

TWAIN Driver

Scanner Utility for Microsoft® Windows®

Version 9.19 / 9.21 / 10.10 / 10.21

User's Guide

Introduction

Thank you for purchasing the "Scanner Utility for Microsoft® Windows®".

This software contains a TWAIN-compliant image scanner driver (simply called "driver" in this guide) and utilities.

This guide provides a description summary of the driver, as well as a description of the installation method and procedures for appropriate use. Please read this guide before starting to use the software.

In addition, refer to the [Read Me] file located in [Start] Menu - [All Programs] - [Scanner Utility for Microsoft Windows] for the latest information not included in this manual.

In this guide, product names are abbreviated as follows:

Windows® 2000

- Windows® 2000 Professional

Windows® XP

- Windows® XP Home Edition

- Windows® XP Professional

- Windows® XP Professional x64 Edition

Windows Server® 2003

- Windows Server® 2003, Standard Edition

- Windows Server® 2003, Standard x64 Edition

- Windows Server® 2003 R2, Standard Edition

- Windows Server® 2003 R2, Standard x64 Edition

Windows Server® 2008

- Windows Server® 2008 Standard (32/64 bit)

- Windows Server® 2008 R2 Standard

Windows Vista®

- Windows Vista® Home Basic (32/64 bit)

- Windows Vista® Home Premium (32/64 bit)

- Windows Vista® Business (32/64 bit)

- Windows Vista® Enterprise (32/64 bit)

- Windows Vista® Ultimate (32/64 bit)

Windows® 7

- Windows® 7 Home Premium (32/64 bit)

- Windows® 7 Professional (32/64 bit)

- Windows® 7 Enterprise (32/64 bit)

- Windows® 7 Ultimate (32/64 bit)

Windows® 8
Windows® 8 (32/64 bit)
Windows® 8 Pro (32/64 bit)
Windows® 8 Enterprise (32/64 bit)

Windows® 8.1
Windows® 8.1 (32/64 bit)
Windows® 8.1 Pro (32/64 bit)
Windows® 8.1 Enterprise (32/64 bit)

Windows Server® 2012
Windows Server® 2012 Standard
Windows Server® 2012 R2 Standard

When "Windows® 2000," "Windows® XP," "Windows Server® 2003," "Windows Server® 2008," "Windows Vista®," "Windows® 7," "Windows® 8," "Windows® 8.1" and "Windows Server® 2012" are referred to collectively, they are simply referred to as "Windows®". Unless otherwise indicated, explanations refer to "Windows® 2000," "Windows® XP," "Windows Server® 2003," "Windows Server® 2008," "Windows Vista®," "Windows® 7," "Windows® 8," "Windows® 8.1" and "Windows Server® 2012" collectively.

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[High Risk Activity]

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Organization

This manual explains how to install and use this driver, and how to use the TWAIN scanning utility.

- **Installation**
This section explains the procedure for installing the environments in which this driver may operate.
- **Using the Driver**
This section explains how to use the driver.
- **Using the Gamma Pattern Editor**
This section explains how to use the Gamma Pattern Editor.
- **Using the Scanners and Cameras**
This section explains about the property of “Scanners and Cameras”
- **Troubleshooting**
This section explains the possible causes of error messages and operation errors and the corresponding recommended actions.
- **Appendix**
The appendix contains the specifications of image scanners.

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1. Outline

1.1 Characteristics of this Driver

- This driver complies with TWAIN regulations V2.1, which are global standards for image scanners. The driver can be used in all TWAIN-compliant applications.
- This driver also supports an image scanner that has the "double-sided scan" function. If the application supports continuous scan, a double-sided document can be scanned.

1.2 Operating Environment

This driver can be used in the following systems:

[SCSI connection]

- A personal computer on which one of the following operating systems are installed
 - Windows® 2000
 - Windows® XP
 - Windows Server® 2003
 - Windows Server® 2008
 - Windows Vista®
 - Windows® 7
 - Windows® 8
 - Windows® 8.1
 - Windows Server® 2012

*Some models are not supported in Windows® 2000.

- Adaptec® SCSI adapter or FUJITSU FMV SCSI adapter
 - In some cases, the driver may not operate with the above systems. Please check in advance with your place of purchase.
 - Notes are provided on the accepted SCSI adapters in the following web page, which is included in the installation media. Please read these notes before use.
<http://www.fujitsu.com/global/support/computing/peripheral/scanners/scsi/index.html>
- This driver has the following hardware requirements:
 - CD/DVD drive (required for installation)
 - Mouse (recommended)

[USB connection]

- A personal computer on which one of the following operating systems are installed
 - Windows® 2000
 - Windows® XP
 - Windows Server® 2003
 - Windows Server® 2008
 - Windows Vista®
 - Windows® 7
 - Windows® 8
 - Windows® 8.1
 - Windows Server® 2012

*Some models are not supported in Windows® 2000.

- USB port
- CD/DVD drive (required for installation)
- Mouse (recommended)

1.3 Explanatory Notes

The descriptions in this manual are prepared based on the following rules:

◇ Menus and buttons


The menus and buttons used in the program description are enclosed in [].

Example: [File] menu
 [OK] button

◇ Keyboard

The keytop indications comply with the standard keyboard of the Fujitsu FMV series.

Major differences between the Fujitsu FMV keyboard and other keyboards are shown below.

FMV keytops	Other possible keytops
Alt	Previous screen, GRPH
Ctrl	CTRL
Esc	ESC
Enter	Return, 
Shift	SHIFT
Back space	Backspace, BS
F1	PF1, f-1

◇ Terms related to mouse operation

Terms related to major mouse operations are explained below.

Click: To press and release the mouse left button

Double click: To quickly press the mouse left button twice

Drag: Move the mouse while keeping the mouse left button pressed

◇ Notes on operation procedures

If some menus need to be operated in a certain order, the procedural order is described as follows:

[A] - [B] - [C]

In accordance with this description, operation [A] is executed first, followed by [B] and [C] in that order.

◇ Figures

Figures and screen operations in this guide refer to Windows[®] 7. They are also followed when using other operating systems.

Note that the expressions may vary with the type of scanner connected.

2. TWAIN

2.1 TWAIN

TWAIN is the specification that defines the standard software protocol and application programming interface (API) for data exchange between a software application program and an image input device such as the image scanner.

[TWAIN development background]

In the past, development of a new scanner inevitably required the development of a compatible driver and a sample (demonstration) program exclusively designed for the new scanner. As the scanner is upgraded, the driver may need to be upgraded as well to maintain its compatibility with the upgraded scanner. Therefore, the use is most likely to be restricted to one specific scanner model to avoid the complication of learning new operation methods and replacing the peripheral driver, etc., involved in scanner replacement.

In view of the incompatibility among different scanners and peripheral equipment and the accompanying inconvenience, there was a demand for standardization of the related hardware and software, and TWAIN was established as a result.

The user may now choose among all the input devices and software (driver or application programs) conforming to the TWAIN standard, and configure a most suitable system for himself, without being restricted to the products of a certain series or a certain manufacturer.

2.2 TWAIN Application

TWAIN mainly applies to the following three software components:

- ① Application software
- ② Source manager
- ③ Source

The components are related to each other as shown below.

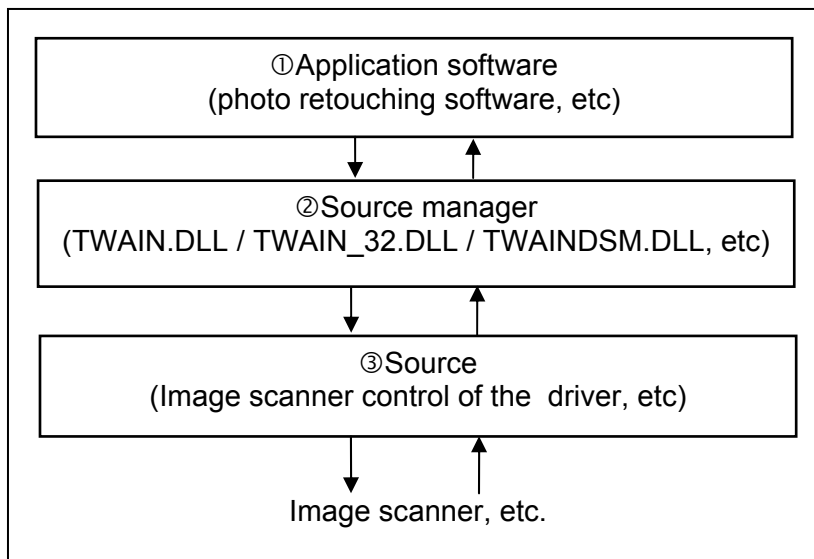


Figure TWAIN Application

3. Installation

3.1 Preparation

1. Make sure that the operating system (OS) is installed correctly.
2. In case of the SCSI connection, confirm that the SCSI adapter is connected to your PC and operating correctly.

In case of the USB connection, confirm that the USB port is installed in your PC.

3. Confirm that the hard disk that is the installation destination has enough free space.

If TWAIN Driver version 9.20 or earlier is installed in your computer, uninstall it before installing a different version of TWAIN Driver. When uninstalling old versions, select [Control Panel] – [Add or Remove Programs] on the [Start] menu and uninstall “Scanner utility for Microsoft Windows”. See Section “3.3 Uninstall (page 15)” described later.

4. Turn off your PC.
5. Connect the scanner to your PC.

3.2 Installing the Scanner Driver

The Windows® XP screen samples are shown below. The screen and operations will differ slightly depending on the OS that is being used.

1. Turn on the scanner.
2. Turn on your PC and Log on to Windows®.

Log on as an administrator.

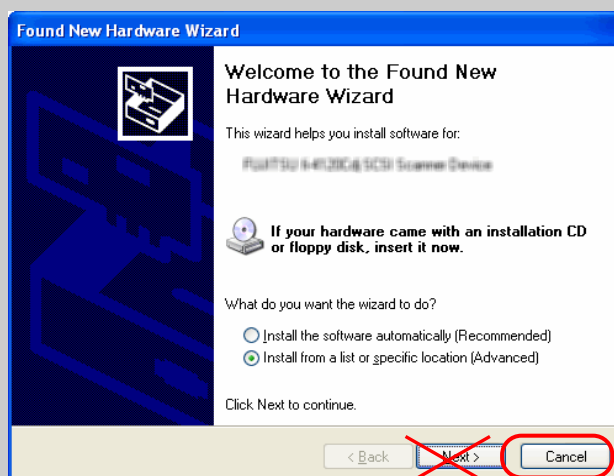
The scanner may be detected automatically, and the "Found New Hardware Wizard" or "Found New Hardware" window is displayed.

In this case, click [**Cancel**] button to close this Wizard window.

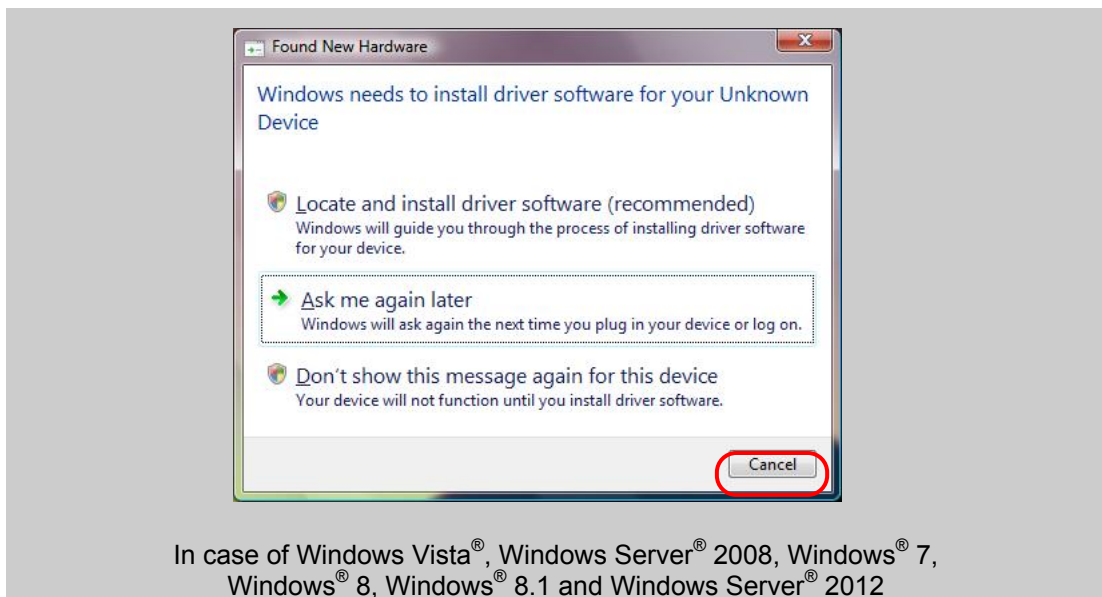
(* Depending on the OS, the window displayed differently.)



In case of Windows® 2000



In case of Windows® XP, Windows Server® 2003



3. Insert the Setup DVD-ROM or Setup CD-ROM into the disk drive.

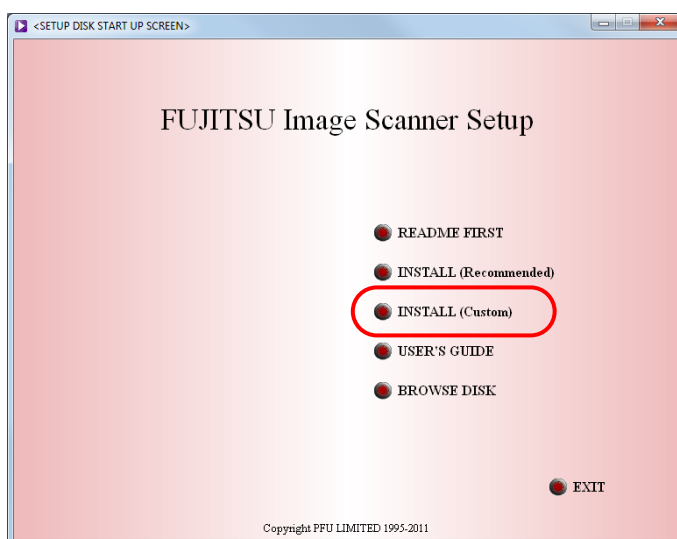
⇒ <SETUP DISK START UP SCREEN> is displayed.

This Dialog is not displayed automatically when the "Auto play" setting of the disk drive on your PC is off.

In this case, please run "**AutoPlayer.exe**" in this Setup DVD-ROM or Setup CD-ROM directly using "Explore" or "My computer".

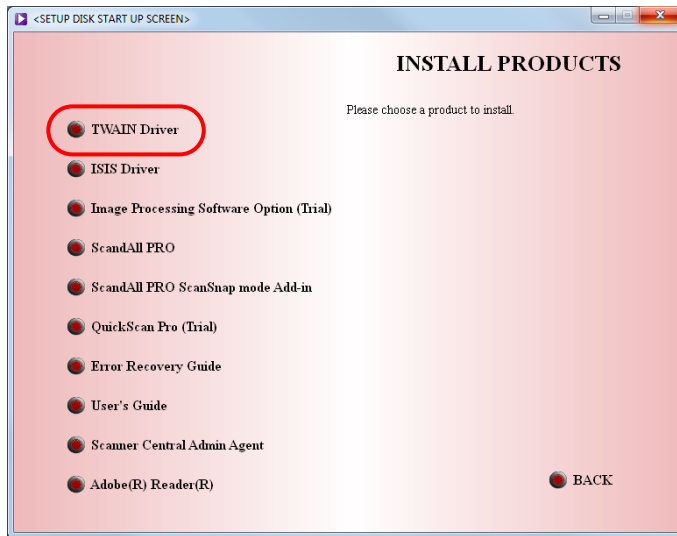
The window "Windows needs your permission to continue" may appear for Windows Vista®, Windows Server® 2008, Windows® 7, Windows® 8, Windows® 8.1 and Windows Server® 2012. Click [Continue] button.

4. Click [INSTALL (Custom)].



(* Depending on the scanner model, a different screen may appear.)

5. Click [TWAIN Driver]



(* Depending on the scanner model, the different screen may appear.)

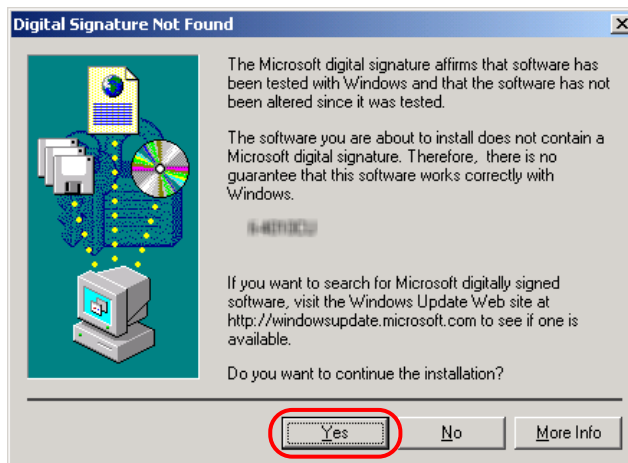
Depending on the scanner model, the screen which confirms whether "Error Recovery Guide" and "Image Processing Software Option" are installed or not is displayed. In this case, click [OK] button, and install Error Recovery Guide.

6. Follow the instructions on the screen to complete the installation.
(* Restarting the PC is necessary for Windows Vista®, Windows Server® 2008 Windows® 7, Windows® 8, Windows® 8.1 and Windows Server® 2012.)
7. After the restart, the scanner is detected.

Depending on the OS, the following operations may be required.

In case of Windows® 2000

[Digital Signature not Found] is displayed, click [Yes] button.



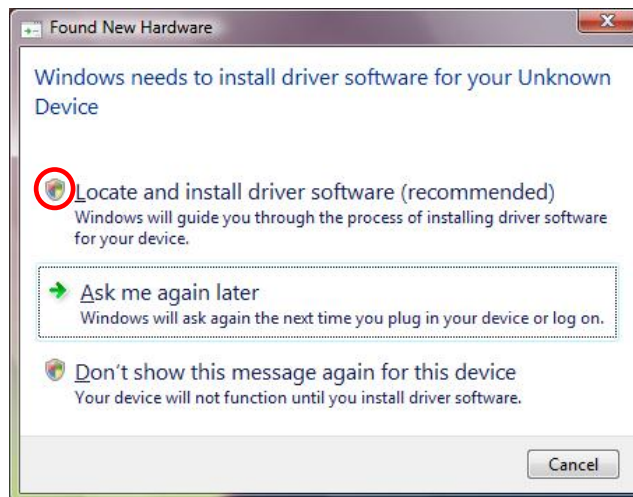
In case of Windows® XP/ Windows Server® 2003/ Windows Server® 2008/ Windows Vista® / Windows® 7/ Windows® 8/ Windows® 8.1/ Windows Server® 2012

1) [Found New Hardware Wizard] is displayed, click [Next >] button.



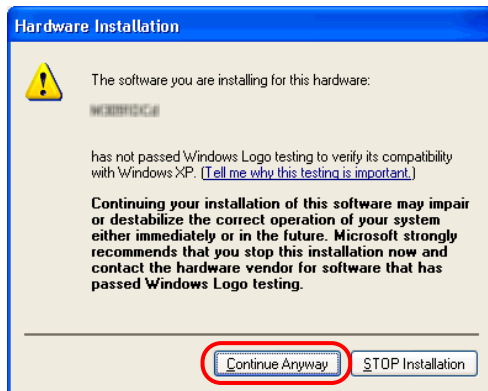
Following operation is required for Windows Vista®, Windows Server® 2008, Windows® 7, Windows® 8, Windows® 8.1 and Windows Server® 2012.

- The window “Window needs to install driver software...” will be displayed. Then select “Locate and install driver software (recommended)” in the dialog box.

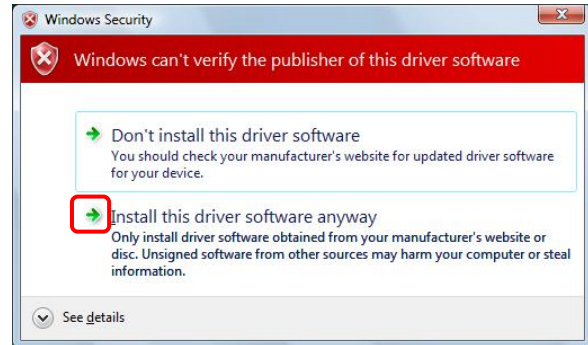


- If the window “Window needs your permission to continue” is displayed, click “Continue” button.

- 2) If [Hardware Installation] is displayed, click [Continue Anyway] button. For Windows Vista®, Windows Server® 2008, Windows® 7, Windows® 8, Windows® 8.1 and Windows Server® 2012, “Windows can’t verify the publisher of this driver software” will appear. Then select “Install this driver software anyway”.



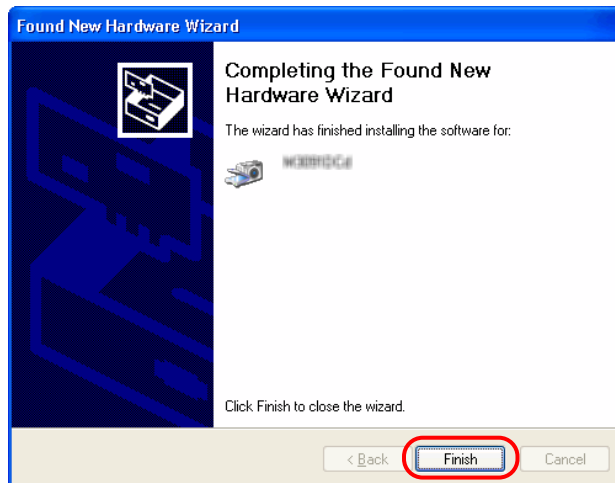
For Windows® 2000, Windows® XP and Windows Server® 2003



For Windows Vista®, Windows Server® 2008, Windows® 7, Windows® 8, Windows® 8.1 and Windows Server® 2012

Some scanner models do not support this option. See "Relevant Image Scanner Specification" in the Appendix.

- 3) Click [Finish] button when the installation is finished.



Now, the installation of scanner driver is completed.

3.3 Uninstall

The uninstall process removes the software and returns the hard disk to its pre-installation state.

When you want to remove this scanner driver program from your PC, uninstall by the following procedures.

1. Turn on your PC and Log on to Windows®.

Log on as an administrator.

2. Close all of the applications on Windows®
3. Select [Control Panel] from [Start] menu.
⇒ The [Control Panel] is displayed.
4. Double-click [Add/Remove Programs] from the icon list of the [Control Panel].
⇒ The properties of [Add/Remove Programs] is displayed.
5. Select "**Scanner Utility for Microsoft Windows (V**L**)**" (* indicates the version number) from the "Install/Uninstall" list.
6. Click [Add/Remove] button.
7. When the confirmation dialog is displayed, click [OK] button if you are ready to uninstall.
8. When uninstallation is completed, click [Finish] button.

Image files that have been scanned and saved will not be deleted.

If other TWAIN-compliant applications and drivers have been installed and you are asked whether or not to delete files shared with them such as the TWAIN Manager, select [NO] to avoid deleting them.

The screen and operations may differ slightly depending on the OS that is being used.

<In case of Windows® XP>

- [Add/Remove Programs] → [Add or Remove Programs]
- [Add/Remove] button → [Change/Remove] button

4. Using the Driver

4.1 Selecting the Driver

To use this driver from the TWAIN application, select "FUJITSU <Product ID>" from the TWAIN data source (driver) selection screen. For general application, the data source selection screen is displayed by selecting the [Select Scanner] or [Acquire ...] menu. Refer to the instruction manual for the application used for details.

4.2 Screen Configuration

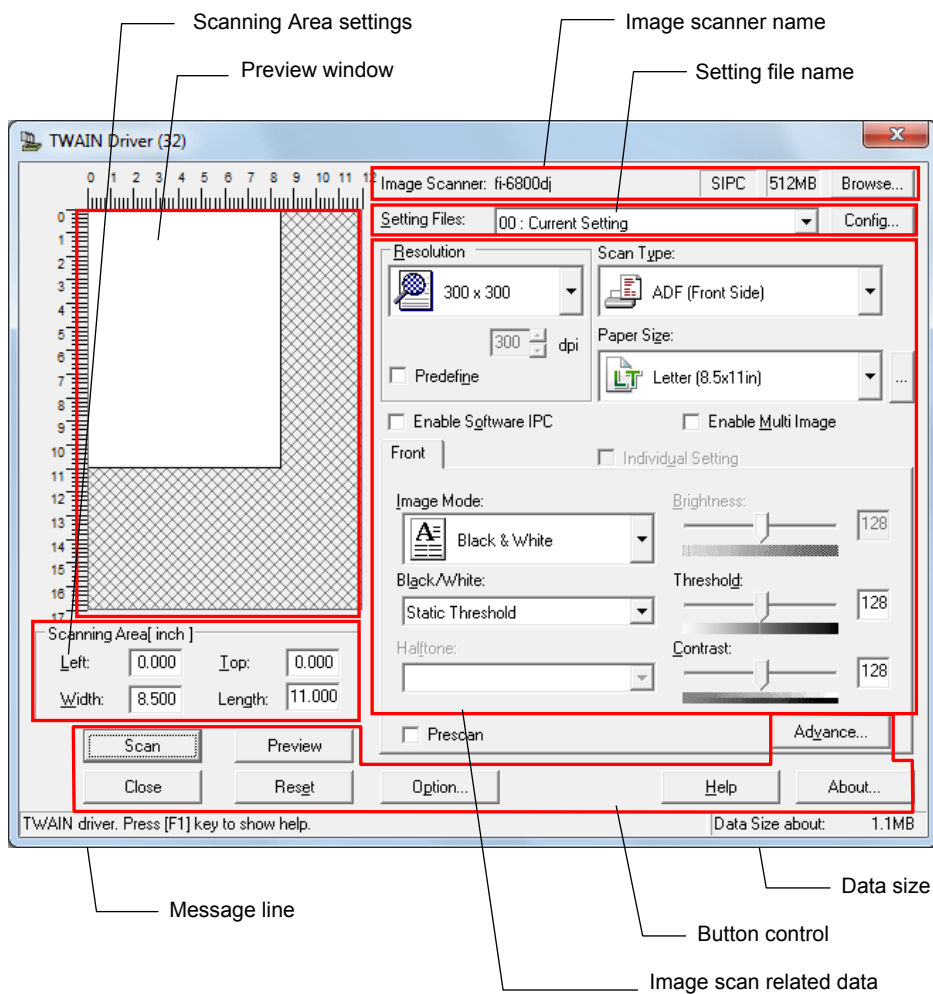
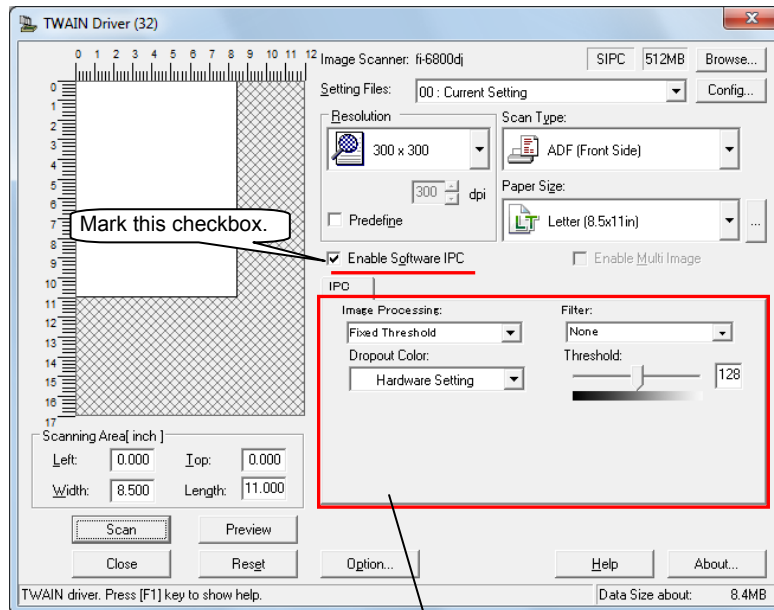


Figure Main Dialog

4.2.1 Linkage to Image Processing Software Option

When the “Enable Software IPC” checkbox is marked after installation of “Image Processing Software Option” (sold separately or included as a standard function)*, there appears setting items of Image Processing Software Option in a part of the Setting Window for TWAIN Driver.

(*: Depending on the scanner, the option is installed together with the scanner driver. See "Relevant Image Scanner Specification" in the Appendix.)



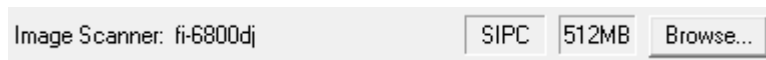
Setting items of “Image Processing Software Option” are displayed here. You can change the settings of Image Processing Software Option here.

- The “Image Processing Software Option” is required for settings on the window of TWAIN Driver.
- For details about the Image Processing Software Option, refer to the “Image Processing Software Option User’s Guide”.

The following pages contain the explanation and operation description for each part.

4.3 Displaying Driver Information

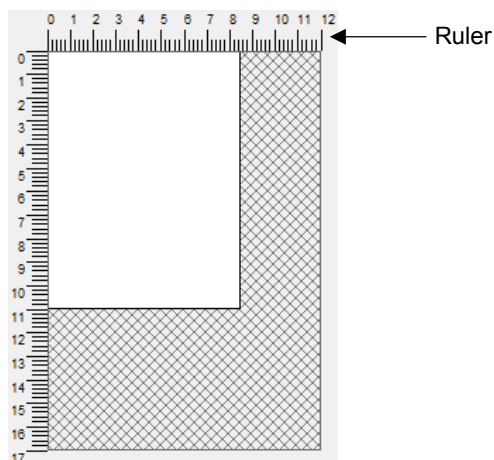
- ◆ Image scanner name



The model name, whether Image Processing Software Option is enabled or disabled, and capacity of internal scanner memory (in units of megabytes) of the connected image scanner are displayed.

If no image scanner is connected, this field is blank.

- ◆ Preview window



The preview window is used to display the temporary image of read data and for setting the "Scanning Area."

For settings, see "Scanning Area" later in this manual. Also see the description of the [Preview] button later in this manual.

- ◆ Ruler

The large divisions are labeled as "Unit". The scale also varies with the selected scanner.

- ◆ Message line

The message line is the bottom line of the dialog in which a brief explanation of an input item or a setting item is displayed when the mouse cursor is moved over the item.

- ◆ Data size

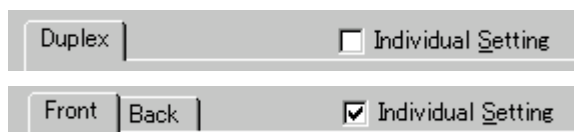
The approximate amount of data per image when data is scanned in the present option.

Note.

This value is the amount of uncompressed data. The size of the stored file will differ from this value and is usually smaller if image compression is chosen and the image is compressed.

4.4 Setting Information on Image Scanning

◆ Current side



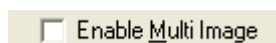
When a scanner that allows duplex scanning is used, specifies the page which sets the image scanning information.

To scan using the same settings as those for "Front side" and "Back side," clear the checks in the "Individual Setting" checkbox on the "Front" and "Back" tabs. A single "Duplex" tab will be displayed at the left so that the same image scanning information can be set for "Front side" and "Back side."

To scan using different settings for "Front side" and "Back side," check the "Individual Setting" checkbox on the "Front" and "Back" tabs. Two tabs, "Front" and "Back," will be displayed at the left. Select each tab and enter the desired settings.

This is only effective when ADF (Duplex) is selected for the method of paper feed. For scanner types which permit duplex scanning, see "Relevant Image Scanner Specification" in the Appendix.

◆ Enable Multi Image

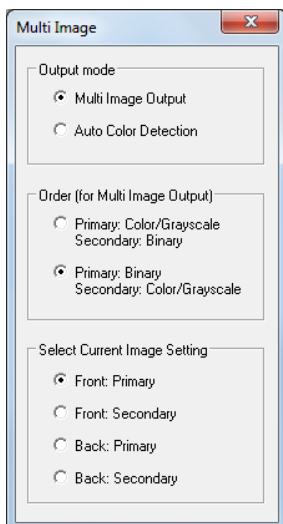


Multi image can scan the document once and output both a Color/Grayscale and a Binary B/W image.

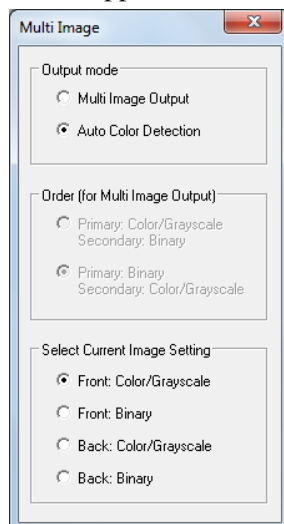
Not all the scanners support Multi image. For details, please refer to "Specification" in the Appendix.

- * This function can be used if "Ram cache" or "Use Both Memory" is selected.
If an item other than "Ram cache" or "Use Both Memory" has been selected in the "Cache Mode:" and this check box is marked, it will change to "Ram cache".
- * This function cannot be used when the [Split Image] function is enabled and vice versa.
- * Depending on the scanner model, "Long page (Front Side)" and "Long page (Duplex)" cannot be selected in the [Scan Type] drop-down list.
- * "1200dpi" under [Resolution] cannot be selected.
- * This function cannot be used when [Double-page spread] is selected and vice versa (V9.21).
- * This function may not work properly in some applications.

If this checkbox is checked, the following screen appears.

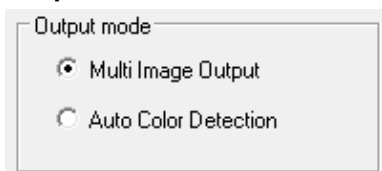


When “Multi Image Output” is selected



When “Auto color Detection” is selected

- Output mode



Multi Image Output

One scan outputs both a Color/Grayscale and a Binary B/W image.

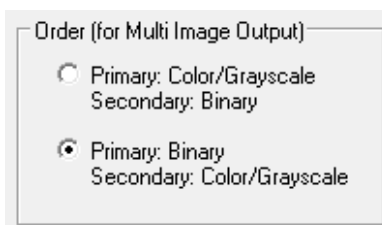
Auto color Detection

Outputs either a Color/Grayscale or a Binary B/W image depending on whether the document is color or black and white.

*The following documents may be recognized as black and white.

- Documents containing light colors
- Partly colored documents
- Two-color documents with a lot of dark colors similar to black (e.g. gray)

- Order (for Multi Image Output)



Specify the output order of images when scanning in Multi Image Output mode.

