

Kodak
















i80 Scanner









User's Guide

A-61195

Contents

Introduction	1
What's in the box	1
Scanning specifications	2
Acceptable paper sizes	2
Document types to avoid in the ADF	2
Safety precautions	3
User precautions	3
Safety and regulatory agency approvals	4
Environmental information	4
Power system	4
Electromagnetic compliance statements	5
For the United States	5
For Japan	5
Acoustic emission	5
Installation	6
Site specifications	6
Shipping switch	7
Unlocking the scanner	7
Locking the scanner	7
Making connections	8
SCSI interface device ID	9
Setting the SCSI terminator	9
Adjusting the trays	10
ADF input tray	10
Output tray	11
Powering up the scanner	11
Turning on the scanner	11
Turning off the scanner	11

System Requirements and Software Installation	12
Installing the scanner drivers	12
Scanning Your Documents	13
Loading documents	13
Using the ADF	13
Using the flatbed	13
Scanning with TWAIN or ISIS	14
Making the Most of Your Scanned Images	15
 Scan Method	15
 Image Type	16
 Resolution	17
 Brightness	17
 Contrast	17
Enhancing your images	18
 Invert	18
 Mirror	18
 Preview Auto-Area	18
 Paper Size	18
 Units	18
 Descreen	19
 Sharpen	19
 Color Adjustment	19
 Auto Level	19
 Advanced Settings	19

	Highlight / Shadow	20
	Curves	21
	Color Balance	22
	Hue / Saturation / Lightness	22
	Color Drop-out	23
	Custom Settings	23
	Scan Settings	24
	Configuration Settings	25
	Preference	25
	Other tools	27
	Width	27
	Height	27
	Size	27
	Lock scale	27
	Information	27
	Starting the final scan	28
	Preview	28
	Zoom View	28
	Scan (TWAIN)	28
	OK (ISIS)	28
	Exit	28
	Maintenance	29
	Opening the ADF	29
	Cleaning the glass scanning areas	30
	Cleaning the ADF	31
	Replacing the feed module	32

Troubleshooting	33
Getting service	35
Equipment disposal	35
Scanner supplies	35
Specifications	36

Introduction

The KODAK i80 Scanner has an automatic document feeder and a flatbed platen to accommodate a wide range of general purpose, departmental, and office capture needs.

Before you install and operate your i80 Scanner, take a few minutes to read through this guide. It contains information about installing, operating, and maintaining your scanner.

What's in the box

- KODAK i80 Scanner
- Output tray
- Power supply
- AC power cords for U.S., U.K., EUR, AUS, China
- Replacement snap-in feed modules (4)
- Shipping switch unlocking instructions
- KODAK i80 Scanner User's Guide (English only; user's guides in other languages in .pdf format are located on the Installation CD)
- CDs (4)
- Read Me Now
- Capture Software information
- Registration/warranty information sheet

Scanning specifications

Acceptable paper sizes

You can use the i80 Scanner to scan documents that have a paper weight between 50 and 105 g (14 and 28 lb.) and that are within the following sizes:

In the ADF (automatic document feeder)

- 94 x 140 mm (3.7 x 5.5 in.) minimum
- 216 x 356 mm (8.5 x 14 in.) maximum

On the flatbed

- up to A4 size (8.3 x 11.7 in.)

Document types to avoid in the ADF

Do not use the ADF (automatic document feeder) to scan the document types listed below. Instead, use the flatbed to scan documents that cannot be fed by the ADF.

- Paper with clips or staples attached
- Paper with wet or damp ink
- Paper with inconsistent thickness, such as envelopes
- Paper with wrinkles, curls, folds, or tears
- Tracing paper
- Carbonless paper
- Items other than paper, such as cloth, metal, or OHP film
- Notched paper
- Paper with an odd (non-rectangular) shape
- Paper weights less than 50 g (14 lb.) or greater than 105 g (28 lb.)

Safety precautions

- Use only the power supply that was provided with the scanner (Sino-American model SA60-24).

IMPORTANT: Do not substitute another power supply model or another manufacturer's power supply.

- Be sure to use the proper AC power source.
- Avoid the danger of electric shock. Only use the scanner and power supply indoors in a dry location.
- Do not install the scanner in a humid or dusty area.

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 should be kept short, using a hair net if needed or by tying long hair up in a bun.
- Remove all loose objects from the area that could be drawn into the machine.
- Take sufficient breaks to maintain mental alertness.

Supervisors should review their practices and make the compliance with these precautions a part of the job description for the operator of the i80 Scanner and any other mechanical devices.

Safety and regulatory agency approvals

The i80 Scanner conforms to all applicable national and international product safety and electronic emission regulatory requirements. This includes, but is not limited to, the following:

- Underwriters Laboratories Inc. listing to UL 60950 Third Edition
- Underwriters Laboratories Inc. listing to CAN/CSA C22.2 No. 60950-00 Third Edition
- TUV Rheinland of North America approval to EN60950
- CFR 47 Part 15, Subpart B (FCC Class B)
- Canadian ICES-003 Class B
- CE Mark (Europe)
- CISPR22 Class B
- EN55022 Class B
- EN55024
- EN61000-3-2
- EN61000-3-3
- AS/NZS 3548 C-Tick Mark (Australia)
- VCCI Class B
- Taiwan CNS 13438 Class B
- China CCC

Environmental information

- The i80 Scanner is designed to meet worldwide environmental requirements.
- Guidelines are available for the disposal of consumable items that are replaced during maintenance or service; follow local regulations or contact Kodak locally for more information.
- The product packaging is recyclable.
- The i80 Scanner is Energy Star compliant.

Power system

This equipment was designed for connection to IT Power Systems.

Electromagnetic compliance statements

For the United States

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

For Japan

This is a Class B product based on the standard of the Voluntary Control Council for Interference from Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

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B情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

Acoustic emission

Operator position sound pressure levels (L_{pA}):

- Standby: < 46 dB(A)
- Full system: < 58 dB(A)
- Instantaneous peak values \geq 130 dB(C): None

Installation

Unpack the scanner carefully and check the contents. If any items are missing or damaged, contact your authorized dealer immediately.

Site specifications

Place the scanner:

- in a clean area with temperature and relative humidity typical of an office environment.

IMPORTANT: Only use the scanner and power supply indoors in a dry location.

- in a location out of direct sunlight.

IMPORTANT: Direct exposure to sun or excessive heat may cause damage to the unit.

- on a stable, level work surface capable of supporting 8 kg (17.6 lb.).

Tilted or uneven surfaces may cause mechanical or paper-feeding problems.

