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# **HT-4139-28/48 Scanner ISIS Driver**

## **User's Guide**

**HITACHI**



## **Preface**

Thank you very much for using our ISIS Driver. This manual provides the functions of the ISIS Driver.

Read this manual carefully to use the ISIS Driver properly.

## Notes

- It is strictly prohibited to reprint or copy part or all of this manual without our permission.
- The content of this manual is subject to change without prior notice due to improvement.

In this manual following shortened forms are used.

- Hitachi scanner ISIS driver (Hereinafter "ISIS driver")

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Apl 2010 (First edition)

## Required System Environment

Using the ISIS Driver requires any of the scanner devices listed below:  
HT-4139 Scanner Device

There are items and contents that cannot be specified by the device composition and the addition product.

You cannot use such a scanner device when it is being used by another application.

You need an application in which the ISIS Driver can be used.

Please select the scanner correctly.

- HITACHI HT-4139-28 Image Scanner
- HITACHI HT-4139-48 Image Scanner

When it makes a mistake in the selection, it doesn't operate correctly.

Please use the fontsize of the display by a Normal size.

It is not likely to be able to display it correctly when using it by a large size.

### Other Cautions

When acquiring huge images or color images or converting the output resolution, you may fail to acquire images because of memory shortage.

# Read Prior to Operation

Read followings to understand functions of this driver and to use it effectively.

This manual does not describe about the ISIS standard,

It is necessary to understand the ISIS standard to develop / test application programs.

## **(1) Scanned image**

The ISIS driver capture images on both sheet sides, B & W / color images, B & W / gray scale images with a single scanning. In this case an application program should be able to handle multiple images.

## **(2) Sheet feeding**

Hitachi scanners equipped an Auto Document Feeder (ADF) to improve business efficiency. And also an auto scanning function is supported. The auto scanning function can start scanning by just putting sheets in the hopper without key operation.

## **(3) Stacker**

There are Hitachi scanners that equip a dual stacker.

If "Non sequence scanning" is specified, sheets that cannot scanned will be ejected to another stacker and scanning can be continued.

The ejected sheets should be put the hopper for rescanning after all sheets are scanned. This function is specified when sheet ordering of scanning is not matter.

## **(4) Multiple Feeding**

Sheet checking before scanning is recommended to avoid miss scanning.

Hitachi scanners can detect multiple feeding by checking sheet length, width, thickness, or skew.

Set up systems that can check scanning miss for actual operation.

Set up a sheet check function properly for conditions of paper quality and mixed sheet scanning.

(No default setting for sheet checking.)

## **(5) Imprinting (Numbering)**

Hitachi scanners support an imprinting function that can be used for scanning check.

This is effective for avoiding multiple feeding error.

A special pattern for the Anti-double-scan print check can be printed.

## **(6) System set up**

When you create an application program with the ISIS driver or using existing program, perform enough tests before actual operations.

Consider following situations for the scanning test.

Fail scanning with the ISIS driver.

Scan images successfully but a host can not save the images

Fail imprinting with the ISIS driver.

- Continue scanning process after an error with the ISIS driver occurs

## **(7) Anti-double-scan print Checking**

The numbering printed on the sheet is read, and reading of the sheet is prevented twice.

# Precautions for Use

## Continuous scanning

If the application program does not support the continuous scanning, performance may become lower than expectation.

If sheets are too thin, copy papers, with glue, or mixed sizes, multiple feeding error might occur. Using options and/or the sheet check function, try to scan them correctly.

## Scanned images

To confirm if the scanned data satisfy the level of customer's accuracy and quality, check the gradation and density of scanned images.

This ISIS driver does not support pre-view function.

## Scanned data

This device can detect sheet sizes and multiple feeding but it might fail to catch multiple feeding depending on conditions.

Inspect all scanned image data after scanning sheets and make sure that all sheets are scanned correctly.

Extra attention is required when check will not performed or sheets will be discarded.

## Imprinting (Numbering)

The imprinting is conducted after scanning but in some cases there might be imprinting without image depends on operation of the application program.

There might be imprinting on wrong sheet due to multiple feeding error, etc.

Compare the original sheet and scanned data and ensure there are no missing images.

## **Note for System Set up**

Keep followings in your mind when you set up systems with the ISIS driver.

Default is set without function. Add needed functions for operation. And make sure they are installed correctly.

Hitachi scanners can check scanning status with the multiple feeding error detection and the imprinting function but it is not always perfect. Set up systems so that it can check if images in sheets are the same as scanned ones.

## Limitations

- 1) The ISIS driver is calculating the unit of length by the inch.  
Because the value when the unit is made a centimeter becomes a corresponding value, it might be the input value and somewhat different.
- 2) The preview button might disappear by specifying the size and the slip size of the dialog.  
It is displayed that focus is matched.
- 3) The input character to the edit box is not checked.  
The ISIS driver converts a value outside a character and a set range illegal into an appropriate value.
- 4) Simplex scanning enables either front side scanning or back side scanning where at least one stream (either Side 1 or Side 2 or Side 3) is transferred to the application. In this instance, **Scan Only** is selected for a maximum of two streams, regardless of the Binarization setting.  
Duplex scanning enables both front side scanning and back side scanning where at least one stream for each side (either Side 1 or Side 2 or Side 3) is transferred to the application. In this case, **Scan Only** is selected for a maximum of two streams on each side (front and back), regardless of the Binarization setting.
- 5) To take the correspondence when the resolution is changed when there are two scanning images or more, the resolution of other images might be changed.  
Please confirm the resolution of all images.
- 6) The image not set to the image that the ISIS driver uses can be specified.  
When scanning, it becomes an error.  
Example:
  - Image Processing- Reference Image
  - Image Check Setting- Image for Sheet Check
  - Imprinter Setting- Image Check
  - Imprinter Checking- Image for check

7) When length is set, it is possible to set it by the value that exceeds the sheet length.  
When scanning, it becomes an error.

Example:

Sheet Setting- Value that length and width check

Image Check Setting- Folded Width/ Folded Length

Imprinter Setting- Print Position

Imprinter Checking-Vertical Position/ Horizontal Position

8) The color of the background deletion cannot be made sure by watching.

9) As a result of the bar code, 256 characters cannot be specified by the comparison.

10) When the numbering character is set, the number of characters that can be printed is not checked.

The number of characters that can be printed is printed.

11) It takes time to move of the tab and to move focus when the scanning image increases.

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## Chapter 1.Properties

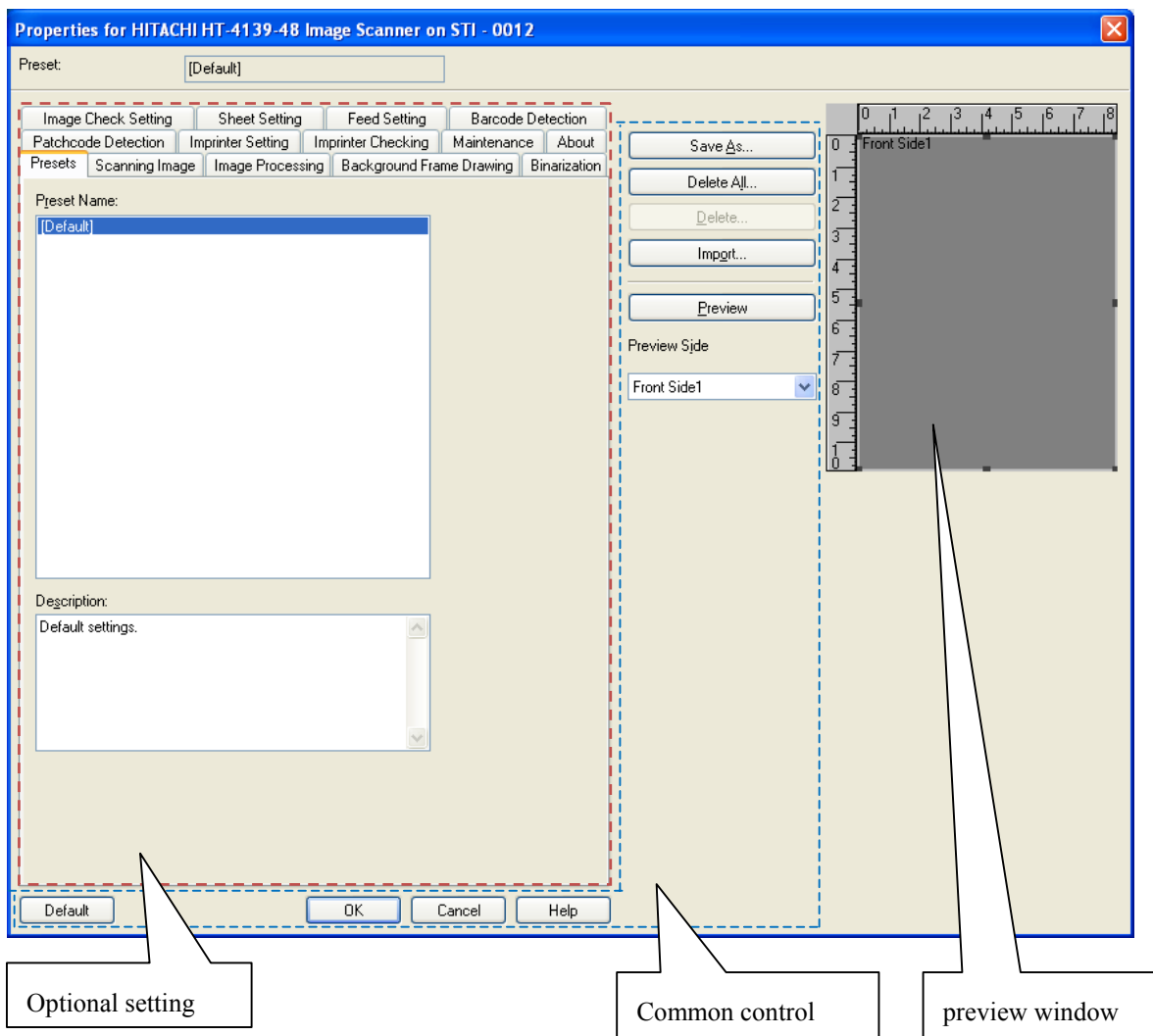
### 1.1 Properties for HT-4139 OCR Image scanner

A custom configuration settings screen is made from the following compositions.

- a)Optional setting
- b)Common control
- c)preview window

The item that can be set to click the tab of an optional setting changes.

A common control is common to all the options.



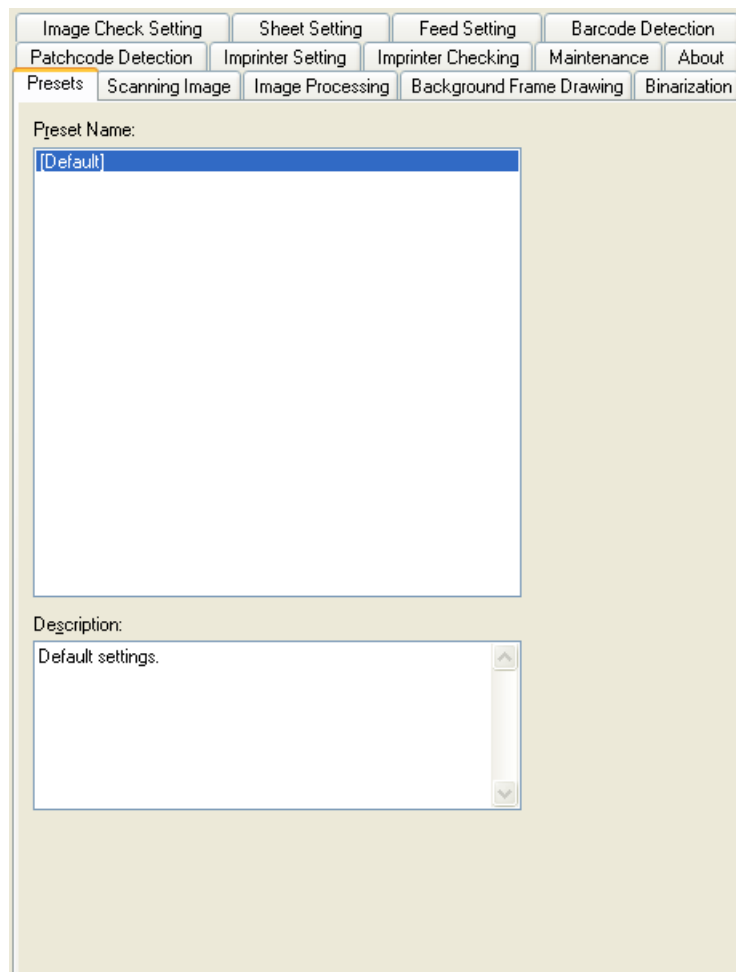
## 1. Properties

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No.	Group	Item name	Function
1	Common control	Save As...	Saves the specified scanner settings as a new preset and adds it to the <b>Presets &gt; Preset Name</b> window.
2		Delete All...	Deletes all available presets and associated settings, except for the default preset, which displays as [Default] in the <b>Presets &gt; Preset Name</b> window.
3		Delete...	Deletes a specific preset and all associated settings. If you have a number of defined presets, it is recommended that you review the list of presets in the <b>Presets &gt; Preset Name</b> window and select the preset to delete.
4		Import...	Imports an ISIS Driver Preset (.IDP) file.
5		Preview	Scans a page (with the set parameters) from the scanner device and also displays an overview of the scanned page in the preview window. Since the page is scanned and made available in paper format, it is recommended that you check for paper in the scanner device before clicking the <b>Preview</b> button. Note that no errors will display even if there is a settings conflict during scanning, since this is a preview mode, and not a runtime mode.
6		Preview Side	Specifies one or more sides of the scanned pages that will be displayed in the preview window.
7		Default	Restores settings to their default values.
8		OK	Closes the window after saving the changes.
9		Cancel	Closes the window without saving the changes.
10		Help	Opens the driver Help file.

## 1.2 Presets

The **Presets** option displays custom configuration settings for the scanner. Each preset is saved locally as an ISIS Driver Preset file with a name and an optional description. Presets can be either loaded or deleted from the **Preset Name** list or imported as an ISIS Driver Preset (.IDP) file from another location. There is no limit to the number of presets that can be created.



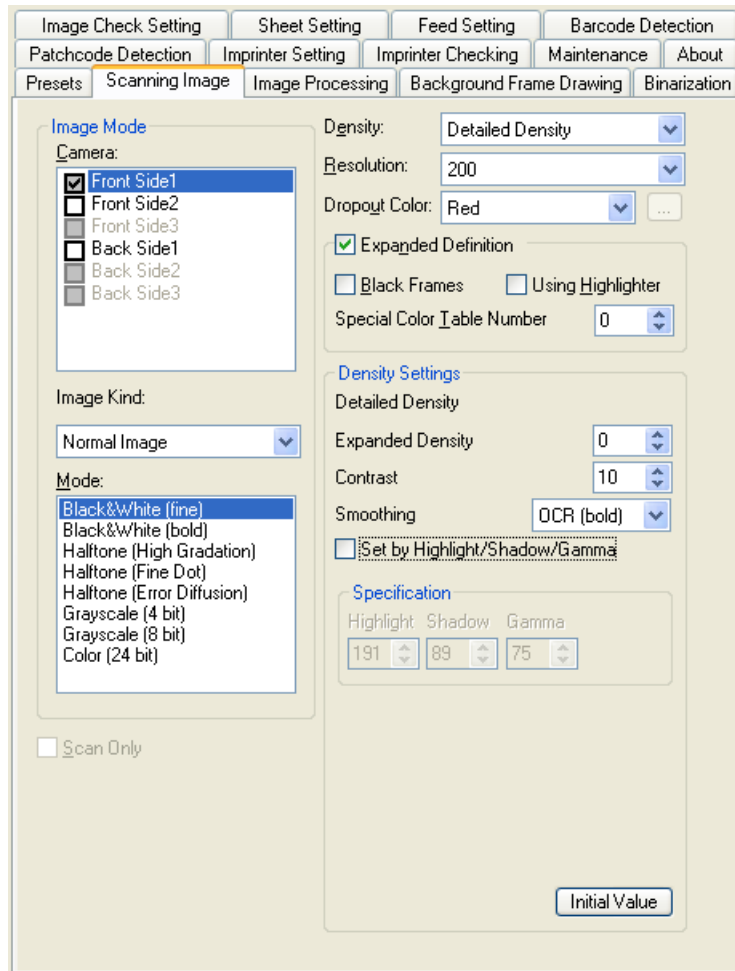
1

Properties

No.	Group	Item name	Function
1	-	Preset Name	Displays the profile name associated with the user's specified scanner settings.
2	-	Description	Displays the description associated with the specified preset name.

### 1.3 Scanning Image

The **Scanning Image** option provides access to common scanning options, including density, resolution, and dropout color.



No.	Group	Item name	Function
1	Image Mode	Camera	Specifies the camera (front/back) to use for scanning the image. Depending on the <b>Image Mode</b> selected, the following camera options may be available: Front Side1/Front Side2/Front Side Back Side1/Back Side2 /Back Side3 (Note1)
2		Image Kind	Specifies the image type. The available options are <b>OCR (pencil)</b> , <b>OCR (ballpoint pen)</b> , and <b>Normal Image</b> .
3		Mode	Specifies the mode for scanning a document: (Note2)
4	-	Scan Only	(Available only when an <b>Image Mode</b> is selected.) Enables setting the usage for the scanned image (that is, whether the image should be used for an image check or for output). This feature is stream dependent and can be enabled or disabled for each stream or image mode - namely, <b>Front Side1</b> , <b>Front Side2</b> , <b>Front Side3</b> , <b>Back Side1</b> , <b>Back Side2</b> , and <b>Back Side3</b> . Select the checkbox to enable or disable the feature. (Note3)
5		Density	Specifies the lightness or darkness of the image. The options are <b>Standard</b> , <b>Simple Density</b> , and <b>Detailed Density</b> . (Note4)
6		Resolution	Specifies the resolution in DPI (Dots-Per-Inch). The available options are <b>100</b> , <b>150</b> , <b>200</b> , <b>300</b> , <b>400</b> , and <b>600</b> . (Note5)
7		Dropout Color	Displays the specified dropout color. This setting is device-dependent, and the available options for this device are <b>None</b> , <b>Custom Red</b> , <b>Green</b> , <b>Blue</b> , and <b>Excluding Black</b> . When the <b>Dropout Color</b> is set to the <b>Custom</b> , the dropout custom configuration file can be read.
8	Expanded Definition	-	Enables setting additional functionality. Select the checkbox to enable or disable the feature.
9		Black Frames	On the OCR scanner, ruled lines tend to be broken. This specification minimizes such a problem.
10		Using Highlighter	Specifies the highlighter (the lightest or whitest part of an image). This feature suppresses errors by the highlighter.
11		Special Color Table Number	Specifies the special color table number and is available only when the <b>Dropout Color</b> is <b>None</b> . The available range is 0 to 9.

