

Kodak

i800 Series Scanners

Installation Planning Guide

A-61176

Safety Information for Users of the *Kodak i800 Series Scanners*

IMPORTANT: Equipment shall be installed by qualified personnel.

WARNING: Dangerous voltage. Disconnect the main power before installation.

WARNING: Before changing a lamp, always power down the scanner and let it cool a minimum of 10 minutes before proceeding (see *Warning Labels* below).



CAUTION: Hot surface, avoid contact

ATTENTION: Eviter le contact, pieces brulantes

VORSICHT: Heisse Oberfläche, Berührung vermeiden

ATTENZIONE: Superficie molto calda, evitare il contatto

ATENÇÃO: Superficie quente. Evite contacto

PRECAUCIN: Superficie caliente. No Tocar

LET OP: Heet oppervlak, contact vermijden

ATENÇÃO: Superfície quente. Evitar o contacto

注意：表面が熱くなっていますので、触れないでください。

注意：移动部件，请勿接触

注意：請勿觸摸表面，小心燙手

إحذر: سطح ساخن، تفادي الإحتكاك

POZOR: Horký povrch - nedotýkat se

DİKKAT: Sıcak yüzey, dokunmayın



CAUTION: Moving parts, avoid contact

ATTENTION: Eviter le contact, pieces en mouvement

VORSICHT: Bewegliche Teile, Berührung vermeiden

ATTENZIONE: Parti in movimento, evitare il contatto

ATENÇÃO: Partes em movimento. Evite contato

PRECAUCIN: Piezas móviles. No Tocar

LET OP: Bewegende delen, contact vermijden

ATENÇÃO: Peças em movimento. Evitar o contacto

注意：稼働中の部品には手を触れないでください。

注意：移动部件，请勿接触

注意：請勿觸摸正在移動的部分

إحذر: أجزاء متحركة، تفادي الإحتكاك

POZOR: Pohybující se části - nedotýkat se

DİKKAT: Hareketli parçalar, dokunmayın

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.

Supervisors should review their practices and make compliance with these precautions a part of the job description for operation of the *Kodak i800 Series Scanners* or any mechanical device.

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.

ElectroMagnetic Compatibility Statements

United States

NOTE: 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 frequency 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.

Taiwan

警告使用者：

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

Japan

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妨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。

Kodak i800 Series Scanners

Introduction

The *Kodak* i800 Series Scanners are a new high speed, dual stream scanning platform consisting of four different models providing advanced image processing and superior throughput. The i800 Series Scanners are designed to handle mixed document batches for any production scanning workflow.

Four configurations are available:

- ◆ *Kodak* i810 Scanner (bi-tonal)
- ◆ *Kodak* i820 Scanner
- ◆ *Kodak* i830 Scanner (bi-tonal)
- ◆ *Kodak* i840 Scanner

This manual provides site specification and installation information for the *Kodak* i800 Series Scanners (all models). Information that is pertinent to a specific model will be noted.

Site specifications

Check that the designated site for the *Kodak* i800 Series Scanners meets the following conditions and space requirements.

Layout considerations

The following should be considered when selecting a site for the i800 Series Scanners:

- Position the scanner to allow for:
 - Clearance space between other equipment and doorways.
 - A maximum distance of 5 feet (1.5 meters) from the scanner to the power outlets.
- Position the scanner away from:
 - Potential flooding and dampness areas, especially in basement areas.
 - Open flame, excessively dusty areas or direct sunlight.
 - Any combustible or corrosive atmosphere caused by volatile liquids or solvents.
 - Heat sources, such as windows, baseboard heating units, heat ducts, space heaters, or any heat-generating equipment.
 - Transmitted interference, such as that generated by electronic air cleaners, communication transmitters, radar (FAA and military), or power lines.
- Locate air conditioning outlets so the scanner will receive optimum air circulation.
- Establish an entry point for the SCSI cable to avoid laying it across the floor or passageway.
- Avoid carpets and any static-generating areas.

