Kodak

i1800 Series Scanners

User's Guide

Contents

1 Introduction

This User's Guide provides information and procedures for the *Kodak* i1800 Series Scanners.

Chapter 1, Introduction — provides general information about the i1800 Series Scanners including a product description, scanner features, safety information, user precautions and how to contact Service and Support.

Chapter 2, Getting Started — includes an overview of internal and external scanner components.

Chapter 3, Using the Scanner — includes information on how to prepare your documents for scanning, input elevator, output tray and workspace table adjustments, scanning your documents and using the touchscreen operator control panel.

Chapter 4, Using the Enhanced Printer and Patch Readers — provides procedures for using and maintaining the Enhanced Printer and the Patch Readers.

NOTE: Patch Reader functionality is for the *Kodak* i1860 Scanner only.

Chapter 5, Maintenance — provides maintenance procedures for the i1800 Series Scanners, including cleaning and replacement procedures for the feed module, separation roller, pre-separation pad and imaging guides.

Chapter 6, Troubleshooting — provides information about accessing the operator log, a problem solving chart, procedures for clearing a document jam and a listing of error messages.

Appendix A, Accessories — provides a description of the optional accessories that can be purchased to support the *Kodak* i1800 Series Scanners. Instructions for using these accessories are included with the accessory.

Appendix B, Specifications — provides a listing of the specifications for the *Kodak* i1800 Series Scanners.

Scanner features

- Excellent paper handling, image quality, and reliability.
- Color or grayscale at the same speed as black-and-white.
- Color touchscreen for easy operator use.
- Simultaneous black-and-white and color/grayscale image output.
- Handles a broad range of paper weights and sizes.
- Built-in Patch Readers accept patch types for post-scan image control, image addressing and for switching between black-and-white/color or black-and-white/grayscale output streams.

  NOTE: Patch Reader and image address functionality is for the *Kodak* i1860 Scanner only.

- Includes the Brightness and Contrast Control which allows you to create custom color tables.
- ISIS and TWAIN device drivers are included on a CD that is packed with each scanner.
- International language support.
- Ergonomic design includes an integrated operator adjustable height, sit- to stand-workspace table
- 500-sheet input elevator.
- Energy Star compliant.
- Document printing capabilities using the Enhanced Printer or High Resolution Printer accessory.
- Electronic red, green and blue color dropout.
- Output resolutions include:
    - Black-and-white: 200, 240, 300, 400
    - Color: 100, 150, 200, 240, 300
    - Grayscale: 100, 150, 200, 240, 300
- Multi-feed detection by multiple ultrasonic sensors as well as by length detection.
- Automatic and manual feeding.
- JPEG compression for color and grayscale images.
- Image processing features include Kodak's Perfect Page technology for black-and-white, grayscale and color images.
- Easily replaceable feed module, separation roller and pre-separation pad.
- Long lasting lamps.

System requirements

Following is the minimum recommended system configuration to run the *Kodak* i1800 Series Scanners.

NOTE: The actual performance of the system depends on the scanning application, choice of scanning parameters, and the host computer configuration. If the scanner is not performing at the optimal speed, a faster computer and/or more RAM may be necessary to obtain the rated throughput.

- Intel PC (or compatible) with a Pentium IV 2 GHz processor
- An available PCI slot (for FireWire card)
- Microsoft Windows 2000 Professional, Windows XP (Professional/ Home)
- 512 MB RAM

Supporting documentation

The following documentation is available to support the *Kodak* i1800 Series Scanners:

- **Quick Tips Guide,** A-61556 — is a summary of this User's Guide and intended to be used as a quick reference for basic scanner use.

- **Brightness and Contrast Control Reference Guide**, A-61587— provides information and procedures for using the Brightness and Contrast Control which allows you to create your own custom color tables.

- **Image Processing Guide**, A-61580 — provides information on the *Kodak* Scan Validation Tool as well as descriptions of the features available for the i1800 Series Scanners that can be configured using the TWAIN Data source or ISIS Driver.

- **On-line help** — available when using the TWAIN Data source and ISIS Driver.

- **Patch Code Information**, A-61599 — provides detailed specifications for patch codes and includes camera-ready patches.

- **Installation Planning Guide**, A-61578 — provides site specification information to ensure a successful scanner installation.

- **Supplies and Consumables**, A-61403 — provides a complete listing of supplies and consumables for all *Kodak* Scanners.

- **White Background Accessory Instructions**, A-61576 — when you purchase the White Background Accessory, these instructions are included and provide a description of how to install the accessory.

- **High Resolution Printer Accessory Instructions**, A-61591 — provides instructions for using and maintaining the the High Resolution Printer.

- **Ultra-Lightweight Feeder Accessory Instructions**, A-61577 — when you purchase the Ultra-Lightweight Feeder Accessory these instructions are included and provide a description of how to use the Ultra-Lightweight Feed Module.

- *Kodak* **Manual Feeder for i1800 Series Scanners**, A-61559 — when you purchase the manual feeder this document provides instructions on how to install and use the manual feeder.

Contacting Service and Support

Telephone and on-site service by trained Kodak Field Engineer is available as part of the warranty and Service Agreement. Refer to your Service Agreement Terms and Conditions for hours of availability.

Only a trained scanner operator should place a call to the Kodak Service Center and have the following information ready:

- The K-number of the scanner, which is located on the top cover of the scanner.

- A brief description of the question or problem including error code numbers as displayed in the summary log file. See Chapter 6, *Troubleshooting*, for details.

- A contact name and phone number where the contact/customer can be reached.

Phone numbers:
- **United States and Canada**:

    Kodak Field Service: 1-800-356-3253
    Kodak Professional Services: 1-800-525-6325

- **Other locations**: the Kodak Field Engineer who installs your scanner will provide you with the contact numbers and procedure for contacting your local support center.

When a call is placed for Field Service, the contact name and phone number will be taken and a Kodak Field Engineer will return the call.

You may also use this procedure to schedule the Preventative Maintenance visits you are entitled to if you have purchased a Service Contract.

Call the Professional Services number to request additional training for scanner operators by a Kodak Certified Technical Trainer (CTT).

- Request any of the following Professional Services:

    - Additional Preventative Maintenance visits at high usage times anytime you want to ensure your scanner is running at optimum performance.

    - Scanner Relocation Services are available if you are moving down the hall, to another building or across the country. Damage incurred during transport is not covered under your warranty or Service Agreement. Kodak will help with your move by packing the scanner in packaging material that is specifically designed for the i1800 Series Scanners. Kodak will also unpack and test your equipment at the final destination.

    - *Kodak* Capture Software Application Development. If you have selected Kodak software to drive your scanner, Kodak can send a trained and experienced technician to assist you in developing your applications.

    - Customized consulting services.

Safety information

Warning labels

 CAUTION: Moving parts, avoid contact.

 CAUTION: Hot surface, avoid contact.

MSDS

Material Safety Data Sheets (MSDS) are available on the Kodak website at: www.kodak.com/go/msds. When accessing the MSDSs from the website, you will be required to provide the catalog number of the consumable for the Material Safety Data Sheet you are requesting. See Chapter 5, "Supplies, consumables and accessories" for consumables and catalog numbers.

User precautions

Users and their employer need to observe the common sense precautions applicable to the operation of any machinery. These include, but are not limited to, the following:

• Do not wear loose clothing, unbuttoned sleeves, etc.
• Do not wear loose jewelry, bracelets, bulky rings, long necklaces, etc.
• Hair length should be kept short, using a hair net if needed, or tying long hair up in a bundle.
• Remove all other loose objects from the area that could be drawn into the machine.
• Take sufficient breaks to maintain mental alertness.
• Use only the recommended cleaning supplies.
• Do not use canned/compressed air.

Supervisors should review their practices and make compliance with these precautions a part of the job description for operation of the scanner or any mechanical device.

Gas springs warning

Do not attempt to repair the gas springs. These are designed to be replaced by a Kodak Field Engineer.

Environmental information

- The product packaging is recyclable.
- The i1800 Series Scanners are Energy Star compliant and are shipped from the factory with the default time set to 15 minutes.

European Union

This symbol indicates that when the last user wishes to discard this product, it must be sent to appropriate facilities for recovery and recycling. Please contact your local Kodak representative or refer to www.kodak.com/go/recycle for additional information on the collection and recovery programs available for this product.

EMC statements

IMPORTANT: Compliance with regulations governing radio frequency emissions requires that the installation of your Kodak i1800 Series Scanners use the shielded data cable provided. Any data cable the user may choose to substitute also must be shielded to assure continued compliance.

United States

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequently energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

Japan

This is a Class A product based on the standard of the Voluntary Control Council for interference by information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective action.

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＡ情報技術装置です。この装置を家庭環境で使用すると電波障害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Peoples Republic of China

WARNING: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

<div align="center">声明，该产</div>

此为A级产品，在生活环境中品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施

Korean

Please note that this equipment has obtained EMC registration for commercial use. In the event that it has been mistakenly sold or purchased, please exchange it for equipment certified for home use.

이 기기는 업무용으로 전자파적합등록을 한 기기이오니 판매자

또는 사용자는 이점을 주의하시기 바라며, 만약 잘못 판매 또는

구입하였을 때에는 가정용으로 교환하시기 바랍니다.

European Union

WARNING: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Acoustic emission

Maschinenlärminformationsverordnung – 3, GSGV
Der arbeitsplatzbezogene Emissionswert beträgt <70 db(A).

[Machine Noise Information Ordinance — 3, GSGV
The operator-position noise emission value is <70 dB(A).]

Power system connection

This product is also designed for Norwegian IT power system with phase-to-phase voltage 230V.

Netzanschluß

Das Gerät ist auch für die Verwendung im norwegischen IT-Stromsystem mit einer Leiterspannung von 230 V geeignet.

Connexion aux systèmes d'alimentation électrique
Ce produit est également conçu pour les systèmes norvégiens d'alimentation électrique informatique, dont la tension par phase est de 230 V.

2   Getting Started

Scanner components   Front view

1   **Power switch** — press the power switch on (I) or off (O) as required.

2   **Input elevator** — holds documents for scanning. The input elevator can be set to accommodate stacks of 25-, 100-, 250- or 500-documents (20 lb. bond paper).

3   **Input elevator extender** — open the input elevator extender to accommodate long documents.

4   **Input elevator side guides** — slide the guides in or out to accommodate the document size you want to scan. Side guides can be left-, center- and right-adjusted to accommodate documents of various widths. The side guides can also be locked into position if desired.

5   **Feed module** — provides smooth document feeding of various sizes, thicknesses and textures.

6   **Paper present sensor** — detects the presence of documents in the input elevator.

7   **Gap release button** — allows you to manually adjust the space between the feed module and separation roller for documents that require special handling.
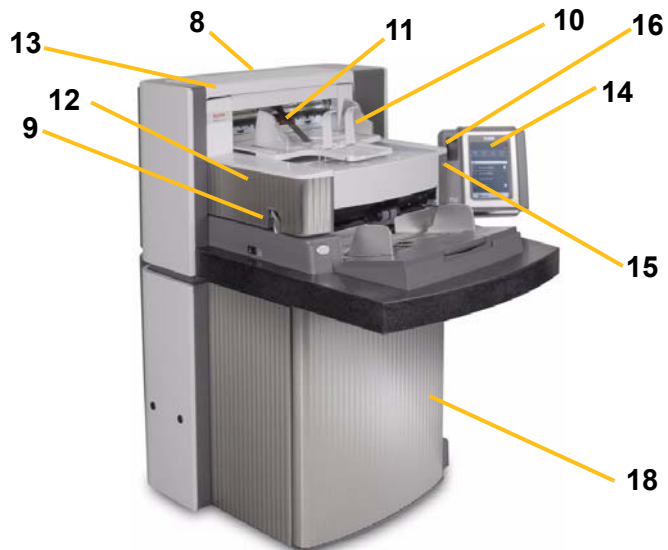
8   Service K-Number — the number on this sticker is the number you will be asked to provide when placing a call Kodak Service.

9   POD release latch — push up the POD release latch when you need to access the inside of the scanner.

10 Output tray and end stop — collects the scanned documents. The output tray width and end stop length can be adjusted.

11 Exit deflector — aids in document stacking.

12 Printer access cover — lift this cover to access the front printer for changing printer positions and maintenance.

13 Top access cover — lift this cover to access the rear printer for changing printer positions and maintenance.

14 Touchscreen — a variety of functions can be performed using the touchscreen. See Chapter 3, *Using the Scanner* for procedures on using these functions. If you need to move the scanner, the touchscreen can be rotated so it will easily fit through doorways or tight spaces.

15 LED — flashes green when the scanner is in Power Saver/Energy Star mode; LED is steady green when the scanner is idle and ready to scan.

16 Workspace table height adjustment switch — used to raise and lower the workspace table on the scanner. The workspace table can be raised or lowered approximately 10 inches up or down.

17 Height Adjustment Wire — located underneath the output tray (not shown in photo), this wire can be pulled out to raise the front of the output tray.

18 Storage pocket — provides a convenient and easy-access area for storing calibration targets and documentation.

Internal components
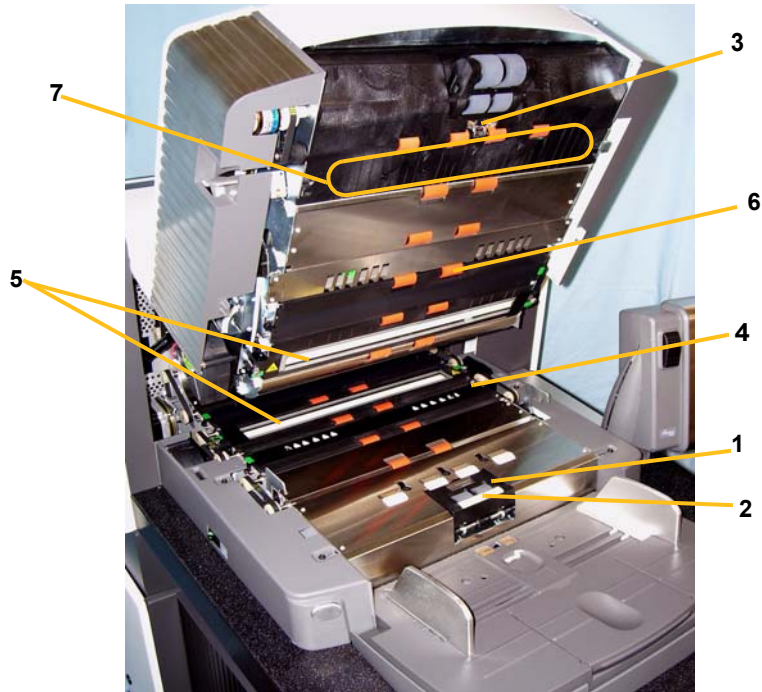
1 **Separation roller** — provides smooth document feeding of various sizes and textures one document at a time.

2 **Pre-separation pad** — provides smooth document feeding of various sizes and textures one document at a time.

3 **Document sensor** — detects the presence of documents in the paper path during feeding.

4 **Ink blotter strip cover** — remove this cover to provide access to the ink blotter strips. The ink blotter strips collect residue from the Enhanced Printer.

5 **Imaging guides** — the scanner has an upper and lower imaging guide. It is important to keep the imaging guides clean to obtain optimum image quality.

6 **Rollers** — transport the documents through the paper path.

7 **Patch Readers** — these four patch readers can be setup to read patches. You can enable the patch readers via the capture software application.

NOTE: Patch Reader functionality is for the *Kodak* i1860 Scanner only.

7 **Multi-feed sensors** — the scanner has three (ultrasonic) multi-feed detection sensors. These sensors are used to detect if more than one document enters the paper path at one time causing a multi-feed.

Sensors
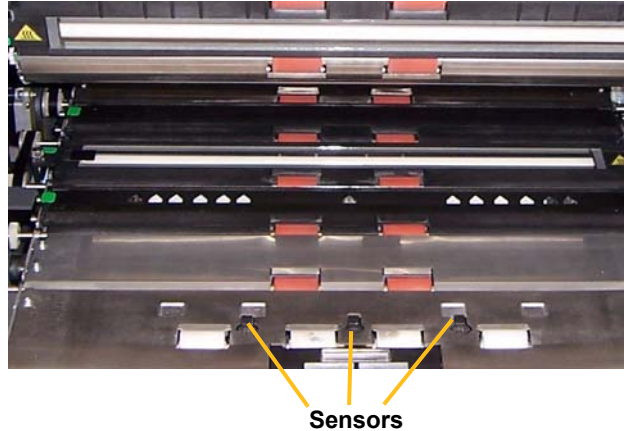
Rear view
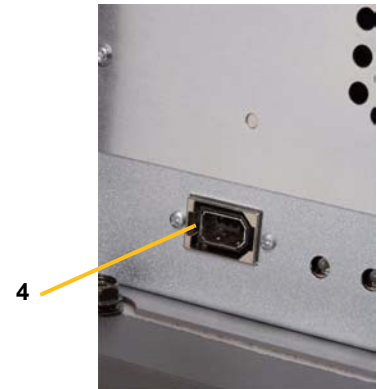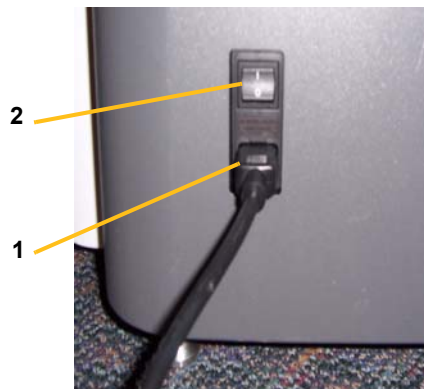
1 **Power cord connection** — provides power to the scanner. The scanner is packed with multiple power cords. Choose the power cord appropriate for your location and connect it accordingly. Connect the power cord first to the scanner, then to the wall outlet.

2 **Main breaker switch** — this switch must be On to activate the power to the scanner.

3 **Rear access door** — provides access to the space in the back of the scanner for a computer (not shown in illustration).

4 **FireWire (IEEE-1394) connection** — provides a port for the FireWire cable.

3 Using the Scanner

This chapter provides the following operational procedures:

- Turning on/off the scanner
- Starting and stopping the scanner
- Document preparation
- Adjusting the input elevator
- Adjusting the output tray
- Adjusting the height of the scanner
- Scanning documents
- Automatic, continuous and manual feeding
- Using the touchscreen

Turning the scanner on

The i1800 Series Scanners have two power switches. The main breaker switch is located on the back of the scanner on the lower left-side near the power cord.

1. Turn on the main breaker switch first. Under normal circumstances the main breaker switch should remain on.

2. After turning on the main breaker switch, press the power switch on the left side of the scanner to the on position (I).

After you power up the scanner, the following screen will be displayed.

