Kodak

i2900 Scanner

Scanning Setup Guide
for ISIS Applications

Using the ISIS Driver

Contents

The *Kodak* i2900 Scanner provides the ability to process scanned images to improve their quality by using image processing features.

Image processing refers to features of the scanner that allow you to automatically adjust each image that may improve the resulting images (i.e., correcting any skew in the fed document, cutting the edges of the image off to remove unneeded borders or cleaning up extraneous "noise" on the image).
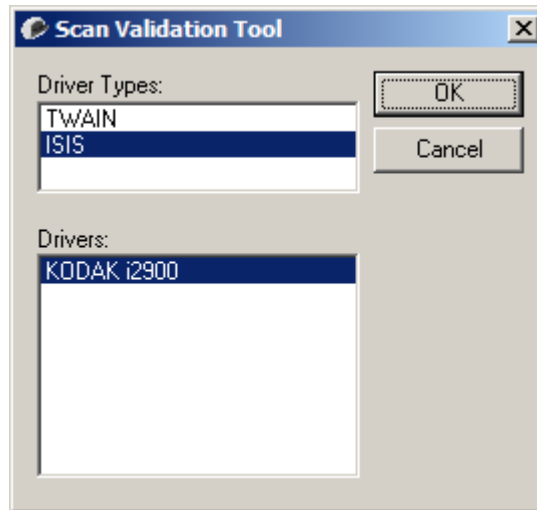
The ISIS Driver is software that communicates with the scanner. This driver is created and maintained by EMC Captiva and is provided with the scanner by Kodak. This driver can be used to interface with many scanning applications that support ISIS drivers.

The information in this guide provides descriptions of the features on the tabs of the ISIS Driver windows. The same features should be available on the user interface of the scanning application you are using.

Starting the Scan Validation Tool

NOTE: The Scan Validation Tool is provided by Kodak and is a diagnostic tool only. Kodak does not support the use of the Scan Validation Tool as a scanning application.
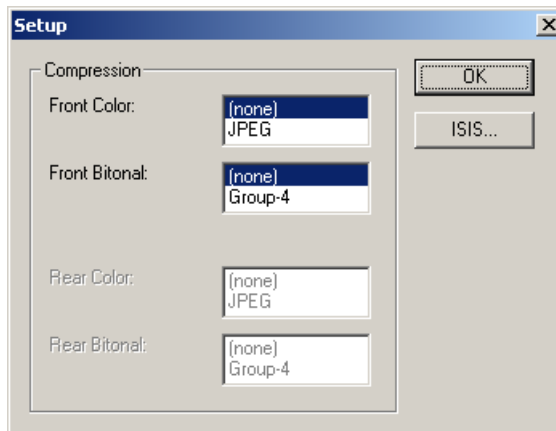
1. Select **Start>Programs>Kodak>Document Imaging>Scan Validation Tool**.

2. Select **ISIS** for the Driver Type and the **KODAK i2900** as the driver and click **OK**.

3. Click the ⊞ icon to enable the image view panels.

4. Click the **Setup** icon on the main Scan Validation Tool screen.

The Setup dialog box will be displayed.

5. Click **ISIS**. The Preset Configurations dialog box will be displayed. This dialog box maintains a list of saved driver settings.

    You can save, delete or import a preset; or select a preset that is already set up or one you want to modify.

6. Click **Image** to configure settings associated with the image.

    The following sections provide descriptions and procedures for configuring Image settings. See the section later in this chapter entitled, "Configuring Scanner settings" for scanner configuration procedures.

Configuring Image settings

The main ISIS Driver window provides a set of several tabs for configuring images. You can select each of these tabs and make any choices necessary to meet your scanning needs.
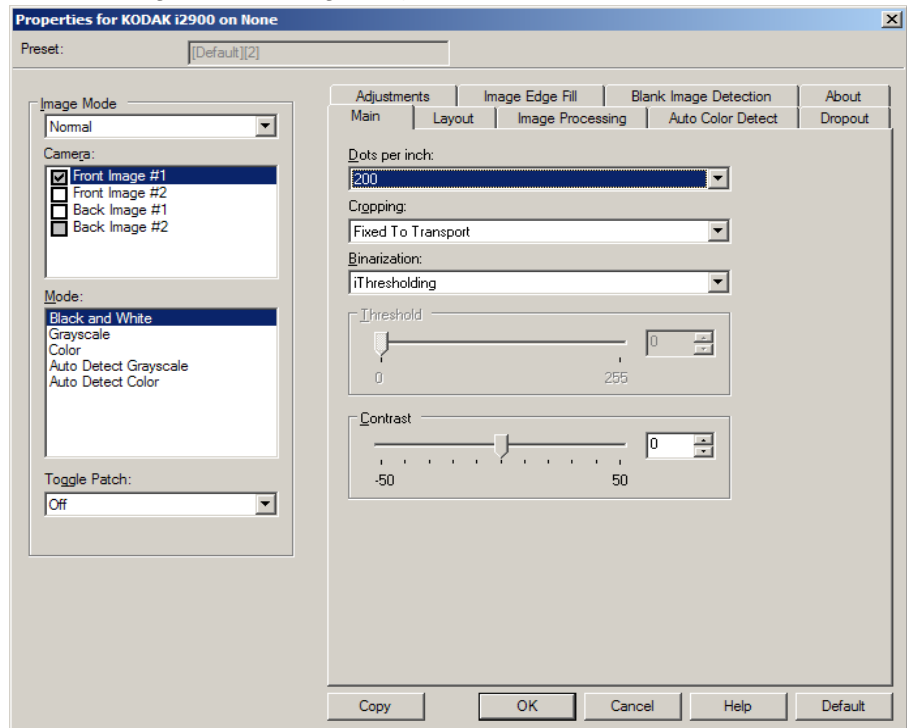
NOTE: The **Image Mode**, **Camera**, **Mode** and **Toggle Patch** selections are available with all of the Image tabs (i.e., Main, Layout, Image Processing, etc.).

Image mode — select one of the following options:

- **Normal** — typically, for a document, one image is created for the front side and another image is created for the back side. Select this option if you want the front and back side to be individual images.

- **Merged** — select this option if you want one image that contains both the front side and back side of the document. *Image Merge* options are:

  - **Front on Top**; **Front on Bottom**; **Front on Left** or **Front on Right**.

Camera — the selections in the Camera box list the available sides (front and back) of an image where you can define individual image processing values. Options include: **Front Image #1, Front Image #2, Back Image #1** and **Back Image #2**.

The *Kodak* Scanner drivers allow you to control the camera settings independently. Some settings apply only to black and white images, others apply to color/grayscale images.

Mode — select one of the following modes:

- **Black and White**: if you want your electronic image to represent all elements of your document in black and white.

- **Grayscale**: if you want your electronic image to have a range of varying shades of gray from black to white.

- **Color**: if you want your electronic image to be in color.

- **Auto Detect Grayscale:** sets auto color detect for grayscale. See the section entitled, "Auto Color Detect tab" for more information.

- **Auto Detect Color**: sets auto color detect for color. See the section entitled, "Auto Color Detect tab" for more information.

