

# ***Nikon***

**IX240 Film Adapter**

**IA-20**

**Reference Manual**

## Cautions

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### Symbol

The  symbols in this manual signify important safety precautions. All passages marked with this indication should be read prior to installation to prevent injury to yourself or to others. These indications are also placed in the table of contents to mark passages that should be read before use.

### Symbol

The  symbols in this manual signify the need for caution when using the products. These indications are placed in sections that should be read before operation to prevent damage to the product.

## Federal Communications Commission (FCC) Radio Frequency Interference Statement

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/television technician for help.

## **CAUTIONS**

### **Modifications**

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Nikon Corporation may void the user's authority to operate the equipment.

### **Notice for customers in Canada**

#### **CAUTION**

This class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations.

#### **ATTENTION**

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

### **Notice for customers in European countries**

#### **ACHTUNG**

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# 1. Overview

Thank you for your purchase of an IA-20 IX240 film adapter. With the IA-20 inserted in the adapter slot of your LS-2000 Nikon film scanner, an entire roll of IX240 film can be previewed and selected frames scanned either singly or all at once. Like the other adapters for the LS-2000, the IA-20 can be inserted while the scanner is on and connected to a computer.

This manual describes the procedures for unpacking, setting up, and connecting the adapter to your scanner. The next chapter, “*Parts and Accessories*,” details the contents of the package and the parts of the adapter. This is followed by “*Installation*,” which describes how to connect the adapter to the scanner. In “*Using the IA-20*,” the procedures for using IX240 film are explained. The final chapter, “*Maintenance*,” gives instructions on how to care for and transport the adapter. Please read all instructions thoroughly to ensure that you can get the most from your IA-20.

The procedures for scanning images with the IX240 film adapter may be found in the software reference manuals provided on the CD-ROM that came with your scanner.

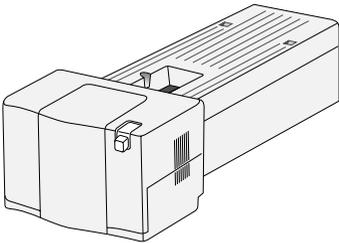
We hope that you find this manual helpful.

## 2. Parts and Accessories

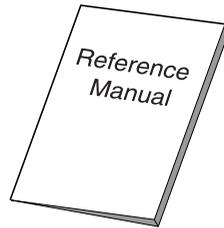
This chapter lists the items packaged with your adapter and identifies the parts of the IA-20.

### 2.1 Package Contents

Purchasers of the IA-20 should find that the package contains all the items listed below. Should you find that anything is missing or damaged, contact your retailer immediately.

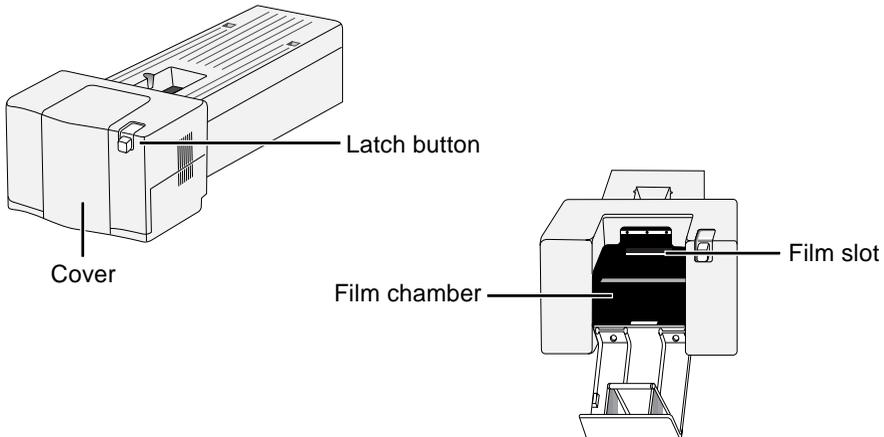


IA-20 IX240 film adapter  
(1)



Reference manual (this manual)  
(1)

### 2.2 Parts of the IA-20



### 3. Installation

Before installing the IA-20, make sure that your scanner is set up as described in the *Fast Track Guide* and reference manual provided with the scanner. The IA-20 should not be used where:

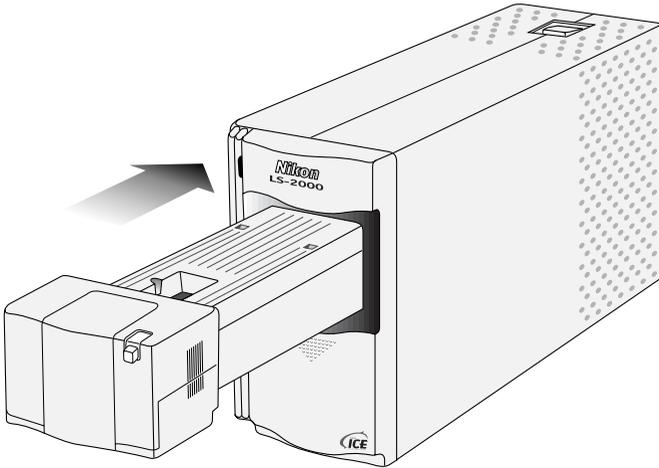
- the temperature exceeds 35°C (95°F) or falls below 10°C (50°F)
- it would be subject to condensation or drastic changes in temperature
- the humidity exceeds 85%
- it would be exposed to direct or reflected sunlight
- it might be subject to vibration or strong physical shocks
- there is a lot of dust
- it would be exposed to radio interference from other electronic devices



**Warning:** *Failure to observe the above precautions could result in fire or in scanner malfunction.*

The IA-20 can be mounted on the scanner whether the scanner is off or on and connected to a computer. Before mounting the adapter while the scanner is on, check that the status LED is glowing steadily. The IA-20 should NOT be inserted or removed while the status LED is blinking.

To insert the adapter into the adapter slot, open the scanner's front cover and slide the adapter in as shown below, stopping when the connector on the rear of the adapter is seated securely in the socket at the back of the slot.



## Cautions

- Wait until the status LED glows steadily or the scanner is off before inserting or removing the adapter. Do not attempt to remove or insert the adapter while the scanner is operating.
- If an adapter does not slide in smoothly, remove it from the adapter slot and try again. Do not use force.

## 4. Using the IA-20

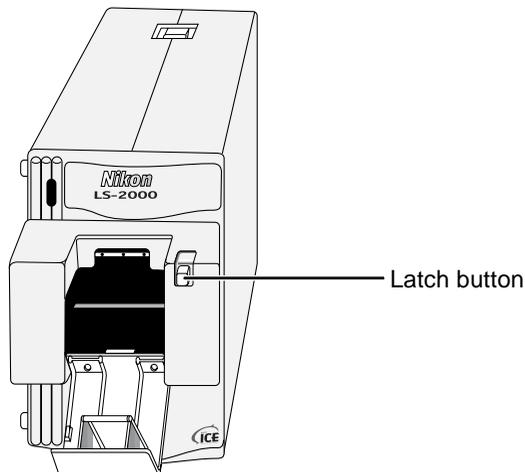
This chapter describes how to insert IX240 film for scanning and how to remove film from the adapter.

### 4.1 Inserting film

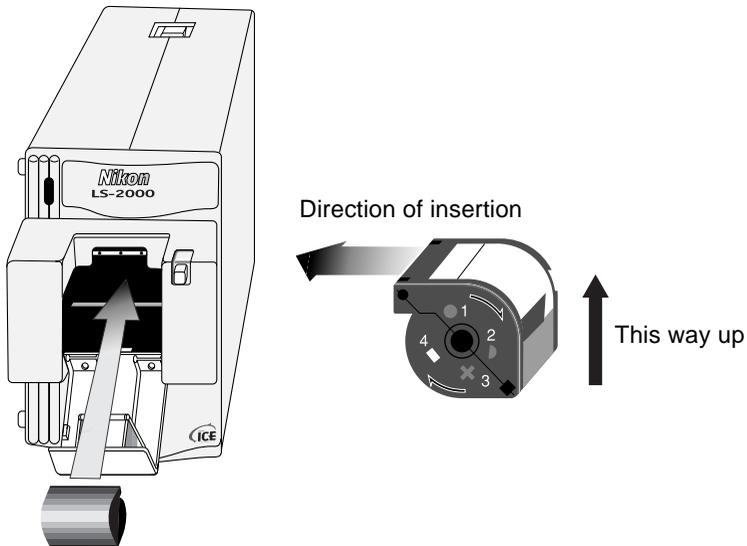
IX240 film must be developed before it can be scanned. To determine whether a roll of IX240 film has been developed, examine the end of the film cartridge where its current status is marked. If there is a white square showing in the fourth box, the film has been developed and can be scanned.