Initializing scanner, please wait...
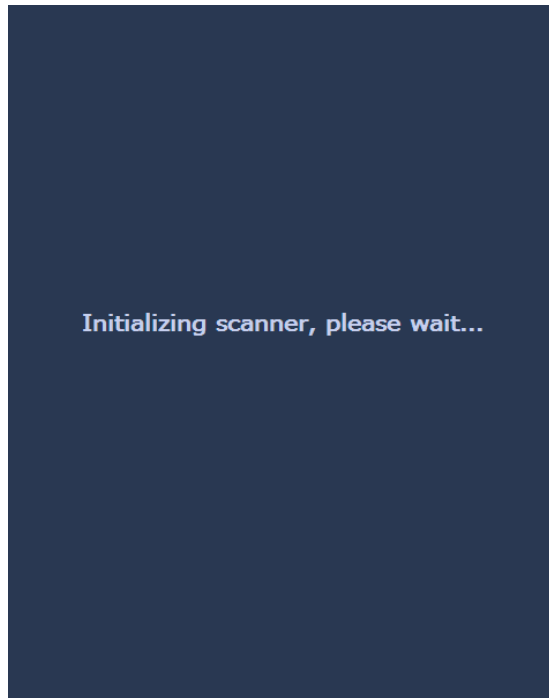
When the scanner completes the power-up sequence, the Idle screen will be displayed. See the section entitled, Using the touchscreen" later in this chapter for information about the Idle screen.

IMPORTANT: Always power up the host computer to its ready state before powering up the scanner.

Turning the scanner off

- Press the power switch on the left-side of the scanner to the off (O) position.

NOTES:

- You do not need to turn the main breaker switch off unless you are going to move the scanner.
- There are four leveling feet on the bottom of the scanner. If you need to move the scanner, these leveling feet must be raised. Contact your Kodak Service Representative before attempting to relocate the scanner.

Starting and stopping scanning

The scanner is controlled by a capture software application. To start and stop scanning, refer to the documentation provided with your application software.

Document preparation

Kodak Scanners have been tested with a range of documents that represent the broad spectrum of document types found in the most common business applications. Optimal scanner performance is achieved when scanning documents within the recommended document specifications listed below. Scanning documents outside of these specifications may lead to undesirable results in terms of scanner reliability, image quality, and/or consumable life.

Materials:
- Virgin, recycled and photographic papers
- Clear protective sleeves meeting the size and thickness requirements in this section

Paper Types: Bond, Laser, Inkjet, Offset

Paper Weights: The input elevator handles a broad range of paper weights from 45 to 200 g/m^2 (12 to 110 lb.). The *Kodak* Feeder Kit for Ultralightweight Paper can handle paper weights from 25 to 75 g/m^2 (7 to 20 lbs).

Minimum Document Size: 6.4 x 6.4 cm (2.5 x 2.5 in.).

Maximum Document Size: 30.5 x 86 cm (12 x 34 in.). Documents larger than 43 cm (17 in.) may require operator assistance and installation of optional document extenders.

Paper inks: All inks on the paper must be dry before scanning is started. This includes: Standard offset printing, Inkjet printer, Thermal transfer, Handwriting inks.

Correction Fluids: Liquid Paper®, Tipp-Ex®, Wite-out®, and other similar correction fluids must be dry before scanning is started.

Feeder Capacity: The input elevator can hold up to 500 sheets of 75 g/m^2 (20 lb.) paper.

Before you begin scanning documents, make certain the documents can be fed through the scanner easily.

- A stack of documents to be fed into the scanner must be arranged so the leading edges of all documents are aligned under the feed module; this allows the feeder to introduce documents into the scanner one at a time.

- Staples and paper clips on documents may damage the scanner and documents. Remove all staples and paper clips before scanning.

- Documents with missing corners, perforated edges, hole punches in the margins, irregular and curled edges, torn, damaged, or crushed pages can be transported successfully through the scanner. These documents may require manual feeding.

- When scanning mixed-sized documents, in addition to lead-edge alignment, you may also want to left- or right-edge align the documents. This would allow offset feeding, especially when using the Enhanced Printer.

- If in doubt about whether a specific damaged document can be transported through the scanner, place the document in a clear protective sleeve with the lead edge of the document aligned with the folded edge of the sleeve. Sleeves should be manually fed, one at a time, folded edge first, while using the gap release button. Ultrasonic multi-feed detection is not recommended when using plastic sleeves.

    NOTE: When scanning documents in a clear protective sleeve, the input elevator side guides must be adjusted to accommodate the width of the sleeve.

Adjusting the input elevator

Adjusting the side guides

1. Place the documents in the input elevator.

2. Adjust the side guides to fit the documents. The side guides should be far enough apart to accommodate the widest document that you are feeding.

Selecting your feeding position

The side guides can be adjusted for right-edge, left-edge or center feeding. The side guides can be moved together for center feeding or independently for offset feeding (right-edge or left-edge).

When using the Enhanced Printer, documents should be placed in the input elevator in a manner that will align the print string in the proper location. Offset feeding may be required.

If your stack of documents contain mixed sizes and has been left- or right-edge aligned, adjust the side guides for offset feeding.

Locking the side guides

Side guides may be locked into position after they are adjusted. This may be helpful when the placement of print strings is important.

If you want to lock the side guides into position, move any documents which may be in the input tray and move the locking switch into the **locked** position.

Adjusting the height of the input elevator

The input elevator can be set to accommodate stacks of 25-, 100-, 250- or 500-documents of 20 lb. bond paper. Input elevator settings are made through the TWAIN Data source or ISIS Driver.

NOTE: In this document 25 will be referred to as the highest setting and 500 as the lowest.

Make this setting based on the number of documents you will place in the input elevator at one time.

When set to 25 (Document Feeder or Normal), the input elevator will remain in position. When set to 100, 250 or 500, the input elevator will automatically raise to feed documents and lower after the last document in your stack has been fed.

Adjusting the input tray for document length

• No adjustments are required for documents up to 14 inches long.

• If you are scanning documents from 14 to 17 inches in length, open the input elevator extension.

• Documents longer than 17 inches require a document extender. Three sizes of document extenders are available for scanning documents from 43 cm (17 in.) to 86 cm (34 in.). See the section entitled, "Ordering parts" in Chapter 5 or contact your Kodak Field Engineer at 1-800-3KODAK3 (1-800-356-3253).

Installing the document extender

• Insert the ends of the document extender into the holes on the input elevator and lower the extender into position.

Output tray options

The scanner is shipped with a standard output tray and a short document tray. Use the short document tray when scanning documents less than 15.2 cm (6 in.) in length and 13.9 cm (5.5 in.) in width. See the section entitled "Adjusting the short document tray" for more information.

Adjusting the output tray

The output tray can be adjusted to a variety of positions to meet your stacking needs. Factors which determine the optimum output tray position are size and weight of your paper and the number of documents to be stacked in the output tray at one time.

Adjusting the side guides

• Adjust the side guides on the output tray to match the position of the side guides on the input elevator.

Adjusting the output tray for document lengths up to 43.2 cm (17 in.)

Adjusting for document length involves selecting an output tray position and angle, positioning the end stop, or removing the end stop and installing a document extender. Reviewing the following table will help you determine the best position for your output tray and your stacking needs.

Position	Stacking capacity	Maximum document length with end stop
1	Up to 250 documents	35.6 cm (14 in.)
2	Up to 500 documents	35.6 cm (14 in.)
3	Up to 500 documents	43.2 cm (17 in.)

Positioning the output tray

There are three positions that the output tray can be placed in.
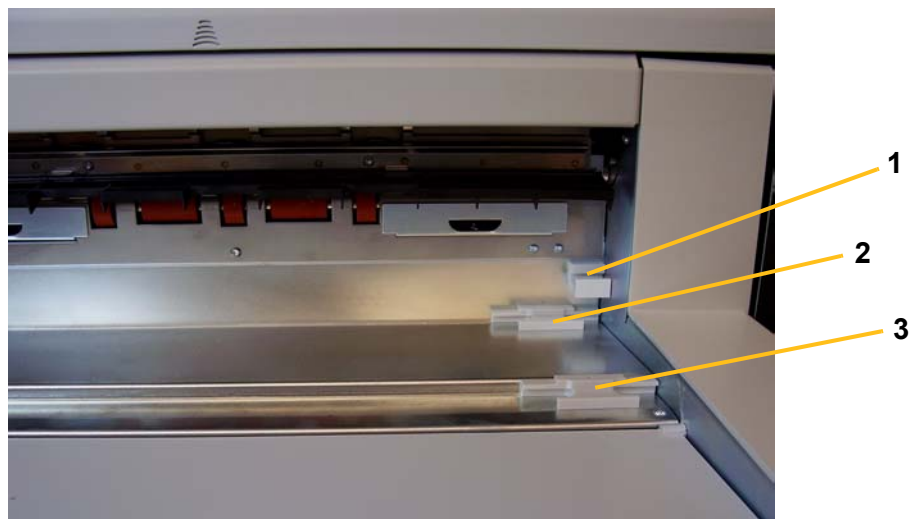
1. Lift the front of the output tray and pull it out of position.

2. Set the back of the tray either in the upper position (1), lower position (2) or forward position (3) as desired.

Adjusting the end stop   Adjust the output tray end stop to slightly longer than the longest document being fed.

Adjusting the angle of the output tray   In addition to adjusting the back of the output tray, you can adjust the front of the tray by swinging the height adjustment wire out from underneath the output tray and placing it in one of the detent positions.
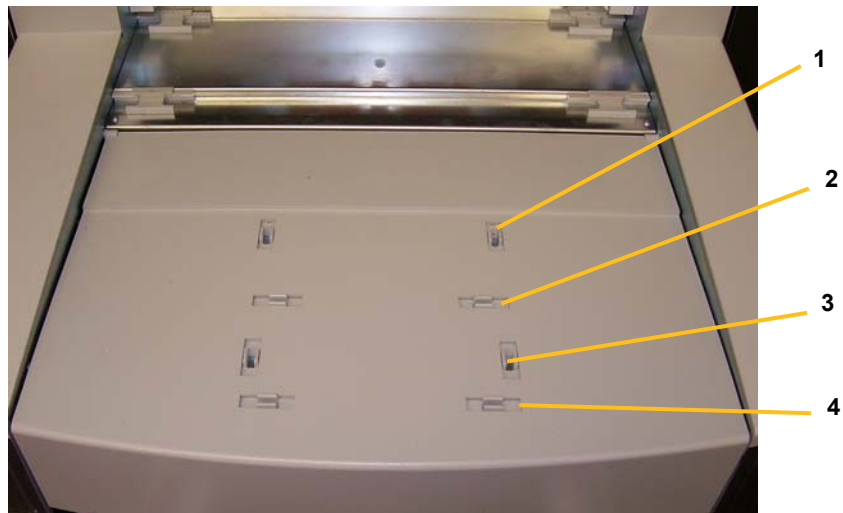
1. Lift the front of the output tray.

2. Swing the height adjustment wire out from underneath the output tray and insert it into one of the grooves on the printer access cover.

3. When finished using the output tray in this position, tuck the height adjustment wire back into position and lower the output tray.

The exit deflector

The exit deflector aids in document stacking. When feeding light-weight documents, it is suggested that the exit deflector be removed.

The exit deflector can be easily removed by gently pulling it out of the holding clips. There are three positions that the exit deflector can be placed in.

- If you are left-edge feeding documents, it is suggested that the exit deflector be positioned in the left position.

- If you are center feeding documents, it is suggested that the exit deflector be positioned in the center position.

- If you are right-edge feeding documents, it is suggested that the exit deflector be positioned in the right position.

Left position   **Center position**   **Right position**
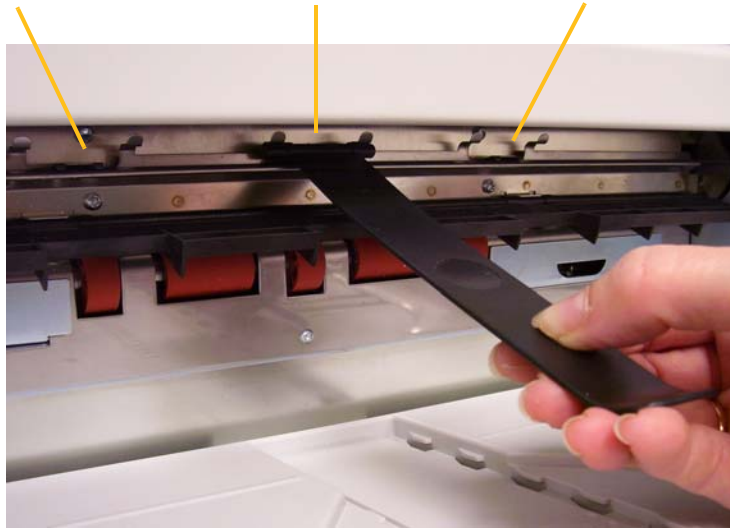
NOTE: If you are feeding wider or heavy documents, additional exit deflectors can be used. Contact your Kodak Field Engineer at 1-800-3KODAK3 (1-800-356-3253) to order additional exit deflectors (Part No. 3E9575).

Adjusting the output tray for documents from 43.2 cm (17 in.) to 86 cm (34 in.)

Documents longer than 17 inches require a document extender. Three sizes of document extenders are available for scanning documents from 43.2 cm (17 in.) to 86 cm (34 in.). See the section entitled, "Ordering parts" in Chapter 5 or contact your Kodak Field Engineer at 1-800-3KODAK3 (1-800-356-3253).

1. Remove the end stop.

2. Insert the ends of the document extender into the holes on the output tray and lower the extender into position.

Adjusting the short document tray

1. Remove the end stop on the output tray.

2. Slide the short document tray on the rail of the output tray and push it up to the desired position to accommodate your documents.

3. Adjust the sides guides as necessary.

Adjusting the height of the scanner

The workspace table can be raised approximately 25.4 cm (10 in.) from its lowest position for your comfort when you are sitting or standing at the scanner. When you are raising or lowering the workspace table, be sure that there is nothing close to the scanner that would interfere with the upward and downward movement (e.g., chair, table, etc.).

• Press the upper portion of the button on the control panel to raise to workspace table.

• Press the lower portion of the button on the control panel to lower the workspace table.

If the workspace table will not move up or down from its position, check the following:

• Be sure the front and/or rear access doors are securely closed.

• Be sure the workspace table is not already in its highest or lowest position.

• Be sure the scanner is on and is not in Power Saver mode.

Feeding documents using multi-feed detection

The scanner has three multi-feed detection sensors that can be independently enabled or disabled. When multi-feed detection is enabled, adjust the side guides so the documents fully cover at least one sensor. If the document partially covers a sensor, false multi-feeds may occur.

Automatic feeding

To scan a stack of documents follow the guidelines for size, type, quantity, etc., outlined in the "Document preparation" section.

For faster throughput, place documents into the input elevator in landscape orientation (longer side as the leading edge).

IMPORTANT: Staples and paper clips on documents may damage the scanner. Remove all staples and paper clips before scanning.

1. Align the leading edges of the stacked documents.

2. Position the stack of the documents, face up in the input elevator so the stack covers the paper present sensor.

Depending on how your capture application software is configured, your documents will automatically start feeding, or you may need to touch the **Scan** button on the touchscreen to begin feeding documents.

Continuous feeding

Continuous feeding can be used when you want to continuously scan small stacks of documents (less than 25) without stopping/starting a scan session.

When the input elevator is in highest position, continuous feeding of small stacks of documents can be accomplished by adding them to the bottom of the stack while scanning.

1. Align the leading edges of the stacked documents.

2. Position the stack of the documents, face up in the input elevator so the stack covers the paper present sensor.

    As the documents are being scanned, you can continuously add documents to the bottom of the stack. When adding documents, be sure that the paper present sensor remains covered at all times.

Manual feeding

When the scanner is configured for manual feeding, the input elevator is raised to the highest position where approximately 25 documents can be loaded. The input elevator will remain in this position to allow documents to be fed one at a time.

To manually feed documents:

1. Position the document you want to feed in the input elevator so that the paper present sensor is covered.

2. Touch **Scan** on the touchscreen.

NOTE: The *Kodak* Manual Feeder Accessory is also available provides a larger surface for manual feeding. See *Appendix A, Accessories* for more information.

Feeding documents that require special handling

The gap release button allows you to manually adjust the space between the feed module and separation roller for documents that require special handling; e.g., documents that are badly torn. If you are in doubt about whether a damaged document can be transported through the scanner, use the gap release button and manually feed the document. Using the scanner in continuous feed mode is recommended when handling special documents.

1. Raise the input elevator to the highest position.

2. Press and hold the gap release button — this provides clearance to ease document feeding.

3. Push the document into the input elevator. If more than one document is to be scanned, feed them one at a time.

4. After the document(s) has been fed, release the gap release button.

Using the operator control panel touchscreen

There are a variety of functions that can be accessed by using the operator control panel touchscreen. If there are three dots after the function, another screen will be displayed allowing you to make additional choices. For more information and procedures for using these functions, see the following sections.

To navigate through the touchscreen, simply touch the desired function with your finger. Using any object other than your finger may damage the touchscreen and void your warranty.

NOTES:

• If all of the functions cannot be displayed on the touchscreen at one time, it may be necessary to touch the up or down arrow at the right-edge of the screen to gain access to a desired function.

• **Image Addressing, Patch Reading and Batch functionality are only available for the *Kodak* i1860 Scanner.**

Idle screen — depending on whether image addressing is enabled or disabled or not available, the Idle screen will appear differently.
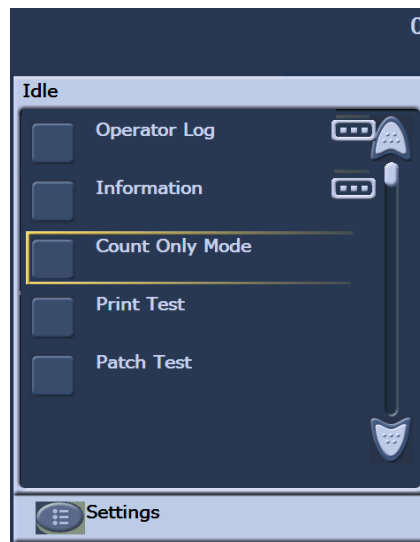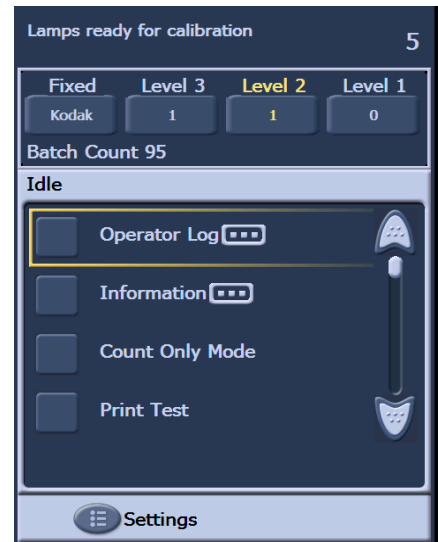

Image Addressing - disabled   **Image Addressing - enabled**

When the Idle screen is displayed, you can do the following:

• View the operator log
• Access information about the scanner
• Run the scanner in count only mode
• Perform a print test
• Perform a patch test
• Perform a self test

In addition from Idle mode, you can setup or change scanner configuration settings, and enable or disable imaging addressing by using the Settings screen. The Settings screen allows you to set or change the following options:

- Volume
- Tones
- Language
- Enabling or disabling image addressing
- Calibration

Settings screen

The Settings screen is accessed by touching **Settings** on the Idle screen. The Settings screen provides scanner settings that will only need to be set infrequently.

