

LS-600

Starting Guide

This manual covers precautions and other information you need to know before operating this product.

1. For your safety
2. Getting Started
3. Turning power on/off
4. Emergency operation
5. Mastering basic operations
6. Daily maintenance
7. How to access the HELP display
8. Accessories and consumable parts

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Preface

We greatly appreciate your purchase of this product.

Before using this product, read the manual carefully, and make sure that you understand the procedure described. Be sure to store the paper manual near the product so it can be referred to immediately should you have questions about operation or should any problems arise.

If you should lose or heavily damage the manual, contact your place of purchase.

[Issued in April, 2007]

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 - Illustrations in the manual may differ from your system depending on the model or manufacturing lot.
 - Should you find any unclear points or errors, or should you have any comments for the manual, please contact your place of purchase.
 - If there is a missing page or incorrect pagination in this manual, please contact your place of purchase to receive a replacement. We will replace it.
-

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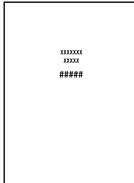
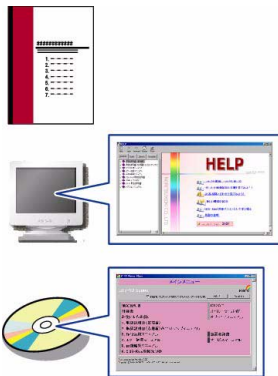
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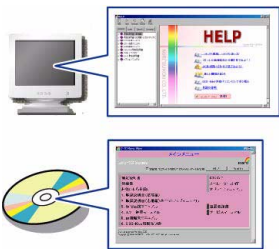


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Manual types/contents

Before starting operation, read the **EZ Controller Operator's Manual** to understand how to print from films and how to save images from films.

Manual type	Main contents
<p>Specifications</p> 	<ul style="list-style-type: none"> • Processing capacity • Standard equipment/ Standard accessories/ Options • Installation requirements
<p>Starting Guide</p>  <p>This manual is provided in a hard copy, on built-in <u>Help</u>, and on a CD.</p>	<ul style="list-style-type: none"> ■ For your safety <ul style="list-style-type: none"> IMPORTANT <ul style="list-style-type: none"> • This section explains general safety precautions. Read these precautions thoroughly and carefully. ■ Getting Started <p>This section explains topics you need to know before using this product.</p> ■ Turning power on/off <p>This section explains how to turn the product's power on and off.</p> ■ Emergency operation <p>This section explains the procedure to turn off the power supply in an emergency or corrective actions for the case that the scanner makes abnormal sounds.</p> ■ Mastering basic operations <p>This section explains operation methods such as how to scan films.</p> ■ Daily maintenance <p>This section explains maintenance procedures of this product.</p> ■ How to access the HELP display <p>You can view the built-in manuals (HELP) on the display. This chapter explains how to access the Help display.</p> ■ Accessories and consumable parts <ul style="list-style-type: none"> • Accessories and consumable parts

Manual type	Main contents
<p>Operator's Manual</p>  <p>This manual is available on built-in <u>Help</u> of this system and on a CD.</p>	<ul style="list-style-type: none"> ■ Available functions on each display This section explains available functions on each display. ■ Configuring initial settings This section explains settings that are required to be configured before you use this product. ■ Configuring settings of the scanning method This section explains settings for scanning films such as image correction, frame advance and frame number settings. ■ Making corrections to colors and density This section explains procedures to making corrections to colors and density on the Judgment Display. ■ Operations performed when necessary This section explains saving and loading the scanner setting data or upgrading the program, etc. ■ Troubleshooting This section explains corrective actions to perform when an error or attention message is shown. ■ Quick reference This section explains corrective actions to perform if films frequently jam or black margin appears on prints. ■ Glossary This section explains terms in this manual.
<p>Operator's Manual (options)</p> 	<p>This manual explains how to operate each option. The Operator's Manual is supplied for each option.</p>
<p>Installation Manual</p> 	<p>This section explains procedures to install the product, install various software and configure various settings.</p>

Symbols used in this manual

This section explains the definitions of the symbols used in this manual.

The symbols shown below are used in this manual. Confirm the meaning of each of them before reading the manual.

This is called the alert symbol.
Text following this symbol contains particularly important information concerning safety. Be sure to heed this information. This symbol is used in conjunction with the words **DANGER**, **WARNING** and **CAUTION**, according to the possible degree of injury to people or damage to physical property.