## 1. Properties

No.	Group	Item name	Function
12	Density Settings		(Available only when the <b>Density</b> options <b>Simple Density</b> or <b>Detailed Density</b> are selected.) The settings vary based on the image type and the density setting:

### (Note1)

Camera options that are unavailable are dimmed, and cannot be selected. The status of the camera option is indicated by its checkbox:

- A white checkbox indicates that the option available.

- A gray checkbox with a check mark indicates that the option is a forced value and cannot be modified.

- A gray checkbox indicates that the option is not available.

### (Note2)

Element	Description
Black&White (fine)	(Available only when the <b>Image Kind</b> is <b>Normal Image</b> .) Scans data using a fixed threshold, black-and-white mode. This scanning mode is suitable for scanning line drawings and text documents.
Black&White (bold)	Scans data using a fixed threshold, black-and-white mode. This scanning mode is suitable for scanning line drawings and text documents.
Halftone (High Gradation)	(Available only when the <b>Image Kind</b> is <b>Normal Image</b> .) Scans data using a simulation of continuous tones of black or overlapping color dots of varying sizes or positions. This scanning mode is suitable for scanning detailed graphics or photographic images.
Halftone (Fine Dot)	(Available only when the <b>Image Kind</b> is <b>Normal Image</b> .) Scans data using a simulation of continuous tones of black or overlapping color dots of a fixed, smaller size, where the smaller dots represent lighter areas. This scanning mode is suitable for scanning detailed graphics or photographic images.
Halftone (Error Diffusion)	(Available only when the <b>Image Kind</b> is <b>Normal Image</b> .) Scans data using a simulation of continuous tones of black or overlapping color dots, where individual dots in an area are blended with surrounding dots to achieve subtle gradation. This scanning mode is suitable for scanning detailed graphics or photographic images.
Grayscale (4 bit)	(Available only when the <b>Image Kind</b> is <b>Normal Image</b> .) Scans data using a 16-level monochrome gray scale mode. This scanning mode is suitable for scanning images containing light and shadow, such as a photograph.
Grayscale (8 bit)	(Available only when the <b>Image Kind</b> is <b>Normal Image</b> .) Scans data using

	a 256-level monochrome gray scale mode. This scanning mode is suitable for scanning images containing light and shadow, such as a photograph.
Color (24 bit)	(Available only when the <b>Image Kind</b> is <b>Normal Image</b> .) Scans with 24 bit color (16777216 colors). This scanning mode is most suitable for scanning color images, such as color photographs.

**(Note3)**

Simplex scanning enables either front side scanning or back side scanning where at least one stream (either Side 1 or Side 2 or Side 3) is transferred to the application. In this instance, **Scan Only** is selected for a maximum of two streams, regardless of the Binarization setting.

Duplex scanning enables both front side scanning and back side scanning where at least one stream for each side (either Side 1 or Side 2 or Side 3) is transferred to the application. In this case, **Scan Only** is selected for a maximum of two streams on each side (front and back), regardless of the Binarization setting.

If the **Binarization** feature is enabled, the binarized stream is appended to the scanned **Mode**. For example, if the **Binarization** feature is enabled with **Color (24 bit)**, then a total of two streams are returned to the application, where the first stream is in color and the second stream is in binarized black and white.

**(Note4)**

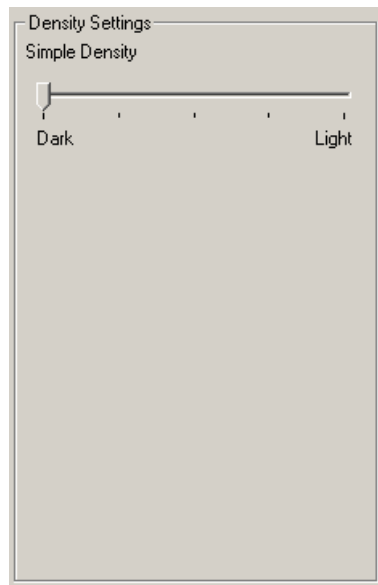
The **Simple Density** and **Detailed Density** options require values to be specified in the Density Settings area.

**(Note5)**

The list includes all possible options; however, the actual range is dependent on the resolution specified on any other stream. If the resolution (DPI) on any stream is specified as 100 or 150, then the available options are 100, 150, 200, and 300 - note that 400 and 600 are **not** available. Similarly, if the resolution (DPI) on any stream is specified as 400 or 600, then the available options are 200, 300, 400, and 600 - note that 100 and 150 are **not** available. This is because the beginning ranges (100 and 150) and the end ranges (400 and 600) are mutually exclusive. It is recommended that the resolution options are verified before scanning since the selected choices might be initialized by the exclusiveness.

(1) Simple Density Settings

Displays a 5 step slider or a 12-step slider to select between **Dark** and **Light**, where **Dark** creates a darker image and **Light** creates a lighter image. The step slider that is displayed is dependent on the **Image Kind**. If the **Image Kind** has been set to **Normal Image**, a 5 step slider is displayed. If the Image Kind has been set to **OCR (pencil)** or **OCR (ballpoint pen)**, a 12 step slider is displayed.



## (2) Detailed Density

## (A) Black&amp;White or Halftone

The following options display when the **Mode** is **Black&White** or **Halftone**. These options are used to specify the density of details in an image.

The image shows a dialog box titled "Density Settings". It contains the following controls:

- A label "Detailed Density" with a corresponding numeric input field set to "0".
- A label "Expanded Density" with a corresponding numeric input field set to "10".
- A label "Contrast" with a corresponding numeric input field set to "10".
- A label "Smoothing" with a dropdown menu showing "OCR (bold)".
- An unchecked checkbox labeled "Set by Highlight/Shadow/Gamma".
- A section titled "Specification" containing three numeric input fields: "Highlight" (191), "Shadow" (89), and "Gamma" (75).
- An "Initial Value" button at the bottom right.

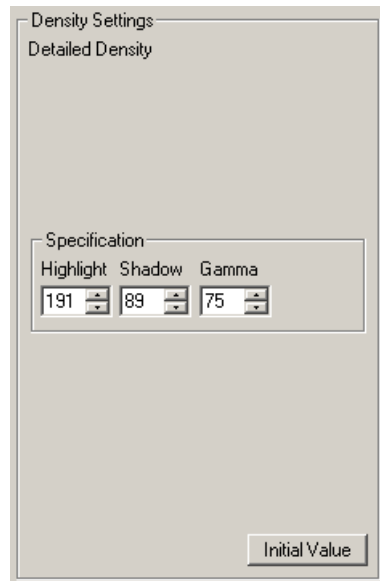
## 1. Properties

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No.	Group	Item name	Function
1	-	Expanded Density	Allows you to specify the density for fine images. The available range is 0 (Dark) to 13 (Light). Note that it is possible to specify 14 and 15, which are special cases.
2		Contrast	Allows you to specify the contrast for fine images. The available range is 5 (Light) to 15 (Dark).
3		Smoothing	Allows you specify the smoothing for fine images. The available options are <b>OCR (bold)</b> and <b>Image (fine)</b> . The <b>OCR (bold)</b> smoothing option is suitable for character recognition, while the <b>Image (fine)</b> smoothing option is suitable for clear images.
4		Set by Highlight/Shadow/Gamma	Enables the Specification section.
5	Specification	Highlight	Specifies the highlight value (in integer format). The available range is 0 (Dark) to 255 (Light).
6		Shadow	Specifies the shadow value (in integer format). The available range is 0 (Dark) to 255 (Light).
7		Gamma	Specifies the gamma value (in integer format). The available range is 30 (Dark) to 500 (Light).
8	Control Button	Initial Value	Returns the selected parameters to their initial values.

## (B) Normal Image (Gray)

The following options display when the **Mode** is **Gray**. These options are used to specify the detailed density of an image.



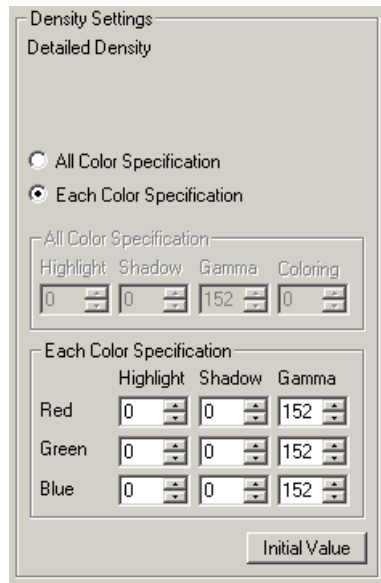
No.	Group	Item name	Function
1	Specification	Highlight	Specifies the highlight value (in integer format). The available range is -256 (Dark) to 256 (Light).
2		Shadow	Specifies the shadow value (in integer format). The available range is -128 (Dark) to 128 (Light).
3		Gamma	Specifies the gamma value (in integer format). The available range is 30 (Dark) to 500 (Light).
4	Control Button	Initial Value	Returns the selected parameters to their initial values.

## 1. Properties

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### (C) Normal Image (Color)

The following options display when the **Mode** is **Color**. These options are used to specify the detailed density of an image.



The image shows a dialog box titled "Density Settings" with a sub-section "Detailed Density". It contains two radio buttons: "All Color Specification" (unselected) and "Each Color Specification" (selected). Below these are two panels of spinners. The "All Color Specification" panel has four spinners labeled "Highlight", "Shadow", "Gamma", and "Coloring" with values 0, 0, 152, and 0 respectively. The "Each Color Specification" panel has three columns of spinners labeled "Highlight", "Shadow", and "Gamma" for "Red", "Green", and "Blue" channels, all with values 0, 0, and 152. An "Initial Value" button is at the bottom right.

All Color Specification			
Highlight	Shadow	Gamma	Coloring
0	0	152	0

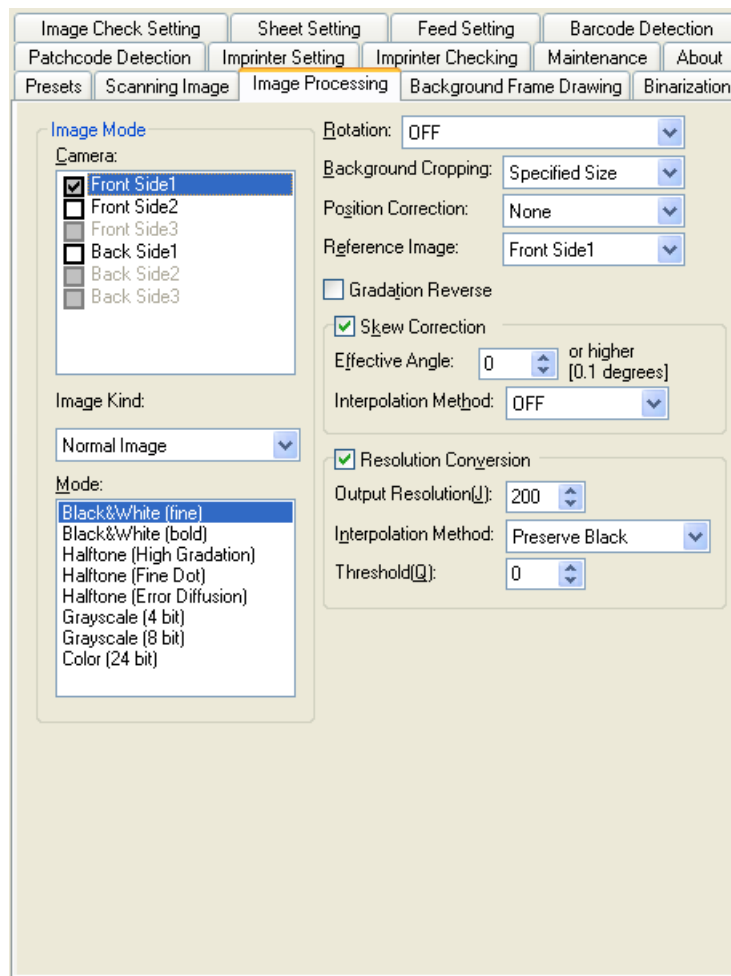
	Each Color Specification		
	Highlight	Shadow	Gamma
Red	0	0	152
Green	0	0	152
Blue	0	0	152

Initial Value

No.	Group	Item name	Function
1	-		<b>All Color Specification:</b> Enables the All Color Specification section. <b>Each Color Specification:</b> Enables the Each Color Specification section.
2	All Color Specification	Highlight	Specifies the highlight value with RGB (in integer format). The available range is -128 to 128.
3		Shadow	Specifies the shadow value with RGB (in integer format). The available range is -128 to 128.
4		Gamma	Specifies the gamma value with RGB (in integer format). The available range is 30 to 500.
5		Coloring	Specifies the coloring value with RGB (in integer format). The available range is -128 to 128.
6	Each Color Specification Red	Highlight	Specifies the red highlight value (in integer format). The available range is -256 to 256.
7		Shadow	Specifies the red shadow value (in integer format). The available range is -128 to 128.
8		Gamma	Specifies the red gamma value (in integer format). The available range is 30 to 500.
9	Each Color Specification Green	Highlight	Specifies the green highlight value (in integer format). The available range is -256 to 256.
10		Shadow	Specifies the green shadow value (in integer format). The available range is -128 to 128.
11		Gamma	Specifies the green gamma value (in integer format). The available range is 30 to 500.
12	Each Color Specification Blue	Highlight	Specifies the blue highlight value (in integer format). The available range is -256 to 256.
13		Shadow	Specifies the blue shadow value (in integer format). The available range is -128 to 128.
14		Gamma	Specifies the blue gamma value (in integer format). The available range is 30 to 500.
15	Control Button	Initial Value	Returns the selected parameters to their initial values.

## 1.4 Image Processing

The **Image Processing** option provides access to common image processing settings, including rotation, background cropping, position correction, gradation reverse, skew correction, and resolution conversion.



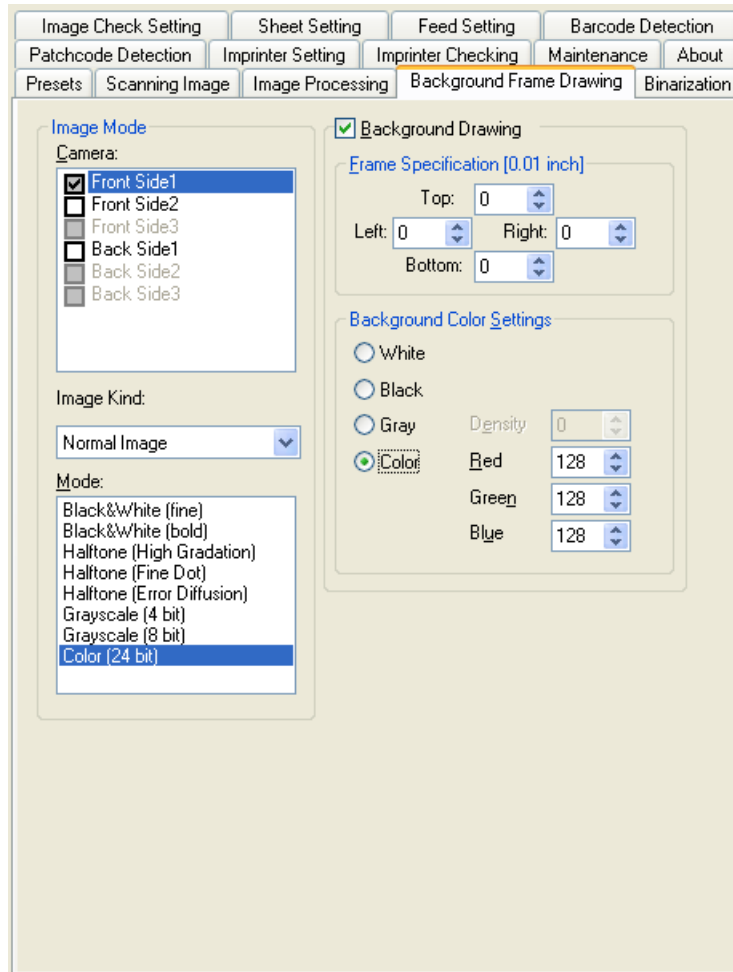
No.	Group	Item name	Function
1	ImageMode		Please refer to.1.3 Scanning Image
2	-	Rotation	Specifies the angle of rotation. The available options are <b>OFF</b> , <b>90 degrees (clockwise)</b> , <b>180 degrees</b> , and <b>-90 degrees (counterclockwise)</b> .
3		Background Cropping	Specifies the background area to crop. The available options are <b>OFF</b> , <b>Detected Size</b> , and <b>Specified Size</b> .
4		Position Correction	Specifies the position correction. The available options are <b>None</b> , <b>Upper-Left</b> and <b>Detection-Sized Center</b> .
5		Reference Image	Specifies a reference image. The option selected here must match the stream selected in the Image Mode; otherwise, an error displays. The available options are <b>Front Side1</b> , <b>Front Side2</b> , <b>Front Side3</b> , <b>Back Side1</b> , <b>Back Side2</b> , and <b>Back Side3</b> .
6		Gradation Reverse	Enables reversal of an image gradation. Select the checkbox to enable or disable the feature.
7		Skew Correction	
8	Effective Angle		The skew is corrected if the angle exceeds the specified number (in 0.1 degrees). The available range is 0 to 900.
9	Interpolation Method		Specifies the interpolation method for skew correction. The available options are <b>OFF</b> , <b>Standard</b> , and <b>High quality</b> .
10	Resolution Conversion		Enables resolution conversion. Select the checkbox to enable or disable the feature.
11		Output Resolution	Specifies the output resolution (in DPI). The available range is 50 to 600.
12		Interpolation Method	Specifies the interpolation method for resolution conversion. The available options are: <b>OFF</b> , <b>Average Interpolation</b> , <b>Bilinear Interpolation</b> , <b>Adjacent Point</b> , <b>Preserve White</b> , <b>Preserve Black</b> , and <b>Bicubic Interpolation</b> . (Note1)
13		Threshold	Specifies the threshold resolution (in DPI) when the Interpolation Method is <b>Preserve White</b> or <b>Preserve Black</b> . The range is 0 to 100.

**(Note1)**

Interpolation is a way of resizing or remapping images from one pixel grid to another. For example, **Bilinear Interpolation** uses an area approach and references the closest 2X2 area of known pixel values that surround the unknown pixel and then takes a weighted average of the 4 pixels to determine the final interpolated value. In contrast, **Adjacent Point** uses a linear approach and references the two adjacent points that surround the unknown pixel and then takes a weighted average of the 2 pixels to determine the final interpolated value.

## 1.5 Background Frame Drawing

The **Background Frame Drawing** option provides access to background frame settings.