- within 1.52 metres (5 feet) of an easily accessible electrical power outlet
 - Keep the scanner box and packing materials for shipping purposes.

Shipping switch

The scanner has a shipping switch that locks the carrier mechanism to avoid causing damage during transportation.

- Unlock the shipping switch before you connect the cord and cable and before you power up the scanner.
- Lock the shipping switch before moving the scanner to a new location.

Unlocking the scanner

1. Place the scanner in an upright position on its front.
2. Unlock the scanner by moving the shipping switch (located on the bottom of the scanner) down into the unlocked position.



3. Place the scanner back in its normal position.

Locking the scanner

1. Make sure that the scanner is off.
2. Raise the flatbed cover to reveal the flatbed platen and scanning unit.
3. Turn on the scanner.
The scanning unit begins moving.
4. Wait until the scanning unit has moved to the end (opposite the scanner ADF).
5. Turn the scanner off after the scanning unit has finished moving.
6. Place the scanner in an upright position on its front.
7. Lock the scanner by moving the shipping switch (located on the bottom of the scanner) up to the locked position.
8. Place the scanner back in its normal position.

Making connections

Connect the power cord and SCSI signal cable as shown below. Several power cords are supplied with the scanner. Use only the cord required for your type of power. Dispose of the unneeded power cords properly.

Use only the power supply that was provided with the scanner.

CAUTION: The power supply must only be used indoors in a dry location.

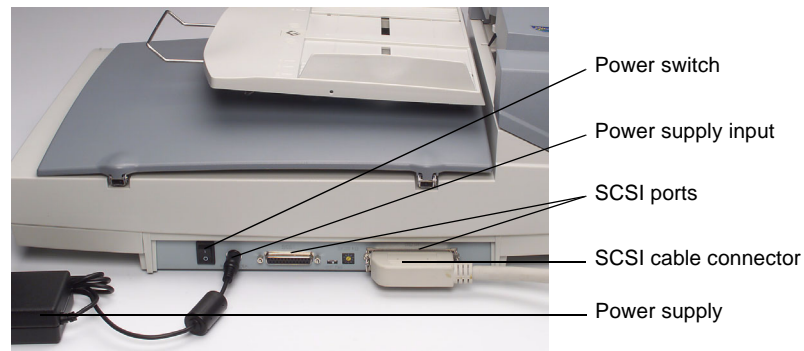
IMPORTANT: Do not substitute another power supply model or another manufacturer's power supply.

1. Attach the power supply to the power input on the back of the scanner.
2. Attach the power cord for your power type to the power supply.
3. Plug the power cord into a power outlet.

NOTE: Make sure that the power outlet is located within 1.52 metres (5 feet) of the scanner and is easily accessible.

4. Attach a SCSI cable to the SCSI port.

NOTE: There are two SCSI ports on the scanner. You can use either a DB25 (male) or a 50-pin Amphenol connector to connect to the scanner.



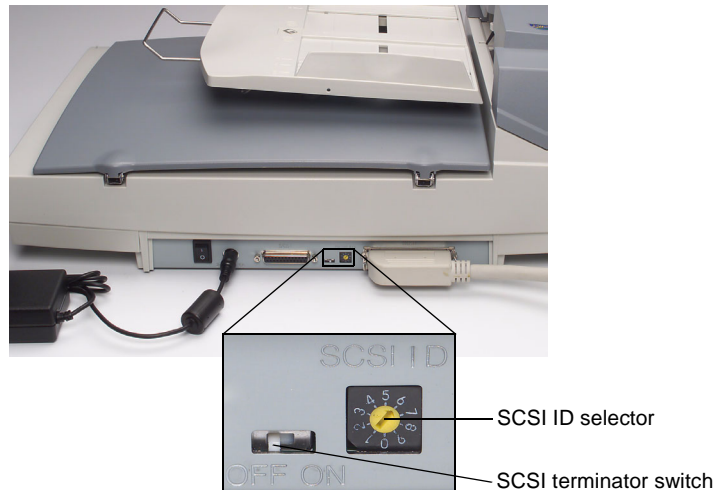
5. Attach the other end of the SCSI cable to your PC.

SCSI interface device ID

When there are several devices on a SCSI chain, you may need to adjust the SCSI ID selector on the scanner. This selector assigns a specific device ID to the scanner. If the assignment conflicts with an existing SCSI device, select a new ID.

NOTE: The factory SCSI ID setting for the scanner is 6. SCSI ID 0 is usually assigned to an internal hard disk drive and 7, 8, and 9 are not in actual use. The scanner will not operate properly if the SCSI ID is set to 7, 8, or 9.

- Using a suitable tool, turn the SCSI ID selector switch until the arrow points to the desired ID number.



Setting the SCSI terminator

The scanner comes with a built-in SCSI terminator. The terminator ON/OFF switch is located on the scanner between the SCSI cable connectors.

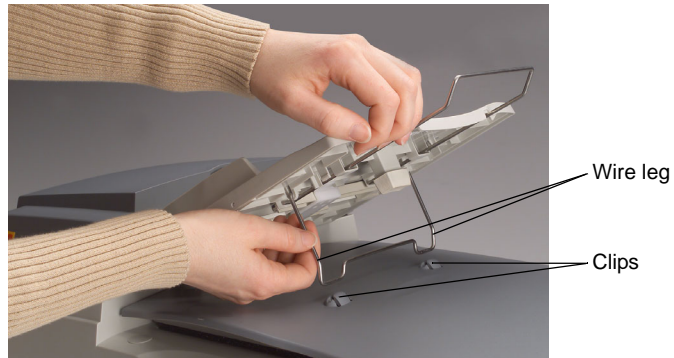
- If the scanner is the only or the last device in a SCSI chain, place the terminator switch in the ON position.
- If the scanner is to be located between the computer and another SCSI device, place the terminator switch in the OFF position.

Adjusting the trays

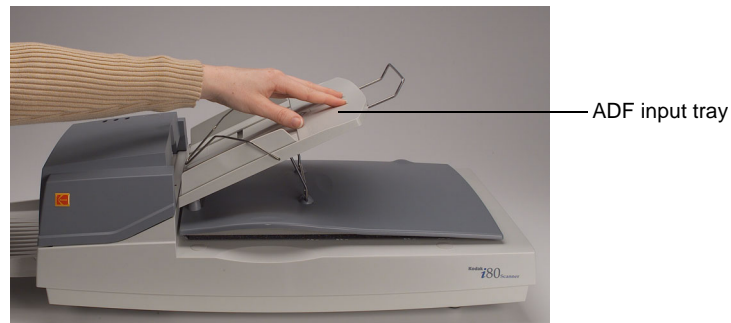
There are two trays on the scanner: the ADF input tray for loading documents to be scanned through the automatic document feeder and the output tray which receives scanned documents from the ADF.