Toggle Patch — indicates you want to tell the scanner, via a toggle patch document, if the document is color/grayscale or black and white.
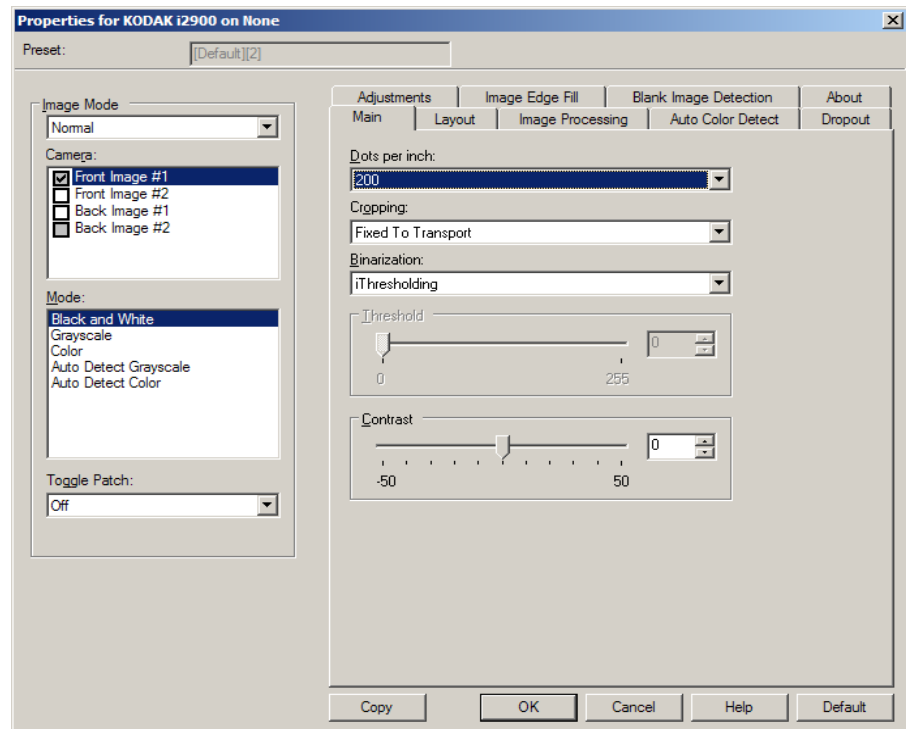
- **Off**: no patches will be used.

- **Same Side**: only the side which recognizes the patch sheet will toggle.

- **Both Sides**: a patch will be recognized on either the front or the back side.

Buttons — the buttons on the bottom of the window apply to all tabs:

- **Copy** — this function is only available when scanning two-sided documents. The Copy button provides a convenient way to set up the color, grayscale or black and white image settings on one side and transfer them to the other. For example, if you highlight and set up **Front Image #1**, you can use the Copy button to duplicate those settings for **Back Image #1**.

- **OK** — saves the values set on all tabs.

- **Cancel** — closes the window without saving any changes.

- **Help** — displays on-line help about the options available on the selected window.

- **Default** — resets the values on all tabs to the factory defaults.

Main tab

The Main tab provides the following options:

Dots per inch (dpi) or resolution — indicates the scanning resolution, which largely determines the quality of the scanned image. The greater the resolution, the better the reproduction. However, scanning at a higher resolution also increases scanning time and file size.

Select a resolution value from the drop-down list. The default is 200 dpi. Available resolutions are: 100, 150, 200, 240, 250, 300, 400, 600 and 1200 dpi.

Cropping — allows you to capture a portion of the document being scanned. All cropping options can be used with color/grayscale and black and white images. Front and Back cropping are independent, however, for dual stream scanning, color/grayscale and black and white cropping must be the same per side. Only one cropping option can be assigned per image.

- **Automatic:** dynamically adjusts the cropping window for different document sizes based on the edges of the image.

- **Aggressive:** eliminates any residual black border on any image edges. In order to achieve this, there is a possibility that a small amount of image data from the edge of the document may be lost.

- **Fixed to Transport:** (used for batches of same-sized documents) allows you to define the area to be imaged. Fixed to Transport cropping is used in conjunction with paper size and page layout and assumes you are center-feeding your documents. If you are not using center feeding, you must select the Layout tab to define your scan area. See the section entitled, "Layout tab" later in this guide.

- **Relative to Document**: (zone processing): (used for batches of same-sized documents) — zone processing is a floating fixed crop window (the zone) located relative to the upper left corner of a document. It allows you to select an area on the document to be delivered in either color/grayscale or black and white format (a separate window for both black and white and color/grayscale may be defined). Different parameters may be selected for both the front and back of the image.

  This option may be used in conjunction with Automatic cropping where a separate color/grayscale or black and white area to be saved is desired. It is useful in applications where a photograph, signature, embossment or seal appears in a consistent area for an application (you may want that small area in color/grayscale and the rest in black and white). To define a zone, select the Layout tab.

Binarization — these options work on grayscale images and outputs a black and white electronic image. Their strength lies in the ability to separate the foreground information from the background information even when the background color or shading varies, and the foreground information varies in color quality and darkness. Different types of documents may be scanned using the same image processing parameters and results in excellent scanned images.

- **iThresholding:** allows the scanner to dynamically evaluate each document to determine the optimal threshold value to produce the highest quality image. This allows scanning of mixed document sets with varying quality (i.e., faint text, shaded backgrounds, color backgrounds) to be scanned using a single setting thus reducing the need for document sorting. When using iThresholding, only Contrast can be adjusted.

- **Fixed Processing (FP):** used for black and white and other high contrast documents. If Fixed Processing is selected, only Brightness can be adjusted.

- **Adaptive Thresholding (ATP):** separates the foreground information in an image (i.e., text, graphics, lines, etc.) from the background information (i.e., white or non-white paper background). When using Adaptive Thresholding, Brightness and Contrast can be adjusted. Use this option when scanning similar type documents.
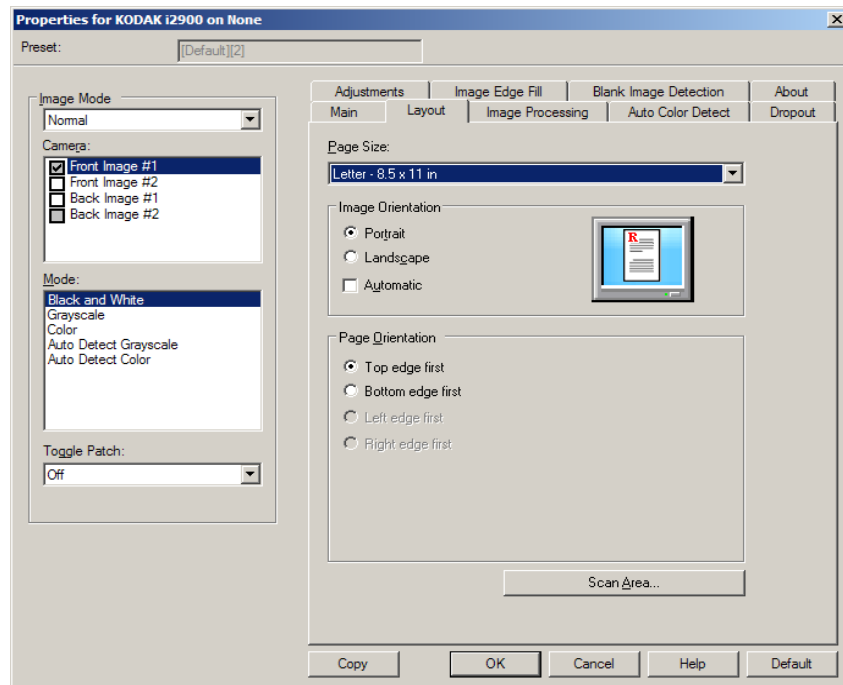
Threshold (Brightness) — this option is available when you select **Fixed Processing** or **Adaptive Thresholding (ATP)**. This option allows you to change the black and white image to be darker or lighter. The higher the threshold value, the darker the image. Use the slider to select a value from 0 to 255. The default is 90

Contrast — adjusts how much of the faint detail you want to see in the output image. The higher the contrast value, the more faint lines will be shown in the image. The lower the contrast value, the clearer (or less detailed) the output image will be. If contrast is set too high, you may get lines or black areas in your output image that you do not want. If the contrast is set too low, some letters or lines may not show in the output image. Select a contrast value from -50 to 50. The default is 50.