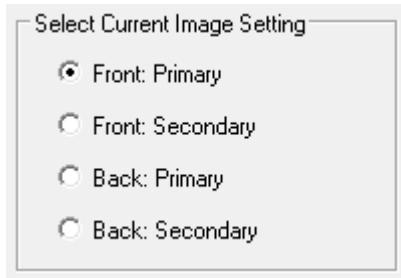
Primary: Color/Grayscale Secondary: Binary

Output images in the order of “Color/Grayscale image” → “Binary B/W image”.

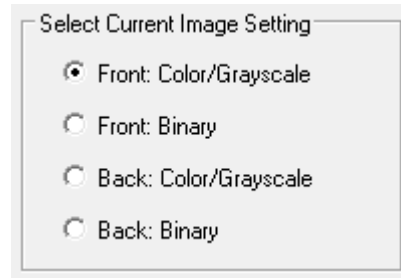
Primary: Binary Secondary: Color/Grayscale

Output images in the order of “Binary B/W image” → “Color/Grayscale image”.

- Select Current Image Setting



When "Multi Image Output" is selected



When "Auto color Detection" is selected

Select a side and then set the scanning options for it on the main dialog box accordingly.

When scanning in Multi Image Output mode, set the scanning options for primary and secondary as specified in the "Order" section.

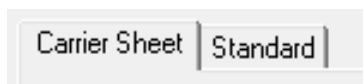
When scanning in Auto color Detection mode, pre-set the scanning options for color/grayscale or black and white if detected.

You can use different "Rotation" settings for Multi Image Output and Auto Color Detection ("Multi Image" setting).

When you use the "Multi Image" function (Multi Image Output and Auto Color Detection) together with the "Filter" function (Page Edge Filter and Digital Endorser), the "Filter" setting is common to both Multi Image Output and Auto Color Detection. You cannot configure different "Filter" settings for each.

When you use the "Multi Image" function (Multi Image Output and Auto Color Detection) together with the "Dropout Color" function, the primary and secondary setting is common to both Multi Image and Dropout Color.

◆ **Carrier Sheet / Standard**



[Carrier Sheet] and [Standard] tabs are displayed when [Double-page spread], [Clipping (Front)] or [Clipping (Duplex)] is selected for [Scan Type].

Some scanner models do not support this function. See "Relevant Image Scanner Specification" in the Appendix.

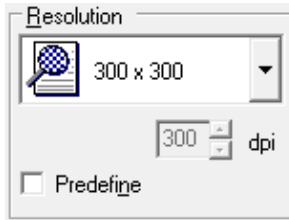
Carrier Sheet

Configures the scan settings when performing a scan with the Carrier Sheet.

Standard

Configures the scan settings when performing a scan without using the Carrier Sheet.

◆ Resolution

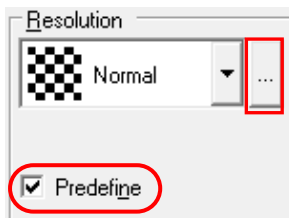


Specifies the number of pixels (dots) per inch.

Select a predefined resolution or [Custom] from the list.

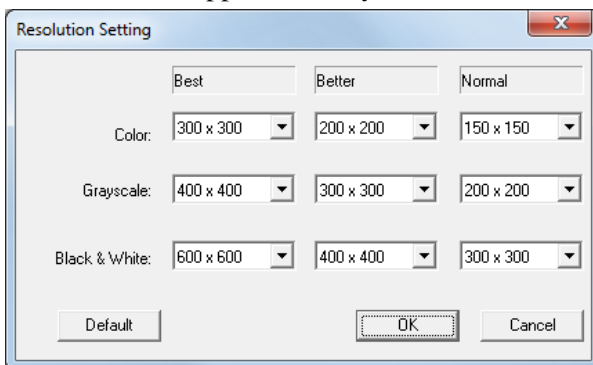
[Customize] enables detailed settings by a pixel unit.

* When you scan documents at a resolution of less than 150 dpi with [Double-page spread], [Clipping (Front)] or [Clipping (Duplex)] selected for [Scan Type], the double-page spread or the cropping function may not work properly. In that case, set the resolution to 150 dpi or higher.



By marking [Predefine] checkbox, you can select one from three predefined settings as [Normal], [Better], [Best] to scan documents instead of configuring settings by yourself.

Otherwise, you can change the details of the predefined settings on the [Resolution Setting] window, which appears when you click on the [...] button.



Resolutions for Image modes (“Color”, “Grayscale”, and “Black & White”) of the each predefined settings are changed corresponding to the selection of the Image Type.

* Click [Default] button to return the resolutions to the default value.

High resolution produces finer images, meanwhile requires more memory that leads to longer scanning time.

The supported resolution depends on the type of scanner and the options installed. Refer to "Relevant Image Scanner Specification" in the Appendix.

* When scanning with [Enable Multi Image] enabled, images with a resolution different than the one specified in predefine may be output.

◆ Paper Size

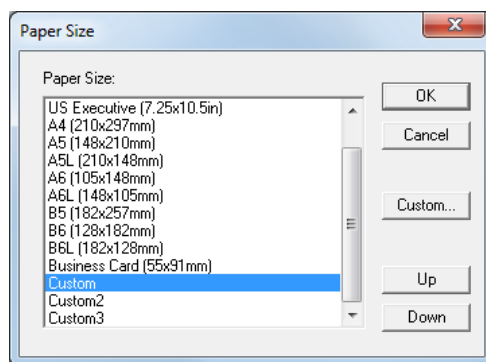


Specifies a document size for scanning.

Select a standard size or [Custom] size (can be registered up to three) from the list.

* When you perform a scan in [Carrier Sheet] size with [Clipping (Front)] or [Clipping (Duplex)] selected for [Scan Type], the image is output in Carrier Sheet size without being cropped.

Window for customizing the paper size will appear when you click on [...] button besides the list. On this window, you can change the order of the paper size in the list.



[Custom] button : Used for configuration of a custom size.

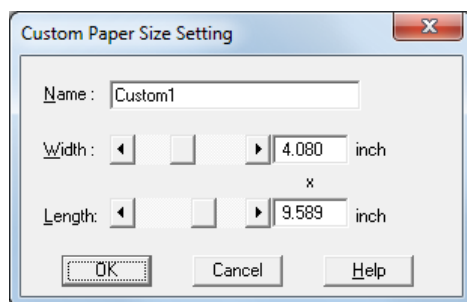
[Up] button : Used for shifting the order of the selected document size upward.

[Down] button : Used for shifting the order of the selected document size downward.

You can register up to three sizes as the customized document sizes.

[Custom Paper Size Setting] window will appear when you click the [Custom] button. Enter the size of the document to be scanned. (When entering the size, specify the paper size by width x length to the scanning direction.)

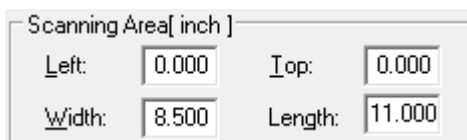
Some paper sizes may not be accepted by your device. Refer to "Relevant Image Scanner Specification" in Appendix.



Name : Enter the name of the customized setting to be displayed in the list.

Width, Length : To specify a custom paper size, use the scroll bar or enter the paper size directly. The unit specified in [Option]-[Generic]-[Unit/Scaling] will be applied to the unit in this window.

◆ Scanning Area



Scanning Area[inch]

Left:	0.000	Top:	0.000
Width:	8.500	Length:	11.000

Specifies the start position, width and length for the image scan. The maximum allowable size is the paper size selected previously.

In addition, the minimum size is 1.000 inch, 26 millimeters, or pixels (number of dots per inch) according to the unit that has been set.

"Left": The left end of the scan area on the scanned document (X coordinate)

"Top": The top end of the scan area on the scanned document (Y coordinate)

"Width": The width of the scan area

"Length": The length of the scan area

These values are related to one another in the following way:

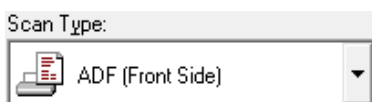
$0 \leq \text{left end coordinate} < (\text{paper width} - \text{minimum scan area size})$

$0 \leq \text{top end coordinate} < (\text{paper length} - \text{minimum scan area size})$

$\text{Minimum value} \leq \text{width} \leq (\text{paper width} - \text{left end coordinate})$

$\text{Minimum value} \leq \text{length} \leq (\text{paper length} - \text{top end coordinate})$

◆ Scan Type



Scan Type:

ADF (Front Side)

Selects the feeding device.

The image scanner uses a document bed called the flat bed as well as an automatic document feeder (ADF) for feeding scanned document. The ADF usually enables the documents to be scanned only once. The flat bed allows scanning the same documents repeatedly.

Flat bed

Scans a document placed on the flat bed of the device.

ADF (Front Side)

Scans the documents on the device's automatic document feeder (ADF). Here, only the front sides are scanned.

ADF (Duplex)

To scan both the front and the back of a page, select this option.

If this option is selected, the documents are scanned in the "front to back to front to back ..." order.

This option can be used only for scanner models that support duplex scanning.

The "Duplex Function" requires that the calling application supports "continuous scan."

If the application does not support "continuous scan," only the data for the front side of the page is passed to the application.

Some scanner models do not support this option. See "Relevant Image Scanner Specification" in the Appendix.

ADF (Virtual Duplex)

When you use a simplex scanner, this function automatically sorts the scanned pages in the correct order after scanning the front of the pages loaded in the ADF first, and then the back sides in succession.

Example: when you scan 2 double-sided sheets (4 pages)

Scanning order	Output order
Front side of the first sheet (1 st page)	Front side of the first sheet (1 st page)
Front side of the second sheet (3 rd page)	Back side of the first sheet (2 nd page)
Back side of the second sheet (4 th page)	Front side of the second sheet (3 rd page)
Back side of the first sheet (2 nd page)	Back side of the second sheet (4 th page)

* This function is available for fi-6750S.

Long page (Front Side)

Scans a document longer than the paper size which can be specified by [Paper Size]. In this case, only the front sides of documents are scanned.

When this option is selected, the "Long Page Paper Size Setting" dialog box opens. Specify the size of the document to be scanned.

* While the "Long page" is specified, the preview window cannot be displayed and the scanning area cannot be specified.

* In case of some scanner models, while the "Long page" is specified, color and grayscale settings cannot be selected in [Image mode].
(Refer to "Relevant Image Scanner Specification" in the Appendix.)

* In case of some scanner models, there may be a limit on the maximum [Resolution] value that can be specified.

* The "Long page" is not displayed in the [Scan Type] dropdown list if not supported by the device. See "Relevant Image Scanner Specification" in the Appendix.

* When the scan size is increased, more memory space is consumed. If a scan cannot be performed due to insufficient memory, refer to "Insufficient memory. (DS41001)" in "Troubleshooting."

Long page (Duplex)

Scans a document longer than the paper size which can be specified by [Paper Size].

If this option is selected, the documents are scanned in the "front to back to front to back..." order.

* While the "Long page" is specified, the preview window cannot be displayed and the scanning area cannot be specified.

* In case of some scanner models, while the "Long page" is specified, color and grayscale settings cannot be selected in [Image mode].
(Refer to "Relevant Image Scanner Specification" in the Appendix.)

* In case of some scanner models, there may be a limit on the maximum [Resolution] value that can be specified.

* The "Long page" is not displayed in the [Scan Type] dropdown list if not supported by the device. See "Relevant Image Scanner Specification" in the Appendix.

* When the scan size is increased, more memory space is consumed. If a scan cannot be performed due to insufficient memory, refer to "Insufficient memory. (DS41001)" in "Troubleshooting."

ADF (Back Side)

Scans the documents on the device's automatic document feeder (ADF). Here, only back sides are scanned.

Double-page Spread

Select this scan type to scan a document larger than A4 size and have the front and back side images automatically merged, by folding the document in half and placing it in a Carrier Sheet.

*Some functions are not supported when you perform scanning using "Double-page Spread".

Clipping (Front)

Select [Clipping (Front)] to scan in simplex mode documents that can be damaged easily, or documents that are difficult to load such as newspaper clippings using the Carrier Sheet.

* Some functions are not supported when you perform scanning using [Clipping (Front)].

Clipping (Duplex)

Select [Clipping (Duplex)] to scan in duplex mode documents that can be damaged easily, or documents that are difficult to load such as newspaper clippings using the Carrier Sheet.

* Some functions are not supported when you perform scanning using [Clipping (Duplex)].

Some scanner models do not support this option. See "Relevant Image Scanner Specification" in the Appendix.

Note.

To specify duplex scanning, the number of copies designated should be based on the number of pages, not the number of paper sheets. In other words, one original with a front and back is regarded as two pages.

◆ **Image Mode**



Selects an image mode for scanning the image.
Select a corresponding image mode from the list.

Black & White

Scans data by using the fixed threshold binary, black-and-white. Distinguishes black from white by the setting in the "Threshold" of "Scanning Parameter". This scanning mode is suitable for scanning line drawings and text documents.

Halftone (Dither)

Scans data using the halftone processing, with dithering or error diffusion. Uses the patterns set in "Halftone" to simulate data in black-and-white. Selection of built-in dithered patterns or error diffusion (not supported by some device models) is allowed.

This scanning mode is suitable for scanning images containing light and shadow such as a photograph. Some scanner models do not support this option. See "Relevant Image Scanner Specification" in the Appendix.

Gray scale

Scans data using 256-level monochrome gray scale. Light and shade in photographs can be represented with greater fidelity. This scanning mode employs far more memory than the Black & White mode.

Some scanner models do not support this option. See "Relevant Image Scanner Specification" in the Appendix.

4bit Gray scale

Scans data using 16-level monochrome gray scale. Data size is smaller than "Gray scale" selected.

Some scanner models do not support this option. See "Relevant Image Scanner Specification" in the Appendix.

SEE (Selective Edge Emphasis)

Scans data using the halftone processing and emphasizes line drawings and text. This option is most suitable for emphasizing only text of documents containing both photographs and text.

Some scanner models do not support this option. See "Relevant Image Scanner Specification" in the Appendix.

24bit Color

Scans data using 24 bits color. This mode is suitable for scanning color photograph and employs far more memory than Gray scale mode.

Only color scanner models support this option. See "Relevant Image Scanner Specification" in the Appendix.

256 Color

Scans data using 256 colors.

Data size is smaller than "24 bit Color" selected.

Please note that the image quality of "256 Color (8 bit)" is inferior to the case of "24 bit Color". Choose "24 bit Color" for higher quality.

Only color scanner models support this option. See "Relevant Image Scanner Specification" in the Appendix.

8 Color

Scans data using 8 colors.

Data size is smaller than "256 Color" selected.

Please note that the image quality of "8 Color" is inferior to the case of "24 bit Color" and "256 Color (8 bit)". Choose "24 bit Color" for higher quality.

Only color scanner models support this option. See "Relevant Image Scanner Specification" in the Appendix.

◆ **Black & White**



Specifies the processing method when "Black & White" is specified in "Image Mode".

Static Threshold

Executes simple binary processing based on the "Threshold" setting.

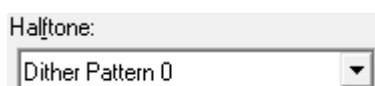
SDTC mode

To enable the auto binary function of the image scanner, specify this option.
If this option is selected, the "Threshold" setting will be disabled.

Advanced DTC

Scan in fine binary mode regardless of the document.
Normal binary mode can't scan very well faintly toned documents, documents with colored background, or documents with color charts. Choose this to scan these documents clearly. Some scanner models do not support this function. See "Relevant Image Scanner Specification" in Appendix.

◆ **Halftone**



Select the halftone pattern for halftone scanning from the built-in pattern list.
Select the desired halftone pattern for displaying the obtained image. This setting is effective when "Halftone" or "SEE (Selective Edge Emphasis)" is selected in "Image Mode".
Some scanner models do not support this function. See "Relevant Image Scanner Specification" in Appendix.

Dither Pattern 0

Executes pattern processing that is suitable for scanning a dark photograph.

Dither Pattern 1

Executes pattern processing that is suitable for scanning a dark-colored document containing both text and photographs.

Dither Pattern 2

Executes pattern processing that is suitable for scanning a light photograph.

Dither Pattern 3

Executes pattern processing that is suitable for scanning a light-colored document containing both text and photographs.

Download Pattern

Executes processing using the dithered download pattern specified in the dithered download file (described later). Some scanner models do not support this function. See "Image Scanner Specification" in Appendix.

Error Diffusion

Error Diffusion minimizes the difference between the pixel density of the scanned image and the pixel density of the printed image to create better reproduction of a scanned photograph.
Some scanner models do not support this function. See "Relevant Image Scanner Specification" in Appendix.

◆ **Scanning Parameters**

For fine scan adjustments.
Since there is no fixed set of values, set by trial and error.

◇ **Brightness:**



Sets the brightness of the overall image.

Specify the brightness with a number in the range of 1 (bright) to 255 (dark).

To darken the overall image, increase the value of the setting. To brighten the overall image, decrease the value.

◇ **Threshold:**



Sets the threshold value by which the black and the white of black-and-white images are distinguished. Specify a number in the range of 1 (bright) to 255 (dark). This parameter can be set only if "Black & White" is specified for "Image Mode."

In addition, if "DTC mode" is selected, the scanner will automatically use the appropriate threshold value. As a result, the set value cannot be changed.

If the light color in the scanned document is read as black, increase the threshold value. To eliminate light-colored areas in the scanned document, decrease this value.

◇ **Contrast:**



Sets the contrast of light and shadow in a scanned image.

Specify the contrast with a number in the range of 1 (low [soft]) to 255 (high [sharp]).

If this value is increased, the dark part of the image is shown darker and the light part is shown lighter.

Some scanner models do not support this function. See "Relevant Image Scanner Specification" in Appendix.

◆ **Prescan**

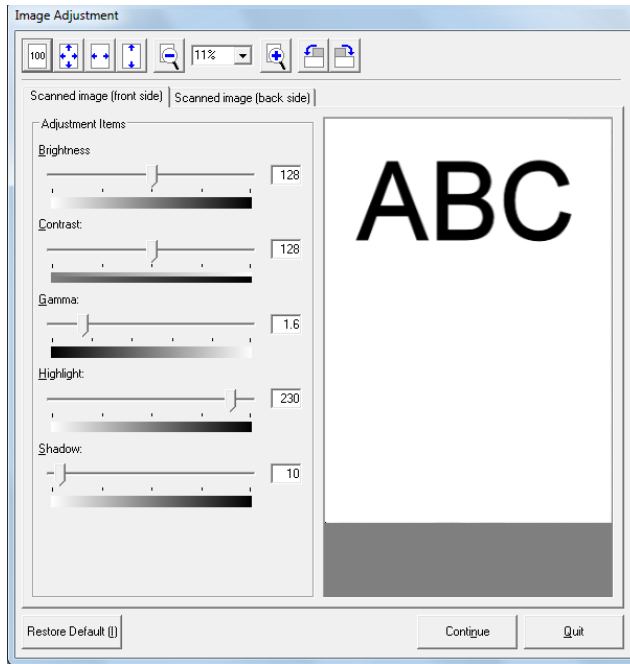
While viewing the scanned image on the screen, settings such as brightness and contrast of the scanned image can be finely adjusted.

Some scanner models do not support this function. See "Relevant Image Scanner Specification" in Appendix.

When performing a scan with the [Prescan] checkbox selected, [Image Adjustment Screen] appears after the first page is scanned.

* This function cannot be used when [Multi Image Output], [Auto Color Detection], [Individual Setting] or [Enable Software IPC] functions are enabled.

* Depending on the settings during scanning, images may be slightly different from each other for documents adjusted on the [Image Adjustment Window] and the rest of the documents.



◇ Adjusts Items:

Adjusts the scanning parameters (Brightness, Threshold, Contrast, Gamma, Highlight and Shadow). The parameters that can be adjusted differ depending on the [Image Mode] setting.

◇ Brightness:



Sets the brightness of the entire image. The setting range is from 1 (bright) to 255 (dark). To brighten the entire image, decrease the setting value. To darken the entire image, increase the setting value.

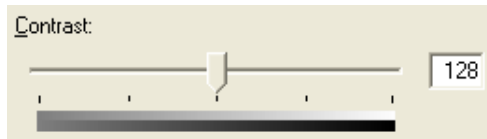
◇ Threshold :



Threshold is the criterion that distinguishes black and white colors in B&W images. The setting range is from 1 (bright) to 255 (dark).

To scan light gray as black, increase the setting value. To avoid scanning any unwanted gray, decrease the setting value.

◇ Contrast :



Sets the contrast of the scanned image. The setting range is from 1 (weak) to 255 (strong).

To scan dark parts of the image darker and light parts of the image lighter, increase the setting value.

◇ Gamma :



Gamma corrects the nonlinearity of the image. Scanner sensors generate linear outputs relative to the density of light reflected from the document. However, because most of the output terminals do not generate linear outputs, linearity adjustment is necessary.

The arbitrary setting range is from 0.1 to 10.0.

◇ Highlight :



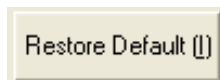
Specifies the level of the brightest part of the image. Increasing the setting value will darken the image and decreasing it will lighten the image.

◇ Shadow:



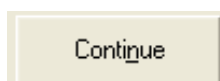
Specifies the level of the darkest part of the image. Increasing the setting value will darken the image and decreasing it will lighten the image.

◇ [Restore Default] button



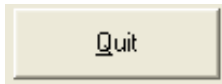
Restores the scanner parameter setting values back to what they were when the screen was turned on.

◇ [Continue] button



Continues scanning using the adjusted scanning parameters.

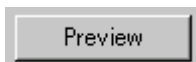
◇ [Quit] button



Saves the adjusted scanning parameters and stops scanning.

4.5 Specifying Driver Operation

◆ [Preview]



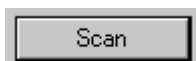
Scans in a preliminary image based on set values, and displays the image in the preview window.

Before actual scanning, the preview function can be used to display the entire document for specifying the desired scan area.

In case of the scanner with Flatbed basically, the preview function is available only when a document is scanned with the Flatbed. The scanner without Flatbed scans the first page of a document on the ADF (the front side only in case of duplex scanning).

Some models do not support this function. See "Relevant Image Scanner Specification".

◆ [Scan]



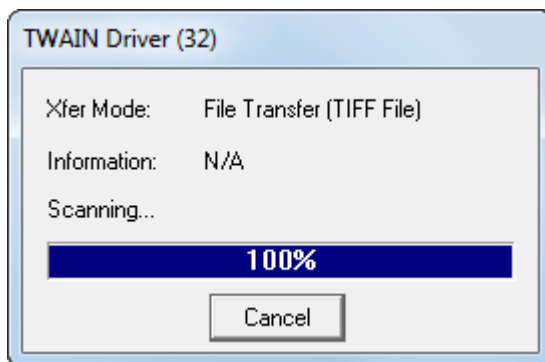
Scans the specified scan range based on set values.

The following "progress indicator" is displayed during scanning to show the progress of the scan operation. To stop scanning, click the [Cancel] button.

The character string indicates the data transfer mode used between the driver and the application.

There are three types of "Xfer Modes (transfer modes)" which vary depending on the application in use: Native mode, Memory mode and File mode.

Some models display skew of the document being scanned in the "Information:" column.



Progress indicator

- ◆ [Close] / [OK]



Closes the dialog box without scanning.

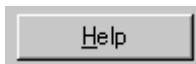
If a setting is changed, the changed setting is saved in the initial value file.

- ◆ [Reset]



Restores the current setting values to the status immediately after the window is opened.

- ◆ [Help]

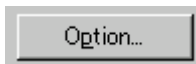


Displays online help. When the [F1] key is pressed, help information regarding the item on which the cursor is placed is displayed.

Note.

Depending on the application used help information may not be displayable with the [F1] key. This is because the driver operation is controlled through the application and the [F1] key may be used differently in each application program. Help information can be displayed by pressing the [F1] key while holding down the [Ctrl] or [Shift] key.

- ◆ [Option]



Displays the "option dialog" for setting device-specific functions.

See Section "4.7 Setting Options (page33)" described later.

- ◆ [Advance]



Displays the "advance dialog" for settings related to color variance and image processing.

See Section "4.8 Setting Advance Options (page65)" described later

- ◆ [Config]



Displays the "basic scan dialog" for managing the settings file and for setting simple scan dialog switching. See Section "4.9 Setting the Setting Manager Options (page79)" described later.

- ◆ [About]



Express the version of this driver by clicking this button.

4.6 Setting "Scanning Area"

Specify the scanning area in the preview window as follows:

Setting:

1. Press the left mouse button to specify the origin (top left corner) of the scanning area. (The cursor appears as a "+".)
2. Drag the mouse to show the outline of the scanning area. (As the cursor moves, a range frame is shown.)
3. Release the left mouse button again to set the range (bottom right corner) of the scanning area.

Movement:

1. Move the cursor into the range frame. (The cursor appears as a hand.)
2. Press the left mouse button. (The cursor changes to a fist.)
3. Drag the mouse to move the range frame.
4. Release the left mouse button to set the current range.

Cancellation:


The range frame can be canceled by either of the following ways:

- Click the left mouse button outside the range frame (inside the scan document).
- Select other paper types.

4.7 Setting Options

The "option dialog" is used to set device-specific functions and the items that differ depending on whether the scanner used supports them.

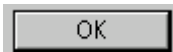
The option specification is divided into "Rotation", "Job/Cache", "Generic", "Imprinter (Endorse)", "Start Up", "Filter" and "Compression".

The supported options depend on the scanner. See "Relevant Image Scanner Specification" in the Appendix. ( is displayed for options that cannot be used.)

The option dialog in this driver is explained below.

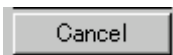
The commonly used buttons are explained first.

- ◆ [OK]



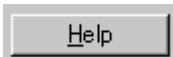
Enables the new setting, and terminates the option dialog box.

- ◆ [Cancel]



Disables the new setting, returns the setting to the previous value, and terminates the processing.

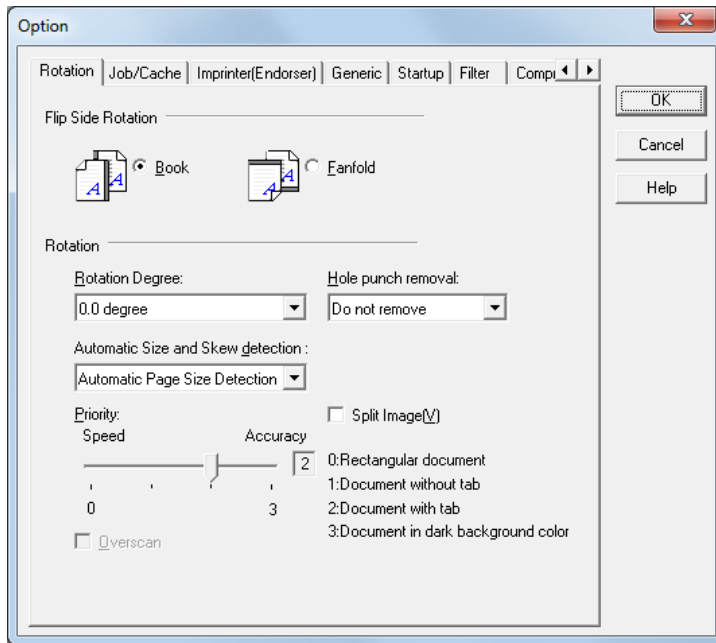
- ◆ [Help]



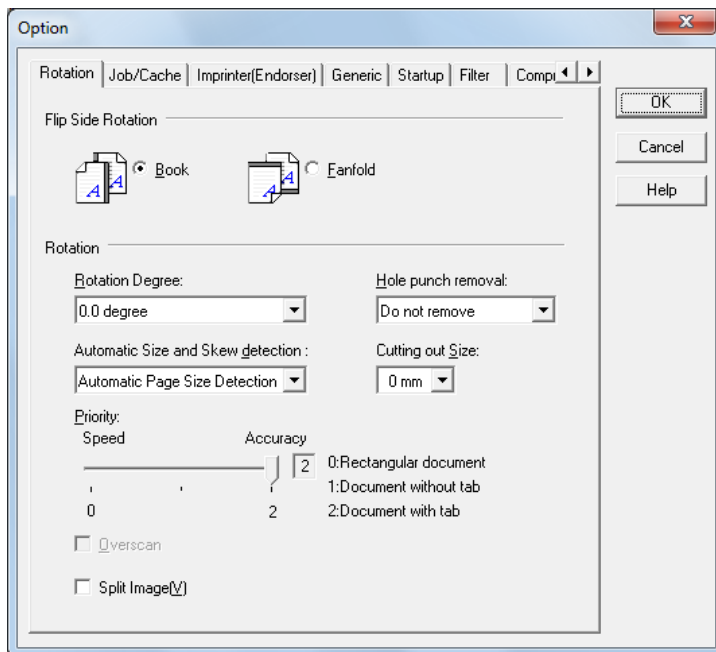
Displays online help.

The options are described below:

4.7.1 Rotation



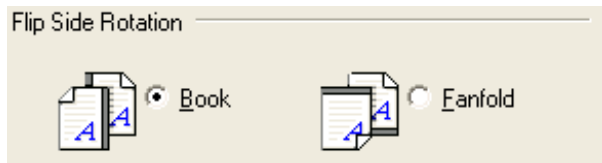
(For V9.19 / 9.21 / 10.21)



(For V10.10)

Figure Option dialog (Rotation)

◆ **Flip Side Rotation**



Specifies the binding of the document when both sides are scanned using ADF.

Book

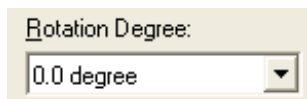
Outputs the scanned image for both sides as is.
Select this option to scan documents bound on the left or right side

Fanfold

Outputs the scanned image of the backside rotated 180 degrees.
Select this option to scan documents bound on the top or bottom (Front side and backside are printed conversely.)

* When scanning from the top to bottom for the printing direction of the document, this setting outputs the image with the front and backsides printed in the same direction.

◆ **Rotation Degree**



Outputs the scanned image rotated to the right or left 90 degrees.

0.0 degree

Outputs the scanned image as is.

90.0 degree

Outputs the scanned image rotated 90 degrees to the right (clockwise).

-90.0 degree

Outputs the scanned image rotated 90 degrees to the left (counterclockwise).

180.0 degree

Outputs the scanned image rotated 180 degrees (top and bottom reversed).

Automatic

Detects the document orientation and corrects it automatically, if necessary.

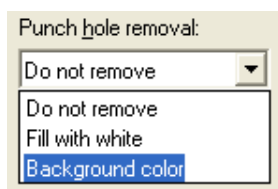
* "Automatic" is not supported by some scanner models.

* "Automatic" determines a document orientation based on the characters printed on the document, it may not work properly for the following kinds of documents:

- Documents with the resolution not between: 300dpi and 600dpi (in Black & White mode) or 200dpi and 600dpi (in Color or Gray mode)
- Documents with many extremely large/small characters

- Documents on which the pitches of lines or characters are extremely narrow, or characters are overlapped
 - Documents with many photographs or figures and only a few characters
 - Documents, such as drawings, on which characters are printed in various directions
 - Documents written only in capital characters
 - Handwritten documents
 - Skewed documents
 - Documents in languages other than supported languages (English, German, French, Italian, Spanish, Japanese, Korean, Chinese [Simplified/Traditional], Russian, Portuguese)
 - Documents with uneven colors, design and/or patterns in background
 - Documents with intricate design
 - Documents with a large amount of noise
- * ScandAll PRO must be installed.
 - * The language specified in “Regional and Language Options” in Windows® is used for recognizing characters in documents.
 - * The image orientation may not be corrected properly depending on the driver setting at scanning.
 - * If you cannot correct the image orientation properly, use the Edge Emphasis function of the driver to correct it.
 - * This function does not work properly for some applications.

◆ Punch hole removal



Holes punched along the binding side are detected and filled with white or background color. This setting can be specified only when the [Automatic Page Size Detection] or [Black Background] setting is selected in the [Automatic Size and Skew detection] drop-down list.

Depending on the documents, characters and/or graphics may be mistakenly detected as punch holes and filled with a color. If this happens, select [Automatic Page Size Detection] and specify "3" for [Priority] to avoid false detection.

Do not remove

Punch holes are ignored.

Fill with white

Punch holes are white out (filled with white).

Background color

Punch holes are filled with a color used around the punch holes. (If more than one color is used, holes are filled with the most used color.)

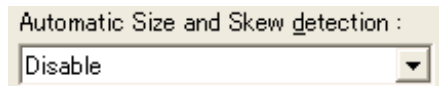
*When scanning a color document, select [Background color].

If you select [Fill with white], punch holes will be filled with white.

*This function may not work properly when:

- Punched holes are not aligned along the document edge.
- Holes are punched in varying sizes or at irregular intervals.
- The document is not rectangular.
- The background of the document is dark.
- There are characters and/or pictures at the document edges or the punched holes.
- With [Automatic Page Size detection] being selected, the scanned document size is larger than the one selected in the [Paper Size] drop-down list.
- With [Black Background] being selected, the scanned document size is different from the one selected in the [Paper Size] drop-down list.
- With [Halftone (Dither)] or [SEE (Selective Edge Emphasis)] being selected in the [Image Mode] drop-down list.

◆ Automatic Size and Skew detection



Disable

This option outputs the image as it was scanned.

End of Page Detection

Scanning with the ADF and page length detection selected will output data for the page size detected.

The image data output will adjust to the page length detected for each page including smaller size pages.

Data cannot be output for page sizes greater than the length setup in [Page Size].

This function does not work properly for some applications.

Automatic Deskew

When scanning with the ADF, this option detects skew of the document being fed and automatically corrects the skew.

Automatic Page Size Detection

Scanning with the ADF and Automatic Page Size Detection selected, the output will adjust to the page size detected.

Document skew can be detected and can be corrected for the output image.

Output data size will be equal to each document scanned in a multi page scan. When page size is detected incorrectly, set up the [Page size] to the largest size page in the set.

For example, With Automatic Page Size Detection is selected, it also need to select a Paper Size (example: Double Letter 11"x17") in the set. If any paper size within the selected (Double Letter) paper size range is used for scanning, the output will adjust to the page size detected.

(However, in case of fi-5650C/fi-5750C, this function is not dependent on the setting of [Paper size] because these scanners always scan documents as the maximum paper size and detect the paper size from the scanned data.)

This function does not work properly for some applications.

However, some detection cannot be corrected for example, an unfixed long image, folded corner, document has uneven width for the length of the page.

When you used a white document pad and scan documents with the Flatbed, page size may not be detected correctly.

However, in case of fi-5750C/fi-6230/fi-6230Z/fi-6240/fi-6240Z/fi-6750S/fi-6770(A), this function can work correctly with flat bed scanning when "Document holding pad (black)" option (sold separately) is attached on the scanner.