ADF input tray

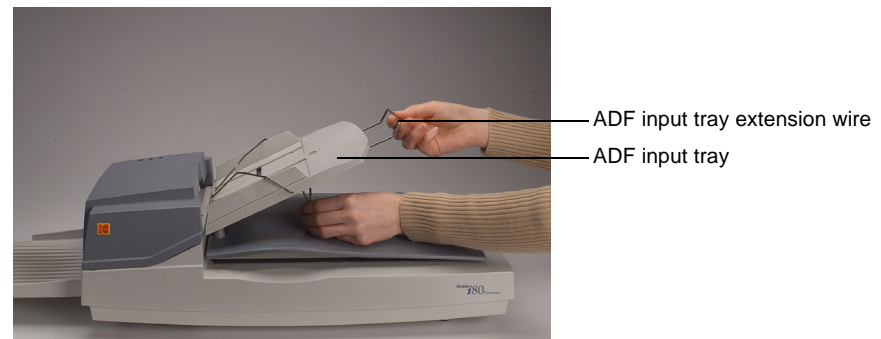
1. Lift the ADF input tray to about a 45° angle.
2. Pull the ADF input tray wire leg down.
3. Place the wire leg on top of the clips on the flatbed cover.



4. Press down slightly on the ADF input tray to snap the wire leg into the clips.

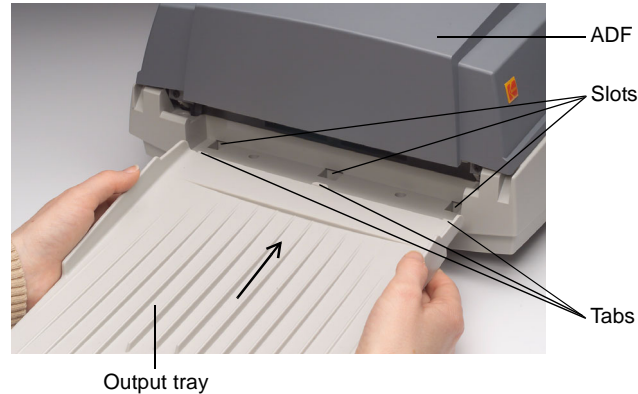


5. Pull the ADF input tray extension wire out to the desired length.



Output tray

1. Hold the output tray at about a 30° angle.
2. Insert the three tabs on the output tray into the three slots on the ADF.



3. Release the output tray.
4. Make sure that the output tray is firmly attached to the ADF.
5. Pull the output tray extension wire out to the desired length.

Powering up the scanner

Make sure that you press the I/O power switch on the back of the scanner and not the SCSI terminator switch (which has an ON/OFF label under it) when you want to turn the scanner on or off. The scanner must be on and its self-test completed before you power up the PC.

IMPORTANT: Before you power up the scanner, make sure that there are no documents in the ADF or on the flatbed platen.

Turning on the scanner

- Press the side of the power switch that is marked “I” to turn on the scanner. The power light on the ADF illuminates. If it does not, check the power source.

Turning off the scanner

- Press the side of the power switch that is marked “O” to turn off the scanner.

Indicator lights

There are three indicator lights on the ADF.

- **POWER (green)**—illuminates after you turn on the scanner.
- **READY (green)**—illuminates when the scanner is ready to scan.
- **ERROR (red)**—illuminates or flashes when there is an error condition.

System Requirements and Software Installation

Following is the minimum system configuration to run the i80 Scanner.

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, using a faster PC and/or more RAM may be necessary to obtain the rated throughput.

- IBM PC (or compatible) with a Pentium III 1.0 GHz processor
- Microsoft Windows 98, Windows NT 4.0, Windows 2000, Windows Millennium Edition (Me), or Windows XP
- 100 MB of available hard disk space (200 MB is recommended)
- 128 MB of RAM
- Monitor (VGA)
- Mouse
- CD-ROM drive

Installing the scanner drivers

1. Start your PC and Windows application.
2. Insert the i80 Scanner Installation CD that contains the device drivers in your CD-ROM drive.

NOTE: If the CD does not start automatically, click on the **Start** button and choose *Run*, then type **d:\driver\setup.exe** (where “d” is the letter of your CD-ROM drive). Click on the **OK** button.

3. Follow the instructions on the screen to complete the driver installation.

Scanning Your Documents

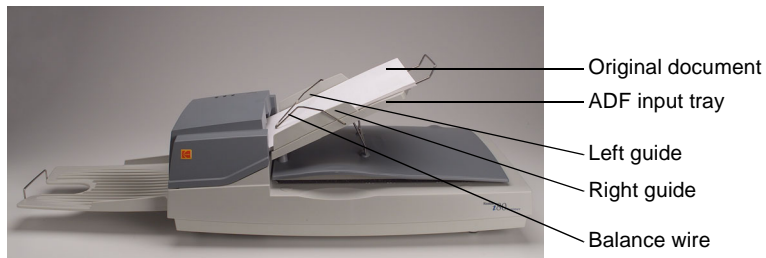
Loading documents

Make sure that the scanner is on and has completed its self-test before you turn on the PC to begin scanning. See the section entitled “Scanning specifications” for information about the sizes and types of documents that you can scan.

Using the ADF

Use the ADF to feed multiple documents automatically in a batch.

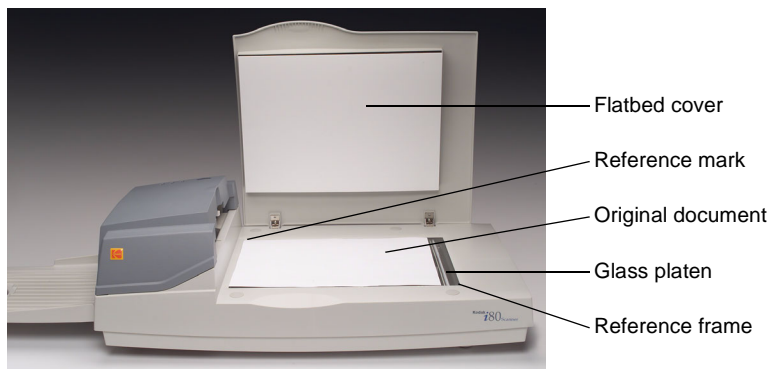
1. Fan documents before loading to prevent paper jams.
2. Place the documents face down under the balance wire in the ADF input tray, with the leading edges in the auto feeder entrance.
3. Adjust the left and right guides until they are snug against the document sides.



Using the flatbed

Use the flatbed to scan documents that cannot be scanned using the ADF.