The Important symbol indicates supplementary explanations, operations or procedures that require caution, and instructions that must be followed.

The Note symbol indicates useful information on functions and instructions.

The pointing finger indicates the manual or section where you can find additional information.

Reference

1.2 Cleaning the sensors

Cleaning the sensors

Sensors are used to operate each unit properly and check whether or not the machine has problems. They are equipped on the paper path. If dust accumulates on the sensors, the machine will not operate properly and may be damaged.

1.2.1 Cleaning the sensors

CAUTION Do not open any non-specified covers.

IMPORTANT After cleaning the sensors, perform sensor adjustments.

NOTE This cleaning can be performed, no matter the power supply is on or off.

Requirements

- Blower brush

Procedures

1. Open the cover.

How to open the cover, refer to 40 1.2.2 Opening and closing the covers.

2. Clean the sensor.

3. Close the cover.
4. Adjust the sensors.

This completes the operation.

1.2.2 Opening and closing the covers

1. Open the unit.
2. Open the cover.

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1. For your safety

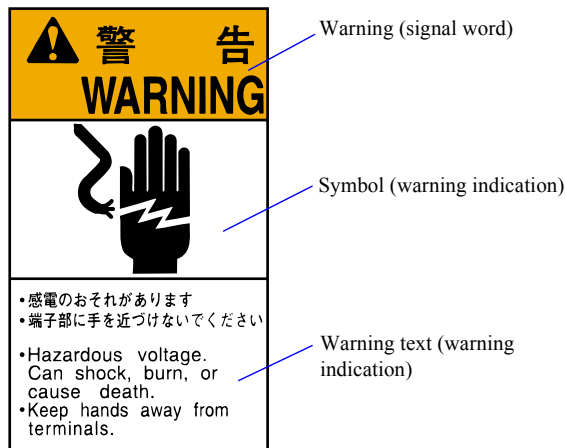
This section explains general safety precautions. Read these precautions thoroughly and carefully.

1.1 Description of warnings (signal words)

- Signal words identify the level of injuries that can potentially occur.
- The signal words used in this manual and found on labels, **DANGER**, **WARNING** and **CAUTION**, are assigned according to the level of potential risk.
- Warning labels are located at or near the part of the system that poses the indicated danger. Ignoring a warning may cause death or serious injury, or system malfunction. Be sure to follow the indications in the manuals and on the warning labels.
- The warnings include a signal word, the type and extent of the danger, and information on avoiding the danger.
- Carefully read and understand the warnings included in this manual and on the warning labels before operating the system.

⚠ DANGER
This indicates <u>situations that if not immediately avoided could result in serious injury or death.</u>
⚠ WARNING
This indicates <u>situations that if not avoided could result in serious injury or death.</u>
⚠ CAUTION
This indicates <u>situations that if not avoided could result in non-life threatening injury.</u> It is also used to indicate situations which may cause damage to physical property.

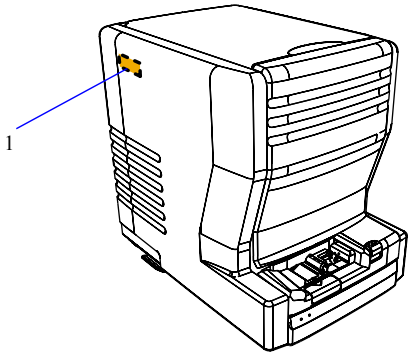
Example of warning label



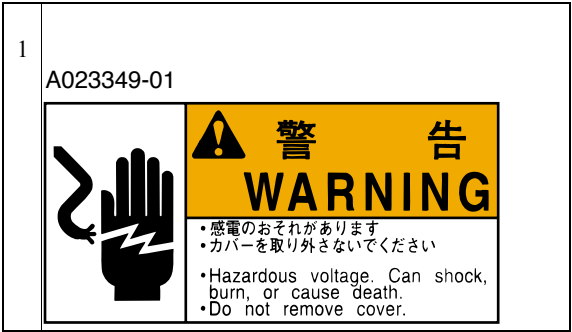
SIGNALWORD

1.2 Location of warning labels

The following shows the locations and types of warning labels on this product. Follow the instructions on the labels carefully in order to operate the product safely and avoid accidents. Do not remove labels. If a label becomes illegible or comes off completely, contact your place of purchase for replacement label using the part number shown.



