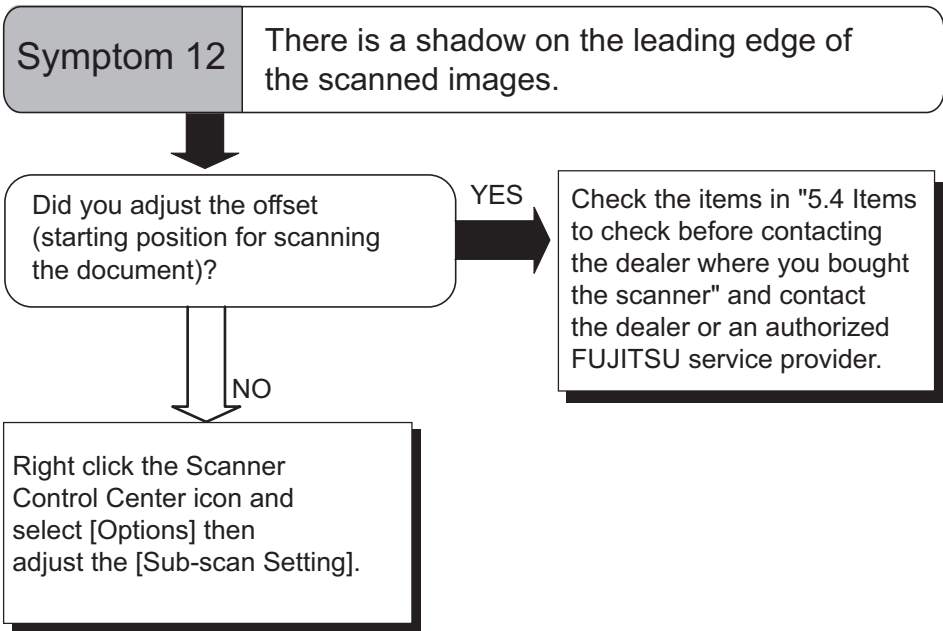*2) For details, refer to "2.3 Scanning Thin Documents" on page 37.
*3) For details, refer to "4 REPLACING CONSUMABLES" on page 75.
*4) For details, refer to "3.2 Cleaning the ADF" on page 70.

Symptom 11	The scanned images are elongated

Have you cleaned all the rollers?

→ NO → Clean all the rollers. (*)

↓ YES

Have you adjusted the scan scale?

→ YES → Check the items in "5.4 Items to check before contacting the dealer where you bought the scanner" and contact the dealer or an authorized FUJITSU service provider.

↓ NO

Right click the Scanner Control Center icon and select [Options] then adjust the scan scale.

*) For details on how to clean the rollers, refer to "3.2 Cleaning the ADF" on page 70.

5

TROUBLESHOOTING

Symptom 12	There is a shadow on the leading edge of the scanned images.

Did you adjust the offset (starting position for scanning the document)?

YES → Check the items in "5.4 Items to check before contacting the dealer where you bought the scanner" and contact the dealer or an authorized FUJITSU service provider.

NO ↓

Right click the Scanner Control Center icon and select [Options] then adjust the [Sub-scan Setting].

5.4 Items to check before contacting the agent where you bought the scanner

Check the following items before you contact the agent where you bought the scanner.

■ General Details

Item	Findings
Model	fi-5530C2
Serial Number	(Example) 000001 For details on the serial number, refer to "5.5 Checking Labels on the Scanner" on page 110.
Production date	(Example) 2007-07 (July, 2007) For details on the production date, refer to "5.5 Checking Labels on the Scanner" on page 110.
Date of purchase	
Symptom	
Frequency of trouble	

5

TROUBLESHOOTING

■ Problems in Installation or PC connection

- Problems occur when connecting to your computer

Item	Findings
OS	
Displayed error message	
Interface	(Example) SCSI interface
Interface controllers	(Example) made by Adaptec SCSI Card 2940AU

- Problems in the feeding system

Item	Findings
Document type	
Main purpose of use	
Last cleaning date	
Last consumables replacement date	
Operator panel status at trouble	

- Problems in the imaging system

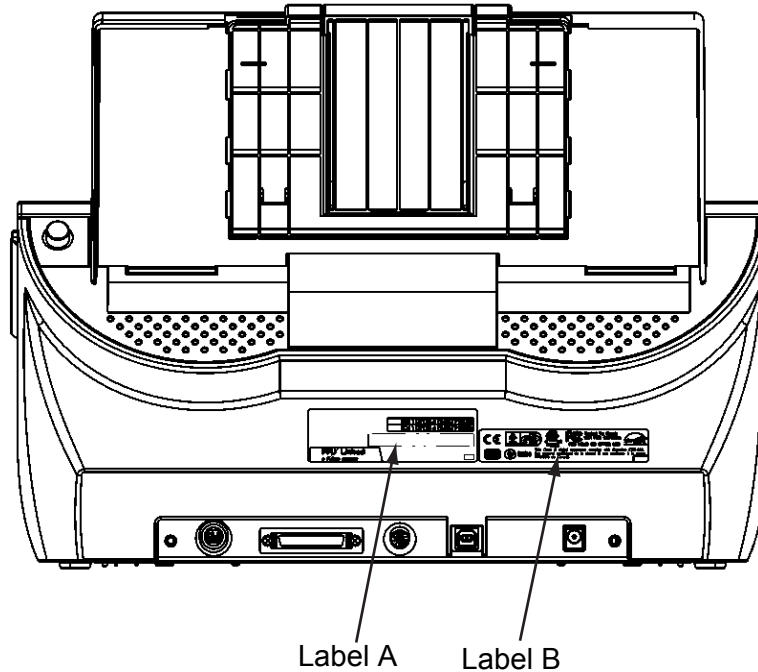| Item	Findings
Type and version of scanner driver	
Type of interface controller	(Example) made by Adaptec SCSI Card 2940AU
OS (Windows®)	
Application software	(Example) ScandAll PRO

