

Slide Feeder SF-200 (S)

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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.



Symbol

The  symbols in this manual signify the need for caution when using the product. 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

Dieses Gerät entspricht den Bestimmungen der EG-Direktive 87/308/EEC zur Störungsunterdrückung. Lärmemission kleiner 70 dBA

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I. Overview

Thank you for your purchase of an SF-200 (S) slide feeder for 4000 ED (SUPER COOLSCAN 4000 ED) and LS-2000 (SUPER COOLSCAN 2000) Nikon film scanners. The SF-200 (S), which can hold up to fifty mounts 1.5 mm in thickness, automates the scanning of consecutive 35 mm slides. Like the other adapters for the 4000 ED and LS-2000, the SF-200 (S) 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 feeder to your scanner. The next chapter, "**Parts and Accessories**," details the contents of the package and the parts of the feeder. This is followed by "**Installation**," which describes how to connect the feeder to the scanner. In "**Using the SF-200 (S)**," the procedures for loading and removing slides are explained. The final chapter, "**Maintenance**," gives instructions on how to care for and transport the feeder. Please read all instructions thoroughly to ensure that you can get the most from your SF-200 (S).

The procedures for scanning consecutive slides with the SF-200 (S) 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.

A Note on Nikon Scan

If you are using the SF-200 (S) with LS-2000 film scanners, note that although Nikon Scan version 2.0 supports the SF-200 (S), it does not allow scanned images to be saved automatically. We recommend that you upgrade to version 2.1 or later. To determine the version currently installed on your computer:

- Windows: click the  button in the Nikon Scan applet
- Macintosh: select **About Nikon Scan** from the Apple  menu

For information on upgrading to Nikon Scan 2.1 or later, visit the following URL:

USA: <http://www.nikontechusa.com>

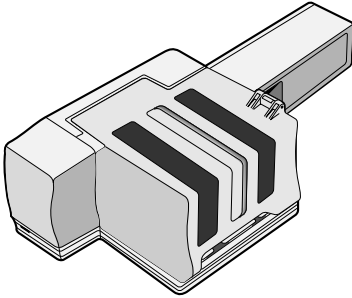
Europe: <http://www.nikon-euro.com>

2. Parts and Accessories

This chapter lists the items packaged with your slide feeder and identifies the parts of the SF-200 (S).

2.1 Package Contents

Purchasers of the SF-200 (S) should find that the package contains all the items listed below. Should you find that anything is missing or damaged, contact your retailer immediately.



SF-200 (S) slide feeder (1)

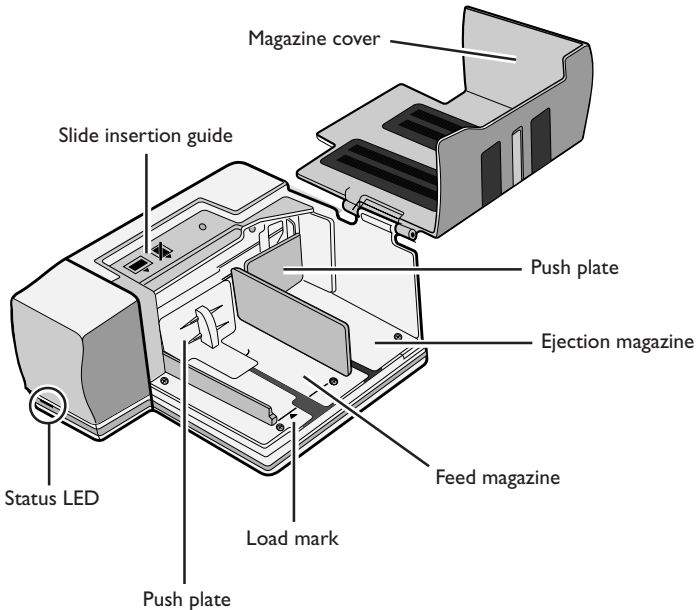


Reference manual (this manual)
(1)



Feed-mechanism
attachment for rounded
slide mounts (1)