Automatic Paper Size Detection may fail if Edge Emphasis is selected.

Black Background

If it is selected, the outside of document paper becomes black by using black background during scanning.

White Background

Use it to activate "Overscan". Both [White Background] and "Overscan" need to be selected for making Overscan effective.

If "Overscan" is not selected, [White Background] functions the same as [Disable].

This option may not be supported for some scanners. See "Relevant Image Scanner Specification" in the Appendix.

◆ Priority



Setup for speed versus automatic document size detection.

Select a small value when scanning speed is the higher priority.

Select a large value when document detection accuracy is the higher priority.

Priority can only be setup when [Automatic Page Size Detection] is selected at [Automatic Size and Skew Detection].

Set the priority as “2” or “3” if documents with partition indices, tags, or index stickers are scanned.

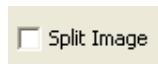
If the selection of [Automatic Page Size Detection] do not makes this function selectable, you do not need to setup this function.

To detect the paper size of dark colored documents, select “3”.

Note.

Priority “3” may not be supported for some scanners and is not displayed if not supported by the device.

◆ Split Image



A scanned document image can be split in two equal halves (each called a page) vertically. The relationship between the output order of the pages and each [Flip Side Rotation] setting is as follows:

The output orders of the front or back side images scanned in Simplex mode, and the front images scanned in Duplex mode.

First page : The upper half on the front side

Second page : The lower half on the front side

The output order of the back side images scanned in Duplex mode.

When "Book" is selected under [Flip Side Rotation]

Third page : The upper half on the back side

Fourth page : The lower half on the back side

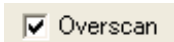
When "Fanfold" is selected under [Flip Side Rotation]

Third page : The lower half on the back side

Fourth page : The upper half on the back side

- * Split image is not supported in all scanner models. See “Relevant Image Scanner Specification” in the Appendix.
- * The [Blank page skip] function is valid for each split (upper and lower) half. When either of the upper and lower halves is blank, only the blank half (one page) is skipped.
- * When [Digital Endorse] is enabled, a character string is printed on each separate page.
- * When this function is enabled, [Multi Image] or [Color/ monochrome Auto Detection] cannot be enabled, and vice versa.
- * This function is disabled when you select [Double-page spread], [Clipping (Front)] or [Clipping (Duplex)] for [Scan Type].

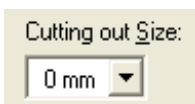
◆ **Overscan**



This function makes the scanned images larger than the original documents by adding margins. This option is available only when [Black Background] or [White Background] is selected for [Automatic Size and Skew detection].

This option may not be supported for some scanners. See "Relevant Image Scanner Specification" in the Appendix.

◆ **Cutting out Size**



Depending on the size of the document, crops the image from all sides based on the cropping width specified.

This can be set only when [Automatic Page Size Detection] is selected in [Automatic Size and Skew Detection].

- * If the document is cropped a little larger than its actual size, there will be black margins on the outer edge of the image.
- * If the document is cropped smaller than its actual size, the area around the edges of the document will be deleted.
- * If the specified setting surpasses the largest scanning size, this largest size will be used.
- * This option may not be supported for some scanners. See "Relevant Image Scanner Specification" in the Appendix.

Note.

When [Double-page spread] is selected, Option dialog (Rotation) is not displayed. (V9.21)

4.7.2 Job/Cache

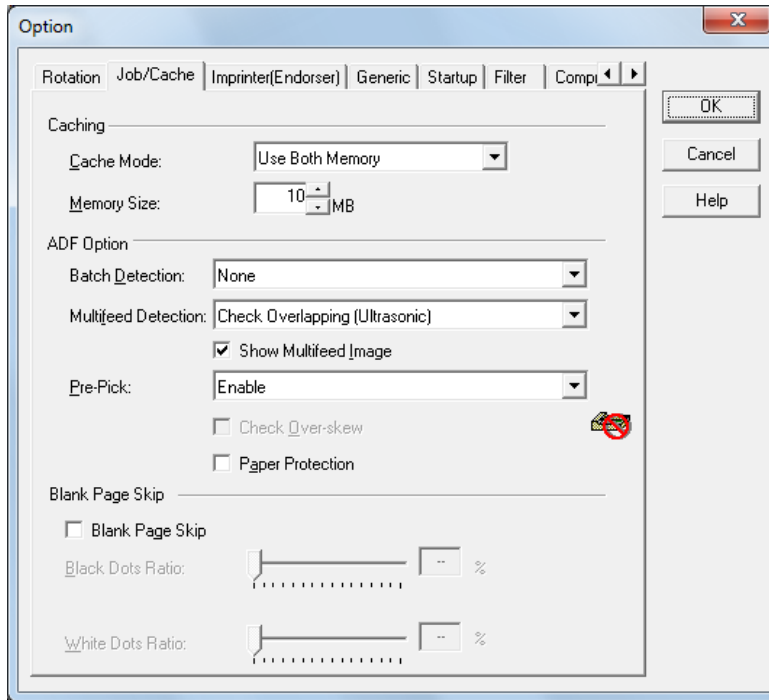


Figure Option dialog (Job/Cache)

◆ Caching



Specifies whether to pre-read (cache) when a document is scanned. This option enables faster scanning.

If processing of the application being used slows down and scanning stops, this option can be used to prevent degradation of the scanning speed. (The effect, however, depends on the environment being used.)

This function cannot be used when [Double-page spread] is selected. (V9.21)

There are five modes as shown below.

None

Caching is not performed.

Read ahead

One document page is scanned, and the data is pre-read and stored in PC memory (main memory of the personal computer).

Ram cache



Prereads the allowable amount based on the allocated memory size and stores the data in PC memory.

A memory size between 1 and 200 MB can be set.

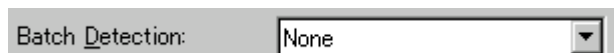
Use Memory on Scanner

Pre-reads using the memory installed in the scanner (displayed only if supported by the scanner).

Use Both Memory

Pre-reads using memory of both Scanner and PC (displayed only if supported by the scanner).

◆ Batch Detection



A screenshot of a software interface showing a dropdown menu for 'Batch Detection'. The menu is open, and 'None' is selected. The dropdown arrow is visible on the right side of the menu box.

The application can detect documents on a specific type of form (special paper). The application must support this function.

None

No detection. Scanning is done without change.

Include and Continue

After the special paper is detected, scanning continues. The data on the special paper is also valid.

Include and Stop

After the special paper is detected, scanning stops. The data on the special paper is also valid.

Exclude and Continue

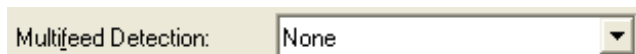
After the special paper is detected, scanning continues. The data on the special paper is excluded and will not be transferred to the application.

Exclude and Stop

After the special paper is detected, scanning stops. The data on the special paper is excluded and will not be transferred to the application.

This option may not be supported for some scanners. See "Relevant Image Scanner Specification" in the Appendix.

◆ Multifeed Detection



A screenshot of a software interface showing a dropdown menu for 'Multifeed Detection'. The menu is open, and 'None' is selected. The dropdown arrow is visible on the right side of the menu box.

This option detects a multifeed (occurs when two or more documents are sent) based on the set condition.

If a multifeed is detected when this setting has been turned on, the device will stop and an error message output.

However, when [Double-page spread], [Cropping (Front)] or [Cropping (Duplex)] is selected, an error message will appear when a multifeed is detected but the device will not stop.

None

Multifeed detection is not performed.

Hardware Setting

A multifeed is detected based on the device setting.

Check thickness

The thickness of the transmitted document is checked by the sensor in the device.
A multifeed is detected by detecting changes in the thickness when more than one document is sent.

Check length

The length of the transmitted document is checked by the sensor in the device.
A multifeed is detected by detecting changes in the length when more than one document is sent.

Check thickness and length

The thickness and length of the transmitted document are checked.

Check overlapping

The overlapping of the transmitted document is checked by the sensor in the device.
A multifeed is detected by overlapping when more than one document is sent.

Check overlapping and length

The overlapping and length of the transmitted document are checked.

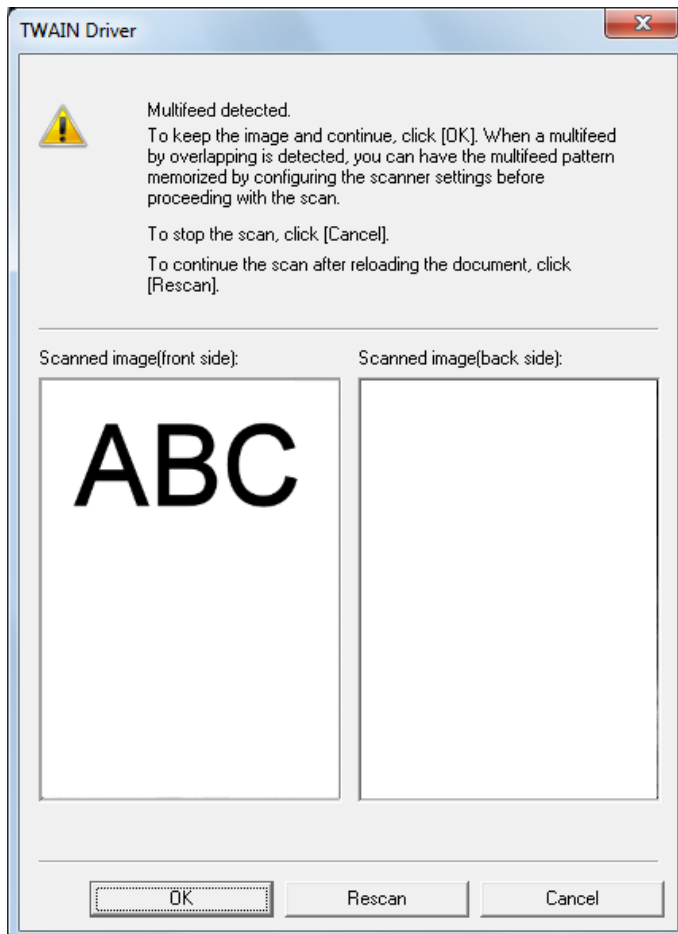
For example, the detection accuracy can be improved by using [Check thickness] or [Check overlapping] for continuous scanning of forms that have different lengths and [Check length] for scanning of forms that have different thicknesses.

Depending on scanner model, the selectable items are different. Refer to “Relevant Image Scanner Specification” of Appendix.

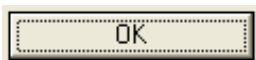
◆ Show Multifeed Image

Views the image where a multifeed is detected. You can specify either to stop or to continue the scanning.

* Depending on the settings during scanning, the image on the show multifeed image window may be different than output the image.

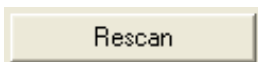


OK



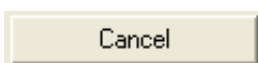
Scans the displayed image as the scanning image. Scanning continues.

Rescan



Suitable for discarding the displayed image and performing a rescan.

Cancel



Discards the displayed image. Scanning stops.

◆ Pre-Pick



It specifies whether a document is picked and carried in front of the scanning position before starting scanning operation at the ADF scanning.

This function cannot be used when [Double-page spread], [Clipping (Front)] or [Clipping (Duplex)] is selected. (V9.21, V10.21)

Disable

Pre-Pick is not performed.

A document is picked and carried in front of the scanning position, after starting scanning operation.

Enable

Pre-Pick is performed.

A document is picked and carried in front of the scanning position, before starting scanning operation.

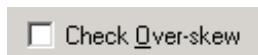
Panel setting

The setting of device is followed.

* When selecting “Enable,” you can scan faster than when selecting “Disable,” because of Pre-Pick process.

When selecting “Enable,” if you cancel during the ADF scanning, a document remains in the scanner in the Pre-Pick status.

◆ Check Over-skew



The skew of the transmitted document is supervised during the ADF scanning.

When an over-skew is detected, the scanner is stopped and an error message is displayed.

* The image data of the skewed document is deleted.

* This functions, only when “Multifeed Detection” is enabled.

* Skew Detection is a function used for detecting over-skew to stop feeding skewed documents. If sheets of paper are stapled together, miss-detection may occur.

* Some scanner models do not support this function. See "Relevant Image Scanner Specification" in Appendix.)

◆ Paper Protection

Marking this check box raises the paper jam detection level to reduce paper wrinkled or ripped during ADF scanning.

If this function is enabled, paper jam error occurs more frequently than usual.

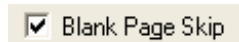
Disable this function if paper jam error often occurs at paper feeding.

This function cannot be used when [Double-page spread], [Clipping (Front)] or [Clipping (Duplex)] is selected. (V9.21, V10.21)

Some scanner models do not support this function. See "Relevant Image Scanner Specification" in Appendix.

◆ **Blank page skip**

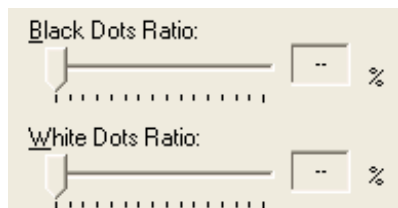
This option skips blank pages (blank pages or completely black pages) during ADF continuous scanning.



Marking this check box, this function is enabled.

- *This function can be used if “Ram cache” or “Use Both Memory” is selected. If an item other than “Ram cache” or “Use Both Memory” has been selected in the “Cache Mode:” and this check box is marked, it will change to “Ram cache”.
- * Depending on the scan settings and scanner model, the settings dialog box for “Color” or “Grayscale” may be displayed even when “Black & White” or “Halftone” is specified for [Image Mode].
- * The blank page skip result for the same document may be different depending on whether the document was scanned with “Black & White” and “Halftone” settings or “Color” and “Grayscale” settings.

In case of Black&White or Halftone (In case of binary)

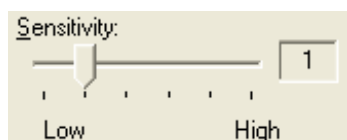


For White pages, use the [Black Dots Ratio] slider bar to set the skip condition. For black pages, use the [White Dots Ratio] scroll bar to set the skip condition.

The value displayed to the right of the scroll bar displays the garbage ratio(*1). If a scanned document is below this value, it is recognized as a blank page. The setting range is OFF(-) and 0.2% to 3.0% (in increments of 0.2%).

*1: Ratio of black dots included in the scanning area (for white pages)

In case of Color or Grayscale



Use the slider bar to set the skip condition in five stages from 1 to 5.

To make the blank pages easy to skip, increase the value of the setting.

* This dialog is also displayed when “Black & White” or “Halftone” is specified for [Image Mode].

<If blank page skip does not operate properly>

- If a blank page is scanned, increase the value set.
- If scanning is skipped up to the required document, decrease the value set.

This function is available only when "Ram cache" or "Use Both Memory" is selected as "Caching" setting.

* 1: This percentage represents the ratio of black dots to an area to be scanned (when white paper is used).

* When "Black Background" is selected in [Automatic Size and Skew detection], the Blank page skip may not operate properly.

When Scanned image has many background noises, the Blank page skip may not operate properly.

4.7.3 Generic

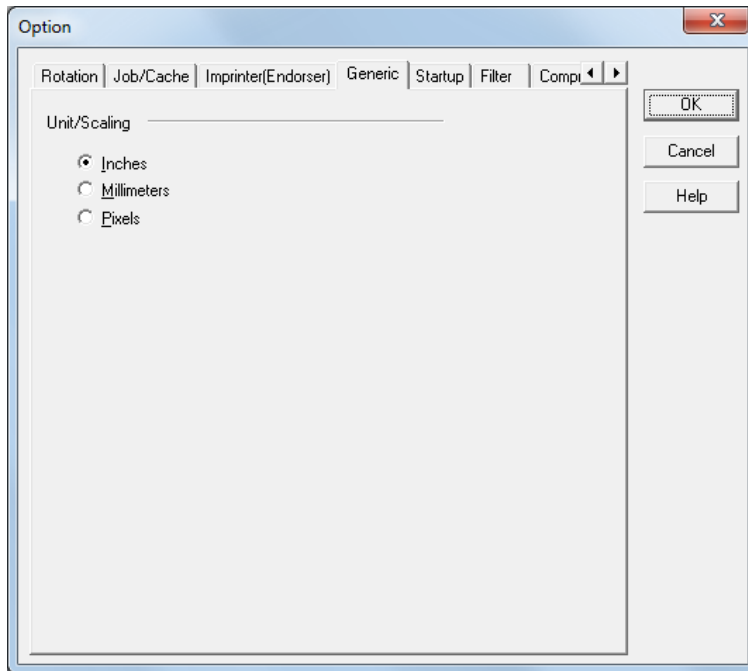


Figure Option dialog (Generic)

◆ Unit/Scaling



This option selects the unit for the scanning area and preview window. One inch is calculated as 25.4 millimeters. When inches are converted to millimeters, values are rounded off.

Note.

The TWAIN specifications require that the data width be arranged in units of 32 bits. As a result, a difference of up to 31 dots can be included, depending on the value set.

4.7.4 Imprinter (Endorse)

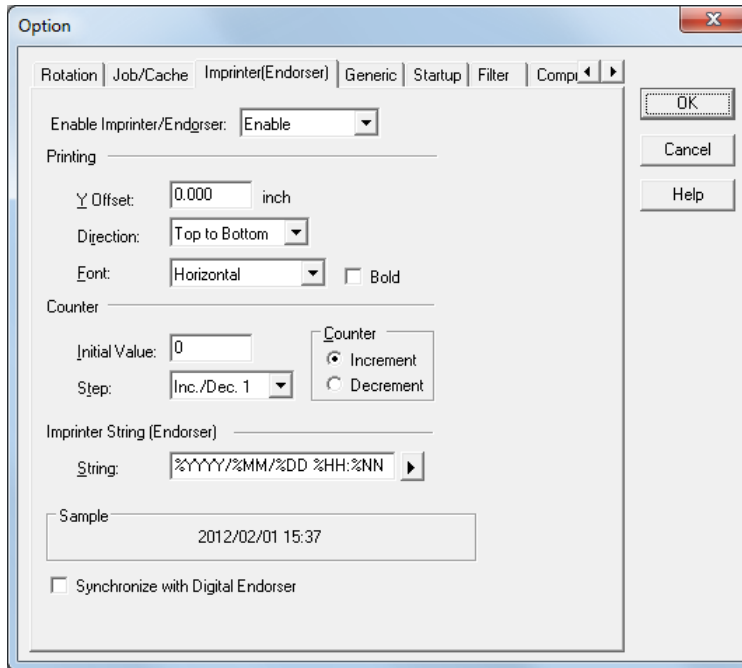
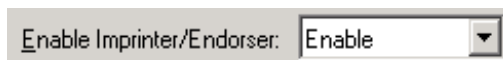


Figure Option dialog (Imprinter)

◆ Enable Imprinter (Endorse)



Specifies enabling or disabling the imprinter function of the device.

When the option is selected, the scanned documents are imprinted according to the instructions below. This applies only to the imprinter option. Therefore, the function is supported only with the scanner which supports imprinter option(s). See "Relevant Image Scanner Specification" described in the Appendix.

Disable

Imprinting is not performed.

Enable

Prints on documents using imprinter by the settings below.

In this case, it prints on the back side of documents after scanning.

Therefore, the printing is not included in a scanning result.

Depending on scanners, two imprinters can be installed and one of them can be selected to use.

In this case, "**Enable**" is displayed as follows.

Pre-Imprinter (Printing before scanning, and on the front side of documents)

Prints on documents using the imprinter installed in front part of the scanner.

In this case, it prints on the front side of documents before scanning.

Therefore, the printing can be included in a scanning result.

Post-Imprinter (Printing after scanning, and on the back side of documents)

Prints on documents using the imprinter installed in rear part of the scanner.

In this case, it prints on the back side of documents after scanning.

Therefore, the printing is not included in a scanning result.

* [Pre-Imprinter] and [Post-Imprinter] cannot be used at the same time.

Frontside Imprinter (Printing after scanning, and on the front side of documents)

Prints on documents using the frontside imprinter.

In this case, it prints on the front side of the document after scanning. Therefore, the printing is not included in the scanning result.

Backside Imprinter (Printing after scanning, and on the back side of documents)

Prints on documents using the backside printer.

In this case, it prints on the back side of the document after scanning.

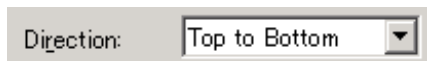
* [Frontside Imprinter] and [Backside Imprinter] cannot be used at the same time.

◆ Y Offset (Printing)



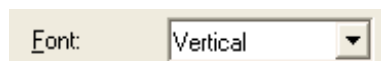
Specifies Y Offset from the edge of the original for the placement of printing. See "Relevant Image Scanner Specification" in the Appendix because the standard value specified here depends on the device.

◆ Direction (Printing)



Specifies the printing direction of endorsement strings. When printing from the head of strings against to the direction of scanning, designate "Top to Bottom". And when printing from the tail of strings against to the direction of scanning, designate "Bottom to Top". However, see the "Relevant Image Scanner Specification" described in the Appendix since the available settings depend on the device.

◆ Font (Printing)

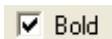


Specifies the type of character from the followings.

Horizontal	:	A B C D 0 1 2 3	Printing direction —————→
Vertical	:	◀ ◻ ◻ ◻ ◻ ◻ ◻ ◻	
Horizontal-Narrow	:	A B C D 0 1 2 3	

Available settings vary depending on your scanner. Refer to "Relevant Image Scanner Specification" in the Appendix.

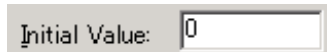
◆ Bold



The imprinter string is outputted with bold font.

Available settings vary depending on your scanner. Refer to “Relevant Image Scanner Specification” in the Appendix.

◆ Initial Value (Counter)



Designates the initial count when the Imprinter String is set, including a counter value. See the "Relevant Image Scanner Specification" described in the Appendix since the programmable values range depends on the device.

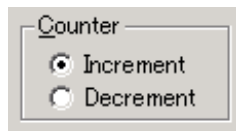
◆ Counter Step (Counter)



Designates the counter increment of the set counter values. In other words, this value is added to or subtracted from the counter each time one original is scanned.

An increment of 0, 1, or 2 may be specified. Usually, 1 is designated for a single-sided original, and 2 for a double- sided original.

◆ Counter (Counter)



Designates whether to increase or decrease the specified step value.

◆ Imprinter String (Endorse)



Specifies the imprinter string.

The following characters can be outputted by the Imprinter.

- Alphabet Letters : A-Z, a-z
- Numeric Characters : 0, 1-9
- Symbols : !"#\$%&'()*+,-./:;<=>?@[\\]^_`{|}~
- Other : (Space)

(*The space is ignored when it is entered at the head of [String:].)

The following definitions can be used. They may also be selected from the menu, which is displayed by clicking on "▶".

%YYYY: The year is printed in four digits using the Western calendar.

%YYY: The year is printed using the two digits of the Japanese calendar (current, or Heisei era).

%YY: The year is printed in the last two digits of the Western calendar.

%MMM: An English abbreviation of the month is printed; for example, JAN for January and FEB for February.

%MM: The month is printed in two digits; for example, 01 for January and 12 for December.

%M: The month is printed using one or two digits; for example, 1 for January and 12 for December.

%DD: The day is printed using two digits; for example, 03 for the 3rd day of the month and 26 for the 26th day of the month.

%D: The day is printed using one or two digits; for example, 3 for the 3rd day of the month and 26 for the 26th day of the month.

%HH: The hour is printed using two digits of the 24-hour clock; for example, 08 for 8:00 a.m. and 14 for 2:00 p.m.

%H: The hour is printed using one or two digits of the 24-hour clock; for example, 8 for 8:00 a.m. and 14 for 2:00 p.m.

%NN: The minute is printed using two digits; for example, 02 for 8:02 a.m. and 48 for 2:48 p.m.

%N: The minute is printed using one or two digits; for example, 2 for 8:02 a.m. and 48 for 2:48 p.m.

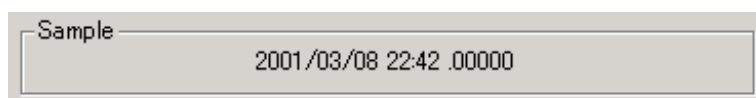
%0Nud: A counter value is printed by N digits which increases or decreases with each page.

Programmable digits of the counter are 3 ~ 8 and described as "%03ud" ~ "%08ud." (See the "Relevant Image Scanner Specification" described in the Appendix since the programmable digits depend on the device.)

The initial counter and the methods of increasing and decreasing values can be specified as explained above under the heading "Counter."

For some scanners, this counter value can be added only to the end of the string.

◆ Sample



Displays printed examples of the Imprinter String (Endorse) designated above.

◆ Synchronize with Digital Endorser

Specify to output the same string from the imprinter and digital endorser.

Note.

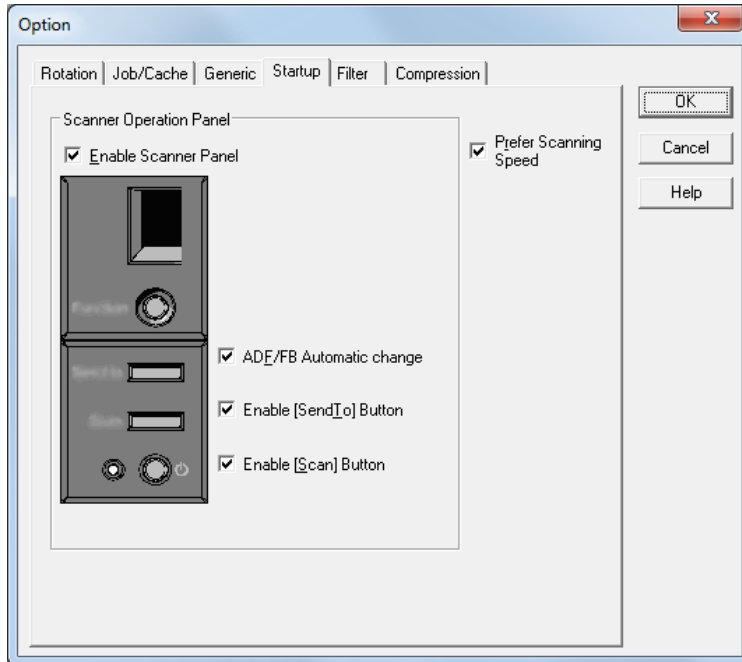
- When scanning in Duplex mode with this setting enabled, the digital endorser only prints on the front side of the document.
- This setting cannot be enabled when Multi Image Output, Auto Color Detection or Split Image is specified.
- This setting synchronizes the default endorser strings of imprinter and digital endorser. When errors such as paper jams or multifeeds occur, the output endorser strings may not always be the same. In such cases, specify the initial value for counter again and retry scanning.

Note.

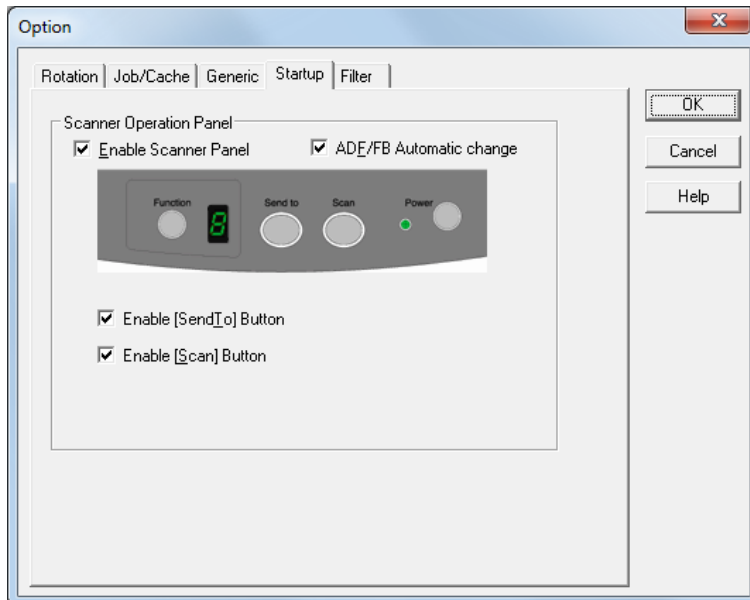
- The printed counter, date, and time do not always look like the sample because the scanning option takes precedence.
- When [Double-page spread], [Clipping (Front)] or [Clipping (Duplex)] is selected, Option dialog [Imprinter] cannot be specified.

4.7.5 Start Up

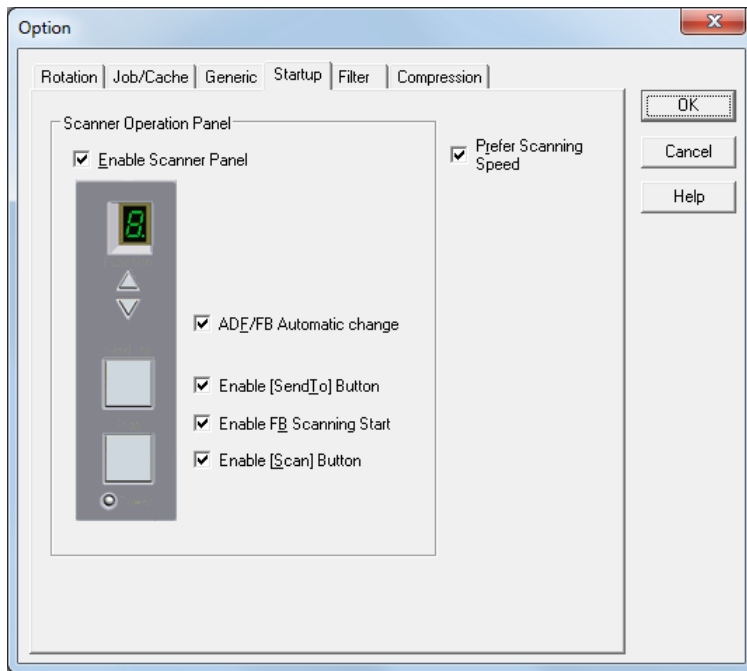
Set up the Power Mode, Low-Speed Feeding and Scanner Operation Panel.
In some scanner models, displayed dialog box or setup item may be different or even [Startup] dialog box may not be displayed.