NOTE: The value displayed under the option is the current setting.
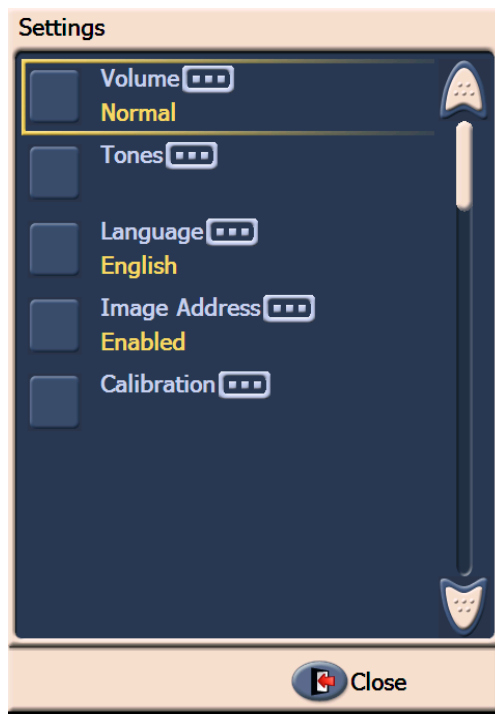
Changing the alarm volume   The Volume screen allows you to adjust the volume of the alarm from a **Very High** volume (loudest) to a **Low** volume (quietest) or to **Off** (no sound). The default is Low.

1. Touch **Volume** on the Settings screen to display the Volume screen.
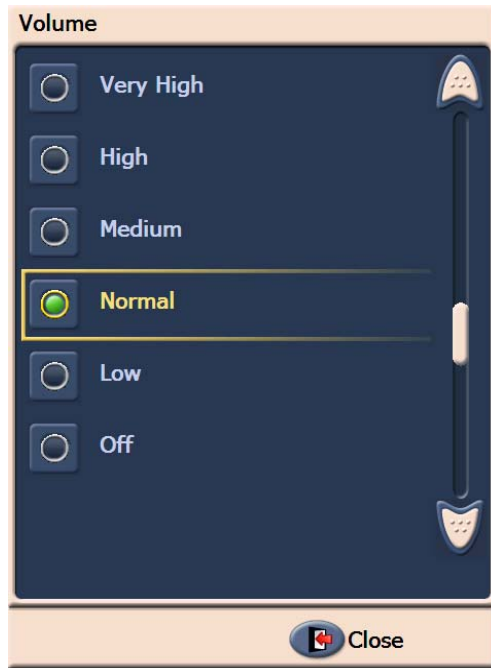
2. Select the Volume option that you want. A tone will sound with each selection.

3. Touch **Close** to return to the Settings screen.

Selecting the tone

You can select the tone you want the scanner to make when a particular scanner condition is encountered such as, document jam or multi-feed, etc.

1. Touch **Tone Select** to display the Tones screen.
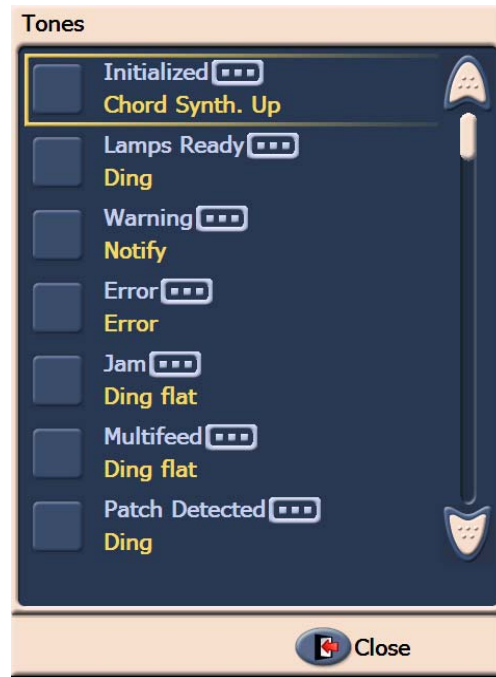
2. Select the event (e.g., Warning, Jam, etc.) that you want a tone to be set for. When you select an Event, another screen will be displayed listing a variety of different sounds that you can choose from.

3. Select the type of sound you want to hear. A tone will sound with each selection.

4. Return to the Tones screen to set other tones for other events by repeating Steps 2 and 3.

5. Touch **Close** to return to the Settings screen.

Selecting a language

The *Kodak* i1800 Series Scanners support several languages. Select the language you want the information on the touchscreen to be displayed in.

1. Touch **Language** to display the Language screen.

Language

- ◉ English
- ○ Français
- ○ Deutsch
- ○ Italiano
- ○ Nederlands
- ○ Português (Brasil)
- ○ Español

Close
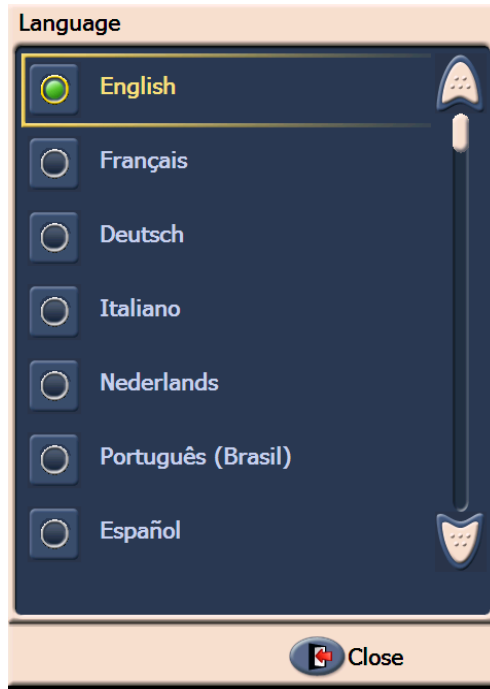
2. Touch the desired language. The screen will automatically be updated in the language of choice. If the language you want is not displayed on the screen, use the up and down arrows to display the desired language.

   If the setting is changed, you will be prompted to power cycle the scanner.

3. Touch **Close** to return to the Settings screen.

Enabling/disabling image addressing (for i1860 Scanner only)

An image address is a unique identifier assigned to each individual document and may contain up to 30 characters (up to a maximum of 27 characters, plus 3 delimiters). An Image Address template is set up using the TWAIN Data source or ISIS Driver. See the on-line help file for more information on image addressing or the *Image Processing Guide* PDF located on the installation CD. You can enable or disable image addressing from the touchscreen.

IMPORTANT: If you change this setting, you will need to power cycle the scanner.

1. From the Idle screen, select **Settings** to display the Settings screen.
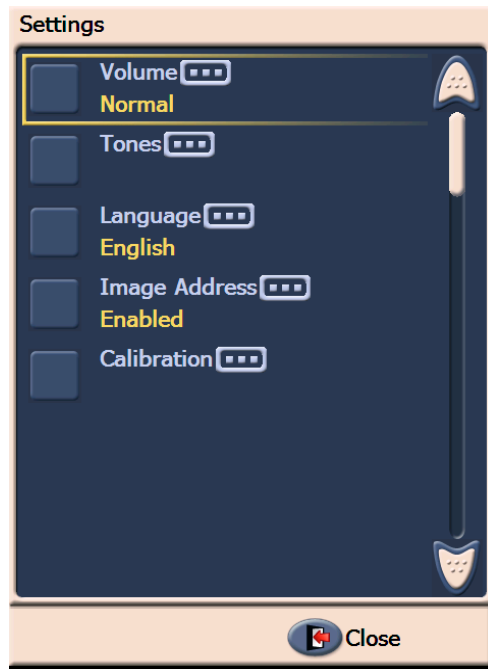
2. Touch **Image Address.** The following screen will be displayed.
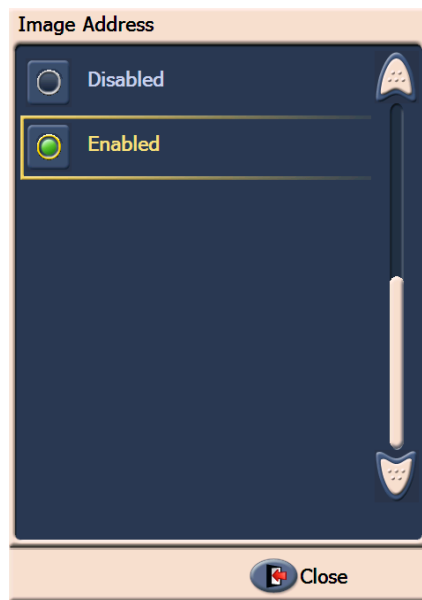
If you change the status of the image address, the following message will be displayed.

Reboot

This selection will require a system reboot. Continue?

✓ Yes   ◄ Close
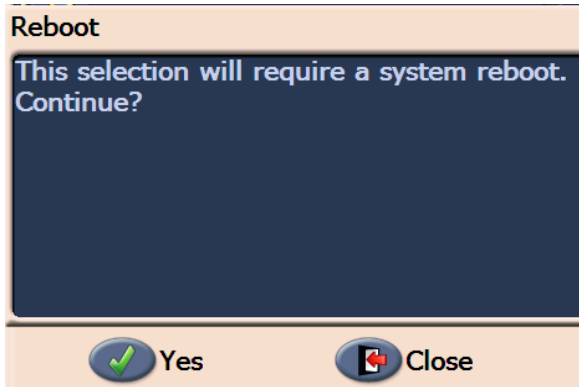
3. Touch **Yes** to change the image address status and restart the system, otherwise click **Close**.

4. Restart the scanner.

   NOTE: Disabling image addressing also disables the Patch Readers and batching. Toggle patch functionality will still be available.

Calibrating the scanner

The *Kodak* i1800 Series Scanners allow you to perform an Image calibration (black-and-white, color, grayscale) and UDDS calibration (multi-feed detection). Calibration optimizes your scanner to achieve the best image quality and feeding performance. Your scanner is properly calibrated when you purchase it, therefore, frequent calibration is not necessary or recommended. Only calibrate the scanner when prompted to do so.

Before calibrating the scanner, clean the scanner (see the procedures outlined in Chapter 5, *Maintenance*). Failure to clean the scanner before calibrating may cause image quality issues.

Use the calibration target provided with your scanner. Be sure to use a good, clean calibration target. Additional calibration targets can be ordered. Refer to the "Supplies, consumables and accessories" section in Chapter 5 for ordering information.

Image Calibration

IMPORTANT: If the White Background Accessory is installed, it must be replaced with the black background strips, and the scanner must be restarted prior to calibration.

1. Touch **Calibrate**. The Calibration screen will be displayed.

2. Touch **Image Calibration** to display the Image Calibration screen.
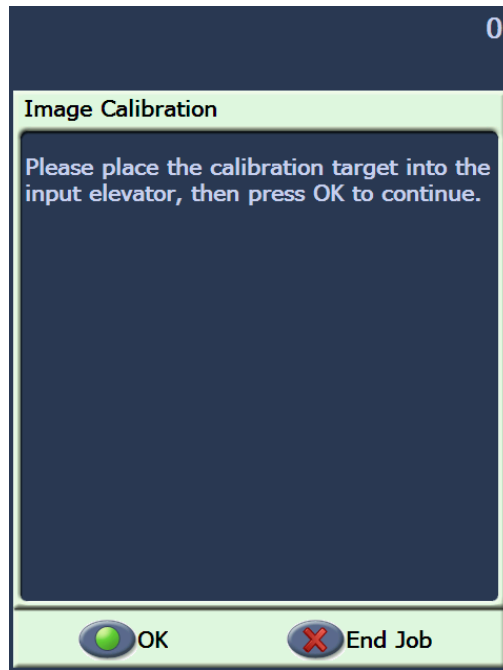
3. Place the calibration target in the input elevator.

4. Touch **OK**. The calibration results will be displayed.

5. When calibration is finished, the Idle screen will be redisplayed.

UDDS Calibration

UDDS calibration is used to calibrate the ultrasonic document detection system for multi-feeds. UDDS calibration is rarely needed. This calibration should only be performed if there is a feeding or multi-feed detection issue.

1. Touch **Calibrate**. The Calibration screen will be displayed.

2. Touch **UDDS Calibration** to display the UDDS Calibration screen.

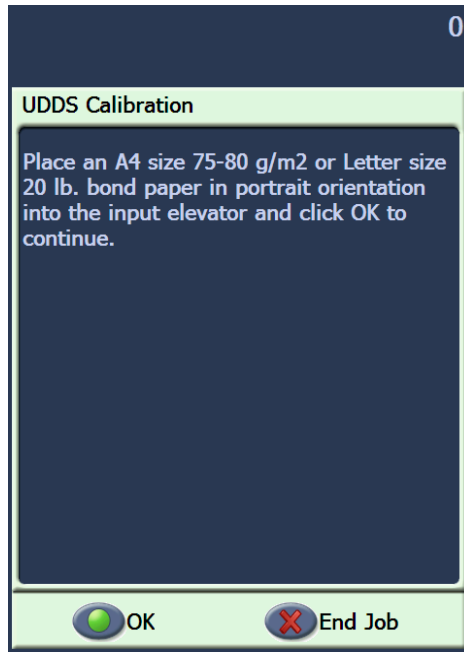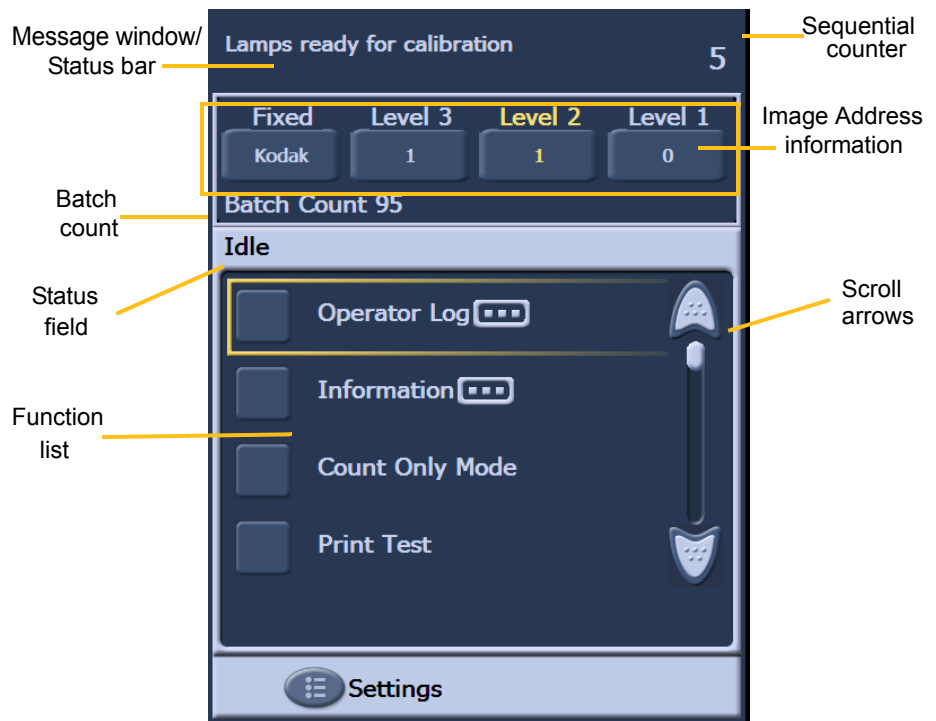3. You will be prompted to place a 20 lb. or 75 g/m^2 bond sheet of paper in the input elevator. **Do not use the calibration target.**

4. Touch **OK**. The calibration results will be displayed.

5. When finished, touch **End Job** to return to the Idle screen.

Idle screen

The Idle screen provides a status bar, function list, scroll arrows and the Settings button. When image addressing is enabled, the image address level buttons and batch count information will also be displayed.

Message window/Status bar

Sequential counter

Image Address information

Batch count

Status field

Scroll arrows

Function list

Lamps ready for calibration   5

Fixed	Level 3	Level 2	Level 1
Kodak	1	1	0

Batch Count 95

Idle

Operator Log [•••]

Information [•••]

Count Only Mode

Print Test

Settings

NOTE: **Image Addressing, Patch Reading and Batch functionality are only available for the *Kodak* i1860 Scanner.**

Message window/Status bar — provides an up-to-date status of scanner activity and/or any operator messages.

- **Status** field: displays the current scanner activity and messages. For example, if the scanner is scanning documents, *Scanning*, will be displayed in the Status field.
- **Sequential counter**: displays an incremental count of each document entering the transport.
- **Batch count**: displays the number of documents to be counted before performing a predefined action (when image addressing is enabled).

Image Address information

- **Level** buttons — when image addressing is enabled, the three image address level buttons will be displayed: Level 3, Level 2 and Level 1. You can increment the image address level by touching one of the level buttons. During a scan session the level button that is highlighted is the level which will be assigned to the next document.
- **Next Image Address** — the values displayed in the level buttons indicate the image address which will be assigned to the next document.

Scroll arrows — touch the up or down scroll arrow to display additional functions that are not currently visible on the touchscreen.

Settings button — displays the Settings screen where you can set the volume, change the language, set the tone and enable or disable image addressing.

Operator Log

When you touch **Operator Log,** the Operator Log screen will be displayed. This screen provides the time, message code and a message description.

The messages that are displayed in the log are only those messages that have been posted since the scanner was powered on. When you turn the power off, the Operator Log on the Operator Control Panel touchscreen will be cleared.

To view messages which have been cleared from the Operator Control Panel touchscreen, see Chapter 6, *Troubleshooting*.
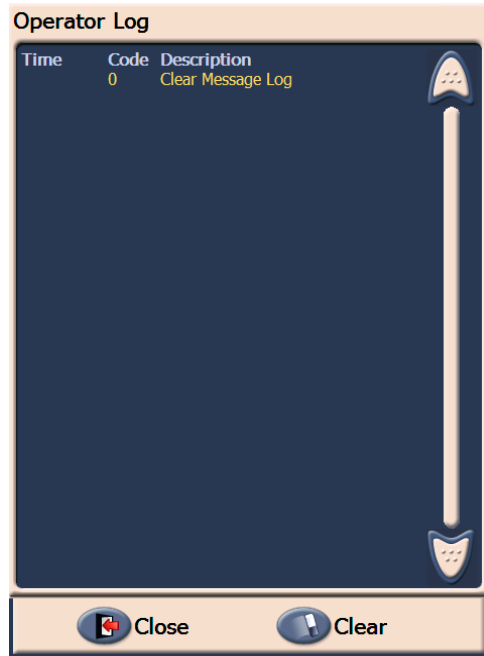
- To clear the operator log, touch **Clear**.
- After viewing the operator log, touch **Close** to return to the Idle screen.