2.2 Parts of the SF-200 (S)



3. Installation

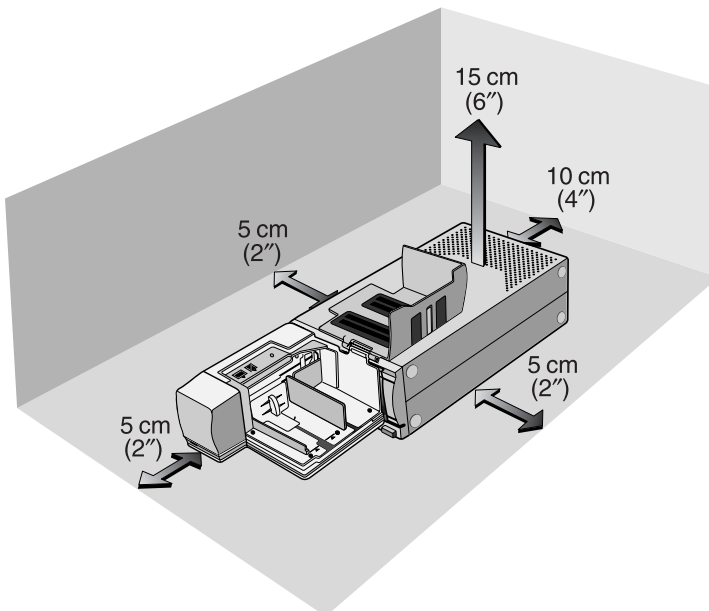
Before installing the SF-200 (S), make sure that your scanner is set up in a suitable location, as described in the documentation provided with the scanner. The SF-200 (S) should not be used where:

- 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
- it would be exposed to water vapor (e.g., from a humidifier)
- it would be exposed to smoke



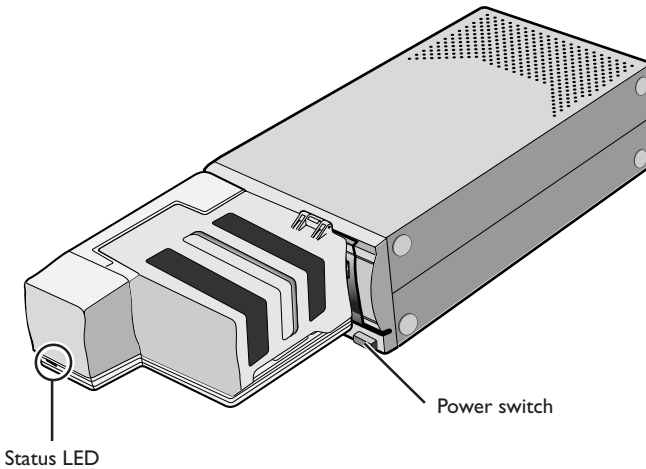
Warning: Failure to observe the above precautions could result in fire or in scanner malfunction.

The scanner must be on its base when the SF-200 (S) is used, and there must be sufficient space around the scanner to allow the magazine cover to open and to ensure adequate ventilation. There should be at least 15 cm (6") of space above the unit and 10 cm (4") open to the rear. Space requirements when the SF-200 (S) is attached are illustrated below.



The SF-200 (S) can be mounted on the scanner whether the scanner is off or on and connected to a computer. If the scanner is on, before mounting the feeder check that the status LED is glowing steadily. The SF-200 (S) should NOT be inserted or removed while the status LED is blinking.

The scanner must be on its base before the SF-200 (S) can be inserted. If the scanner is currently installed on its side, turn the scanner onto its base. Slide the SF-200 (S) into the scanner's adapter slot, stopping when the feeder contacts the back of the slot. The feeder should be oriented as shown below when inserted. Push the feeder until the connector on the rear of the feeder is seated securely in the socket at the back of the slot. The feeder is properly inserted if the status LED on the front of the feeder lights when the scanner is turned on. If the scanner is on when the feeder is inserted, the feeder's status LED will blink to indicate that the feeder has been inserted correctly. In all other respects, the feeder LED functions in the same way as the scanner status LED.



The illustration shows the SUPER COOLSCAN 4000 ED

If the feed mechanism for the SF-200 (S) is not in the initial position when the scanner is turned on, you will need to wait a few seconds for the feed mechanism to return to initial position before inserting slides.