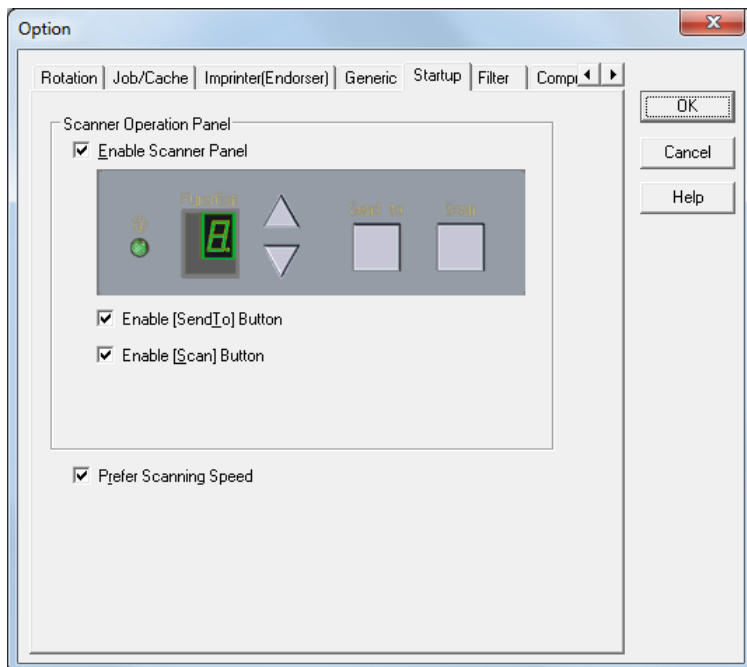
In case of model fi-5110C / fi-5120C / fi-5220C / fi-5530C / fi-5530C2
Figure Option dialog (Start Up)



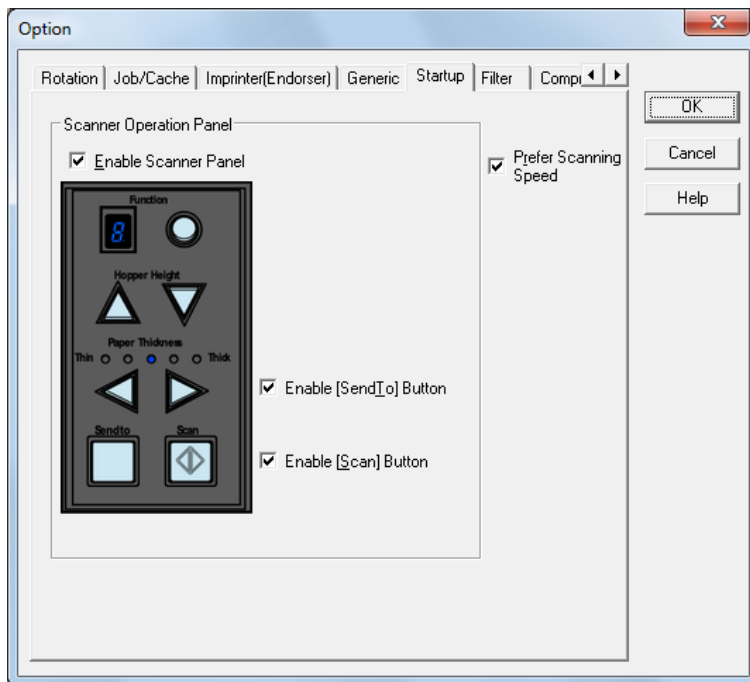
In case of model fi-5015C
Figure Option dialog (Start Up)



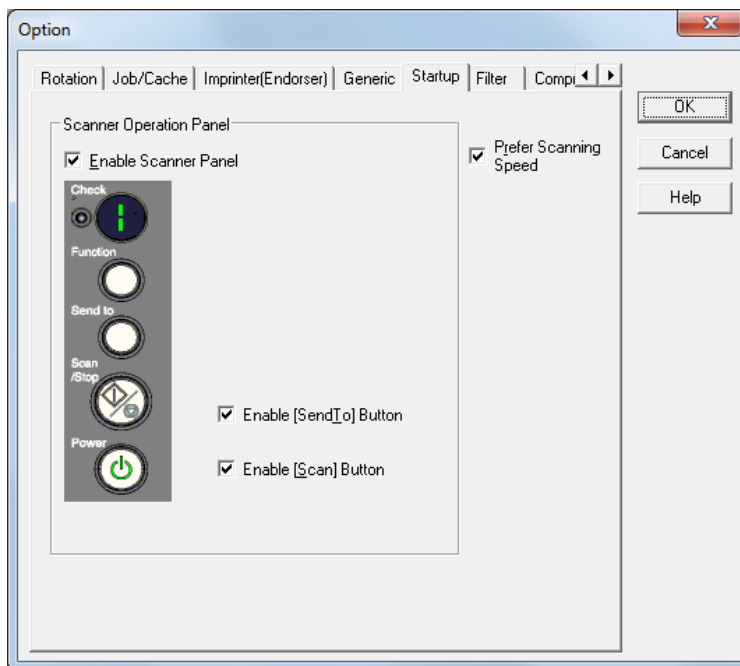
In case of model fi-5750C
 Figure Option dialog (Start Up)



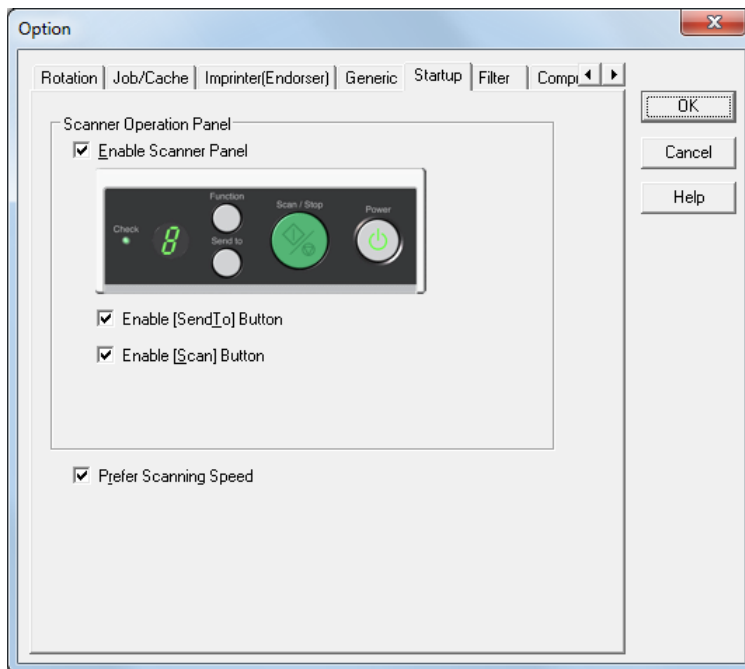
In case of model fi-5650C
 Figure Option dialog (Start Up)



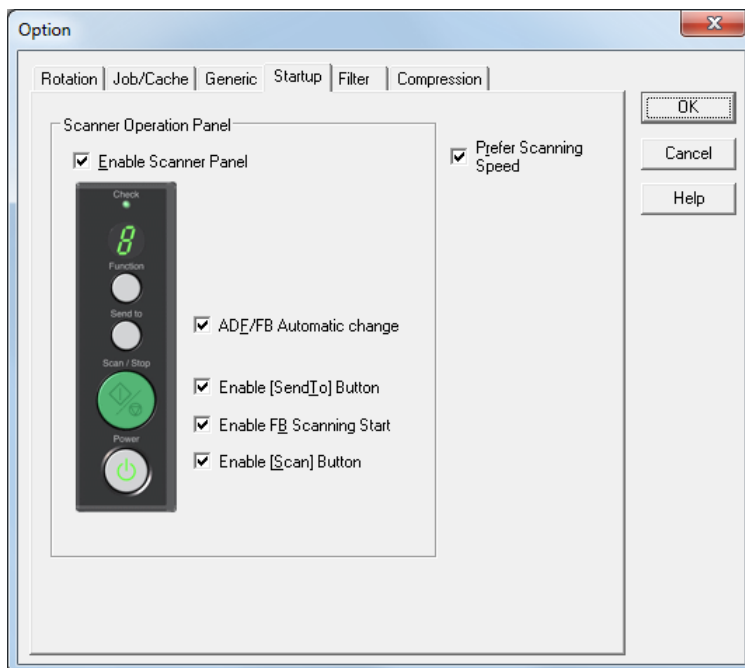
In case of model fi-5900C / fi-5950
Figure Option dialog (Start Up)



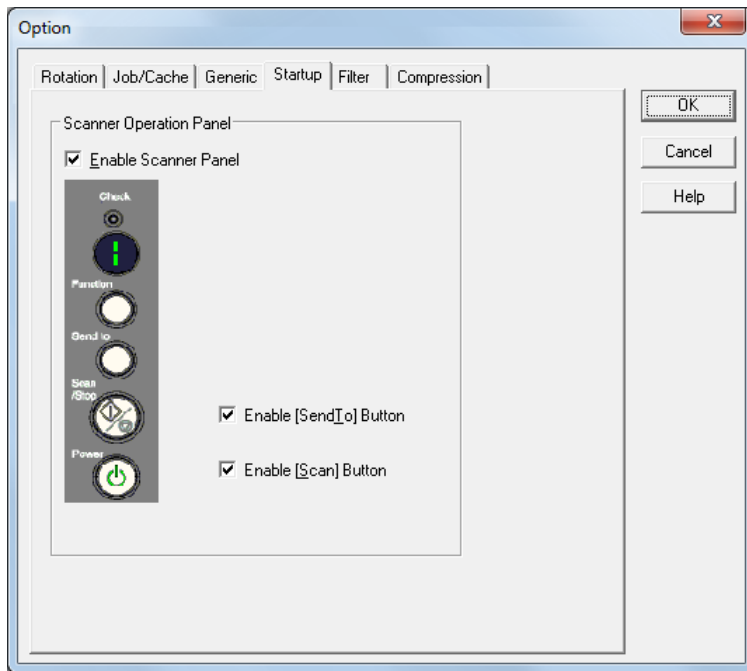
In case of model fi-6130 / fi-6140 / fi-6230 / fi-6240 /
fi-6130Z / fi-6140Z / fi-6230Z / fi-6240Z
Figure Option dialog (Start Up)



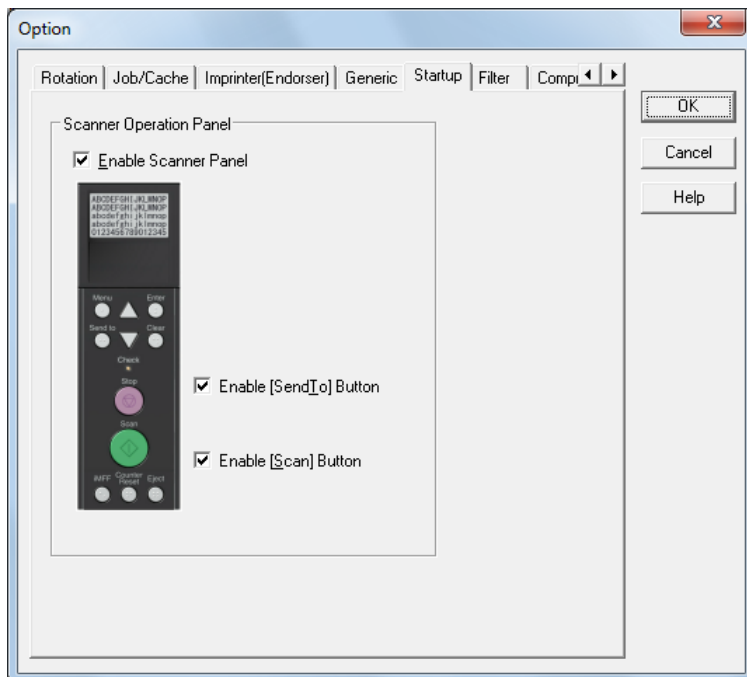
In case of model fi-6670(A)
Figure Option dialog (Start Up)



In case of model fi-6770(A)/6750S
Figure Option dialog (Start Up)

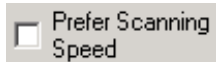


In case of model fi-6110
Figure Option dialog (Start Up)



In case of model fi-6800
Figure Option dialog (Start Up)

◆ Prefer Scanning Speed



This mode makes scanning speed becomes faster in color/grayscale scanning.

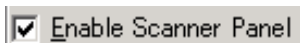
When checking this check box, scanning speed becomes faster, but image quality is slightly deteriorated.

Check this check box, when giving priority to scanning speed over image quality.²³

Depending on the scanner model, resolution and paper size, this setting may remain disabled even after you enable it.

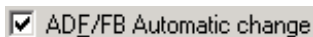
◆ Scanner Operation Panel

- Enable Scanner Panel



- This is to specify whether the operator panel is enabled or not. If this is checked, button operation on the operator panel becomes effective. (Note that the operator panel is enabled only during the driver is activating.)

- ADF/FB Automatic change



It distinguishes whether to scan from the ADF, or from the Flat Bed (FB), and changes automatically.

When a document is on the ADF, scanning is started from the ADF.

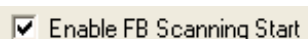
And when no document is on the ADF, scanning is started from the FB.

- Enable [Send to] button



Specifies whether the preview is started by pressing the [Send to] button on the device.

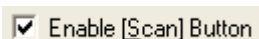
- Enable FB Scanning Start



Specifies whether Scanning is started by closing the Flat bed cover.

When setting the document on the Flat bed and closing the Flat bed cover, scanning starts.

- Enable [Scan] Button



Specifies whether scanning is started by the [Scan] button.

4.7.6 Filter

Set the filter processing in this dialog.

The filter name is displayed in the list box.

While checking the checkbox in the left of the filter name, the filter processing is applied to scanned image.

When selecting a filter name and clicking [Property] button, the setting dialog of the filter is displayed.

This function cannot be used when [Double-page spread] is selected. (V9.21)

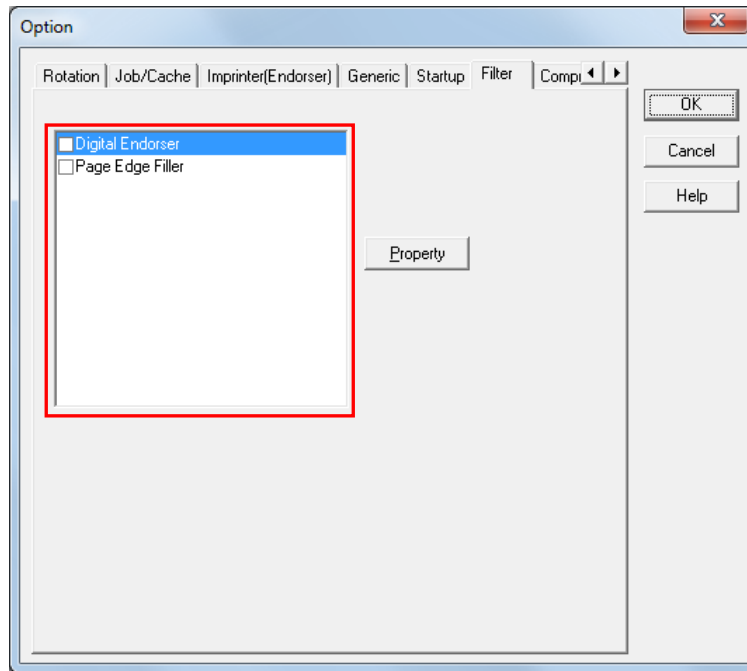
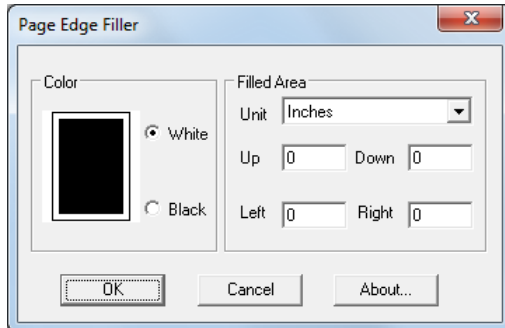


Figure Option dialog (Filter)

The type of filter and the setting details are explained below.

◆ Page Edge Filler

Eliminates the blemish around the paper edges by covering the area in (Black or White) color.



Color

Select a color to paint over the image frame.

Can select "White" or "Black".

Please specify either white or black to match the background color of the document.

Filled Area

• **[Unit]**

Select a unit from "Inches", "Millimeters", and "Pixels"

• **[Up], [Down], [Left], [Right]**

Specify the paint area from each side of the scanned image in numbers.

[Up] : Input width from the top edge of the image.

[Down] : Input width from the bottom edge of the image.

[Left] : Input width from the left edge of the image.

[Right] : Input width from the right edge of the image.

Each value should be set in the following ranges.

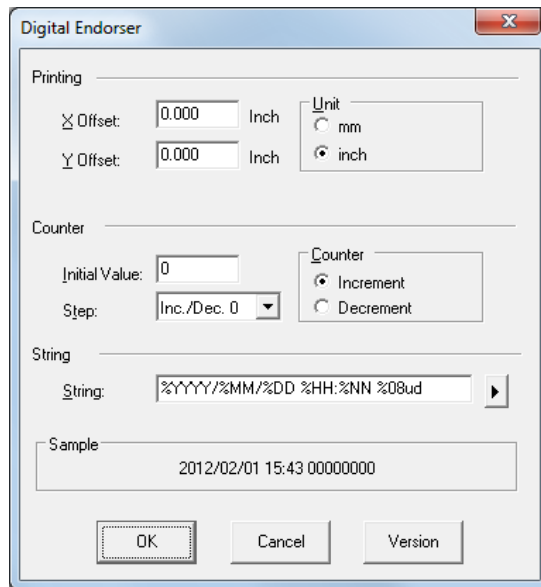
$$0 < [\text{Up}] + [\text{Down}] < [\text{Image Length}]$$

$$0 < [\text{Left}] + [\text{Right}] < [\text{Image Width}]$$

If any values are out of these ranges, this function may not work.

◆ Digital Endorse

Character string, such as the alphabet and number, is added on the data of the scanned image. By using this filter, you can attach a name, a date, a time or a serial number on the scanned images and manage them.



Printing

Specify the beginning position of the character string to output on the scanned image data.

X Offset :Specify the position of the width direction from the left end of document.

Y Offset :Specify the position of the length direction from the top of document.

Unit :Select either “mm” or “inch” as the unit of offset value.

Counter

Specify the rule of the counter value used in the String.

Initial Value :Specify the initial count when the scanning starts.

Step :Specify the counter increment / decrement.

Counter :Select whether to increase or decrease the specified step value.

For example) In case of “Initial Value”= 0, “Step”= 2, “Counter”= Increment
0, 2, 4, 6, 8.....

String

Specify the output string.

The following characters can be outputted by the Imprinter.

Alphabet Letters : A-Z, a-z

Numeric Characters : 0, 1-9

Symbols : !"#%&'()*+,-./:;<=>?[\^_`{|}~

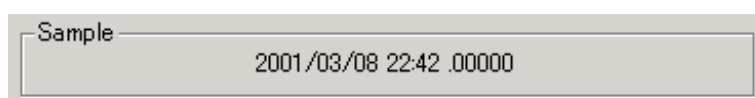
Other : (Space)

(*The space is ignored when it is entered at the head of [String:].)

The following definitions can be used. They may also be selected from the menu, which is displayed by clicking on "▶".

- %YYYY: The year is printed in four digits using the Western calendar.
- %YYY: The year is printed using the two digits of the Japanese calendar (current, or Heisei era).
- %YY: The year is printed in the last two digits of the Western calendar.
- %MMM: An English abbreviation of the month is printed; for example, JAN for January and FEB for February.
- %MM: The month is printed in two digits; for example, 01 for January and 12 for December.
- %M: The month is printed using one or two digits; for example, 1 for January and 12 for December.
- %DD: The day is printed using two digits; for example, 03 for the 3rd day of the month and 26 for the 26th day of the month.
- %D: The day is printed using one or two digits; for example, 3 for the 3rd day of the month and 26 for the 26th day of the month.
- %HH: The hour is printed using two digits of the 24-hour clock; for example, 08 for 8:00 a.m. and 14 for 2:00 p.m.
- %H: The hour is printed using one or two digits of the 24-hour clock; for example, 8 for 8:00 a.m. and 14 for 2:00 p.m.
- %NN: The minute is printed using two digits; for example, 02 for 8:02 a.m. and 48 for 2:48 p.m.
- %N: The minute is printed using one or two digits; for example, 2 for 8:02 a.m. and 48 for 2:48 p.m.
- %ONud: A counter value is printed by N digits which increases or decreases with each page. The number of programmable digits of the counter is from 3 to 8 inclusive. (See the "Relevant Image Scanner Specification" described in the Appendix since the programmable digits depend on the device.) The initial counter and the methods of increasing and decreasing values can be specified as explained above under the heading "Counter."

Sample



Displays the output examples of the String specified above.

Note.

The counter, date, and time do not always look like the sample because this string is output during scanning.

4.7.7 Compression

Click this tab and mark the check box to enable or disable JPEG compression for data transfer from the image scanner. (This function is available only for Color or Grayscale scans.)

This function cannot be used when [Double-page spread] is selected. (V9.21)

Depending on the scan settings and the scanner model, this function is also enabled when "Black & White" or "Halftone" is specified for [Image Mode].

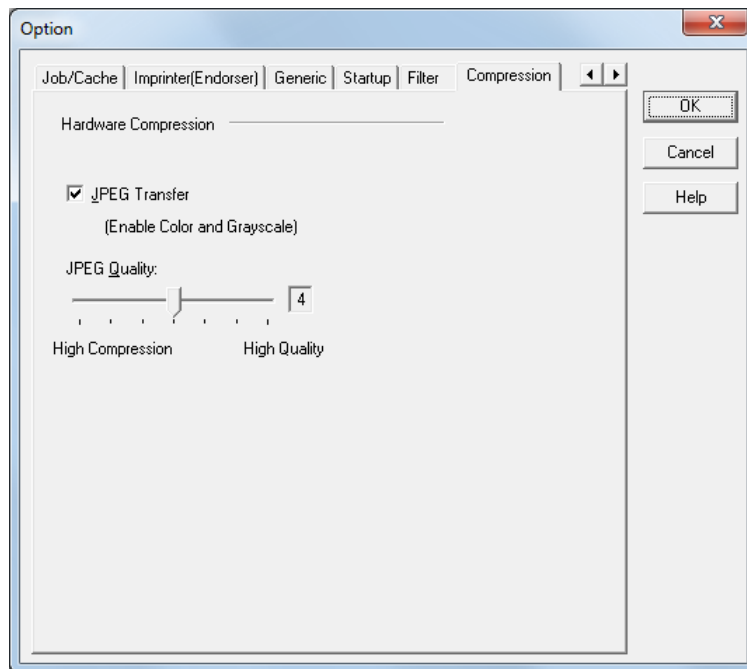


Figure Option dialog (Compression)

◆ JPEG Transfer

Converts scanned image data into JPEG format for transfer. Because of smaller data size, data transfer time is shorter than that of ordinary method (when the check box is not marked).

◆ Jpeg Quality

Specifies data compression rate for JPEG transfer. Increase the value when you prefer to get finer image quality, otherwise decrease the value for smaller data size.


Note.

- Image quality may deteriorate due to scanning with JPEG compression.
- When JPEG compression is enabled, lengths and widths of images may slightly be different from that of the scans without JPEG compression.
- This function may not be available for some image scanner models.

4.8 Setting Advance Options

The "advance dialog" is used to set items related to image processing. The settings apply to device-specific functions and items that differ according to whether the scanner used supports them.

The advance option specification is divided into "Color Variance", "Image Processing", and "Auto Binary".

The supported options depend on the scanner. See "Relevant Image Scanner Specification" in the Appendix. ( is displayed for options that cannot be used.)

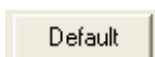
The option dialog for this driver is explained below.

Note.

Only the DTC Variance can be adjusted in SDTC mode when [Double-page spread] is selected. Other options cannot be specified. (V9.21)

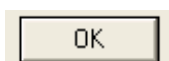
The commonly used buttons are explained first.

◆ [Default]



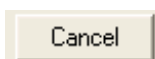
Returns the setting to the initial value.

◆ [OK]



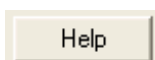
Makes the new setting valid and closes the "Advance" dialog box.

◆ [Cancel]



Makes the new setting invalid, returns the setting to the previous value, and terminates processing.

◆ [Help]



Displays online help.

The options are described below:

4.8.1 Gray

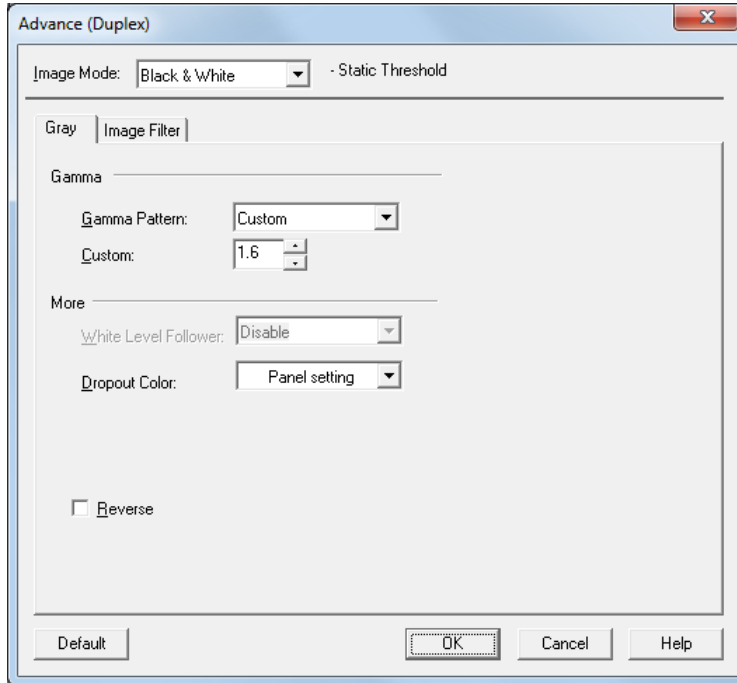
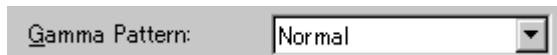


Figure Advance dialog (Gray)

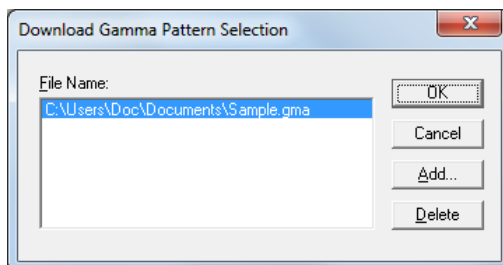
◆ Gamma Pattern



This option corrects distortions from nonlinear image representation. Scanner sensors are generally designed to generate output linear to the density of the light reflected from the document. However, most output terminals do not produce output that has the desired linear relation to the input, and the resulting distortion must be corrected.

One of the following can be selected as a correction pattern: "Normal", "Soft", "Sharp", "Download Pattern", or "Custom".

Some scanner models do not support this function. See "Relevant Image Scanner Specification" in Appendix.



When "Download Pattern" is selected, the above dialog box opens.

Select the gamma pattern download file to be used from the list of file names. Then, press the [OK] button. Correction will then be executed using the selected gamma pattern.

If the gamma pattern download file has not been registered in the list of file names, use the [Add] button to register the file.

See "Download Pattern File" for information about how to specify the file.



When "Custom" is selected, a custom specification can be entered.

Entering an arbitrary value between 0.1 and 10.0 enables a gamma pattern corresponding to the entered value to be specified.

◆ White Level Follower



Select this option to scan a document whose background color is not white, such as a newspaper.

Select "Auto", "Enable", or "Disable".

When "Enable" is selected, the document is scanned using background follow-up (for line drawings). When "Disable" is selected, the document is scanned using the standard basic white background (for photographs). When "Auto" is selected, the option automatically switches to the optimal setting based on the specified "Image Mode".

"White Level Follower" is used to adjust the density of the white background of a document and correct variations in the background color by compensating the pixels of scanned images individually.

For ordinary use, set "White Level Follower" to off. Use of "White Level Follower" often increases the background noise because IPC-3/3D is very sensitive.

This option is not available if "Gray Scale" is selected for "Image Mode".

In addition, some scanner models do not support this option. See "Relevant Image Scanner Specification" in the Appendix.

◆ Dropout Color



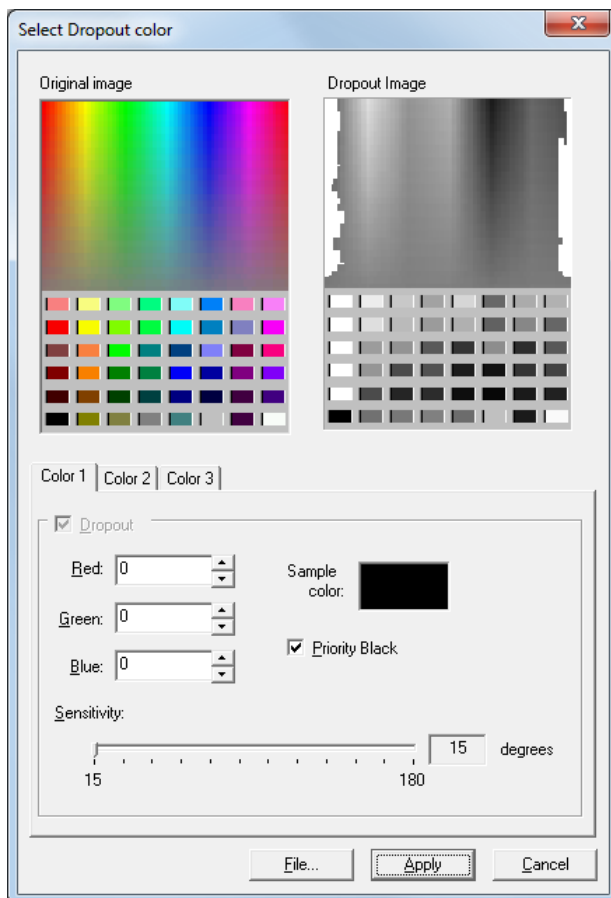
A color (the three primary colors: green, red, blue or any other color) can be chosen to be "dropped out" (ignored) during scanning. For example, when scanning a black text in a red frame, you can select "red" to be the dropout color and scan only the black text.

If "white" or "none" is selected, no color is dropped out.

But in case of "white", colors such as "yellow" may be dropped. And if "none" is selected, it may slow down your scanning speed.

If you want to select a particular color as dropout color, "Custom Pattern 1 – 3" can be used.

If [Custom Pattern 1 – 3] is selected, the following screen appears.



Original Image

A color sample will be shown. The dropout color can be selected by clicking the desired color with your mouse.

Dropout Image

An image without the dropout color will be shown.

Dropout

Specify up to three colors configured with [Color 1], [Color 2], and/or [Color 3] to be dropped out. (Dropout for [Color 1] is always checked.)

Both the color values and the color will be shown.

You can change the color by inputting the color values directly or using the [▲] / [▼] buttons.

Priority Black

Check this check box when you do not want to dropout some characters.

This function is used in order not to drop out colors of low saturation which are frequently used, such as black.

Sensitivity

Specifies tolerance of the selected color to be dropped out.

Specifiable range: 15 to 180 degrees (default: 15 degrees)

Larger the value becomes, wider the color gamut is to be dropped out.

[File] button

Displays arbitrary image files (24-bit color bmp format) on the “Original Image”.

[Apply] button

Reflects the contents that have been set and closes the window.

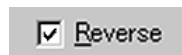
[Cancel] button

Discards the contents that have been set and closes the window.

These functions may not be supported depending on the scanner model. Refer to “Image scanner specification” attached to the Appendix.

*When [Priority Black] is disabled, hole punch removal may not work properly with automatic page size detection.

◆ Reverse



This option specifies whether to reverse the black and white of a scanned image.

If this option is selected, black and white are reversed by reversing the black and white pixels. If this option is not selected, the black and white values of the reproduced image correspond to the original image.

Some applications do not permit normal operation. If this occurs, contact the manufacturer of the application.

4.8.2 Image Filter

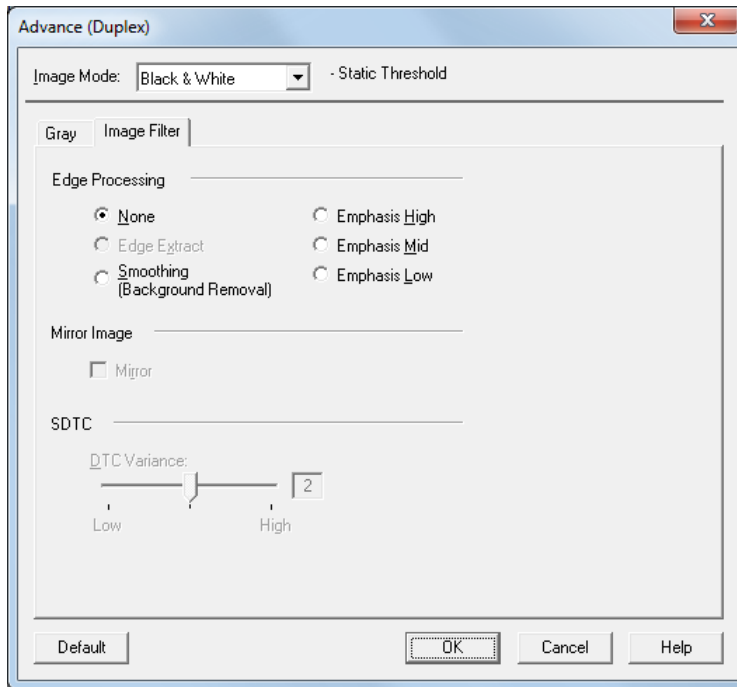
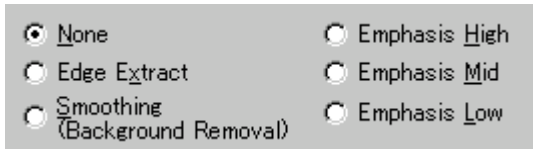


Figure Advance dialog (Image Filter)

◆ Edge Processing



This option specifies the sharpness of a scanned image.

Select "None", "Edge Extract", "Smoothing (Background Removal)" or "Emphasis".

None

Edge processing is not performed.

Edge Extract

This option outputs an image with the edge extracted.

If this option is selected, the boundary between the black part and white part in a closed area is traced and the edge extracted.

"DTC Variance" and "Edge Extract" are mutually exclusive.

Smoothing (Background Removal)

This option specifies whether to smooth the curves in an image by removing zigzag lines.

"Smoothing" or "Emphasis" can be selected. In addition, "Edge Extract" and

"Emphasis" are mutually exclusive.

Emphasis

This option outputs an image with the edge emphasized.

"Emphasis High", "Emphasis Mid", or "Emphasis Low" can be selected.

If "Emphasis High" is selected, the image becomes sharper. If "Emphasis Low" is selected, the image appears less distinct.

* Automatic Paper Size Detection may fail if Edge Emphasis is selected.

◆ Mirror

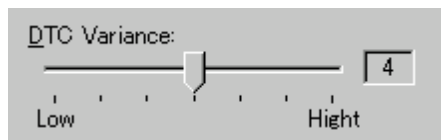


This option specifies whether to flip the scanned image over the scanning axis.

If this option is selected, a mirror image of the original image is obtained.

Some scanner models do not support this function. See "Relevant Image Scanner Specification" in Appendix.)

◆ Variance (DTC Variance)



This option specifies the value for adjusting the dynamic threshold of an image based on the brightness of the image.

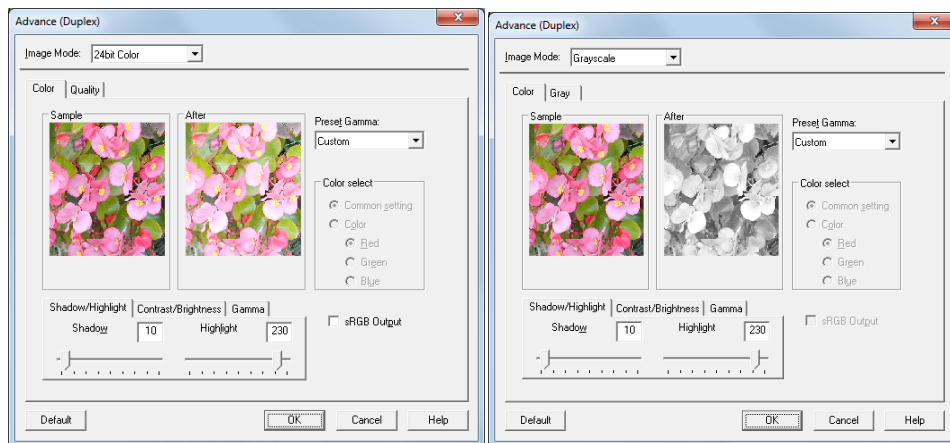
A value is specified using the slider. The smaller the value, the lower the variance becomes. The higher the value, the higher the variance becomes. To specify the value, drag the tab of the slider to the desired setting position. The current setting is displayed on the right. This option is mainly used for optical character recognition (OCR). It enables dark and bright images in a document to be scanned effectively.

4.8.3 When Color (/Grayscale) is specified

For color scanners, when “Color” is selected in the [Image Mode], the [Advance] dialog changes as follows. And in case of some color scanners, when selecting “Grayscale” the [Advance] dialog change as same as selecting “Color”.

There are two image samples which are “Sample (before processing)” and “After (after processing)” on this dialog. When you change a setting item, the effect of the setting item is reflected in the image “After”.

You can specify the items, checking their effect.



<Image Mode : Color selected>

<Image Mode : Grayscale selected>

Figure Advance dialog (Color / Grayscale)

◆ Shadow/Highlight (Color / Grayscale)

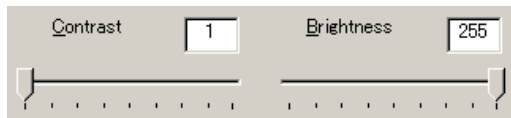


Shadow : The highlight allows the darkest part of the document to be controlled.
The higher the shadow value, the darker the image.

Highlight : The highlight allows the brightest part of the document to be controlled.
The higher the highlight value, the lighter the image.

Any levels on the document outside these settings are flooded (all 0 or 255), while the interval between the shadow and highlight settings are equally divided into 255 levels, which are used to create the output images. This means that if the shadow and highlight settings are close to each other, the contrast for that interval in the scanned document will be very strong (but with all other areas maximizing high or low).

◆ Contrast/Brightness (Color / Grayscale)

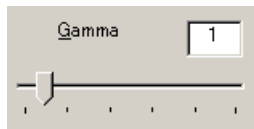


Contrast : Sets the contrast of light and shadow in a scanned image. Specify the contrast with a number in the range of 1 (low [soft]) to 255 (high [sharp]). If this value is increased, the dark part of the image is shown darker and the light part is shown lighter.

Some scanner models do not support this function. See "Relevant Image Scanner Specification" in Appendix.

Brightness : Sets the brightness of the overall image. Specify the brightness with a number in the range of 1 (light) to 255 (dark). To darken the overall image, increase the value of the setting. To brighten the overall image, decrease the value.