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1.3 For your safety

● General precautions

⚠ WARNING

- Do not modify, remove or install any non-specified parts without our permission. Doing so may cause severe personal injury or damage this product. It also voids any quality guarantee.
- Do not remove safety devices or modify it so that it cannot function. Doing either may put the users at risk or cause a malfunction.

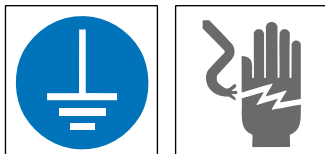
⚠ CAUTION

- Immediately stop using the product if it smokes, makes abnormal sounds or is overheating during operation. Turn off the power switch and the circuit breaker of the main power supply then contact your place of purchase.

● Precautions against electric shock

⚠ WARNING

- Do not remove covers while the power cord of this product is connected. Doing so presents a risk of electrical shock.
An electrical shock may cause severe personal injury or death, and/or damage this product.
- Do not remove covers unless directed by us or specified in the manual.
- Consult an electrician for electrical grounding.



● LED Precautions

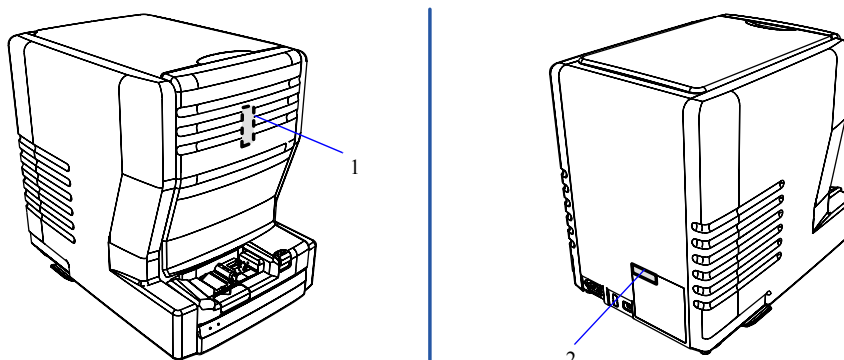
The LED is built into the scanner.

⚠ WARNING



- Follow the instructions to avoid exposing your eyes to LED beam.
 - Do not remove any parts except specified ones.
 - Do not see LED beam directly using optical instruments.

Location of LED labels

The labels for the LED precautions are attached on this product.
Do not remove those labels.



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1  <p>LED放射ビームを のぞき込まないこと。 クラス1M LED製品</p> <p>LED RADIATION DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. CLASS 1M LED PRODUCT</p>	2  <p>CLASS 1M LED PRODUCT</p>
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1.4 Additional precautions

● Precautions in operating the system

- Do not place a vase or a cup containing liquid on this product. Liquid can damage the product. Do not place heavy objects on the product.
- This product has some vents. These vents are used for air intake/outtake. Do not place anything in front of the vents or block them in any way.
- Applying strong vibration to the product may adversely affect scanning operation. Do not apply strong vibration to the product.
- Problems caused by connecting devices other than those specified by us are not covered by our warranty.
- Do not damage, break, bind up or cut the power cord. Placing a heavy load on the power cord, pulling it, or bending it forcibly may damage the cord, resulting in a fire or electric shock.
- If the power cord is damaged or the lead is bare or broken, contact your place of purchase to replace it. Using it as it is may cause a fire or electric shock.
- Do not place the product in a wet or dusty area. This may cause a fire or electric shock.
- Do not place the product on an unstable area such as an unstable table or inclined place. This may allow the product to drop or fall down, resulting in an injury.

1.5 Precautions for handling films

This section explains precautions for handling films, or information that you should know before starting operation.

● Precautions for handling films

- When handling a film, be sure to wear clean gloves and prevent the film from being soiled.
- If dust is not removed from the film path, the dust on the soiled path adversely affects the finished prints. The film is also scratched by the dust. Be sure to remove dust.

● Handling an IX240 film cartridge

- Keep film cartridge away from items with magnetic fields in which the magnetic data for printing is stored. Do not allow the magnet on the bottom of film cleaner (option) to directly touch it.



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- The IX240 film is contained in a plastic cartridge. Be careful in handling a cartridge not to damage it.