Layout tab

The Layout tab provides the following options:

Page Size — the default page size is set when a scanner is first selected. You can choose a different page size using the drop-down list. Page size should be set to the **Scanner's maximum** when using the **Automatic** or **Aggressive** cropping option.

Image Orientation

- **Portrait**: displays the image orientation in the shape of a conventional portrait, where height is greater than width.

- **Landscape:** displays the image orientation in the shape of a conventional landscape painting, where width is greater than height.

Page Orientation — allows you to select the way you place your documents in the scanner, **Top edge first, Bottom edge first, Left edge first** or **Right edge first**.

Scan Area — displays the Scan Area dialog box. The Scan Area options are only available for images when the cropping option is **Fixed to Transport** or **Relative to Document**. See the next section entitled, "The Scan Area dialog box" for more information.
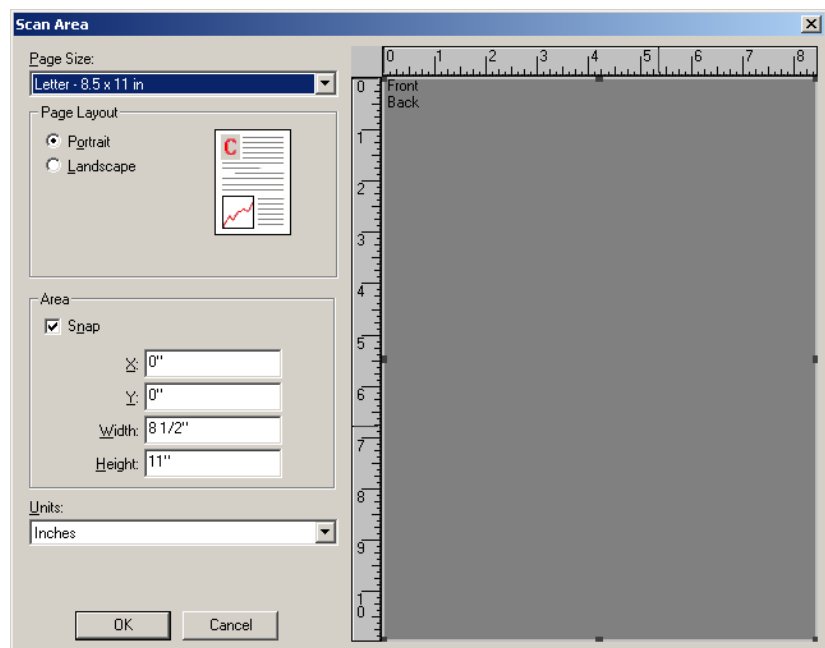
Scan Area dialog box   The Scan Area dialog box allows you to define the amount of image data which is returned to the host.

NOTE: Select the **Image Mode** (either **Normal** or **Merge**) based on the cropping option selected on the Main tab. If you select **Normal**, select the side(s) (i.e., **Front Image #1, Front Image #2, Back Image #1** and/or **Back Image #2**) to be defined.
If you Select **Merge**, select the orientation of the merged images (i.e., **Front on Top, Front on Bottom, Front on Left** or **Front on Right**). The scan areas defined for all camera selections are independent.

• Select **Scan Area** on the Layout tab to access the Scan Area dialog box.

NOTE: The Scan Area dialog box is only available when **Fixed to Transport** or **Relative to Document** is selected on the Main tab.

Page Size — the default paper size is set when a scanner is first selected. You can choose a different paper size using the drop-down list.

NOTE: Page Size also appears on the Layout tab. If you make a change on the Scan Area dialog box, the same selection appears on the Layout tab and vice versa.

Page Layout

• **Portrait:** displays the image orientation in the shape of a conventional portrait, where height is greater than width.

• **Landscape:** displays the image orientation in the shape of a conventional landscape painting, where width is greater than height.
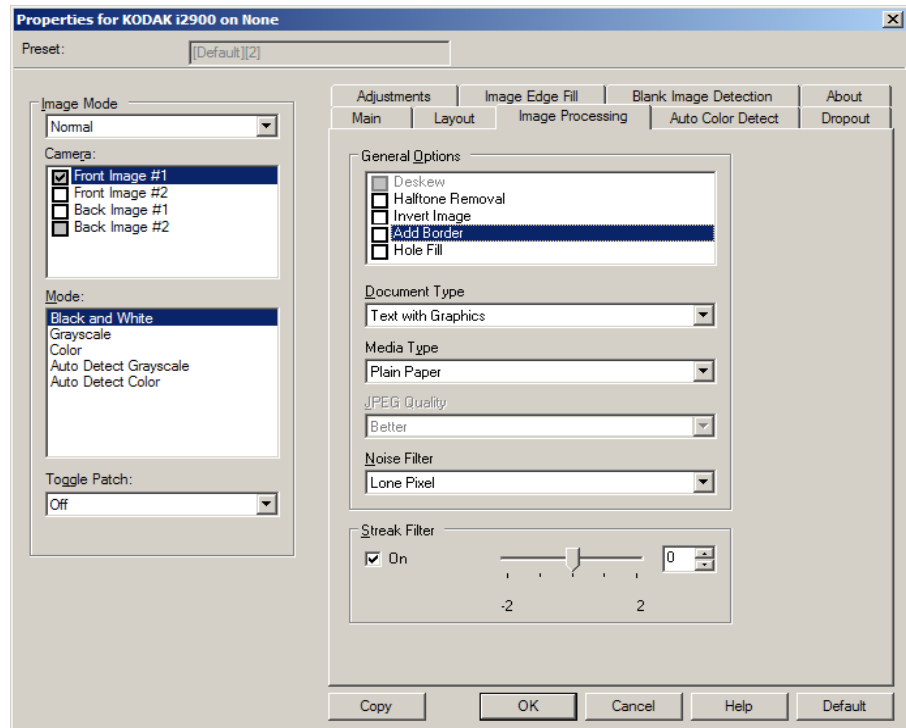
Area

- **Snap** — enable this option to control the dimensions of the preview area to fixed 0.3175 cm (1/8-inch) increments. This option is not available in **Pixels** mode.

- **X**: the distance from the left end of the scanner to the left-edge of the scanning area.

- **Y:** the position from the top end of the document to the top end of the scanning area.

- **Width**: the width of the scanning area.

- **Height:** the height of the scanning area.

Units — select whether you want the area to be defined in **Pixels**, **Inches** or **Centimeters**.

Image Processing tab   The Image Processing tab provides the following options:

General Options

- **Deskew** — automatically straightens a document within ±0.3 degrees of the leading edge of the document. Deskew can detect up to a 45-degree skew and correct up to a 24-degree angle at 200 dpi or a 10-degree skew angle at 300 dpi. This option is only available when **Automatic** is selected.

  NOTE: To prevent data loss, the document must have all four corners within the image path.

- **Halftone Removal** — enhances images containing dot matrix text and/or images with shaded or colored backgrounds using halftone screens and effectively eliminates noise caused by the halftone screen.