Cautions

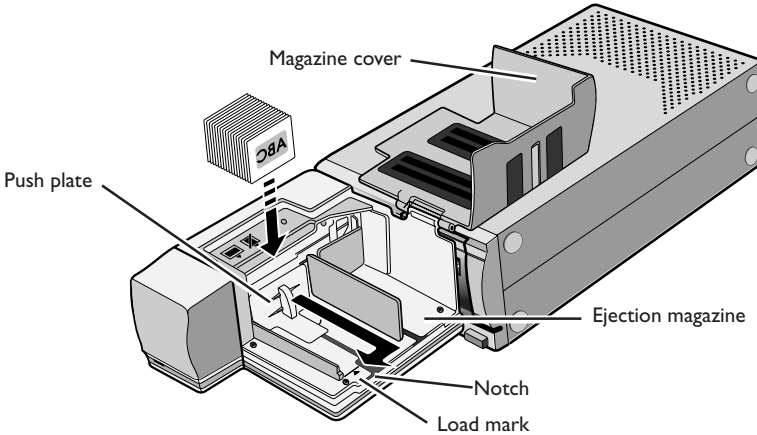
- Wait until the status LED glows steadily or the scanner is off before inserting or removing the SF-200 (S). Do not attempt to remove or insert the feeder while the scanner is operating.
- When the SF-200 (S) is inserted with the power on, or the scanner turned on after the feeder has been inserted with the power off, the feed mechanism will return to the initial position. While this operation is in progress, the status LED on the front of the feeder will blink. Do not perform any operations while the LED is blinking.
- If the feeder does not slide in smoothly, remove it from the adapter slot and try again. Do not use force.

4. Using the SF-200 (S)

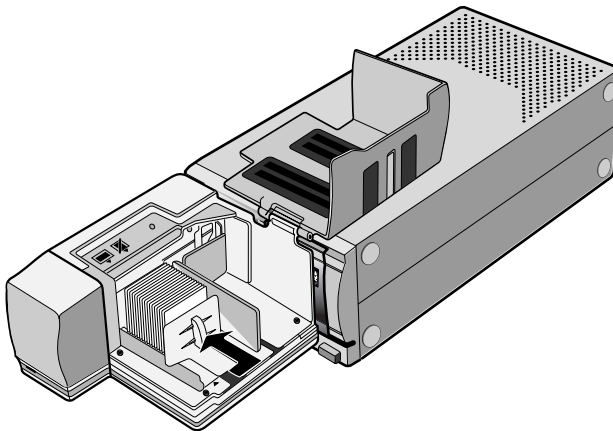
This chapter describes how to load the SF-200 (S), how to remove slides, and how to deal with jams.

4.1 Loading the feeder

Slides to be scanned are inserted in the feed magazine. To load the magazine, open the magazine cover, pull back the feed push-plate to the end of its groove, and hook it in the notch so that it does not spring back to its original position. Place the slides in the magazine with the long end of the aperture up and the emulsion surface facing the push plate (the images in the slides should be reversed when viewed from the magazine side). Scanning will be considerably simplified if the slides are all inserted in the same orientation.



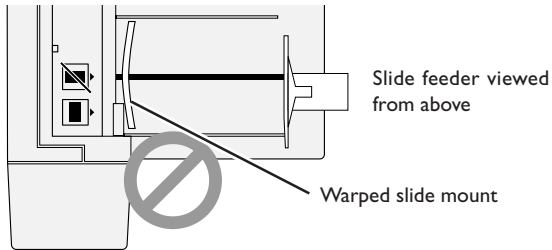
Slides can be loaded into the feed magazine up to the load mark. Do not attempt to fill the magazine past this point. Once the feed magazine is loaded, release the push plate from the notch and slide it back until it rests against the slides.



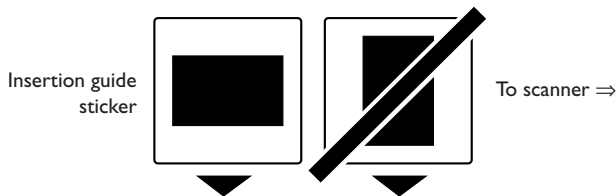
Close the magazine cover. You are now ready to begin scanning. For details on automatic consecutive scanning of multiple slides, refer to the software reference manual.