1. Place the document face down on the glass platen.
2. Position the document with the upper right corner aligned with the reference mark.



Scanning with TWAIN or ISIS

1. Open your scanning application.
2. Pull down the File menu and choose **Select Source** or **Select Scanner**.

NOTE: If the Select Source or Select Scanner command is not available on the File menu, see your application's user's guide to determine how the application link is used.

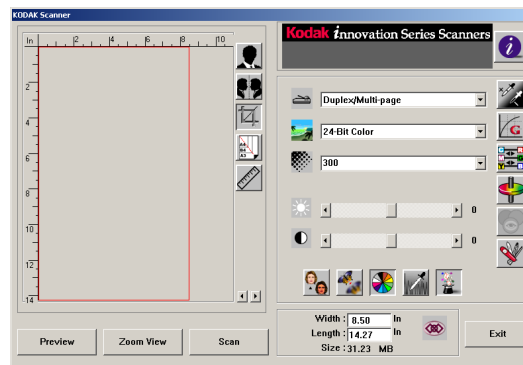
A dialog box with a list of scanning sources appears.




3. Select your **Kodak** scanner model.

You need to select the source only once, unless you want to choose another scanner.

4. Place the document to be scanned in the ADF or on the flatbed glass platen.
5. Pull down the File menu and choose **Acquire**.

A dialog box containing scanning features appears. (The TWAIN dialog box is shown below.)



6. Select a scanning method on the **Scan Method**  drop-down menu.
7. Select a scanning mode on the **Image Type**  drop-down menu.
8. Select a scanning resolution on the **Resolution**  drop-down menu.
9. Select the settings for the scanning features (e.g., Sharpen, Descreen, etc.) that you want to use.

NOTE: Refer to the driver feature descriptions in the following section, "Making the most of your scanned images."

10. Click on the **Preview** button to preview your document(s).
11. Click on the **Scan** (TWAIN) or **OK** (ISIS) button scan your document(s).

Making the Most of Your Scanned Images

The features in the TWAIN and ISIS dialog boxes are described in this section.

Note that not all features are available at all times. The availability of some features may depend on the scanner model or other feature selections.

Scan Method



Select how you want to scan on the **Scan Method** drop-down menu.

TWAIN

Simplex/One-page—select this setting to use the automatic document feeder (ADF) to scan one side of a document at a time.

Simplex/Multi-page—select this setting to use the automatic document feeder (ADF) to scan one side of a document at a time in a batch of documents.

Flatbed—select this setting to use the flatbed to scan one side of a document at a time.

Duplex/One-page—select this setting to use the automatic document feeder (ADF) to scan both sides of one document at a time.

Duplex/Multi-page—select this setting to use the automatic document feeder (ADF) to scan both sides of documents in a batch of documents.

ISIS

Simplex—select this setting to use the automatic document feeder (ADF) to scan one side of a document at a time in a batch of documents.

Flatbed—select this setting to use the flatbed to scan one side of a document at a time.

Duplex—select this setting to use the automatic document feeder (ADF) to scan both sides of documents in a batch of documents.

Image Type



Select the mode you want to use for your scans on the **Image Type** drop-down menu.

Black and White—the image appears in black and white with no intermediate shades of gray. That means that each pixel of the image is either 100% black or 100% white.

Choose *Black and White* if you are scanning text or pen and ink drawings. Since only one bit of black or white information is required per pixel, the file size of a *Black and White* image is only about 1/24 the size of a *24-Bit Color* image.

Halftone—a halftone is a picture like that which is usually seen in a newspaper or magazine. Since a halftone is a type of black-and-white image, the file size of a halftone image is only about 1/24 the size of a *24-Bit Color* image.

Halftone simulates grayscale by using varying dot sizes. If you view a halftone image at a certain distance, it looks much like a grayscale image, but the file size is smaller.

When you select *Halftone*, a submenu appears that allows you to select a halftone pattern.

8-Bit Gray—a single-channel image consists of at least 256 shades of gray. An 8-bit scanner produces a grayscale image with 1024 shades of gray between pure black and pure white. Choose this option if you are scanning black-and-white photographs.

With 8 bits of color information per pixel, the file size of an image is eight times larger than a *Black and White* image and 1/3 the size of a *24-Bit Color* image.

8-Bit Color—an *8-Bit Color* image provides 256 color hues in the image. The file size of a 256 color image is 1/3 the size of a *24-Bit Color* image (TWAIN only).

24-Bit Color—a *24-Bit Color* image consists of three 8-bit color channels. The red, green, and blue channels are mixed together to create a combination of one billion colors which give a more true-to-life quality to the image. Choose *24-Bit Color* if you are scanning color photos.

Resolution



Resolution or dots per inch (dpi) indicates the scanning resolution, which largely determines the quality of the scanned image. The greater the resolution, the better the reproduction will be.

However, scanning at a higher resolution also increases scanning time and file size. Therefore, up to a certain dpi level, the resolution will not be visually improved, but the file size will be larger.

Tips

An A4-size color image scanned at 300 dpi in *24-Bit Color* mode is approximately 25 MB in size. A higher resolution (usually over 600 dpi) is recommended only when you need to scan a small area in *24-Bit Color* mode.

Refer to the following table to choose the best image resolution for use with your application.

Scanner Settings Application	Image Type	Resolution (dpi)
File, Fax, E-mail Document	Black and White	200
View, Copy, Edit Color Picture	24-Bit Color	100
OCR* Document	Black and White	300

* OCR (Optical Character Recognition): the process of converting an image to a text format.

Brightness



The **Brightness** option allows you to adjust the image brightness, making it lighter or darker. Select a brightness setting from -100 to 100 by dragging the Brightness sliding control bar. The default is "0." The smaller the number, the darker the image. Scan the document and check the brightness.

A darker setting is recommended for blurred character documents. With a brighter setting, background noise in a color document disappears.

Contrast



The **Contrast** option sets the image contrast by adjusting the difference between black and white, thereby making an image sharper or softer. Select a contrast setting from -100 to 100 by dragging the Contrast sliding control bar. The default is "0." Scan the document and check the contrast.

In a low-contrast setting, the difference between black and white is small, so the image is softer. In a high-contrast setting, the difference between black and white is large, so the image is clearer.

Enhancing your images

These features allow you to improve or enhance the appearance of scanned images.

Invert



Click on the **Invert** button to reverse the brightness and color in the image. For black-and-white images, black areas will be white and white areas will be black. For color images, inverting the image will cause each pixel to be changed into its complementary color.

Mirror





Click on the **Mirror** button to reverse the image (create a mirror image).