- **Invert Image** — allows you to select how the black pixels will be stored in the image. By default the black pixels are stored as black and the white pixels are stored as white. Turn this option on if you want the black pixels stored as white and the white pixels stored as black.

  NOTE: You may want to change this option if your application misinterprets the image data and stores your image in reverse of what you expect.

- **Add Border** — allows you to add a fixed amount of border to the left, right, top and bottom edge of the image. This option is not available when **Aggressive** is selected.

Hole Fill — allows you to fill in the holes that are around the edges of your document. The types of holes that are filled include: round, rectangular, and irregularly shaped (e.g., double-punched or those having a slight tear that could have occurred when the document was removed from a binder).

Document Type

- **Text**: when the documents you want to scan contain mostly text.

- **Text with Graphics**: when the documents you want to scan contain a mix of text, business graphics (bar graphs, pie charts, etc.) and line art.

- **Photographs**: when the documents you want to scan are comprised mainly of photos.

Media type — allows you to select the type of paper you are scanning, based upon the texture/weight. The options are: **Plain Paper, Thin Paper, Glossy Paper, Card Stock,** and **Magazine**.

JPEG (Joint Photographic Editor Group) **Quality** — if you choose JPEG compression, select one of the quality options:

- **Draft**: maximum compression which produces the smallest image size.
- **Good**: a fair amount of compression but still produces acceptable image quality.
- **Better**: some compression which produces decent image quality.
- **Best**: minimal compression which produces very good image quality.
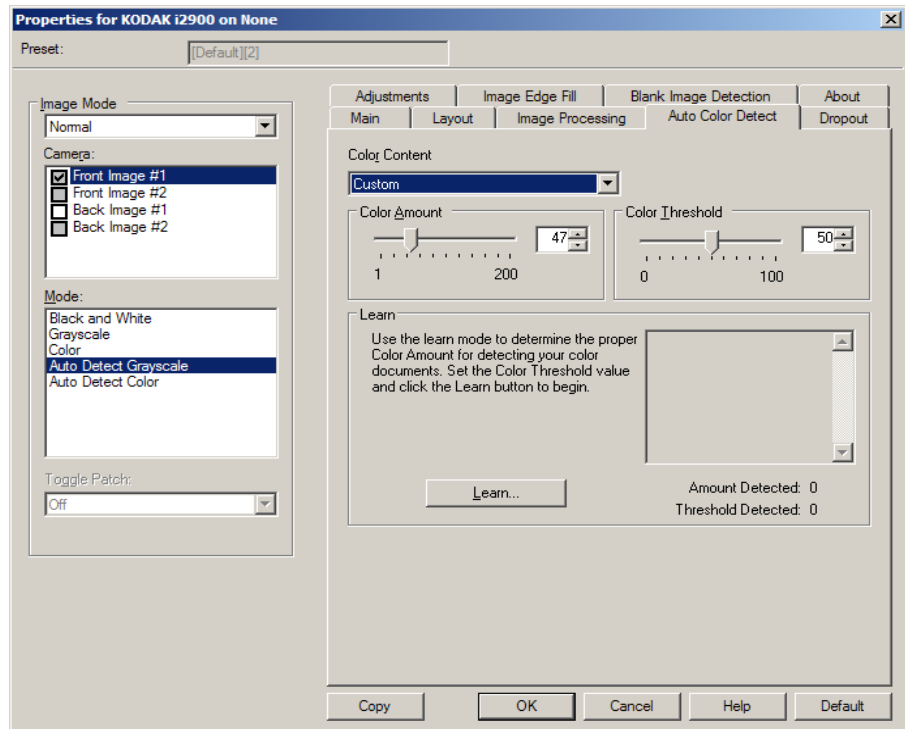- **Superior**: the least amount of compression which produces the largest image size.

Noise Filter

- **None**
- **Lone Pixel:** reduces random noise by converting a single black pixel to white when it is completely surrounded by white pixels or by converting a single white pixel to black when it is completely surrounded by black pixels.
- **Majority Rule**: sets each pixel based on its surrounding pixels. The pixel will become white if the majority of the surrounding pixels are white and vise versa.

Streak Filter — allows you to configure the scanner to filter vertical streaks from your images. Streaks are lines which may appear on an image and are not part of the original document. Streaks may be caused by contaminants on your documents (e.g., dirt, dust or frayed edges) or by not following the recommended cleaning procedures for your scanner. Adjust the extent at which the streaks are filtered by moving the slider bar from -2 to 2. The default is 0.

Auto Color Detect tab

The Auto Color Detect tab provides the following options. This option is only available when **Auto Detect Grayscale** or **Auto Detect Color** is selected.

Color Content

- **Low**: documents requiring only a small amount of color to be saved as color or grayscale images. Used for capturing documents that are primarily black text with small logos, or contain small amounts of highlighted text or small colorful photos.

- **Medium**: documents require more color, as compared with the Low option, before they are saved as color or grayscale images.

- **High**: documents require more color, as compared with the Medium option, before they will be saved as color or grayscale images. Used for distinguishing documents containing medium- to large-size colorful photos from plain black text. Photos with neutral colors may require adjustments to the Color Threshold or Color Amount values in order to be captured correctly.

- **Custom**: allows you to manually adjust the **Color Amount** and/or **Color Threshold**.

  NOTE: When setting Auto Color Detect values, it is suggested that you start with the **Medium** option and scan a typical job set. If too many documents were returned as color/grayscale vs. black and white, then change to the **High** option and re-run the job. If too few documents were returned as color/grayscale vs. black and white, then change to the **Low** option and re-run the job. If none of these options provide the desired result, select **Custom** option to manually adjust Color Amount and/or Color Threshold.

Color Amount: the amount of color that needs to be present in a document before it will be saved as either color or grayscale. As the value of Color Amount increases, more color pixels are required. Valid values are 1 to 200.
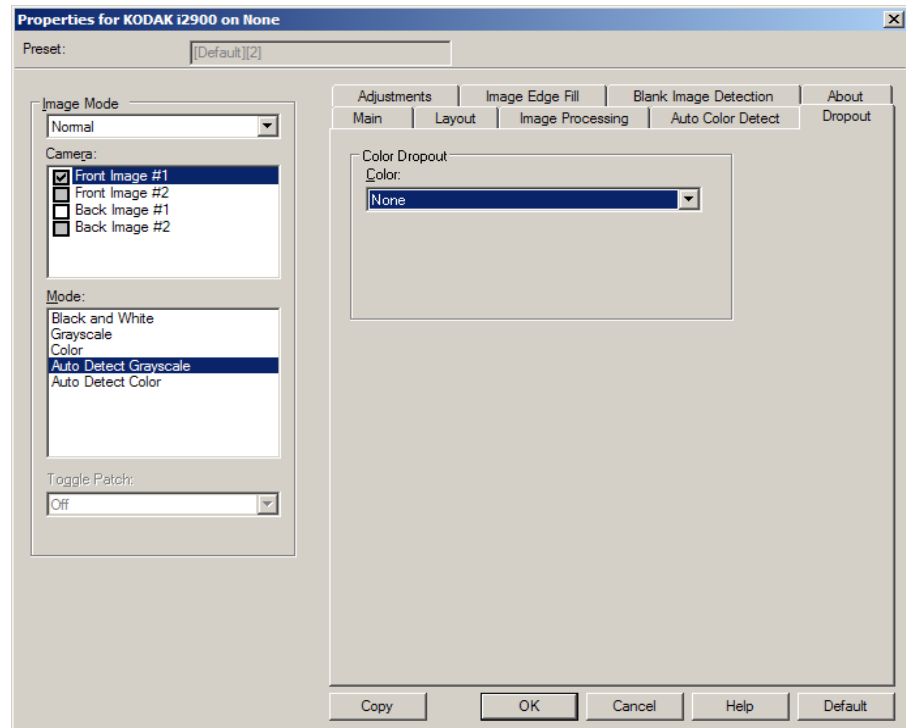
Color Threshold: the color threshold or intensity (i.e., pale blue vs. dark blue) at which a given color will be included in the color amount calculation. A higher value indicates that a more intense color is required. Valid values are 0 to 100.