Cautions

- Slides must be from 1.0 mm to 3.2 mm thick.
- Mounts with rough surfaces could cause the feeder to jam.
- Do not use mounts with peeling or burred edges, mounts to which seals or labels have been affixed, or mounts with sharp corners. Such mounts could jam the feeder or cause problems during scanning.
- The feeder does not function equally well with all makes of slide mount. Makes that have projecting parts or are not of an even thickness may jam in the feeder.
- Avoid slides with warped mounts. Warped slides may jam if placed in the feeder as shown below.



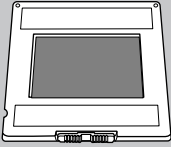
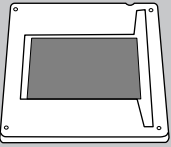
- Do not load slides into the feeder with the longer side of the aperture facing the scanner, as this could damage the film or slide mount or cause the feeder to jam. Insert slides as shown by the insertion guide sticker next to the feed magazine.



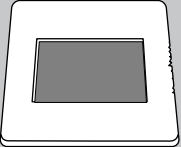
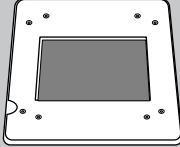
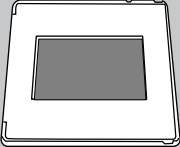
- Do not load slides in the feed magazine past the load mark, as this may cause the feeder to jam.
- Do not move the scanner while scanning is in progress.
- Remove scanned slides from the ejection magazine before the magazine is full. Continuing scanning when there is no room left in the ejection magazine could jam the feeder.
- Do not remove the feeder while scanning is in progress.
- Before turning the scanner off or removing the feeder, make sure that all slides have been removed from the magazine and that the last slide to be fed has been ejected.

✓ Slide Mounts That Can Be Used in the SF-200 (S)

- The following mounts have been tested and approved for use in the SF-200 (S):
GEPE 3mm, GEPE 2mm, bonum, REVUE, AGFA system G, AGFA reflecta CS, Reflecta GR, Kaiser SR, hama fix, ROWI quickslide
- The following mounts can be used only in restricted orientations:

Mount	Cautions
 <p data-bbox="284 596 344 624">WESS</p>	<p data-bbox="561 421 1020 560">Insert the slide with the front (the photograph side) facing the right of the SF-200 (S) (when the feeder is viewed from the front). When the slide-mount adapter is used, slides can be inserted facing either direction.</p>
 <p data-bbox="262 911 367 938">hama DSR</p>	<p data-bbox="561 759 1020 842">Insert the slide with the front (the photograph side) facing the right of the SF-200 (S) (when the feeder is viewed from the front).</p>

- The following mounts are known to cause jams:

Mount			Notes
 <p data-bbox="105 1289 277 1374">Kodachrome 1.1 mm cardboard mounts</p>	 <p data-bbox="348 1289 519 1316">PLASTIMOUNTS</p>	 <p data-bbox="645 1289 710 1316">Pakon</p>	<p data-bbox="801 1171 1020 1310">The uneven edges, surface projections, curled edges or apertures, or burrs on these mounts can cause jams.</p>

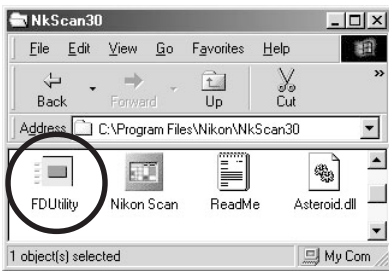
4.2 Removing slides

Slides will be sent to the ejection magazine after scanning. To remove slides from the ejection magazine, pull back the push plate and remove the slides. Slides must be removed before the ejection magazine fills up.