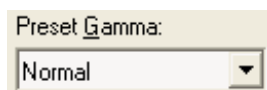
◆ Gamma (Color / Grayscale)



This option corrects distortions from nonlinear image representation. Scanner sensors are generally designed to generate output linear to the density of the light reflected from the document. However, most output terminals do not produce output that has the desired linear relation to the input, and the resulting distortion must be corrected.

An arbitrary range is between 0.1 and 10.0.

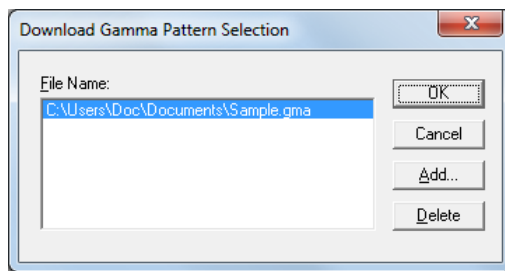
◆ Preset Gamma



This option corrects distortions from nonlinear image representation. Scanner sensors are generally designed to generate output linear to the density of the light reflected from the document. However, most output terminals do not produce output that has the desired linear relation to the input, and the resulting distortion must be corrected.

One of the following can be selected as a correction pattern: "Normal", "Soft", "Sharp", "Download Pattern", "Custom" or "Bright".

Some scanner models do not support this function. See "Relevant Image Scanner Specification" in Appendix.



When "Download Pattern" is selected, the above dialog box opens.

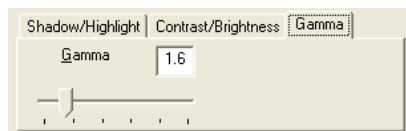
Select the gamma pattern download file to be used from the list of file names. Then, press the [OK] button. Correction will then be executed using the selected gamma pattern.

If the gamma pattern download file has not been registered in the list of file names, use the [Add] button to register the file.

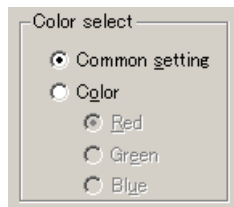
See "Download Pattern File" for information about how to specify the file.

When scanning a dark image in grayscale or color, you can scan the image brighter by selecting [Bright].

When "Custom" is selected, you can specify the values on the [Shadow/Highlight], [Contrast/Brightness] and [Gamma] tab.

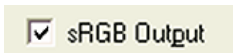


◆ Color select (Color only)



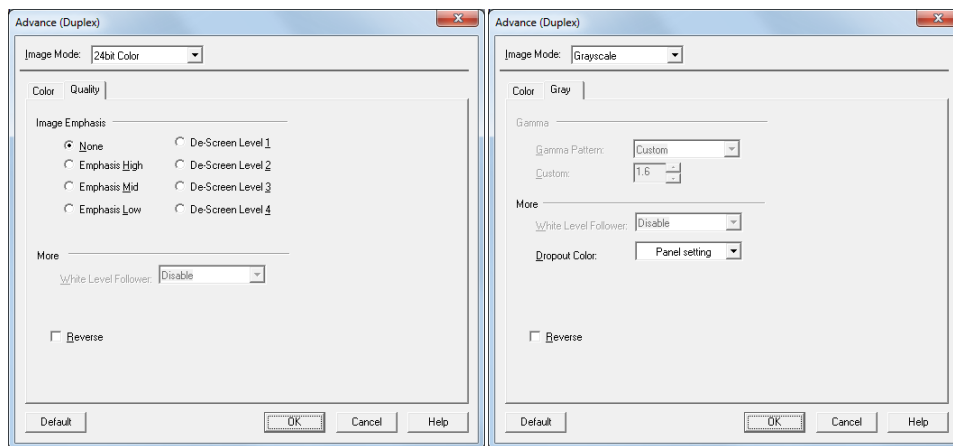
It is possible to select independent value on each color

◆ sRGB Output (Color)



Scans images by using the color control information of "Color Space Profile.icm" (the standard color profile of Windows®).

* Refer to "Windows® Help" to learn more about "color profile".



<Image Mode : Color selected>

<Image Mode : Grayscale selected>

Figure Advance dialog ([Quality] / [Gray] tab)

◆ Image Emphasis (Color only)



This option specifies the sharpness of a scanned image.

Select "None", "De-Screen" or "Emphasis".

None

Edge processing is not performed.

Emphasis

This option outputs an image with the edge emphasized.

"Emphasis High", "Emphasis Mid", or "Emphasis Low" can be selected.

If "Emphasis High" is selected, the image becomes sharper. If "Emphasis Low" is selected, the image appears less distinct.

* Automatic Paper Size Detection may fail if Edge Emphasis is selected.

De-Screen

"De-Screen Level 1", "De-Screen Level 2", "De-Screen Level 3", or "De-Screen Level 4" can be selected.

This option eliminates moirés patterns. To eliminate more effectively, higher level is selected.

◆ White Level Follower (Color)



Select this option to scan a document whose background color is not white, such as a newspaper.

Select "Auto", "Enable", or "Disable".

When "Enable" is selected, the document is scanned using background follow-up (for line drawings). When "Disable" is selected, the document is scanned using the standard basic white background (for photographs). When "Auto" is selected, the option automatically switches to the optimal setting based on the specified "Image Mode".

"White Level Follower" is used to adjust the density of the white background of a document and correct variations in the background color by compensating the pixels of scanned images individually.

Some scanner models do not support this function. Refer to "Relevant Image Scanner Specification" in Appendix.

◆ Reverse (Color / Grayscale)



This option specifies whether to reverse the black and white of a scanned image.

If this option is selected, color data is reversed. If this option is not selected, the color values of the reproduced image correspond to the original image.

Some applications do not permit normal operation. If this occurs, contact the manufacturer of the application.

Some scanner models do not support this function. Refer to "Relevant Image Scanner Specification" in Appendix.

◆ Dropout Color (Grayscale only)



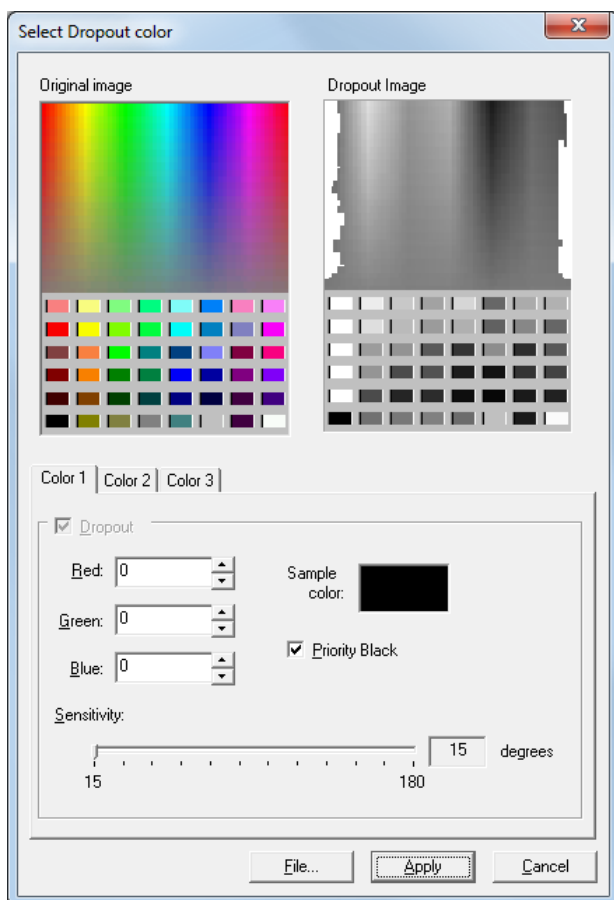
A color (the three primary colors: green, red, blue or any other color) can be chosen to be "dropped out" (ignored) during scanning. For example, when scanning a black text in a red frame, you can select "red" to be the dropout color and scan only the black text.

If "white" or "none" is selected, no color is dropped out.

But in case of "white", colors such as "yellow" may be dropped. And if "none" is selected, it may slow down your scanning speed.

If you want to select a particular color as dropout color, "Custom Pattern 1 – 3" can be used.

If [Custom Pattern 1 – 3] is selected, the following screen appears.



Original Image

A color sample will be shown. The dropout color can be selected by clicking the desired color with your mouse.

Dropout Image

An image without the dropout color will be shown.

Dropout

Specify up to three colors configured with [Color 1], [Color 2], and/or [Color 3] to be dropped out. (Dropout for [Color 1] is always checked.)

Both the color values and the color will be shown.

You can change the color by inputting the color values directly or using the [▲] / [▼] buttons.

Priority Black

Check this check box when you do not want to dropout some characters.

This function is used in order not to drop out colors of low saturation which are frequently used, such as black.

Sensitivity

Specifies tolerance of the selected color to be dropped out.

Specifiable range: 15 to 180 degrees (default: 15 degrees)

Larger the value becomes, wider the color gamut is to be dropped out.

[File] button

Displays arbitrary image files (24-bit color bmp format) on the “Original Image”.

[Apply] button

Reflects the contents that have been set and closes the window.

[Cancel] button

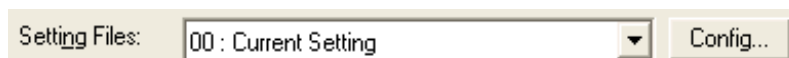
Discards the contents that have been set and closes the window.

These functions may not be supported depending on the scanner model. Refer to “Image scanner specification” attached to the Appendix.

*When [Priority Black] is disabled, hole punch removal may not work properly with automatic page size detection.

4.9 Setting the Setting Manager Options

These options are used to manage the setting files, and switch the basic scan dialog display.



Press the [Config...] button of the main dialog to open the [Configuration] dialog box shown below.

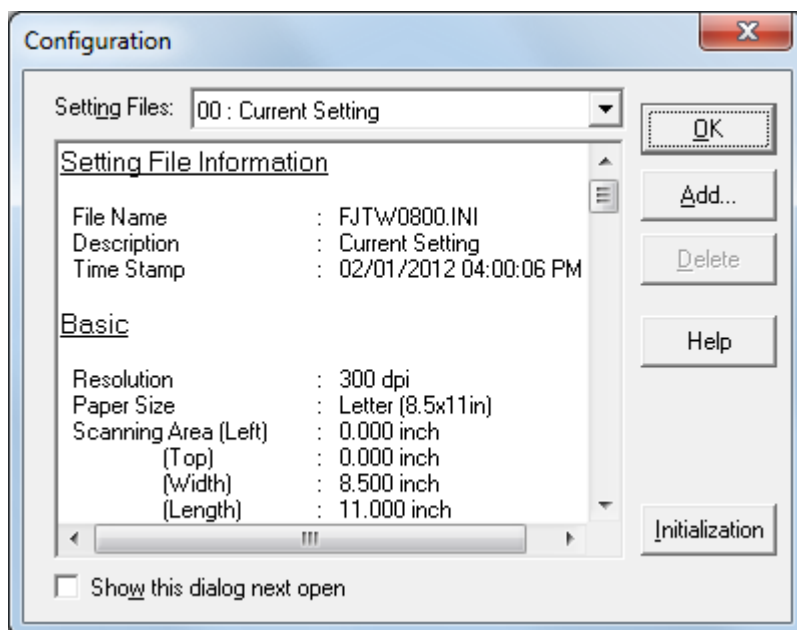
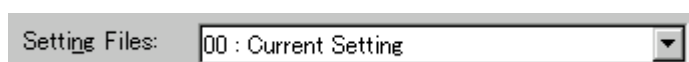



Figure Configuration dialog box

◆ Setting Files

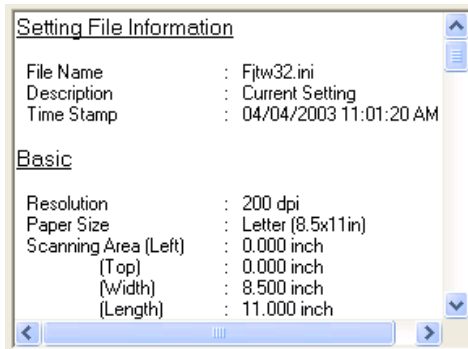


The setting information of the scan conditions can be saved in a “Setting file.”

Scan condition settings that have been set in advance in this dialog can be selected from the list of setting files. This enables selection of all settings at the same time without having to enter the scan conditions one at a time. Press the  button to open the list of setting files.

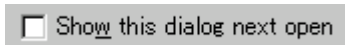
Subsequent scanning operations can be performed effectively by registering several types of scan conditions that are frequently used.

◆ FTS File Information



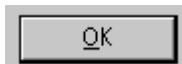
The information of the setting file selected in [Setting Files] is displayed.

◆ [Show this dialog next open] checkbox



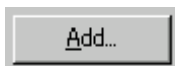
If this checkbox is checked, [Basic Scan Dialog] will be activated the next time the driver is activated.

◆ [OK] button

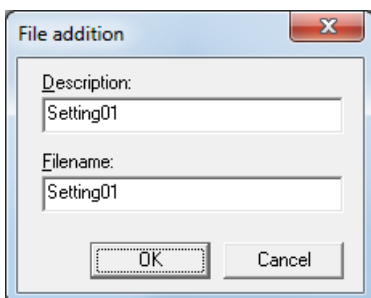


Makes the new setting valid, closes this dialog box, and returns to the main dialog.

◆ [Add] button



Adds the setting of the current driver to a setting file.



Pressing the [Add] button opens the [File addition] dialog.

Enter the [Description] and [Filename] as shown in the example above. Then, press the [OK] button to add the new setting file. To cancel, press the [Cancel] button.

Description: Enter a character string to be displayed in the selection frame of the [Setting Files].

Filename: Specify the name of the file used to save the settings.

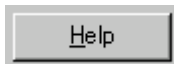
◆ [Delete] button



Deletes unnecessary setting files.

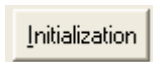
Select the setting file to be deleted and then press the [Delete] button. A confirmation dialog will be displayed. Press the [OK] button to delete the setting file. To cancel, press the [Cancel] button.

◆ [Help] button



Displays online help.

◆ [Initialization] button



All of scan settings are returned to the initial value.

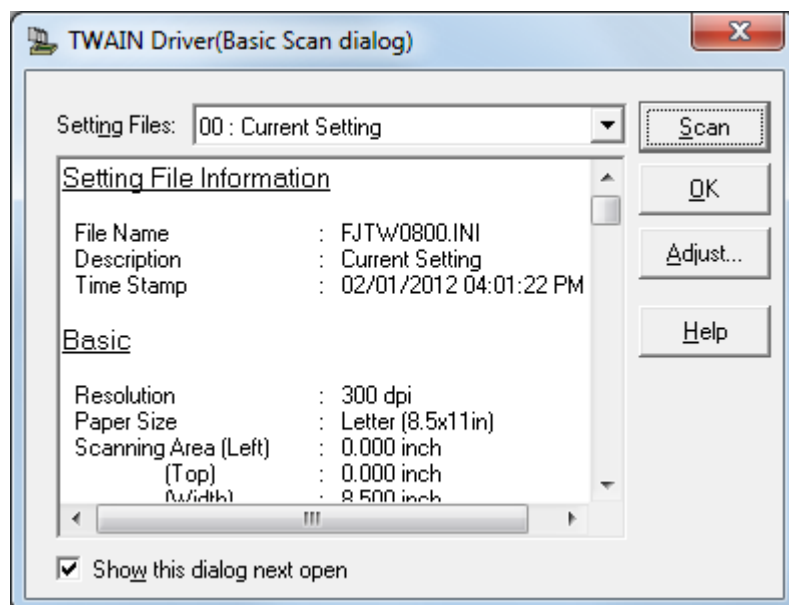
4.10 Basic Scan Dialog

The basic scan dialog contains only the minimum functions required for scanning. The detailed setting functions of the main dialog have been omitted.

Scanning can be easily performed by selecting a registered setting file.

The basic scan dialog is also useful for avoiding incorrect operations when standard work is performed.

By checking the [Show this dialog next open] checkbox of the [Configuration] dialog, the Basic Scan dialog will be opened instead of the main dialog box at the next activation.



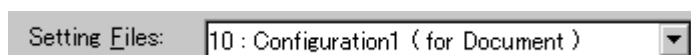
<Scan Procedure>

1. Select the file to be used from the list of setting files.
2. Click the [Scan] button.

⇒ Scanning is performed based on the settings of the setting file information.

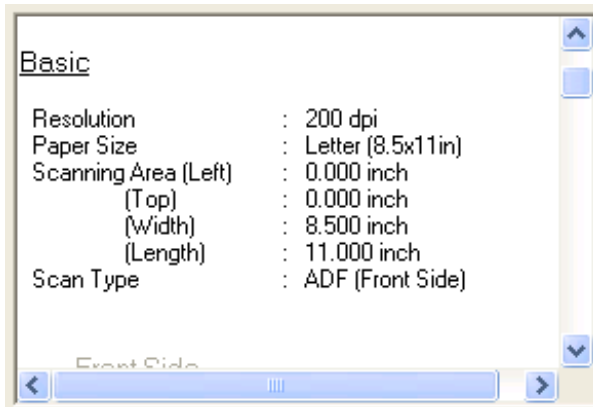
<Configuration>

◆ Setting Files



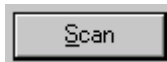
A list of setting files is displayed. When the desired file is selected, the setting information saved in the file will be read and reflected during scanning.

◆ FTS File Information



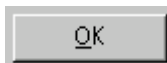
The contents of the selected file are displayed.

◆ [Scan] button



Executes scanning based on the contents of the setting file.

◆ [OK] button



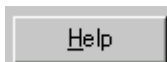
Terminates without performing the scan operation.

◆ [Adjust] button



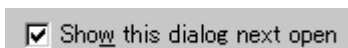
Switches from the basic scan dialog to the main dialog.

◆ [Help] button



Displays online help.

◆ [Show this dialog next open] checkbox



If this checkbox is checked, the [Basic Scan Dialog] will be opened at the next startup. If this checkbox is not checked, the main dialog will be opened at the next startup.

4.11 Download Pattern File

The "download pattern file" of this driver is a file that defines the patterns to be used by the scanner to execute various image processing. This file is available in the following two versions. Each version can be selected using the [Download Selection Dialog] that opens when [Download] is selected.

The file is a text file that conforms to the following rules. Use an appropriate text editing program (for example, "Note Pad" in the operating system) to edit the file.

- ◆ Dithered download pattern file

Any user defined dithered pattern can be used to scan an image by downloading the pattern from the dithered download file to the scanner. The defined pattern becomes effective when [Download Pattern] is selected for [Halftone].

Some models do not support this file. See "Relevant Image Scanner Specification" in Appendix.

Although the standard extension of the file name is ".DTH," there may be exceptions.

Coding configuration:

(n, size in the X direction),(m, size in the Y direction),
(pattern value for the X1/Y1 coordinates),
(pattern value for the X1/Y2 coordinates),
(pattern value for the X1/Y2 coordinates),.....
(pattern value for the Xn/Ym-2 coordinates),
(pattern value for the Xn/Ym-1 coordinates),
(pattern value for the Xn/Ym coordinates)

Meaning of each element:

(n, size in the X direction) indicates the size of the matrix in the X direction. Specify 8 for the scanner supported by this driver.¹

(m, size in the Y direction) indicates the size of the matrix in the Y direction. Specify 8 for the scanner supported by this driver.¹

(Pattern value for the Xx/Yy coordinates) contains a values in the range of 0 (bright) to 255 (dark) that specifies the brightness of the X coordinate, x, and the Y coordinate, y.

Note

Use a delimiter other than a number to delimit elements. For most cases, use a comma (,).

¹ In case of fi-5650C, fi-5750C, you can specify the value from 1 to 32.

Example: In case of 8x8 matrix

8, 8,

128, 128, 128, 128, 128, 128, 128, 128,
255, 128, 128, 128, 128, 128, 128, 128,
255, 255, 128, 128, 128, 128, 128, 128,
255, 255, 255, 128, 128, 128, 128, 128,
255, 255, 255, 255, 128, 128, 128, 128,
255, 255, 255, 255, 255, 128, 128, 128,
255, 255, 255, 255, 255, 255, 128, 128,
255, 255, 255, 255, 255, 255, 128, 128,

} 8 elements

8 elements

◆ **Gamma download pattern file**

Any user defined gamma correction processing can be performed by downloading the pattern from the gamma download file to the scanner. The defined pattern becomes effective when [Download Pattern] is selected for [Gamma Pattern].

Some models do not support this file. See "Relevant Image Scanner Specification" in Appendix.

Although the standard extension of the file name is ".GMA," there may be exceptions

Creation of a gamma download pattern file can be facilitated using the following utilities for editing the gamma correction pattern:

Coding configuration:

(gray-scale in the X direction),(gray-scale in the Y direction),
(X0 output value),(X1 output value),(X2 output value),.....
(X253 output value),(X254 output value),(X255 output value)

Meaning of each element:

(gray-scale in the X direction) indicates the size and the gray scale of the input value. (In this driver, this value is fixed at 256.)

(gray-scale in the Y direction) indicates the size and the gray scale of the output value. (In this driver, this value is fixed at 256.)

(Xx output value) indicates the output value, in the range of 0 (bright) to 255 (dark), for an input value x.

Note

Use a delimiter other than a number to delimit elements. For most cases, use a comma (,).

Example

256, 256,
255, 254, 253, 252, 251, 250, 249, 248, 247, 246, 245, 244, 243,
242, 241, 240, 239, 238, 237, 236, 235, 234, 233, 232, 231, 230,
229, 228, 227, 226, 225, 224, 223, 222, 221, 220, 219, 218, 217,
216, 215, 214, 213, 212, 211, 210, 209, 208, 207, 206, 205, 204,
203, 202, 201, 200, 199, 198, 197, 196, 195, 194, 193, 192, 191,
190, 189, 188, 187, 186, 185, 184, 183, 182, 181, 180, 179, 178,
177, 176, 175, 174, 173, 172, 171, 170, 169, 168, 167, 166, 165,
164, 163, 162, 161, 160, 159, 158, 157, 156, 155, 154, 153, 152,
151, 150, 149, 148, 147, 146, 145, 144, 143, 142, 141, 140, 139,
138, 137, 136, 135, 134, 133, 132, 131, 130, 129, 128, 127, 126,
125, 124, 123, 122, 121, 120, 119, 118, 117, 116, 115, 114, 113,
112, 111, 110, 109, 108, 107, 106, 105, 104, 103, 102, 101, 100,
99, 98, 97, 96, 95, 94, 93, 92, 91, 90, 89, 88, 87, 86, 85, 84,
83, 82, 81, 80, 79, 78, 77, 76, 75, 74, 73, 72, 71, 70, 69, 68,
67, 66, 65, 64, 63, 62, 61, 60, 59, 58, 57, 56, 55, 54, 53, 52,
51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36,
35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20,
19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0

5. Using the Gamma Pattern Editor

5.1 Start-up

Click on [Start] and select [Gamma Pattern Editor] from "Scanner Utility for Microsoft Windows" under [Programs]. The following menu is displayed:

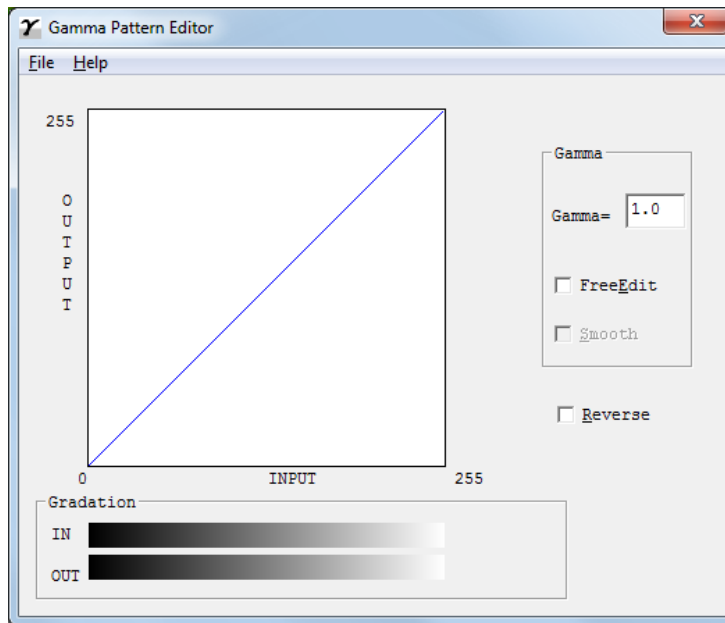
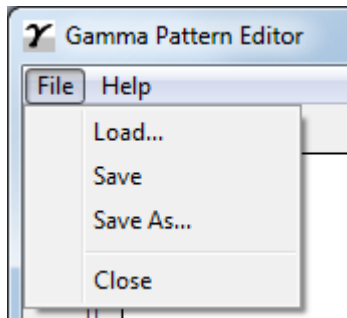


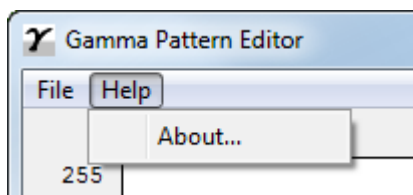
Figure Gamma Pattern Editor Tool start-up menu

5.2 [File] menu



- ◆ [Load...]
This menu is used to read the Gamma Download file and display the graph and gradations. The name of the open file is displayed above the graph area.
- ◆ [Save]
The gamma pattern currently being edited is saved in the file whose name is displayed above the graph area. If no filename is displayed, the pattern is named and saved in that file.
- ◆ [Save As...]
The gamma pattern currently being edited is named and saved in that file. The saved filename is then displayed above the graph area.
- ◆ [Close]
Select this to exit the editing program.

5.3 [Help] menu



- ◆ [About]
Information related to this editor and its version number is displayed.

5.4 Gamma Pattern Editing

◆ Graph Area

The graph area is a 256-dot x 256-dot white square area bordered by black lines, where the relationship between the input values of 0 to 255 (x axis) and output values of 0 to 255 (y axis) is indicated in blue lines. Each graph dot represents one division (unit).

◆ Gradation

The input is displayed in black and white in 256 single-dot steps from 0 at the left border to 255 at the right border. The gamma function of the scanner is displayed. After saving it, the displayed (gray scale) gamma function is fixed and constant. The output values are displayed in single dots in relation to the input values and the brightness of the output equipment is displayed. To ensure accurate display, the display must be set for "True-Color" or greater.

◆ Gamma

Calculation of the output values is based on the value γ entered in the edit box; the graph and the gradation are then displayed. The values that can be input are integers greater than 0 or fractions.

$$\llcorner\text{Formula}\gg \text{ Output} = (\text{input} \div 255)^\gamma \times 255 \quad (\text{Input} = 0 - 255)$$

◆ Free Edit

Designates whether to enable editing of the graph area directly using the mouse cursor.

If this box is checked, the gamma pattern input edit box cannot be used and only editing using the mouse cursor is supported.

◆ Smooth

Designates whether to smooth edited curves. This setting is only valid when Free Edit is selected. In this setting, the curved lines drawn by the mouse are automatically smoothed. This is reflected in the graph and gradation display.

◆ Reverse

Designates whether to reverse black and white. When this box is checked, the current output values are converted to (255 - output values).

6. Setting Scanner and Camera Properties

6.1 Displaying Scanner and Camera Properties

Double-click the [Scanner and Camera] icon on the [Control Panel] to display the corresponding Properties dialog box.

If the scanner driver has been properly installed, the icon of your scanner is displayed. Select the model name, then double-click the icon or select the [Properties...] by using right-click. The Properties dialog box shown below is displayed.

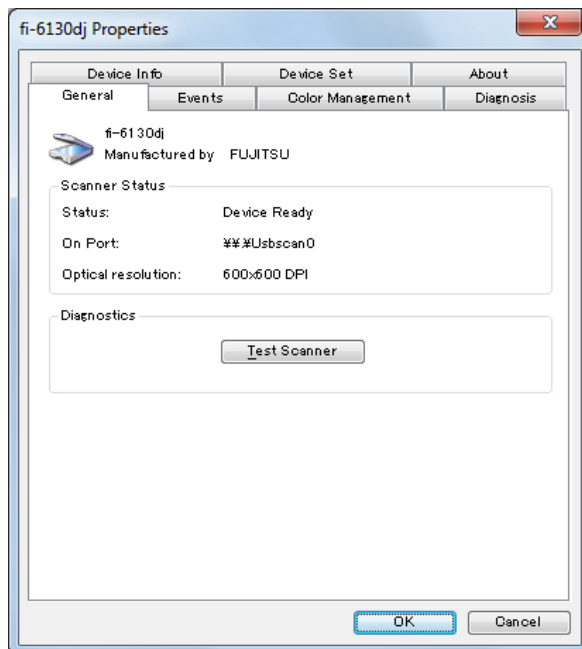
In this dialog box, the scanner can be checked and information related to different kinds of related devices can be confirmed. An explanation of each tab folder and its use is below.

- * Close the application software, which is using the scanner, to display Properties dialog box.
- * Depending on scanners, [Events] and [Device Set] tab may not be displayed.
- * For some scanner models, only [General], [Events] and [Color Management] tabs may be displayed. Use the [Software Operation Panel] to check device information and configure device settings for such models.

For information about the Software Operation Panel, refer to the “Operator’s Guide” bundled with the scanner.

6.2 General Tab

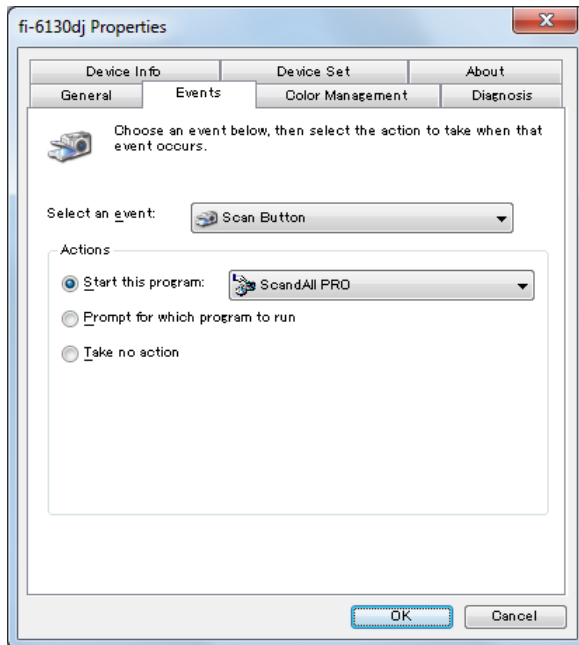
General information on the driver for a connected scanner can be displayed, and the connection can be tested from this folder.



6.3 Events Tab

On the Events tab, an application can be specified to be started automatically by “Scanner events” such as “pushing buttons on the scanner”.

(The Events tab is not displayed if the device does not support this function.)



- ◆ **Select an event**

Select a “scanner event” from the list box to start an application.

Please select the item to set up from the following events.

"Start button" or "Scan button":

When pushing the "Start" or the "Scan" button on the scanner.

"Send to1-9": When pushing the "Send To" button of the scanner.

(* “Scanner events” may not be displayed depending on scanners.)

- ◆ **Actions**

Select an action when the event selected [Select an event] occurs.

- Start this program:

The application selected from the right list box starts when the event occurs.

- Prompt for which program to run

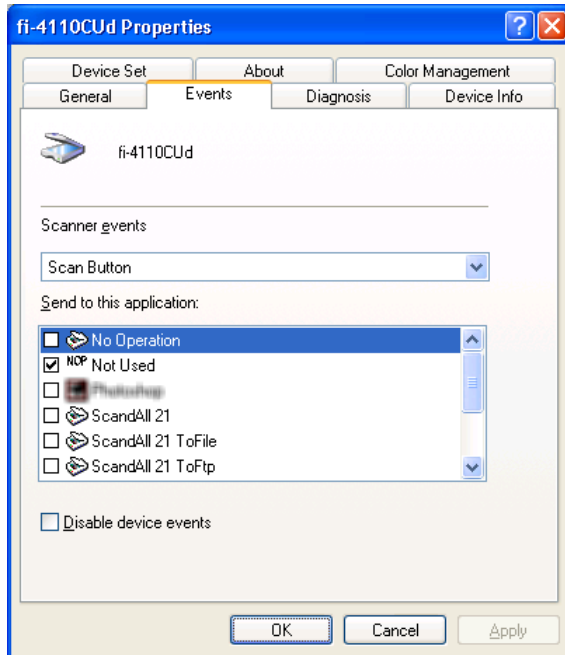
The window for selecting application appears when the event occurs.

- Take no action

Nothing starts even if the event occurs.

If these functions are not used, mark on this check box.

In Windows® 2000 or some scanner driver, the following "Events" screen may be displayed. (This screen has the same function as the above screen.)



- ◆ Select an event

Select a "scanner event" from the list box to start an application. Please select the item to set up from the following events.

"Start button" or "Scan button":

When pushing the "Start" or the "Scan" button on the scanner.

"Send to1-9": When pushing the "Send To" button of the scanner.

(* "Scanner events" may not be displayed depending on scanners.)

- ◆ Send to this application

Mark on the check box of an application to be started by the operation specified in the above [Scanner events].

Multiple applications can be specified.

When two or more applications are specified, a dialog box appears to select one to be started by the operation.

- ◆ Disable device events

If these functions are not used, mark on this check box.

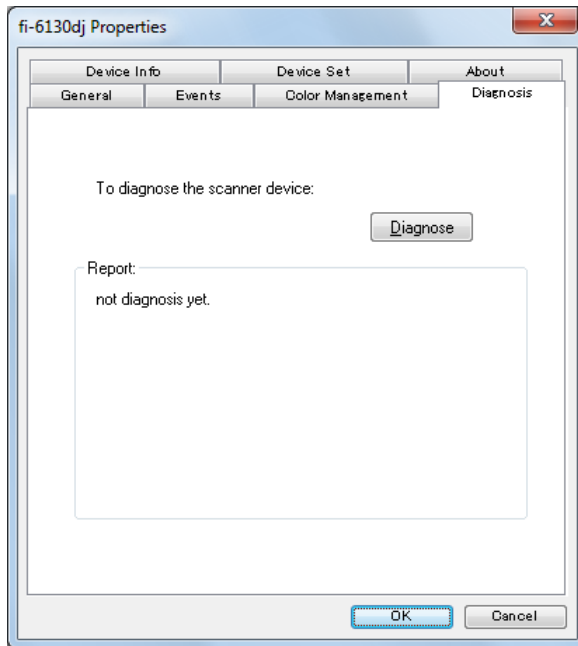
* If the above settings are not activated by clicking [OK] or [Apply], please reboot the PC.

6.4 Diagnostic Tab

To perform more detailed diagnostic tests than those provided in the general tab folder, click the [Diagnose] button.