Accessing scanner information

This screen provides information about your scanner. If you are using image addressing, the last image address value is displayed on this screen.

1. Touch **Information** on the Idle screen to display scanner information.

Information

Last Image Address:
    Kodak.333.22.
Image Address Mode:
    Enabled
Lamps On Hours:
    1.9
Transport On Hours:
    2.7
Power On Hours:
    123.4
Total Scanned Documents:
    113
Firmware Version Number:
    1.2.3
Scanner Serial Number:
    9876543210
First Scan:
    10/15/2005 03:11:22
Local Clock:
    6/29/2006 08:07:54
GMT Clock:
    6/29/2006 11:07:54
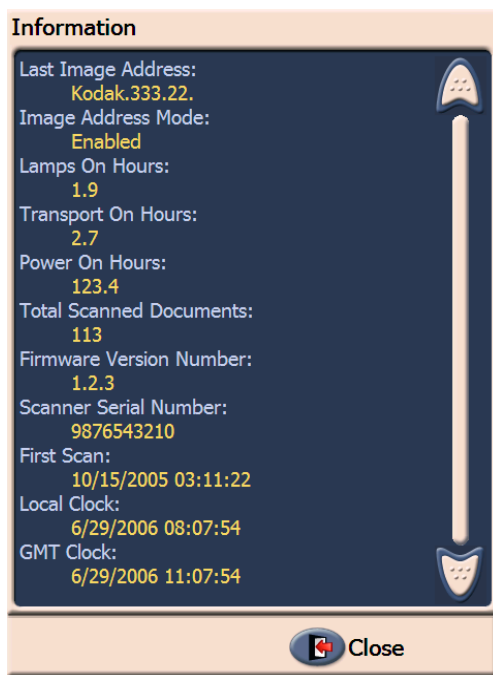
Close

2. After viewing this information, touch **Close** to return to the Idle screen.

Count only mode

You may want to count the number of documents entering the scanner without actually scanning them.

1. Touch **Count Only Mode**. The Count Only screen will be displayed.
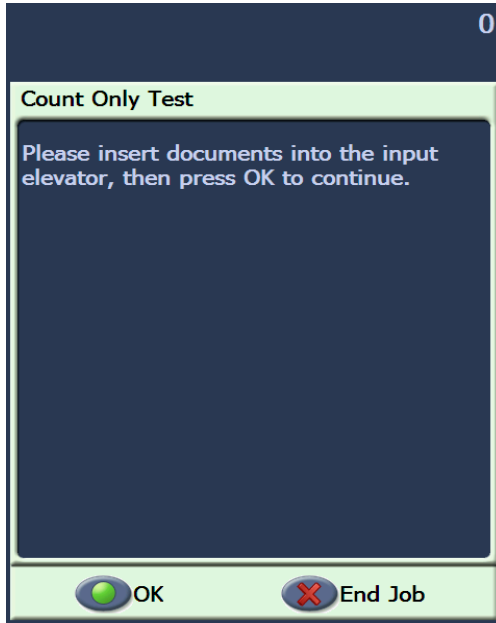
2. Place the documents you want to count in the input elevator.

3. Touch **OK**. When the scanner has scanned all documents, the total number will be displayed in the Status bar.
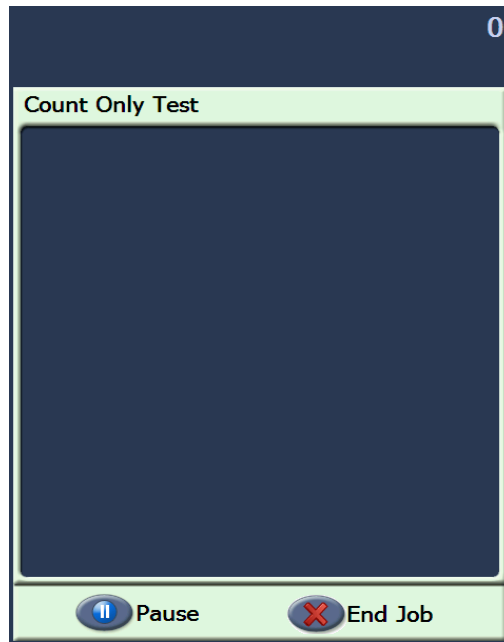
4. Touch **End Job** when finished to return to the Idle screen.

NOTE: When you touch the Pause button, the feeder and transport will stop. You can continue your Count only test by touching the Resume button.

Performing a Print test

The print test checks to be sure the ink jets in the Enhanced Printer are working properly.

1. Touch **Print Test**. The Print Test screen will be displayed.

```
                                    0
  Print Test

  Please insert a clean white sheet of paper
  into the input elevator, then press OK to
  continue.




      OK              End Job
```

2. Place a blank sheet(s) of paper in the input elevator.

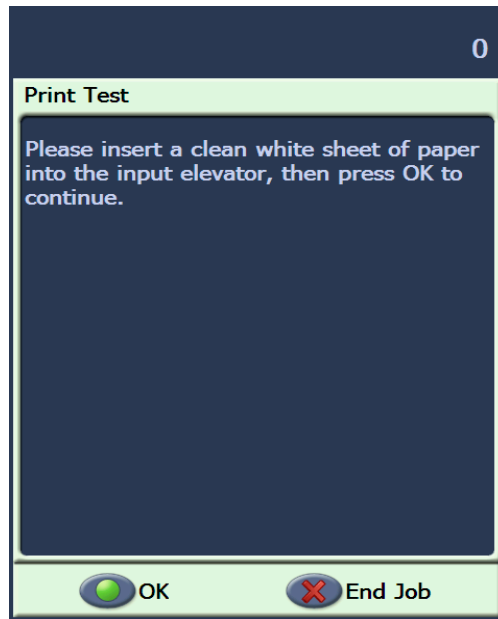3. Touch **OK**. The document(s) in the output tray will display the results of the print test.

4. Remove the document(s) from the output tray and evaluate the appearance of the test pattern.

   • If the pattern is complete, you are ready to begin.

   • If the pattern is not legible:

     – Check to see that the print cartridge is installed properly. Repeat the print test. See Chapter 4, *Using the Enhanced Printer and Patch Readers.*

     – If the pattern is still not legible, replace the ink cartridge.

5. Touch **End Job** to return to the Idle screen.

Performing a Patch test

Use the Patch test to verify that the Patch Readers are operational and that your patches are being read.

1. Touch **Patch Test**. The Patch Test screen will be displayed.

```
                                    0
 Patch Test

 Please insert patch documents into the
 input elevator, then press OK to continue.




        ○ OK           ✖ End Job
```
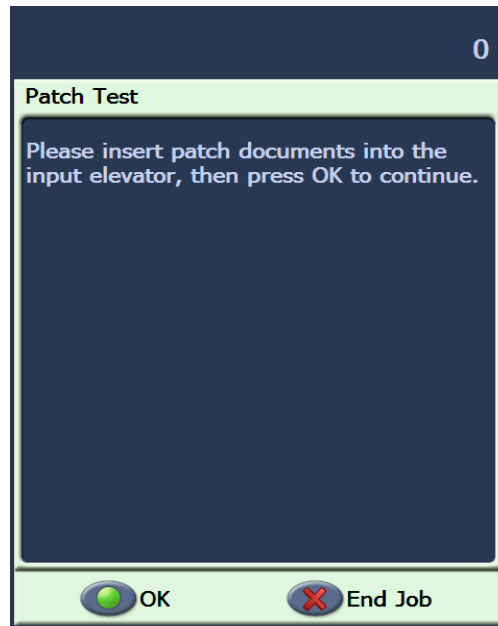
2. Place a document(s) with a patch(es) in the input elevator.

3. Touch **OK**. When the document(s) has been scanned, the results of the patch test will be displayed on the touchscreen.

   The results show the number of patches and patch types that were recognized by the scanner.

```
                              0              Patch Test                        0
 Patch Test
                                             Toggle Patch Count
 Patch Type    Patch Head
              1    2    3    4               Front           Rear
      1       0    0    0    0
      2       0    0    0    0                 0               0
      3       0    0    0    0
      4       0    0    0    0
      T       0    0    0    0
      6       0    0    0    0

   Total      0    0    0    0

      ⏸ Pause      ✖ End Job                   ● Pause        ✖ End Job
```

Image Addressing - enabled   **Image Addressing - disabled**
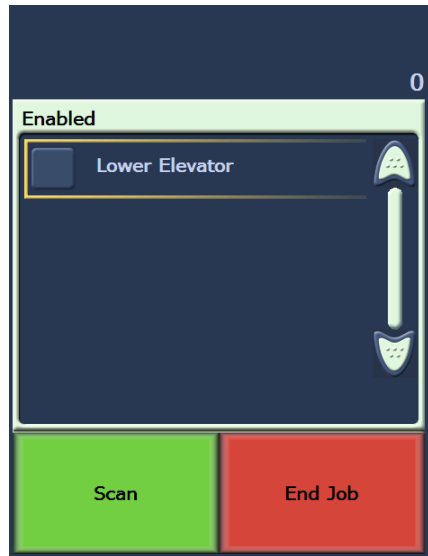
4. Touch **End Job** to return to the Idle screen.

Performing a self test

The scanner self test will test the image capture subsystem to ensure that is functioning correctly.

Enabling the scanner

In order to scan documents, the scanner must be enabled. This is done using the capture application software. When the scanner is enabled, the following screen is displayed.

Enabled - Image Addressing - off   **Enabled - Image Addressing - on**

Scanning

After enabling the scanner, depending on how your scanner is configured, your scanner will automatically start scanning, or you can touch the **Scan** button from the enabled screen. The following screen is displayed:
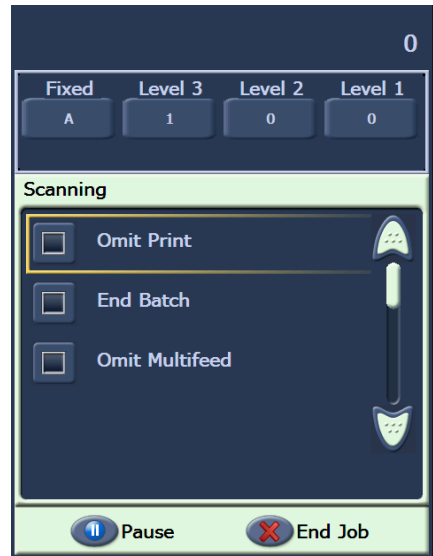
Scanning - Image Addressing - off   **Scanning - Image Addressing - on**

NOTE: The options that appear on the screens above may be different depending on how your OCP function keys are set up.

Using function keys when scanning

Up to three additional functions may appear on the touchscreen when scanning. These functions are set up by the capture software application. Options which may appear are:

- Omit patch
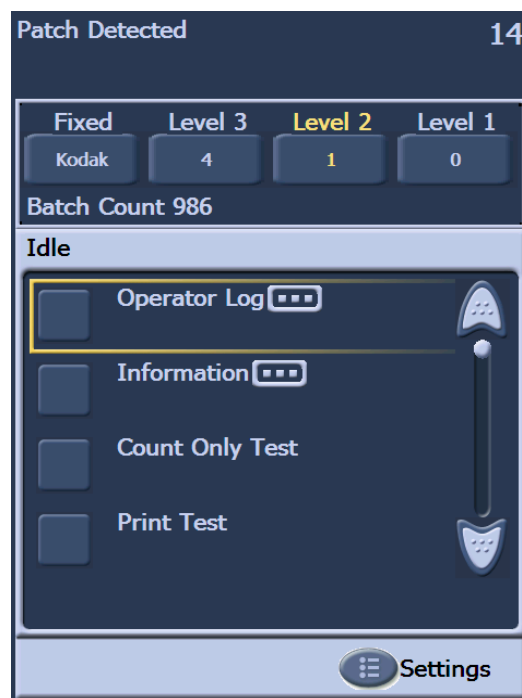- Omit print
- Omit multifeed
- End batch

To select a function, touch the function you want to perform.

Changing image address levels (for i1860 Scanner only)

Image address levels may be changed from the Idle screen if image addressing is enabled. The next image address level is highlighted.
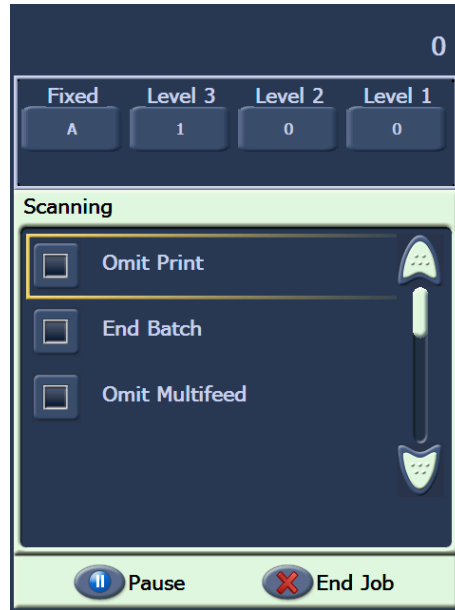
To change the level:

- Touch the level button you want to assign.

Manually pausing and resuming the scanner

You can manually pause and resume the scanner while scanning documents.

- Touch **Pause** on the touchscreen to stop scanning. The Pause button now becomes the Resume button.

- Touch **Resume** on the touchscreen to restart scanning after it has been paused.

Automatically pausing and resuming the scanner

During scanning the scanner monitors its own internal image buffer memory. In order to prevent overwriting images before the host computer can retrieve them, the scanner will automatically pause the feeder while waiting for the capture software application to read existing images.

The scanner resumes scanning by automatically restarting the feeder once the capture software application has caught up.

Power Saver mode

The *Kodak* i1800 Series Scanners are configured from the factory to go into Power Saver mode after 15 minutes of inactivity. This setting can be changed by your capture software application. If Power Saver is enabled, the scanner will begin a one-minute count-down prior to entering Power Saver mode. When the scanner is in Power Saver mode, the green LED will be flashing and the touchscreen will be blank.
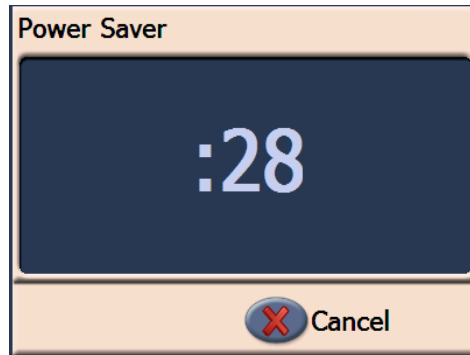
NOTE: If you do not want to go into Power Saver mode, touch **Cancel**.

Resuming from Power Saver mode

• If there is paper in the input elevator, take the paper out and put it back in.

• If no paper is in the input elevator, put paper in the input elevator.

The initializing screen will appear on the touchscreen.

Viewing messages

The message window provides an up-to-date status of scanner activity and/or any operator messages. Only one message can be displayed at a time. To review previous messages use the Operator Log.
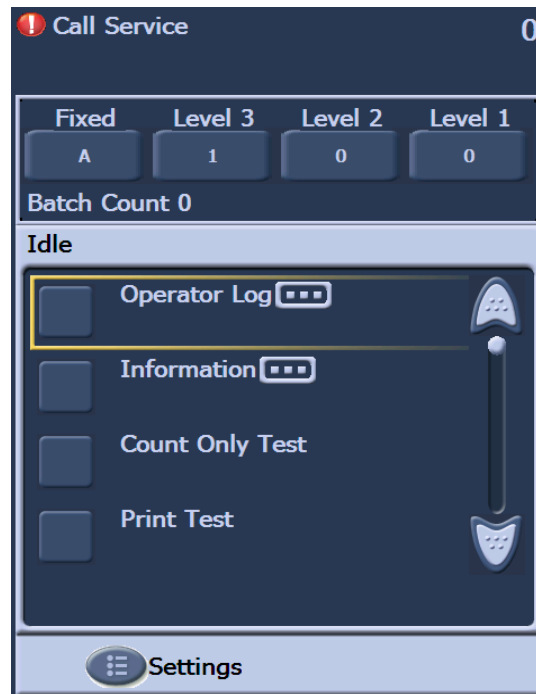
4   The Enhanced Printer and Patch Readers

This chapter provides instructions for using the Enhanced Printer and Patch Readers. The following information and procedures can be found in this chapter:

- Overview information about the Enhanced Printer, including information about print fields and printer specifications.

- Setting horizontal printer positions.

- Replacing the ink cartridge and ink blotter strips.

- Moving the printer carrier and cable from the front position to the rear position or vice versa.

- Overview information about the Patch Readers and patch types.

NOTE: More detailed information on the Enhanced Printer and Patch Readers can be found in the *Image Processing Guide* and Kodak publication, A-61599, *Patch Code Information*.

Enhanced Printer overview

The *Kodak* i1800 Series Scanners include a factory-installed, pre-configured front or rear printer. The printer operates at full scanner speed and prints on the front before scanning or rear after scanning. The printer can add a date, time, image address, and custom messages.

The printer is unique in that the document 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 image address). The capture software application controls static fields; any information that the software allows you to enter can be sent to the printer.

All printer controls and functions are accessible through the ISIS Driver or TWAIN Data source. Printing must be enabled or disabled for each scan session.

NOTES:

- The scanner is shipped configured for front printing. See the section entitled, "Moving the printer carrier and cable from the front to the rear or vice versa" to change to the rear printing position.
- Clean the scanner's paper path components daily when using the printer.
- You may only use one printer (either front or rear) at one time. If you attempt to print on both sides, an error will be displayed.
- The minimum document height for using the printer is 10 cm (4 in.) with adjustable side guides.
- The ink cartridge must be installed prior to powering on the scanner, or it could result in errors when printing is attempted.

Printer specifications

Characteristic	Description
Maximum lines	1
Maximum characters	40
Print locations (horizontal)	12 front, 8 rear, manually set,
Print locations (vertical)	Set by capture software application
Print orientation	0, 90, 180 or 270 degrees
Font size	2 selectable, Bold or Normal NOTE: Not all languages can support a Bold font based on the complexity of the characters, such as half-width Katakana.
Ink cartridge	Black: HP-C6602A Red: HP-C6602R Green: HP-C6602G Blue: HP-C6602B
Print side	Front (pre-scan) or Rear (post-scan)
Minimum printing distance from document lead edge	0.89 cm (0.35 in.)
Static fields available	User-specified messages via capture software application
Dynamic fields available	Up to a nine-digit sequential document number, date, image address, four-digit time
Languages supported	Any phonetic language (for example: Dutch, English, French, German, Italian, Portuguese, Spanish, Japanese (half-width Katakana)

Changing print positions

The horizontal print position can be changed manually. You can change the front or rear print position.