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- In general, if processing a lot of IX240 film cartridges, clean the magnetic head every time 100 cartridges are processed. The amount of the dirt on the magnetic head varies according to the film development condition. Specify the frequency of cleaning according to the condition.

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2. Getting Started

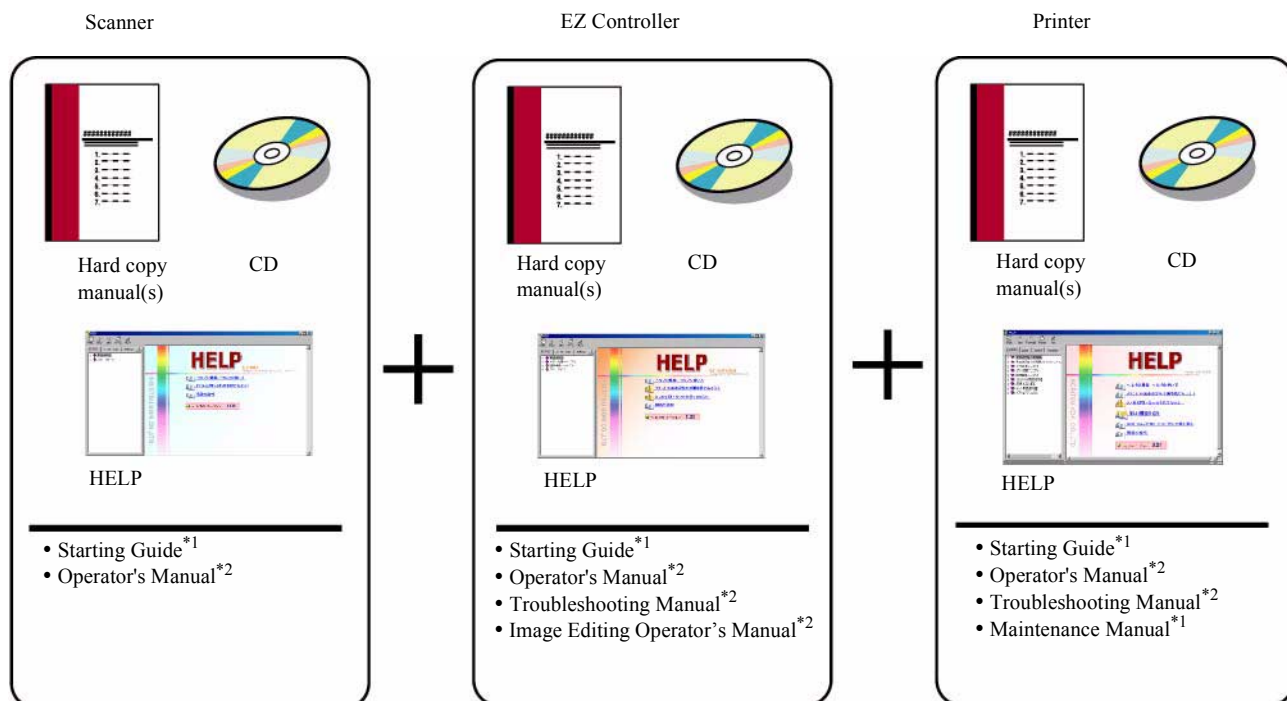
This chapter explains contents or precautions you should know before using this product.

2.1 Manuals supplied if a printer and the EZ Controller are connected

If the system consists of the EZ Controller, a scanner and a printer, we supply manuals to each of these sections in hard copies, as built-ins (HELP), and on CD-Rs. See the figure below.

To see the built-in manuals (HELP), start each application that is installed in the PC.