- Others

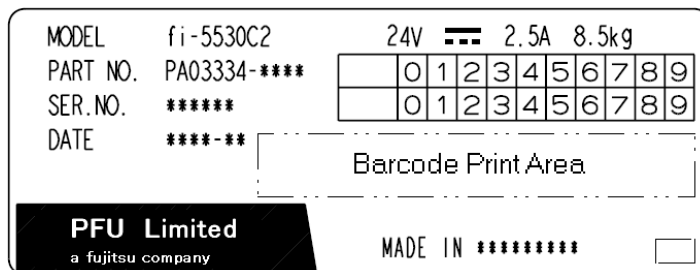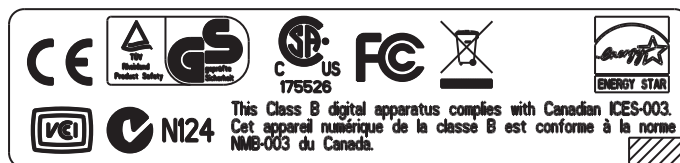| Item	Findings
Can both the original document and the scanned document image (output paper with Fax) be sent out by e-mail or Fax?	

5

TROUBLESHOOTING

5.5 Checking Labels on the Scanner

■ Positions of Labels on the Scanner

Label A   Label B

Label A (example): Indicates scanner information.

MODEL	fi-5530C2	24V === 2.5A 8.5kg
PART NO.	PA03334-****	0 1 2 3 4 5 6 7 8 9
SER.NO.	******	0 1 2 3 4 5 6 7 8 9
DATE	****-**	Barcode Print Area

PFU Limited
a fujitsu company

MADE IN *********

Label B (example): Indicates various standards that the scanner conforms with.

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Chapter 6
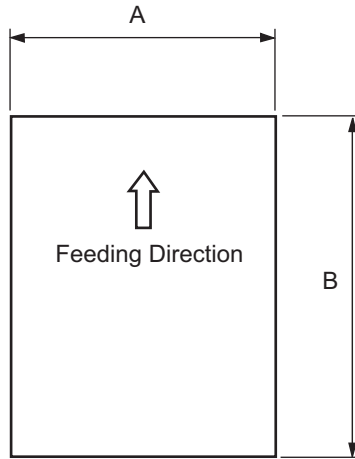
DOCUMENT SPECIFICATIONS FOR ADF

This chapter describes the required document sizes and paper quality for ensuring a correct operation when scanning documents on the ADF.

6

6.1 Document Size

The following shows the size of documents that can be scanned.

Maximum		Minimum	
A	**B**	**A**	**B**
297 (11.7 in)	863.6 (34 in)	53 (2.0 in)	74 (2.9 in)

(Unit: mm)

6.2   Document Quality

This section describes the types and thicknesses of documents that can be scanned stably, and precautions to follow.

■ Document Type

The recommended following paper types are:

- Woodfree paper
- Wood containing paper

When using documents of a paper type other than the above, perform a test-scanning with a few sheets of the same type before executing the actual task in order to check whether or not the documents can be scanned.

■ Document Thickness

Paper thickness is expressed by "paper weight." The following shows the paper weights that can be used on this scanner:

- 52 g/m^2 to 127 g/m^2 (13.9 lb to 34.0 lb)

Only a paper weight of 127 g/m^2 (34.0 lb) is allowed for A8-size documents.

DOCUMENT SPECIFICATIONS FOR ADF

6

■ Precautions

The following documents may not be scanned successfully.

- Documents of non-uniform thickness (e.g. envelopes and documents with photographs attached)
- Wrinkled or curled documents (Refer to HINT on page 115.)
- Folded or torn documents
- Documents with pictures and/or sticky notes attached
- Tracing paper
- Coated paper
- Carbon paper
- Carbonless paper
- Photosensitive paper
- Perforated or punched documents
- Documents that are not square or rectangular
- Very thin documents
- Photographs

Do not use the following documents:

- Paper-clipped or stapled documents
- Documents on which the ink is still wet
- Documents smaller than A8 (Portrait) in size
- Documents wider than A3 or 11x 17 in size
- Documents of materials other than paper such as the fabric, metal foil, transparency

● ●

HINT
- When scanning semi-transparent documents, slide the [Brightness] bar to light to avoid bleed through.
- To prevent the rollers from becoming dirty, avoid scanning documents containing large areas written or filled in pencil. If scanning of such documents is inevitable, clean the rollers more frequently.