Learn — allows you to calculate your settings based on representative color documents scanned. Before selecting **Learn**, place at least 5 representative color documents in the input elevator. The documents will be scanned and analyzed to determine the recommended Color Amount.

NOTE: The **Color Amount** and **Color Threshold** sliders will be updated automatically. If these values do not provide the desired results with your job set, you may need to manually adjust the **Color Threshold**.

Dropout tab

The Dropout tab provides the following option:

The Dropout tab is used to eliminate a form's background so that only the entered data is included in the electronic image (i.e., remove the form's lines and boxes). For black and white images, these settings effect the grayscale version of the document which the scanner analyzes to produce that electronic image.

Color Dropout

- **None**

- **Multiple**: drops colors other than dark shades (e.g. black or dark blue ink)

- **Predominant**: drops the predominant color
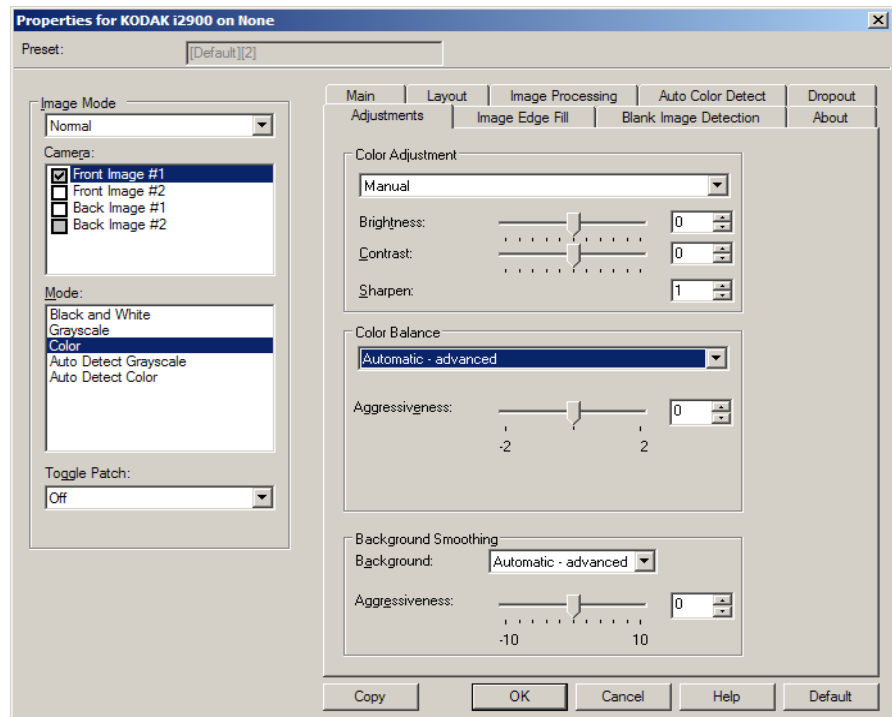
- **Red**

- **Green**

- **Blue**

Aggressiveness: allows you to adjust the extent at which the colors are dropped. The values range from -10 to 10. The default is 0.

This option is only available when *Color* is set to **Multiple** or **Predominant**.

Adjustments tab

The Adjustments tab provides the following options:

Depending on your scanning mode the following options are available:

- **Black and White** mode: no options are available.
- **Grayscale** mode: only Background Smoothing is available.
- **Color**: all options are available.
- **Auto Detect Grayscale**: Color Adjustment and Background Smoothing are available.
- **Auto Detect Color**: all options are available.

Color Adjustments

- **(none)**

- **Automatic**: automatically adjusts each image.

- **Manual**: allows you to set specific values that will be used for all images:
  - **Brightness** - changes the amount of white in the color or grayscale image. The values range from -50 to 50.
  - **Contrast** - makes the images sharper or softer. The values range from -50 to 50.
  - **Sharpen** - increases the contrast of edges within the image. Values range from 0 to 3.
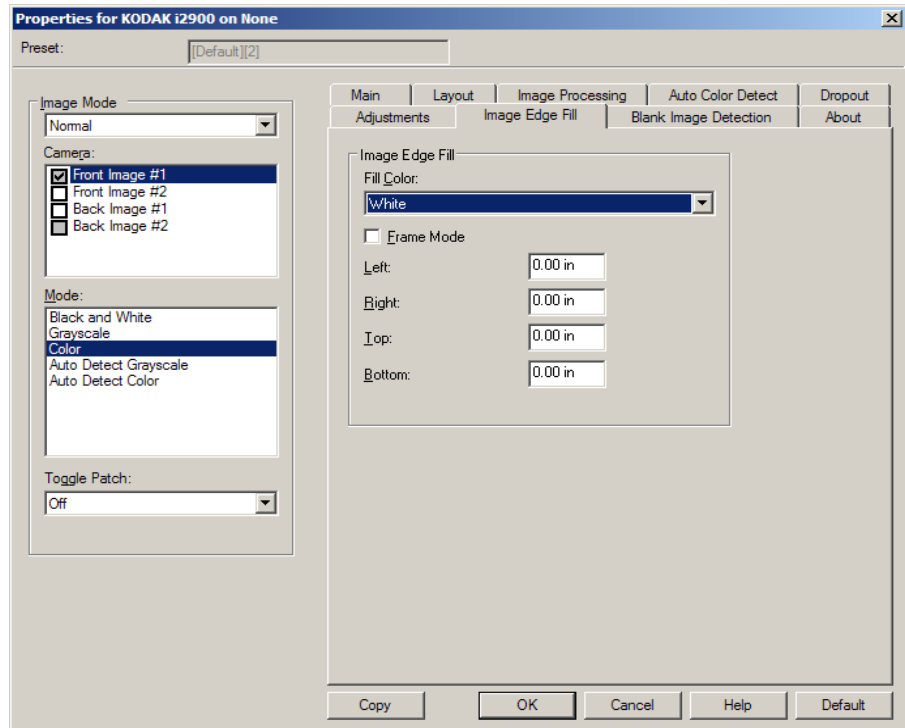
Color Balance

- **(none)**

- **Automatic**: adjusts the white background of each document to pure white. This option compensates for the variations that occur between different weights and brands of paper.

- **Automatic - advanced**: for advanced users that want to further adjust the Automatic option.

  - **Aggressiveness** - allows you to adjust the extent of the variation. Increasing this value can help with documents that have yellowed due to age. The values range from -2 to 2.

- **Manual:** allows you to set specific values that will be used for all images:

  - Red - changes the amount of red in the color image. The values range from -50 to 50.
  - Green - changes the amount of green in the color image. The values range from -50 to 50.
  - Blue - changes the amount of blue in the color image. The values range from -50 to 50.

Background Smoothing — using this option for documents or forms with a background color will help produce images with a more uniform background color.

- **Background**: select one of the following:

  - **None** - no background smoothing will be performed.