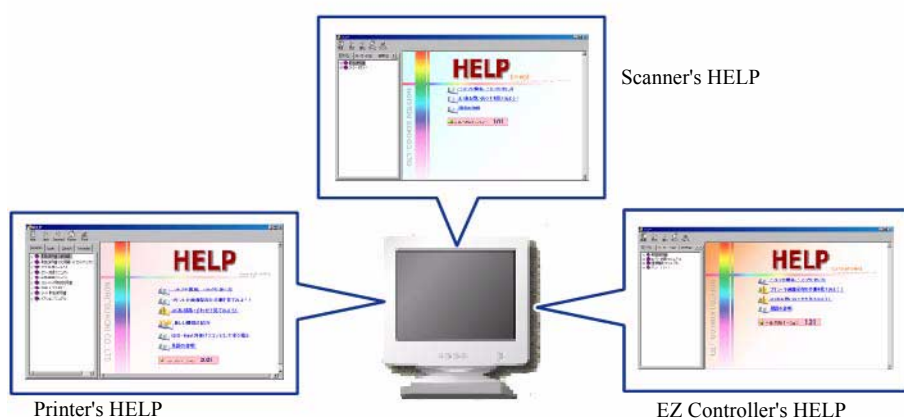
- For details about how to see the built-in manuals (HELP), see [7.1 Accessing the HELP display](#).
- For details about how to use the HELP manuals of the EZ Controller and the printer, see each Starting Guide.



To see each built-in manuals (HELP), start each application installed in the PC.

NOTE

- More than one printer can be connected. If different types of printers are connected, manuals of all the printers are supplied.



*1. Supplied in a hard copy, CD and HELP.

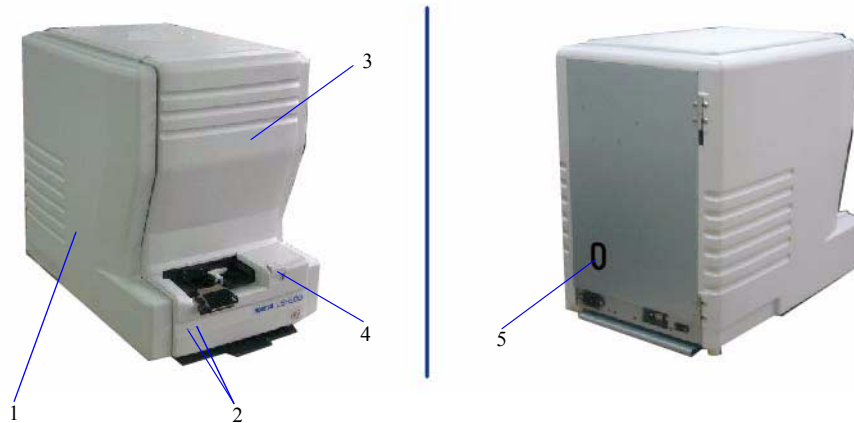
*2. Supplied in CD and HELP.

2.2 Names of the components

This product is a device for scanning images on films.

Images on films can be printed or saved to storage media by connecting this product to an output system.

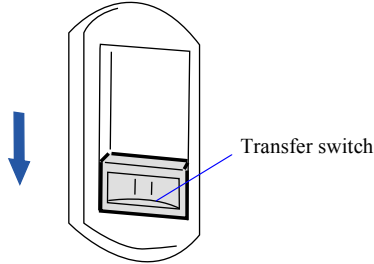
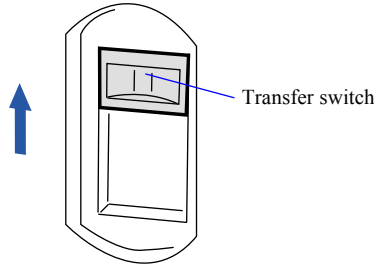
2.2.1 Names and functions of components



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No.	Name	Functions
1	Side cover (left)	Open this unit when you perform the daily maintenance or if film jammed.
2	Film ready light	Shows whether or not the product is ready to process film. <ul style="list-style-type: none"> • Lights in green. Shows that you can insert film into the product. • Blinks in green. Shows that the product is starting up. It also shows that the product is processing films. You cannot insert film. • Off Shows that this product is not started. You cannot insert film. • Blinks in red. Shows that an error occurs. You cannot insert film.
3	Front cover	Open this unit when you perform the daily maintenance or if film jammed.
4	Eject button	Press this button to remove the IX240 film cartridge. If you press the eject button, the cartridge holder will raise.

2.2 Names of the components

No.	Name	Functions
5	Transfer switch	<p>Selects whether to supply power from household socket or from the connected printer to this product.</p> <ul style="list-style-type: none">• If supplying power from household socket Flip the transfer switch down. Turning on the power supply of the PC starts up this product.  <ul style="list-style-type: none">• If supplying power from the connected printer Flip the transfer switch up. Activating the printer starts up this product. If the program timer of the printer is used, this product is started up when the printer is activated by the program timer. 

2.3 Processable films

This section explains processable films.