Only a user who has administrator authority can run these tests.

(The Diagnostic tab is not displayed if the device does not support this function.)

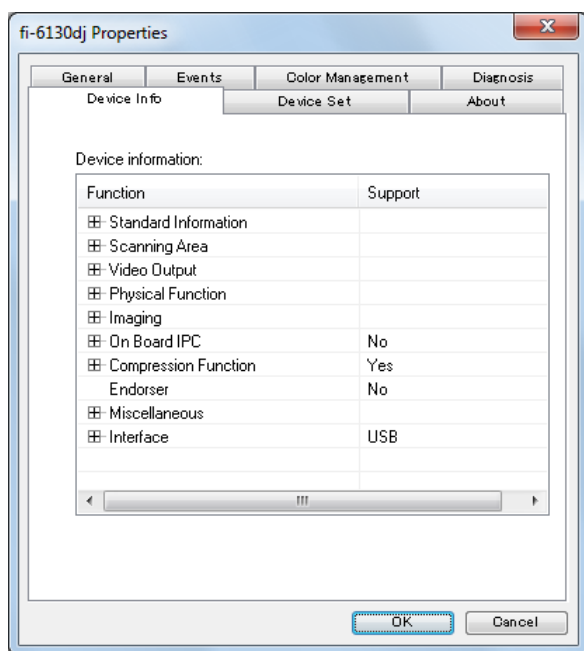


6.5 Device Information Tab

A list of the functions compatible with the selected scanner driver is displayed. The items displayed depend on the selected model of scanner. Only hardware functions are displayed. The functions realized by software are not displayed in this tab folder. Therefore, the displayed content may not match the content specified during reading. The contents of this tab folder are not displayed if the scanner driver is either currently in use or not connected to the computer. If they are not displayed, stop the application being used by the scanner driver or check the connection. Then, select this tab folder again to display the contents.

(The Device Information tab is not displayed if the device does not support this function.)

(In version 10.10 or later, this tab is not displayed.)



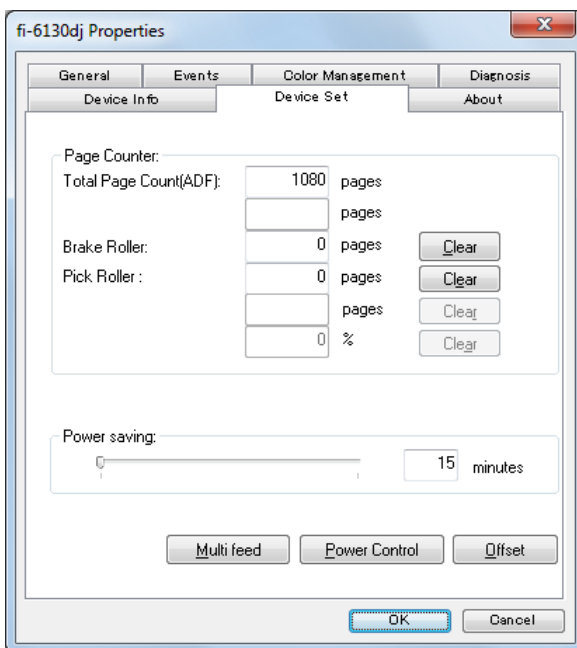
6.6 Device Setup Tab

Information related to the operation and maintenance of the scanner driver can be displayed and set up. For some scanner models, this tab may not be displayed, or some items cannot be set up (grayed out). Changing the setup activates the Apply button. The changed setup is reflected on the device only if the Apply button or OK button is clicked. The contents of this tab folder are not displayed if the scanner driver is either currently in use or not connected to the computer. If they are not displayed, stop the application being used by the scanner driver or check the connection. Then, select this tab folder again to display the data.

Only a user who has administrator authority can change the setup from this tab folder.

(The Device Setup tab is not displayed if the device does not support this function.)

(In version 10.10 or later, this tab is not displayed.)



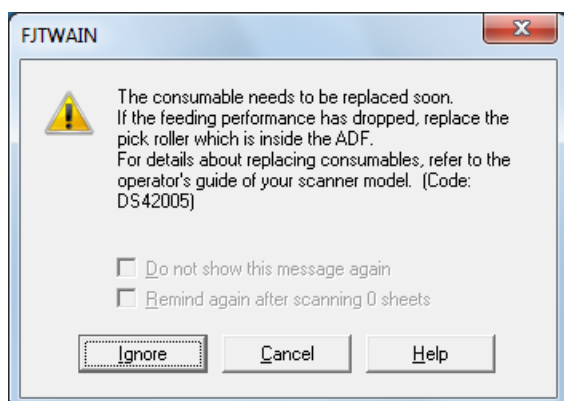
◆ Page counter

An approximate total of the numbers of pages that the ADF and flat bed (FB) have scanned are displayed. An equivalent count of the pages scanned after consumables are replaced is also displayed. To set the consumables counter to zero after replacing consumables, click the [Clear] button. Depending on the device, this operation can be executed using the operation panel of the device. Displayed consumables names or item numbers also vary depending on the device. For information, see the Operator's guide of the device.

Note

Depend on some scanner models, once the [Device Set] tab appears, the operation panel is unable to be handled. In this case, close this dialog and turn the power ON/OFF of the scanner. After the scanner setup, the operation panel is able to be handled.

When using a scanner, the following message may be displayed.



If this message appears, replace consumables following the instructions below.

< If replacing consumables immediately >

1. Check [This message not display again.]
* Skip this operation for some models, as this function is not supported by the driver.
2. In cases where consumables are replaced after completing all documents being scanned, click [Ignore]. In cases where scanning is stopped for an immediate replacement, click [Cancel].
3. Following the Operator's guide of the device, replace the consumables.
4. Select [Page counter] from [Device setup], click [Clear] button to reset the consumables counter.

< If replacing later (immediate replacement is impossible) >

1. If it is not necessary to display this message again, check [This message not display again]*. If it is necessary to display this message again after scanning xxx pages, check [Warns again after scanning xxx pages].
* Skip this operation for some models, as this function is not supported by the driver.
2. If the scanning is continued, click [Ignore] and close the message. If the scanning is stopped, click [Cancel] and close the message.
3. Replace consumables as soon as possible or when this message appears next time.
4. After the replacement, click [Clear] of [Device Setup] under [Page Counter] to reset the consumables counter.

(* If [This message not display again] is checked, this message will not appear before the consumables counter is reset.)

◆ Power saving:

Specify when the lamp turns off. This is the elapsed time after a scan is complete.

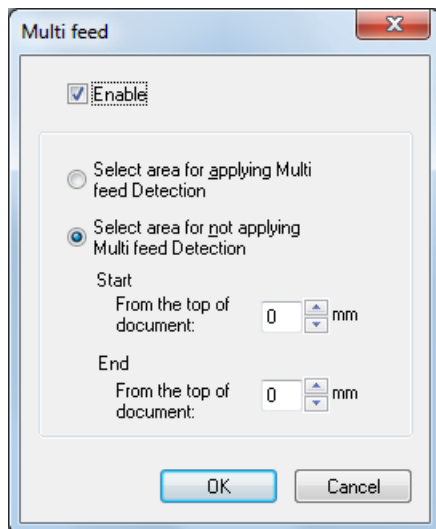
◆ [Multifeed] button

Use this to specify multifeed detection area.

By default [Multifeed Detection](#) monitors paper overlap over the central column (width: 35 mm) of the document to be scanned. This will lead to mis-detection when the document is partially pasted with photographs or clippings.

When scanning these kinds of documents, you can specify an exact detection area to prevent mis-detection.

Click on the button and the following screen will appear.



Enable (Detection Area Selection)

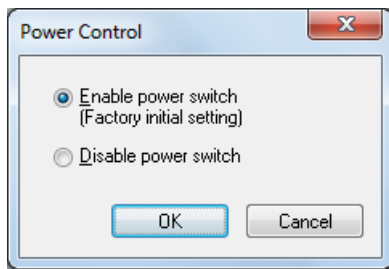
Vertically select an area where multifeed detection will or will not be conducted. Choose either “Select area for applying Multifeed Detection” or “Select area for not applying Multifeed Detection”.

- **Select area for applying Multifeed Detection**
Select an area for multifeed detection.
- **Select area for not applying Multifeed Detection**
Select an area not to be detected.
- **Start**
Set start position as distance from the document’s top edge.
(Possible values: 0 – 510 mm with Start Position < End Position)
- **End**
Set end position as distance from the document’s top edge.
(Possible values: 0 – 510 mm with Start Position < End Position)

* This button may not be displayed for some scanner models.

◆ [Power Control] Button

Enable/Disable the scanner's power switch.



– **Enable Power Switch**

Scanner power switch is enabled.
The scanner can be turned ON/OFF by the power button.

– **Disable Power Switch**

Scanner power switch is disabled.
The scanner will be turned ON/OFF by connecting/disconnecting the power supply.
(Power button will no longer work).

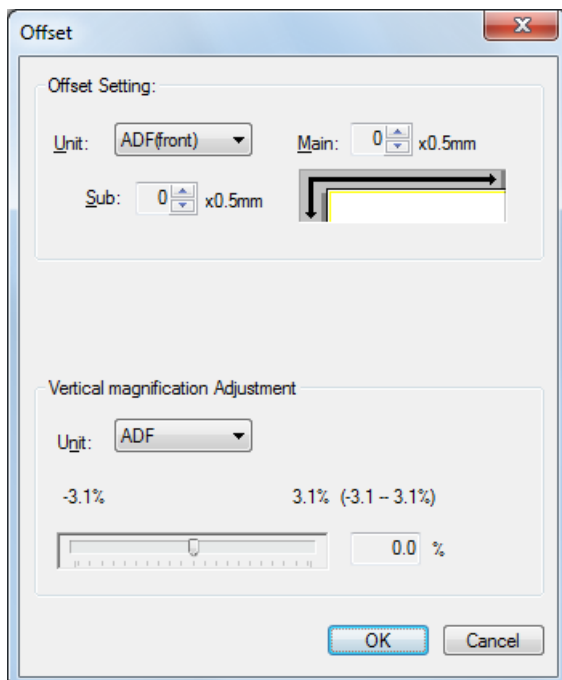
* If the scanner is equipped with a main power switch, the main power switch needs to be set at "ON".

* This button may not be displayed for some scanner models.

◆ [Offset] button

When this button is clicked, the following dialog box is displayed.

Using this dialog box, the offset of the leading edge and magnification for the sub-scanning direction can be changed.



– **Offset Setting:**

If the position of the scanned image shifts from the original document, fine adjustment is possible.

At shipment, the offset has been adjusted to an optimum value within a certain range. Therefore, adjustment is not generally required.

*The maximum size of changes depends on the device.

– **Enable eliminating a dark area on the top of the image.**

– **Enable eliminating a dark area on the left side of the image.**

These modes can be selected to eliminate the dark area on the leading edge and the left side appeared when using the flat bed

*These functions may not be displayed for some scanner models.

– **Vertical magnification Adjustment**

The Vertical magnification correction value of sub-scanning direction can be changed.

For ADF scanning, the image is expanded or shrunk in the paper feeding direction based on the setting value at shipment.

For FB scanning, the image is expanded or shrunk in the direction to which the scan head moves based on the setting value at shipment.

This function is used to adjust the image whose ratio of length and width seems different from the original document.

*The setting value varies depending upon the device used.

– **[OK] button**

The adjusted value is written to the EEPROM.

* This button may not be displayed depending on the scanner model.

The available settings also vary depending on the scanner model.

(e.g. For fi-6130, only the setting of the ADF part can be changed)

Changing this setting affects scanning operation of the scanner device greatly.

Care must be taken when changing.

6.7 About Tab

The version of this driver and a link to the Fujitsu home page are displayed.

(The About tab is not displayed if the device does not support this function.)

(In version 10.10 or later, this tab is not displayed.)

6.8 Color Management Tab

Color profiles assigned to the device can be added or deleted from this folder.

"sRGB Color Space Profile.icm" is the default driver assigned to this driver.

6.9 Scanning by using “Scanner and Camera Wizard”

In case of Windows® XP / Windows Server® 2003, you can scan by using “Scanner and Camera Wizard”.

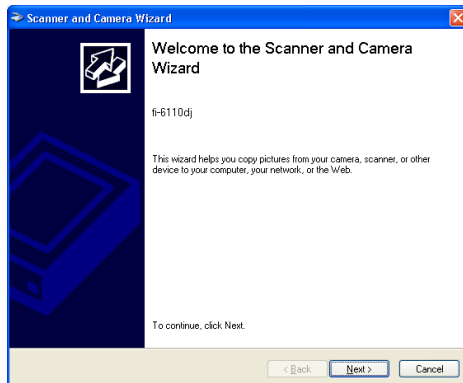
(* It functions when scanning with supported scanner.)

Follow below procedure to scan:

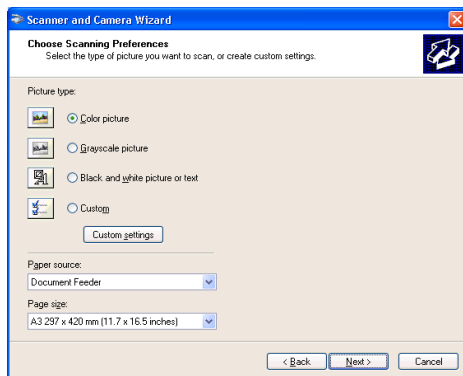
1. On the [Start] menu, select [Control Panel] – [Scanners and Cameras].
2. Double-click on your scanner’s icon.



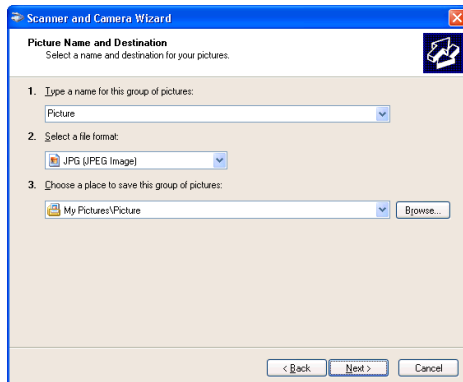
3. Click [Next] button when Scanner and Camera Wizard appears.



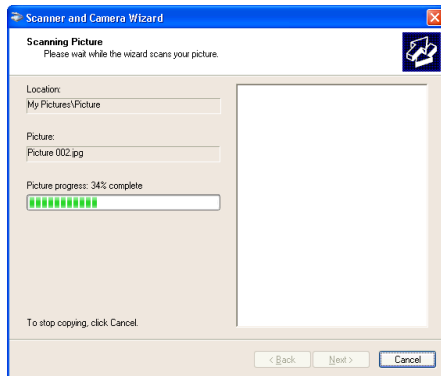
4. Specify the scan settings and click [Next] button on the following window.



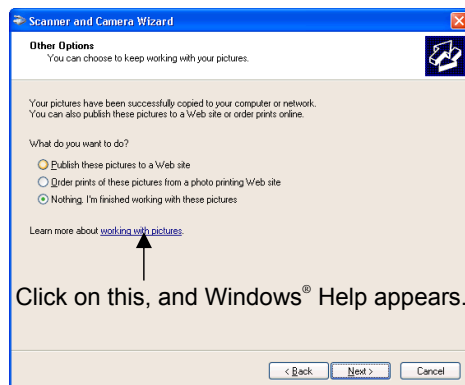
5. Specify a file name, a format and a place to save scanned images.
And click [Next] button.



⇒ Scanning starts. (The following window is displayed during scanning.)



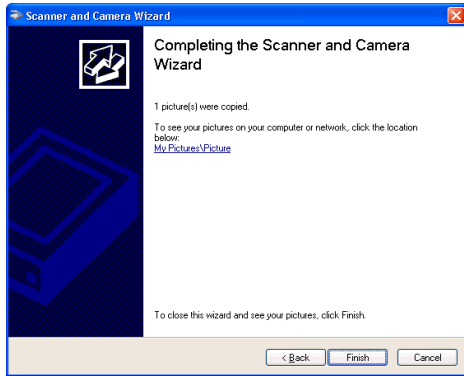
6. Select an item of “What do you want to do?” to keep working with your picture.
And click [Next] button.



* Refer to Windows® Help for detail.

7. Select “Nothing, I’m finished working with these pictures when you want to finish.
And click [Next] button.

8. Click [Finish] button to finish this wizard.



7. Troubleshooting

7.1 Error Messages

7.1.1 Messages from the TWAIN Driver

- The input value is outside the range. (DS00001)
Cause: A value exceeding the range allowed for an input item was input.
Resolution: Input a value within the allowed range. Refer to the input item or the image scanner specification for the range.

- The input value is not acceptable. (DS00002)
Cause: A value exceeding the range allowed for an input item was input.
Resolution: Input a value within the allowed range. Refer to [Help] of the item or the User's Guide for the correct range.

- This file cannot be removed because it is specified in other side. (DS00013)
Cause: An attempt was made to remove a file using the dither pattern or gamma download pattern file setting dialog. However, the file is being used for the other side (front side if back side or back side if front side).
Resolution: Before removing the file, change the setting of the other side and then remove.

- The initial value contains an invalid value. The default value is set. (DS31001)
Cause: A value outside the specified range, or invalid text was found in the initial-value data file (the specific item involved is indicated by Entry=XXXXX). If the file has been modified, the setting value for the item may be wrong. If the file has not been rewritten, the file may have been damaged.
Resolution: The value is set to a standard value. Be sure to check the hard disk (chkdsk/scandisk) and check for computer viruses regularly.

- The value is higher than the maximum scanning size. Either the resolution value or the scanning area has to be reduced. (DS00004)
Cause: A value exceeding the data capacity of the scanner was specified. As the resolution is increased, the amount of data to be scanned also increases.
Resolution: Decrease the resolution or reduce the size of the scan area.

- The value for custom paper is higher than the maximum scan size. Width needs to equal 279 mm or less and length needs to equal 420 mm or less. (DS00005)
- The value for custom paper is higher than the maximum scan size. Width needs to equal 11 inch or less and length needs to equal 16.53 inch or less. (DS00006)
- The value for custom paper is higher than the maximum scan size. Width needs to equal xxx pixel or less and length needs to equal xxx pixel or less. (DS00007)

Cause: A value exceeding the limit applicable to the scan area of the scanner was specified.

Resolution: To specify a custom paper size, specify the value that is smaller than the value applicable to the device.

- The value for custom paper is greater than the maximum scan size. Width need to less equal 259mm. (DS00018)
- The value for custom paper is greater than the maximum scan size. Width need to less equal 10.24inch. (DS00019)
- The value for custom paper is greater than the maximum scan size. Width need to less equal 2048pixel. (DS00020)

Cause: A value exceeding the limit applicable to the scan area of the scanner was specified.

Resolution: To specify a custom paper size, specify the value that is smaller than 259mm (10.24inch, 2048pixel)

- The resolution must be less or equal to xxx dpi when scanning in Gray Scale. (DS00010)
- The resolution must be less or equal to xxx dpi when scanning in Color. (DS00026)
- Cannot specify Long Page Scan. Width need to less equal 400dpi. (DS00021)

Cause: There is a limit on the resolution when gray-scale scanning, long page scanning or color scanning is used.

Resolution: Specify a resolution value that is below the indicated xxx dpi.

- Cannot specify Gray Scale with Custom resolution. (DS00009)
- Cannot specify Color with Custom resolution. (DS00027 or DS00033)

Cause: Custom resolution was designated when Gray Scale or Color was designated.

Resolution: Designate a resolution value other than Custom.

- Cannot specify Gray Scale with duplex document. (DS00011)

Cause: Duplex scanning is specified with Gray Scale specified.

Resolution: At duplex scanning, select Black/white binary or Half tone for the [Image type].

- Cannot specify Individual Setting with Gray Scale. (DS00012)
- Cannot specify Long Page Scan with Gray Scale. (DS00017)
 - Cause: Gray Scale and Individual Setting are specified at the same time.
Gray Scale and Long Page Scanning are specified at the same time.
 - Resolution: Uncheck Individual Setting when specifying Gray Scale.
At Long Page scanning, select Black/white binary or Half tone for the [Image type].
- Your application using may not support page end detection, or undefined image size function. (DS41051)
 - Cause: Scanned image may not be displayed correctly when scanning by using the “End of page detection” or “Automatic (Page) Size detection” function with the application which is not supporting these functions.
 - Resolution: When scanned image is not displayed correctly, please select “disable” for the [Option]-[Rotation]-[Automatic Size and Skew detection].
- Dither pattern file not found. (DS00015)
 - Cause: File download has been specified, but a file has not been selected.
 - Resolution: Use the [File...] button to specify a file.
- Gamma pattern file not found. (DS00014)
 - Cause: File download has been specified, but a file has not been selected.
 - Resolution: Use the [File...] button to specify a file.
- Selected file can not be deleted. (DS31002)
 - Cause: If the selected setting file is write-protected, it cannot be deleted.
 - Resolution: Use Explorer to delete the file later.

• Description not specified. (DS00022)

Cause: The description of the setting file has not been specified.

Resolution: Enter the description of the setting file in the description field. Then, try scanning again.

• Filename not specified. (DS00023)

Cause: The filename of the setting file has not been specified.

Resolution: Enter the filename of the setting file. Then, try scanning again.

• Specified string is too long. (DS00024)

Cause: The specified string is too long. Up to 128 en-size characters and up to 64 em-size characters can be specified.

Resolution: Reduce the number of characters in the string so that they do not exceed 128 en-size characters. Then, try scanning again.

• Cannot specify next words for filename. \;?<>|. (DS00025)

Cause: The specified filename contains one or more of the following characters: \;?<>|.

Resolution: Enter a file name that does not contain the above characters. Then, make the settings again.

• Communication failed (DS42028)

- An abnormality has occurred during communication. Make sure that the power is on, and that the cable is firmly connected.
- Communication failed. Make sure that the power is on, the cable is firmly connected, and the scanner is not used by another application.
- An abnormality has occurred during communication.

Cause: Possible causes include the following: an image scanner that is not supported by this driver has been connected, no image scanner has been connected, or the cable is not connected.

The scanner is used by other application.
(This Driver cannot be used at the same time with more than one application.)

Resolution: Check the connection of the image scanner.

Check that the scanner is not used by other application.
(In case of Windows® XP / Windows Server® 2003 / Windows Vista® / Windows Server® 2008 / Windows® 7 / Windows® 8 / Windows® 8.1 / Windows Server® 2012 [Switch User] lets another user log on while your programs and files remain open. Therefore, when you log on with [Switch User], it has the possibility that another user have already been using the driver.)

- The specified image scanner is being used. (DS41005)

Cause: The image scanner may be already in use by another application, or the TWAIN driver may have been started twice.

Resolution: After all applications are terminated, restart the image scanner for scanning.

- Selected scanner is used by other application or not connected.

Cause:

 1. The scanner may be OFF or not connected.
 2. The scanner may be already in use by other application or the “Scanner and Camera” in [Control Panel].

Resolution:

 1. Check the power supply of the scanner or connection with PC.
 2. Close other application or “Scanner and Camera” in [Control Panel]

- An input-output error occurred in the image scanner. (DS41007)

Cause: A fault occurred during the scan operation of the image scanner. There may be a fault in the image scanner itself.

Resolution: Turn off the power of all devices, then turn on the power of the computer before turning on the scanner and retry scanning. If the error still occurs, contact the retail store where the image scanner was purchased, or the nearest service center.

- Scanner is turned OFF. Data source processing is closed. Turn ON the scanner and re-scan. (DS41013)

Cause: Scanner may be turned OFF during scanning.

Resolution: Turn ON the scanner and re-scan. If the error persists, reboot the PC.

- Paper jammed in the ADF. (DS32002)

Cause: A paper jam occurred in the device.

Resolution: Turn off the power of the device, then remove the paper from inside the device. Removing the paper by using excessive force will result in device failure, so be careful.

When the paper jam occurs repeatedly, clean inside of the scanner.

- The ADF is open. Close the ADF and set the document on ADF paper chute or Hopper. (DS32005)

Cause: The ADF cover is open.

Resolution: Close the ADF cover, and set the document on ADF paper chute or Hopper.

- No paper on ADF paper chute or Hopper. (DS32003)
 - Cause: Although ADF was selected as the paper feeding method, no paper is found on ADF paper chute or Hopper.
 - Resolution: Select another paper feeding method or set the document on ADF paper chute or Hopper.

- The ADF is open, or No paper on ADF paper chute or Hopper. (DS32007)
 - Cause: The ADF cover is open, or there is no paper on ADF paper chute or Hopper.
 - Resolution: Close the ADF cover, or load paper.

- Insufficient buffer memory size of scanner device for current scanning parameters. Please reduce the scanning area or the resolution, or install additional memory in the scanner. (DS00008)
 - Cause: A memory option has not been installed in the image scanner. Otherwise, a large area or resolution that is not supported by the image scanner has been specified. The memory inside the scanner may be insufficient due to the excessive data size of the scanning image.
 - Resolution: Reduce the scanning area or resolution. Otherwise, install the memory option. Refer to the Operator's guide of the image scanner for more information.
In color scanning, try to increase the data compression ratio.

- The current parameter(s) is (are) not allowed. Please use (an)other parameter(s) and try scanning again.(DS00003)
 - Cause: An incorrect value has been specified for the image scanner. The problem may be due to an illegal combination with the specification value from the application.
 - Resolution: Change the specification values. Then, try scanning again.

- Irregular status is detected in scanner. (DS42001,DS42022,DS42023,DS42026,DS42028,DS42029,DS42031~4203146,DS42051~42056)
 - Cause: A scanner fault such as a blown fuse or foreign matter in the scanning section has occurred.
 - Resolution:
 - Restart the scanner.
 - Confirm the cable connection.
 - Clean inside of the scanner.
 If the error persists, contact the retail store where the image scanner was purchased or the nearest maintenance and service center.

- Anomaly in the command for communicating with the scanner. (DS00003)
- Anomaly in communication with the scanner. (DS42050)
 - Cause: The SCSI cable is not connected firmly or is disconnected.
 - Resolution: Confirm the cable connection.
If the cable is disconnected, replace the cable with new one.

If the error persists, contact the retail store where the image scanner was purchased or the nearest maintenance and service center.
- Hardware Error was detected. Carrier motor/sensor was broken or Shipping Lock is set in "Lock" position. Please refer to the user's manual for your scanner. (DS42044)
 - Cause: The Shipping Lock may not be set in "Unlock" position.
 - Resolution: Check the Shipping Lock.
If the Shipping Lock is set in "Lock" position, set the Shipping Lock in "Unlock" position referring to the Operator's guide for your scanner.
- Ink cartridge is not installed in the imprinter properly. Please check the installation and try again. (DS32010)
 - Cause: The imprinter (Endorse) has no ink cartridge or the ink cartridge may be mounted improperly.
 - Resolution: Check that the ink cartridge of the imprinter is mounted properly and scan again.
- Imprinting position is set out of paper. Please check the imprinting position and try again. (DS32011)
 - Cause: Printing is not available because the printing part is outside the paper size.
 - Resolution: Adjust the imprinter so that the printing part is settled within the paper size.
- A Hardware Alarm is detected in the Imprinter or Endorse option. (DS 42010)
 - Cause: Failure on Imprinter or Endorse.
 - Resolution: Please check if the Imprinter or the Endorse is installed completely.
If the error occurs after checking the Imprinter or the Endorse, please contact the retail store where the product was purchased or the nearest service center.

- The Multifeed is detected. (DS32006)
 - Cause: The papers are scanned with multifeeding. (One paper stuck to another)
 - Resolution: Remove the papers stopped by multifeeding, and reset them.
- Insufficient memory. (DS41001)
 - Cause: There is not enough memory for tasks such as scanning and image processing. The driver program consumes a lot of memory space for caching (when Ram cache or /Use Both Memory is selected) or for processing images. Because of this, insufficient memory is likely to have occurred.
 - Resolution:
 - Lower the resolution.
 - Don't use the following image processing settings: Dropout Color="None" and Image Rotation.
 - Lower the Automatic Page Size Detection Priority.
 - Don't compress the file when saving it.
 - Select a caching mode other than "Ram cache" or "Use Both Memory."
 - Increase virtual memory.
- An error occurred in the temporary file. (DS41006)
 - Cause: Accessing the internal temporary file of the scanned image is causing the error. The disk space may be insufficient, the temporary file may be damaged, or other programs may be affecting disk access.
 - Resolution: Increase the free space of the disk. Check the hard disk (chkdsk and scandsk). Make sure that no other program is accessing the disk. If the error message persists, contact the retail store where the product was purchased or the nearest service center.
- Download file not found. (DS00016)
 - Cause: A file specified as a dither pattern or gamma pattern cannot be found.
 - Resolution: Check that the download file is in the specified directory. Otherwise, use the file selection dialog to specify an available file.
- Illegal format or data in download file. (DS41009)
 - Cause: The format of the specified download file is illegal or the data is incorrect.
 - Resolution: Use an editor to check file format and data.

- Mini Driver not found. (DS41012)

Cause: The Mini driver may not have been installed, or may have been deleted.

Resolution: Install the mini-port driver following the instructions mentioned in “3.2 Installing Scanner Driver”.

- Scanner DLL file not found. (DS41004)

Cause: An image scanner was selected, but the DLL file of the selected image scanner has not been installed in the directory in which this driver is installed.

Resolution: Perform the setup again.

- A parameter error has occurred (internally) (DS50001)

- The calling procedure is invalid (internally). (DS50002)

- The area is specified incorrectly (internally). (DS50003)

- The calculation result exceeded the value that can be expressed (internally). (DS50004)

- User definition is not registered (internally).

- Illegal value is received during communication with scanner. (internally). (DS41008)

Cause: This is a program error that occurs during command exchange between the driver and the image scanner.

Resolution: Try again by rebooting the machine. If the error persists, contact the retail store where the product was purchased or the nearest service center.

- A general fault of the MSG_XXXXX response (internally). (DS50150 ~ DS50185)

Cause: This is a program error that usually occurs during internal message transfer. This message involves the sub-messages described later.

Resolution: Contact the retail store where the product was purchased or the nearest service center.

- A general fault of the DAT_XXXXX response (internally). (DS50006 ~ S50077,DS50096 ~ DS50150)

Cause: This is a program error that usually occurs during internal data transfer. This message involves the sub-messages described later.

Resolution: Contact the retail store where the product was purchased or the nearest maintenance service center.

- A general fault of the DAT_XXXXX, MSG_SET, and unsupported type response. (Internally)

Cause: This is a program error that usually occurs while making the internal data settings.

Resolution: Contact the place of purchase or your nearest maintenance and service center.

- An undefined error occurred. (DS50006,DS50015,DS50024,DS50033,DS50042,DS50051,DS50060,DS50069,DS50096,DS50105,DS50114,DS50123,DS50132,DS50141,DS50150,DS50159,DS50168,DS50177)
- Processing cannot be continued because of insufficient memory. (DS50007,DS50016,DS50025,DS50034,DS50043,DS50052,DS50061,DS50070,DS50097,DS50106,DS50115,DS50124,DS50133,DS50142,DS50151,DS50160,DS50169,DS50178)
- The data source cannot be found. (DS50008,DS50017,DS50026,DS50035,DS50044,DS50053,DS50062,DS50071,DS50098,DS50107,DS50116,DS50125,DS50134,DS50143,DS50152,DS50161,DS50170,DS50179)
- The driver is connected to a maximum number of applications supported. (DS50009,DS50018,DS50027,DS50036,DS50045,DS50054,DS50063,DS50072,DS50099,DS50108,DS50117,DS50126,DS50135,DS50144,DS50153,DS50162,DS50171,DS50180)
- An operation error occurred. (DS50010,DS50019,DS50028,DS50037,DS50046,DS50055,DS50064,DS50073,DS50100,DS50109,DS50118,DS50127,DS50136,DS50145,DS50154,DS50163,DS50172,DS50181)
- An invalid function is specified. (DS50011,DS50020,DS50029,DS50038,DS50047,DS50056,DS50065,DS50074,DS50101,DS50110,DS50119,DS50128,DS50137,DS50146,DS50155,DS50164,DS50173,DS50182)
- Unpermitted combination of MSG DG DAT. (DS50012,DS50021,DS50030,DS50039,DS50048,DS50057,DS50066,DS50075,DS50102,DS50111,DS50120,DS50129,DS50138,DS50147,DS50156,DS50165,DS50174,DS50183)
- An invalid value is specified. (DS50013,DS50022,DS50031,DS50040,DS50049,DS50058,DS50067,DS50076,DS50103,DS50112,DS50121,DS50130,DS50139,DS50148,DS50157,DS50166,DS50175,DS50184)
- An invalid procedure of DG DAT MSG is specified. (DS50014,DS50023,DS50032,DS50041,DS50050,DS50059,DS50068,DS50077,DS50104,DS50113,DS50122,DS50131,DS50140,DS50149,DS50158,DS50167,DS50176,DS50185)

Cause: These sub-messages are added to the error messages "General MSG_XXXXX response violation (internal)" and "General DAT_XXXXX violation (internal)." These sub-messages indicate details about the programming errors that occur during message and data processing.

Resolution: Contact the retail store where the product was purchased or the nearest service center.

- It is about time to replace the consumable. Please replace XXXXX in paper feeder if the feeding capability is deteriorated.

(DS42003)(DS42005 or DS42017)(DS42007)(DS42008)

Cause: The consumable displayed in “XXXXX” needs to replace.

Resolution: Replace the consumable displayed in “XXXXX” as soon as possible.

7.1.2 Error messages relating to gamma correction pattern editing

- Enter a positive decimal value.

Cause: A value other than a number has been entered as the gamma correction value.
Alternatively, 0 or a negative value has been entered.

Resolution: Reenter a valid value.

- The file could not be created.

Cause: The file for saving could not be created. There is insufficient space to save the file or the disk to which the file was to be saved is corrupted. Alternatively, writing to the directory in which the file was to be saved may not be allowed or other programs relating to disk access may be affecting performance.

Resolution: Increase the amount of available space on the disk.
Use a utility such as chkdsk or scandisk to check the hard disk.
Ensure that any background programs that access the disk are not operating
If this error message continues to be displayed, contact the place of purchase or your nearest maintenance and service center.

- The file cannot be opened.

Cause: The file could not be opened.
The specified file name may be incorrect or the disk from which it is being read may be corrupted. Alternatively, the specified file may be a write-only file or other programs relating to disk access may be affecting performance.

Resolution: If the specified filename is correct, use a utility such as chkdsk or scandisk to check the hard disk. Ensure that no background programs that access the disk are operating.
If this error message continues to be displayed, contact the place of purchase or your nearest maintenance and service center.

- There is a file formatting error.

Cause: There is an error in the format of the specified file. Either an incorrect file has been specified or the content of the specified file is incorrect.