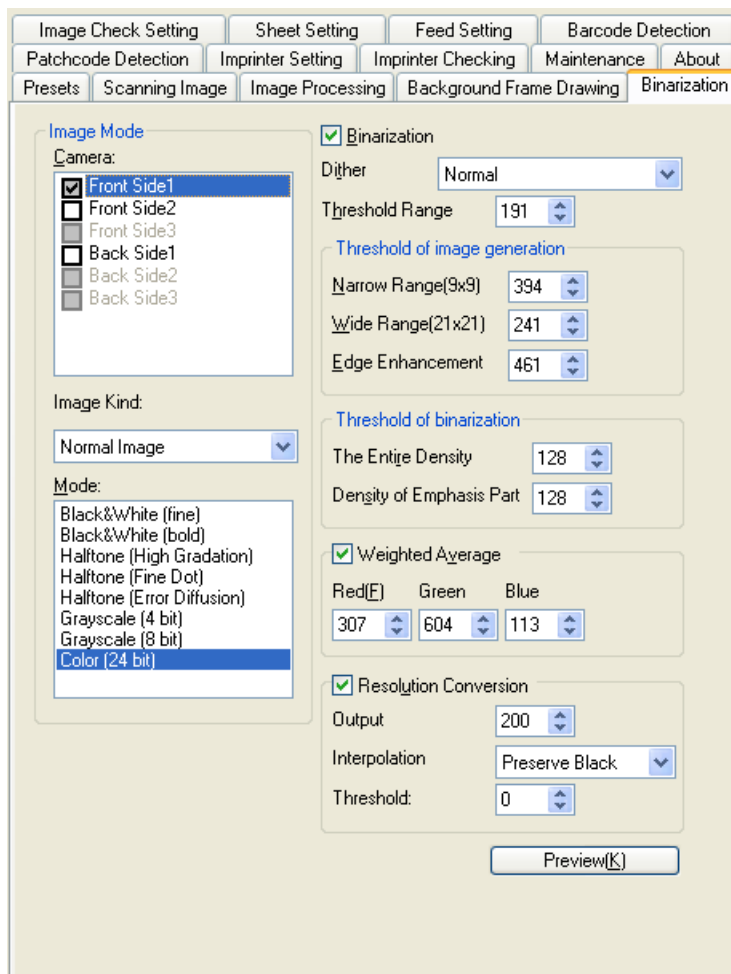
## 1. Properties

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No.	Group	Item name	Function
1	ImageMode		Please refer to.1.3 Scanning Image
2	Background Drawing		Enables drawing the background with specific frame and the background color settings. Select the checkbox to enable or disable the feature and to specify the preferred settings.
3	Frame Specification	Top	Specifies the height of a frame as measured from the top of a sheet (in 0.01 inches).
4		Left	Specifies the height of a frame as measured from the left of a sheet (in 0.01 inches).
5		Right	Specifies the height of a frame as measured from the right of a sheet (in 0.01 inches).
6		Bottom	Specifies the height of a frame as measured from the bottom of a sheet (in 0.01 inches).
7	Background Color Settings	White	When selected, specifies the background/frame drawing color to white.
8		Black	When selected, specifies the background/frame drawing color to black.
9		Gray	(Available only when the <b>Mode</b> is <b>Grayscale or Color</b> .) Specifies the background/frame drawing color to gray by enabling settings for <b>Density</b> (0 to 255).
10		Color	(Available only when the <b>Mode</b> is <b>Color</b> .) Specifies the background/frame drawing color to color by enabling settings for <b>Red</b> , <b>Green</b> , and <b>Blue</b> (0 to 255).

## 1.6 Binarization

The **Binarization** option provides access to common binarization settings, including dither, threshold, and density.



1. Properties

No	Group	Item name	Function
1	ImageMode		Please refer to.1.3 Scanning Image
2	-	Binarization	(Available only when the <b>Mode</b> is <b>Grayscale (8 bit)</b> or <b>Color (24 bit)</b> .) Enables setting the image binarization (an option that allows for an image to be segmented into foreground and background).  (Note1)
3		Dither	Specifies the method of binarization of middle density and is available only when the <b>Mode</b> is <b>Black&amp;White (bold)</b> . The available options are: <ul style="list-style-type: none"> <li>•<b>Normal</b>: The middle density part is output by the dither pattern. The volume of information of the image increases compared to other settings.</li> <li>•<b>White</b>: The middle density part is output by white priority and the image becomes light.</li> <li>•<b>Black</b>: The middle density part is output by black priority and the image becomes dark.</li> </ul>
4		Threshold Range	Specifies the threshold for the image. Typically, the higher the resolution, the sharper the image. However, at some point, a threshold is reached, where added resolution does not produce an appreciable gain in image quality. The <b>Threshold Range</b> is the resolution (in DPI) that captures all the significant details in the image. The available range is 0 (where the image becomes light) to 255 (where the image becomes dark).
5		Threshold of image generation	Narrow Range(9X9)
6	Threshold of image generation	Wide Range(21X21)	Specifies the threshold of Wide Range (21X21) of Binarization. The available range is 0 (where the image becomes light) to 511 (where the image becomes dark).
7		Edge Enhancement	Specifies the threshold of Edge Enhancement of Binarization. The available range is 0 (where the Edge Enhancement becomes light) to 1023 (where the Edge Enhancement becomes dark).
8	Threshold of binarization	The Entire Density	Specifies the threshold of Entire Density of Binarization. The available range is 0 (where the image becomes light) to 255 (where the image becomes dark). The default value is 128.
9		Density of Emphasis Part	Specifies the threshold of Density of Emphasis Part of Binarization. The available range is 0 (where the image becomes light) to 255 (where the image becomes dark). The default value is 128.

No	Group	Item name	Function
10	Weighted Average	Red Green Blue	Enables setting levels of Red, Green, and Blue (RGB) to produce shades of gray. Select the checkbox to enable or disable the feature. If all the components are at zero the result is black; if all are at maximum, the result is the brightest representable white. The available range for <b>Red</b> , <b>Green</b> , and <b>Blue</b> is 0 to 1024.
11	Resolution Conversion		Enables resolution conversion. Select the checkbox to enable or disable the feature.
12		Output Resolution	Specifies the output resolution (in DPI). The available range is 50 to 600.
13		Interpolation Method	Specifies the interpolation method for resolution conversion. The available options are <b>OFF</b> , <b>Average Interpolation</b> , <b>Bilinear Interpolation</b> , <b>Adjacent Point</b> , <b>Preserve White</b> and <b>Preserve Black</b> . (Note2)
14		Threshold	Specifies the threshold resolution (in DPI). The range is 0 to 100.
15	Control Button	Preview	Scans a page (with the set parameters) from the scanner device and also displays an overview of the scanned page in two preview windows: <b>Binarization Parameter</b> and <b>Binarization Settings Preview</b> . Note that in some instances, the front image is displayed in the preview window where the back image should be displayed. Since the page is scanned and made available in paper format, it is recommended that you check for paper in the scanner device before clicking the <b>Preview</b> button. Note that no errors will display even if there is a settings conflict during scanning, since this is a preview mode, and not a runtime mode.

**(Note1)**

If the **Binarization** feature is enabled, the binarized stream is appended to the scanned **Mode**. For example, if the **Binarization** feature is enabled with **Color (24 bit)**, then a total of two streams are returned to the application, where the first stream is in color and the second stream is in binarized black and white.

**(Note2)**

Interpolation is a way of resizing or remapping images from one pixel grid to another. For example, **Bilinear Interpolation** uses an area approach and references the closest 2X2 area of known pixel values that surround the unknown pixel and then takes a weighted average of the 4 pixels to determine the final interpolated value. In contrast, **Adjacent Point** uses a linear approach and references the two adjacent points that surround the unknown pixel and then takes a weighted average of the 2 pixels to determine the final interpolated value.

### 1.6.1 Binarization Parameter

Displays the following parameters.

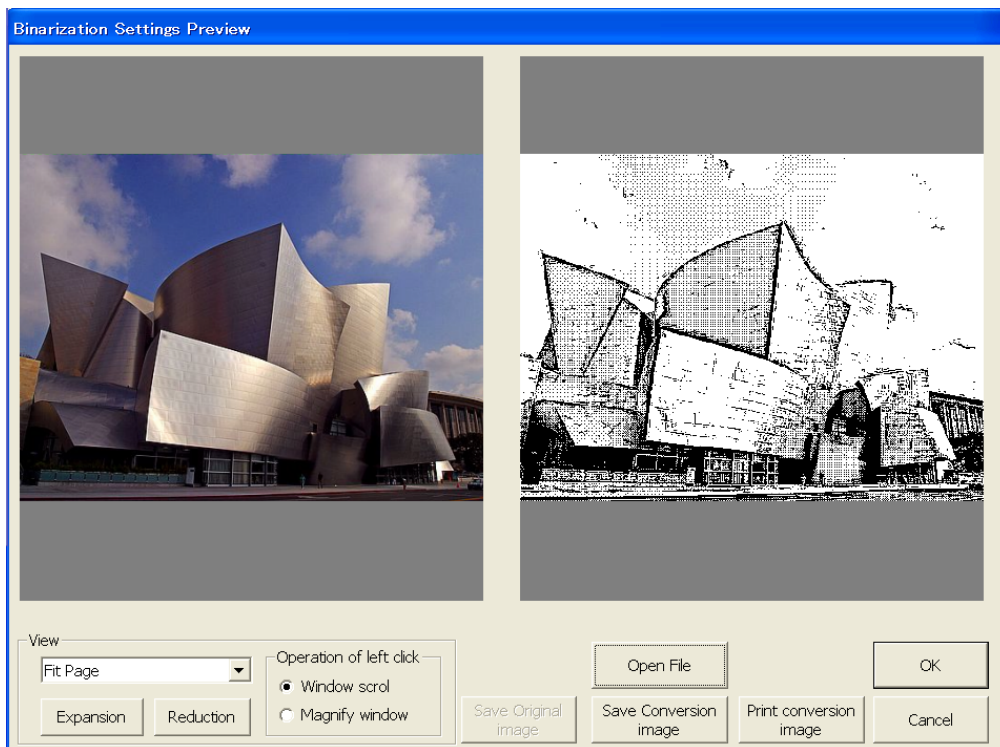
The parameter is the same as Binarization. Please refer to 1.6.

Weighted Average can be set even by the preview when in the color image, there is a check in Weighted Average.

The image shows two versions of the 'Binarization Parameter' dialog box. Both have a blue title bar and a light beige background. The left version shows the 'Initial Value' button, 'Dithering' set to 'Standard', 'Threshold of processing range selection' at 191, and three sub-sections: 'Threshold of image generation' with 'Narrow Range(9X9): 394', 'Wide Range(21X21): 241', and 'Edge Enhancement: 461'; and 'Threshold of binarization' with 'The Entire Density: 128' and 'Density of Emphasis Part: 128'. The right version is identical but includes a 'Weighted average to making grayscale' section at the bottom with 'Red: 307', 'Green: 604', and 'Blue: 113'.

### 1.6.2 Binarization Settings Preview

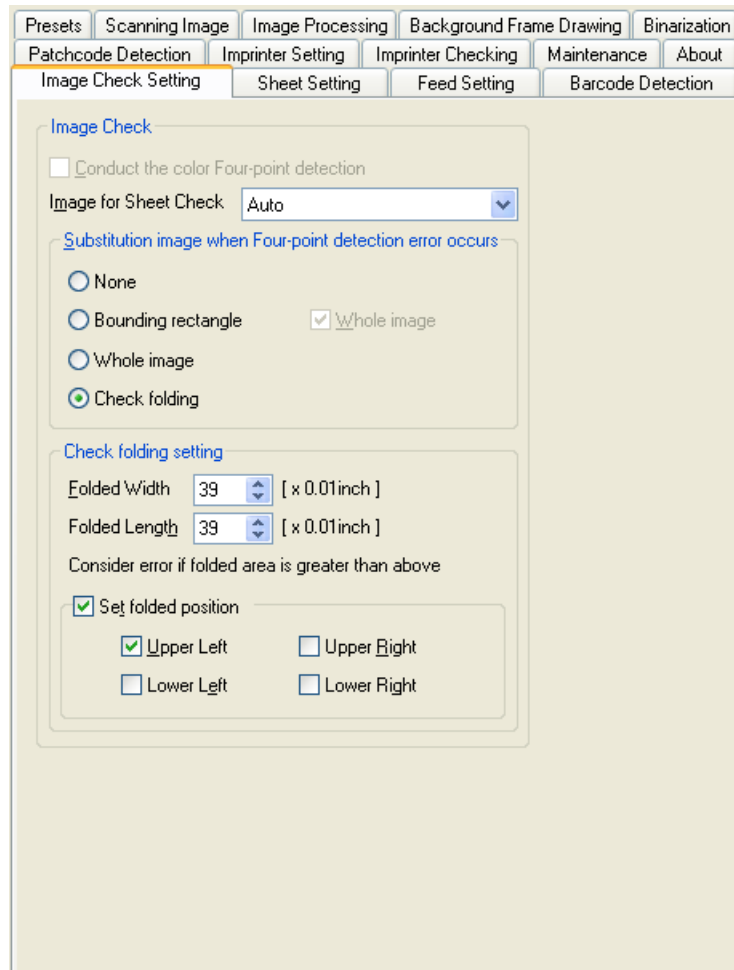
Displays two preview images. The original image is displayed on the left and the conversion image (determined by the **Binarization Parameter** settings) is displayed on the right. Additional settings include:



No.	Group	Item name	Function
1	View		Specifies the view mode. The original image and conversion image are displayed using the same magnification and the position is maintained during display. The available options are <b>Fit Page</b> , <b>Fit Width</b> , <b>Fit Height</b> , and <b>Actual Size</b> .
2		Expansion	Expands the display.
3		Reduction	Reduces the display.
4		Operation of left click	Specifies the operation of left click. The available options are <b>Window scroll</b> and <b>Magnify window</b> .
5	Control Button	Open File	Inputs the original image from an image file.
6		Save Original image	Preserves the scanned image in an image file.
7		Save Conversion image	Preserves the conversion image in an image file.
8		Print conversion image	Prints the conversion image.
9		OK	Closes the window after saving the changes. These changes are then ported to the ISIS driver and are available as part of the driver settings.
10		Cancel	Closes the window without saving the changes.

## 1.7 Image Check Setting

The **Image Check Setting** option enables checks on the image to be scanned.



No.	Group	Item name	Function
1	Image Check	Conduct the color Four-point detection	Enables a Four-point error detection. These errors occur when the four corners of a sheet fail to be detected. Select the checkbox to enable or disable the feature. It is possible to specify it only at the time of the multivalued image having.
2		Image for Sheet Check	Specifies the image to use for the sheet check. The option selected here must match the stream selected in the <b>Image Mode</b> ; otherwise, an error displays. The available options are <b>Auto</b> , <b>Front Side1</b> , <b>Front Side2</b> , <b>Front Side3</b> , <b>Back Side1</b> , <b>Back Side2</b> , <b>Back Side3</b> , <b>Front Side1 +Back Side1</b> , <b>Front Side1 +Back Side2</b> , <b>Front Side1 +Back Side3</b> , <b>Front Side2 +Back Side1</b> , <b>Front Side2 +Back Side2</b> , <b>Front Side2 +Back Side3</b> , <b>Front Side3 +Back Side1</b> , <b>Front Side3 +Back Side2</b> , and <b>Front Side3 +Back Side3</b> . If automatic scanning has been enabled, the scanned side is automatically set as the reference image. An error displays if no reference image is specified.
3		Substitution image when Four-point detection error occurs	Enables the selection of a substitute image when a Four-point detection error occurs. The available options are: <b>None</b> <b>Bounding rectangle</b> : Enabling this option displays the <b>Whole image</b> checkbox as an additional selection. <b>Whole image</b> <b>Check folding</b> : Enabling this option displays the Check folding setting area as an additional selection.
4	Check folding setting		Specifies the folded width and length (in 0.01 inches). (Note1)
5		Folded Width	The available range is 12 to 394.
6		Folded Length	The available range is 12 to 394.
7		Set folded position	Specifies the folded position. The available options are: <b>Upper Left/Lower Left/Upper Right/Lower Right</b>

**(Note1)**

The values specified for Folded Width and Folded Length must be smaller than the current selected page size.

## 1.8 Sheet Setting

The **Sheet Setting** option provides access to common sheet settings, including paper size, thickness and layout, and checks on page length, page width, page thickness, skew, and scanner length.

Presets Scanning Image Image Processing Background Frame Drawing Binarization  
Patchcode Detection Imprinter Setting Imprinter Checking Maintenance About  
Image Check Setting Sheet Setting Feed Setting Barcode Detection

Page Size: Letter - 8.5 x 11 in Thickness: 327 [0.1lb]

Custom Page Width: 0" Custom Page Height: 0"

Page Layout  
 Portrait  
 Landscape

Specify Scan Width Set: 0 [x 0.01inch]

Area  
X: 0" Y: 0" Width: 8 1/2" Height: 11"  
 Pixels  Inches  Centimeters  Snap

Length Checking  
 Minimum Length Checking  
 Range Specification [0.01inch]  
1169 to 1169

Scanner Length Checking(B)  
 Minimum Length Checking  
 Maximum Length [0.01inch]  
1169  
 Length Checking Moderation

Width Checking  
 Minimum Width Checking  
 Range Specification [0.01inch]  
826 to 827

Thickness Checking(E)  
Method: Ultrasonic  
 Minimum Thickness Checking  
 Ultrasonic Detect Length [0.01inch]  
98

Skew Checking  
Accepted Range[0.1 degrees]:  
-60 to 60

No.	Group	Item name	Function
1	-	Page Size	Specifies the page sizes supported by the device. You should select a page size that matches the size of the items you are scanning, or the closest bigger size. Scanning too large an area will result in image files that waste space by storing unnecessary white space or undesired data (noise). If the size you need is not available, you can select a bigger size, and then use the <b>Area</b> controls to adjust the scanned area to the portion of the page you want to save. All scanners have a page size labeled <b>Scanner's Maximum</b> . Selecting this size captures the biggest image the scanner is capable of returning.
2		Thickness	Specifies the thickness of the sheet (in 0.1 lb).
3		Custom Page Width	(Available only when <b>Page Size</b> is set to <b>Custom</b> .) Enables setting a custom page width.
4		Custom Page Height	(Available only when <b>Page Size</b> is set to <b>Custom</b> .) Enables setting a custom page height.
5		Page Layout	Specifies the orientation of data with respect to the narrow or wide dimension of the page. <b>Portrait</b> : Text and other data are oriented across the narrow dimension of the page. <b>Landscape</b> : Text and other data are oriented across the wide dimension of the page. Changing from <b>Portrait</b> to <b>Landscape</b> page layout swaps the page width and length selected in the <b>Paper Size</b> field. This setting, in combination with the <b>Feed Direction</b> , determines the orientation of the scanned images. (Note1)
6		Specify Scan Width	Specifies the scan width (in .01inches).
7	Area	X	Specifies the distance from the left edge to the upper left corner of the scan area in the selected measurement units ( <b>Pixels</b> , <b>Inches</b> , or <b>Centimeters</b> ).
8		Y	Specifies the distance from the top edge to the upper left corner of the scan area in the selected measurement units ( <b>Pixels</b> , <b>Inches</b> , or <b>Centimeters</b> ).
9		Width	Specifies the width of the scan area in the selected measurement units ( <b>Pixels</b> , <b>Inches</b> , or <b>Centimeters</b> ).
10		Height	Specifies the length of the scan area in the selected measurement units ( <b>Pixels</b> , <b>Inches</b> , or <b>Centimeters</b> ).