● ●

ATTENTION
- Carbonless paper contains chemical substances that may harm the Pad ASSY or rollers (e.g. Pick roller) when documents are fed. Pay attention to the following:
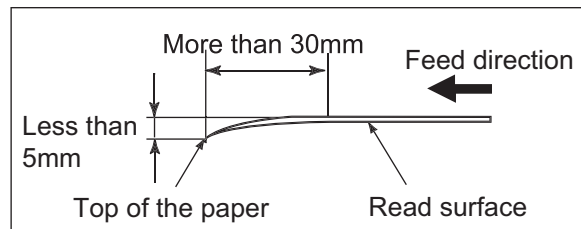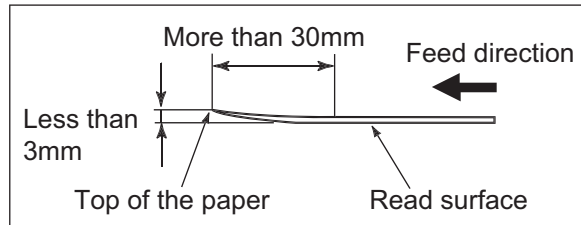
  Cleaning: If document jams occur frequently, clean the Pad ASSY and the Pick roller. For details on cleaning the Pad ASSY and the Pick roller, refer to "3.2 Cleaning the ADF" on page 70.

  Replacing parts: The service life of the Pad ASSY and the Pick roller may be shortened compared to the case of scanning wood containing paper documents.

- If paper containing wood is scanned, the service life of the Pad and Pick roller may become shorter than that of the Pad and Pick roller used for scanning only woodfree paper.
- The pad or rollers of the scanner could be damaged if photographs or sheets of paper attached to the scanned document have contact with the pad or rollers during scanning.
- Scanning documents of calendered paper such as photographs may damage the surface of them.

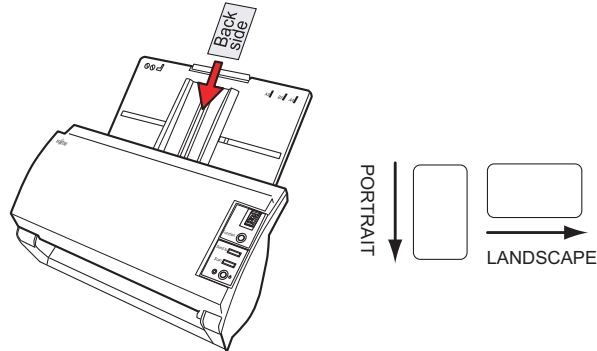--

HINT

When using the ADF, the leading edge of all document sheets must be evenly aligned. Make sure that curling at the leading edge is within the following tolerances:
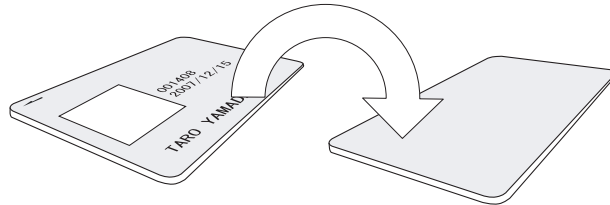

More than 30mm · Feed direction

Less than 3mm

Top of the paper · Read surface

More than 30mm · Feed direction

Less than 5mm

Top of the paper · Read surface

DOCUMENT SPECIFICATIONS FOR ADF

6

6.3 Maximum ADF Capacity

The maximum number of sheets that can be loaded on the ADF paper chute is determined by the size and weight of the documents. The following graph shows the maximum document loading capacity of ADF with respect to paper weight.

Paper weight conversion table

Unit	Conversion						
g/m²	52	64	75	80	90	104	127
lb	13.9	17.0	20.0	21.0	24.0	27.9	34.0

DOCUMENT SPECIFICATIONS FOR ADF

6

6.4 Area Not To Be Perforated

When using the ADF, document trouble might occur if there is any punched hole in the shaded area in the following figure.

6.5   Specifying How to Detect Multifeed

One of the following is selected to detect a multifeed:

- Check overlapping
- Check length
- Check overlapping and length

The following describes what condition is required for each selection:

■ Check overlapping

Paper weight   52 g/m^2 - 127 g/m^2 (13.9 lb to 34.0 lb)

Punched holes are not allowed within 35 mm (1.4 in) of the vertical centerline of the document.
Other paper shall not be glued within 35 mm (1.4 in) of the vertical centerline of the document.

■ Check length

Document length deviation   1% or less

Punched holes are not allowed within 35 mm (1.4 in) of the vertical centerline of the document.

■ Check overlapping and length

Paper weight   52 g/m^2 - 127 g/m^2 (13.9 lb to 34.0 lb)

Document length deviation   1% or less

Punched holes are not allowed within 35 mm (1.4 in) of the vertical centerline of the document.
Other paper shall not be glued within 35 mm (1.4 in) of the vertical centerline of the document.

> ATTENTION
> Multifeed detection by overlap will often mis-detect very thick paper or plastic document.
> When scanning documents like this, please disable the multifeed detection.

DOCUMENT SPECIFICATIONS FOR ADF

6

- When the overlapping check is specified, the papers which contact closely each other, such as glued paper or electro-statically charged paper, can result in the miss-detection of multifeed.
- Normally multifeed detection will monitor the following area of the document.