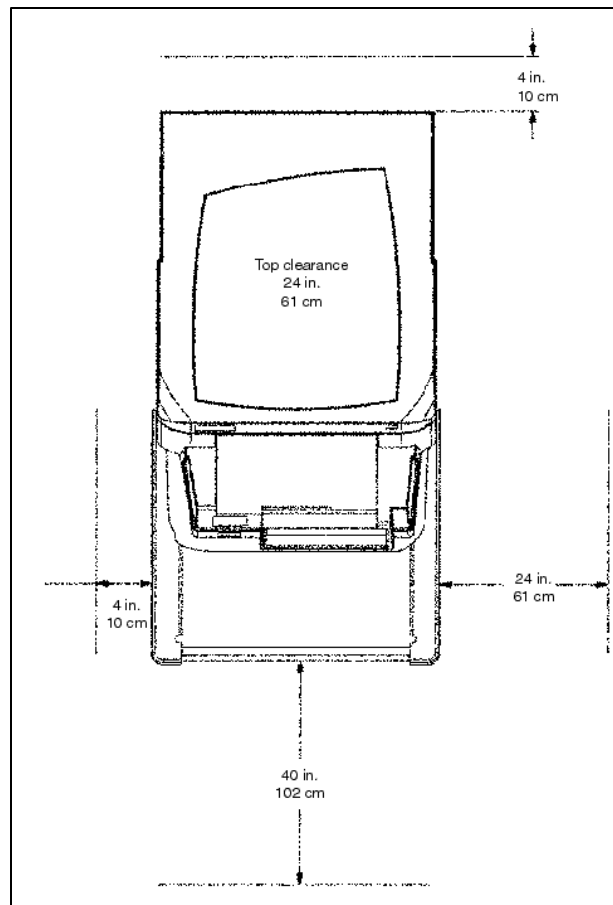
Dimensions and weight

Following are the physical dimensions and weight for the i800 Series Scanners (without shipping material).

- Height:** 124 cm (49 in.)
- Width:** 66 cm (26 in.)
- Depth:** 127 cm (50 in.)
- Weight:** 204 kg (450 lbs) including packaging
188 kg (414 lbs) without packaging

Space requirements

Place the i800 Series Scanner in a location where there is sufficient space to allow for proper air flow and access for maintenance and repairs. The following diagram illustrates the minimum space required for operation and maintenance.



Minimum Clearances around the scanner

	Front	Rear	Right Side	Left Side	Top
Normal Operation	N/A	4 in. 10 cm	4 in. 10 cm	4 in. 10 cm	10 in. 25 cm
Maintenance	40 in. 102 cm	4 in. 10 cm	24 in. 61 cm	4 in. 10 cm	24 in. 61 cm

Operating requirements

The scanner can operate in a typical office environment under the following conditions:

Temperature range: 15 to 35°C (59 to 95°F)

Relative humidity: 15 to 76% (dry bulb)

Altitude: Up to 2438 meters (8000 feet)

Static electricity — buildup of static electricity near the i800 Series Scanners may cause operating problems. If the area is carpeted, it is recommended that the carpet is treated with an anti-static material or a conductive static mat is used.

Electrical requirements

Following are the electrical requirements for the *Kodak* i800 Series Scanners.

Connections

The scanner has a SCSI port for connection to the host computer.

The customer/system integrator **MUST** provide the SCSI cable used to connect the scanner and host computer. This cable is not included with the scanner.

- Maximum cable length is 19.7 ft (6 m).
- The cable must be shielded with a high density, 68-pin, male connector at the end that connects the scanner. For example, Adaptec ACK-LVD-3M or equivalent.
- For details on SCSI cable specifications, refer to SCSI-3 Working Draft SCSI Parallel Interface – 4 (SPI-4) January 2001.

Line voltage and frequency

Acceptable operational voltage:

100-127 V, 6.5 A, 50/60 Hz

200-240 V, 3.5 V, 50/60 Hz

The scanner is shipped with a package of line cords to accommodate all worldwide installations.

CAUTION: Make certain nothing obstructs or is placed on power cords. Do not use extension cords; they can cause voltage loss. This may result in unreliable equipment performance or equipment damage.

Four outlets are required:

- One individual dedicated branch AC circuit employing two standard 3-prong, grounded duplex outlets. These outlets are designated for the scanner and service diagnostic equipment.

The outlets should meet the following standards:

- Amperage: 15 amp
- Wire size: 12-gauge
- Phase: 1 (single)
- Receptacle: NEMA5-15R IG

NOTE: Receptacles should be placed within 5 feet (1.5 meters) of the equipment.

Voltage requirements

- Impedance between neutral and ground wires: less than 2 ohms
- Neutral to ground voltage: less than 1 volt AC maximum
- Voltage drop across circuit breaker: less than 0.1 volts
- Impulse voltage spikes and transients: less than 50% of nominal line voltage
- Surge voltage: less than 5% of nominal line voltage

AC power quality and conditioning

In some locations, even though recommended wiring practices have been followed, the power reaching the scanner may exhibit unstable power quality characteristics. System errors and intermittent data loss could result.