1. Properties

No.	Group	Item name	Function
11		Snap	Enables the scanning preview area to automatically adjust to an even measurement boundary (0.1 cm, or 1/8") when dragging the handles in the preview area. Otherwise, the scanning area remains exactly as defined.
12	Length Checking	Length Checking	Enables a length check on the sheet. (Note2)(Note4)
13		Minimum Length Checking	Enables a minimum length check. The minimum value of the range input is activated.
14		Range Specification	Enables a check with the specified value range (in 0.01 inches).
15	Width Checking	Width Checking	Enables a width check on the sheet. (Note3)
16		Minimum Width Checking	Enables a minimum width check. The minimum value of the range input is activated.
17		Range Specification	Enables a check with the specified value range (in 0.01 inches).
18	Scanner Length Checking	Scanner Length Checking	Enables a length check on the scanner device. (Note4)
19		Minimum Length Checking	Enables a minimum length check. The minimum value of the range input is activated.
20		Maximum Length	Enables a check with the specified value (in 0.01 inches).The available range is 291 to 1654.
21		Length Checking Moderation	Enables a length checking moderation.
22	Thickness Checking	Thickness Checking	Enables a thickness check on the sheet.
23		Method	Specifies the method of a thickness check. The two options are <b>Transmitted Light</b> and <b>Ultrasonic</b> .
24		Minimum Thickness Checking	Enables a minimum thickness check.
25		Ultrasonic Detect Length	(Available only when the <b>Thickness Checking &gt; Method</b> is <b>Ultrasonic</b> ) Enables an ultrasonic length detection with the specified value (in 0.01 inches). The available range is 98 to 1551.
26	Skew Checking	Skew Checking	Enables a skew check on the sheet with the specified values (in 0.1 degrees).
27		Accepted Range	The available range is -900 to 900.

**(Note1)**

For some devices, the combination of *Page Layout* and *Feed Direction* can result in images that are right-side up when viewed.

**(Note2)**

If no range is specified, an error occurs when at least 105% of the specified sheet size is reached.

**(Note3)**

If no range is specified, an error occurs when at least 105% of the specified sheet size is reached.

**(Note4)**

The length check should specify the image that satisfies the clear area of the sheet to check it based on the input image for an image for the check.

Moreover, when the color is specified, it takes a lot of processing time to convert into the black and white image by soft processing and to request length.

The gap between sheets becomes making known because it makes the slip coexistence sending assumption when length is not checked with the scanner, and the paper feed performance decreases. Please specify the scanner length check when you transport only the fixed form size sheet.

## 1.9 Feed Setting

The **Feed Setting** option provides access to common feed settings, including automatic scanning, ejection checking, skew adjustment, error processing, scanning speed, hopper position, and paper gap.

The screenshot displays the 'Feed Setting' tab within a software application. The tab is highlighted in orange. The interface contains the following settings:

- Automatic Scanning
- Pre Feeding
- Ejection Checking
- Skew Adjustment
- Error Processing: Sequence (dropdown)
- Scanning Speed: Normal (dropdown)
- Hopper Position: Normal (dropdown)
- Paper Gap: Normal (dropdown)
- Stacker1: Normal Processing Ejection (dropdown)
- Stacker2: Abnormal Processing Ejection (dropdown)

No.	Group	Item name	Function
1	-	Automatic Scanning	Enables automatic and continuous scanning when enabled.
2		Ejection Checking	Enables ejection checking when enabled. It is not possible to specify it with this device.
3		Pre Feeding	Enables pre-feeding when enabled.
4		Skew Adjustment	Enables skew adjustment when enabled.
5		Error Processing	Specifies the error processing option. <b>Sequence:</b> The operation will be automatically aborted upon encountering a scanning error. <b>Non-Sequence:</b> Ejects the sheet to a specified stacker and continues scanning upon encountering a scanning error. <b>Non-Sequence2:</b> Ejects the sheet to a specified stacker and continues scanning upon encountering the following scanning errors: Abnormal mixed length sheet Abnormal sheet thickness Abnormal sheet length Short gap error Detection of multiple feeding by ultrasonic sensor Ultrasonic sensor error
6		Scanning Speed	Specifies the scanning speed. The available options are <b>Normal, High Speed, and Low Speed.</b>
7		Hopper Position	Specifies the hopper position. The available options are <b>Normal, Level1, and Level2.</b> (Note1)
8		Paper Gap	Specifies the paper gap. The available options are <b>Normal and Widen.</b>
9		Stacker1	Specifies the stacker to eject at normal and abnormal processing when two or more stackers exist. The available options are <b>Normal Processing Ejection, Abnormal Processing Ejection, and Unused.</b> Note that regardless of the settings in this specification, fixed stackers are used to recover from a paper jam or other similar issues.
10		Stacker2	Specifies the stacker to eject at normal and abnormal processing when two or more stackers exist. The available options are <b>Normal Processing Ejection, Abnormal Processing Ejection, and Unused.</b> Note that regardless of the settings in this specification, fixed stackers are used to recover from a paper jam or other similar issues.

(Note1)

**Normal: The hopper is lowered to the lower bound position.**

**Level1: The hopper is lowered from a current position by 20mm.**

**Level2: The hopper is lowered from a current position by 40mm.**

There are specification of Automatic Scanning and the following correlations.

	Automatic Scanning	
	OFF	ON
Scan End	Position usually	Position usually
Hoppe empty	Position usually	It follows the hopper position.
Error occurs	Position usually	Position usually
Scanner stop	It follows the hopper position.	It follows the hopper position.
Sheet clearness	It follows the hopper position.	It follows the hopper position.

## 1.10 Barcode Detection

The **Barcode Detection** option detects and decodes one and two dimensional barcodes on scanned images.

The screenshot shows the 'Barcode Detection' settings window. The window has a tabbed interface with the following tabs: Presets, Scanning Image, Image Processing, Background Frame Drawing, Binarization, Patchcode Detection, Imprinter Setting, Imprinter Checking, Maintenance, About, Image Check Setting, Sheet Setting, Feed Setting, and Barcode Detection. The 'Barcode Detection' tab is active.

Under the 'Barcode Detection' section, the following options are visible:

- Barcode Detection
- Recognition Image: Front Side1 (dropdown)
- Maximum ScanCount: 1 (spinner)
- Barcode Type: None (dropdown)
- Recognition Orientation: Horizontal 1 (upright only) (dropdown)
- Do not transfer barcode images

Under the 'Barcode Sheet feed to the abnormal ejection stacker' section, the following options are visible:

- Barcode Sheet feed to the abnormal ejection stacker
- Judgement standard**
  - All recognized barcodes
  - Recognized barcodes are compared
- Comparison setting**
  - Exactly search (Contents dropdown)
  - Prefix search
  - Suffix search
  - Substring search
  - Character number (1 spinner) (Title text box)
- Comparison data: (text box)
- Buttons: Add, Delete

1. Properties

No.	Group	Item name	Function
1	Barcode Detection	Barcode Detection	Enables setting barcode detection with the additional option to specify the side, the type, and the orientation for the detection. Select the checkbox to enable or disable the feature.
2		Recognition Image	Specifies the image used for barcode recognition. The option selected here must match the stream selected in the Image Mode; otherwise, an error displays. The available options are: <b>Front Side1</b> , <b>Front Side2</b> , <b>Front Side3</b> , <b>Back Side1</b> , <b>Back Side2</b> , and <b>Back Side3</b> . The images that can be specified are <b>OCR (pencil)</b> , <b>OCR (ballpoint pen)</b> , <b>Normal Image - Black&amp;White (fine)</b> , and <b>Normal Image - Black&amp;White (bold)</b> . It is recommended that you select <b>Normal Image - Black&amp;White (fine)</b> .
3		Maximum ScanCount	Specifies the maximum barcode count that can be recognized. The available range is 1 to 100.
4		Barcode Type	Specifies the barcode type. The available options are <b>None</b> , <b>EAN13</b> , <b>EAN8</b> , <b>NW7</b> , <b>Code39</b> , <b>ITF</b> , and <b>Code128</b> .
5		Recognition Orientation	Specifies the position of the recognized barcode. The available options are <b>Horizontal 1 (upright only)</b> , <b>Horizontal 2 (upright and reverse)</b> , <b>Vertical 2 (upright and reverse)</b> , and <b>Vertical/Horizontal 4 (upright and reverse)</b> .
6		Do not transfer barcode images	Enables the image used for barcode detection to be outside the target of ISIS image acquisition and is available for all <b>Recognition Image</b> options <i>except Front Side 1</i> . Select the checkbox to enable or disable the feature.  (Note1)
7	Barcode Sheet feed to the abnormal ejection stacker	Barcode Sheet feed to the abnormal ejection stacker	Enables settings for the barcode sheet feed to the abnormal ejection stacker. Select the checkbox to enable or disable the <b>Judgement standard</b> settings.
8		Judgement standard	Specifies options for the detected barcode. The available options are: <b>All detected barcodes</b> : Enables review of all detected barcodes. <b>Recognized barcodes are compared</b> : Enables the Comparison setting section.  (Note2)

No.	Group	Item name	Function
9		Comparison setting	The Comparison setting option provides the following search options: <b>Exact search</b> <b>Prefix search</b> <b>Suffix search</b> <b>Substring search</b> <b>Character Number:</b> Enables setting the number of characters. The available range is 1 to 256.
10		Comparison data	(Available only when the search method is <i>not</i> <b>Character Number</b> .) Specifies the comparison data string. The comparison is case-sensitive.  (Note3)
11		Contents	Specifies the content for comparison.
12		Title	Enables a title to be set for the comparison settings.
13		Add	Adds the title as specified in the Title field and displays it in the Contents list.
14		Delete	Deletes the item selected in the Contents list.

**(Note1)**

The Do not transfer barcode images feature cannot be selected for the last image side. If you do not want to transfer the barcode image to the last image side, use the Scan Only option, which allows you to not transfer the barcode image regardless of the recognition result of the barcode. An error displays if no other scanning devices are available when this option is selected.

**(Note2)**

Selecting the **Recognized barcodes are compared** option requires settings to be specified in the **Comparison setting** area. An error is displayed if an attempt is made to navigate to a different ISIS tab without identifying any comparison settings.

**(Note3)**

**Comparison data** can be defined up to 255 characters. If **Exact search** is required with 256 characters, use the combination of **Prefix search** and **Suffix search** to cover the 256 character **Exact search**. In addition, a string must be entered in the **Comparison data** field when the **Comparison setting** format is specified as **Exact search**, **Prefix search**, **Suffix search**, or **Substring search**. If this field is left blank, no search results are returned.

## 1.11 Patchcode Detection

The **Patchcode Detection** option detects and decodes patchcode types 1, 2, 3, 4, 6, and T during batch scanning.

The screenshot shows a software interface with several tabs at the top: Image Check Setting, Sheet Setting, Feed Setting, Barcode Detection, Presets, Scanning Image, Image Processing, Background Frame Drawing, Binarization, Patchcode Detection, Imprinter Setting, Imprinter Checking, Maintenance, and About. The 'Patchcode Detection' tab is active.

Inside the 'Patchcode Detection' tab, there is a checked checkbox labeled 'Patchcode Detection'. Below it is a 'Recognition Image' dropdown menu set to 'Front Side1'. A section titled 'Patchcode Priority' contains six dropdown menus arranged in two columns: 1: PATCH1, 2: PATCH2, 3: PATCH3, 4: PATCH4, 5: PATCH6, and 6: PATCHT. Below this is a 'Recognition Orientation' dropdown menu set to 'Horizontal' and an unchecked checkbox labeled 'Do not transfer Patchcode images'.

At the bottom, there is another checked checkbox labeled 'Patchcode Sheet feed to the abnormal ejection stacker'. Below it is a section titled 'Selection of Patchcode' containing six checkboxes: Patch1 (checked), Patch2, Patch3, Patch4, Patch6, and PatchT.

No.	Group	Item name	Function
1	Patchcode Detection	Patchcode Detection	Enables setting patchcode detection with the additional option to specify the side, the priority, and the orientation for the detection. Select the checkbox to enable or disable the feature.
2		Recognition Image	Specifies the image used for patchcode detection. The available options are: <b>Front Side1, Front Side2, Front Side3, Back Side1, Back Side2, and Back Side3</b> . The images that can be specified are <b>OCR (pencil), OCR (ballpoint pen), Normal Image - Black&amp;White (fine), and Normal Image - Black&amp;White (bold)</b> . It is recommended that you select <b>Normal Image - Black&amp;White (fine)</b> .
3		Patchcode Priority	Specifies the order and priority for searching patchcodes. The available options are: None, <b>PATCH1, PATCH2, PATCH3, PATCH4, PATCH6, and PATCHT</b> . (Note1)
4		Recognition Orientation	Specifies the position of the recognized patchcode. The available options are <b>Horizontal, Vertical, Horizontal and Vertical, and Vertical and Horizontal</b> .
5		Do not transfer Patchcode images	Enables the image used for patchcode detection to be outside the target of ISIS image acquisition. Select the checkbox to enable or disable the feature.  (Note2)
6	Patchcode Sheet feed to the abnormal ejection stacker	Patchcode Sheet feed to the abnormal ejection stacker	Enables activation of the <b>Selection of Patchcode</b> controls. This control determines if the recognized patchcode sheet should be ejected to the normal or abnormal stacker. Select the checkbox to enable or disable the feature.
7		Selection of Patchcode PATCH1 PATCH2 PATCH3 PATCH4 PATCH6 PATCHT	Select one or more of these options to specify the judgement standard of the patchcode sheet. (Note3)

**(Note1)**

Selecting None automatically disables the remaining **Patchcode Priority** options.

**(Note2)**

The Do not transfer Patchcode images feature cannot be selected for the last image side. If you do not want to transfer the patchcode image to the last image side, use the Scan Only option, which allows you to not transfer the patchcode image regardless of the recognition result of the patchcode. An error displays if no other scanning devices are available when this option is selected.

**(Note3)**

Enabling this feature requires at least one patchcode to be selected.

## 1.12 Imprinter Setting

The **Imprinter Setting** option specifies the placement of the imprinter, or number, string on the scanned image.

Image Check Setting   Sheet Setting   Feed Setting   Barcode Detection  
 Presets   Scanning Image   Image Processing   Background Frame Drawing   Binarization  
 Patchcode Detection   **Imprinter Setting**   Imprinter Checking   Maintenance   About

**Numbering Print**

No  
 1 Place Printing  
 2 Places - First Position Printing  
 2 Places - Second Position Printing

**Numbering Canceling Symbol**

No  
 1 Place Printing  
 2 Places - First Position Printing  
 2 Places - Second Position Printing  
 Canceling Digit Number: 1

The digit number to cancel at 2 places Printing becomes the target of either the digit number for the numbering print contents or the digit number to cancel.

**Numbering Print Contents**

Type: Year (four digits)   Digit: 1   Contents: [ ]

Character Data: [ ]

Title: [ ]  
 Add   Delete

Printing Orientation: Forward  
 Anti-double-scan printing  
 Print Position(B)  
 Position: 20 [ x 0.01inch ]  
 Check Printability  
 Image Check: Front Side1  
 Printing Character Control  
 Feeding Speed: Standard  
 Size: Standard

1. Properties

No.	Group	Item name	Function
1	-	Numbering Print	Specifies the printing position for numbering. The available options are: <b>No</b> <b>1 Place Printing</b> <b>2 Places - First Position Printing</b> <b>2 Places - Second Position Printing</b> (Note1)
2	Numbering Canceling Symbol	Numbering Canceling Symbol	Specifies the printing position for canceling numbering. The available options are: <b>No</b> <b>1 Place Printing</b> <b>2 Places - First Position Printing</b> <b>2 Places - Second Position Printing</b>
3		Cancelling Digit Number	Specifies the digit number to cancel for numbering and is available when the <b>1 Place Printing, 2 Places - First Position Printing, or 2 Places - Second Position Printing</b> option is selected.
4	-	Printing Orientation	Specifies the printing orientation for numbering. The available options are <b>Forward</b> and <b>Backward</b> .
5		Anti-double-scan-printing	(Available only when <b>Check Printability</b> is enabled.) Disables printing on pages that are identified as double feed. Select the checkbox to enable or disable the feature. (Note2)
6	Print Position	Print Position	Enables setting the printing position for numbering. This feature starts printing "x" distance from the top of the page where "x" is the setting for position. Select the checkbox to enable or disable the feature.
7		Position	Specifies the printing specification position (in 0.01 inches) (Note3).
8	Check Printability	Check Printability	Enables setting a check on printability. Select the checkbox to enable or disable the feature.
9		Image Check	Specifies the image to check. The option selected here must match the stream selected in the Image Mode; otherwise, an error displays. The available options are <b>Front Side1, Front Side2, Front Side3, Back Side1, Back Side2, and Back Side3</b> . (Note4)
10	Printing Character Control	Printing Character Control	Enables setting a check on the feeding speed and size. Select the checkbox to enable or disable the feature.

No.	Group	Item name	Function
11		Feeding Speed	Specifies the feeding speed. The available options are <b>Standard</b> , <b>Level1 (high speed)</b> , <b>Level2</b> , <b>Level3</b> , and <b>Level4 (low speed)</b> . Note that a higher level in feeding speed improves the quality of printing, but reduces the scanning speed. (Note5)
12		Size	Specifies the size of the character set. The available options are <b>Standard</b> and <b>Large</b> .
13	Numbering Print Contents		Specifies the overall format of the numbering data.
14		Type	Specifies the format of the numbering data. The available options are: <b>Year (four digits)</b> , <b>Year (two digits)</b> , <b>Month (two digits)</b> , <b>Day (two digits)</b> , <b>Scanning Page Count</b> , <b>Stacker Symbol</b> , and <b>Character Data</b> . (Note6)
15		Digit	Specifies the page count string length and is available only when the <b>Scanning Page Count</b> option is selected. The maximum value is 36.
16		Character Data	Specifies the character data when the type is <b>Character Data</b> . Use the following one-byte characters: 0 to 9, A to Z, space, hyphen (-), and period (.). Additionally, this driver supports the following symbols: !"#%&'()*+,-./ :;<=>? @[\ ]^_`{ }~ (Note7)
17		Contents	Specifies the character segments that will be printed on the page.
18	Title	Defines the name for the current component of the imprint string.	
19	Add	Adds a character segment to the <b>Contents</b> based on what is set in the <b>Numbering Print Contents</b> area.	
20	Delete	Deletes the item selected in the <b>Contents</b> list.	