35

Top of paper

Front side

Feeding direction

Bottom of paper

Center of paper (Unit : mm)
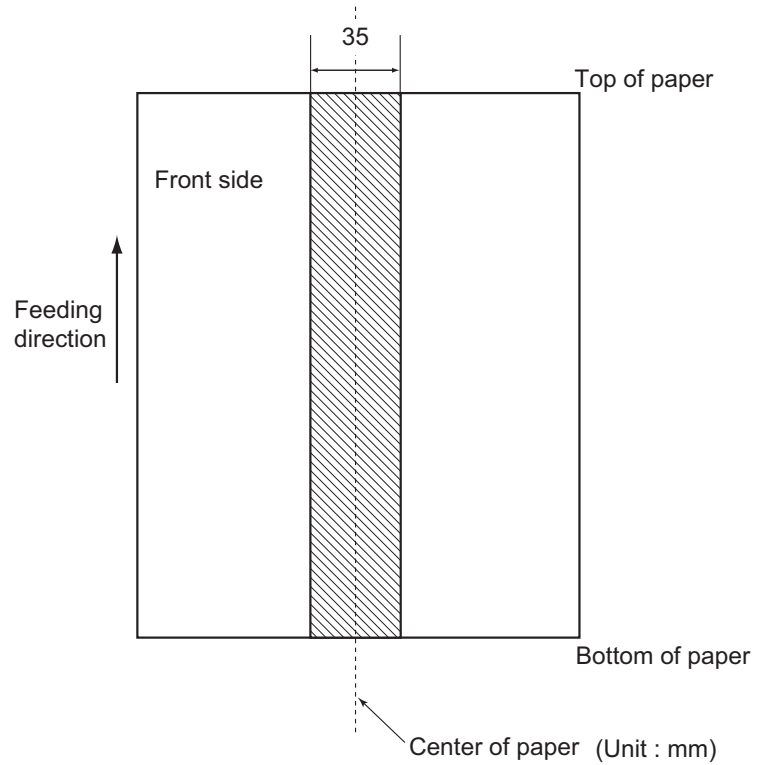
Chapter 7

SCANNER SPECIFICATIONS

This chapter lists the scanner specifications.

7

7.1 Basic Specifications

No.	Item		Specification	
1	Scanner Type		ADF (**A**utomatic **D**ocument **F**eeder)	-
2	Image sensor		CCD x 2	Front / Back
3	Light source		Incandescent cold cathode fluorescent lamp x 2	Front / Back
4	Scanning area	Minimum	A8 portrait	127 g/m^2 paper
		Maximum	A3 / 11 x 17 in	
5	Paper Weight		52 to 127 g/m^2 (13.9 to 34.0 lb)	(*1)
6	Scanning Speed (A4 Portrait) (*2)	Color Grayscale Binary (Black and White)	Simplex: 35 sheets/min. Duplex: 70 pages/min.	200 dpi
	Scanning Speed (A4 Landscape) (*2)	Color Grayscale Binary (Black and White)	Simplex: 50 sheets /min. Duplex: 100 pages/min.	200 dpi
7	Capacity of ADF (*3)		100 sheets	A4, 80 g/m^2
			50 sheets	A3 80 g/m^2
8	Optical Resolution		600 dpi	-
9	Output resolution	Binary (monochrome)	50 - 600, 1200 dpi	Scalable in 1 dpi increments 1200 dpi can be acheived by software processing(*4)
		Glayscale		
		Color		
10	Grayscale level		8 bits per color	Internal 10 bits
11	Halftone Patterns		Dither / Error diffusion	-

No.	Item	Specification	
12	Interface (*5)	Ultra SCSI	Shield-type 50 pin (pin-type) halfpich
		USB 2.0 / USB 1.1 (*6)	B Type
13	Other functions	JPEG compression	-
		Imprinter Port	-
14	Options	Imaging Processing Software	(*7)
		fi-553PR Imprinter	(*8)

*1) For details, refer to "6 DOCUMENT SPECIFICATIONS FOR ADF" on page 111.

*2) The scanning speed shows the maximum performance of the scanner (hardware). Software processing time such as data transfer time is added to the actual scanning time. The scanning speed in color/grayscale mode shows the scanner performance when images already converted to JPEG are processed.

*3) The maximum stacking capacity varies according to the document thickness. For details, refer to "6 DOCUMENT SPECIFICATIONS FOR ADF" on page 111.

*4) With a high resolution of 600dpi or more, scanning may be limited depending on the scan mode, the size of the document, and the memory size of the computer you are using.

*5) The Ultra SCSI and USB2.0/1.1 interfaces cannot be used at the same time.

*6) If you connect the scanner with USB 2.0, it its required that the USB port and the Hub are compliant with USB 2.0. The scanning speed may slow down when connecting with USB 1.1.

*7) "Image Processing Software Option" is an optional software for FUJITSU fi-series scanners to perform advanced binarization processing using the "TWAIN" scanner driver.

*8) By Using the Imprinter, a character string, such as the alphabet and numbers, can be printed in the scanned document. It helps you to organize your documents by printing a name, date, time or a serial number on the scanned document.