Preview Auto-Area



Clicking on this button automatically crops the preview scan area to the previewed document. This will then be the cropping area for all of the scanned documents.

Click on the arrows   at the lower right side of the Preview box to view the front and rear scanned images.

NOTE: The arrows appear in the dialog box only when a duplex scanning method has been selected.

Using **Preview Auto-Area** on batches of mixed-size documents is not recommended because cropping is not performed separately on each document in the batch.

If *Black and White* is selected on the **Image Type** drop-down menu, documents may be cropped to the document content when using **Preview Auto-Area**.

Paper Size



Select a size on the **Paper Size** list of frequently used scan sizes, including business card, 5 x 3 in., 6 x 4 in., Letter, Legal, B5, A5, A4, or your current scan area to perform an immediate selection of your scan size.

Units



The **Units** button indicates the measuring system that is in use (Inch, Cm, or Pixel).

Descreen



Click on the **Descreen** button to access a drop-down menu that allows you to specify the type of document you are scanning in order to eliminate the moiré pattern* commonly found in printed matter. You can specify *Newspaper*, *Magazine*, or *Catalog*.

* Moiré pattern: an undesirable pattern resulting from the incorrect screen angle of the overprinting halftone.


Sharpen



Click on the **Sharpen** button to access a drop-down menu that allows you to specify a level to sharpen the scanned image. You can specify a Sharpen setting of *Light*, *More*, *Heavy*, or *Extra Heavy*.

Color Adjustment



Click on the **Color Adjustment** button to enable the button  for the **Hue / Saturation / Lightness** feature.

NOTE: The **Advanced Settings** button  must be enabled in order to use the **Hue / Saturation / Lightness** feature.

Auto Level



Click on the **Auto Level** button to add shadow to reveal more details in an image.

Advanced Settings



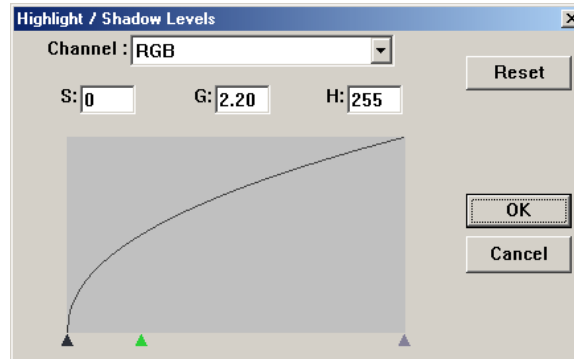
Click on the **Advanced Settings** button to view the advanced settings buttons for *Highlight / Shadow*, *Curves*, *Color Balance*, *Hue / Saturation / Lightness*, *Color Drop-out*, and *Custom Settings* (six buttons on the right side of the dialog box).

Highlight / Shadow



This feature is available when *8-Bit Gray*, *8-Bit Color*, or *24-Bit Color* is selected on the **Image Type** drop-down menu. Highlight refers the lightest point in a scanned image; shadow refers the darkest point.

Click on the **Highlight / Shadow** button to access the Highlight / Shadow Levels dialog box. You can type values in the text boxes or you can place the mouse cursor on the arrow at the bottom of the box, hold down the right mouse button, and drag the arrow to specify the values you want.





(S = Shadow, G = Gamma, H = Highlight)

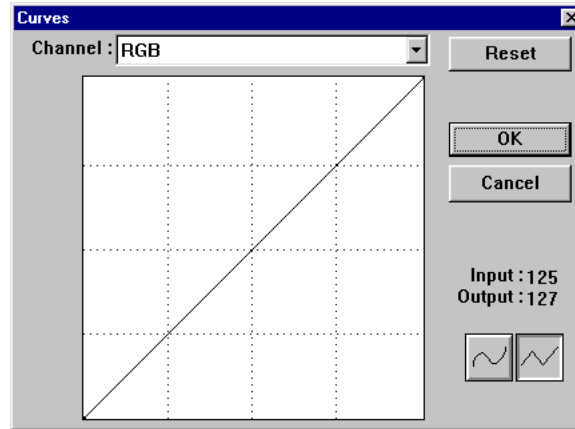
Use the **Highlight** and **Shadow** settings together to extend the range of color and reveal more details in a color image.

Curves



Click on the **Curves** button to access a dialog box that allows you to adjust the midtone of the image without losing details in the lightest and darkest areas.

Select the *Curve* or the *Line* button   on the bottom right of the Curves dialog box, depending on whether you want a curved or an angled setting. Place the mouse cursor over the line, click the right mouse button, and drag the line to set a curve.

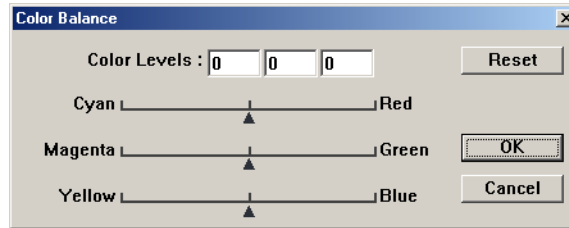


Color Balance



Click on the **Color Balance** button to access a dialog box that allows you to adjust the color of the image so that it comes close to that of the original.

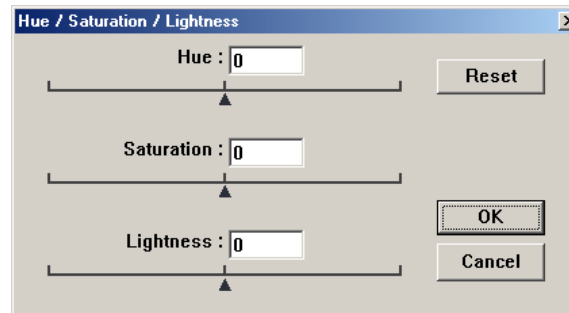
The default parameters are used to adjust the image. You can type values in the *Color Levels* text boxes or you can drag the sliding arrow under the color.



Hue / Saturation / Lightness



Click on this button to access a dialog box that allows you to adjust the hue, saturation, and lightness of an image.



Hue—specify a value in the **Hue** text box or click and drag the sliding arrow under the box to adjust the hue up to 360°.

Saturation—specify a value in the **Saturation** text box or click and drag the sliding arrow under the box to adjust the saturation level of the color.

The level of saturation indicates whether the color is pale or rich.