Power conditioning equipment may be required to overcome the power quality problems. Kodak can make arrangements for an on-site power analysis in an area with exceptionally unstable power.

Consult with your electrical contractor or utility company to ensure that on-site wiring complies with the specifications and that wall outlets have isolated grounds and comply with codes.

Environment

Following are environmental considerations:

Heat Dissipation 4009 kj/hour (3800 Btu/hour) maximum

Acoustic noise

- Operator position standby mode:
 - Sound Pressure Level (L_A): 39.8 dB(A)
- Operator position full system operating mode:
 - Sound Pressure Level (L_A): 65.4 dB(A)
 - Instantaneous Peak Values ≥ 130 dB(C) None
- Sound Power Level (L_{WA}):
 - Standby 56.4 dB(A)
 - Full System 72.0 dB(A)

NOTE: All data was measured in accordance with DIN 45635, ANSI S12.10-1985, and ISO 7779 in a hemi-anechoic chamber.

Safety, regulatory conformance, and certifications

The *Kodak* i800 Series Scanners conform to all applicable national and international product safety and electronic emission regulatory requirements. This includes, but is not limited to, the following:

- UL
- CUL (CSA 22.2 No. 950 standard)
- TUV / GS Mark
- C – Tick Mark
- EN 55024
- EN 55022 Class A
- US - FCC, CFR47, part 15, Class A
- Canada - ICES 003, Issue 3, Class A
- Japan - VCCI Class A
- Taiwan - CNS 13438 Class A
- Australia / New Zealand - AS/NZ 3548 Class A
- CE Mark
- Certifying Body Certificate

Grounding requirements

The i800 Series Scanner can be on the same line as the host PC. The power cord must be used with a properly grounded outlet (15 amp duplex outlet). No devices other than the host PC should be on the same outlet as the scanner.

Power extension cords should not be used with the scanner or the host PC.

An uninterruptible power supply is acceptable as long as it meets the minimum power requirements.

Supplies

The following supplies are available. Order them in the United States by calling DI Supply at 1-888-247-1234 or contact your local Kodak Reseller.

Outside of the United States, contact your local Kodak dealer.

Description	CAT No.
Calibration Target (Qty 50)	149 1869
Emulsiclean Wipes (Qty 24)	853 5981
Feeder Consumables Kit for i800 Series Scanners – includes 2 feed modules, 2 separation roller assemblies, 5 pre-separation pads, 50 replacement tires	838 9181
Imaging Guide Set – includes one upper and one lower guide	156 4418
Ink Blotter Kit (Qty 60)	140 1728
Paper Path Cleaners (Qty 50)	169 0783
Printer Ink Cartridge Carrier for i800/3000/4000 Scanners	826 7486
Printer Ink Cartridges for Scanner Series 3000/4000/7000/9000/i800	135 5155
Staticide Wipes (Qty 144)	896 5519
White Imaging Lamp for Scanner Series 3000/5000/7000/i800 (1/carton)	876 6545

System requirements

This section lists the host requirements for the i800 Series Scanners.

The following minimum software and hardware requirements for an i800 Series Scanner is needed to achieve duplex, single-stream throughput (bi-tonal) at rated speed.

Operating Systems: Windows 98, Millennium, NT, 2000, XP

- Single Processor PC
- Pentium 2 — 400 MHz CPU
- 128 MB of RAM (memory)
- 29160 SCSI Adapter or equivalent (Ultra2 Wide SCSI support, with transfer rates up to 80 MB/sec) dedicated to scanner, configured for Synchronous Data Transfers (80MB/sec)

The recommended software and hardware requirements for an i820/840 Series Scanner are:

Operating Systems: Windows 98, Millennium, NT, 2000, XP

- Single Processor PC
- Pentium 4 — 1.5 GHz CPU
- 512 MB of RAM (memory)
- 29160 SCSI Adapter or equivalent (Ultra2 Wide SCSI support, with transfer rates up to 80 MB/sec) dedicated to scanner, configured for Synchronous Data Transfers (80MB/sec)
- 29160 SCSI card or equivalent for SCSI hard drives (Ultra2 Wide SCSI support)
- 2 hard drives: one for the operating system and one for the data (i.e., scanned images). The second drive should be 60GB for storing image data.
- AGP (Advanced Graphics Processor) Video Card with 32MB of video RAM, supporting Direct X

The recommended requirements for the i820/840 are needed to achieve dual-stream at the rated throughput.