Resolution: After checking the users' manual, check that the content of the specified file is correct.

7.2 Device Trouble Related to Operation

- The [Scan] button is pressed, but scanning is not performed.

Cause: Has the scanner power been turned on? Has the SCSI cable been connected correctly? Has the correct device type been selected using [Select TWAIN Input Device]?

- The scanner appears to be operating, but no image is displayed.

Cause: Has the SCSI/USB cable between the scanner and the main unit been connected correctly?

Is the [Brightness] value or [Threshold] value too small?

Does the image appear after minimizing and restoring the window?

Is the application set to perform only file output?

Resolution: If the [Restore] button is displayed after the [Minimize] button is pressed, the problem could be the display driver that is being used. Contact the manufacturer of the display driver.

If a file has been selected as output destination with the environment settings by the image scanner operation confirmation utility, try to change to screen output.

- When you don't know how to replace consumables.

Resolution: See the Operator's guide.

7.3 Device Trouble Related to Installation

- Cannot install the driver. (The installation is stopped on the way.)

Cause: Is the older version TWAIN Driver installed in your PC?

Resolution: Please install the driver after uninstalling the old versions.

- Though the PC is activated after connecting the scanner device, the scanner device is not detected automatically.

Cause: Check the followings

1. Is the power of the scanner device turned on?
Is the cable connected correctly?
Has an error occurred?
2. Has the driver of old version already been installed?
3. Was the installation terminated incompletely at the previous time?
4. Isn't the EZ-SCSI of Adaptec installed?

- The scanner does not scan, though the driver has been installed.

Cause: Check the followings.

1. Have the Mini driver and the data source been installed in the right order? (If either of them has not been installed, the scanner does not operate properly)
2. Is the scanner selected correctly in the application software being used?

Resolution:

1. Follow the procedure given in the chapter 3 "Installation" and perform the installation correctly.
2. Refer to the application software manual and select the scanner to use correctly to perform scanning.

8. Appendix

8.1 Relevant Image Scanner Specification

Product:	fi-5015C	(Driver version: 9.19)
Type	:	Desktop
Image sensor	:	Reduced optical system
Operating method	:	Document fixed Flat bed, Automatic Document Feed (ADF), Single-sided reading
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution ¹	:	50 dpi to 600 dpi (at steps of 1dpi)
Grayscale levels (internal)	:	8 bit 256 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (1 pattern)
Color	:	24bit
Flat bed scanning speed	:	Monochrome 5.3 sec or less (A4, 200 dpi) Color 5.3 sec or less (A4, 150dpi)
ADF scanning speed ²	:	<Monochrome Asynchronous Scanning> Single sided:15 pages per minute (200 dpi, A4, 80 g/m ²) <Color Asynchronous Scanning> Single sided:15 pages per minute (150 dpi, A4, 80 g/m ²)
Hopper capacity	:	Maximum 50 sheets (A4, 80 g/m ² , High quality paper, normal temperature and humidity)
Document size	:	Flat bed Maximum 218 mm x 297 mm ADF Minimum 115 mm x 140 mm Maximum 218 mm x 361 mm
Supported regular paper ³	:	A4, A5/A5 Landscape, B5, B6, Letter, Legal, US Executive
Cutout specification	:	Specified (one location)
White level follower	:	Disabled
Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)

¹ Change processing is done inside the driver.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ Not all paper sizes can be used in all devices. For details, refer to the users' manual for the device. For other paper sizes, the customer settings can be used.

Gamma pattern	:	Normal / Custom
Image processing function	:	Reverse, De-Screen, Advanced DTC, 256 Color, 8 Color, 4bit Grayscale
Individual setting	:	Disabled
Multi Image	:	Disabled
Imprinter (Endorse)	:	Disabled
Interface	:	USB 1.1 / 2.0
Prescan	:	Disabled
Preview	:	Disabled
Flip Side Rotation	:	Disabled
Rotation	:	Enabled
Punch hole removal	:	Disabled
Automatic Size and Skew detection	:	White Background
Split Image	:	Disabled
Overscan	:	Enabled (when “White Background” and “ADF” are selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Disabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Disabled
Batch Detection ¹	:	Disabled
Multifeed detection	:	Disabled
Show Multifeed Image	:	Disabled
Pre-Pick	:	Disabled
Check Over-skew	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Disabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled

¹ Batch Detection can not be used with following Caching, “Use Memory on Scanner” or “Use Both Memory”.

Use Image Processing Software Option : Enabled (sold separately)

Double-page spread with Carrier Sheet : Disabled

Cropping with Carrier Sheet : Disabled

<Other functions>

Operator Panel setting : [Scan] / [Send to] button

Device set : Consumables replace (Pad / Pick Roller counter clear)
Offset setting, Power Control setting, Power saving setting

Scanner and Camera Wizard : Enabled (Windows XP / Windows Server® 2003 only)

Product: fi-5110C (Driver version: 9.21)

Type	: Desktop
Image sensor	: Color CCD (Reduced optical system)
Operating method	: Automatic Document Feed (ADF), Simultaneous double-sided scanning ¹ , Long page scanning: Max 216mm x 863mm
Light source	: Fluorescent tube (White)
Basic resolution	: 600 dpi
Output resolution	: 50 dpi to 600 dpi (at steps of 1dpi)
Grayscale levels (internal)	: 10 bit 1024 levels
Grayscale output	: Enabled (8 bits)
Halftone Patterns	: Dither matrix (can be downloaded), Error diffusion
Color (24bit) output	: Enabled
ADF scanning speed ²	: B/W Single sided: 15 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 15 pages per minute (200 dpi, A4, 80g/m ²) (=30 screens per minute) Color Single sided: 15 pages per minute (150 dpi, A4, 80g/m ²) Double sided: 15 pages per minute (150 dpi, A4, 80g/m ²) (=30 screens per minute)
ADF paper chute capacity	: Maximum 50 sheets (A4, 80g/m ² , High quality paper, normal temperature and humidity)
Document size	: Minimum 53mm x 74 mm Maximum 216mm x 356mm
Supported regular paper ³	: A4, A5/A5 Landscape, A6/A6 Landscape, B5, B6/B6 Landscape, Letter, Legal, US Executive, Name card
Scanning area specification	: Specified (one location)
White level follower	: Disabled
Brightness / Threshold / Contrast	: 255 steps

¹ Individual setting : Disabled

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ Not all paper sizes can be used in all devices. For details, refer to the operator's guide of the device. For other paper sizes, the customer settings can be used.

High light / Shadow	:	255 steps (at Color / Grayscale scanning)
Gamma pattern	:	Normal / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Edge emphasis, De-Screen, 256 Color, 8 Color, 4bit Grayscale, Reverse image
Individual setting	:	Disabled
Multi Image	:	Disabled
Imprinter (Endorse)	:	Disabled
Interface	:	USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Disabled
Automatic Size and Skew detection	:	End of Page Detection, White Background
Split Image	:	Disabled
Overscan	:	Enabled (when “White Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Disabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Disabled
Batch Detection	:	Disabled
Multifeed detection	:	Enabled (Check thickness / length)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Disabled
Check Over-skew	:	Disabled
Paper Protection	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware	:	Enabled

Compression)

Filter : Page Edge Filler, Digital Endorse

Drop out color : Enabled

sRGB output : Disabled

Use Image Processing Software : Enabled (sold separately)
Option

Double-page spread with : Disabled
Carrier Sheet

Cropping with Carrier Sheet : Disabled

<Other functions>

Scanner panel setting : Enabled

Prefer Scanning Speed setting : Enabled

Page counter clear : Enabled (2 types)

Offset settings : Enabled (Magnification adjustment and the Offset adjustment)

Power Saving : Enabled

Product: fi-5120C (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	Color CCD (Reduced optical system)
Operating method	:	Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning : Max 216mm x864mm
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	50 dpi to 600 dpi (at steps of 1dpi)
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color (24bit) output	:	Enabled
ADF scanning speed ¹	:	B/W Single sided: 25 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 25 pages per minute (200 dpi, A4, 80g/m ²) (= 50 screens per minute) Color Single sided: 30 pages per minute (150 dpi, A4, 80g/m ²) Double sided: 30 pages per minute (150 dpi, A4, 80g/m ²) (= 60 screens per minute)
ADF paper chute capacity	:	Maximum 50 sheets (A4, 80g/m ² , High quality paper, normal temperature and humidity)
Document size	:	Minimum 53mm x 74 mm Maximum 216mm x 355.6mm
Supported regular paper ²	:	A4, A5/A5 Landscape, A6/A6 Landscape, B5, B6/B6 Landscape, Letter, Legal, US Executive, Name card
Scanning area specification	:	Specified (one location)
White level follower	:	Disabled
Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)

¹ This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

² Not all paper sizes can be used in all devices. For details, refer to the operator's guide of the device. For other paper sizes, the customer settings can be used.

Gamma pattern	:	Normal / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge smoothing, De-Screen, 256 Color, 8 Color, 4bit Grayscale, Reverse image
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern)
Multi Image	:	Disabled
Imprinter (Endorse)	:	With Imprinter option (Reverse side, minimum left margin printing position of 5mm) ¹ Maximum number of characters to be printed: 40 characters Counter display range: 0 to 99999 (at 5 digits display) 0 to 16777215 (at 8 digits display) Direction(Printing): Top to Bottom, Bottom to Top Font (orientation) : Vertical (Normal), Horizontal (Normal / Narrow) Bold font : Enabled
Interface	:	Ultra SCSI, USB1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Disabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Disabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Disabled
Multifeed detection	:	Enabled (Check overlapping / length, Area selection)

¹ If 0 mm is specified as the printing position, printing will begin 5 mm from the edge of the page.

Show Multifeed Image	:	Disabled
Pre-Pick	:	Disabled
Check Over-skew	:	Disabled
Paper Protection	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (sold separately)
Double-page spread with Carrier Sheet	:	Disabled
Cropping with Carrier Sheet	:	Disabled
<Other functions>		
Operator Panel setting	:	[Scan] / [Send to] button
Prefer Scanning Speed setting	:	Enabled
Device set	:	Consumables replace (Pad / Pick Roller / Remaining Ink counter clear) Offset Setting, Vertical magnification Adjustment, Lamp timer Area Selection for Multifeed Detection, Power ON/OFF Control setting

Product: fi-5220C (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	Color CCD (Reduced optical system)
Operating method	:	Document fixed Flat bed (FB), Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning : Max 216mm x 864mm
Light source	:	Fluorescent tube (White)
Basic resolution	:	600dpi
Output resolution	:	50 dpi to 600 dpi (at steps of 1dpi)
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color (24bit) output	:	Enabled
Flat bed scanning speed	:	B/W : 2.2 sec or less (200 dpi, A4) Color : 1.7 sec or less (150 dpi, A4)
ADF scanning speed ¹	:	B/W Single sided: 25 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 25 pages per minute (200 dpi, A4, 80g/m ²) (=50 screens per minute) Color Single sided: 30 pages per minute (150 dpi, A4, 80g/m ²) Double sided: 30 pages per minute (150 dpi, A4, 80g/m ²) (=60 screens per minute)
ADF paper chute capacity	:	Maximum 50 sheets (A4, 80g/m ² , High quality paper, normal temperature and humidity)
Document size	:	Minimum 53mm x 74 mm Maximum 216mm x 355.6mm <ADF> Maximum 216 mm x 297 mm <Flat Bed>
Supported regular paper ²	:	A4, A5/A5 Landscape, A6/A6 Landscape, B5, B6/B6 Landscape, Letter, Legal, US Executive, Name card
Scanning area specification	:	Specified (one location)
White level follower	:	Disabled
Brightness / Threshold /	:	255 steps

¹ This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

² Not all paper sizes can be used in all devices. For details, refer to the operator's guide of the device. For other paper sizes, the customer settings can be used.

Contrast	
High light / Shadow	: 255 steps (at Color / Grayscale scanning)
Gamma pattern	: Normal / Custom / Bright
Image processing function	: Simplified Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge smoothing, De-Screen, 256 Color, 8 Color, 4bit Grayscale, Reverse image
Individual setting	: Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern)
Multi Image	: Disabled
Imprinter (Endorse)	: Disabled
Interface	: Ultra SCSI, USB1.1/2.0
Prescan	: Disabled
Preview	: Enabled
Flip Side Rotation	: Enabled
Rotation	: Enabled
Punch hole removal	: Disabled
Automatic Size and Skew detection	: End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	: Disabled
Overscan	: Enabled (when “Black Background” is selected)
Cutting out Size	: Disabled
Buffer scan ([Use Memory on Scanner]) function	: Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	: Enabled
Batch Detection	: Disabled
Multifeed detection	: Enabled (Check overlapping / length, Area selection)
Show Multifeed Image	: Disabled
Pre-Pick	: Disabled
Check Over-skew	: Disabled
Paper Protection	: Disabled

Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (sold separately)
Double-page spread with Carrier Sheet	:	Disabled
Cropping with Carrier Sheet	:	Disabled
 <Other functions>		
Operator Panel setting	:	[Scan] / [Send to] button
Prefer Scanning Speed setting	:	Enabled
Device set	:	Consumables replace (Pad / Pick Roller counter clear) Offset Setting, Vertical magnification Adjustment, Lamp timer Area Selection for Multifeed Detection, Power ON/OFF Control setting

Product: fi-5530C (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	Color CCD
Operating method	:	Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning (Resolution free) Black&White : Maximum 297mm x 864mm Grayscale, Color : Maximum 297mm x 864mm
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	50 - 600 dpi (at steps of 1 dpi)
Grayscale levels (internal)	:	10 bit 1024 levels
Gray scale (8 bits) output	:	Enabled
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color (24bits) output	:	Enabled
ADF scanning speed ¹	:	Black & White Single sided: 35 pages per minute (200 dpi, A4, 80 kg) Double sided: 35 pages per minute (200 dpi, A4, 80 kg) (=70 screens per minute) Color Single sided: 45 pages per minute (150 dpi, A4, 80 kg) Double sided: 45 pages per minute (150 dpi, A4, 80kg) (=90 screens per minute)
Hopper capacity	:	Maximum 100 sheets, (ream weight: 80 kg, A4 [High quality paper, Normal temperature and humidity])
Document size	:	Minimum 53 mm x 74 mm Maximum 297 mm x 432 mm.
Supported regular paper ²	:	A3, A4/A4 Landscape, A5/A5 Landscape, A6/A6 Landscape, B4, B5/B5 Landscape, B6/B6 Landscape, Double Letter, Letter/Letter Landscape, Legal, US Executive/US Executive Landscape, Business Card
Scanning area specification	:	Specified (one location)
White level follower	:	Disabled

¹ This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

² Not all paper sizes can be used in all devices. For details, refer to the operator's guide of the device. For other paper sizes, the customer settings can be used.

Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)
Gamma pattern	:	Normal / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge smoothing, De-screen, 256 color, 8 color, 4bit Grayscale, Reverse image
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern)
Multi Image	:	Disabled
Imprinter (Endorse)	:	With Imprinter option (Reverse side, minimum left margin printing position of 5mm) ¹ Maximum number of characters to be printed: 40 characters Counter display range: 0 to 99999 (at 5 digits display) 0 to 16777215 (at 8 digits display) Direction(Printing): Top to Bottom, Bottom to Top Font (orientation) : Vertical (Normal), Horizontal (Normal / Narrow) Bold font : Enabled
Interface	:	Ultra SCSI, USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Disabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Disabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Disabled

¹ If 0 mm is specified as the printing position, printing will begin 5 mm from the edge of the page.

Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Disabled
Batch Detection	:	Disabled
Multifeed detection	:	Enabled (Check overlapping / length, Area selection)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Disabled
Paper Protection	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (sold separately)
Double-page spread with Carrier Sheet	:	Disabled
Cropping with Carrier Sheet	:	Disabled
 <Other functions>		
Operator Panel setting	:	[Scan] / [Send to] button
Prefer Scanning Speed setting	:	Enabled
Device set	:	Consumables replace (Pad / Pick Roller / Remaining Ink counter clear) Offset Setting, Vertical magnification Adjustment, Lamp timer Area Selection for Multifeed Detection, Power ON/OFF Control setting

Product: fi-5530C2 (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	Color CCD
Operating method	:	Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning (Resolution free) Black&White : Maximum 297mm x 864mm Grayscale, Color : Maximum 297mm x 864mm
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	50 - 600 dpi (at steps of 1 dpi), 1200dpi
Grayscale levels (internal)	:	10 bit 1024 levels
Gray scale (8 bits) output	:	Enabled
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color (24bits) output	:	Enabled
ADF scanning speed ¹	:	Black & White Single sided: 35 pages per minute (200 dpi, A4, 80 kg) Double sided: 35 pages per minute (200 dpi, A4, 80 kg) (=70 screens per minute) Color Single sided: 45 pages per minute (150 dpi, A4, 80 kg) Double sided: 45 pages per minute (150 dpi, A4, 80kg) (=90 screens per minute)
Hopper capacity	:	Maximum 100 sheets, (ream weight: 80 kg, A4 [High quality paper, Normal temperature and humidity])
Document size	:	Minimum 53 mm x 74 mm Maximum 297 mm x 432 mm.
Supported regular paper ²	:	A3, A4/A4 Landscape, A5/A5 Landscape, A6/A6 Landscape, B4, B5/B5 Landscape, B6/B6 Landscape, Double Letter, Letter/Letter Landscape, Legal, US Executive/US Executive Landscape, Business Card
Scanning area specification	:	Specified (one location)
White level follower	:	Disabled
Brightness / Threshold / Contrast	:	255 steps

¹ This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

² Not all paper sizes can be used in all devices. For details, refer to the operator's guide of the device. For other paper sizes, the customer settings can be used.

High light / Shadow	:	255 steps (at Color / Grayscale scanning)
Gamma pattern	:	Normal / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge smoothing, De-screen, 256 color, 8 color, 4bit Grayscale, Reverse image
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	With Imprinter option (Reverse side, minimum left margin printing position of 5mm) ¹ Maximum number of characters to be printed: 43 characters Counter display range: The number of digits is from 3 to 8 0 to 99999999 Direction(Printing): Top to Bottom Font (orientation) : Vertical (Normal), Horizontal (Normal / Narrow) Bold font : Enabled
Interface	:	Ultra SCSI, USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Enabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Disabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Disabled

¹ If 0 mm is specified as the printing position, printing will begin 5 mm from the edge of the page.

Batch Detection	:	Disabled
Multifeed detection	:	Enabled (Check overlapping / length, Area selection)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Disabled
Paper Protection	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (sold separately)
Double-page spread with Carrier Sheet	:	Disabled
Cropping with Carrier Sheet	:	Disabled
 <Other functions>		
Operator Panel setting	:	[Scan] / [Send to] button
Prefer Scanning Speed setting	:	Enabled
Device set	:	Consumables replace (Pad / Pick Roller / Remaining Ink counter clear) Offset Setting, Vertical magnification Adjustment, Lamp timer Area Selection for Multifeed Detection, Power ON/OFF Control setting

Product: fi-5650C (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	Color CCD + Reduced optical system
Operating method	:	Automatic Document Feed(ADF), Simultaneous double-sided scanning Long page scanning (305mm x 864mm)
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	Standard: 50 dpi to 600 dpi (at steps of 1dpi)
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color output	:	Enabled (24bit)
ADF scanning speed ¹	:	B/W Single sided: 55 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 55 pages per minute (200 dpi, A4, 80g/m ²) (=110 screens per minute) Color Single sided: 55 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 55 pages per minute (200 dpi, A4, 80g/m ²) (=110 screens per minute)
ADF paper chute capacity	:	Maximum 200 sheets, ream weight: 80 kg, A4 [High quality paper, normal temperature and humidity]
Document size	:	Minimum 53mm x 74mm, Maximum 297 mm x 432 mm
Supported regular paper ²	:	A3, A4/A4 Landscape, A5/A5 Landscape, A6/A6 Landscape, B4, B5/B5 Landscape, B6/B6 Landscape, Letter/Letter Landscape, Double Letter, Legal, US Executive/US Executive Landscape
Isolation specification	:	Specified (one location)
White level follower	:	Enabled
Brightness / Threshold / Contrast	:	255 steps

¹ This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

² Not all paper sizes can be used in all devices. For details, refer to the operator's guide of the device. For other paper sizes, the customer settings can be used.

High light / Shadow	:	255 steps (at Color / Grayscale scanning)
Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Edge emphasis, Edge extraction, De-Screen, SEE (Selectable Edge Enhancement), Reverse image (at Black & White, Grayscale), 256 Color, 8 Color, 4bit Grayscale
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern / Image processing function)
Multi Image	:	Disabled
Imprinter (Endorse)	:	With Imprinter option (Reverse side, minimum left margin printing position of 5mm) ¹ Maximum number of characters to be printed: 40 characters Counter display range: 0 to 99999 (at 5 digits display) 0 to 16777215 (at 8 digits display) Direction(Printing): Top to Bottom, Bottom to Top Font (orientation) : Vertical / Horizontal Bold font : Enabled
Interface	:	SCSI-II, USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Disabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Disabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled

¹ If 0 mm is specified as the printing position, printing will begin 5 mm from the edge of the page.

Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Enabled
Multifeed detection	:	Enabled (Check overlapping / length)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Disabled
Paper Protection	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (sold separately)
Double-page spread with Carrier Sheet	:	Disabled
Cropping with Carrier Sheet	:	Disabled

Product: fi-5750C (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	Color CCD + Reduced optical system
Operating method	:	Document fixed Flat bed(FB), Automatic Document Feed(ADF), Simultaneous double-sided scanning Long page scanning (305mm x 864mm)
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	Standard: 50 dpi to 600 dpi (at steps of 1dpi)
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color output	:	Enabled (24bit)
Flat bed scanning speed	:	B/W : 0.9 sec or less (200 dpi, A4) Color : 0.9 sec or less (200 dpi, A4)
ADF scanning speed ¹	:	B/W Single sided: 55 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 55 pages per minute (200 dpi, A4, 80g/m ²) (=110 screens per minute) Color Single sided: 55 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 55 pages per minute (200 dpi, A4, 80g/m ²) (=110 screens per minute)
ADF paper chute capacity	:	Maximum 200 sheets, ream weight: 80 kg, A4 [High quality paper, normal temperature and humidity]
Document size	:	Minimum 53mm x 74mm, Maximum 297 mm x 432 mm
Supported regular paper ²	:	A3, A4/A4 Landscape, A5/A5 Landscape, A6/A6 Landscape, B4, B5/B5 Landscape, B6/B6 Landscape, Letter/Letter Landscape, Double Letter, Legal, US Executive/US Executive Landscape
Isolation specification	:	Specified (one location)

¹ This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

² Not all paper sizes can be used in all devices. For details, refer to the operator's guide of the device. For other paper sizes, the customer settings can be used.

White level follower	:	Enabled
Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)
Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Edge emphasis, Edge extraction, De-Screen, SEE (Selectable Edge Enhancement), Reverse image (at Black & White, Grayscale), 256 Color, 8 Color, 4bit Grayscale
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern / Image processing function)
Multi Image	:	Disabled
Imprinter (Endorse)	:	Disabled
Interface	:	SCSI-II, USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Disabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Disabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Enabled
Multifeed detection	:	Enabled (Check overlapping / length)
Show Multifeed Image	:	Disabled

Pre-Pick	:	Enabled
Check Over-skew	:	Disabled
Paper Protection	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (sold separately)
Double-page spread with Carrier Sheet	:	Disabled
Cropping with Carrier Sheet	:	Disabled

Product: fi-5900C (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	Reduced optical system
Operating method	:	Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning (305mm x 3175mm) ^{1,2}
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	Standard: 50 dpi to 600 dpi (at steps of 1dpi)
Grayscale levels (internal)	:	10 bit 1024 levels
Gray scale (8 bits) output	:	Enabled
Halftone Patterns	:	Dither matrix, Error diffusion
Color output	:	24bit
ADF scanning speed ³	:	<Monochrome Asynchronous Scanning> Single sided: 100 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 100 pages per minute (200 dpi, A4, 80g/m ²) (= 200 screens per minute) <Color Asynchronous Scanning> Single sided: 100 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 100 pages per minute (200 dpi, A4, 80g/m ²) (= 200 screens per minute)
Hopper capacity	:	Maximum 500 sheets, (80g/m ² , A4 [High quality paper, Normal temperature and humidity])
Document size	:	Minimum 53mm x 74mm, Maximum 305 mm x 432 mm
Supported regular paper ⁴	:	A3, A4/A4 Landscape, A5/A5 Landscape, A6/A6 Landscape, B4, B5/B5 Landscape, B6/B6 Landscape, Double Letter, Letter/Letter Landscape, Legal, US Executive/US Executive Landscape, Business Card
Cutout specification	:	Specified (one location)
White level follower	:	Enabled

¹ 305mm×878mm max. on some scanner models

² If you specify a “long page” which is longer than 864mm, you must specify a resolution of 200dpi or less.

³ This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration. Color scanning speed is a value with JPEG enabled.

⁴ Not all paper sizes can be used in all devices. For details, refer to the operator's guide of the device. For other paper sizes, the customer settings can be used.

Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)
Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge extraction, De-Screen, SEE(Selectable Edge Enhancement), Reverse image (at Black & White, Grayscale), 256 Color, 8 Color, 4bit Grayscale
Individual setting	:	Enabled (Image Mode / Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern / Image processing function)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	With Imprinter option (Pre-Imprinter / Post-Imprinter) (Reverse side, minimum left margin printing position of 5 mm) ¹ Maximum number of characters to be printed ² : 43 characters Counter display range ² : 3 to 8 characters (0 to 99999999) Direction (Printing): Top to Bottom Font (orientation) : Vertical (Normal) , Horizontal (Normal / Narrow) Bold font : Enabled Pre-Imprinter / Post-Imprinter switching: Enabled
Interface	:	Ultra Wide SCSI, USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection ³	:	End of Page Detection, Automatic Deskew, Automatic Page Size Detection, Black Background

¹ If 0 mm is specified as the endorser print position, printing will begin 5 mm from the edge of the page.

² 40 characters on some scanner models (43 characters on the scanner which has an 8-digit counter)

The counter display range is 0 to 99999 (5-digit counter); 0 to 16777215 (8-digit counter).

³ The “Automatic Deskew” and “Automatic Page Size Detection” are not supported with color scanning.

Split Image	:	Disabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection ¹	:	Enabled
Multifeed detection	:	Enabled (Check overlapping / length)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Enabled
Paper Protection	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled(Red, Green, Blue, None, Custom, Panel setting)
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (included as a standard function)
Double-page spread with Carrier Sheet	:	Disabled
Cropping with Carrier Sheet	:	Disabled
<Other functions>		
Operator Panel setting	:	[Scan] / [Send to] button
Prefer Scanning Speed setting	:	Enabled
Device set	:	Consumables replace (Pad / Pick Roller / Break Roller / Separator Roller / Remaining Ink counter clear) Offset Setting, Vertical magnification Adjustment, Power Saving setting Area Selection for Multifeed Detection

¹ Batch Detection cannot be used with following Caching, “Use Memory on Scanner” or “Use Both Memory”.

Product: fi-5950 (Driver version: 10.10)

Type	:	Desktop
Image sensor	:	Reduced optical system
Operating method	:	Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning (305mm x 3175mm) ¹
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	Standard: 50 dpi to 600 dpi (at steps of 1dpi)
Grayscale levels (internal)	:	10 bit 1024 levels
Gray scale (8 bits) output	:	Enabled
Halftone Patterns	:	Dither matrix, Error diffusion
Color	:	24bit
ADF scanning speed ²	:	<Monochrome Asynchronous Scanning> Single sided: 105 pages per minute (200 dpi, A4, 80 g/m ²) Double sided: 105 pages per minute (200 dpi, A4, 80g/m ²) (= 210 screens per minute) <Color Asynchronous Scanning> Single sided: 105 pages per minute (200 dpi, A4, 80 g/m ²) Double sided: 105 pages per minute (200 dpi, A4, 80 g/m ²) (= 210 screens per minute)
Hopper capacity	:	Maximum 500 sheets (A4, 80 g/m ² , High quality paper, normal temperature and humidity)
Document size	:	Minimum 53mm x 74mm, Maximum 305 mm x 432 mm
Supported regular paper ³	:	A3, A4/A4 Landscape, A5/A5 Landscape, A6/A6 Landscape, B4, B5/B5 Landscape, B6/B6 Landscape, Double Letter, Letter/Letter Landscape, Legal, US Executive/US Executive Landscape, Business Card
Cutout specification	:	Specified (one location)
White level follower	:	Enabled
Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)

¹ If you specify a “long page” which is longer than 864mm, you must specify a resolution of 200dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration. Color scanning speed is a value with JPEG enabled.

³ Not all paper sizes can be used in all devices. For details, refer to the operator’s guide of the device. For other paper sizes, the customer settings can be used.

Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge extraction, De-Screen, SEE (Selectable Edge Enhancement), Reverse image (at Black & White, Grayscale), 256 Color, 8 Color, 4bit Grayscale
Individual setting	:	Enabled (Image Mode / Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern / Image processing function)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	With Imprinter option (Pre-Imprinter / Post-Imprinter) (Reverse side, minimum left margin printing position of 5 mm) ¹ Maximum number of characters to be printed ² : 43 characters Counter display range ² : 3 to 8 characters (0 to 99999999) Direction (Printing): Top to Bottom Font (orientation) : Vertical (Normal) , Horizontal (Normal / Narrow) Bold font : Enabled Pre-Imprinter / Post-Imprinter switching: Enabled
Interface	:	Ultra Wide SCSI, USB 1.1 / 2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection ³	:	End of Page Detection, Automatic Deskew, Automatic Page Size Detection, Black Background
Split Image	:	Enabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled

¹ If 0 mm is specified as the endorser print position, printing will begin 5 mm from the edge of the page.

² 40 characters on some scanner models (43 characters on the scanner which has an 8-digit counter)

The counter display range is 0 to 99999 (5-digit counter); 0 to 16777215 (8-digit counter).

³ The “Automatic Deskew” and “Automatic Page Size Detection” are not supported with color scanning.

Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection ¹	:	Enabled
Multifeed detection	:	Enabled (Check overlapping / length)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Enabled
Paper Protection	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled (Red, Green, Blue, None, Custom, Panel setting)
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (included as a standard function)
Double-page spread with Carrier Sheet	:	Disabled
Cropping with Carrier Sheet	:	Disabled
<Other functions>		
Operator Panel setting	:	[Scan] / [Send to] button
Prefer Scanning Speed setting	:	Enabled
Device set	:	Consumables replace (Pad / Pick Roller / Break Roller / Separator Roller / Remaining Ink counter clear) Offset Setting, Vertical magnification Adjustment, Power Saving setting Area Selection for Multifeed Detection

¹ Batch Detection can not be used with following Caching, “Use Memory on Scanner” or “Use Both Memory”.

Product: fi-60F (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	LED(RGB) + Contact Image Sensor
Operating method	:	Document fixed Flat bed(FB)
Light source	:	LED (R, G, B)
Basic resolution	:	600 dpi
Output resolution	:	Standard: 50 dpi to 600 dpi (at steps of 1dpi)
Grayscale levels (internal)	:	16 bit 65536 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color output	:	Enabled (24bit)
Flat bed scanning speed	:	B/W : 1.0 sec or less (200 dpi, A6) Color : 1.3 sec or less (150 dpi, A6)
Document size	:	Maximum 148 mm x 105 mm
Supported regular paper ¹	:	A6, Name card
Isolation specification	:	Specified (one location)
White level follower	:	Disabled
Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)
Gamma pattern	:	Normal / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Edge emphasis, Edge extraction, De-Screen, Reverse image, 256 Color, 8 Color, 4bit Grayscale
Individual setting	:	Disabled
Multi Image	:	Disabled
Imprinter (Endorse)	:	Disabled
Interface	:	USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Disabled

¹ For other paper sizes, the customer settings can be used.

Rotation	:	Enabled
Punch hole removal	:	Disabled
Automatic Size and Skew detection	:	Automatic Page Size Detection
Split Image	:	Disabled
Overscan	:	Disabled
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Disabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Disabled
Batch Detection	:	Disabled
Multifeed detection	:	Disabled
Show Multifeed Image	:	Disabled
Pre-Pick	:	Disabled
Check Over-skew	:	Disabled
Paper Protection	:	Disabled
Blank page skip	:	Disabled
JPEG Transfer (Hardware Compression)	:	Disabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (sold separately)
Double-page spread with Carrier Sheet	:	Disabled
Cropping with Carrier Sheet	:	Disabled
 <Other functions>		
Device set	:	Offset Setting, Vertical magnification Adjustment

Product: fi-6110 (Driver version: 10.21)

Type	:	Desktop
Image sensor	:	Color CCD (Reduced optical system)
Operating method	:	Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning : Max 216mm x3175mm ¹
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	50 dpi to 600 dpi (at steps of 1dpi), 1200dpi
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color output	:	Enabled
ADF scanning speed ²	:	B/W Single sided: 20 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 20 pages per minute (200 dpi, A4, 80g/m ²) (= 40 screens per minute) Color Single sided: 20 pages per minute (150 dpi, A4, 80g/m ²) Double sided: 20 pages per minute (150 dpi, A4, 80g/m ²) (= 40 screens per minute)
ADF paper chute capacity	:	Maximum 50 sheets (A4, 80g/m ² , High quality paper, normal temperature and humidity)
Document size	:	Minimum 53mm x 74 mm Maximum 216mm x 355.6mm
Supported regular paper ³	:	A4, A5/A5 Landscape, A6/A6 Landscape, B5, B6/B6 Landscape, Letter, Legal, US Executive, Name card
Scanning area specification	:	Specified (one location)
White level follower	:	Disabled
Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)

¹ If you specify a “long page” which is longer than 864mm, you must specify a resolution of 200dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ Not all paper sizes can be used in all devices. For details, refer to the operator’s guide of the device. For other paper sizes, the customer settings can be used.

Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge smoothing, De-Screen, 256 Color, 8 Color, 4bit Grayscale, Reverse image
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	Disabled
Interface	:	USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Disabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, White background
Split Image	:	Enabled
Overscan	:	Enabled (when “White background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Disabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Disabled
Batch Detection	:	Disabled
Multifeed detection	:	Enabled (Check overlapping / length, Area selection)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Disabled
Check Over-skew	:	Disabled
Paper Protection	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled

Use Image Processing Software Option : Enabled (sold separately)

Double-page spread with Carrier Sheet : Enabled

Cropping with Carrier Sheet : Enabled

<Other functions>

Operator Panel setting : [Scan] / [Send to] button

Prefer Scanning Speed setting : Enabled

Device set : Consumables replace (Pad/ Pick Roller counter clear)
Offset Setting, Vertical magnification Adjustment, Lamp timer
Area Selection for Multifeed Detection, Power ON/OFF Control setting

Product: fi-6130 (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	Color CCD (Reduced optical system)
Operating method	:	Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning : Max 216mm x3175mm ¹
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	50 dpi to 600 dpi (at steps of 1dpi), 1200dpi
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color output	:	Enabled
ADF scanning speed ²	:	B/W Single sided: 30 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 30 pages per minute (200 dpi, A4, 80g/m ²) (= 60 screens per minute) Color Single sided: 30 pages per minute (150 dpi, A4, 80g/m ²) Double sided: 30 pages per minute (150 dpi, A4, 80g/m ²) (= 60 screens per minute)
ADF paper chute capacity	:	Maximum 50 sheets (A4, 80g/m ² , High quality paper, normal temperature and humidity)
Document size	:	Minimum 53mm x 74 mm Maximum 216mm x 355.6mm
Supported regular paper ³	:	A4, A5/A5 Landscape, A6/A6 Landscape, B5, B6/B6 Landscape, Letter, Legal, US Executive, Name card
Scanning area specification	:	Specified (one location)
White level follower	:	Disabled
Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)

¹ If you specify a “long page” which is longer than 864mm, you must specify a resolution of 200dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ Not all paper sizes can be used in all devices. For details, refer to the operator’s guide of the device. For other paper sizes, the customer settings can be used.

Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge smoothing, De-Screen, 256 Color, 8 Color, 4bit Grayscale, Reverse image
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	With Imprinter option (Reverse side, minimum left margin printing position of 5mm) ¹ Maximum number of characters to be printed: 43 characters Counter display range: The number of digits is from 3 to 8 0 to 99999999 Direction(Printing): Top to Bottom Font (orientation) : Vertical (Normal), Horizontal (Normal / Narrow) Bold font : Enabled
Interface	:	USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Enabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Disabled
Multifeed detection	:	Enabled (Check overlapping / length, Area selection)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Disabled

¹ If 0 mm is specified as the printing position, printing will begin 5 mm from the edge of the page.

Paper Protection	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (sold separately)
Double-page spread with Carrier Sheet	:	Enabled
Cropping with Carrier Sheet	:	Disabled
<Other functions>		
Operator Panel setting	:	[Scan] / [Send to] button
Prefer Scanning Speed setting	:	Enabled
Device set	:	Consumables replace (Break Roller / Pick Roller / Remaining Ink counter clear) Offset Setting, Vertical magnification Adjustment, Lamp timer Area Selection for Multifeed Detection, Power ON/OFF Control setting

Product: fi-6130Z (Driver version: 10.21)

Type	:	Desktop
Image sensor	:	Color CCD (Reduced optical system)
Operating method	:	Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning : Max 216mm x3175mm ¹
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	50 dpi to 600 dpi (at steps of 1dpi), 1200dpi
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color output	:	Enabled
ADF scanning speed ²	:	B/W Single sided: 40 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 40 pages per minute (200 dpi, A4, 80g/m ²) (= 80 screens per minute) Color Single sided: 40 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 40 pages per minute (200 dpi, A4, 80g/m ²) (= 80 screens per minute)
ADF paper chute capacity	:	Maximum 50 sheets (A4, 80g/m ² , High quality paper, normal temperature and humidity)
Document size	:	Minimum 53mm x 74 mm Maximum 216mm x 355.6mm
Supported regular paper ³	:	A4, A5/A5 Landscape, A6/A6 Landscape, B5, B6/B6 Landscape, Letter, Legal, US Executive, Name card
Scanning area specification	:	Specified (one location)
White level follower	:	Disabled
Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)

¹ If you specify a “long page” which is longer than 864mm, you must specify a resolution of 200dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ Not all paper sizes can be used in all devices. For details, refer to the operator’s guide of the device. For other paper sizes, the customer settings can be used.

Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge smoothing, De-Screen, 256 Color, 8 Color, 4bit Grayscale, Reverse image
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	With Imprinter option (Reverse side, minimum left margin printing position of 5mm) ¹ Maximum number of characters to be printed: 43 characters Counter display range: The number of digits is from 3 to 8 0 to 99999999 Direction(Printing): Top to Bottom Font (orientation) : Vertical (Normal), Horizontal (Normal / Narrow) Bold font : Enabled
Interface	:	USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Enabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Disabled
Multifeed detection	:	Enabled (Check overlapping / length, Area selection)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Disabled

¹ If 0 mm is specified as the printing position, printing will begin 5 mm from the edge of the page.

Paper Protection	:	Enabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (sold separately)
Double-page spread with Carrier Sheet	:	Enabled
Cropping with Carrier Sheet	:	Enabled
 <Other functions>		
Operator Panel setting	:	[Scan] / [Send to] button
Prefer Scanning Speed setting	:	Enabled
Device set	:	Consumables replace (Break Roller / Pick Roller / Remaining Ink counter clear) Offset Setting, Vertical magnification Adjustment, Lamp timer Area Selection for Multifeed Detection, Power ON/OFF Control setting

Product: fi-6140 (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	Color CCD (Reduced optical system)
Operating method	:	Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning : Max 216mm x3175mm ¹
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	50 dpi to 600 dpi (at steps of 1dpi), 1200dpi
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color output	:	Enabled
ADF scanning speed ²	:	B/W Single sided: 60 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 60 pages per minute (200 dpi, A4, 80g/m ²) (= 120 screens per minute) Color Single sided: 40 pages per minute (150 dpi, A4, 80g/m ²) Double sided: 40 pages per minute (150 dpi, A4, 80g/m ²) (= 80 screens per minute)
ADF paper chute capacity	:	Maximum 50 sheets (A4, 80g/m ² , High quality paper, normal temperature and humidity)
Document size	:	Minimum 53mm x 74 mm Maximum 216mm x 355.6mm
Supported regular paper ³	:	A4, A5/A5 Landscape, A6/A6 Landscape, B5, B6/B6 Landscape, Letter, Legal, US Executive, Name card
Scanning area specification	:	Specified (one location)
White level follower	:	Disabled
Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)

¹ If you specify a “long page” which is longer than 864mm, you must specify a resolution of 200dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ Not all paper sizes can be used in all devices. For details, refer to the operator’s guide of the device. For other paper sizes, the customer settings can be used.

Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), De-Screen, Edge emphasis, 256 Color, 8 Color, 4bit Grayscale
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	With Imprinter option (Reverse side, minimum left margin printing position of 5mm) ¹ Maximum number of characters to be printed: 43 characters Counter display range: The number of digits is from 3 to 8 0 to 99999999 Direction(Printing): Top to Bottom Font (orientation) : Vertical (Normal), Horizontal (Normal / Narrow) Bold font : Enabled
Interface	:	Ultra SCSI, USB1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Enabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Disabled
Multifeed detection	:	Enabled (Check overlapping / length, Area selection)

¹ If 0 mm is specified as the printing position, printing will begin 5 mm from the edge of the page.

Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Disabled
Paper Protection	:	Enabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (sold separately)
Double-page spread with Carrier Sheet	:	Enabled
Cropping with Carrier Sheet	:	Disabled
<Other functions>		
Operator Panel setting	:	[Scan] / [Send to] button
Prefer Scanning Speed setting	:	Enabled
Device set	:	Consumables replace (Break Roller / Pick Roller / Remaining Ink counter clear) Offset Setting, Vertical magnification Adjustment, Lamp timer Area Selection for Multifeed Detection, Power ON/OFF Control setting

Product: fi-6140Z (Driver version: 10.21)

Type	:	Desktop
Image sensor	:	Color CCD (Reduced optical system)
Operating method	:	Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning : Max 216mm x3175mm ¹
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	50 dpi to 600 dpi (at steps of 1dpi), 1200dpi
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color output	:	Enabled
ADF scanning speed ²	:	B/W Single sided: 60 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 60 pages per minute (200 dpi, A4, 80g/m ²) (= 120 screens per minute) Color Single sided: 60 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 60 pages per minute (200 dpi, A4, 80g/m ²) (= 120 screens per minute)
ADF paper chute capacity	:	Maximum 50 sheets (A4, 80g/m ² , High quality paper, normal temperature and humidity)
Document size	:	Minimum 53mm x 74 mm Maximum 216mm x 355.6mm
Supported regular paper ³	:	A4, A5/A5 Landscape, A6/A6 Landscape, B5, B6/B6 Landscape, Letter, Legal, US Executive, Name card
Scanning area specification	:	Specified (one location)
White level follower	:	Disabled
Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)

¹ If you specify a “long page” which is longer than 864mm, you must specify a resolution of 200dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ Not all paper sizes can be used in all devices. For details, refer to the operator’s guide of the device. For other paper sizes, the customer settings can be used.

Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge smoothing, De-Screen, 256 Color, 8 Color, 4bit Grayscale, Reverse image
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	With Imprinter option (Reverse side, minimum left margin printing position of 5mm) ¹ Maximum number of characters to be printed: 43 characters Counter display range: The number of digits is from 3 to 8 0 to 99999999 Direction(Printing): Top to Bottom Font (orientation) : Vertical (Normal), Horizontal (Normal / Narrow) Bold font : Enabled
Interface	:	Ultra SCSI, USB1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Enabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Disabled

¹ If 0 mm is specified as the printing position, printing will begin 5 mm from the edge of the page.

Multifeed detection	:	Enabled (Check overlapping / length, Area selection)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Disabled
Paper Protection	:	Enabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (sold separately)
Double-page spread with Carrier Sheet	:	Enabled
Cropping with Carrier Sheet	:	Enabled
<Other functions>		
Operator Panel setting	:	[Scan] / [Send to] button
Prefer Scanning Speed setting	:	Enabled
Device set	:	Consumables replace (Break Roller / Pick Roller / Remaining Ink counter clear) Offset Setting, Vertical magnification Adjustment, Lamp timer Area Selection for Multifeed Detection, Power ON/OFF Control setting

Product: fi-6230 (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	Color CCD (Reduced optical system)
Operating method	:	Document fixed Flat bed (FB), Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning : Max 216mm x 3175mm ¹
Light source	:	Fluorescent tube (White)
Basic resolution	:	600dpi
Output resolution	:	50 dpi to 600 dpi (at steps of 1dpi), 1200dpi
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color (24bit) output	:	Enabled
Flat bed scanning speed	:	B/W : 1.7 sec or less (200 dpi, A4) Color : 1.7 sec or less (150 dpi, A4)
ADF scanning speed ²	:	B/W Single sided: 30 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 30 pages per minute (200 dpi, A4, 80g/m ²) (=60 screens per minute) Color Single sided: 30 pages per minute (150 dpi, A4, 80g/m ²) Double sided: 30 pages per minute (150 dpi, A4, 80g/m ²) (=60 screens per minute)
ADF paper chute capacity	:	Maximum 50 sheets (A4, 80g/m ² , High quality paper, normal temperature and humidity)
Document size	:	Minimum 53mm x 74 mm Maximum 216mm x 355.6mm <ADF> Maximum 216 mm x 297 mm <Flat Bed>
Supported regular paper ³	:	A4, A5/A5 Landscape, A6/A6 Landscape, B5, B6/B6 Landscape, Letter, Legal, US Executive, Name card
Scanning area specification	:	Specified (one location)
White level follower	:	Disabled

¹ If you specify a “long page” which is longer than 864mm, you must specify a resolution of 200dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ Not all paper sizes can be used in all devices. For details, refer to the operator’s guide of the device. For other paper sizes, the customer settings can be used.

Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)
Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge smoothing, De-Screen, 256 Color, 8 Color, 4bit Grayscale, Reverse image
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	Disabled
Interface	:	USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Enabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Disabled
Multifeed detection	:	Enabled (Check overlapping / length, Area selection)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Disabled
Paper Protection	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse

Drop out color : Enabled
sRGB output : Enabled
Use Image Processing Software Option : Enabled (sold separately)
Double-page spread with Carrier Sheet : Enabled
Cropping with Carrier Sheet : Disabled

<Other functions>

Operator Panel setting : [Scan] / [Send to] button
Prefer Scanning Speed setting : Enabled
Device set : Consumables replace (Break Roller / Pick Roller counter clear)
Offset Setting, Vertical magnification Adjustment, Lamp timer
Area Selection for Multifeed Detection, Power ON/OFF Control setting

Product: fi-6230Z (Driver version: 10.21)

Type	:	Desktop
Image sensor	:	Color CCD (Reduced optical system)
Operating method	:	Document fixed Flat bed (FB), Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning : Max 216mm x 3175mm ¹
Light source	:	Fluorescent tube (White)
Basic resolution	:	600dpi
Output resolution	:	50 dpi to 600 dpi (at steps of 1dpi), 1200dpi
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color (24bit) output	:	Enabled
Flat bed scanning speed	:	B/W : 1.7 sec or less (200 dpi, A4) Color : 1.7 sec or less (200 dpi, A4)
ADF scanning speed ²	:	B/W Single sided: 40 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 40 pages per minute (200 dpi, A4, 80g/m ²) (=80 screens per minute) Color Single sided: 40 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 40 pages per minute (200 dpi, A4, 80g/m ²) (=80 screens per minute)
ADF paper chute capacity	:	Maximum 50 sheets (A4, 80g/m ² , High quality paper, normal temperature and humidity)
Document size	:	Minimum 53mm x 74 mm Maximum 216mm x 355.6mm <ADF> Maximum 216 mm x 297 mm <Flat Bed>
Supported regular paper ³	:	A4, A5/A5 Landscape, A6/A6 Landscape, B5, B6/B6 Landscape, Letter, Legal, US Executive, Name card
Scanning area specification	:	Specified (one location)
White level follower	:	Disabled

¹ If you specify a “long page” which is longer than 864mm, you must specify a resolution of 200dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ Not all paper sizes can be used in all devices. For details, refer to the operator’s guide of the device. For other paper sizes, the customer settings can be used.

Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)
Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge smoothing, De-Screen, 256 Color, 8 Color, 4bit Grayscale, Reverse image
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	Disabled
Interface	:	USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Enabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Disabled
Multifeed detection	:	Enabled (Check overlapping / length, Area selection)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Disabled
Paper Protection	:	Enabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse

Drop out color : Enabled
sRGB output : Enabled
Use Image Processing Software Option : Enabled (sold separately)
Double-page spread with Carrier Sheet : Enabled
Cropping with Carrier Sheet : Enabled

<Other functions>

Operator Panel setting : [Scan] / [Send to] button
Prefer Scanning Speed setting : Enabled
Device set : Consumables replace (Break Roller / Pick Roller counter clear)
Offset Setting, Vertical magnification Adjustment, Lamp timer
Area Selection for Multifeed Detection, Power ON/OFF Control setting

Product: fi-6240 (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	Color CCD (Reduced optical system)
Operating method	:	Document fixed Flat bed (FB), Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning : Max 216mm x 3175mm ¹
Light source	:	Fluorescent tube (White)
Basic resolution	:	600dpi
Output resolution	:	50 dpi to 600 dpi (at steps of 1dpi), 1200dpi
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color (24bit) output	:	Enabled
Flat bed scanning speed	:	B/W : 1.7 sec or less (200 dpi, A4) Color : 1.7 sec or less (150 dpi, A4)
ADF scanning speed ²	:	B/W Single sided: 60 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 60 pages per minute (200 dpi, A4, 80g/m ²) (=120 screens per minute) Color Single sided: 40 pages per minute (150 dpi, A4, 80g/m ²) Double sided: 40 pages per minute (150 dpi, A4, 80g/m ²) (=80 screens per minute)
ADF paper chute capacity	:	Maximum 50 sheets (A4, 80g/m ² , High quality paper, normal temperature and humidity)
Document size	:	Minimum 53mm x 74 mm Maximum 216mm x 355.6mm <ADF> Maximum 216 mm x 297 mm <Flat Bed>
Supported regular paper ³	:	A4, A5/A5 Landscape, A6/A6 Landscape, B5, B6/B6 Landscape, Letter, Legal, US Executive, Name card
Scanning area specification	:	Specified (one location)
White level follower	:	Disabled

¹ If you specify a “long page” which is longer than 864mm, you must specify a resolution of 200dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ Not all paper sizes can be used in all devices. For details, refer to the operator’s guide of the device. For other paper sizes, the customer settings can be used.

Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)
Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge smoothing, De-Screen, 256 Color, 8 Color, 4bit Grayscale, Reverse image
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	Disabled
Interface	:	Ultra SCSI, USB1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Enabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Disabled
Multifeed detection	:	Enabled (Check overlapping / length, Area selection)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Disabled

Paper Protection	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (sold separately)
Double-page spread with Carrier Sheet	:	Enabled
Cropping with Carrier Sheet	:	Disabled
<Other functions>		
Operator Panel setting	:	[Scan] / [Send to] button
Prefer Scanning Speed setting	:	Enabled
Device set	:	Consumables replace (Break Roller / Pick Roller counter clear) Offset Setting, Vertical magnification Adjustment, Lamp timer Area Selection for Multifeed Detection, Power ON/OFF Control setting

Product: fi-6240Z (Driver version: 10.21)

Type	:	Desktop
Image sensor	:	Color CCD (Reduced optical system)
Operating method	:	Document fixed Flat bed (FB), Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning : Max 216mm x 3175mm ¹
Light source	:	Fluorescent tube (White)
Basic resolution	:	600dpi
Output resolution	:	50 dpi to 600 dpi (at steps of 1dpi), 1200dpi
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color (24bit) output	:	Enabled
Flat bed scanning speed	:	B/W : 1.7 sec or less (200 dpi, A4) Color : 1.7 sec or less (200 dpi, A4)
ADF scanning speed ²	:	B/W Single sided: 60 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 60 pages per minute (200 dpi, A4, 80g/m ²) (=120 screens per minute) Color Single sided: 60 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 60 pages per minute (200 dpi, A4, 80g/m ²) (=120 screens per minute)
ADF paper chute capacity	:	Maximum 50 sheets (A4, 80g/m ² , High quality paper, normal temperature and humidity)
Document size	:	Minimum 53mm x 74 mm Maximum 216mm x 355.6mm <ADF> Maximum 216 mm x 297 mm <Flat Bed>
Supported regular paper ³	:	A4, A5/A5 Landscape, A6/A6 Landscape, B5, B6/B6 Landscape, Letter, Legal, US Executive, Name card
Scanning area specification	:	Specified (one location)
White level follower	:	Disabled

¹ If you specify a “long page” which is longer than 864mm, you must specify a resolution of 200dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ Not all paper sizes can be used in all devices. For details, refer to the operator’s guide of the device. For other paper sizes, the customer settings can be used.

Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)
Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge smoothing, De-Screen, 256 Color, 8 Color, 4bit Grayscale, Reverse image
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	Disabled
Interface	:	Ultra SCSI, USB1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Enabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Disabled
Multifeed detection	:	Enabled (Check overlapping / length, Area selection)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Disabled

Paper Protection	:	Enabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (sold separately)
Double-page spread with Carrier Sheet	:	Enabled
Cropping with Carrier Sheet	:	Enabled
<Other functions>		
Operator Panel setting	:	[Scan] / [Send to] button
Prefer Scanning Speed setting	:	Enabled
Device set	:	Consumables replace (Break Roller / Pick Roller counter clear) Offset Setting, Vertical magnification Adjustment, Lamp timer Area Selection for Multifeed Detection, Power ON/OFF Control setting

Product: fi-6670/fi-6670A (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	Color CCD + Reduced optical system
Operating method	:	Automatic Document Feed(ADF), Simultaneous double-sided scanning Long page scanning (Resolution: 400dpi or less ¹) (305mm x 3175mm)
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	Standard: 50 dpi to 600 dpi (at steps of 1dpi)
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color (24bit) output	:	Enabled (24bit)
ADF scanning speed ²	:	B/W Single sided: 70 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 70 pages per minute (200 dpi, A4, 80g/m ²) (=140 screens per minute) Color Single sided: 70 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 70 pages per minute (200 dpi, A4, 80g/m ²) (=140 screens per minute)
ADF paper chute capacity	:	Maximum 200 sheets ³ , ream weight: 80 kg, A4 [High quality paper, normal temperature and humidity]
Document size	:	Minimum 53mm x 74mm, Maximum 297 mm x 432 mm
Supported regular paper ⁴	:	A3, A4/A4 Landscape, A5/A5 Landscape, A6/A6 Landscape, B4, B5/B5 Landscape, B6/B6 Landscape, Letter/Letter Landscape, Double Letter, Legal, US Executive/US Executive Landscape
Isolation specification	:	Specified (one location)
White level follower	:	Enabled

¹ If you scan a long document which is longer than 864mm, you must specify a resolution of 200dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ If you load documents larger than A4 or than the letter size, the maximum capacity is up to 100 sheets.

⁴ Not all paper sizes can be used in all devices. For details, refer to the operator's guide of the device. For other paper sizes, the customer settings can be used.

Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)
Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Edge emphasis, Edge extraction, De-Screen, SEE (Selectable Edge Enhancement), Reverse image (at Black & White, Grayscale), 256 Color, 8 Color, 4bit Grayscale
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern / Image processing function)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	With Imprinter option (Reverse side, minimum left margin printing position of 5mm) ¹ Maximum number of characters to be printed: 43 characters Counter display range: The number of digits is from 3 to 8 0 to 99999999 Direction(Printing): Top to Bottom, Bottom to Top Font (orientation) : Vertical / Horizontal Bold font : Enabled
Interface	:	Ultra Wide SCSI(fi-6670A only), Ultra SCSI, USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Enabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled

¹ If 0 mm is specified as the printing position, printing will begin 5 mm from the edge of the page.

Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Enabled
Multifeed detection	:	Enabled (Check overlapping / length)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Disabled
Paper Protection	:	Disabled
Blank page skip	:	Enabled
JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (included as a standard function)
Double-page spread with Carrier Sheet	:	Disabled
Cropping with Carrier Sheet	:	Disabled

Product: fi-6750S (Driver version: 9.21)

Type	: Desktop
Image sensor	: Color CCD + Reduced optical system
Operating method	: Document fixed Flat bed(FB), Automatic Document Feed(ADF) Long page scanning (Resolution: 400dpi or less ¹) (305mm x 3175mm)
Light source	: Fluorescent tube (White)
Basic resolution	: 600 dpi
Output resolution	: Standard: 50 dpi to 600 dpi (at steps of 1dpi)
Grayscale levels (internal)	: 10 bit 1024 levels
Grayscale output	: Enabled (8 bits)
Halftone Patterns	: Dither matrix (can be downloaded), Error diffusion
Color output	: Enabled (24bit)
Flat bed scanning speed	: B/W : 0.9 sec or less (200 dpi, A4) Color : 0.9 sec or less (200 dpi, A4)
ADF scanning speed ²	: B/W Single sided: 55 pages per minute (200 dpi, A4, 80g/m ²) Color Single sided: 55 pages per minute (200 dpi, A4, 80g/m ²)
ADF paper chute capacity	: Maximum 200 sheets ³ , ream weight: 80 kg, A4 [High quality paper, normal temperature and humidity]
Document size	: Minimum 53mm x 74mm, Maximum 297 mm x 432 mm
Supported regular paper ⁴	: A3, A4/A4 Landscape, A5/A5 Landscape, A6/A6 Landscape, B4, B5/B5 Landscape, B6/B6 Landscape, Letter/Letter Landscape, Double Letter, Legal, US Executive/US Executive Landscape
Isolation specification	: Specified (one location)
White level follower	: Enabled
Brightness / Threshold / Contrast	: 255 steps
High light / Shadow	: 255 steps (at Color / Grayscale scanning)

¹ If you scan a long document which is longer than 864mm, you must specify a resolution of 200dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ If you load documents larger than A4 or than the letter size, the maximum capacity is up to 100 sheets.

⁴ Not all paper sizes can be used in all devices. For details, refer to the operator's guide of the device. For other paper sizes, the customer settings can be used.

Gamma pattern	: Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	: Simplified Dynamic Threshold (SDTC), Edge emphasis, Edge extraction, De-Screen, SEE (Selectable Edge Enhancement), Reverse image (at Black & White, Grayscale), 256 Color, 8 Color, 4bit Grayscale
Individual setting	: Disabled
Multi Image	: Multi Image Output / Auto color Detection
Imprinter (Endorse)	: Disabled
Interface	: USB 1.1/2.0
Prescan	: Disabled
Preview	: Enabled
Flip Side Rotation	: Disabled
Rotation	: Enabled
Punch hole removal	: Enabled
Automatic Size and Skew detection	: End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	: Enabled
Overscan	: Enabled (when “Black Background” is selected)
Cutting out Size	: Disabled
Buffer scan ([Use Memory on Scanner]) function	: Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	: Enabled
Batch Detection	: Enabled
Multifeed detection	: Enabled (Check overlapping / length)
Show Multifeed Image	: Disabled
Pre-Pick	: Enabled
Check Over-skew	: Disabled
Paper Protection	: Disabled
Blank page skip	: Enabled
JPEG Transfer (Hardware Compression)	: Enabled
Filter	: Page Edge Filler, Digital Endorse
Drop out color	: Enabled
sRGB output	: Enabled
Use Image Processing Software Option	: Enabled (included as a standard function)
Double-page spread with Carrier Sheet	: Disabled
Cropping with Carrier Sheet	: Disabled

Product: fi-6770/fi-6770A (Driver version: 9.21)

Type	:	Desktop
Image sensor	:	Color CCD + Reduced optical system
Operating method	:	Document fixed Flat bed(FB), Automatic Document Feed(ADF), Simultaneous double-sided scanning Long page scanning (Resolution: 400dpi or less ¹) (305mm x 3175mm)
Light source	:	Fluorescent tube (White)
Basic resolution	:	600 dpi
Output resolution	:	Standard: 50 dpi to 600 dpi (at steps of 1dpi)
Grayscale levels (internal)	:	10 bit 1024 levels
Grayscale output	:	Enabled (8 bits)
Halftone Patterns	:	Dither matrix (can be downloaded), Error diffusion
Color output	:	Enabled (24bit)
Flat bed scanning speed	:	B/W : 0.9 sec or less (200 dpi, A4) Color : 0.9 sec or less (200 dpi, A4)
ADF scanning speed ²	:	B/W Single sided: 70 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 70 pages per minute (200 dpi, A4, 80g/m ²) (=140 screens per minute) Color Single sided: 70 pages per minute (200 dpi, A4, 80g/m ²) Double sided: 70 pages per minute (200 dpi, A4, 80g/m ²) (=140 screens per minute)
ADF paper chute capacity	:	Maximum 200 sheets ³ , ream weight: 80 kg, A4 [High quality paper, normal temperature and humidity]
Document size	:	Minimum 53mm x 74mm, Maximum 297 mm x 432 mm
Supported regular paper ⁴	:	A3, A4/A4 Landscape, A5/A5 Landscape, A6/A6 Landscape, B4, B5/B5 Landscape, B6/B6 Landscape, Letter/Letter Landscape, Double Letter, Legal, US Executive/US Executive Landscape

¹ If you scan a long document which is longer than 864mm, you must specify a resolution of 200dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration.

³ If you load documents larger than A4 or than the letter size, the maximum capacity is up to 100 sheets.

⁴ Not all paper sizes can be used in all devices. For details, refer to the operator's guide of the device. For other paper sizes, the customer settings can be used.

Isolation specification	:	Specified (one location)
White level follower	:	Enabled
Brightness / Threshold / Contrast	:	255 steps
High light / Shadow	:	255 steps (at Color / Grayscale scanning)
Gamma pattern	:	Normal / Soft / Sharp / Download Pattern / Custom / Bright
Image processing function	:	Simplified Dynamic Threshold (SDTC), Edge emphasis, Edge extraction, De-Screen, SEE (Selectable Edge Enhancement), Reverse image (at Black & White, Grayscale), 256 Color, 8 Color, 4bit Grayscale
Individual setting	:	Enabled (Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern / Image processing function)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	Disabled
Interface	:	Ultra Wide SCSI(fi-6770A only), Ultra SCSI, USB 1.1/2.0
Prescan	:	Disabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Page Size Detection, Black Background
Split Image	:	Enabled
Overscan	:	Enabled (when "Black Background" is selected)
Cutting out Size	:	Disabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Enabled
Multifeed detection	:	Enabled (Check overlapping / length)
Show Multifeed Image	:	Disabled
Pre-Pick	:	Enabled
Check Over-skew	:	Disabled
Paper Protection	:	Disabled
Blank page skip	:	Enabled

JPEG Transfer (Hardware Compression)	:	Enabled
Filter	:	Page Edge Filler, Digital Endorse
Drop out color	:	Enabled
sRGB output	:	Enabled
Use Image Processing Software Option	:	Enabled (included as a standard function)
Double-page spread with Carrier Sheet	:	Disabled
Cropping with Carrier Sheet	:	Disabled

Product: fi-6800 (Driver version: 10.10)

Type	: Desktop
Image sensor	: Reduced optical system
Operating method	: Automatic Document Feed (ADF), Simultaneous double-sided scanning, Long page scanning (305mm x 3175mm) ¹
Light source	: Fluorescent tube (White)
Basic resolution	: 600 dpi
Output resolution	: Standard: 50 dpi to 600 dpi (at steps of 1dpi)
Grayscale levels (internal)	: 10 bit 1024 levels
Gray scale (8 bits) output	: Enabled
Halftone Patterns	: Dither matrix, Error diffusion
Color	: 24bit
ADF scanning speed ²	: <Monochrome Asynchronous Scanning> Single sided: 125 pages per minute (200 dpi, A4, 80 g/m ²) Double sided: 125 pages per minute (200 dpi, A4, 80 g/m ²) (= 250 screens per minute) <Color Asynchronous Scanning> Single sided: 125 pages per minute (200 dpi, A4, 80 g/m ²) Double sided: 125 pages per minute (200 dpi, A4, 80 g/m ²) (= 250 screens per minute)
Hopper capacity	: Maximum 500 sheets (A4, 80 g/m ² , High quality paper, normal temperature and humidity)
Document size	: Minimum 53mm x 74mm, Maximum 305 mm x 432 mm
Supported regular paper ³	: A3, A4/A4 Landscape, A5/A5 Landscape, A6/A6 Landscape, B4, B5/B5 Landscape, B6/B6 Landscape, Double Letter, Letter/Letter Landscape, Legal, US Executive/US Executive Landscape, Business Card
Cutout specification	: Specified (one location)
Background compensation	: Enabled
Brightness / Threshold / Contrast	: 255 steps
High light / Shadow	: 255 steps (at Color / Grayscale scanning)
Gamma pattern	: Normal / Soft / Sharp / Download Pattern / Custom / Bright

¹ If you specify a “long page” which is longer than 864mm, you must specify a resolution of 300dpi or less.

² This speed is only specified for the scanner itself. The actual reading speed may vary depending on the system configuration. Color scanning speed is a value with JPEG enabled.

³ Not all paper sizes can be used in all devices. For details, refer to the operator’s guide of the device. For other paper sizes, the customer settings can be used.

Image processing function	:	Dynamic Threshold (SDTC), Advanced DTC, Edge emphasis, Edge extraction, De-Screen, SEE (Selectable Edge Enhancement), Reverse image, 256 Color, 8 Color, 4bit Grayscale
Individual setting	:	Enabled (Image Mode / Brightness / Threshold / Contrast / High light / Shadow / Gamma pattern / Image processing function)
Multi Image	:	Multi Image Output / Auto color Detection
Imprinter (Endorse)	:	With Imprinter option (Pre-Imprinter / Post-Imprinter) (Reverse side, minimum left margin printing position of 5 mm) ¹ Maximum number of characters to be printed: 43 characters Counter display range: 3 to 8 characters (0 to 99999999) Direction (Printing): Top to Bottom Font (orientation) : Vertical (Normal) , Horizontal (Normal / Narrow) Bold font : Enabled Post-Imprinter switching: Enabled
Interface	:	Ultra Wide SCSI, USB 1.1 / 2.0
Prescan	:	Enabled
Preview	:	Enabled
Flip Side Rotation	:	Enabled
Rotation	:	Enabled
Punch hole removal	:	Enabled
Automatic Size and Skew detection	:	End of Page Detection, Automatic Deskew, Automatic Page Size Detection, Black Background
Split Image	:	Enabled
Overscan	:	Enabled (when “Black Background” is selected)
Cutting out Size	:	Enabled
Buffer scan ([Use Memory on Scanner]) function	:	Enabled
Use Both Memory ([Ram Cache]+[Use Memory on Scanner]) function	:	Enabled
Batch Detection	:	Enabled
Multifeed detection	:	Enabled (Check overlapping / length)

¹ If 0 mm is specified as the endorser print position, printing will begin 5 mm from the edge of the page.

Show Multifeed Image	: Enabled
Pre-Pick	: Enabled
Check Over-skew	: Disabled
Paper Protection	: Enabled
Blank page skip	: Enabled
JPEG Transfer (Hardware Compression)	: Enabled
Filter	: Page Edge Filler, Digital Endorse
Drop out color	: Enabled (Red, Green, Blue, None, Custom, Panel setting)
sRGB output	: Enabled
Use Image Processing Software Option	: Enabled (included as a standard function)
Double-page spread with Carrier Sheet	: Disabled
Cropping with Carrier Sheet	: Disabled
 <Other functions>	
Operator Panel setting	: [Scan] / [Send to] button
Device set	: Consumables replace (Pick Roller / Break Roller / Separator Roller / Remaining Ink counter clear) Offset Setting, Vertical magnification Adjustment, Power Saving setting Area Selection for Multifeed Detection

8.2 Maintenance Service

This section explains briefly how you can help us to provide you with high-quality maintenance service.

Since it is practically impossible for the Fujitsu service staff to be aware of every detail of your daily scanning operation, please understand that our staff may sometimes be unable to answer your question immediately. To help us in our effort to provide you with the best maintenance service possible, we ask you to kindly write down the following items (as many as possible):

- Serial number, version, and date, etc., of this product
- Name and product number of the image scanner being used
- The options installed on the image scanner being used
- Manufacturer, product name, and type number of the computer being used
- Manufacturer and version of the Windows® OS (whether Windows® has been updated)
- Name and version of the display driver
- Name and version of the printer driver
- Resolution (1024 x 768), number of colors, and number of dots (or points) of the screen
- Product name of the SCSI adapter, and name and version of the SCSI driver (in case of the SCSI connection)
- Name of the USB controller and version of the USB driver (in case of the USB connection)
- Error occurrence processing (the simpler the processing, the easier it is to determine the cause.)

Also, we would appreciate it very much if you could kindly verify the following items prior to receiving our maintenance service;

- Is the power turned on?
- Is the cable connected correctly?
- Is the correct image scanner driver selected?

TWAIN Driver
“Scanner Utility for Microsoft® Windows®”
User’s Guide
<32 bit / 64bit version>
First Edition August 2011
Second Edition March 2012
Third Edition October 2012
Fourth Edition December 2013

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