**(Note1)**

Selecting an option other than **No** requires numbering settings to be specified in the **Numbering Print Contents** area. An error is displayed if an attempt is made to navigate to a different ISIS tab without identifying any numbering settings.

**(Note2)**

When **Anti-double-scan printing** is enabled, a special pattern is printed along with the printed data, thereby reducing the number of characters that can be printed by six (characters).

**(Note3)**

The print position must be equal to or smaller than 450 [0.1mm] units of the actual page size. For example, if the imprinter is printed on a 1000 [0.1mm] length page size, the maximum position must be  $1000 - 450 = 550$  [0.1mm] units of the actual page size. For reference, 450 [0.1mm] units is equal to 177 [0.01inch] units.

**(Note4)**

The image for the print check should satisfy the clear area. Additionally, if a color image is specified, it will take more time for binarization.

**(Note5)**

An error displays if **Level 1** or **Level 2** is selected when the resolution is at 100 or 150 DPI or when **Anti-double-scan printing** is enabled.

**(Note6)**

A string must be entered in the **Character Data** field when the **Type** format is specified as **Character Data**.

**(Note7)**

The backslash symbol ( \ ) gets imprinted as the Japanese Yen symbol ( ¥ ). Additionally, a string must be entered in the **Character Data** field when the **Type** format is specified as **Character Data**. If this field is left blank, no character data is imprinted.

## 1.13 Imprinter Checking

The **Imprinter Checking** option helps identify and avoid numbering issues due to multiple feed errors.

Anti-double-scan print Checking reads the numbering printed on the sheet, and prevents reading of the slip twice.

Note: The imprinting is typically conducted after scanning, but in some cases there may be imprinting without any image depending on the application program. Comparing the scanned sheet against the original sheet should help identify any missing images.

The screenshot shows the 'Imprinter Checking' settings dialog box. The 'Imprinter Checking' tab is active. The 'Anti-double-scan print Checking' checkbox is checked. Below it, the 'First position Checking' and 'Second position Checking' checkboxes are also checked. For both positions, the 'Image for check' is set to 'Front Side1', 'Check Method' is 'Print', 'Recognition method' is 'Black Area', and 'Check Part' is 'Lower Left'. For the first position, the 'Vertical Position [0.01inch]' has a 'Start' of 4 and an 'End' of 14, and the 'Horizontal Position [0.01inch]' has a 'Start' of 4 and an 'End' of 16. For the second position, the 'Vertical Position(Y) [0.01inch]' has a 'Start' of 4 and an 'End' of 14, and the 'Horizontal Position(X) [0.01inch]' has a 'Start' of 4 and an 'End' of 16.

1. Properties

No.	Group	Item name	Function
1	Anti-double-scan print Checking		Enables checking for multiple feed errors. Select the checkbox to enable or disable the feature. If enabled, the available options are <b>First position Checking</b> and <b>Second position Checking</b> . Select either option to activate additional check controls. (Note1)
2	First position Checking Second position Checking	Image for check	Specifies the image to check. The option selected here must match the stream selected in the Image Mode; otherwise, an error displays. The available options are <b>Front Side1</b> , <b>Front Side2</b> , <b>Front Side3</b> , <b>Back Side1</b> , <b>Back Side2</b> , and <b>Back Side3</b> . (Note2)
3		Check Method	Specifies the check method. The available options are <b>Print</b> and <b>No Print</b> . <b>Print</b> : It becomes an error when there is a print. <b>No Print</b> : It becomes an error when there is no print.
4		Recognition method	Specifies the recognition method. The available options are <b>Black Area</b> and <b>Print Pattern</b> . <b>Black Area</b> : It is judged that there is numbering when there is a black print in the detection specification area. <b>Print Pattern</b> : It judges in the form of Anti-double-scan print of Imprinter Setting.
5		Check Part	Specifies the check position. The available options are <b>Lower Left</b> and <b>Four Corners</b> .
6		Vertical Position	Specifies the vertical position of the sheet (in 0.01 inches). The <b>Start</b> range is 4 to 1476 and the <b>End</b> range is 14 to 1650. (Note3) (Note5)
7		Horizontal Position	Specifies the horizontal position of the sheet (in 0.01 inches). The <b>Start</b> range is 4 to 106 and the <b>End</b> range is 16 to 118. (Note4) (Note5)

**(Note1)**

When **Anti-double-scan** printing is enabled, a special pattern is printed along with the printed data, thereby reducing the number of characters that can be printed by six (characters).

**(Note2)**

The image for the print check should satisfy the clear area. Additionally, if a color image is specified, it will take more time for binarization.

**(Note3)**

Note that the selected **End** range must be equal to, or smaller than, the current selected page size length.

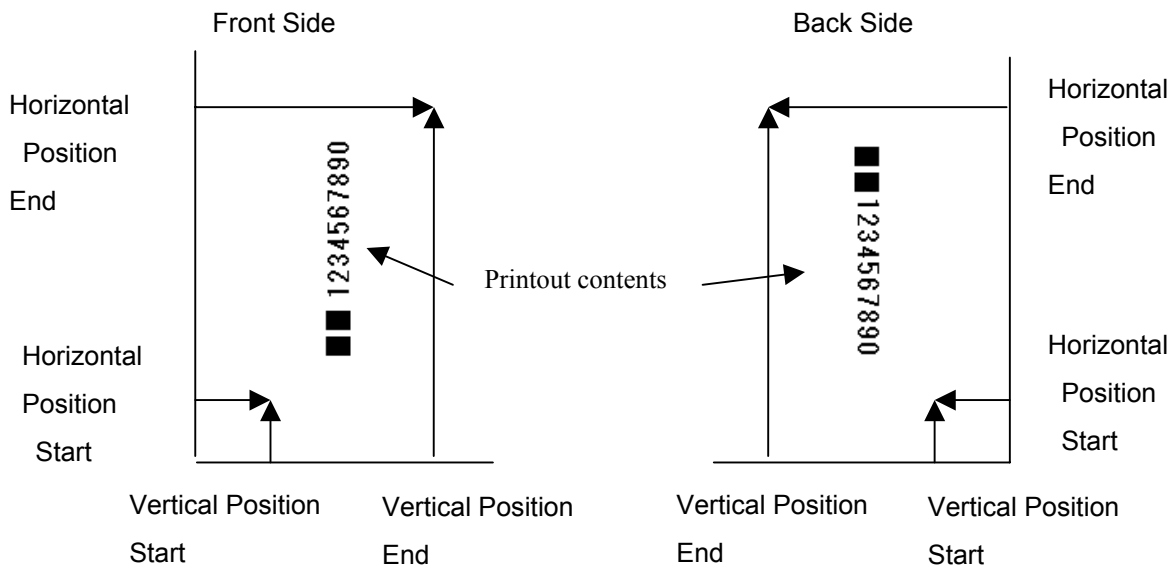
**(Note4)**

that the selected **End** range must be equal to, or smaller than, the current selected page size width.

**(Note5)**

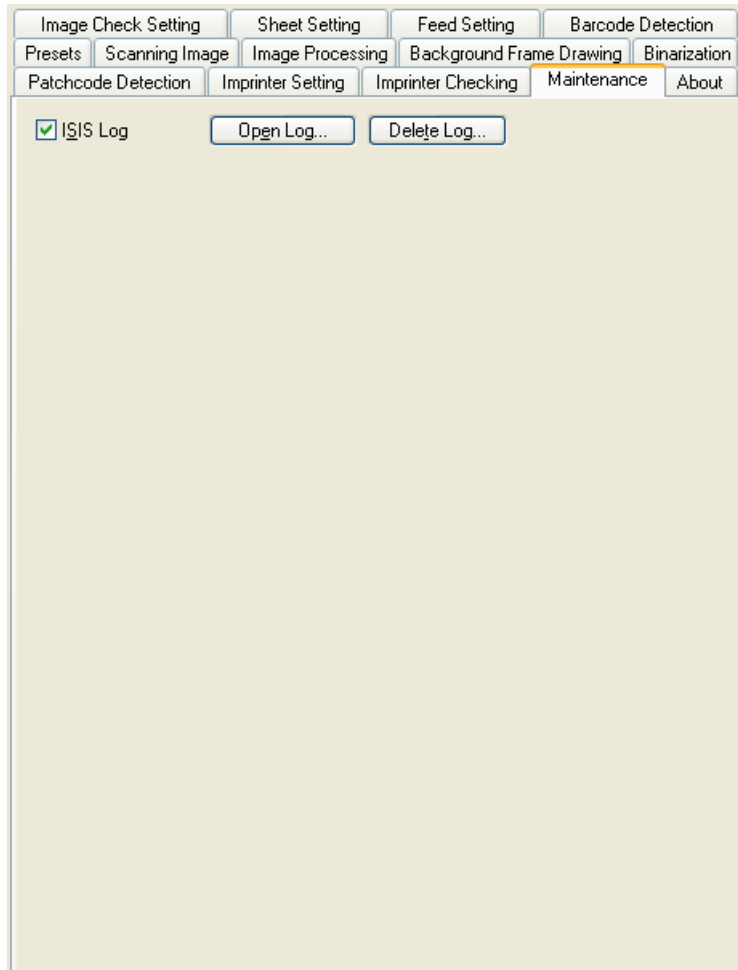
The bottom of the left of the sheet becomes a standard on the Front.

A lower right edge of the sheet becomes a standard on the Back.



## 1.14 Maintenance

The Maintenance option provides access to common maintenance functions.



No.	Group	Item name	Function
1	-	ISIS Log	Creates an ISIS driver log file with information on recent activity. Select the checkbox to enable or disable the feature.
2		Open Log...	Displays all available log entries in text (.txt) file format.
3		Delete Log...	Deletes the existing log entries. You may want to periodically delete old log entries and create new entries to help trace recent activity.

## 1. Properties

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## Chapter 2. Error Codes

### 2.1 Scanner Detailed Error Code List

Some of errors are not described in this error code list. Refer to error code in the scanner user's manual.

Table 2.1 Scanner Error Code (1/9)

No.	Error code	Cause	Recovery
1	20E91002 20EA1002 20EB1002 20EC1002	The device is reserved. (Other process is using the device.)	Close the program using the scanner and retry.
2	20E910X3 20EA1003 20EB1003 20EC1003	The device is warming up. (The device is not ready.)	Retry when the status lamp start blinking slowly.
3	20EB1004	The device is warming up. (Releasing from the energy saving mode)	
4	20E92001 20EA2001 20EB2001 20EC2001	No device is connected.	Check connection of scanner and retry.
5	21122810 21122811	Lighting time has reached to the threshold value.	Contact service personnel and replace with new lamp.
6	2112282X 2112283X 2112286X 2112287X	A lamp for scanning is not bright enough.	Clean the surface lower mirror and cover glass. If not recovered, contact service personnel.
7	2112284X 2112285X 2112288X 2112289X		Clean the surface lower mirror and cover glass. If not recovered, contact service personnel.
8	2112308X 2112309X X:0 to 6	Warning for contamination on the scanning head.	Clean the surface lower mirror and cover glass.
9	2112308X 2112309X X:8 to E		Clean the surface lower mirror and cover glass.

## 2. Error Code

Table 2.1 Scanner Error Code (2/9)

No.	Error code	Cause	Recovery
10	21123301 21123302 21123304	Reaching the life of roller for scanning.	Possible to continue job. Contact service personnel.
11	21123310	Roller for scanning mechanism is contaminated.	Clean the roller.
12	21123510 21123511 21123512 21123513	Life of ink jet	Replace the ink jet.
13	21128F0X	Stacker n is full.	Stacker n is full. Remove sheets from stacker and resume process.
14	21128F1X		Stacker n is full. Remove sheets from stacker and resume process.
15	21128F2X		Close the door of stacker n and resume process.
16	21128F3X		Sheets remaining the stacker n. Remove sheets from stacker and resume process. Please confirm whether for the substacker to shift and to interrupt the detector When there is no Sheet.
17	2312D01X 2312D10X	Multiple feeding check error	Check if sheet and parameter are correct
18	250F3000 250F4000 250F5000 250F60XX 250F700X 250F8000 250F900X 250FA001 250FBXX0	Scanner mode is different.	Suspend the process and power cycle to continue.
19	264C0002	Un-scanned sheets remain in the scanner.	Continue scanning until hopper will be empty.
20	30129001 30129011	No sheets in the hopper.	Set sheets to continue scanning or finish process.
21	301296XX	Stop scanning(Stop switch)	Set sheets to continue scanning or finish process.
22	30129801	Stop scanning(Stop command)	

Table 2.1 Scanner Error Code (3/9)

No.	Error code	Cause	Recovery
23	32126006	Sheet jam	Remove jammed Sheet and resume scanning.
24	331218F0	Surface, scanning error	Remove jammed paper and reset them in the hopper to scan.
25	331218F1	Back, scanning error	
26	331220XX	Detector error	Clean the detector PC11.
27	331221XX		Clean the detector PC20
28	331222XX		Clean the detector PC22
29	3312233X		Clean the detector PC21L
30	3312234X		Clean the detector PC21M
31	3312235X		Clean the detector PC21R
32	331223XX		Clean the detector PC21
33	331224XX		Clean the detector PC31
34	331225XX		Clean the detector PC41
35	331226XX		Clean the detector PC42
36	331227XX		Clean the detector PC43
37	3312273X		Clean the detector PCS1
38	3312274X		Clean the detector PCS2
39	3312275X		Clean the detector PCS3
40	3312276X		Clean the detector PCS4
41	3312277X		Clean the detector PCS5
42	331229XX	Light intensity error	Contact service personnel ASAP and replace a lamp for scanning.
43	3312313X	Detector error	Clean the detector PC51
44	3312314X		Clean the detector PC52
45	3312313X		Clean the detector PCF1
46	3312314X		Clean the detector PCF2
47	3312315X		Clean the detector PCF3
48	3312316X		Clean the detector PCF4
49	3312317X		Clean the detector PCF5
50	33123400	Elevator error	Check if sheets are set in the hopper properly.
51	33123401		Remove sheets from the hopper.
52	331236XX	Displacement meter error	Clean roller of displacement meter
53	33123680 33123AXX	Ultra sonic sensor error	Clean the Ultra sonic sensor

2. Error Code

Table 2.1 Scanner Error Code (4/9)

No.	Error code	Cause	Recovery
54	3312373X	Detector error	Clean the detector PC12
55	3312383X		Clean the detector PCE1
56	3312384X		Clean the detector PCE2
57	3312385X		Clean the detector PCE3
58	3312386X		Clean the detector PCE4
59	3312387X		Clean the detector PCE5
60	33124000	Sheet is ejected to the wrong stacker (A).	Stack sheets on the correct stacker. If this happens frequently, contact service personnel.
61	33124400	Sheet is ejected to the wrong stacker (R).	
62	33124401 33124412 33124423 33124445	The sheet specified to exhaust it to stacker m was exhausted from m to the stacker in the back (since n).(m,n is stacker number)	
63	33124410 33124420 33124421 33124430 33124431 33124432 33124434 33124440 33124441 33124442 33124443 3312445X	The slip specified to exhaust it to stacker m was exhausted to stacker n before m. (m,n is stacker number)	Please insert the sheet with a correct stacker.
64	3312470X	Detector error	Clean the detector PCMS1
65	3312471X		Clean the detector PCMS2
66	3312472X		Clean the detector PCMS3
67	3312473X		Clean the detector PCMS4

Table 2.1 Scanner Error Code (5/9)

No.	Error code	Cause	Recovery
68	33124812	Mirror control error or CIS control error.	Clean the surface lower mirror and cover glass.
	33124820		
	33124822		
	33124824		
	33124830		
	33124832		
	33124834		
	33124840		
	33124841		
	33124842		
	33124850		
	33124851		
	33124852		
	33124860		
33124862			
69	33124813		Clean the back lower mirror and cover glass.
	33124821		
	33124823		
	33124825		
	33124831		
	33124833		
	33124835		
	33124843		
	33124844		
	33124845		
	33124853		
	33124854		
33124855			
33124861			
33124863			
70	33124920	Imprinting does not work.	Check parameter for imprint is correct.
71	331249F0		Lack of ink. Replace with new one.
	331249F1		
72	331249F8		Ink cartridge is not installed.
	331249F9		
73	331249XX		If it happens again, contact service personnel.

## 2. Error Code

Table 2.1 Scanner Error Code (6/9)

No.	Error code	Cause	Recovery	
74	33125800	Sheet is fed not straightly at imprinting	Remove sheets from stacker and resume process.	
75	331261XX	Paper jam at hopper area		
76	331262XX	Paper jam at feeding mechanism		
77	331263XX	Paper jam at gate area		
78	331264XX	Paper jam at stacker area		
79	331266XX	Paper jam at imprinting area		
80	3312700X 3312701X 3312704X 3312705X 3312708X 331270AX	Mirror control error or CIS control error.	Clean the surface lower mirror and cover glass.	
	81		3312702X 3312703X 3312706X 3312707X 3312709X 331270BX	Clean the back lower mirror and cover glass.
82			3312710X	Finish process, power off, and after 30minutes power on and resume job.
83	331272XX			Remove sheets from stacker and resume process.
84	33128001 33128002		Sheet length error during feeding.	Remove sheets from stacker and resume process.
	85		331281XX	
86	33128201 33128202	Sheet length error during feeding..		
	87	33128303 33128304	A gap between papers during feeding is too short.	

Table 2.1 Scanner Error Code (7/9)

No.	Error code	Cause	Recovery
88	331284XX	Sheet thickness error during feeding.	Remove sheets from stacker and resume process.
89	33128500	Sheet length error during feeding.	
90	331286XX	Sheet thickness error during feeding.	
91	331287XX	Sheets remain in the scanner.	
92	33128801	Sheet feeding error.	Clean detector PC43 or PCS1through PCS5
93	33128802		Clean detector PC42
94	33128803		Clean detector PC41
95	33128804		Clean detector PC22
96	33128810		Clean detector PC21orPC21L、PC21M、PC21R
97	33128811		Clean detector PC43orPCS1through PCS5
98	33128812		Clean detector PC42
99	33128813		Clean detector PC41
100	33128814		Clean detector PC22
101	33128815		Clean detector PC31
102	33128820		Clean detector PC21orPC21L、PC21M、PC21R
103	33128821		Clean detector PC31
104	33128822		Clean detector PCMS1through PCMS4
105	33128823		
106	331288XX		
107	331289XX	Sheet thickness error during feeding.	
108	33128AXX	Detect multiple feeding.	
109	3312913X	Stacker n stopped immediately fully. (n is a stacker number)	Please exhaust the sheet that remains in the scanner after taking out the sheet of the stacker, and restart the business.
110	33129400	Detect hopper interlock.	Check if something between upper cover and hopper.