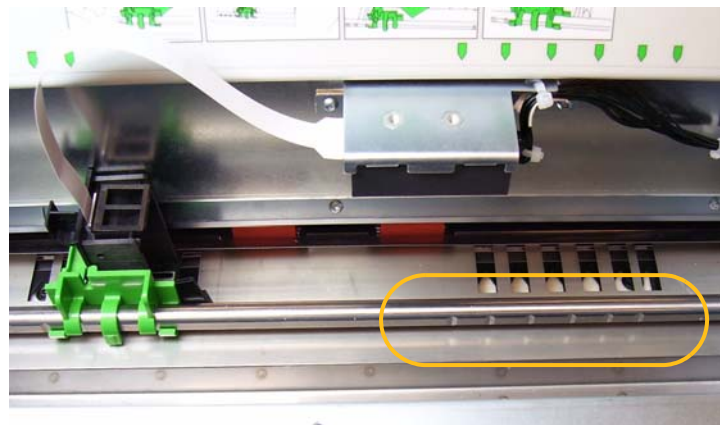**Changing the front horizontal print position**

1. Remove the output tray.

2. Open the print access cover.

There are 12 horizontal print positions. These positions are visible by a small detent on the printer rail.

3. The printer carrier slides easily along the rail. There is a small arrow on the green printer carrier. Slide the printer carrier to the desired position aligning the arrow with the detent position on the rail.

4. Close the printer access cover.

5. Reinstall the output tray.

NOTE: Printing automatically stops approximately ½-inch (1.27 cm) from the trailing edge of the document, even if the information has not been completely printed.

Changing the rear horizontal print position

There are 8 horizontal print positions. These positions are visible by a small detent on the printer rail.

1. Lift the top access cover.

2. The printer carrier slides easily along the rail. There is a small arrow on the green printer carrier. Slide the printer carrier to the desired position aligning the arrow with the detent position on the rail.

3. Close the top access cover.

Moving the printer carrier and cable from the front to the rear or vice versa

The scanner comes with the printer carrier and ribbon cable installed for front pre-scan printing. If your application requires rear post-scan printing, the printer carrier and cable must be moved from the front to the rear position. Printing can only be done on the front **or** the rear.

If you alternate between front and rear printing frequently, you may want to purchase a second printer carrier, then you only need to move the ink cartridge from the front to the back or vice versa. Otherwise, you need to move the printer carrier and cable from the front to rear or rear to front as well as the ink cartridge.

NOTE: After you move the printer carrier and cable you must restart the scanner.

Moving the printer carrier and cable from front position to the rear position

NOTE: Remove the ink cartridge before you begin. See the next section "Replacing the ink cartridge" for procedures.

1. Access the front printer by removing the output tray and lifting the printer access cover.

2. Disconnect the ribbon cable by pulling it straight out from the holder.

3. Lift the printer carrier out of position.

4. Close the printer access cover and reinstall the output tray.

5. Access the rear printer by lifting the top access cover.

6. Install the printer carrier in the desired position.

7. Connect the ribbon cable.

8. Install the ink cartridge. See the next section, "Replacing the ink cartridge" for procedures.

9. Close the top access cover.

10. Restart the scanner.

11. Run a test print.

Moving the printer carrier and cable from rear position to the front position

NOTE: Remove the ink cartridge before you begin. See the next section "Replacing the ink cartridge" for procedures.

1. Open the top access cover.

2. Disconnect the ribbon cable.

3. Remove the printer carrier.

4. Close the top access cover.

5. Remove the output tray and open the printer access cover.

6. Install the printer carrier in the desired position.

7. Connect the ribbon cable.

8. Install the ink cartridge.

9. Close the top access cover.

10. Restart the scanner.

11. Run a print test.

Replacing the ink cartridge

Replace the ink cartridge when:

• printed characters appear light or uneven
• missing characters are evident
• a print test reveals inconsistent character quality
• cleaning has not improved the overall print quality

Procedures for changing the ink cartridge, whether it is in the front position or rear position, are the same; with the exception of how you access the printer.

1. Lift up the top access cover (rear position) or remove the output tray and lift the printer access cover (front position).

2. Holding the printer carrier as shown, press and hold the release tab on the bottom of the printer carrier and rotate the printer carrier to the left until it locks into position.
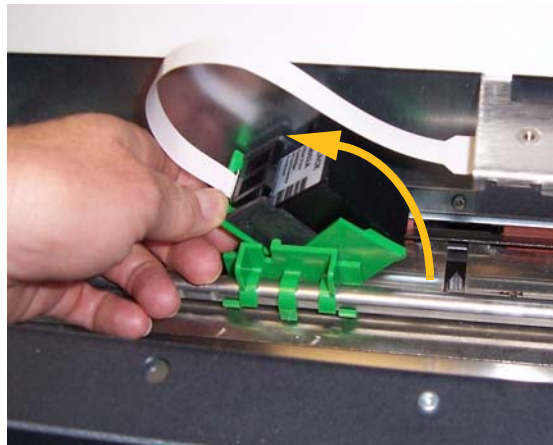

IMPORTANT: Dispose the empty ink cartridge in accordance with all federal, state and local laws.

3. Lift the ink cartridge out from the printer carrier.

4. Remove the tab from the new ink cartridge.

5. Slightly angle a new ink cartridge in the print carrier and snap it into place.
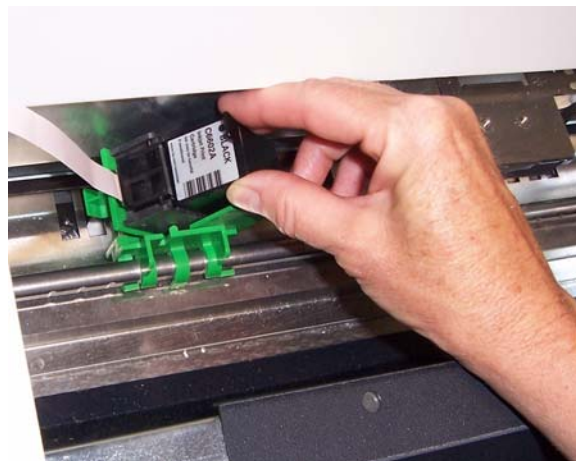
6. Press and hold the release tab on the bottom of the printer carrier and rotate the printer carrier back into position.
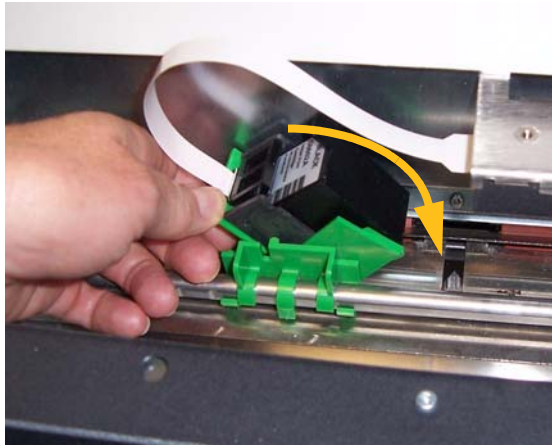
NOTE: If the ribbon cable should become disconnected, snap it back into position.


7. Slide the printer carrier into the desired position matching the arrow on the printer carrier with the detent position.

8. Close the top access cover (rear position) or the printer access cover and replace the output tray (front position).

9. Run a print test.

Replacing the front blotter strips

Blotter strips collect ink overflow. They should be replaced when there is a build-up of ink. Replacement blotter strips may be purchased through your supplier.

1. Open the pod.

2. Use the green tab to lift and remove the ink blotter strip cover to access the front blotter strips.
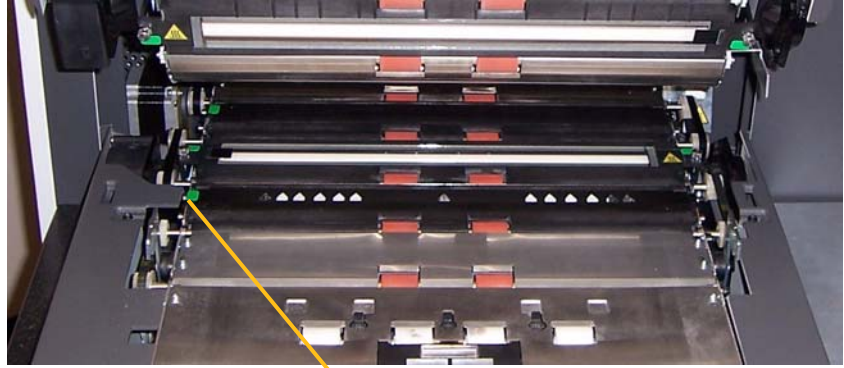
Remove Ink Blotter Strip cover

3. Carefully pull the blotter strip(s) off the transport. You can replace one or both of the strips as necessary..

4. Discard the soiled strip(s)

5. Peel the backing away from the blotter strip.
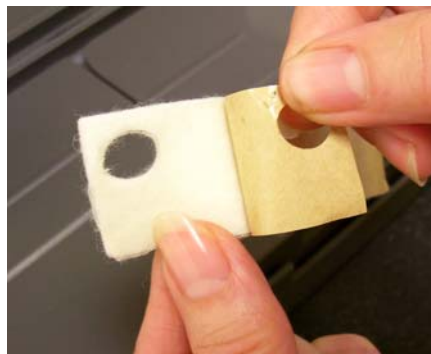
6. Align the blotter strip in the transport channel. Be sure it is properly aligned before pressing the adhesive side into the channel.

7. Press the blotter strip firmly into the channel.

8. Repeat Steps 5 - 7 for the other blotter strip, if necessary.

9. Replace the ink blotter strip cover.

10. Close the pod.

Replacing the rear blotter strips

Blotter strips collect ink overflow. They should be replaced when there is a build-up of ink. Replacement blotter strips may be purchased through your supplier.

1. Remove the output tray. The rear blotter strips are located in the two drawers underneath the baffle.

2. Open the one of the drawers by pushing it in a little and lifting up slightly, then pull it out.

3. Peel off the soiled blotter strip.

4. Peel the backing away from the new blotter strip.
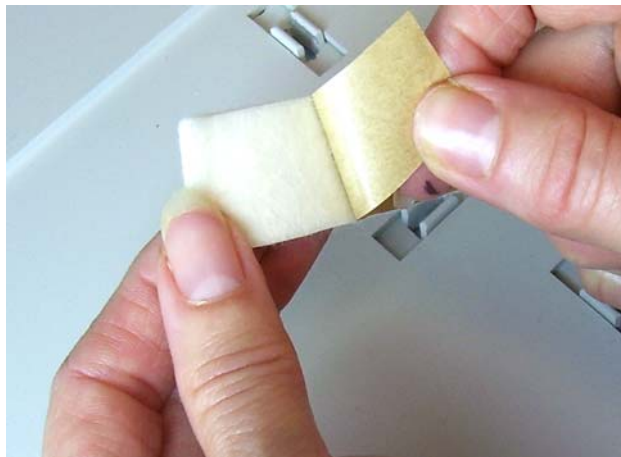
5. Align the blotter strip in the channel. Be sure it is properly aligned before pressing the adhesive side into the channel.

6. Press the blotter strip firmly into place.

7. Repeat Steps 2 - 5 for the other blotter strip.

8. Close the drawer(s) by pushing it in and sliding it down slightly. This will lock the drawer in place.

9. Replace the output tray.

Patch function overview

All i1800 Series Scanners provide toggle patch capability. This type of patch is used to trigger the scanner to switch from the current image stream (black-and-white) to the alternative image stream (color/grayscale). Patches used for image address level changes are only valid when using an i1860 Scanner with image address enabled.

The Patch Readers

The Patch Readers allow you to automatically increment the image address or initiate a special function. Image addressing must be enabled in order to use the Patch Readers. Patch sheets are inserted during document preparation.

For i1860 Scanner only: There are four off-center, permanently mounted Patch Readers. They can be independently enabled or disabled by your capture software application.

If more than one Patch Reader is enabled and any one of the enabled Patch Readers successfully decodes the patch, then the patch will be read. Also, if the patch bars pass under more than one patch head that is enabled, there is a higher probability that the patch will be read.

NOTE: Almost all patch reading problems are related to poor quality patch codes or patch sheets. Using only the best quality printed patch sheets will ensure the highest possible read rates.

See Kodak publication A-61599, *Patch Code Information*, for complete information.

Patch types

Patch Types 1, 4, and 6 — these patch types can be used by the capture software application to perform post-scan functions. These patches are not used for image addressing.

IMPORTANT: Do not use these illustrated patches for production — they are not to spec.

Patch 1

Patch 4

Patch 6

Toggle Patch — the Toggle patch is a Type 4 patch that is used to trigger the scanner to switch from the current image stream (black-and-white) to the alternative image stream (color/grayscale).

NOTE: Toggle patch orientation is different depending on whether image addressing is disabled or enabled.

Toggle Patch

Image addressing - enabled

Image addressing - disabled

When image addressing is disabled, the Patch Readers are also disabled. However a Toggle patch can still be detected.

Patch Types 2, 3 and T — these patch types are used for image addressing.

The Patch Readers control document level changes by automatically sensing a predefined patch code and changing the document level accordingly.

IMPORTANT: Do not use these illustrated patches for production — they are not to spec.

Patch 2 — assigns a Level 2 to the *current* document

Patch 3 — assigns a Level 3 to the *current* document

Patch 5/T/Transfer Patch — assigns a predetermined level to the *next* document

The Transfer Patch Definition is also defined by the application. The Transfer Patch Definition controls the level assigned to the next document when a Transfer Patch is used. For example, if the Transfer Patch Definition for the current operation is defined as Level 3 and a Transfer Patch is used, the next document will be assigned Level 3.

Patch code placement

See Kodak publication A-61599, *Patch Code Information*, for complete information about patch placement and specifications.

Patches can be tested using the Patch Test on the touchscreen. See Chapter 3, "Performing a Patch test" for more information.

5 Maintenance

This chapter provides:

- a cleaning frequency chart
- a list of cleaning tools and materials
- a list of supplies, consumables and accessories
- cleaning procedures for the scanner
- replacement procedures for customer-replaceable parts

IMPORTANT: Scanner components marked with a green tab indicate operator-accessible parts.

Cleaning your scanner and preventative maintenance on a regular basis is required to ensure the best possible image quality. The following is a preventative maintenance procedure that is recommended to prevent costly interruptions during production scanning. Following this procedure as recommended should take approximately 5 to 10 minutes.

Some document types generate more paper dust and debris and may require more frequent cleaning than recommended.

NOTES:

- Some debris from the rubber tires on the feed module and separation roller is normal. Tire debris does not always mean that the tires are worn or damaged. After cleaning, inspect the tires for wear and replace the separation roller or feed module if necessary.
- When cleaning rollers/tires, allow the rollers/tires to dry completely before scanning.
- Use only the recommended cleaning supplies.
- Do not use canned/compressed air.
- Using unapproved cleaning fluids or solvents may damage the rubber tires.

Cleaning frequency chart

A recommended cleaning sequence includes vacuuming the scanner transport, cleaning the residue from the feed module, separation roller or drive rollers and cleaning the imaging guides.

Use the chart below as a guide to the order and how frequently you should clean your scanner.

Procedure	Start of day	Middle of shift	Start of new shift
Vacuum output tray and input areas (input elevator and transport)	x		
Clean all rollers	x		x
Vacuum transport area	x	x	x
Remove and vacuum under background strips	x		
Run transport cleaning sheet	x		x
Clean imaging guides - basic	x	x	x
Clean imaging guides - thorough	x		x

Cleaning tools and materials

Use only these cleaning tools and materials when performing routine maintenance on your scanner. Use of any other cleaning materials could damage your scanner.

- *Kodak Digital Science* Transport Cleaning Sheets
- *Kodak Digital Science* Roller Cleaning Pads
- Staticide wipes for *Kodak* Scanners
- A vacuum cleaner and tools

Supplies, consumables and accessories

Contact your scanner supplier to order supplies.

Supplies/Consumables	CAT No.
Kodak Feeder Consumables Kit for i600/i1800 Series Scanners	108 4755
Kodak Feeder Kit for Ultralightweight Paper for i600/i1800 Series Scanners	896 5279
Kodak Extra-Large Feeder Consumables Kit for i600/i1800 Series Scanners	842 6157
Kodak Extra-Extra-Large Feeder Consumables Kit for i600/i1800 Series Scanners	134 3680
Kodak Imaging Guide Set / for i600/i1800 Series Scanners	197 6703
Kodak Printer Ink Blotters, Front Side for i1800 Series Scanners	125 7633
Kodak Printer Ink Blotters, Rear Side for i1800 Series Scanners	114 1472
Enhanced Printer Black Ink Cartridge for *Kodak* i800/i1800 Series Scanners	818 3386
Enhanced Printer Red Ink Cartridge for *Kodak* i800/i1800 Series Scanners	159 6832
Kodak Digital Science Transport Cleaning Sheets (qty 50)	169 0783
High Resolution Printer Maintenance Kit	877 6254
High Resolution Printer Black Ink Cartridge for *Kodak* i1800 Series Scanners and *Kodak Imagelink* Microimager 70	822 1376
High Resolution Printer Red Ink Cartridge for *Kodak* i1800 Series Scanners and *Kodak Imagelink* Microimager 70	145 6532
Kodak Digital Science Roller Cleaning Pads (qty 24)	853 5981
Staticide Wipes for *Kodak* Scanners (qty 144)	896 5519
Kodak Calibration Targets (qty 5)	127 1436
Accessories	**CAT No.**
Kodak White Background Accessory	894 9000
Kodak Manual Feeder for the i1800 Series Scanners	874 1894
Kodak High Resolution Printer Accessory	815 0237

NOTE: Items and catalog numbers are subject to change.

Ordering parts

The following parts can be ordered from Parts Services.

Accessories	Part No.
Exit deflector	3E9575
Black Background	9E3357
26 in. document extenders (qty 1 per box)	5E4754
30 in. document extenders (qty 1 per box)	9E3216
34 in. document extenders (qty 1 per box)	9E5277

Cleaning procedures

Follow the cleaning procedure below to ensure the best scanner performance and image quality.

Cleaning the OCP touchscreen

The touchscreen requires very little maintenance. However, periodically, it is recommended that you use a Staticide wipe to clean the screen and dry it with a lint free cloth.