Testing was done with Kodak's Scan Validation Tool using 200 dpi color and 200 dpi bi-tonal dual stream duplex, letter/A4/landscape while viewing every image. Both the TWAIN Data Source and ISIS Driver were tested.

For PCs running Windows 2000 or Windows XP using Adaptec SCSI cards, reference the Adaptec website (www.adaptec.com) for the most up-to-date version of the SCSI device driver.

SCSI host adapter BIOS should be set to "Disabled: scan bus".

Delivery/installation

The period between the placement of the order and the installation of the equipment may vary. During this time, you should prepare the installation site. This will help prevent unexpected problems on installation day.

NOTE: All site preparation should be completed in advance of the equipment delivery.

Kodak must be notified in advance of any special site requirements. These requirements include special delivery procedures, time restrictions and security clearance.

Inspecting shipment

The customer is responsible for inspecting the shipment and signing the Bill of Lading. The following inspections should be performed:

- Check for complete shipment
- Inspect the carton(s) for damage
- Check for signs of pilferage
- Note any concerns and sign the Bill of Lading

Partial shipment — when the shipment arrives, check the number of pieces against the number of pieces specified in the Bill of Lading. If a portion of the shipment is missing, this must be noted in the *Exceptions* column on the Bill of Lading. The driver should sign the same *Exceptions* column on the customer copy of the Bill of Lading. A copy of the Bill of Lading must be retained for claims purposes.

Inspection of cartons — while the equipment is still crated, carefully inspect each carton for signs of damage. Examples of shipping damage include:

- Cuts
- Dents
- Crushed cartons
- Punctures
- Scrapes
- Wet cartons (including those that were wet but have dried out and have watermarks)

Signs of pilferage — if any carton shows signs of pilferage at the time of receipt, (i.e., the carton was opened, resealed, torn, or had a hole at the time of delivery), the customer should also state this in the *Exceptions* column on the Bill of Lading.

Signing the Bill of Lading — inspect all cartons before signing the Bill of Lading. The exceptions should be reviewed with the driver, the driver should sign the customer copy.

The Field Engineer who installs the scanner is responsible for the following:

- Uncrating the equipment
- Checking for hidden damages

Hidden damage — if the installer discovers damage to the equipment, a claim can still be made (See Claims Process below).

If the installer finds any parts missing, they should notify the appropriate broker to obtain the parts from Distribution.

Claims process

The following steps should be taken before making a claim.

Outside the United States

Contact your local Kodak dealer or Kodak representative.

Within the United States

- Save all packing materials from the carton in question.
- Do not move damaged equipment any farther than necessary (equipment should be moved no farther than an immediately adjacent area).
- Do not attempt any repairs until authorized by Kodak's Equipment Customer Relations in Rochester, New York.
- Obtain and keep a copy of the Bill of Lading.
- If possible, take photographs of damages.

Either you or the installer should notify Kodak's Equipment Customer Relations (1-800-421-6633) in Rochester to handle the claim. Provide the following information when you call:

- Date and time of delivery.
- Estimated value of the damage.

Equipment Customer Relations will notify the carrier. The carrier's claim representative will be dispatched to the customer site for inspection of the damaged merchandise.

NOTE: It is important to report damage immediately. A damage claim must be submitted to the carrier within 15 days of equipment delivery. The carrier is not legally responsible for any claims for equipment loss or damage after 15 days of equipment delivery.

If either you or the installer discovers portions of the shipment damaged or missing after the carrier has left and the Bill of Lading was signed, a claim can still be made.

Either you or the installer should notify Kodak's Equipment Customer Relations (1-800-421-6633) in Rochester to handle the claim. Provide the same information as already noted.

In this case, claims may be made for:

- Fewer pieces delivered than stated on the invoice.
- Concealed damages not evident from carton inspection.
- Missing items in a carton due to pilferage.

There is no minimum value for making a claim.

Equipment delivery/ removal survey

An Equipment Delivery/Removal Survey is not required by Kodak Distribution for the i800 Series Scanners. If your site has unique or difficult installation considerations, your Kodak representative must complete the Equipment Delivery/Removal Survey.

Training

The integrator or his/her representative will conduct training for the key operator. A Sales and Customer Training CD, A-5611, is included with the *Kodak* i800 Series Scanner. This CD includes the *Kodak* i800 Series Scanner User Interface Software, PDF files of supporting user documentation and a training program.