## 2. Error Code

Table 2.1 Scanner Error Code (8/9)

No.	Error code	Cause	Recovery
111	33129680	The scanner is not studied.	Contact service personnel.
112	331297XX	Scanner cover is open.	Close the door and resume scanning.
113	331X9AXX 331X9BXX	Scanner latch is open.	Latch and resume scanning.
114	3612910X	Stacker is full.	Remove sheets from stacker.
115	3612913X	Stacker n is full. (n is Stacker Number)	Remove sheets from stacker.
116	3612918X	The sheet remains in stacker n. (n is Stacker Number)	Remove sheets from stacker.  Please confirm whether for the substacker to shift and to interrupt the detector When there is no Sheet.
117	3612930X	The stacker door of stacker n remains opening. (n is Stacker Number)	Close stacker door.
118	36129500 36129510	Miss-feed. Sheet remains hopper.	Set sheets in the hopper properly and resume scanning.
119	60222500 60222523 60222526 60222527 60222529 60E9XXXX 60EAXXXX 60EBXXXX 60ECXXXX	A scanner abnormal line was generated.	Close the program and power cycle to resume process.
120	8006XXXX 8007XXXX	Invalid parameter or wrong scanner configuration.	Review parameter.

Table 2.1 Scanner Error Code (9/9)

No.	Error code	Cause	Recovery
121	901219XX 901234XX 901255XX 901257XX 901276XX	Scanner has an error.	Contact service personnel
122	9061XXXX 9062XXXX 9063XXXX 9064XXXX 9065XXXX 9066XXXX 90FFXXXX	Scanner has an error.	Contact service personnel
123	90E92XXX 90EA2XXX 90EB2XXX 90EC2XXX	USB driver error.	Suspend process, power cycle scanner and PC to resume process.
124	90E0XXXX 90E9XXXX 90EAXXXX 90EBXXXX 90ECXXXX 95E0XXXX 99E0XXXX 99E9XXXX 99EAXXXX 99EBXXXX 99ECXXXX 9AE0XXXX 9AE9XXXX 9AEAXXXX 9AEBXXXX 9AECXXXX 9BE0XXXX 9CE0XXXX	Control program error.	Contact service personnel

## 2.2 Error Code (Host)

Table 2.2 Error Code (Host) (1/31)

Code	Detail	Cause	Recovery
23G00101	-	A printable check error has occurred.	Check Numbering setting.
23G00200	-	An anti-double-scan printing check 1 error has occurred. (Undetectable)	
23G00201	-	An anti-double-scan printing check 1 error has occurred. (Printing)	
23G00202	-	An anti-double-scan printing check 1 error has occurred. (No printing)	
23G00203	-	An anti-double-scan printing check 1 error has occurred. (Printing,Uncertain)	
23G00204	-	An anti-double-scan printing check 1 error has occurred. (No printing,Uncertain)	
23G00210	-	An anti-double-scan printing check 2 error has occurred. (Undetectable)	
23G00211	-	An anti-double-scan printing check 2 error has occurred. (Printing)	
23G00212	-	An anti-double-scan printing check 2 error has occurred. (No printing)	
23G00213	-	An anti-double-scan printing check 2 error has occurred. (Printing,Uncertain)	
23G00214	-	An anti-double-scan printing check 2 error has occurred. (No printing,Uncertain)	

Table 2.2 Error Code (Host) (2/31)

Code	Detail	Cause	Recovery	
33G00101	-	Length check error has occurred. (Long)	Check sheet. Or confirm sheet checking.	
33G00102	-	Length check error has occurred. (Short)		
33G00111	-	Mixed length check error has occurred. (Long)		
33G00112	-	Mixed length check error has occurred. (Short)		
33G00201	-	Width check error has occurred. (Long)		
33G00202	-	Width check error has occurred. (Short)		
33G00211	-	Mixed width check error has occurred. (Long)		
33G00212	-	Mixed width check error has occurred. (Short)		
33G00401	-	Skew error has occurred. (Large left skew angle)		
33G00402	-	Skew error has occurred. (Large right skew angle)		
33G00901	-	A four-point-coordinates detection error has occurred. (Four-point rectangular detection)		Check sheet. Refer to Appendix of this manual: A-4 Notes on 4-point coordinates recognition errors.
33G00902	-	Four-point rectangular detection(color))		
33G00B01	-	A four-point-coordinates recognition warning error has occurred. (Soiled at the reference side)		
33G00B02	-	A four-point-coordinates recognition warning error has occurred. (Uncertain at the top or bottom)		
33G00B03	-	A four-point-coordinates recognition warning error has occurred. (Uncertain at the left end)		
33G00B04	-	A four-point-coordinates recognition warning error has occurred. (Uncertain at the right end)		
33G00B05	-	A four-point-coordinates recognition warning error has occurred. (Width error at the top)		

2. Error Code

Table 2.2 Error Code (Host) (3/31)

Code	Detail	Cause	Recovery
33G00B11	-	A four-point-coordinates recognition warning error has occurred. (Error of straight advancement at top or bottom)	Check sheet. Refer to Appendix of this manual: A-4 Notes on 4-point coordinates recognition errors.
33G00B12	-	A four-point-coordinates recognition warning error has occurred. (Top or bottom shape abnormality error)	
33G00B13	-	A four-point-coordinates recognition warning error has occurred. (Left end straight advancement error)	
33G00B14	-	A four-point-coordinates recognition warning error has occurred. (Right end straight advancement error)	
33G00B15	-	A four-point-coordinates recognition warning error has occurred. (Less than minimum width)	
33G00B16	-	A four-point-coordinates recognition warning error has occurred. (Less than minimum length)	Check sheet. Refer to Appendix of this manual: A-4 Notes on 4-point coordinates recognition errors.
33G00B17	-	A four-point-coordinates recognition warning error has occurred. (Skew error)	
33G00B18	-	A four-point-coordinates recognition warning error has occurred. (Image lack error)	
33G00B19	-	A four-point-coordinates recognition warning error has occurred. (Error with great top and bottom width difference)	
33G00B1A	-	A four-point-coordinates recognition warning error has occurred. (Error with great left and right length difference)	
33G00B21	-	A four-point-coordinates recognition warning error has occurred.(Common)(lack of corner on the upper left)	
33G00B22	-	A four-point-coordinates recognition warning error has occurred.(Common)(lack of corner on the upper right)	
33G00B23	-	A four-point-coordinates recognition warning error has occurred.(Common)(lack of corner on the lower left)	
33G00B24	-	A four-point-coordinates recognition warning error has occurred.(Common)(lack of corner on the lower right)	
33G00BFF	-	A four-point-coordinates recognition warning error has occurred. (Other)	

Table 2.2 Error Code (Host) (4/31)

Code	Detail	Cause	Recovery
33G00C02	-	A four-point-coordinates recognition warning error has occurred. (Uncertain at the top or bottom(color))	Check sheet. Refer to Appendix of this manual: A-4 Notes on 4-point coordinates recognition errors.
33G00C03	-	A four-point-coordinates recognition warning error has occurred. (Uncertain at the left end)	
33G00C04	-	A four-point-coordinates recognition warning error has occurred. (Uncertain at the right end(color))	
33G00C05	-	A four-point-coordinates recognition warning error has occurred. (Width error at the top(color))	
33G00C18	-	A four-point-coordinates recognition warning error has occurred. (Image lack error(color))	
33G00C21	-	A four-point-coordinates recognition warning error has occurred.(color)(lack of corner on the upper left)	
33G00C22	-	A four-point-coordinates recognition warning error has occurred.(color)(lack of corner on the upper right)	
33G00C23	-	A four-point-coordinates recognition warning error has occurred.(color)(lack of corner on the lower left)	
33G00C24	-	A four-point-coordinates recognition warning error has occurred.(color)(lack of corner on the lower right)	
33G00CFD	-	A four-point-coordinates recognition warning error has occurred. (loaded modules fails(color))	
33G00CFE	-	A four-point-coordinates recognition warning error has occurred. (Read the function's address fails(color))	
33G00CFF	-	A four-point-coordinates recognition warning error has occurred. (Other(color))	

## 2. Error Code

Table 2.2 Error Code (Host) (5/31)

Code	Detail	Cause	Recovery
80G0A101	-	Sheet information table check error has occurred.	-
	00040001	Pre-Feeding specification error	Review feeding setting.
	00040002	Hopper empty control specification error	
	00040003	Hopper position specification error	
	00040004	Scanning speed specification error	
	00040005	Automatic scanning mode specification error	
	00040006	Inter-sheet gap specification error	
	00040007	Picking roller specification error	
	00040008	Separating force specification error	
	00040009	Skew angle correction control specification error	
	0004000A	Non-sequence scanning control specification error	
	0004000B	Double-error conversion specification error	
	0004000C	Error image acquisition control specification error	
	00040101	Ejection check specification error	
	00040102	Normal sheet ejection stacker specification error	
	00040103	Abnormal sheet ejection stacker specification error	
	00040104	Normal sheet ejection group specification error	
	00040105	Abnormal sheet ejection group specification error	
	00040106	Intra-group sheet ejection sequence specification error	
	00040107	Group identifier specification error	
00040108	Stacker name specification error		
0004010A	Stacker count specification error		
0004010B	Stacker full control specification error		

Table 2.2 Error Code (Host) (6/31)

Code	Detail	Cause	Recovery
80G0A101	-	Sheet information table check error has occurred.	
	00040201	Printing place specification error	Check numbering setting again
	00040202	Printing orientation specification error	
	00040203	Printing position specification's specification error	
	00040204	Printing position specification error	
	00040205	Printing character count specification error	
	00040207	Anti-double-scan printing specification error	
	00040211	Printable check specification error	
	00040212	Printable check specification's specification error	
	00040221	Anti-double-scan printing check 1 specification error	Check numbering chking again
	00040222	Check method 1 specification error	
	00040223	Detection method 1 specification error	
	00040224	Check place 1 specification error	
	00040225	Vertical start position 1 specification error	
	00040226	Vertical end position 1 specification error	
	00040227	Horizontal start position 1 specification error	
	00040228	Horizontal end position 1 specification error	
	00040229	Anti-double-scan printing check image 1 specification error	
	00040231	Anti-double-scan printing check 2 specification error	
	00040232	Check method 2 specification error	
	00040233	Detection method 2 specification error	
	00040234	Check place 2 specification error	
	00040235	Vertical start position 2 specification error	
	00040236	Vertical end position 2 specification error	
	00040237	Horizontal start position 2 specification error	
	00040238	Horizontal end position 2 specification error	
	00040239	Anti-double-scan printing check image 2 specification error	

## 2. Error Code

Table 2.2 Error Code (Host) (7/31)

Code	Detail	Cause	Recovery
80G0A101	-	Sheet information table check error has occurred.	-
	00040241	Printing character control specification error	Check numbering setting again
	00040242	Printing character number specification error	
	00040243	Printing character size specification error	
	00040244	Printing character thickness specification error	
	00040251	Inkjet Refreshing Mode specification error	
	00040301	Sheet length specification error	Check Sheet setting /ImageCheck setting again.
	00040302	Sheet width specification error	
	00040303	Sheet thickness specification error	
	00040304	Sheet check image specification's specification error	
	00040305	Sheet length check specification error	
	00040306	Mixed sheet length specification error	
	00040307	Minimum sheet length check omission specification error	
	00040308	Sheet length specification error (Maximum value)	
	00040309	Sheet length specification error (Minimum value)	
	0004030A	Sheet width check specification error	
	0004030B	Mixed sheet width specification error	
	0004030C	Minimum sheet width check omission specification error	
	0004030D	Sheet width specification error (Maximum value)	
	0004030E	Sheet width specification error (Minimum value)	
0004030F	Sheet thickness check specification error		

Table 2.2 Error Code (Host) (8/31)

Code	Detail	Cause	Recovery
80G0A101	-	Sheet information table check error has occurred.	-
	00040310	Sheet thickness check method specification error	Check Sheet setting again.
	00040311	Mixed sheet thickness specification error	
	00040312	Minimum sheet thickness check omission specification error	
	00040313	Sheet thickness specification error (Standard value)	
	00040314	Sheet thickness specification error (Step Height value)	
	00040315	Sheet thickness specification error (Ultrasonic multi-feed detection length)	
	00040316	Sheet skew check specification error	
	00040317	Sheet skew angle specification error (Left limit angle)	
	00040318	Sheet skew angle specification error (Right limit angle)	
	00040319	Sheet length check-cancellation specification error	
	0004031A	Sheet width check-cancellation specification error	
	0004031B	Sheet thickness check-cancellation specification error	
	0004031C	Four-point rectangular error bypass specification error	
	0004031E	Four-point detection error bypass specification error	
0004031F	Recognition check flag specification error		

## 2. Error Code

Table 2.2 Error Code (Host) (9/31)

Code	Detail	Cause	Recovery
80G0A101	-	Sheet information table check error has occurred.	-
	00040320	Sheet length device check specification error	Check sheet setting again
	00040321	Mixed sheet length specification error	
	00040322	Minimum sheet length check omission specification error	
	00040323	Maximum mixed sheet length specification error	
	00040324	Sheet length check moderation specification error	
	00040325	Sheet length device check cancellation specification error	
	00040326	Window width specification error	
	00040327	Sheet thickness specification error (Mixed thin sheet)	
	00040328	Window length specification error (Maximum value)	
	00040329	Window width specification error (Maximum value)	
	00040330	Four-point detection used Color Flg specification error	
	00040331	lack checked of conner specification error	
	00040332	lack checked of conner specification error(the upper left)	
	00040333	lack checked of conner specification error(the upper right)	
	00040334	lack checked of conner specification error(the lower left)	
	00040335	lack checked of conner specification error(the lower right)	
00040336	lack checked of conner specification error(Length)		
00040337	lack checked of conner specification error(Width)		

Table 2.2 Error Code (Host) (10/31)

Code	Detail	Cause	Recovery
80G0A101	-	Sheet information table check error has occurred.	-
	00040401	Scanning image side count specification error (Front side)	Check image setting again
	00040402	Scanning image side count specification error (Back side)	
	00040403	Scanning image kind specification error	
	00040404	Halftone type specification error	
	00040405	Input resolution specification error (X-axis)	
	00040406	Input resolution specification error (Y-axis)	
	00040407	Light-source color specification error	
	00040408	Special color table number specification error	
	00040409	Black frame specification error	
	0004040A	Highlighter/correction fluid specification error	
	0004040B	Density specification's specification error	
	0004040C	Density specification error	
	0004040D	Black&White image detailed specification's specification error	
	0004040E	Expanded density specification error	
	0004040F	Mask slice specification error	
	00040410	Smoothing specification error	
	00040411	Multi-value image quality detail specification's specification error	
	00040412	Information setting method specification error	

2. Error Code

Table 2.2 Error Code (Host) (11/31)

Code	Detail	Cause	Recovery
80G0A101	-	Sheet information table check error has occurred.	-
	00040413	Highlight specification error (RGB)	Check image setting again
	00040414	Shadow specification error (RGB)	
	00040415	Gamma specification error (RGB)	
	00040416	Coloring specification error (RGB)	
	00040417	Highlight specification error (Red)	
	00040418	Shadow specification error (Red)	
	00040419	Gamma specification error (Red)	
	0004041A	Highlight specification error (Green)	
	0004041B	Shadow specification error (Green)	
	0004041C	Gamma specification error (Green)	
	0004041D	Highlight specification error (Blue)	
	0004041E	Shadow specification error (Blue)	
	0004041F	Gamma specification error (Blue)	
	00040420	Scanning image transfer mode specification error	
	00040421	Scanning image length specification error	
	00040422	Scanning image width specification error	
	00040423	Rectangle position coordinate specification error (X-axis)	
	00040424	Rectangle position coordinate specification error (Y-axis)	
	00040425	Scanning-only image specification error	
	00040426	Highlight specification error(Black&White)	
	00040427	Shadow specification error (Black&White)	
	00040428	Gamma specification error (Black&White)	
	00040429	Highlight specification error (RGB Recommended value)	
	0004042A	Shadow specification error (RGB Recommended value)	
	0004042B	Gamma specification error (RGB Recommended value)	
	0004042C	Coloring specification error(RGB Recommended value)	

Table 2.2 Error Code (Host) (12/31)

Code	Detail	Cause	Recovery
80G0A101	-	Sheet information table check error has occurred.	-
	00040501	Image editing method specification error	Check image setting again
	00040502	Skew correction specification error	
	00040503	Image cropping specification error	
	00040504	Image rotation specification error	
	00040505	Image movement specification error	
	00040506	Out-of-image-area color specification error	
	00040507	Frame drawing specification's specification error	
	00040508	Frame drawing width specification error	
	00040509	Out-of-image-area color specification error	
	00040510	Reference image specification's specification error	
	00040511	Skew correction-omitted angle specification error	
	00040512	Gradation reverse flag specification error	
00040513	Skew correction interpolation mode specification error		

## 2. Error Code

Table 2.2 Error Code (Host) (13/31)

Code	Detail	Cause	Recovery
80G0A101	-	Sheet information table check error has occurred.	-
	00040601	Numbering print content specification error (Front side)	Check numbering setting again
	00040602	Numbering print content specification error (Back side)	
	00040611	Numbering print content specification error (NULL after ' to ' specification)	
	00040612	Numbering print content specification error (NULL after '[' specification)	
	00040613	Numbering print content specification error ('[' after '[' specification)	
	00040614	Numbering print content specification error (No ']' after '[' specification)	
	00040615	Numbering print content specification error (']' before '[' specification)	
	00040621	Numbering print content specification error (yy: Double specification)	
	00040622	Numbering print content specification error (mm: Double specification)	
	00040623	Numbering print content specification error (dd: Double specification)	
	00040624	Numbering print content specification error (yy: digit shortage)	
	00040625	Numbering print content specification error (mm: digit shortage)	
	00040626	Numbering print content specification error (dd: digit shortage)	
	00040627	Numbering print content specification error (yy: Excess digits)	
	00040628	Numbering print content specification error (mm: Excess digits)	
	00040629	Numbering print content specification error (dd: Excess digits)	

Table 2.2 Error Code (Host) (14/31)

Code	Detail	Cause	Recovery
80G0A101	-	Sheet information table check error has occurred.	-
	00040631	Numbering print content specification error (#: Double specification)	Check numbering setting again
	00040632	Numbering print content specification error (#: Excess digits)	
	00040641	Numbering print content specification error (*: Double specification)	
	00040642	Numbering print content specification error (*: Excess digits)	
	00040651	Numbering print content specification error (¥: Double specification)	
	00040652	Numbering print content specification error (¥: Excess digits)	
	00040661	Numbering print content specification error (\$: Double specification)	
	00040662	Numbering print content specification error (\$: Excess digits)	
	00040671	Numbering print content specification error (&: Double specification)	
	00040672	Numbering print content specification error (&: Excess digits)	
	00040681	Numbering print content specification error (%: Double specification)	
	00040682	Numbering print content specification error (%: Excess digits)	
	00040691	Numbering print content specification error (^: Double specification)	
	00040692	Numbering print content specification error (^: Excess digits)	
	000406F1	Numbering print content specification error (None)	
000406F2	Numbering print content specification error (Buffer overflow)		