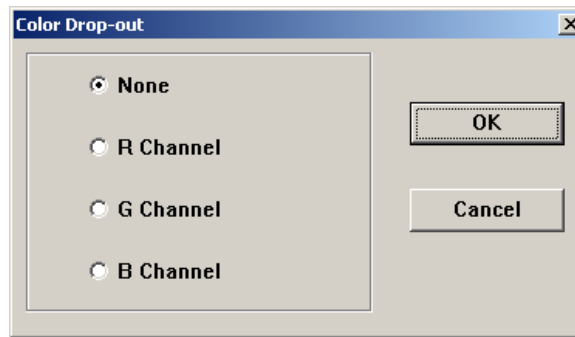
Lightness—specify a value in the **Lightness** text box or click and drag the sliding arrow under the box to adjust the color strength.

NOTE: Click on the **Color Adjustment** button  to enable the Hue / Saturation / Lightness button.

Color Drop-out



This feature is available when *Black and White*, *Halftone*, or *8-Bit Gray* is selected on the **Image Type** drop-down menu. Click on the **Color Drop-out** button to access a dialog box that allows you to choose to remove the R (Red), G (Green), or B (Blue) color channel while scanning.



For example, if your image contains red text or a red background, choose **R channel** (red) to remove the red text or red background.

This feature is applicable only for black-and-white and grayscale images. Make sure that you have selected a black-and-white or grayscale image type (on the **Image Type** drop-down menu) when you use this option.

Tip

Increasing the brightness after removing one of the color channels will make the image clearer.

Custom Settings

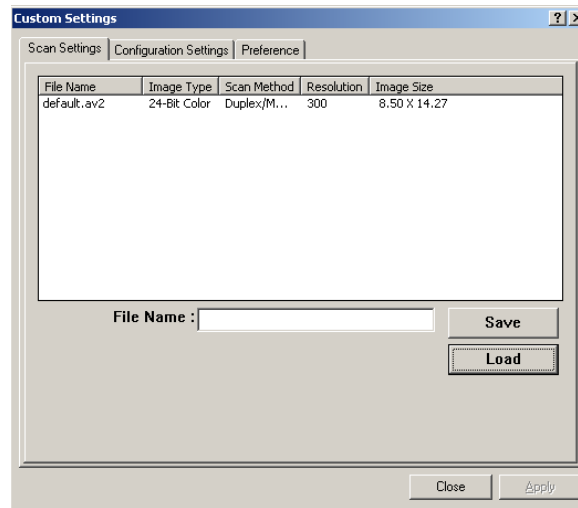


Click on the **Custom Settings** button to access a dialog box where you can save your scan and configuration settings, select a black or white scanning background, and specify an overscan value.

There are three tabs in the Custom settings dialog box: Scan Settings, Configuration Settings, and Preference.

Scan Settings

The Scan Settings tab in the Custom Settings dialog box allows you to save your scanning feature settings in a file, load an existing file, or delete an existing file.



Saving a scan settings file

Type a name for your settings in the **File Name** text box and click on the **Save** button. Your settings will be saved and the file name will appear in the list box.

Using a scan settings file

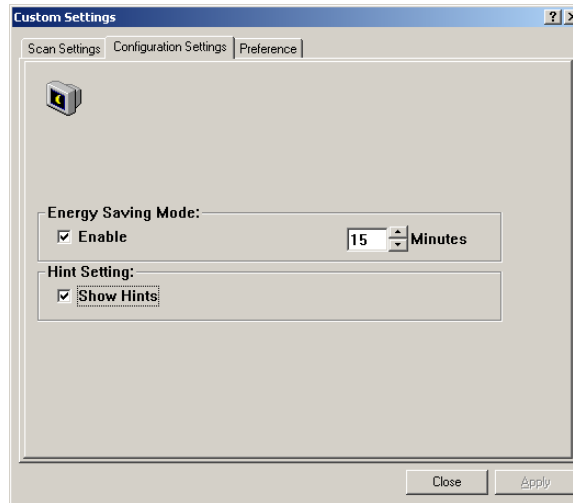
You can use an existing settings file. Right-click on the file name for the settings you want to use and click on the **Load** button. The settings in the file will automatically be specified in the scanning features dialog box.

Deleting a scan settings file

Right-click on a file name and press the **Delete** button on the computer keyboard to delete the file. You cannot delete the default scan settings file *default.av2*.

Configuration Settings

The Configuration Settings tab in the Custom Settings dialog box allows you to customize some special settings.

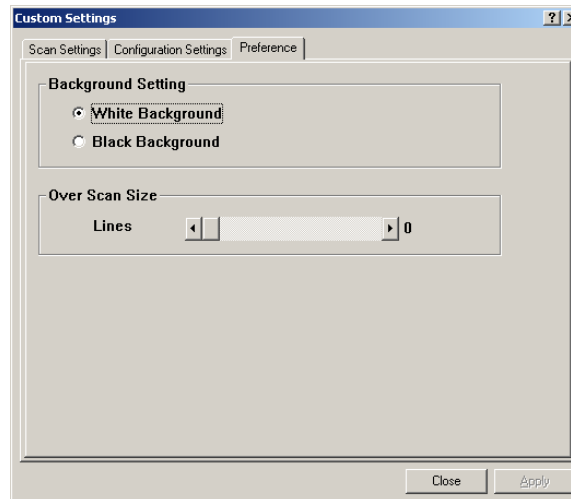


Energy Saving Mode—check the **Enable** box to enable automatic lamp shut-off. Specify a time delay of 1 to 60 minutes in the **Minutes** box. This is the amount of time that the scanner will wait before shutting off the lamps after the last scan operation. Click on the **Apply** button to save the changes.

Hint Setting—check the **Show Hints** box if you want to have flags showing feature names appear when you place the mouse cursor on features in the dialog box. Click on the **Apply** button to save the changes.

Preference

The Preference tab in the Custom Settings dialog box allows you to select the scanning background and an overscan parameter.



Background Setting—allows you to specify the background against which you wish to scan. Scanning against a black background allows you to use deskew and auto-crop functions in downstream software such as KODAK Capture Software.

Over Scan Size—allows you to add a specified number of lines before and after the edge of the image to reduce the possibility of corner clipping on skewed images. This function allows you to use deskew and auto-crop functions in downstream software such as KODAK Capture Software. Drag the **Lines** sliding control bar to specify an overscan number from 0-118. The default is "0." The maximum width of an overscan image is 216 mm (8.5 in.).

Other tools

In addition to the image enhancement options, the dialog box contains the items described below.

Width

Shows the current image width. Enter a custom value in the **Width** box.

NOTE: If you manually change the width value with **Lock scale** enabled, the value in the **Height** box will automatically change proportionally.

Height

Shows the current image height. Enter a custom value in the **Height** box.

NOTE: If you manually change the height value with **Lock scale** enabled, the value in the **Width** box will automatically change proportionally.

Size

Shows the current file size of the scanned image.