Additional training CDs are available by calling: 1-888-247-1234.

Publications

In addition to this Installation Planning Guide, the following manuals are available (1-888-247-1234) for the *Kodak i800 Series Scanner*:

- User's Guide, A-61169 — hard copy
- Quick Reference Card, A-61171 — hard copy
- Image Processing User's Guide, A-61172 — PDF file available on CD

Installation Warning and Disclaimer

In the event the customer's host computer does not meet Kodak's specifications, customer acknowledges that the i800 Series Scanners may not operate as efficiently and effectively as possible.

KODAK WILL NOT BE RESPONSIBLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES RESULTING FROM THE SALE, INSTALLATION, USE, SERVICING OR IMPROPER FUNCTIONING OF THIS PRODUCT, REGARDLESS OF THE CAUSE. SUCH DAMAGES FOR WHICH KODAK WILL NOT BE RESPONSIBLE, INCLUDE, BUT ARE NOT LIMITED TO, LOSS OF REVENUE OR PROFIT, LOSS OF DATA, DOWNTIME COSTS, LOSS OF USE OF THE PRODUCT, COST OF ANY SUBSTITUTE PRODUCT, FACILITIES OR SERVICES OR CLAIMS OF CUSTOMERS FOR SUCH DAMAGES.

New Equipment Warranty ³/₄ United States and Canada

On-site Terms and Conditions ³/₄ United States and Canada

Kodak warrants that these products are:

- Free from defects in materials and workmanship, and
- will function properly for a period of 90 (ninety) days from date of purchase.

The warranty rights shall survive resale of these products.

New equipment warranty coverage is available for DI products located within the contiguous United States; Oahu, Hawaii; Anchorage, Alaska In Canada, coverage is available within 325 road Km of a Kodak Service City; excluding Yukon and Northwest Territories, Northern Quebec, Labrador, and other remote areas. Generally, all items of the system that are mechanically, electronically, or remotely interconnected, as well as, all items of software that interface or are networked together, must be inspected, tested and adjusted as one operating unit to diagnose and correct malfunctions effectively.

1. Coverage

Kodak will provide telephone support and perform on-site maintenance, including any adjustments and/or replacement of parts (except supply items and consumables as referenced in the Product Operator Manual), required to maintain equipment in an operating condition which is consistent with Kodak's specifications.

2. How to Obtain Service

Call Kodak's Customer Support Center. The Kodak K-number (located on the equipment) must be provided.

USA call: 1 (800) 356-3253

Toronto, Canada: (416) 766-8233

All other areas of Canada call: 1 (800) 465-6325

3. Days and Hours of Coverage

Coverage is not provided on National holidays; in the USA: New Years, Memorial, Independence, Labor, Thanksgiving and Christmas days, in Canada: New Years, Canada, Victory, Labour, Thanksgiving and Christmas days. Service outside Coverage Hours is provided on a Best Effort basis and at prevailing Kodak Per Call rates.

Coverage Hours: This warranty covers service during Kodak's normal working hours, usually 8:00 a.m. to 5:00 p.m. customer local time, Monday through Friday.

4. Response Time

Kodak's objective is to provide on-site service, during Kodak's normal working hours, within the following time frames:

In the USA

Distance from Kodak Service City	Within Contract Hours
Zone 1 (0 to 25 Miles)	4 Hours
Zone 2 (26 to 50 Miles)	6 Hours
Zone 3 (Over 50 Miles)	Next Business Day

In Canada

Road Distance from Kodak Service City	Within Contract Hours
Zone 1 (0 to 80 Km))	4 Hours
Zone 2 (81 to 160 Km)	6 Hours
Zone 3 (161 to 325 Km)	12 Hours
Beyond 325 Km	Not Applicable

5. Services Not Covered

Services not described above, if available, may be at additional cost. These include but are not limited to:

- A. Operating System (e.g., database maintenance and recovery, product integration, application support).
- B. System Administration (e.g., system restarts, error monitoring and reporting, basic system matters including restoring the database).
- C. Network System Administration (e.g., installation of new software packages, maintain user and group accounts, solve network problems, perform system maintenance functions, monitor network, install application software, maintain configuration).
- D. Consultation services.
- E. Software Version releases.
- F. Configuration services.
- G. Customer training.
- H. Customer requested on-site support when the cause of a problem is not the responsibility of Kodak.

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