  - **Automatic** - smooths up to three background colors.

  - **Automatic - advanced** - for advanced users that want to further adjust the Automatic option.

    - **Aggressiveness**: allows you to adjust the extent at which the background(s) are determined. The values range from -10 to 10.

Image Edge Fill tab

This option fills the edges of the final electronic image by covering the area with the specified color. Image Edge Fill is performed after all other image processing options have been applied.

Fill Color — allows you to select the color to fill the edges with.
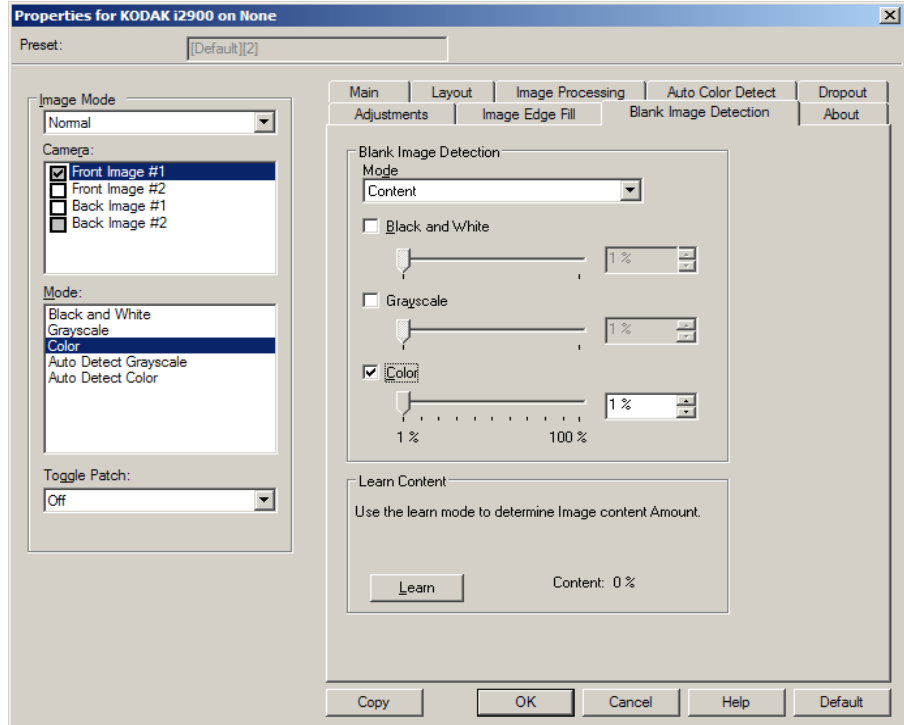
- None
- White
- Black

Frame Mode — fills in an equal amount of the selected color from the *Image Edge Fill* drop-down list on all sides of the image, or you can select a value in the **Top, Left, Right** and/or **Bottom** area(s) from each side of the scanned image to be filled.

NOTE: When using **Image Edge Fill,** be careful not to enter a value too large as it could fill in image data that you want to keep.

Blank Page Detection tab

Blank Image Detection allows you to configure the scanner to not give blank images to the scanning application. Select the image size (KB), below which an image is determined to be blank. Images with sizes less than the number you select will not be created. If you use this option, you must specify a blank image size for each image type (**Black and White, Grayscale** and **Color)** you want to delete. If you do not make an entry in these fields, all images are kept.
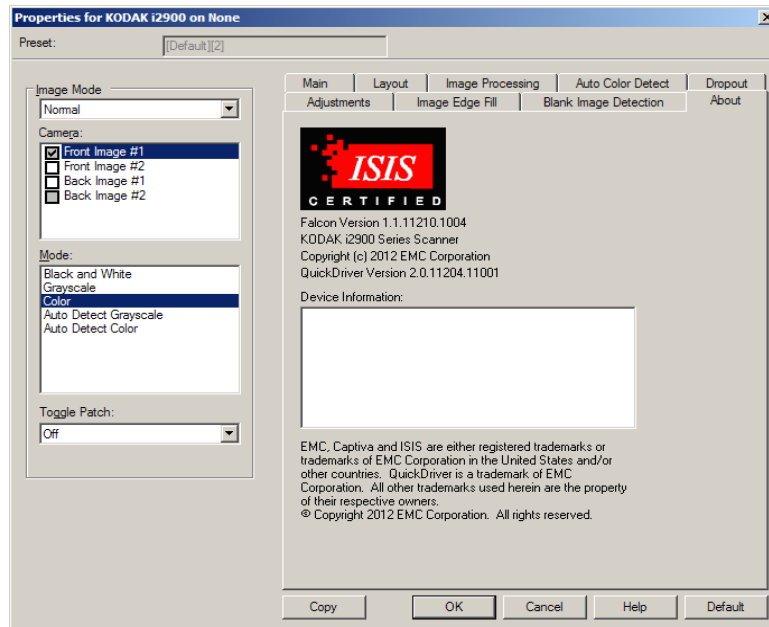

Mode

- **Off:** all images are given to the scanning application.

- **Size**: images will be considered blank based on the size of the image that would be given to the scanning application (i.e., after all other settings have been applied).

- **Content**: images will be considered blank based on the document content within the image. Select **Black and White**, **Grayscale** or **Color** to choose the maximum amount of content that the scanner will consider to be blank. Any image that has more content than this value will be considered non-blank and will be given to the scanning application. The values range from **0** to **100** percent.

Learn Content — allows the scanner to determine the content amount based on the documents to be scanned. Click **Learn** to use this function.

NOTE: Learn mode cannot be applied to both the front and back sides simultaneously. You must select the side you want to configure.
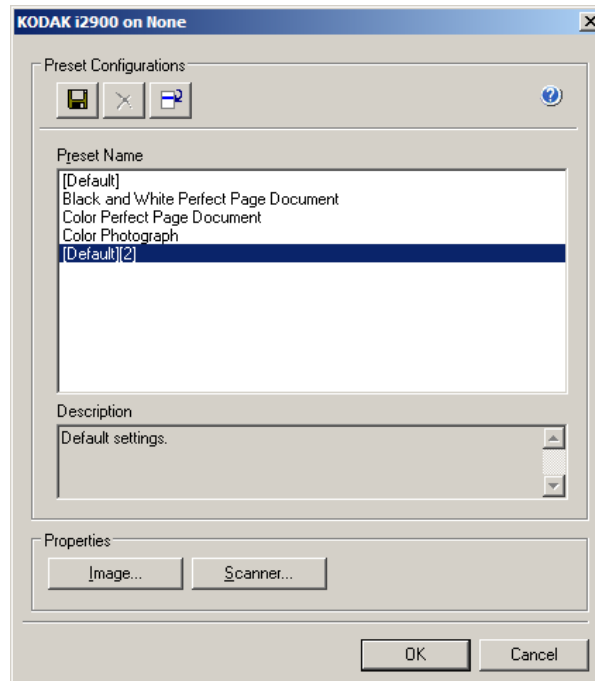
About tab　　　　　　　　　The About tab displays information about your scanner and driver.