Lock scale



Click on the **Lock scale** button to enable lock scaling, which keeps the scanning width and height proportional to the paper size selected in the **Paper Size** setting.

When **Lock scale** is enabled and you manually change the value in the **Width** box, the value in the **Height** box will automatically change proportionally, and vice versa.

Information



Click on the **Information** button to access information about the scanner and driver.


Starting the final scan

The buttons shown below allow you to begin scanning or to exit the job.

Preview

Click on the **Preview** button to scan a document so you can review the scanned image. This allows you to specify an area to be scanned and any scanning feature settings to be used for future scans. When a scanning feature is changed and applied, the Preview image is updated for a real-time view of the change.

You can define the area to be scanned by dragging the cursor lines with the mouse.

Click on the arrows  at the lower right side of the Preview box to view the front and rear scanned images.

NOTE: The arrows appear in the dialog box only when a duplex scanning method has been selected.

Zoom View

Click on the **Zoom View** button to view a selected area.

Scan (TWAIN)

Click on the **Scan** (TWAIN) or **OK** (ISIS) button to scan the area with the specified parameters.

OK (ISIS)

You can define the area to be scanned by dragging the cursor lines with the mouse.

Exit

Click on the **Exit** button to cancel the current job.

Maintenance

The scanner is designed to be maintenance free. However, it must be cleaned occasionally to ensure optimum image quality and performance. Clean the scanner when it does not feed documents smoothly or if multiple-sheet feeding occurs.

For best scanner performance, clean the glass scanning areas and the feed module and rollers at least once per week. Use only these cleaning materials:

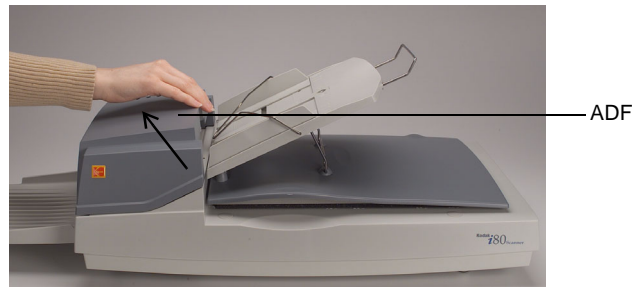
- Kodak Digital Science Roller Cleaning Pads (CAT. No. 853-5981)
- Staticide Wipes for KODAK Scanners (CAT. No. 896-5519)

IMPORTANT: Staticide Wipes contain isopropanol which can cause eye irritation and dry skin. Wash your hands with soap and water after performing maintenance procedures.

Use of other cleaning materials could damage your scanner.

Opening the ADF

1. Grasp the ADF with one hand.

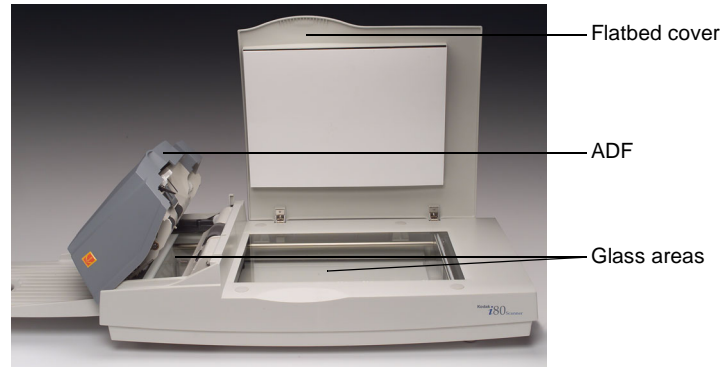


2. Lift up the ADF to open it.

The feed module, scanning glass areas, and feed rollers are visible.

Cleaning the glass scanning areas

1. Open the flatbed cover and the ADF.

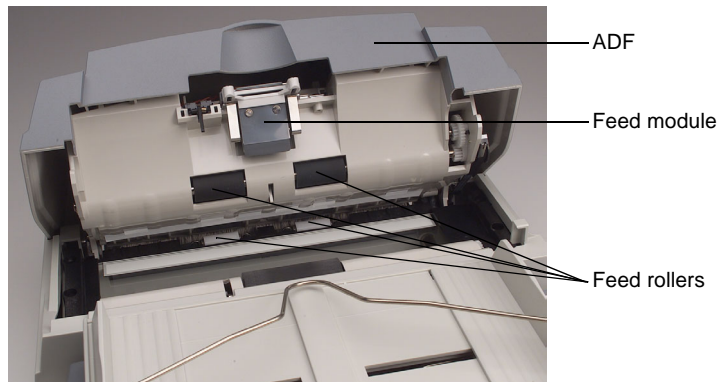


2. Wipe the flatbed platen glass with a **fresh** Staticide Wipe.
3. Wipe the flatbed platen glass with a **dry** Staticide Wipe.
4. Wipe the scanning glass in the ADF with a **fresh** Staticide Wipe.
Wipe from one side to the other.
5. Wipe the scanning glass in the ADF with a **dry** Staticide Wipe.
6. Close the ADF and flatbed cover.
The scanner is now ready for use.

Cleaning the ADF

The feed module and the feed rollers in the ADF may become contaminated with ink, toner, and paper dust. This can cause document feeding problems.

1. Open the ADF.



2. Wipe the feed module with a **fresh** Roller Cleaning Pad.
3. Wipe the feed module with a **dry** Roller Cleaning Pad.
4. Wipe the feed rollers with a **fresh** Roller Cleaning Pad from side to side and top to bottom.

Rotate the rollers by hand as you clean them. Be careful not to snag or damage the springs.
5. Wipe the feed rollers with a **dry** Roller Cleaning Pad from side to side and top to bottom.

Rotate the rollers by hand as you dry them. Be careful not to snag or damage the springs.
6. Close the ADF.

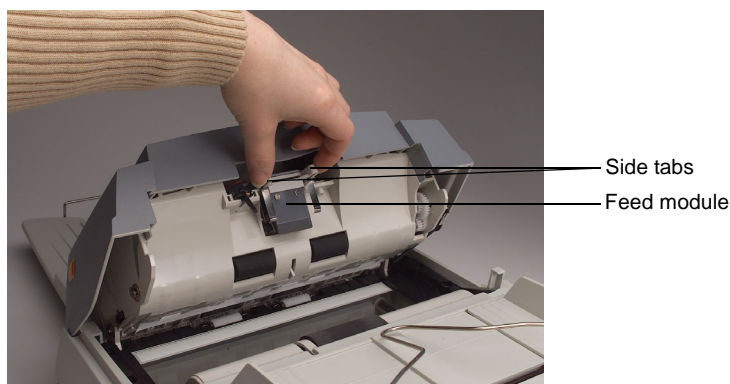
The scanner is now ready for use.