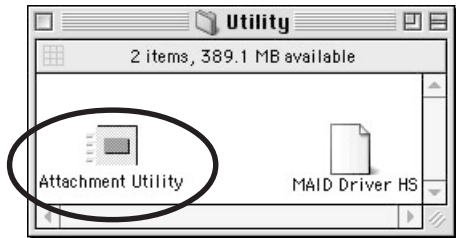
4.3 Using the Feed-Mechanism Attachment

Thick mounts (over 2 mm thick) with rounded edges may not feed properly when used with the SF-200 (S). A removable plastic part is provided for attachment to the feed mechanism, enabling the scanner to feed such slides. A special attachment utility program, provided with the Nikon Scan software that came with your scanner, is required both when attaching this part to and removing it from the feed mechanism.

To attach the feed-mechanism attachment, the scanner must be connected to the computer and both scanner and computer must be on. After inserting the SF-200 (S) into the scanner as described above, open the **FDUtility** (Windows) or **Utility** (Macintosh) folder in the folder to which you installed Nikon Scan and then double-click the **Attachment Utility** icon to start the attachment utility.



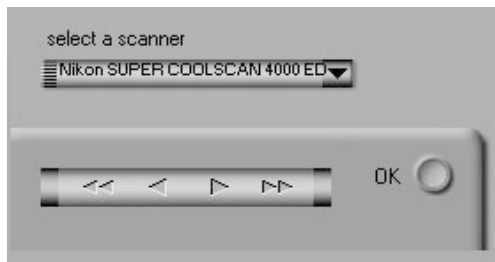
Windows



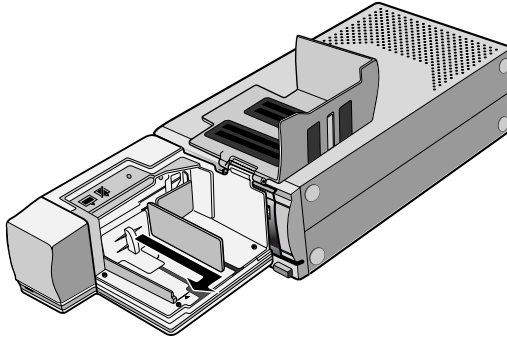
Macintosh

The attachment utility window will appear on the desktop. If more than one scanner is attached to your computer and powered on, select the scanner to which the SF-200 (S) is attached from the **select a scanner** pop-up menu.

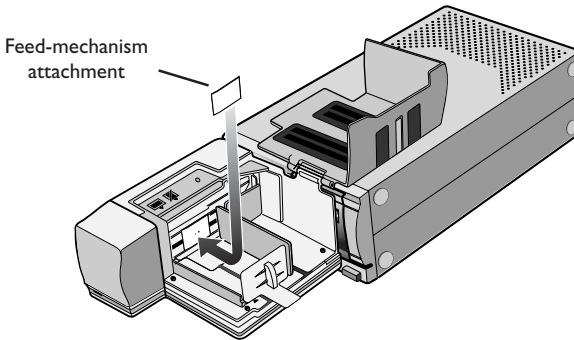
Nikon Scan does not support simultaneous connection of more than one 4000 ED. If more than one scanner of the same type is connected, only one of the devices will appear in the Tools menu.



Open the SF-200 (S)'s magazine cover; pull back the feed push-plate to the end of its groove, and hook it in the notch so that it does not spring back to its original position.



Click the double right-arrow button in the attachment utility to move the feed mechanism to where it is fully visible. If you move the feed mechanism too far, click the left-arrow button to move it back. The single-arrow buttons can be used for fine adjustments. Once the feed mechanism is visible, insert the pegs on the attachment into the holes in the feed mechanism.



Click the **OK** button in the attachment utility window to return the feed mechanism to its initial position. You are now ready to begin scanning.

4.4 Removing attachment

When scanning slides with flat mounts or slides less than 2 mm thick, you will need to remove the attachment. Use the attachment utility as described above to move the feed mechanism into the magazine, then remove the attachment and click **OK** to return the feed mechanism to its initial position.

Caution

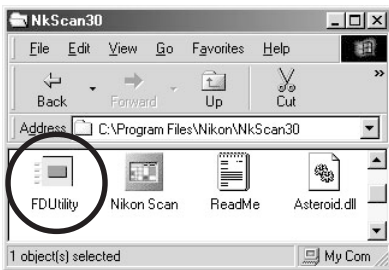
Be sure that the attachment is securely in place. If the attachment is loose, slides may not feed properly and damage to the SF-200 (S) could result.