To scan IX240 film, press the latch button to open the adapter cover.



Insert the cartridge in the film chamber as shown below.



Close the cover, pushing it closed until the latch snaps into place. The scanner will automatically feed film from the IX240 cartridge into the scanner. For details on scanning IX240 film, see the software reference manual.

**Note:** *If no operation is performed for several minutes, the film will automatically be wound back into the canister. Film will be fed into the scanner once more when the Nikon Scan scan window is opened or a preview or thumbnail scan is performed.*



## Cautions

- The latch button will lock when film is fed from the cartridge into the scanner. Do not attempt to open the latch until the film has rewound or been ejected as described in “*Removing Film,*” immediately below.
- Do not remove the adapter with film inside and the cover closed. Open the cover and remove the film before replacing the adapter.
- Do not insert undeveloped film in the adapter.
- Do not move the scanner while scanning is in progress.

- The number of times IX240 film can be unwound from the cartridge is limited. When scanning IX240 film, scan as many images in a session as possible to minimize the number of times the film is wound and unwound. If you notice an unusual noise when scanning IX240 film, remove the film as described below and take it to a developer to have a copy made. Use the copy when making further scans.

## 4.2 Removing film

To remove film from the adapter, click the “eject” button () in the Nikon Scan scan window (see the documentation provided with your scanner). Wait until the scanner’s status LED glows steadily, then open the cover and take the film out with your fingers.



### If You Should Notice Anything Unusual

Should you notice an unusual noise, smell, or smoke coming from the adapter or scanner, immediately turn off the scanner and then unplug the power cord. Continued use could result in fire or electric shock. After ensuring that the equipment is no longer smoking, contact your dealer or Nikon representative for information on replacement or repair. Do NOT attempt repairs yourself.

## 5. Maintenance

This chapter describes how to clean, store, and transport the IA-20.

### 5.1 Cleaning

Before cleaning the adapter, remove it from the scanner. The exterior of the adapter is made of plastic, and should not be cleaned with volatile cleaners such as alcohol or paint thinner. Use a blower to blow off dust or wipe the surface with a dry cloth. If this is not sufficient to remove all dirt, clean with a cloth that has been slightly dampened with a neutral detergent or liquid soap.



**Warning:** *Do not use volatile liquids such as alcohol, benzine, or thinner. Should any of these liquids enter the adapter, fire or electric shock could result. Volatile chemicals could also stain the plastic exterior of the adapter.*

## 5.2 Storage

When you do not plan to use the adapter for an extended period of time, remove it from the scanner. Store in a dry, well-ventilated environment, away from electronic equipment such as televisions or radios which produce strong magnetic fields. Do not store the adapter where the temperature exceeds 60°C (140°F) or goes below -20°C (-4°F), or where the humidity is less than 20% or more than 90%.

## 5.3 Transport

When transporting the scanner within the country, remove the adapter from the scanner and pack it in the original packing material.

# 6. Specifications

Film:	Developed IX240 film cartridge
Operating mode:	Connected directly to the connector at rear of scanner adapter slot
Dimensions:	84.0 mm (W) × 207.5 mm (D) × 58.5 mm (H) (3.31" × 8.17" × 3.30")
Weight:	Approx. 270 g (9.6 oz.)
Power supply:	5 VDC, 1.7 A or less, supplied from scanner
Operating environment:	
Operating temperature	+ 10°C to +35°C
Humidity	20% to 85% (no condensation)