## 2. Error Code

Table 2.2 Error Code (Host) (15/31)

Code	Detail	Cause	Recovery
80G0A101	-	Sheet information table check error has occurred.	-
	00040701	Decimal point specification's specification error	Check image setting again
	00040801	Barcode recognition specification error	Check recognition setting again
	00040802	Barcode recognition count specification error	
	00040803	Barcode recognition image specification's specification error	
	00040804	Barcode type specification error	
	00040805	Barcode recognition orientation specification error	
	00040810	A non-PP installation error has occurred.(Code recognition of two dimensions)	
	00040850	Patchcode recognition specification error	
	00040851	Patchcode recognition image specification's specification error	
	00040852	Patchcode recognition orientation specification error	
	00040853	Order and priority for Patchcode searching specification error	
	00040901	Another image using flag specification error	Check image setting again
	00040902	Another image using image specification error	

Table 2.2 Error Code (Host) (16/31)

Code	Detail	Cause	Recovery
80G0A201	-	Sheet information combination check error has occurred.	-
	00041001	Resolution combination check error	Check image setting again
	00041002	Light-source color combination check error	
	00041003	Anti-double-scan printing combination error	
	00041004	Paper thickness check combination error	
	00041005	Scanning image side count combination error	
	00041006	Printing place combination check error	
	00041008	Light-source color combination check error(Custom Specification)	
	00041101	Ejection group combination error	Check feed setting again
	00041201	Group identifier combination error	
	00041203	Stacker name combination error	

## 2. Error Code

Table 2.2 Error Code (Host) (17/31)

Code	Detail	Cause	Recovery
80G0A201	-	Sheet information combination check error has occurred.	-
	00041301	Printing position combination check error	Check numbering setting again
	00041302	Printing character count combination check error	
	00041303	Printing position specification combination check error	
	00041304	Printing character control combination check error	
	00041305	Numbering feed speed anti-double-scan printing combination error	
	00041306	Numbering feed speed printing location combination error	
	00041307	Numbering feed speed paper thickness check combination error	
	00041308	Numbering feed speed mixed paper thickness combination error	
	00041311	Printable check image specification combination error	
	00041312	Printable check combination error	
	00041321	Anti-double-scan printing check 1 area specification error	Check numbering checking again
	00041322	Anti-double-scan printing check 1 image specification combination error	
	00041331	Anti-double-scan printing check 2 area specification error	
	00041332	Anti-double-scan printing check 2 image specification combination error	Check numbering setting again
00041341	Inkjet Refreshing Mode combination error		

Table 2.2 Error Code (Host) (18/31)

Code	Detail	Cause	Recovery
80G0A201	-	Sheet information combination check error has occurred.	-
	00041401	Paper check image specification combination error	Check sheet check setting again
	00041402	Minimum length bypass-possible combination error	
	00041403	Mixed paper thickness combination error	
	00041404	Double check synchronization combination error	
	00041405	Mixed paper size combination error (Paper length)	
	00041406	Mixed paper size combination error (Paper width)	
	00041407	Double-check combination error (Paper length)	
	00041408	Double-check combination error (Paper width)	
	00041409	Double-check combination error (Paper thickness)	
	0004140A	Numbering-run double-check execution confirmation check error	
	0004140B	Double-detection length validity check error	
	0004140C	Method-based paper thickness check error	
	0004140D	Minimum thickness bypass-possible combination error	
	0004140E	Double-check (Paper length) combination error (Device check)	

## 2. Error Code

Table 2.2 Error Code (Host) (19/31)

Code	Detail	Cause	Recovery
80G0A201	-	Sheet information combination check error has occurred.	-
	00041501	Image side count error	Check image setting again
	00041502	Scanning image kind side count combination error	
	00041503	Halftone image combination error	
	00041504	Color image combination error	
	00041505	Resolution matching error	
	00041506	Resolution scanning image kind matching error	
	00041507	Optional resolution information matching error	
	00041508	Resolution HT-4155 matching error	
	00041509	Resolution HT-4155 scanning speed matching error	
	0004150A	Special color table number combination error	
	0004150B	Density specification combination error	
	0004150C	Black&White image detailed specification combination error	
	0004150D	Multi-value image detailed specification combination error	
0004150E	Image-only image use error		

Table 2.2 Error Code (Host) (20/31)

Code	Detail	Cause	Recovery
80G0A201	-	Sheet information combination check error has occurred.	-
	0004150F	Anti-double-scan printing check matching error	Check numbering setting again
	00041511	Resolution and printing place combination error	
	00041512	Resolution and numbering feed speed combination error	
	00041513	Resolution and numbering feed speed level 1 combination error	
	00041514	Resolution and numbering feed speed level 2 combination error	
	00041515	Resolution and numbering feed speed level 3 combination error	
	00041516	Resolution and numbering feed speed level 4 combination error	
	00041517	Light-source color and Scanning image kind matching error	
	00041518	Black&White image detailed specification2 combination error	
	00041601	Image paper cropping combination error	
	00041602	Image recognition cropping combination error	
	00041603	Skew correction combination error	
	00041604	Standard image specification combination error	
	00041701	Printing character count combination check error	Check numbering setting again
	00041702	Printing character combination check error(4Space)	
	00041703	1 Place and 2 Place Printing character count combination check error	

## 2. Error Code

Table 2.2 Error Code (Host) (21/31)

Code	Detail	Cause	Recovery
80G0A201	-	Sheet information combination check error has occurred.	-
	00041801	Barcode recognition image specification combination error	Check recognition setting again
	00041802	Barcode recognition image type combination error	
	00041803	Barcode recognition count combination error	
	00041901	Window width paper size combination error (Width)	Check sheet setting again.
	00041A01	Non-sequence scanning ejection information specification error	Check feed setting again.
	00041B01	Check image combination error (Standard image)	Check image setting again
	00041B02	Check image combination error (Form check image)	
	00041B03	Check image combination error (Barcode recognition image)	
	00041B04	Check image combination error (Printable check image)	
	00041B05	Check image combination error (Anti-double-scan printing check 1 image)	
	00041B06	Check image combination error (Anti-double-scan printing check 2 image)	
	00041B11	Another image using image combination error	
	00041B12	Read only image combination error	
	00041B13	Read only image reference ahead combination error	
	00041B14	Thin paper specification combination error	
	00041B15	Recognition check flag combination error	
00041B16	Recognition check flag and Four-point detection used Color Flg combination error		

Table 2.2 Error Code (Host) (21/31)

Code	Detail	Cause	Recovery
80G0A201	-	Sheet information combination check error has occurred.	Check image setting again
	00041C01	Four-point detection used Color Flg matching error	
	00041D01	Error image acquisition control matching error	
	00041E01	lack checked of conner specification error(check corner matching error)	
	00041E02	lack checked of conner specification error(Four-point detection matching error)	
	00041E03	lack checked of conner specification error(sheet Length matching error)	
	00041E04	lack checked of conner specification error(sheet width matching error)	
	00041F01	Patchcode recognition image specification combination error	
	00041F02	Patchcode recognition image type combination error	
	00041F03	Check image combination error(Patchcode recognition image)	
90G00001	-	A version error has occurred. (Device control)	Contact service personnel.
90G00002	-	A version error has occurred. (Color image editing)	
90G00003	-	A version error has occurred. (Feature information error)	
90G00101	-	A sequence error has occurred.	
90G00102	-	A sequence error has occurred. (Feature information search)	

## 2. Error Code

Table 2.2 Error Code (Host) (23/31)

Code	Detail	Cause	Recovery
90G00201	-	An argument check error has occurred.	-
	01050001	Specification image type error	Check image setting again
	01050002	Four-point-coordinates acquisition flag error	
	01050004	Scanning mode flag check error	
	01070001	Specification image type error	Check sheet check setting again
	01070002	Sheet double-check execution flag error	
	01070003	Sheet check execution flag error (Length)	
	01070004	Mixed sheet length error	
	01070005	Sheet check execution flag error (Minimum length)	
	01070006	Sheet check execution flag error (Width)	
	01070007	Mixed sheet width error	
	01070008	Sheet check execution flag error (Minimum width)	
	01070009	Sheet check execution flag error (Skew)	
	0107000A	Paper skew angle error (Left limit angle)	
	0107000B	Paper skew angle error (Right limit angle)	
	0107000C	Scanning mode flag check error	
	01100001	Device connection check flag error	

Table 2.2 Error Code (Host) (24/31)

Code	Detail	Cause	Recovery
90G00201	-	An argument check error has occurred.	-
	01120001	Specification image kind error	Check image setting again
	01120002	Skew correction flag error	
	01120003	Image cropping flag error	
	01120004	Rotation flag error	
	01120005	Image movement flag error	
	01120006	Out-of-image-area painting flag error	
	01120007	Black Drawing flag error (Top side)	
	01120008	Black Drawing flag error (Bottom side)	
	01120009	Black Drawing flag error (Left side)	
	0112000A	Black Drawing execution flag error (Right side)	
	0112000B	Image movement specification error	
	0112000C	Out-of-image-area color specification error	
	0112000D	Skew correction interpolation mode specification error	
	0112000E	Bitmap file header acquisition flag error	
	0112000F	Scanning mode flag check error	
	01140001	Error bypass information source error	
	01140002	Printable check error	
	01150001	Specification image type error	Check image setting again
	01150002	Printable check error	Check numbering setting again
	01180001	Feature information flag error	Contact service personnel.
	01180002	Feature information name error	
	011B0001	Feature information name error	
	011C0001	Feature information name error	
	011C0002	Feature information count error	

## 2. Error Code

Table 2.2 Error Code (Host) (25/31)

Code	Detail	Cause	Recovery
90G00301	-	A file open error has occurred. (Read access)	Contact service personnel.
90G00302	-	A file read error has occurred.	
	01180011	Read error (Header reading)	
	01180012	Read error (Header inconsistency)	
	01180013	Read error (Table reading)	
	01180014	Read error (Next table seeking)	
	01180015	Read error (Feature reading)	
	01190011	Read error (Header reading)	
	01190012	Read error (Header inconsistency)	
	01190013	Read error (Table reading)	
	01190014	Read error (Next table seeking)	
	011B0011	Read error (Header reading)	
	011B0012	Read error (Header inconsistency)	
	011B0013	Read error (Next table seeking)	
	011B0014	Read error (Feature reading)	
	011C0011	Read error (Header reading)	
	011C0012	Read error (Header inconsistency)	
	011C0013	Read error (Next table seeking)	
	011C0014	Read error (Feature reading)	

Table 2.2 Error Code (Host) (26/31)

Code	Detail	Cause	Recovery
90G00303	-	A file write error has occurred.	-
	011B0021	Write error (Feature information file)	Contact service personnel.
	011C0021	Write error (Feature information file)	
90G00304	-	A file access error has occurred.	-
	011B0031	File size acquisition error	Contact service personnel.
	011C0031	File size acquisition error	
90G00305	-	A file open error has occurred. (Write access)	
90G00306	-	A file open error has occurred. (Read-write access)	
90G00401	-	An unconnected supported-device error has occurred.	
90G00402	-	An out-of-support target error has occurred. (Feature)	
90G00501	-	A size information invalid error has occurred.	
90G00601	-	An unavailable data error has occurred. (Feature)	
90G00A01	-	A four-point coordinate acquisition error has occurred.	Check sheet. Refer to Appendix of this manual: A-4 Notes on 4-point coordinates recognition errors.
90G00A02	-	A four-point-coordinates acquisition error has occurred.(color)	
90G00B01	-	A numbering check error has occurred.	Check numbering setting again
90G00C01	-	A barcode recognition error has occurred. (Memory error)	Check Recognition setting again
90G00C02	-	A barcode recognition error has occurred. (Argument error)	
90G00C03	-	A barcode recognition error has occurred. (loaded modules fails)	
90G00D01	-	A patchcode recognition error has occurred. (Memory error)	
90G00D02	-	A patchcode recognition error has occurred. (Argument error)	
90G00D03	-	A patchcode recognition error has occurred. (recognition error)	
90G00D04	-	A patchcode recognition error has occurred. (Other errors)	
90G0A101	-	A sequence error has occurred.	Check process sequence of application.

## 2. Error Code

Table 2.2 Error Code (Host) (27/31)

Code	Detail	Cause	Recovery
90G0A201	-	An argument check error has occurred.	-
	00010001	Device connection check flag error	Check setting up
	00020001	Specified-device number error	
	00020002	Feature information flag error	Contact service personnel.
	00020003	Feature information name error	
	00030001	Paper information table pointer error	
	00030002	Soft option check existence flag error	
	00060001	Ejection control flag error	
	00060002	Four-point-coordinates information acquisition flag error	
	00060003	Four-point-coordinates information table pointer error	
	00060004	Bitmap file header acquisition flag error	
	00061001	Executable function flag error	
	00061002	Ejection control flag error	
	00061003	Four-point-coordinates information acquisition flag error	
	00061004	Four-point-coordinates information table pointer error	
	00061005	Barcode Result information table pointer error	

Table 2.2 Error Code (Host) (28/31)

Code	Detail	Cause	Recovery
90G0A201	-	An argument check error has occurred.	-
	00061006	Bitmap file header acquisition flag error	Contact service personnel.
	00061101	Ejection printing place specification error (Front side)	
	00061201	Ejection printing place specification error (Back side)	
	00062001	Scan image acquisition image specification error (Out-of-range specification)	
	00062002	Scan image acquisition image specification error (Multi-value image definition)	
	00062003	Scan image acquisition image specification error (No image definition)	
	00062004	Scan image acquisition image specification error (No image acquisition)	
	00070001	Ejection instruction flag error	
	000C0001	Using device number error (Feature information search)	
	000E0001	Using device number error (Feature information acquisition)	
	000E0002	Feature information name number error (Feature information acquisition)	
	000F0001	Using device number error (Feature information deleting)	
	000F0002	Feature information name number error (Feature information deletion)	

## 2. Error Code

Table 2.2 Error Code (Host) (29/31)

Code	Detail	Cause	Recovery
90G0A401	-	An unconnected device error has occurred.	Check setting up
90G0A501	-	A non-PP installation error has occurred.	
99G00101	-	A memory allocation error occurred.	Check the usage status of PC memory
	0FF000001	Sheet information table(GlobalAlloc)	
	0FF000002	Sheet information table(GlobalLock)	
	0FF000010	Error of making to binary(A four-point-coordinates acquisition)	
	0FF000011	Error of making to binary(A four-point-coordinates acquisition(color))	
	0FF000012	Error of making to binary(A numbering check:Front Side)(GlobalLock)	
	0FF000013	Error of making to binary(A numbering check:Back Side)(GlobalLock)	
	0FF000020	Image conversion failure	
	0FF000030	Barcode Result information table(GlobalAlloc)	
	0FF000031	Barcode Result information table(GlobalLock)	
	0FF000040	[Retrieval of feature information file] Buffer for analysis(GlobalAlloc)	
	0FF000041	[Retrieval of feature information file] Buffer for analysis(GlobalLock)	
	0FF000042	[Retrieval of feature information file] Buffer for composition preservation(GlobalAlloc)	
	0FF000043	[Retrieval of feature information file] Buffer for composition preservation(GlobalLock)	
	0FF000044	[Acquisition of feature information file] Buffer for analysis(GlobalAlloc)	
	0FF000045	[Acquisition of feature information file] Buffer for analysis(GlobalLock)	
	0FF000046	[Acquisition of feature information file] Buffer for information acquisition(GlobalAlloc)	
0FF000047	[Acquisition of feature information file] Buffer for information acquisition(GlobalLock)		
0FF000048	[Addition of feature information file] Buffer for information addition(GlobalAlloc)		

Table 2.2 Error Code (Host) (30/31)

Code	Detail	Cause	Recovery
99G00101	-	A memory allocation error occurred.	Check the usage status of PC memory
	0FF000049	[Addition of feature information file] Buffer for information addition(GlobalLock)	
	0FF00004A	[Deletion of feature information file] Buffer for information deletion(GlobalAlloc)	
	0FF00004B	[Deletion of feature information file] Buffer for information deletion(GlobalLock)	
	0FF000050	Device control table(GlobalAlloc)	
	0FF000051	Device control table(GlobalLock)	
	0FF000052	Device control table(GlobalAlloc)	
	0FF000053	Device control table(GlobalLock)	
	0FF000060	Size information table(GlobalAlloc)	
	0FF000061	Size information table(GlobalLock)	
	0FF000062	Feature information(scanner)(GlobalAlloc)	
	0FF000063	Feature information(scanner)(GlobalLock)	
	0FF000064	Feature information(file)(GlobalAlloc)	
	0FF000065	Feature information(file)(GlobalLock)	
	0FF000066	Device information(malloc)	
	0FF000067	Feature information(file)(GlobalAlloc)	
	0FF000068	Feature information(file)(GlobalLock)	
	0FF000069	Device information table(GlobalAlloc)	
	0FF00006A	Device information table(GlobalLock)	
	0FF009000	Input image buffer(A four-point-coordinates acquisition)	
	0FF009001	Input image buffer(A four-point-coordinates acquisition(color))	
	0FF009002	Input image buffer(numbering check)	
	0FF009003	Input image buffer(barcode recognition)	

## 2. Error Code

Table 2.2 Error Code (Host) (31/31)

Code	Detail	Cause	Recovery
99G00102	-	A memory shortage error has occurred.	Check the usage status of PC memory
99G00201	-	A DLL load error has occurred.	Contact service personnel.
99G00301	-	A function address acquisition error has occurred.	
99G0A101		A memory allocation error occurred.	Check the usage status of PC memory
	0FF0A0001	Sheet information table(Default value)(GlobalAlloc)	
	0FF0A0002	Sheet information table(Default value)(GlobalLock)	
	0FF0A0003	Sheet information table(Capability)(GlobalAlloc)	
	0FF0A0004	Sheet information table(Capability)(GlobalLock)	
	0FF0A0010	Barcode Result information table(GlobalLock)	
99G0A102	-	An unavailable memory data error has occurred.	Contact service personnel.
99G0A103	-	A thread generation error has occurred.	
9AG00101	-	An INI file acquisition error has occurred.	
9BG00101	-	A registry acquisition error has occurred.	
9CG00101	-	A color image editing start error has occurred.	
9CG00201	-	A color image editing export error has occurred.	
9CG00301	-	A color image editing processing error has occurred.	
9CG00401	-	A color image editing end error has occurred.	

## 2.3 Error Dialogs In Scanning

If error has occurred in scanning, the error message is displayed.

A recoverable error displays the Recoverable Error Dialog as shown in Figure 2.1.

The unrecoverable error doesn't display the error dialog. Figure 2.2 shows the example of the application's having displayed the ISIS driver's error.