Vacuuming the output tray and input elevator

1. Power down the scanner.
2. Remove the output tray.

3. Thoroughly vacuum the output tray area and the input elevator area.
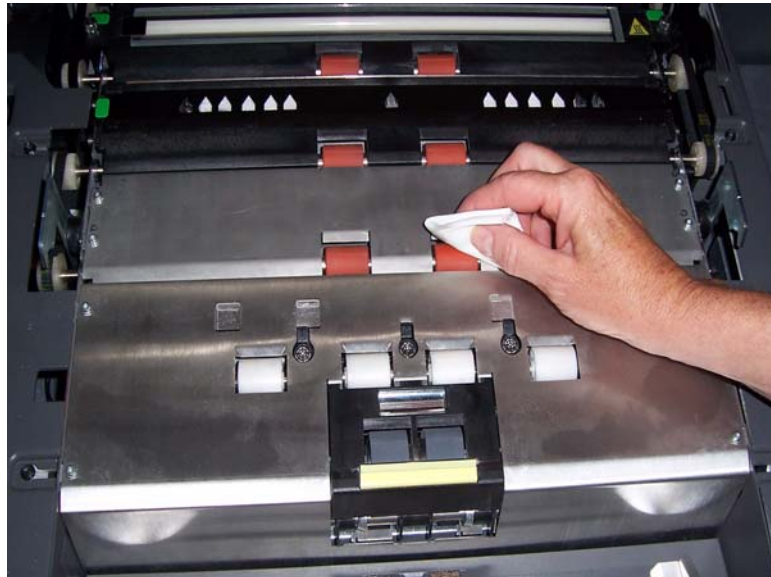
Cleaning the rollers
Cleaning the rollers includes all of the rollers in the transport area, the separation roller tires and the feed module tires.

1. Pull up on the pod release lever and open the pod.

2. Manually rotate and wipe the rollers with a roller cleaning pad.

    IMPORTANT: The roller cleaning pad contains sodium lauryl ether sulfate and sodium silicate which can cause eye irritation. Refer to the MSDS for more information.
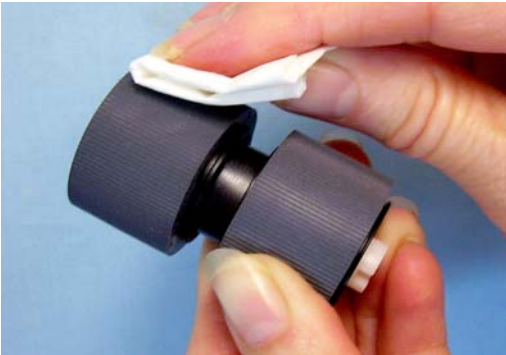

3. Dry the rollers with a lint-free cloth.

Cleaning the separation roller tires

4. Pull the separation pad holder forward and remove the separation roller.

5. Manually rotate and wipe the separation roller tires with a roller cleaning pad. For best results wipe parallel to the ribs in order to remove any residue between the ribs.

6. Inspect the tires. If the tires show signs of wear or damage, replace the separation roller. See "Replacement procedures" later in this chapter.

7. Reinstall the separation roller by aligning the slots on the separation roller with the holders.

8. Close the pod.

Cleaning the feed module tires
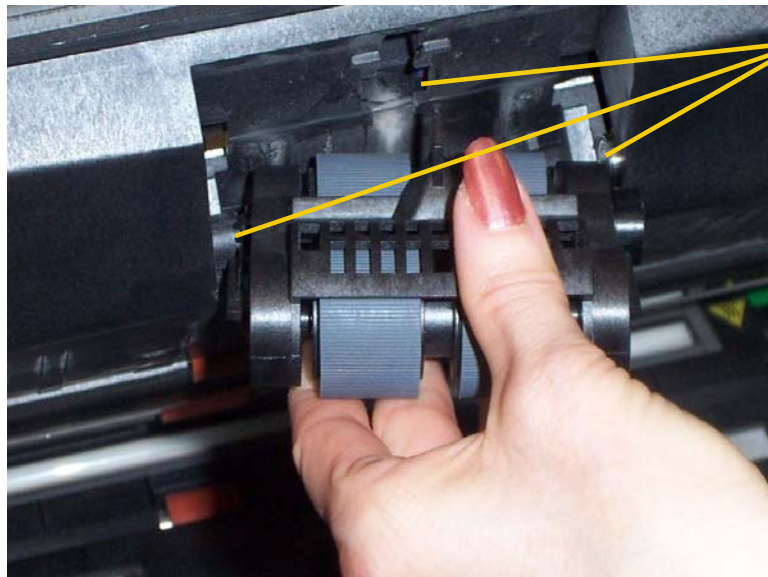
9. Lift up the printer access cover.

10. Push the release lever down (located underneath the printer access cover) to release and remove the feed module.

11. Manually rotate and wipe the feed module tires with a roller cleaning pad. For best results wipe parallel to the ribs in order to remove any residue between the ribs.

12. Inspect the tires. If the tires show signs of wear or damage, replace the feed module tires. See "Replacement procedures" later in this chapter.

13. Reinstall the feed module by aligning the pins and fitting it into position. Pull up on the release lever to lock it into place. Verify that the feed module is securely in place and moves freely after you install it.
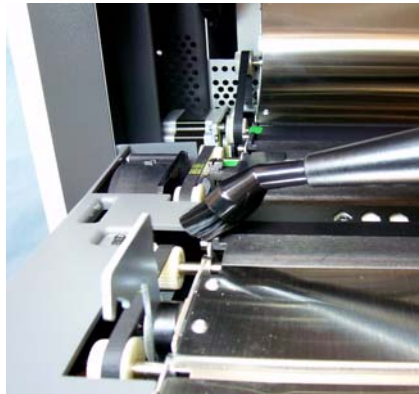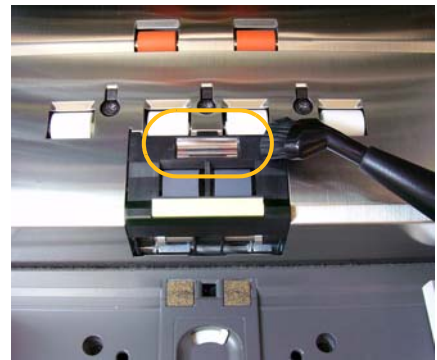

Align these areas

14. Close the printer access cover.
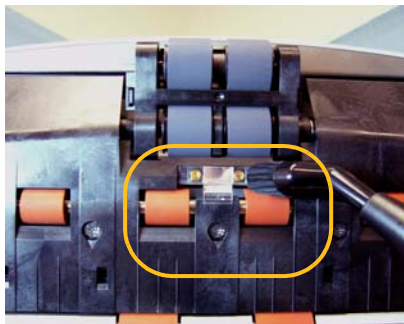
Vacuuming the transport area

1. Open the pod.

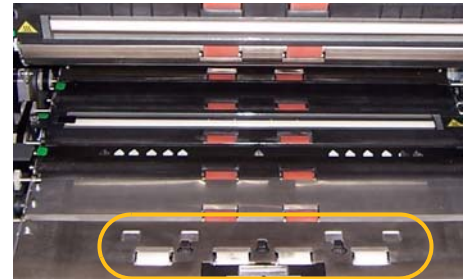2. Thoroughly vacuum the entire transport area, paying particular attention to these areas:

the edges of the transport

the reflective tape near the front of the transport
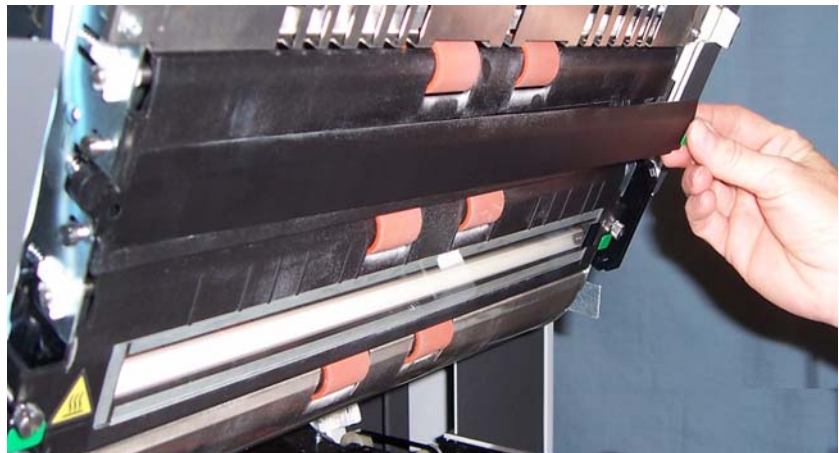

the reflective tape near the front of the pod

the three multifeed sensors at the base of the transport and the pod

Vacuuming under the background strips

1. Using the green tabs pull off the upper and lower background strips and set them aside.

2. Vacuum the areas where the background strips are adhered to.

3. Reinstall the upper and lower background strips.

Cleaning the imaging guides — basic cleaning

1. Open the pod.

2. Wipe the upper and lower imaging guides with a Staticide wipe.

IMPORTANT: Staticide wipes contain isopropanol which can cause eye irritation and dry skin. Wash your hands with soap and water after performing maintenance procedures. Refer to the MSDS for more information.

3. Wipe the upper and lower imaging guides again with an almost-dry Staticide wipe to remove any streaks.

4. When finished, close the pod.

Cleaning the imaging guides — thorough cleaning

Thorough cleaning of the imaging guides is recommended at the start of the day and beginning of each shift.

NOTE: Hold the imaging guides at the green tabs to avoid getting fingerprints on the imaging guides during the cleaning procedure.

Upper imaging guide

1. Open the pod.

2. Turn the screw on each end of the upper imaging guide and remove it from its position.
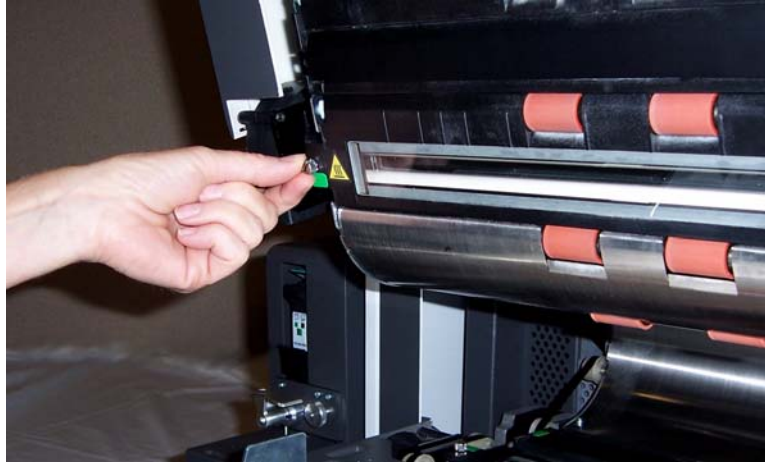
3. Clean the imaging guide thoroughly with a Staticide wipe.

4. Wipe the imaging guide again with an almost-dry Staticide wipe to remove any streaks.

IMPORTANT: There is no cover glass between the upper lamps. Do not insert any objects into the area between the upper lamps, as you may damage the reflective mirrors in the scan module.

5. Reinstall the upper imaging guide.

Lower imaging guide

1. Turn the screw on each end of the lower imaging guide, remove it from its position and set it aside.


2. Carefully vacuum the areas between the lamps, then use a Staticide wipe to thoroughly clean the glass plate between the lamps.

3. Clean the lower imaging guide thoroughly with a Staticide wipe.

4. Wipe the imaging guide again with an almost-dry Staticide wipe to remove any streaks.

5. Reinstall the lower imaging guide.

6. Close the pod.

7. When finished with all cleaning procedures, reinstall the output tray.
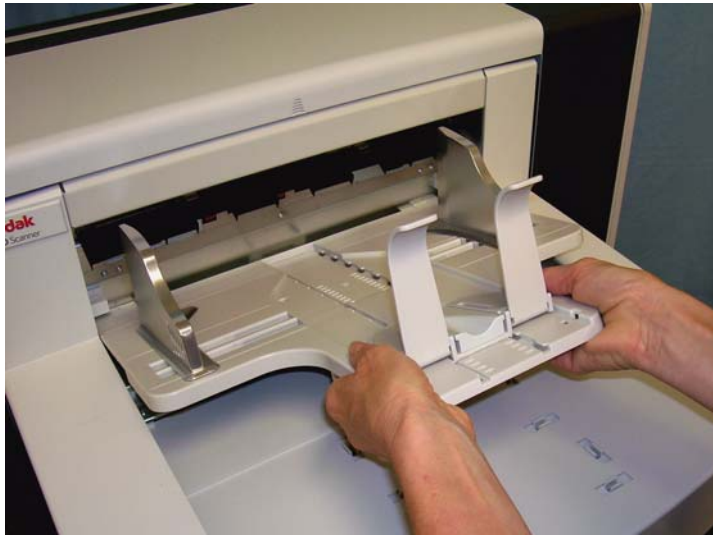
8. Turn on the scanner.

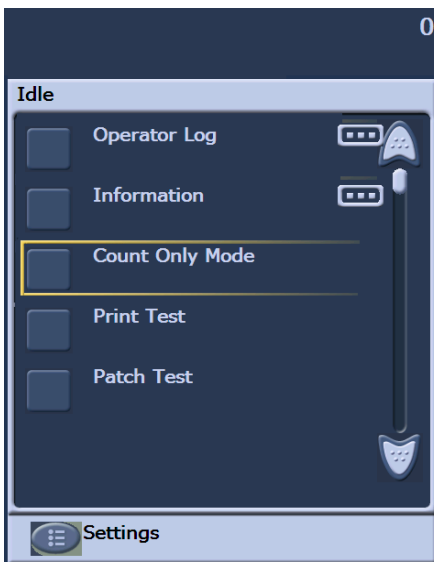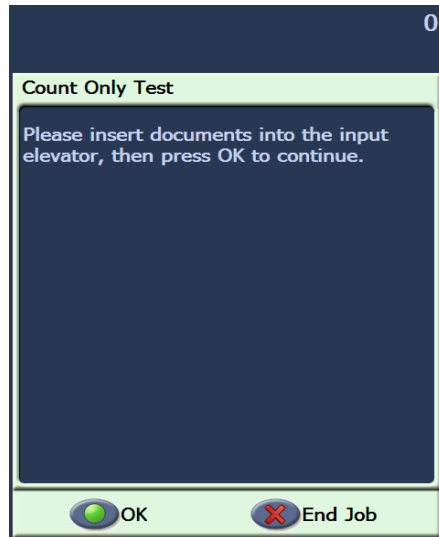**Running a transport cleaning sheet**

The transport should be cleaned with a Transport Cleaning Sheet fed several times.

1. Remove the wrapping from the Transport Cleaning Sheet.

2. Adjust the side guides to the widest position.

3. Place the transport cleaning sheet in the center of the input elevator in landscape orientation with the adhesive side up.

4. Select **Count Only Mode** from the Idle screen.

The Count Only screen will be displayed.

5. Touch **Scan**.

6. Remove the transport cleaning sheet from the output tray and place it in the center of the input elevator in landscape orientation with the adhesive side down and touch **Scan**.

7. When finished, touch **End Job**.

NOTE: When the transport sheet gets dirty, discard it and use a new one.

Final cleaning steps   When finished running the transport cleaning sheet:

1. Open the pod.

2. Wipe the exposed side of the upper and lower imaging guides with a lint-free cloth.

3. Close the pod and scan a test image to ensure image quality.

Replacement procedures

This section provides procedures for replacing the following parts. Use the list below as a guideline for frequency of replacement.

- **Feed module tires and separation roller tires** — tire life will vary depending upon paper types, environment and cleanliness. Nominal tire life is approximately 500,000 documents; results will vary. Degradation of feeder performance, multiple feeds, stoppages, etc. indicate a need to change tires. Change all the tires on the feed module and separation roller at the same time.

- **Feed module and separation roller** — it is recommended that you install a new feed module and separation roller approximately every 4th tire change. Install a new feed module and separation roller at the same time.

- **Pre-separation pad** — it is recommended that you change the pre-separation pad at least as often as you change the feed module/separation roller tires.

- **Imaging guides** — replace when the imaging guides are heavily scratched and defects show in the image.

Replacing the feed module or feed module tires

1. Remove the output tray.
2. Lift up the printer access cover.

3. Open the pod.

4. Push down on the release lever (located underneath the printer access cover) to release and remove the feed module.
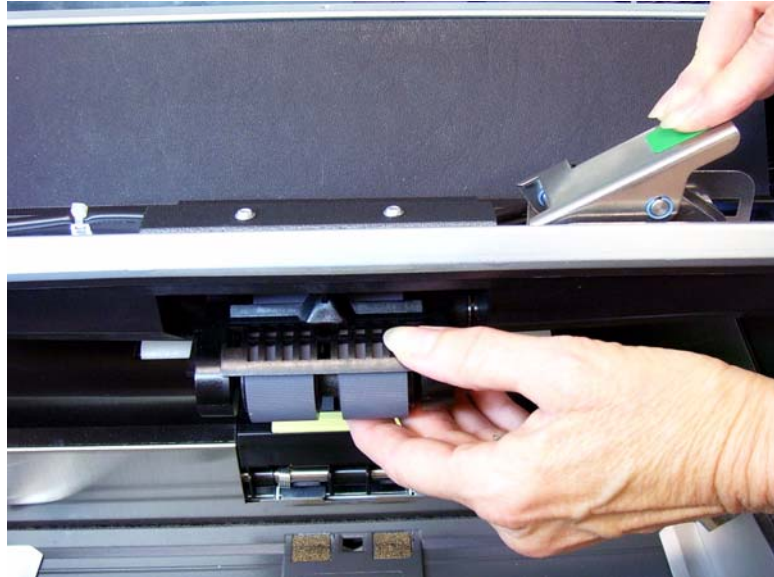
5. If you are just replacing the feed module, do the following. If you are replacing the tires, go to Step 6.

   • Insert the new feed module by aligning the pins, fitting it into position and pulling up on the release lever to lock it into place. Verify that the feed module is securely in place and moves freely after you install it.

Align these areas
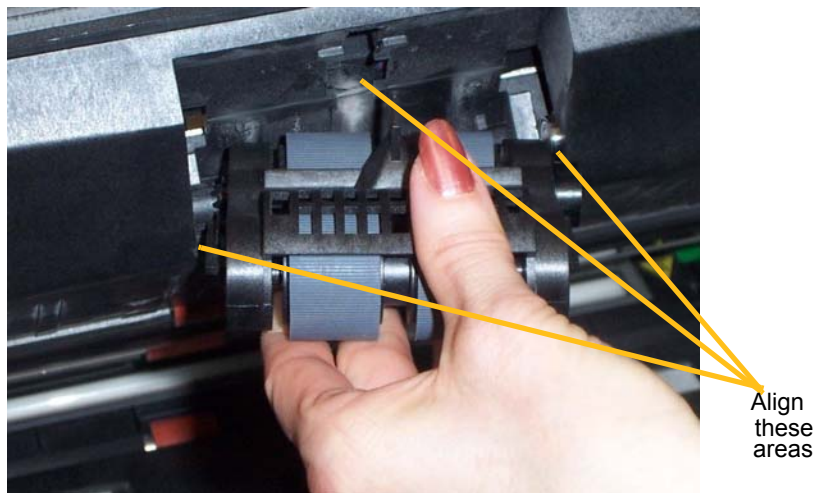
   • Close the pod and the printer access cover.
   • Reinstall the output tray.

If you want to replace the tires, proceed as follows:

6. With one hand, press the locking tabs (one on each side) while holding the bottom housing with the other hand, pull the upper housing up and away from the rollers.