Configuring Scanner settings

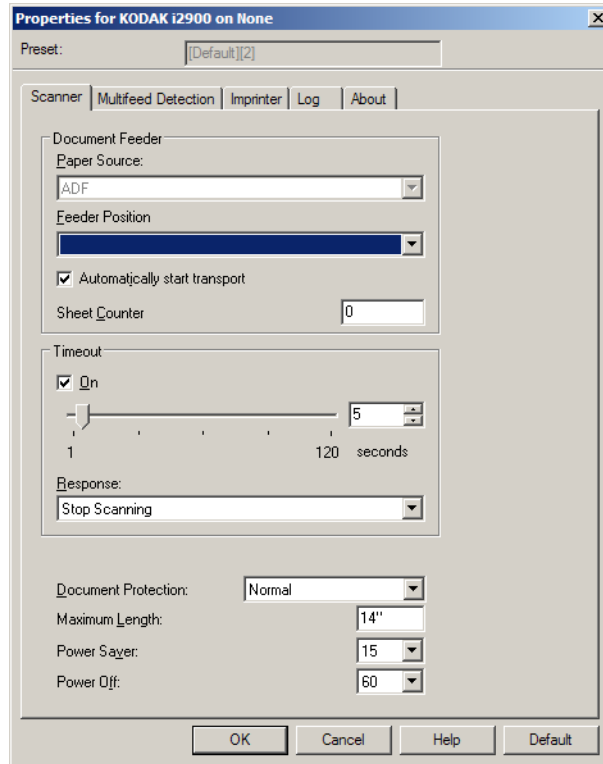To access scanner settings from the ISIS Driver, go into the Scan Validation Tool as described earlier in this guide and access the ISIS driver.

- Click **Scanner** to configure settings associated with the scanner. The following sections provide descriptions and procedures for configuring Scanner settings. See the section entitled, "Configuring Image settings" earlier in this guide for image configuration procedures.

Scanner tab

The Scanner tab provides the following options:

Document Feeder

Paper Source
- **ADF**: the input elevator is in the highest position. This selection is recommended when you are scanning 25 sheets or less from the input elevator.

- **Flatbed**: scanner will scan from the flatbed.

Feeder Position

- **Normal**: looks for paper in the document feeder first. If there are no documents in the input tray, the scanner will scan from the flatbed.

Automatic Start Transport — if selected, the scanner will wait for up to 10 seconds for documents to be placed in the input elevator before scanning will begin.

Sheet Counter — enter the number to be assigned to the next physical sheet of paper entering the scanner. This is incremented sequentially by the scanner and is returned in the image header.

Timeout — allows you to select the amount of time, in seconds, the scanner will wait once the last document enters the feeder before the timeout occurs. This option can also be turned off.

Response — indicates the action that will be taken when the document feeder timeout has been reached.

- **Stop Scanning:** scanning will stop and control will return to the scanning application (i.e., ends the job).

- **Pause Scanning**: scanning will stop but the scanning application will be waiting for additional images (i.e., stops the feeder). Scanning may be resumed by pressing the **Start/Resume** button on the scanner. Scanning may be stopped by pressing the **Stop/Pause** button on the scanner or via the scanning application.

Document Protection — allows you to select how aggressively the scanner detects documents that enter the scanner incorrectly. This can occur when documents are not prepared properly for scanning (e.g. stapled or paper clipped documents).

- **None**

- **Minimum**: select this option if the scanner is stopping too frequently on documents that you do not want it to detect.

  NOTE: Documents may become more damaged before detection occurs.

- **Normal**: this is the recommended option as it provides a balance between minimizing document damage and stopping the scanner unnecessarily.

- **Maximum**: select this option to get the least amount of document damage.

  NOTE: This may cause the scanner to stop unnecessarily.

Maximum Length — enter a value that indicates the length of the longest document in your document set.
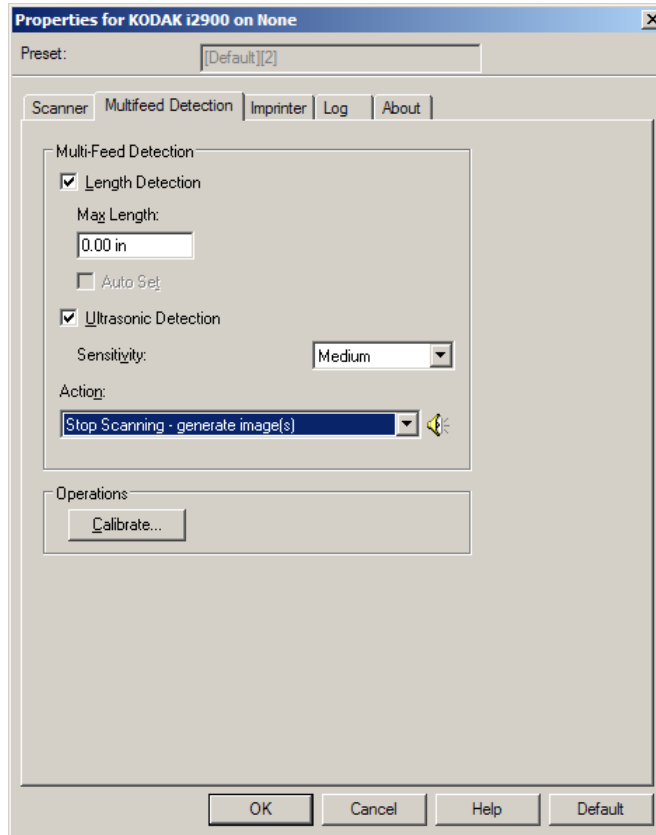
NOTES:

- Changing this value will affect the maximums for the following settings: *Area - Width; Height; Printer - Offset From Lead Edge; Multifeed - Length Detection.*

- Not all combinations of settings are supported at the larger lengths (i.e, resolution, color, grayscale, etc.). To allow for greater flexibility with applications, the scanner will not generate an error until it sees a document whose length is not supported.

- The scanner's throughput may be reduced for larger lengths.

Power Saver — allows you to set the amount of time (**0** to **240** minutes) the scanner will remain inactive before the scanner goes into an idle state. The default is 15 minutes.

Power Off — allows you to set the amount of time (**0** to **240** minutes) the scanner will remain inactive before the scanner will turn the power off.

Multifeed Detection tab   Multifeed detection aids in document processing by detecting documents that may go through the feeder overlapped. Multifeed can happen due to stapled documents, adhesives on documents or electrostatically charged documents. The Multifeed Detection tab provides the following options:

Length Detection — when you enable Length Detection you can select the maximum length of the document that can be scanned without a multifeed being detected. Length detection is used when scanning same-sized documents to check for overlap. For example, if you are scanning A4 (8.5 x 11-inch) documents in portrait mode, enter a value of 28.57 cm (11.25 inches) in the *Max Length* field. The maximum value is 35.56 cm (13.99 inches).

- **Auto Set:** automatically sets the maximum length value to 1.27 cm (.50-inch) greater than the length of the currently selected page size.

Ultrasonic Detection — check this option to set multifeed detection.

- **Sensitivity** — controls how aggressively the scanner will work to determine if more than one document is fed into the transport. Multifeeds are triggered by detecting air gaps between documents. This allows multifeed detection to be used with job sets containing documents with mixed thicknesses.

  - **Low**: the least aggressive setting and is less likely to detect labels, poor quality, thick or wrinkled documents as multifed documents.

- **Medium**: use Medium sensitivity if your application has varying document thickness or labels attached to the document. Depending on the label material, most documents with labels should not be detected as a multifed document.
- **High**: the most aggressive setting. This is a good setting to use if all documents are similar in thickness to 75.2 g/m^2 (20-lb.) Bond paper.

- **Action** — select what action you want the scanner to take when a multifeed is detected. With all options, the condition will be logged in the scanner.