SCANNER SPECIFICATIONS

7

7.2 Installation Specifications

Item		Specification		
Dimensions (Without ADF paper chute and Stacker)		Depth	Width	Height
		225 mm (8.9 in)	399 mm (15.7 in)	193 mm (7.6 in)
Installation Space (D x W x H)		800 x 500 x 500 mm (31.5 x 19.7 x 19.7 in)		
Weight		8.5 kg (18.7 lb)		
Input power	Voltage	100 to 120 VAC ±10% 220 to 240 VAC ±10%		
	Phases	Single-phase		
	Frequency	50 / 60 ± 3Hz		
Power consumption		57 W or less		
Ambient condition	Device status	Operating	Not operating	
	Temperature	5 to 35 °C (41 to 95 °F)	-20 to 60 °C (-4 to 140 °F)	
	Humidity	20 to 80%	8 to 95%	
Heat capacity		49 kcal / H or less		
Shipping Weight		12 kg (33 lb)		

ATTENTION
Installation Space is the reference value of an installation space required to read A3 documents.

ATTENTION
Refer to Chapter 4 "REPLACING CONSUMABLES" (page 75) for details on the scanned number of sheets for current consumable.

7.3   External Dimensions

The following shows the external dimensions of the fi-5530C2.

399 (15.7")

225 (8.8")

457 (17.9")

193 (7.5")

293 (11.5")

(Unit : mm)

SCANNER SPECIFICATIONS

7
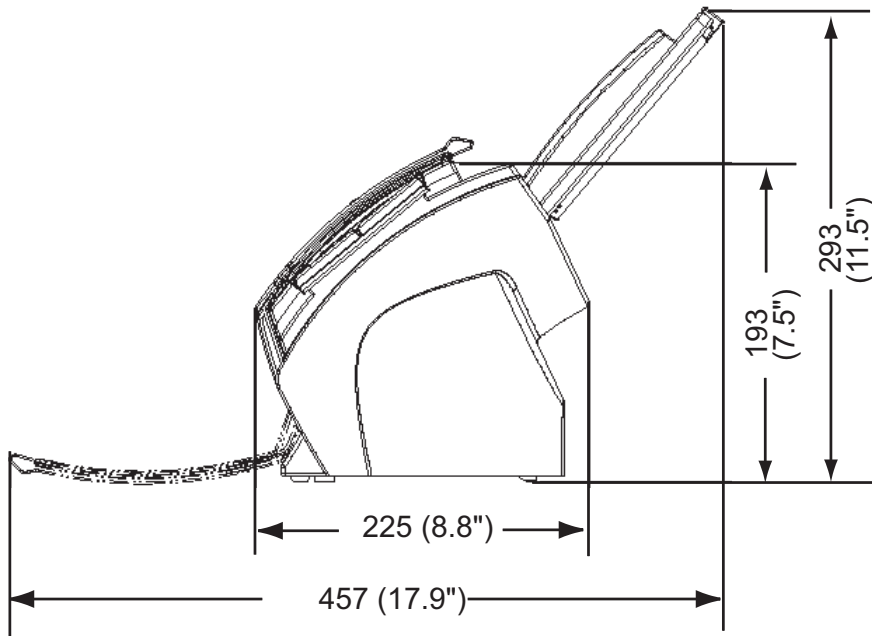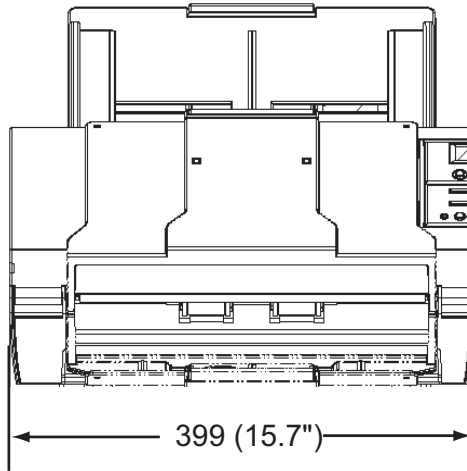
APPENDIX A

Using the [Scan] or [Send to] Button

By linking software applications to the [Scan] or [Send to] button, you can launch the linked application at a press of a button.
(To use ScandAll PRO, read section 2.14 "Scanning by Pressing the Scan Button on the Scanner" on page 63.)

■ Settings to Configure on the Computer

1. Select [Start]-[Control Panel].

2. Select [Scanners and Cameras]-[Properties].

3. Display the [fi-5530C2dj Properties] dialog box.

4. Select the [Events] tab.

5. Select an event.
   When the operating system you are using is Windows XP, select an event for starting up any application from the [Select an event] menu.
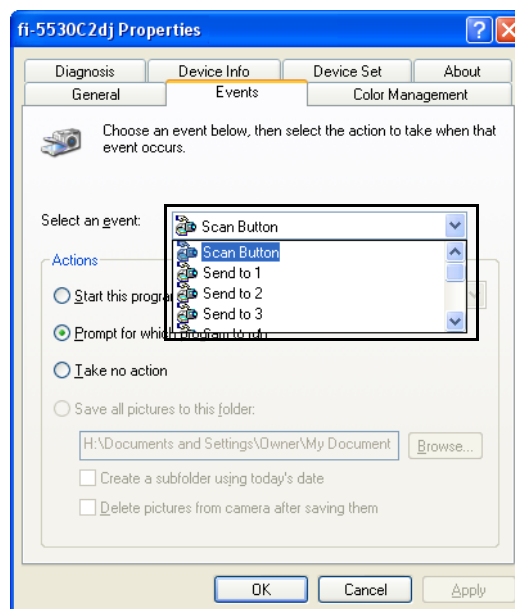
The events available for this function are:
- Scan Button (Press the [Scan] button)
- Send to 1-9 (With a number from 1 to 9 displayed on the Function Number Display, press the [Send to] button)