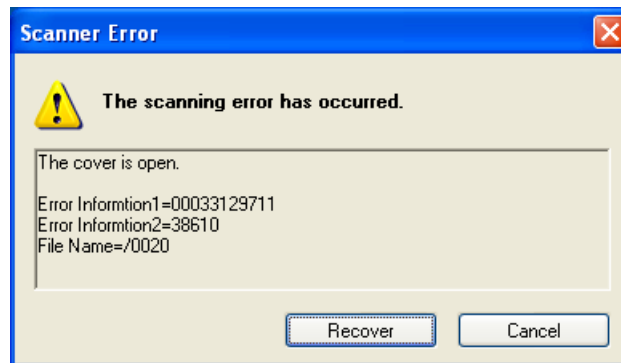


Figure 2.1 Recoverable Error Dialog box

When a sheet is in scanner, please press the [Recovery] button after retrieving the sheet by opening the cover.

Pressing the recovery button when a sheet is in scanner may damage the sheet.

**Note:**

Please do not use the scanner by the application when you push [Cancel] button by the recovery dialog.

Please execute it again after turning off the power supply of the scanner once of the end of the application.

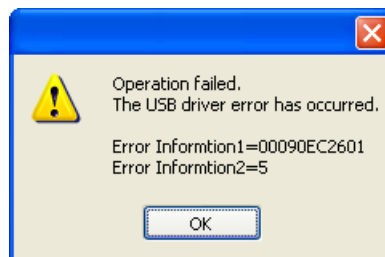


Figure 2.2 Unrecoverable Error Display Dialog box

When a sheet is in scanner, please press the [OK] button after retrieving the sheet by opening the cover.

Pressing the [OK] button when a sheet is in scanner may damage the sheet.

After an unrecoverable error, please turn off and on the scanner and try to scan again.

## 2. Error Code

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# Appendix

## A-1 Dump Information

When ISIS driver error, system down error of scanner systems, unrecoverable error, or hung-up of the ISIS driver occurs, get ISIS driver log, memory dump of scanner and send them .

Resuming operation should be done after saving failure information and recovery operation.

(There may be a case that information will be overwritten.)

### (1) Required tools

Formatted data storage device

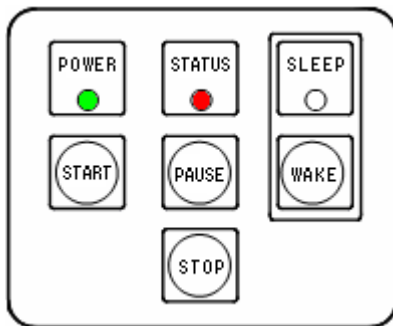
### (2) Procedure

No.	Item	Contents
1	Getting scanner dump	Get scanner memory dump and download dump file.
2	Download log information file	Download log information file of the ISIS driver.

No.	Item	Contents
1	Getting scanner dump	Get scanner memory dump and download dump file.

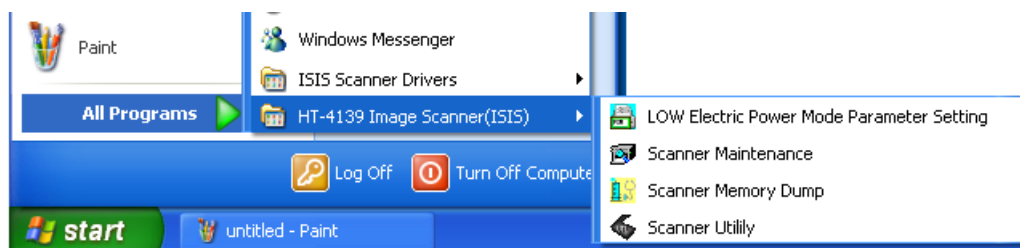
(1) Perform this when system down error or unrecoverable error occurs.

The panel indicates the system down status as shown below. Do not power off.



At systems down Power Supply / Status lamp ON

(2) Scanner memory dump



Select "All programs" from a taskbar and click the "Scanner Memory Dump" from the " HT-4139 Image Scanner(ISIS)" group.

(3)Get dump information from the scanner and scanner will be rebooted.

Examining errors requires the following files.

C:\OCR32\ETC32 directory

OCR8F.DMP

OCR8L.DMP

OCR8O.DMP

OCR81.DMP

OCR82.DMP

No.	Item	Contents
2	Download log information file	Download log information file of the ISIS driver.

The ISIS driver acquires the dump information.

Examining errors requires the following files.

The following OCR32 is the OCR system setup directory.

C:\OCR32\ETC32 directory

AUXLOG.OCR

ImageProcess.DMP

OCRICL\_IMGDMF.BMP

OCRPSW32.trc

Ocrz2.dmp

OCR1.DMP

OCR1.CSV

OCR2.DMP

OCR2.CSV

OCR3.DMP

OCR3.CSV

Please make ISIS Log that exists in the Maintenance dialog On and read again when the phenomenon reproduces it.

C:\Documents and Settings\[username]\Local Settings\Temp

(It is not in C drive by the environment.)

ht4139d\_log.txt(When HT-4139/48 is used.)

ht4139s\_log.txt(When HT-4139/28 is used.)

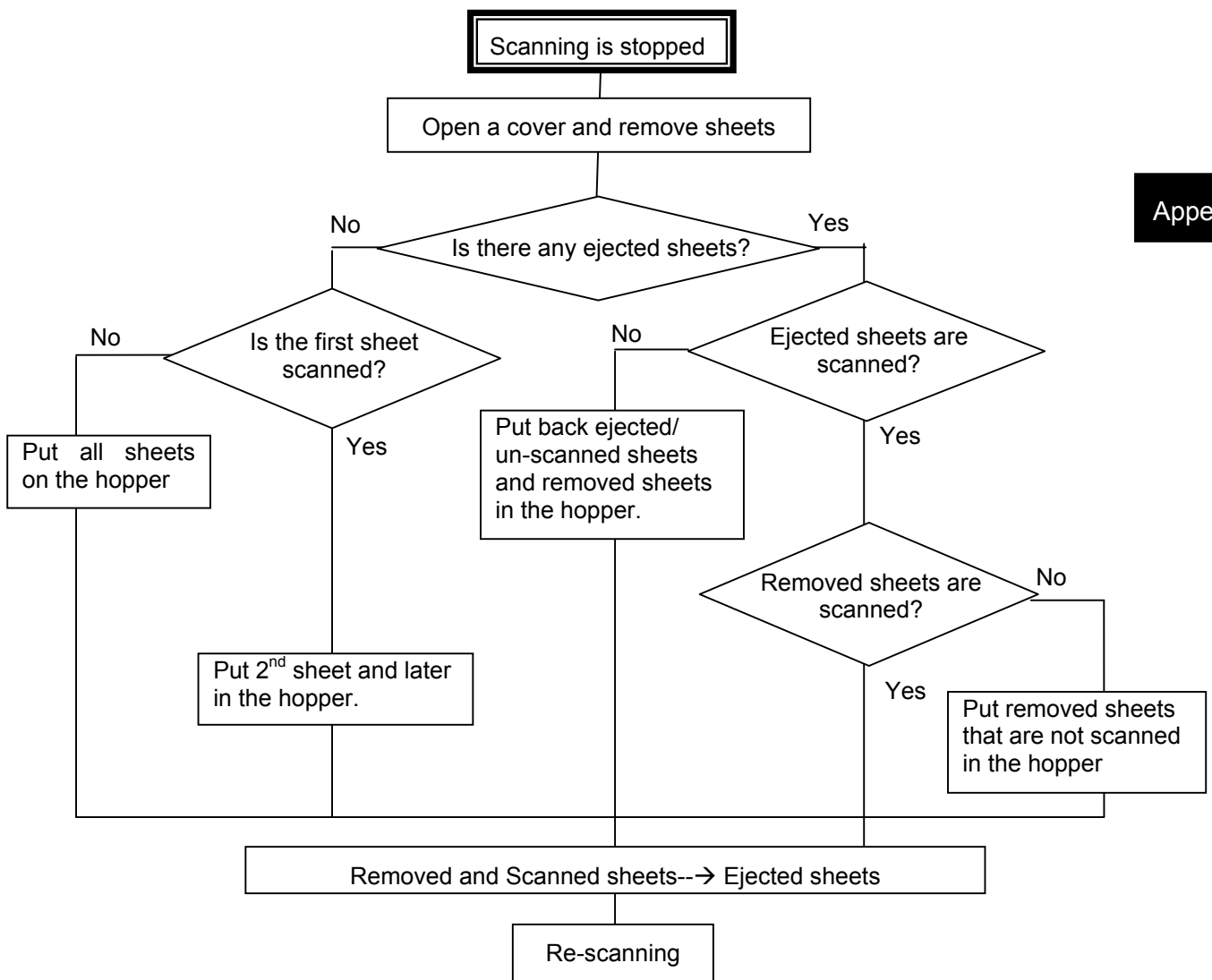
The dump information does not collect the personal information.

In some cases, image files will be required for analysis.

## A-2 How to Recover Error

Sometimes continuous scanning will be suspended due to paper jam or other reasons. In that case put sheets that have not been scanned on the hopper and continue scanning process. (There are some software/ hardware errors that cannot be recovered.)

A sample of error recovery is shown below.



This is a sample of error recovery flow and it should be modified for your business operation.

## A-3 Notes on Four-point detection

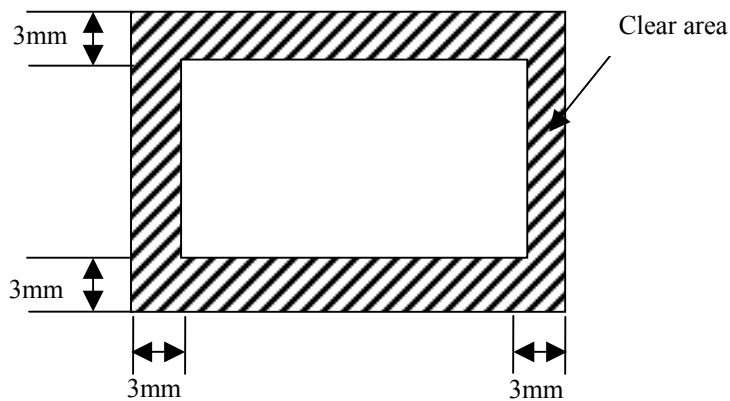
This ISIS driver detect four points from the scan image.

The area to distinguish the background and the sheet because the background becomes black in our scanner is necessary.

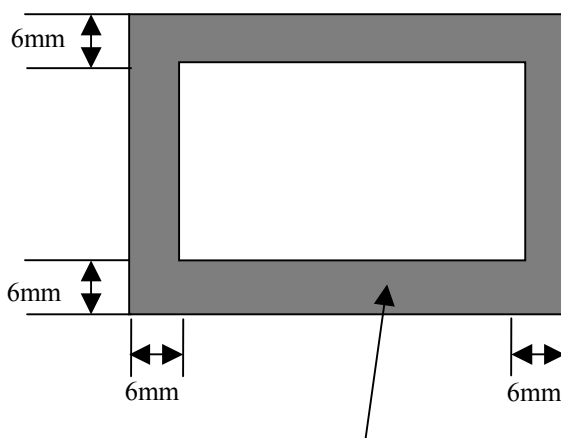
To detect four points of the sheet, this ISIS driver usually detects it from the black and white image.( If it is a multilevel image, it makes it to binary.)

Therefore, the clear area (area that becomes white) is 3mm or more necessary for surroundings of the sheet.

When the clear area can be secured around the sheet, this method is recommended.



You can select "Conduct the color Four-point detection" when there is a multilevel image. It detects four points from the difference of brightness with the background color. Therefore, four points can be detected even if there is a color in the clear area. However, when a lot of colors near the black are included in the area where the difference of brightness is measured, four points are not correctly detected. The area where the difference of brightness can be measured is 6mm or more necessary.



The area where the difference of brightness

The mean value of  $D_c$ ,  $D_m$ , and  $D_y$  must not be and there must not be large color from 0.93.

The difference of brightness with the background must be and there must be 30 or more.(RBG)

The radiance value must be and there must be 50 or more.(RBG)

## A-4 Notes on Four-Point-Coordinates Recognition Errors

Four-point-Coordinates Recognition errors may occur depending on the status of images having been scanned. These errors occur when the four corners of a sheet failed to be detected.

These errors are usually caused from the following problems.

(1) Error resulting from soil at the reference side

- This error occurs when white vertical noise is made due to dust such as paper dust.

Open the opening/closing part at the front and check that there is no dirt on the glass of the scanning unit. Cleaning requires you to use a piece of gauze or other cloth that is as new as possible. Wiping the glass with a soiled cloth may increase the error detection.

(2) Imperfect image error

- This error occurs when a large skew causes a part of the sheet to get outside the image area and makes a part of the image look imperfect.

Check that the sheet is not skewed when it is being sent.

(3) Rectangular detection error

This error occurs when detected 4 points do not make a rectangle with them.

Check that the sheet.

(4) Other errors (such as a tip error and a left end error)

- These errors occur when the entire image is completely black.

- These errors occur when the image is spotted with white noises.

- These errors occur when the image contains an extremely small white area.

Check the sheet.

You may fail to scan a sheet not conforming to the specifications.

For the specifications of the sheet, refer to the "OCR Friend Operation Guide".

## A-5 Note for sheet check

There might be cases that dual feeding error and size invalid error occurs however the sheet checking is enabled. Check images comparing the originals and scanned data.

There might be cases that sheet check does not work correctly under some conditions below.

Sheets are adhere and feed.

Dark sheet or paper with a dark border is fed.

Multiple feeding occurs out of detection area.

The four-point detection does not work correctly due to black border.

Sheet is not placed aligned at left edge.

Thin sheet is fed.

Papers with different friction coefficient are mixed.

Specified check during the sheet check.

The sheet check is not enabled.

When the patch cord is printed in the vertical direction.

## A-6 Notes on Numbering

If a numbering error occurred, check the image and numbering on the last ejected sheet and all the sheets ejected by recovery.

If you do not check the ejection, the numbering may not be on the sheets of several pages before the last sheet.

There may be cases that numbering is not printed properly.

Lack of ink

Fed in skew

Print on the similar color area.

Printable check error

Perform sheet scanning and ejection separately

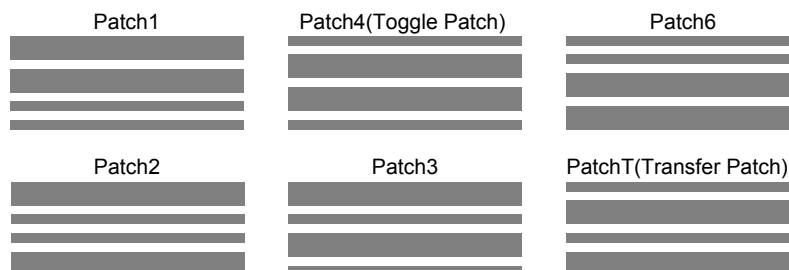
Print on the second sheet of dual feeding.

## A-7 Notes on PatchCode

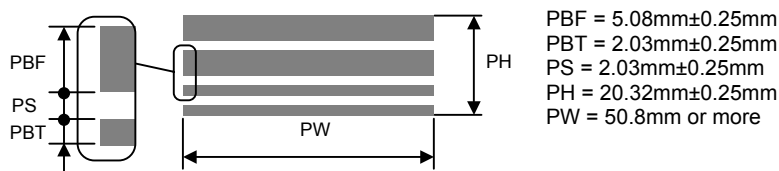
The specification of the patch cord that can be recognized by this ISIS driver becomes it as follows.

item		specification
Patch type that can be recognized		1, 2, 3, 4, 6, T
PatchCode Size	The wide bars(PBF)	5.08mm±0.25mm(0.20±0.01inches)
	The narrow bars(PBT)	2.03mm±0.25mm(0.08±0.01inches)
	Spaces (PS)	2.03mm±0.25mm(0.08±0.01inches)
	The maximum width of the patch code (PH)	20.32mm±0.25mm(0.80±0.01inches)
	The minimum overall length of the patch bars (PW)	50.8mm or more (2.0 inches or more)
Clear area	space between the patch code and any other printed information	6.35mm or more of patch cord in surroundings
Patchcode detection condition	Effective range of vertical direction (When the direction of reading is the above)	6.35mm to 95.25mm(0.25~3.75inches) (From the leading edge of the document)
	Effective range of horizontal direction (When the direction of reading is the above)	Patch codes must appear at least 6.35mm from the right, left, and leading edges of the document.
	Patch Positioning	Patches should appear with the bars parallel to the leading edge of the document (fed into the transport first).
Others		Conform to Kodak specification (A-61599)

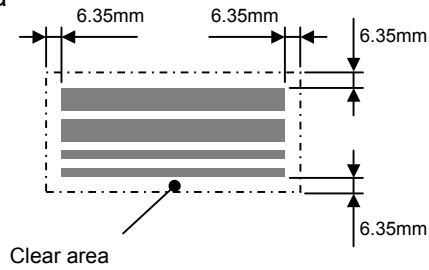
Appendix



### PatchCode Size

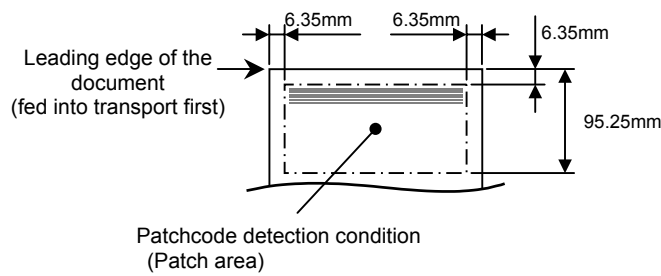


Clear area

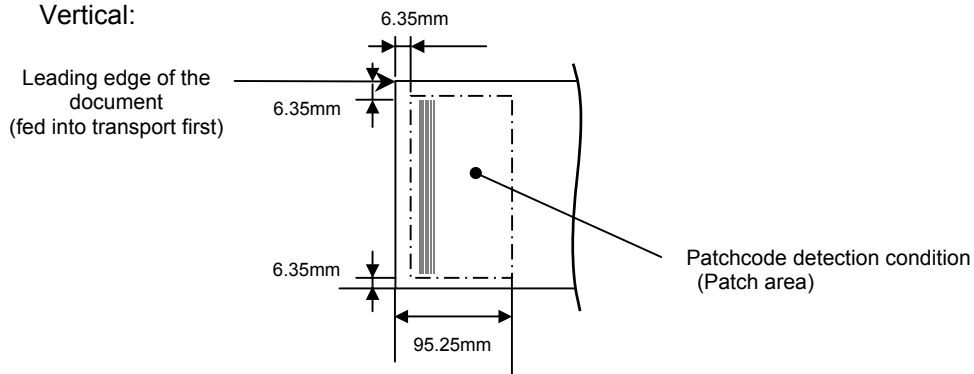


Patchcode Recognition Orientation

Horizontal:



Vertical:



Horizontal – Vertical:

Horizontal direction is recognized in the beginning.  
Next, the vertical direction is recognized.

Vertical – Horizontal:

The vertical direction is recognized in the beginning.  
Next, horizontal direction is recognized.