  - **Continue Scanning**: the scanner will continue to scan.
  - **Stop Scanning**: scanning will stop and control will return to the scanning application (i.e., ends the job). Verify that the paper path has been cleared and restart the scan session from the scanning application.
  - **Stop Scanning - generate image(s)**: scanning will stop and control will return to the scanning application (i.e. ends the job). Image(s) of the multifed document will be generated. Verify that the paper path has been cleared and restart the scan session from the scanning application.
  - **Pause Scanning**: scanning will stop but the scanning application will be waiting for additional images (i.e., stops the feeder). Scanning may be resumed by pressing the **Start/Resume** button on the scanner. Scanning may be stopped by pressing the **Stop/Pause** button on the scanner or via the scanning application.
  - **Pause Scanning - leave paper in path**: scanning will stop immediately (i.e., making no attempt to clear the paper path) but the scanning application will be waiting for additional images (i.e., stops the feeder). Clear any documents from the paper path prior to resuming the scan session. Scanning may be resumed by pressing the **Start/Resume** button on the scanner. Scanning may be stopped by pressing the **Stop/Pause** button on the scanner or via the scanning application.
  - **Stop Scanning - leave paper in path**: scanning will stop immediately (i.e., making no attempt to clear the paper path) and control will return to the scanning application (i.e., ends the job). Clear any documents from the paper path prior to restarting the scan session from the scanning application.

Speaker icon — clicking this icon will display the Open dialog box allowing you to select the desired tone (.wav file) for your alarm.
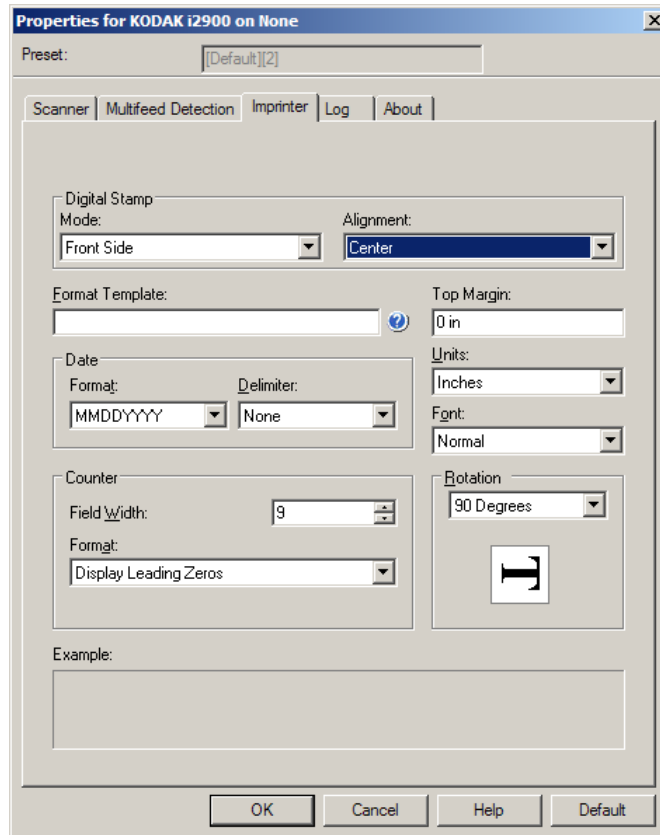
Calibrate — displays the Calibration window allowing you to perform a **UDDS** calibration.

NOTE: Frequent calibration is not necessary or recommended. Only perform a calibration when instructed to do so by your support personnel.

Imprinter tab

The printer operates at full scanner speed. The printer can add a date, time, document sequential counter, and custom messages.

The print string can be configured to include both literal (static) information (i.e., information that stays the same for each document, such as batch name or operator) and dynamic information (i.e., information that may change for each page scanned, such as the document sequential counter). The capture software application controls static fields; any information that the software allows you to enter can be sent to the printer.

Digital Stamp: Mode — to enable this option, select **Front Side.**

Alignment — select where you want the print string to be placed. Options are: **Left, Center, Right.**

Format Template — the format template is used to build the print string. The print string is what is printed on documents as they travel through the transport. The print string is printed before the document is scanned, therefore, it is part of the image. The maximum amount of characters for each print string is 40 characters (including spaces).

Date — if you want to add a date to the print string, select one of the following formats:

• **Format**: MMDDYYYY, DDMMYYYY, YYYYMMDD, YYYYDDD or DDD.

• **Delimiter:** select one of the following separators: **slash: /, dash: -, dot: . , space** or **none**. For example: 08/24/2010, 08-24-2010, 08.24.2010 or 08 24 2010 or 08242010 (none).

Counter — if you want to add a Counter to the print string, you can enter one of the following options:

- **Field Width:** used to control the width of the document counter. Values range from 1 to 9.

- **Format** — allows you to configure the format of the counter when the width of the value is less than the field width (the examples indicate a field width of 3 and the counter at 4). Options are:
    - **Display Leading Zeros** (default): "004"
    - **Suppress Leading Zeros**: "4"
    - **Compress Leading Zeros**: " 4"

Top Margin — allows you to define the distance from the lead edge before the print string begins. Enter the desired amount in the text box.

NOTE: Printing automatically stops 6.3 mm (1/4-inch) from the trailing edge of the document even if the information has not been completely printed.

Units — select **Inches**, **Centimeters** or **Pixels**.

- **Font** — you can select what orientation you want your information to be printed.

    - **Style**: available character styles: **Normal, Large** and **Bold**.
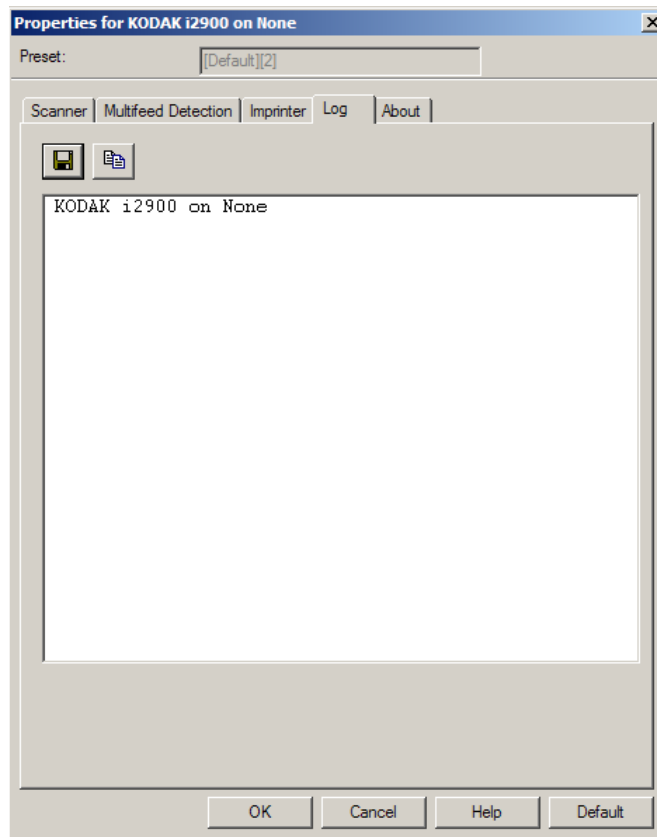

    Normal: 90° rotation   **Large: 90° rotation**   **Bold: 90° rotation**

Rotation — you can select either 0 or 90 degrees.

Logs tab

The Logs tab provides a listing of any errors that have been encountered.

You can view the Operator and Meter logs and save this information to a file by clicking the Save icon, or copy the information to the clipboard which can then be pasted into a document.