6. Select an application to be launched when an event occurs. If the operating system you are using is Windows XP, select [Start this program] under [Actions], and then select the application from the drop-down list.
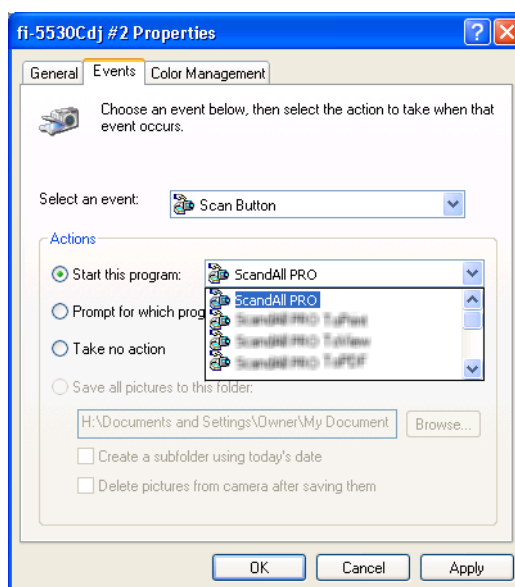
7. Click the [OK] button.

> The screens and operations may vary depending on the operating system you are using.

■ Settings to Configure on the Scanner

Function Number Display

Function
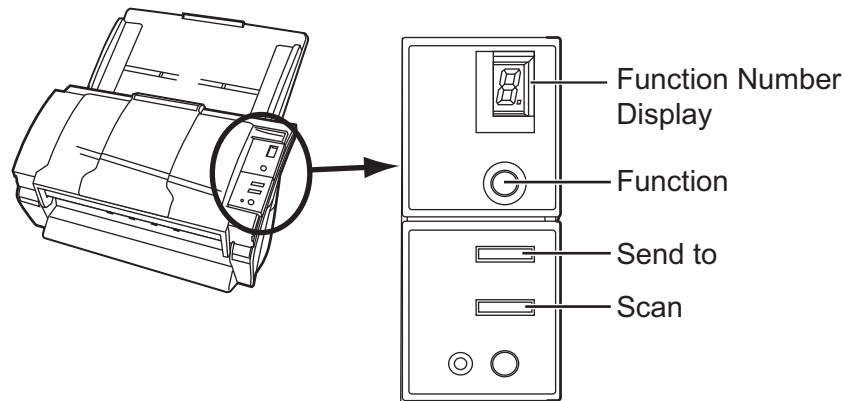
Send to

Scan

- When you want to use the [Scan] button

    There is no specific settings.

    ⇒ Upon pressing the [Scan] button, the linked application starts up.

- When you want to use the [Send to] button

    Press the [Function] button repeatedly to change a number displayed on the Function Number Display until the number matches the event number (from 1 to 9) you have set.

    ⇒ Upon pressing the [Send to] button, the linked application starts up.

> HINT
>
> - For example, when you want to execute the [Send to 2] event, change the number on the Function Number Display to "2".
> - Every time you press the [Function] button, the displayed number changes as follows:
>   1, 2, 3,...9, C, 1, 2, 3... etc.

A

APPENDIX B

GLOSSARY OF TERMS

A4 size

A standard paper size. Paper size is 210 x 297 mm.

A5 size

A standard paper size. Paper size is 148 x 210 mm.

A6 size

A standard paper size. Paper size is 105 x 148 mm.

A7 size

A standard paper size. Paper size is 74 x 105 mm.

A8 size

A standard paper size. Paper size is 53 x 74 mm.

ADF (Automatic Document Feeder)

A unit that allows the user to scan a number of pages consecutively. Fed documents are transported from the ADF paper chute (or hopper) to the Stacker. Actual scanning operation is executed by the mechanism inside of this unit. Backside reading = Back-side scanning Refers to reading the backside of the document, specifically in Duplex reading mode.

Automatic separation

An image processing method in which the scanner automatically detects difference between text and photos, and chooses the threshold accordingly. This function allows the scanner to switch between line mode and half tone mode in one pass.

Automatic size/skew detection

A function that automatically detects the document' page size and adjusts output data to the detected page size. Document skewing is automatically detected and corrected for the output image.

Brake roller

A roller that prevents two or more sheets of paper from being fed simultaneously into the ADF.

Brightness

Refers to the brightness of scanned images in this manual.

Canadian DOC Regulations

"A standard issued by Industry Canada, a department of the Canadian government, which sets out the technical requirements relative to the radiated and conducted radio noise emissions from digital apparatus. "

CCD (Charged Coupling Device) Image Sensor

A semiconductor device inside the scanner that registers light reflected from the original image and converts it into a digitized (electronic) form. CCD technology is the basis of high-quality image acquisition in scanners, cameras, and other specialized devices.