Locking tab

7. Remove one core assembly.

8. Replace each tire by sliding the tire off the core.

9. Install each new tire by gently pulling it over the core. The tires do not need to be installed in any specific orientation.

   IMPORTANT:Do not overstretch the tire; it may tear.

10. Replace the core assembly in the lower feed module housing.

11. Repeat the replacement procedure outlined above for the other core assembly.

12. Align the tabs on the upper housing with the slots on the lower housing.

Locking tab

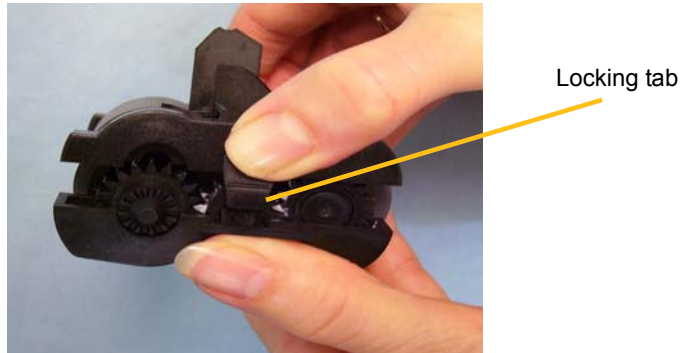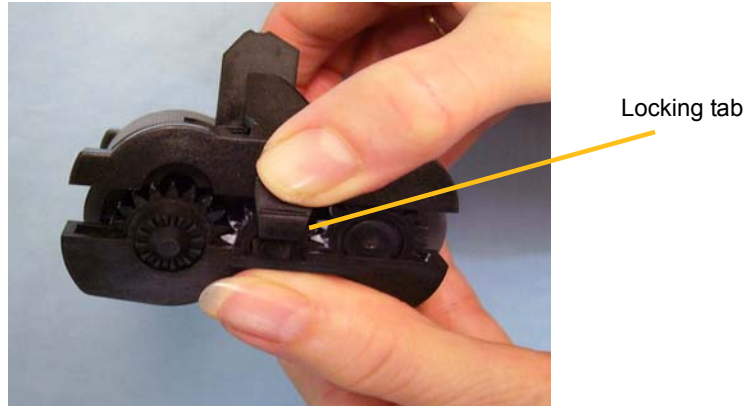13. Press the upper and lower housings together until they snap into place.

14. Reinstall the feed module by aligning the pins, fitting it into position and pulling up on the release lever to lock it into place. Verify that the feed module is securely in place and moves freely after you install it.

Align these areas
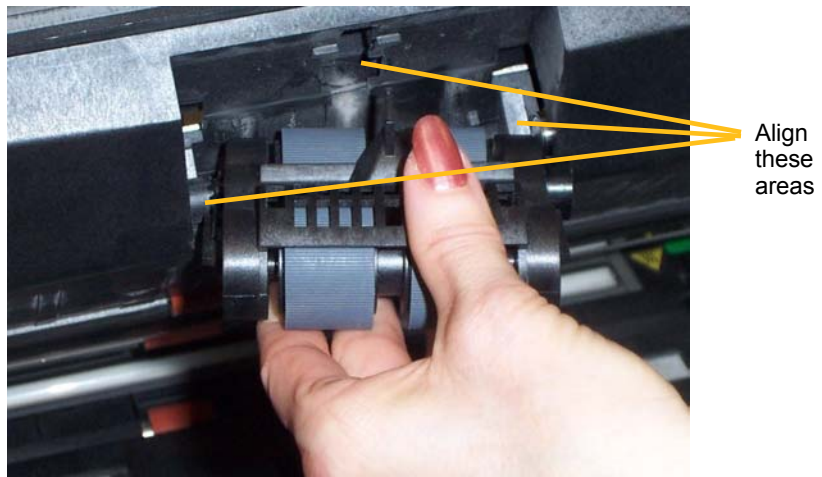
15. Close the pod.

16. Close the printer access cover.

17. Reinstall the output tray.

Replacing the separation roller or separation roller tires

1. Open the pod.

2. Pull the separation pad holder forward and remove the separation roller.

If you want to replace the separation roller, do Steps 3 and 4. If you want to replace the separation roller tires, go to Step 5.

3. Insert the new separation roller. Be sure to line up the slots on the separation roller with the holders.

4. Push the separation roller holder back in place and close the pod.

To replace the tires:

5. Replace each tire by sliding the tire off the core.

6. Install each new tire by gently pulling it over the core.

   IMPORTANT:Do not overstretch the tire; it may tear.

7. Reinstall the separation roller. Be sure to line up the slots on the separation roller with the holders.

8. Push the separation roller holder back in place and close the pod.

Replacing the pre-separation pad

Change the pre-separation pad when the frequency of multi-fed documents increases.

1. Open the pod.

2. Remove the pre-separation pad by lifting the pad up and out of position.
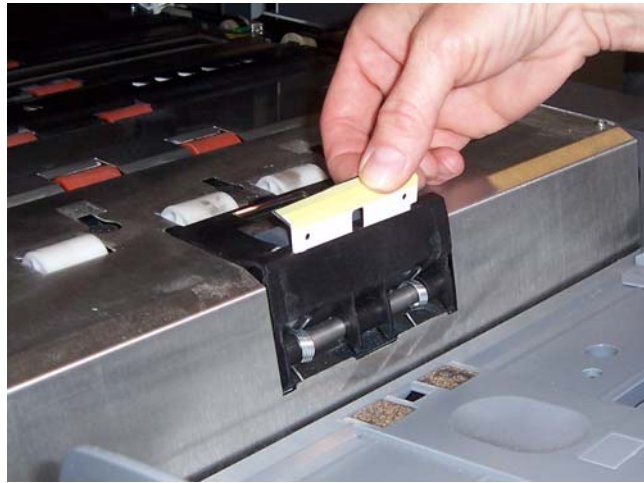
3. Install the new pre-separation pad. Be sure it snaps into place.

4. Close the pod.

Replacing the imaging guides

The imaging guides should be replaced when they are heavily scratched and defects show in the image.

NOTE: Handle the imaging guides carefully so as to not put fingerprints on the guides.

1. Open the pod.

2. Turn the screw on each end of the lower imaging guide to remove it from its position.
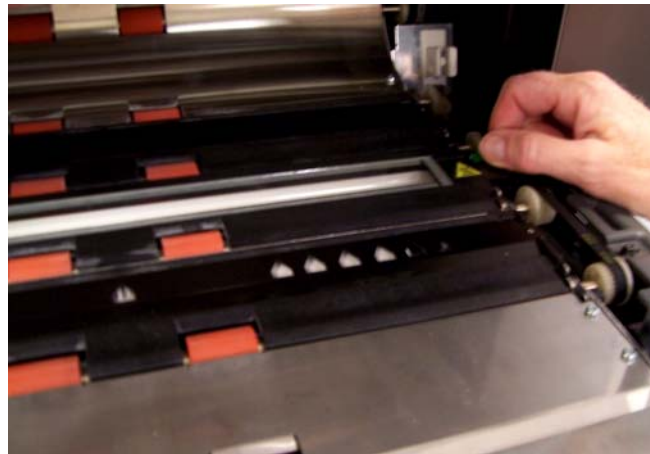
3. Install the new imaging guide and turn the screws to secure the imaging guide.

4. Repeat Steps 2 and 3 to replace the upper imaging guide.

5. Close the pod.

6 Troubleshooting

This chapter provides:

- Information on how to access the Operator Log.
- A problem solving chart.
- A message listing of possible errors you may encounter while using the scanner.

Accessing the Operator Log

The Operator Log is accessed through the Operator Control Panel touchscreen or Scan Validation Tool.

Accessing the Operator Log from the touchscreen

- From the Idle screen, touch **Operator Log**.
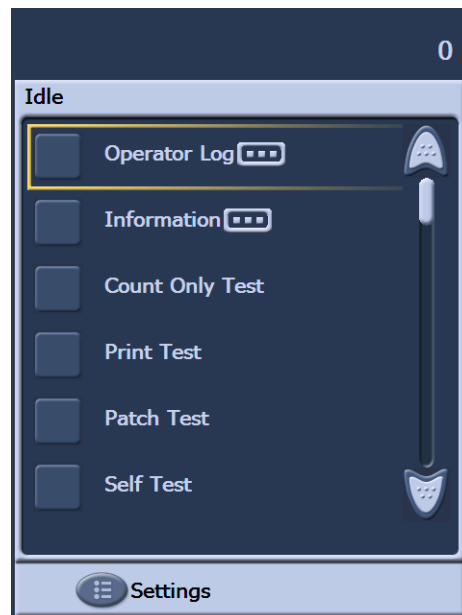
NOTE: The Operator Log only displays messages since the last power-cycle of the scanner, while the Scan Validation Tool can display all messages that have occurred. To view messages which have been cleared from the Operator Control Panel touchscreen, see the next section.

Accessing the Operator Log from the Scan Validation tool

1. Select **Start>Programs>Kodak>Document Imaging>Scan Validation Tool**.

2. From the Driver Types box, select **TWAIN**.

3. From the Drivers box, select **Kodak Scanner: i1800** and click **OK.**
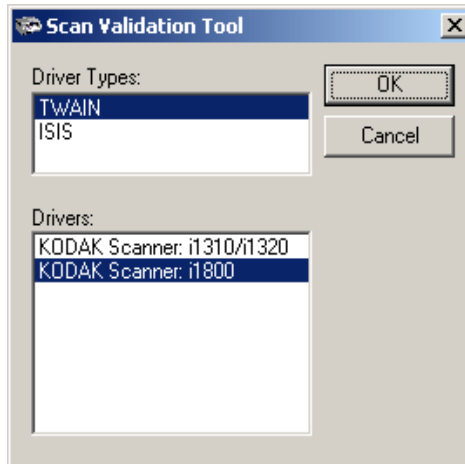
4. Select the Scanner icon.
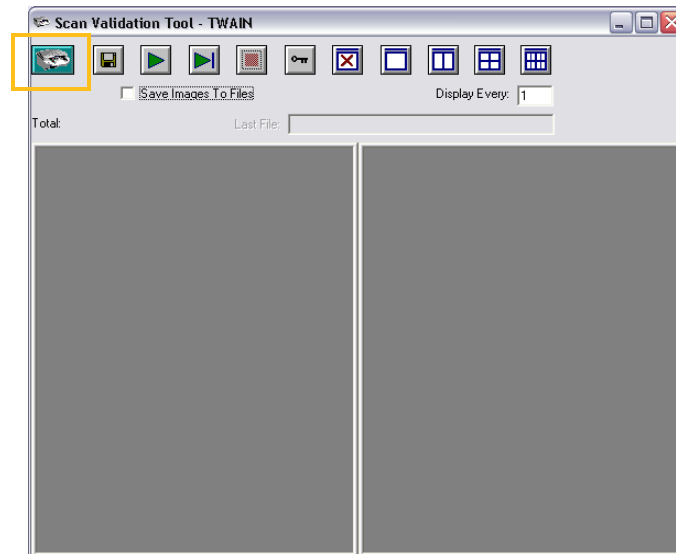
5. From the main screen, click **Settings**.
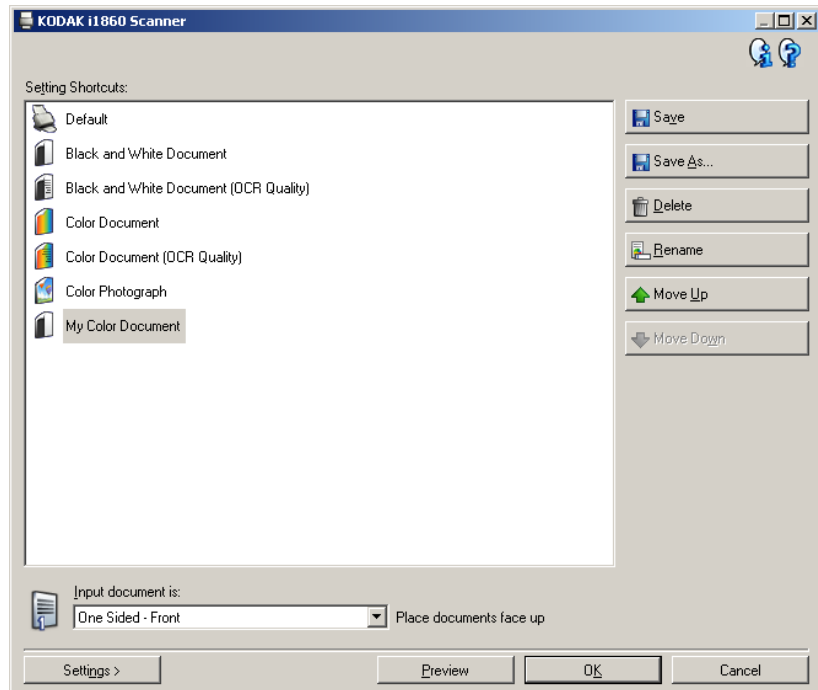
The Settings screen will be displayed.
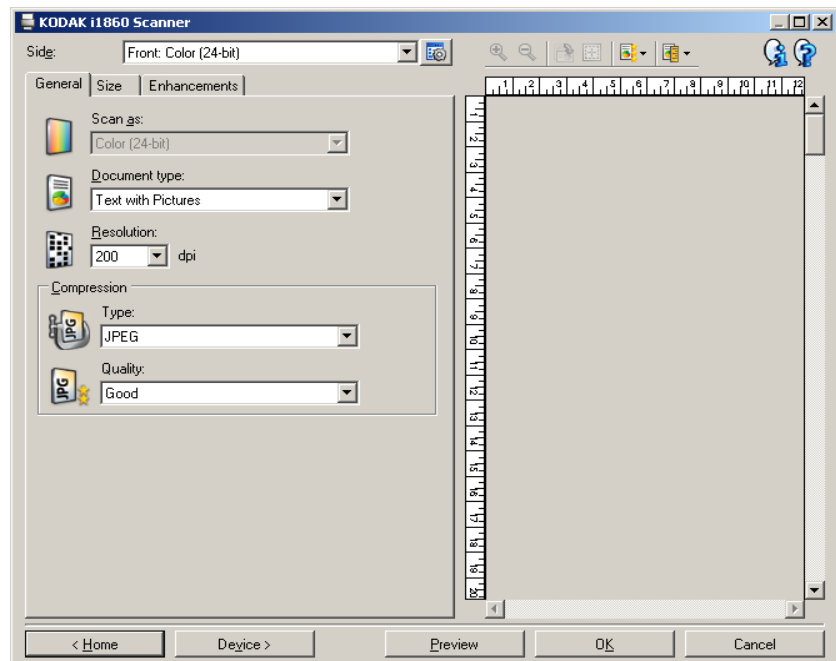
6. Select **Device**.

The Device screen will be displayed.
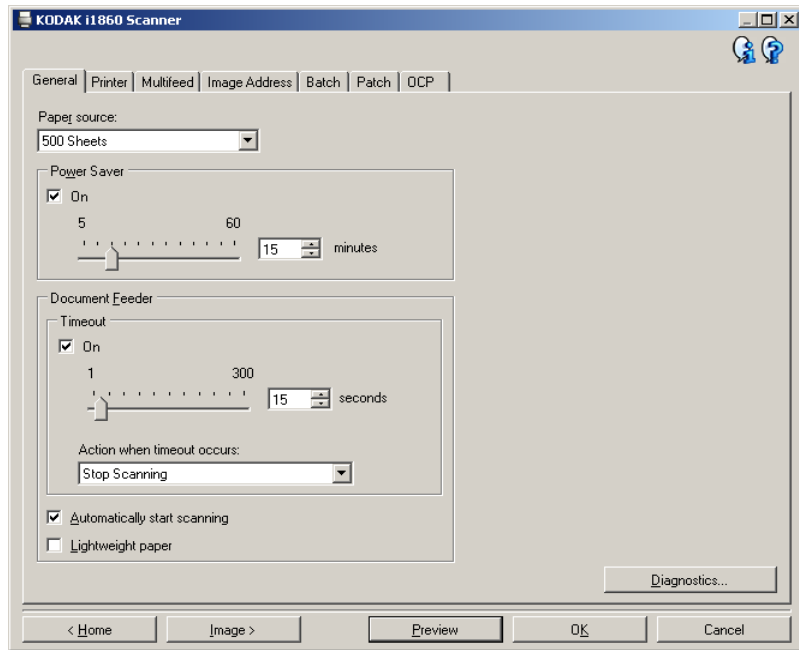
7. Click **Diagnostics**. The Diagnostics screen will be displayed.
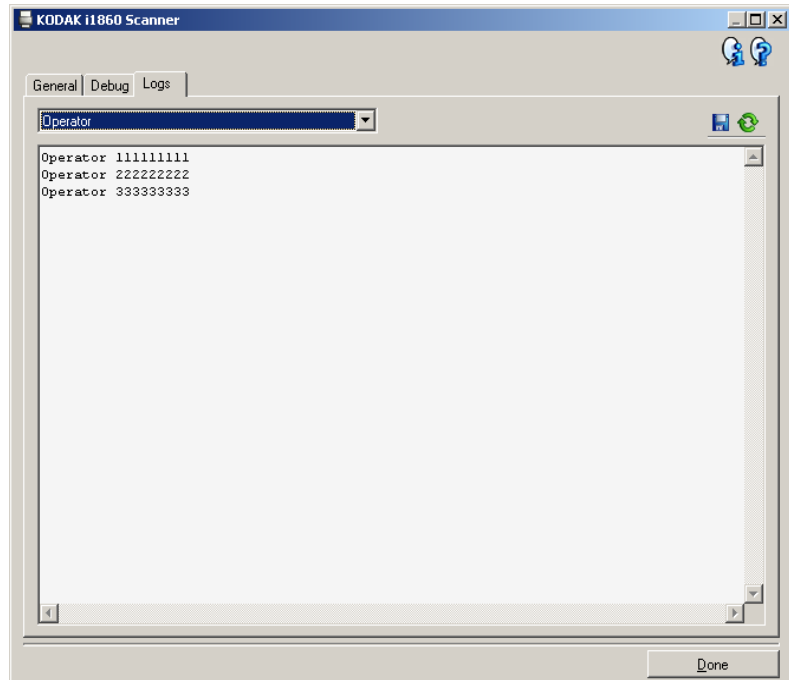
8. Select the **Logs** tab.

9. Select **Operator** from the drop-down box. The most current log entries are displayed at the top of the list. See the following Message Listing for an explanation of error conditions.

NOTE: The Kodak Field Engineer may request the error logs be saved and emailed to them as part of remote problem determination.

Use the button to create a compressed log package.

Message listing

Following is an alphabetic list of messages and corrective actions you can take if one of the following messages is encountered.