4.5 What to do if the feeder jams

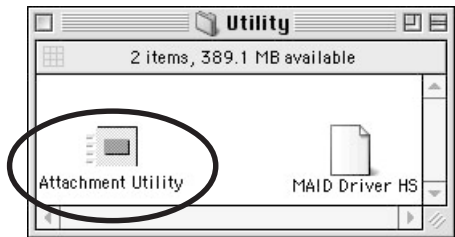
If a jam occurs, open the magazine cover and remove the slides remaining in the feed and eject magazines. Pull back the feed push-plate and hook it in the notch so that it does not spring back to its original position.

The method for resolving a jam depends on the position of the feed mechanism when the jam occurred. If the jammed slide is visible in the magazine and the feed mechanism has returned to its housing in the front of the unit, the jammed slide can be removed with your fingers. If the feed mechanism has locked while feeding a slide, you will need to use the attachment utility to resolve the jam (the attachment utility is a special program for the SF-200 (S) distributed with the Nikon Scan software that came with your scanner).

To use the attachment utility, open the **FDUtility** (Windows) or **Utility** (Macintosh) folder in the folder to which you installed Nikon Scan and double-click the **Attachment Utility** icon to start the attachment utility.



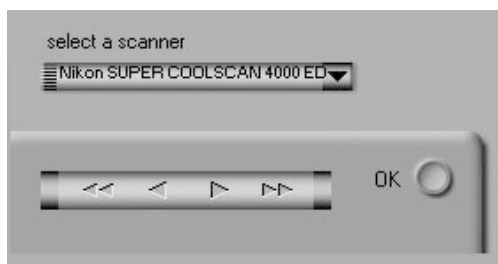
Windows



Macintosh

The attachment utility window will appear on the desktop. If more than one scanner is attached to your computer and powered on, select the scanner to which the SF-200 (S) is attached from the **select a scanner** pop-up menu.

Nikon Scan does not support simultaneous connection of more than one 4000 ED. If more than one scanner of the same type is connected, only one of the devices will appear in the Tools menu.



If the feed mechanism has locked while pushing a slide, click the double left-arrow button in the attachment utility window to move the feed mechanism back to its housing, then remove the jammed slide with your fingers. If two or more slides have jammed so that they overlap, remove the slide on the magazine side first. If the mount has caught at the entrance to the ejection magazine while being ejected from the feeder, click the right arrow button to move the feed mechanism out of the way, then push the slide back gently back towards the scanner to clear the jam. Using the left-arrow button, return the feed mechanism to its housing (if this does not clear the jam, you will need to take the feeder to a Nikon service center for repairs).

5. Maintenance

This chapter describes how to clean, store, and transport the SF-200 (S).

5.1 Cleaning

Before cleaning the feeder, remove it from the scanner. The exterior of the feeder 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 water or a volatile liquid such as alcohol, benzine, or thinner. Should any of these liquids enter the feeder, fire or electric shock could result. Volatile chemicals could also stain the plastic exterior of the feeder.*

5.2 Storage

When you do not plan to use the feeder 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 feeder 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, remove the feeder from the scanner and pack it in the original packing material.

6. Specifications

Film:	35 mm slide mount of 1.0 to 3.2 mm in thickness	
Maximum number of slides:	Approx. 50 slides with mounts 1.5 mm in thickness (Housing space: Approx. 78.5 mm)	
Operating mode:	4000 ED/LS-2000 installed on its base, SF-200 (S) connected directly to the connector at rear of scanner adapter slot	
Feed/eject time (reference):	Feed:	approx. 6 seconds per slide
	Eject:	approx. 6 seconds per slide
Dimensions:	142 mm (W) × 325 mm (D) × 85 mm (H) (5.63" × 12.78" × 3.37")	
Weight:	Approx. 700 g (1 lb 9.0 oz)	
Power supply:	5 VDC, 0.7 A or less, supplied from scanner	
Operating environment:	Operating temperature	+10°C to +35°C
	Humidity	20% to 85% (no condensation)