Cleaning paper

Sheets used with the F1 cleaner for cleaning the rollers (pick rollers, feed rollers, etc.) and complete document path in the scanner. Used in daily maintenance of the low volume production scanner to reduce paper transport problems. Note: these sheets are not meant to replace the more thorough periodic cleaning of the scanner.

Cleaning sheet

Adhesive sheets used for cleaning the rollers (pick rollers, feed rollers, etc.) and complete document path in the scanner. Used in daily maintenance of the high volume production level scanner to reduce paper transport problems. Note: these sheets are not meant to replace the more thorough periodic cleaning of the scanner.

Color balance

Balance of colors in images.

B

Default settings

Pre-set values for optional menus.

Density

In this manual, refers to a measurement of the depth of the display.

Dither

The process by which a group of dots is arranged to represent a shade of gray. The predetermined dot pattern simulates shades of gray. This scanning process offers the advantage of reduce memory requirements compared to multilevel gray.

Document jam

A warning that appears when document is jammed in the transport unit, or transportation is Interrupted because the paper is slipping.

dpi

Dots per inch. Number of dots lined along one inch A measurement of resolution normally used for scanners and printers. Higher dpi means better resolution.

Driver software

In this manual, driver software refers to software that allows the scanning application software to communicate with the scanner.

Dropout color

A color which is used in the document but does not appear in the read image.

Duplex reading mode

A mode for scanning both sides of the document in one pass.

Eject rollers

Rollers that transport documents from the ADF onto the Stacker.

Energy Star

ENERGY STAR is an international standard for energy-efficient electronic equipment. It was created by the US Environment Protection Agency (EPA) in 1992. The standard program has now been adopted by several countries around the world.

Equipment Error

An error that cannot be fixed by the operator. The operator should call the manufacturer for service.

Error diffusion

High-quality halftone (pseudo-grayscale) image production based on black-and-white pixel binarization. A pixel's optical density and that of adjacent pixels are summed, with black pixels relocated in their order of density as they relate to adjacent pixels. The purpose of this technique is to minimize the average error between read and printed densities. Density data for adjacent pixels is modified by diffusing errors on the objective pixel into several pixels, which are then binarized. This maintains high grayscale levels and resolution during reading, while suppressing more patterns by dotted halftone images such as newspaper photographs.

FCC

Acronym for "The Federal Communications Commission", an independent United States government agency which is in charge of regulating interstate and international communications via radio, television, wire, satellite and cable. The Part 15 of the FCC regulations mentioned in this manual is designed to prevent harmful interferences on radio communication of radio receivers and other devices which radiate radio frequency energy, and provides for the certification of radio receivers. It also provides the certification of low power transmitters and the operation of certificated transmitters without a license.

Feeds rollers

Rollers that feed documents through the ADF.

Filtering

A correction method that improves the read quality of handwritten documents. The read quality of images written in pencil or ball-pointed pen depends on the reflective light characteristics of the specific ink or lead used. Dropped pixels may produce outlines, gaps, or thin, barely connected lines due to uneven optical density. Filtering detects areas lighter than their surroundings and increases their density to improve image clarity. Flat bed An input device of the scanner, where documents are placed and scanned. Generally used for scanning pages out of a book, or paper that is out of the feeding specification of the ADF. Also used to scan a small volume of documents by manual operation.

B

Flatbed

An input device of the scanner, where documents are placed and scanned. Generally used for scanning pages out of a book, or paper that is out of the feeding specification of the ADF. Also used to scan a small volume of documents by manual operation.

Gamma

A unit of changes of images' brightness. It is expressed as a function of the electric input power to devices (scanner, display, etc.) and an image's brightness. If the gamma rate is larger than 1, the brightness of an image increases and vice versa. In order to adjust the brightness of an image close to the original, generally the gamma value is set to 1.

Grayscale

A method for realizing the gradation from black to white on the scanned image. For example, when scanning monochrome documents, the computer recognizes the document as sets of black and white dots. In the Gray scale method, each dot contains data regarding density of black. The original gradation of the document is realized as the gradation of the density data.

Halftone processing

Any method used to reproduce a photograph which includes a shade as an image composed of dots, namely, a binary image. Dithering and error diffusion processing are examples of halftone processing.

Image emphasis

Density is decreased for lighter but not completely white areas adjacent to black areas. Weakening this emphasis eliminates spot noise or produces softened images.

Image processing

An image is scanned with specified parameters.

Interface

The connection that allows communication from the computer to the scanner.

Inversion (Reverse-image reading)

In reverse-image reading, data is changed from black to white and vice versa.

IPC preset mode

While reading binary images, it is necessary to set the scanner according to the quality of the sheet to be read. In this mode, these settings can be performed in advance by corresponding each setting to a pattern number.

ISIS (Image Scanner Interface Specification)

A standard of API (Application Program Interface) or protocol for imaging devices (scanners, digital cameras, etc.) developed by Pixel Translations, a division of Captive Software. In order to use imaging devices designed on the ISIS standard, it is necessary to install the driver software of the same standard.

Jaggy images

Images that have sharp projections or irregular shape on their edges.

Job separation sheet

A sheet inserted between documents in a batch for separating different jobs.

Landscape

A document is transported and read with the Short side parallel to the moving direction.

Landscape orientation

A document is transported and scanned with the long side vertical to the moving direction.