Messages	ID#	Operator Message
Background accessory changed while powered up	381	The Background Accessory was changed while the scanner was powered on. • Turn the power off to the scanner, wait a few seconds and power the scanner back on. • If you get this message and you did not change the Background Accessory, clean the scanner.
Cable unplugged	319	Some device on the FireWire bus was unplugged/plugged in. • Check that all FireWire connectors are securely fastened.
Calibration failed	106, 331	• Clean the imaging guides. See Chapter 5, *Maintenance* for procedures. • Try to calibrate the scanner again. Be sure you are using the correct calibration target. See Chapter 3, "Calibrating the scanner". • The calibration target is too small. A 12- x 12-inch calibration target is required for image calibration. • Calibration target is too narrow. • If the problem persists, call Service.
Calibration succeeded	105, 342	*Informational message.* The scanner has been successfully calibrated.
Call Service	Many ID numbers	A condition was detected that may require repair. • Turn the power off to the scanner, wait a few seconds and power the scanner back on. • If the problem persists, call Service and provide the ID number of the error.
Cannot calibrate with white background	184	Both a front and rear print head is installed in the scanner. Only one print head can be installed at one time. • Remove one of the print heads.
Cannot run with both printers installed	90	The White Background Accessory is installed in the scanner while the scanner is trying the calibrate. • Remove the White Background Accessory before calibrating the scanner.
Check document preparation	123, 135, 81	• The gap between your documents is too small. • Make sure the leading edges of the documents are aligned. See Chapter 3, "Document preparation" for more information. • Check the condition of your feed module and separation roller tires and your pre-separation pad. Clean and replace if necessary.
Check imaging guides and lamps	149, 178, 139	• Verify that the imaging guides are installed correctly. See Chapter 5, *Maintenance*. • Clean both sides of the imaging guides and lower glass plate between the lamps. • Check that the white patch on the imaging guides is clean and in good condition. • If the problem persists, call Service.
Clean lower imaging guide	294	The lower imaging guide is dirty or there may be a small piece of paper in the imaging guide area. • Clean the imaging guides. See Chapter 5, *Maintenance* for procedures.

Messages	ID#	Operator Message
Clean upper imaging guide	293, 304	The upper imaging guide is dirty or there may be a small piece of paper in the imaging guide area. • Clean the imaging guides. See Chapter 5, *Maintenance* for procedures.
Document count exceeded maximum value	124	The document counter is larger than the maximum configured value. • Reconfigure the scanner to allow a larger value for the document counter. Refeed the document set.
Document too dark to deskew	143	*Informational message.* The scanner was unable to find the document edges to determine the skew angle. A full-width, non-deskewed image has been created. • The document is too dark. • The image is too large. • Rescan using a fixed-sized cropping window.
Document too long	35, 36, 183	A document was measured which exceeded the configured maximum allowable length. This may be due to a document overlap. • Check the host monitor to see if there are any overlapped documents that may need to be rescanned. This condition may also be caused by poor document separation. • Replace the separation roller tires and pre-separation pad. See Chapter 5, *Maintenance* for procedures.
Front calibration failed	110	The front imaging path calibration failed. • Clean the imaging guides. See Chapter 5, *Maintenance* for procedures. • Try to calibrate the scanner again. Be sure you are using the correct calibration target. See Chapter 3, "Calibrating the Scanner". • If the problem persists, call Service.
Front calibration succeeded	111	*Informational message.* The front image path has been successfully calibrated.
Image address overflow	120	One of the image address fields is not large enough for the next image address (i.e., level 2 field width is 2, but the next level 2 value is 100). • Define the image address field to be wider.
Image calibration is suggested	109	• Calibrate the scanner when the current batch of documents has completed.
Image outside document area	177	Based on relative cropping parameters, the image to be generated from this document would be outside the document area. • Make sure the relative cropping offset, width and length are correct and that the correct document is being scanned.
Ink cartridge not installed	282	An attempt was made to use the Enhanced Printer without a ink cartridge installed. • Be sure the cable is properly connected to the printer carrier and the ink cartridge is installed in the printer carrier. See Chapter 4, *The Enhanced Printer and Patch Readers* for more information. NOTE:The ink cartridge must be installed before turning on the scanner.

Messages	ID#	Operator Message
Input elevator too full, feed module missing or broken	297	• There is too much paper in the input elevator and it is holding the feed module up. The maximum input elevator capacity is 500 sheets. Remove some documents from the input elevator. • The feed module is not installed properly. See Chapter 5, *Maintenance*, for correct installation procedures. • If the problem persists, call Service.
Invalid job setup	4	The image processing values sent by the host are invalid or in conflict with one another. • Check the job settings for illegal combinations. Refer to the *Image Processing Guide* for valid values.
Jam in transport	30	A document is lodged in the transport. • Remove the documents that have been scanned from the output tray. • Open the pod. • Remove any jammed documents from inside the transport. • Close the pod. NOTE: The following procedure is a general guideline. Your procedure may be different depending on how your application is set up. • Verify the last document that was scanned correctly. • Place any documents that were not scanned at the top of the batch. • Place the documents in the input elevator and begin scanning. One or more documents that passed through the transport were not scanned. • Refeed all documents for which images were not obtained.
Lamps not ready for calibration	107	Calibration was attempted before the lamps were warmed up. • Wait until the lamps have completely warmed (90 seconds) and try the calibration again.
Lamps not ready for scanning	359, 19	Scanning was attempted before the lamps were warmed up. • Wait for the message *Lamps ready for scanning* to be displayed and scan again.
Lamps ready for calibration	108	*Informational message*. The lamps are warmed and a calibration can be performed now, if needed. This does not indicate that a calibrate is needed.
Lamps ready for scanning	280	*Informational message*. The lamps are warmed and scanning can be initiated.
Lamps timed out	355	*Informational message.* The lamps were turned off due to inactivity.
No paper input elevator	46	The scanner was started with an empty input elevator or the portion of the document that is covering the paper present sensor is too dark (the back side of the bottom page). • Place the documents you want to scan in the input elevator and try again. • Offset the document until the paper present sensor detects it.

Messages	ID#	Operator Message
Paused waiting for host	1, 48	The feeder has stopped and the transport is still running because the scanner's internal image buffer is almost full. Processing will automatically resume after the capture software application has successfully retrieved enough images to allow the scanner to continue. • Be sure your host computer meets the recommended specifications to avoid this condition.
Please update firmware before scanning	91	The expected production version of operational firmware was not found. The back-up firmware is in use. • Reload the most recent version of operational scanner firmware.
Pod door closed	26	*Informational message.* The pod was closed.
Pod door opened	25	*Informational message.* The pod is not closed completely.
Power on self-test completed	20	*Informational message.* The scanner has completed its self-tests after power-on.
Power on self-test failed	6	This error could occur during scanner power-up. • Power-down the scanner, then power down the PC. Wait a few seconds and then power the PC back up, then power up the scanner. • If the problem persists, call Service.
Printer bitmap font in use	281	*Informational message.* An alternate printer font file was found and is being used instead of the default font.
Rear calibration failed	112	The rear imaging path calibration failed. • Clean the imaging guides. See Chapter 5, *Maintenance* for procedures. • Try to calibrate the scanner again. Be sure you are using the correct calibration target. See Chapter 3, "Calibrating the Scanner". • If the problem persists, call Service.
Rear calibration succeeded	113	*Informational message.* The rear image path has been successfully calibrated.
Refeed document set	Many ID numbers	Documents passed through the transport but no images were created. • Clean document sensors. • Make sure the leading edges of the documents are aligned. See Chapter 3, "Document preparation" for more information. • Check the condition of your feed module and separation roller tires and your pre-separation pad. Clean and replace if necessary. • Refeed these documents and verify that the images have been captured.
Requested pages scanned	337	*Informational message.* The scanner has completed scanning the requested number of documents.
Paused for image processing	63	*Informational message.* Scanner paused. • Slow host PC may not be able to keep up with the scanner.
Transport timeout	336	*Informational message.* The transport was turned off due to inactivity.

Messages	ID#	Operator Message
UDDS calibration failed	333	The UDDS calibration failed. • Be sure you are using the correct ultrasonics calibration target. See Chapter 3, "Calibrating the scanner". • Clean the sensors and try again. • If the problem persists, call Service.
UDDS calibration succeeded	332	*Informational message.* The scanner ultrasonics has been successfully calibrated.
UDDS is not calibrated	21	• Perform an Ultrasonics calibration. See Chapter 3, "Calibrating the scanner" for procedures.
UDDS multi-feed detected	23, 24, 334	A multi-feed document condition has been detected. • Check the host monitor to see if there are any overlapped documents that may need to be rescanned. This condition may be caused by: • Poor document separation causing overlapped documents. • Stickers on the documents. • Wrinkles in the documents • Thick documents with high multi-feed settings.
Unable to scan	5	• The previous error condition has not been corrected. For example, there could be a document jam that has not been completely cleared. • Incomplete or conflicting image processing parameters. • See other log entries for the actual condition.

Numerical message listing

Use the following numeric listing to quickly find an error. Use the previous Message Listing chart for details and actions regarding the error condition.

ID#	Operator Message
1	Paused waiting for host
4	Invalid job setup
5	Unable to scan
6	Power up self-test failed
19	Lamps not ready for scanning
20	Power on self-test completed
21	UDDS is not calibrated
23	UDDS multi-feed detected
24	UDDS multi-feed detected
25	Pod door opened
26	Pod door closed
30	Jam in transport
35	Document too long
36	Document too long
48	Paused waiting for host
63	Scanner paused for rotation or host processing
90	Cannot run with both printers installed
91	Please update firmware before scanning
105	Calibration succeeded
106	Calibration failed
107	Lamps not ready for calibration
108	Lamps ready for calibration
109	Image calibration is suggested
110	Front calibration failed
111	Front calibration succeeded
112	Rear calibration failed
113	Rear calibration succeeded
120	Image address overflow
123	Check document preparation
124	Document count exceeded maximum value
135	Check document preparation
143	Document too dark to deskew
149	Check imaging guides and lamps
177	Image outside document area
178	Check document preparation
183	Document too long

ID#	Operator Message
184	Cannot calibrate with white background
260	No paper in input elevator
280	Lamps ready for scanning
281	Printer bitmap font in use
282	Ink cartridge not installed
293	Clean upper imaging guide
294	Clean lower imaging guide
297	Input elevator too full, feed module missing or broken
319	Cable unplugged
331	Calibration failed
332	UDDS calibration succeeded
333	UDDS calibration failed
336	Transport timeout
337	Requested pages scanned
355	Lamps timed out
359	Lamps not ready for scanning
381	Background accessory changed while powered up
Many IDs	Call Service

Contacting Service   Refer to the section entitled, "Contacting Support" in Chapter 1 for phone numbers and detailed information.

Problem solving

Use the chart below as a guide to check possible solutions to problems you may encounter when using the *Kodak* i1800 Series Scanners.

Problem	Possible Solution
Scanner does not power on	Make sure that: • the power cord is plugged securely into the receptacle in the back of the scanner. • the wall outlet is not defective (call a licensed electrician). • both power switches are on (the main breaker switch on the back of the scanner and the power switch located on the side of the scanner).
Scanner is not being recognized by the Scan Validation Tool	Make sure that: • when the software was installed, it was installed by someone with Administrator privileges. • the FireWire cable is plugged in securely. • the scanner shows up in the Device Manager as an "imaging" device. • you cycle power on the scanner and PC. First cycle power to the PC. Then make sure the FireWire cable is securely fastened, then restart the scanner.
The scanner will not scan/feed documents	Make sure that: • the power cord is plugged in and the power is on. • the pod is completely closed. • the scanner is enabled from the host. • documents are making contact with the feed module. • for documents that require special handling, press the gap release button during feeding. • the documents meet specifications for size, weight, etc. • if you are feeding small documents, be sure that the documents are covering the paper present sensor in the input elevator. • you check the feed module, separation roller, and pre-separation pad for signs of wear and replace these parts if necessary. • a very dark document or curled document is not on the bottom of the stack. Place a white sheet of paper at the bottom of the stack and scan again. • use Count Only mode to test feeding.
Side guides will not move	Remove all documents from the input elevator and be sure the locking switch is in the **unlocked** position.
More than one document is entering the transport at one time **or** too many multifeeds are being detected	Make sure that: • the guidelines for document preparation have been followed (e.g., staples, paper clips are removed; lead edges are aligned, etc.) • documents meet specifications for size and weight. • the multifeed sensors are clean. • the separation roller, feed module, and pre-separation pad are clean and properly installed. • you have checked the feed module tires, separation roller tires and pre-separation pad for signs of wear and replaced as needed. • ultrasonics have been calibrated.
Image quality is poor or has decreased	Make sure that: • the imaging guides are clean. See Chapter 5, *Maintenance*. • the scanner has been calibrated. See Chapter 3, "Calibrating the scanner". • if using iThresholding, reduce the Contrast value. • try a different color table. • for color or grayscale images, consider creating a custom color table using the Brightness and Contrast Control utility. If unsatisfactory image quality persists, call Service.

Problem	Possible Solution
Calibration has failed	Make sure that: • you are using the proper calibration target and it is oriented correctly for the type of calibration you are performing. The Image calibration target and Ultrasonics calibration target are different. • the imaging guides are clean. • the transport is clear of obstructions. • the sensors are clean. • the calibration target you are using is clean. If unsatisfactory image quality persists, call Service.
Documents are jamming	Make sure that: • the guidelines for document preparation have been followed (e.g., staples, paper clips are removed; lead edges are aligned, etc.) • the output tray and side guides are adjusted for the length and width of the documents being scanned. • all jammed documents have been removed from the transport area. • documents meet specifications for size and weight. • the sensors are clean. • the separation roller, feed module, and pre-separation pad are clean and properly installed. • the transport rollers are clean. • the background strips are properly installed. • you have checked the feed module tires, separation roller tires and pre-separation pad for signs of wear and replaced as needed.
Long documents are not feeding or are jamming	Make sure that: • the input elevator extender is pulled out to provide support for long documents. • the output tray is adjusted for the length of the documents being scanned. • the output tray is installed properly. • document extenders are installed correctly.
Roller marks appear on the documents after scanning	Clean the feed module tires, separation roller tires and transport rollers.
Vertical streaks appear on the image	Make sure that: • imaging guides are clean. • the scanner was thoroughly cleaned **before** the last image calibration. • when you calibrate the scanner that you are using a good, clean calibration target. Use the calibration target provided with your scanner. • If you are using iThresholding, reduce the Contrast value.
The Enhanced Printer is not printing as desired	If you are having problems printing on scanned documents: • verify that the ink cartridge is not empty. • be sure the ink cartridge is properly installed. • be sure the ink cartridge is located in the correct position for printing. • make sure that the printer carrier is properly seated in its slot. • verify that all printer connectors are securely fastened and that the ribbon cable is securely attached. • verify that the printer has been enabled through the host and that the expected print string has been specified.
Image too small or has a black border	• Clean the imaging guides. See Chapter 5, *Maintenance*. • Clean the scanner. See Chapter 5, *Maintenance*. • If using iThresholding, reduce the Contrast value. • Check for scratches on the black (or white) background strips. Replace if necessary.

Appendix A   Accessories

This chapter provides a description of the accessories that are available for use the *Kodak* i1800 Series Scanners.

Kodak Ultralightweight Paper Feed Module

The *Kodak* Feeder Kit for Ultralightweight Paper for i600/i1800 Series Scanners allows you to feed lightweight paper from a paper weight range of 25 g/m^2 to 75 g/m^2 kg (7 to 20 lbs). This kit includes a feed module and separation roller that are specially designed to feed light-weight paper through the scanner transport. This kit includes the following:

- 1 Feed Module
- 1 Separation Roller
- 4 Pre-separation Pads
- 17 Replacement Tires for the Feed Module
- 9 Replacement Tires for the Separation Roller

Instructions for installing the Ultralightweight Paper Feed Module are included with the kit. **CAT No. 896 5279**

Kodak White Background Accessory

When you scan translucent documents, the background often appears dark. The *Kodak* White Background Accessory for i600/i1800 Series Scanners will reduce black background bleed-through while scanning which produces whiter images.

The White Background Accessory comes with two white background strips that replace the two black background strips in the scanner. Instructions for installing the White Background Accessory are included with the kit. **CAT No. 894 9000**

Kodak Manual Feeder

When the need arises to manually feed documents, the *Kodak* Manual Feeder for the i1800 Series Scanners provides a flat work surface. The Manual Feeder can be easily installed and removed. The *Kodak* Manual Feeder comes with the shelf and two side guides which can be adjusted to the desired position for scanning. **CAT No. 874 1894**

Kodak High Resolution Printer Accessory

The *Kodak* High Resolution Printer Accessory provides higher resolution printing on your documents — 600 dpi, front side, pre-scan only. When this printer is installed the Enhanced Printer will no longer be accessible. **CAT No. 815 0237**

Appendix B   Specifications

Scanner Type/Speed	**i1840 Scanner**: Duplex color scanner with an automatic document feeder including the enhanced printer, 160 pages per minute (landscape)
	i1860 Scanner: Duplex color scanner with an automatic document feeder including the enhanced printer, 200 pages per minute (landscape)
Scanning Technology	Dual Tricolor Plus CCD Grayscale output bit depth is 256 levels (8-bit) Color capture bit depth is 40-bit (10 bits per red, green, blue and black channels) Color output bit depth is 24-bit
Output Resolution	Black and white: 200, 240, 300, 400 Color/Grayscale: 100, 150, 200, 240, 300
Compression formats	JPEG, CCITT Group 4, uncompressed
Scan Area	Width: 6.4 to 30.5 cm (2.5 to 12 in.) Length: 6.4 to 86 cm (2.5 to 34 in.)
ADF Capacity	500 sheets of 20 lb. bond paper (up to A3)
Recommended Daily Volume	Unlimited
Light Source	Dual Xenon lamps per side, mercury-free
Scanner operational voltage	100 - 240 VAC, 50/60 Hz, 7.0 - 3.5 A
Scanner Dimensions	Height (adjustable): 102-127 cm (40-50 in.) Width (depending on touchscreen position): 78-83 cm (31-33 in.) Depth: 99 cm (39 in.)
Scanner Weight	218 kg (480 lbs.)
Host Connection	IEEE-1394 (FireWire) interface, 6-pin connector
Multi-feed Detection	Multi-feed detection with ultrasonic technology; three ultrasonic sensors that can work together or independently.
Color Touchscreen Control	Operator control via color LCD touchscreen
Ergonomic Height Adjustment	Integrated height adjustment for seated or standing operation
Image Address	**i1860 Scanner only**: Multi-level indexing/batching capabilities
Patch Readers	**i1860 Scanner only:** Four permanently mounted patch readers that can work together or independently
Imprinting	Front pre-scan or rear post-scan imprinting
Operating Temperature	15 to 35°C (59 to 95°)
Humidity	15 to 76%
Environmental Factors	Complies with Energy Star requirements
Heat Load	3024 kj/hr. (2866 BTU/hr.) max
Altitude	Up to 2440 m (8000 ft)
Acoustic Noise	Data was measured in accordance with DIN 45 635, ANSI S12.10-1985 and ISO 7779 in a semi-anechoic chamber. Operating: 63.4 dBA Standby: 42.3 dBA

Kodak