Replacing the feed module

After approximately 100,000 pages have been scanned through the ADF, the separation pad on the feed module may become worn and cause document feeding problems. In this case, you should replace the feed module.

Four replacement feed modules are included with your scanner. To order more feed modules, consult your dealer (order KODAK Feed Module for Scanners i50/i60/i80; CAT. No. 162-3362).

1. Open the ADF.
2. Remove the feed module by squeezing the side tabs on the module and pulling it out.



3. Insert a new feed module.
4. Slide the feed module into position until it clicks into place.
5. Close the ADF.

The scanner is now ready for use.

Troubleshooting

The scanner automatically performs a simple self-test each time it is powered up. This helps spot major system errors in the scanner itself. When the self-test is initiated, the READY light flashes. When the self-test has completed and no error has occurred, the READY light is steadily illuminated.

Occasionally, you may experience a problem with your scanner. In many cases, you can easily fix the problem yourself. Refer to the following chart for some common problems and their solutions.

Problem	Solution
The light indicates that the scanner is ready, but the scanner does not respond to the scan command from the host computer.	<ul style="list-style-type: none">• Verify that the cable is plugged in, then invoke the scan command again. If there is still no response, reset the scanner by turning it off, then on again. Reboot the host computer.• Verify that the driver is correctly installed.
The red error light is illuminated or is flashing after the scanner's power cycle.	<ul style="list-style-type: none">• The scanner self-test has failed. Reset the scanner by turning it off, then on again. If the problem persists, contact service.
The red error light is illuminated while scanning.	<ul style="list-style-type: none">• The scanner has jammed or a multifeed has been detected.• There is a hardware problem. Reset the scanner by turning it off, then on again. If the problem persists, contact service.
Paper becomes jammed during scanning.	<ul style="list-style-type: none">• Open the ADF and pull out the jammed paper. Close the ADF.
More than one sheet of paper was fed into the scanner (a multifeed).	<ul style="list-style-type: none">• Flatten document corners and edges. Fan the paper before you load it in the ADF input tray.• Check the feed roller condition. Clean the rollers, if necessary.
Paper becomes skewed in the scanner.	<ul style="list-style-type: none">• Check the feed roller condition. Clean the rollers, if necessary.• Use the paper guides when feeding documents.
When the scanner is powered up, it makes noise and does not come to the READY state.	<ul style="list-style-type: none">• The shipping switch was not unlocked. Unlock it.• The scanner is not located on a level surface. This may cause the scanner to function improperly.
You can specify an image from the scanner, but the scanner or computer crashes when scanning.	<ul style="list-style-type: none">• Verify that the cable is plugged in.• Only two SCSI terminators can be connected to the SCSI daisy chain: one is at the end of the SCSI device and the other is already in the host adapter.

Problem	Solution
When the scanner is powered up, the lamp does not light.	<ul style="list-style-type: none"> • The lamp has burned out. Contact service. Lamp life is about 15,000 hours. • If the power light on the ADF is flashing, the power adapter is malfunctioning or the main board has short-circuited. Contact service.
The scanned image is too dark.	<ul style="list-style-type: none"> • Modify the Curves setting to 2.2 and 1.8 for your printer and monitor, respectively. • Use the Brightness setting to get a brighter image.
The scanned lines of <i>Black and White</i> images seem much thicker than those of the original.	<ul style="list-style-type: none"> • Use the Brightness or Threshold setting to adjust <i>Black and White</i> images.
The color image quality is not acceptable	<p>Color image quality is highly subjective. Here are some things to consider when scanning in color:</p> <ul style="list-style-type: none"> • The differing color gamuts of capture, display, and output devices can affect color perception. Computer monitor displays and printer output can vary from model to model and from manufacturer to manufacturer. An image may be acceptable on one monitor and unacceptable on another. • Area lighting (fluorescent, natural, incandescent) can affect color perception. • The appearance of a colored area within an image can be perceived differently, based on what surrounds it. • The characteristics and condition of a document can have an impact on color consistency. • Color requirements may differ between environments (e.g., in a business document environment, images are generally viewed on a monitor, whereas in a "print on demand" environment, scanned images are printed.) • Make sure that the ADF and the glass areas are clean before scanning.

Getting service

If you believe that your scanner needs service, go to the web site at www.kodak.com/go/docimaging. There you can find out how best to obtain service for your scanner.

Equipment disposal

The i80 Scanner contains lead in the circuit board and mercury in the lamp. Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or visit the Electronics Industry Alliance web site at www.eiae.org.

Scanner supplies

Order scanner supplies from your dealer.

Item	Catalog Number
KODAK Feed Module for Scanners i50/i60/i80	162-3362
Staticide Wipes for KODAK Scanners	896-5519
<i>Kodak Digital Science</i> Roller Cleaning Pads	853-5981

Specifications

Scanner type	ADF/flatbed desktop duplex color scanner
Optical resolution	600 dpi
Scanning output	24-bit (RGB) color, 8-bit grayscale, or 1-bit bitonal
Light source	Cold cathode fluorescent lamp
ADF capacity	75 sheets of 16 lb. bond or 50 sheets of 20 lb. bond
ADF scanning speed	35 ppm (200 dpi, B&W mode, ADF) 27 ppm (200 dpi, grayscale mode, ADF) 20 ppm (150 dpi, color mode, ADF) NOTE: Results may vary depending on your scanning application and computer processor speed.
Scan area	ADF 94 x 140 mm (3.7 x 5.5 in.) minimum 216 x 356 mm (8.5 x 14 in.) maximum Flatbed up to A4 size (8.3 x 11.7 in.)
Electrical requirements	Voltage 100-240V Frequency 50 to 60 Hz
Scanner power	Voltage / Current: 24 Vdc / 2.0 A, max.
Power source	Sino-American model SA60-24 (provided with the scanner) <i>IMPORTANT: Do not substitute another power supply model or another manufacturer's power supply.</i>
Power consumption	< 48 watts
Host connection	Interface SCSI-2 SCSI Ports 1 - 50 contact receptacle (Amphenol-style) 1 - DB25-style female, 25 socket Termination internal/external (switch selectable)
Operating temperature	5 to 35 °C
Storage temperature	-40 to 60 °C
Humidity	20 to 80% RH
Dimensions	Without output tray: 567 x 350 x 199 mm (22.3 x 13.8 x 7.8 in.) With output tray: 833 x 350 x 199 mm (32.8 x 13.8 x 7.8 in.)
Weight	7.2 kg (15.9 lb.)

All specifications are subject to change without notice.

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