Letter size

A standard paper size used in the U.S.A. and other countries. Paper size is 8-1/2 x 11 inches.

Linedrawing mode

Selecting linedrawing mode makes threshold and contrast settings effective but prevents brightness from being set. The specified threshold value determines whether black or white pixels are scanned. Line drawing mode is therefore appropriate for scanning text and line art images.

Multifeed detection

A scanner function which detects accidental feeding of multiple sheets into the ADF. This can be set as both enabled/disabled.

B

Mirror image

The read image is symmetrically flipped to produce a mirror image of the original detected in the main scanning direction.

Moire Patterns

Recurrent patterns on scanned images caused by incorrect settings of angles.

Noise removal

Isolated noise from an image appearing as black spots in white areas and voids in black areas is removed to improve image quality.
Removes particles from the document image. Common particles include toner and fax particles. Noise reduction works via an algorithm that removes pixels up to 5 x 5 dots apart. A dot is 1/400 inch. A particle can be distinguished from a character as it is not connected to another dot within 5 pixels.
OCR (optical character recognition)

Devices or technologies for identifying characters on documents and converting them into text data that can be manipulated. The documents are checked by light and the differences of light reflection are recognized as character shapes.

Operator panel

A panel consists of indicators and buttons. The operator panel is used to control scanner operations such as, selecting features, and changing settings.

Optical sensor

A type of sensor for detecting Multifeeding by light transmission. It also detects multifeeding by recognizing differences in length of documents.

Outline extraction

The boundary between black and white areas is traced and the outline extracted for closed areas.

Pad ASSY (Pad Assembly)

This part is used to separate a sheet of paper from a batch before feeding documents into the ADF. This assembly is made out of rubber.

Photograph mode (White level follower OFF)

Selecting photograph mode makes brightness and contrast settings effective but prevents the threshold from being set. With photograph mode, the darkness of image corresponds to the black-pixel density, making it suitable in scanning images such as photographs having gradations.

Pick roller

Roller(s) that picks the page from the batch of paper in the paper chute and feed it into the ADF.

Pick start time

The period from the manual insertion of the document until picking starts after the document passes the hopper empty sensor.

Pixel (Picture Element)

The tiny dots that make up a scanned image.

Portrait

Orientation of documents or images. Documents/images are set or displayed vertically.

Portrait orientation

A document is transported and read with the long side parallel to the moving direction.

Resolution

The measure of the details or grain of images displayed on a computer screen. As a metric of the resolution, dpi is customarily used.

SCSI (Small Computer System Interface)

An abbreviation for "Small Computer System Interface". SCSI is a standard for interfaces, used to connect devices such as hard disks, scanners, etc. Up to seven devices can be connected through this interface (daisy chain). The data transfer rates are different between "Fast SCSI" (Max. 10MB/sec.) and "Wide SCSI" (Max. 20MB/sec.).

SCSI-ID

Used to specify a particular SCSI device when the initiator selects a target or the target reconnects to the initiator.

B

Separation roller

A roller that separates the sheets of paper from each other.

Simplex reading mode

A mode for scanning only the front side of the document.

Smoothing

A process that eliminates "jaggies" from slanted lines and curves. Irregular convexities are deleted and irregular concavities filled in. This is useful in OCR applications, for example.

Storage temperature/humidity

The temperature and humidity levels necessary for proper storage of the scanner.
Temporary Error
An error that can be fixed by the operator.

Terminator

Devices with a SCSI interface can be daisy-chained. A resistor that includes terminal circuits needs to be placed at both ends of the SCSI chain when devices are daisy-chained. If a device (such as a scanner) is the last device in a chain, leaving an interface connector unused, a Terminator therefore must be attached to provide those terminal circuits.

Third Party Interface

Used to install optional board provided by FUJITSU or interface board manufactured by a third party.

Threshold

A value used as a metric for judging a color as black or white. For scanning an image with gray gradation, this value must be defined. The threshold setting determines which pixels are converted to black and which will become white.

TUV

"An institution that controls products for conformity with various standards of security, usability and environmental matters. "

TWAIN (Technology Without Any Interesting Name)

A standard for API (Application Program Interface) or protocol for imaging devices (scanners, digital cameras, etc.) developed by TWAIN Working Group. In order to use devices that comply with this standard, it is necessary to install driver software based on the same standard.

Ultrasonic sensor

A type of sensor for detecting multifeeding by ultrasonic sound. Scanners detect multifeeding by recognizing differences in the amount of ultrasonic waves that penetrates the document.

USB (Universal Serial Bus)

An abbreviation for "Universal Serial Bus". A standard for interfaces used to connect devices such as key boards, scanners, etc. Up to 127 devices can be connected through this interface. USB devices can be plugged/unplugged without turning off their power. Data transfer rates are different between the "Low speed mode" (1.5Mbps) and "High speed mode" (Max. 12Mbps).

White level follower

A function to correct the difference between white colors in unbleached paper (e.g. wood containing paper, etc.) and in scanned images.

White Reference Stripe

The white part located in the ADF that defines the lightest area in an image, causing all other areas to be adjusted accordingly.

B

INDEX

fi-5530C2 Image Scanner Operator's Guide

P3PC-1922-07ENZ0

Issue Date: December, 2014
Issued by: PFU LIMITED