2.3.1 Processable films

Images on the following films can be printed.

Film type	Details
Color negative film	Negative film processed as color negative
Sepia	Sepia film processed as color negative
Black and white film (orange base)	Black and white negative film processed as color negative. This film is shown as B/W Neg. (OB) in Scan Setting .
Black and white film	Negative film processed as black and white negative. This film is shown as B/W (Neg) in Scan Setting .
Color positive film	–



IMPORTANT

- There are two types of black and white film; one is **black and white film (orange base)** that is for color negative processing and the other is **black and white film** that is for monochrome negative processing only. Be sure to process the two types of film correctly.
For black and white film, DIGITAL ICE Technology Correction is not available.



- For details, see [3.1.1](#) Activating/deactivating the correction setting for removing the scratch or dust on the film [DIGITAL ICE Technology Correction], in the Operator's Manual.

- For details about how to use the Operator's Manual, see [7.1](#) Accessing the HELP display.

For 135-type film, 36 mm or more length of film is required. The length 36 mm corresponds to one frame of a 135F film. A curled film, irregular film ends or broken perforations (holes on the both sides) may cause film jams in the film feed unit. Check the film condition and take corrective action if necessary.

- For details about how to handle a severely curled film, refer to [2.3.4](#) Problematic films and corrective actions.

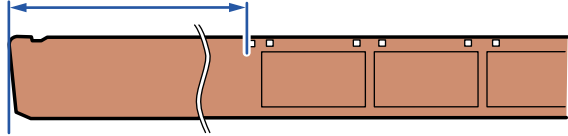
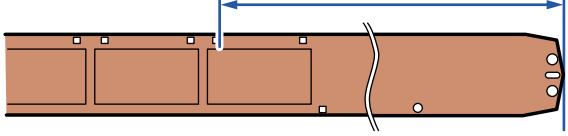
2.3.2 Processable film size

135-type film	IX240-type film
<ul style="list-style-type: none"> 135F (full size) *1 135H (half size)  <ul style="list-style-type: none"> 135P (Panorama) 135FP/135FPS (full panorama) *1 	<ul style="list-style-type: none"> IX240-film cartridge 

*1. 135FP (24 mm×65 mm), 135FPS (24 mm×58 mm)

2.3.3 Processable film length

Film type	Processable length
135-type film	36 mm or more (This corresponds to one frame of 135F.)

Film type	Processable length
IX240-type film	<p>Film that is not cut into pieces. (One that is cut into pieces is not processable.)</p> <p>NOTE</p> <ul style="list-style-type: none"> The following length is required for IX240-type film cut by the optional front edge reshaper or rear edge reshaper. <div style="text-align: center;"> <p><u>Front edge</u></p> <p>120 mm or more</p>  <p><u>Rear edge</u></p> <p>135 mm or more</p>  </div>

2.3.4 Problematic films and corrective actions

A curled film, irregular film ends or broken perforations (holes on the both sides) may cause film jams in a film carrier. Check the film condition and take corrective action if necessary.

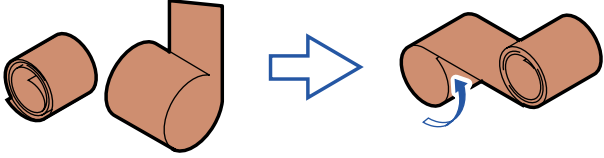
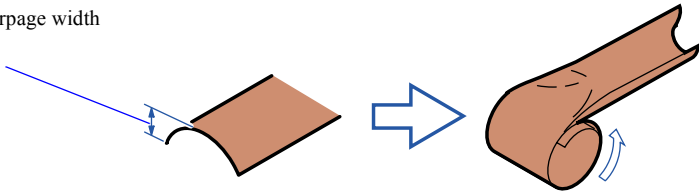


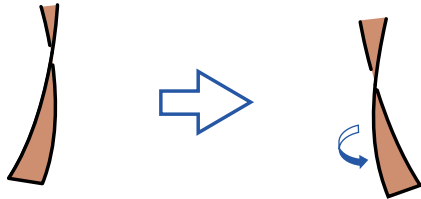
IMPORTANT

- Inserting a problematic film into the inserting slot may cause a film jam and that will damage the film.

● If film is curled up

Take corrective action as shown below.

Symptom	Corrective action
Partly curled film	<p>If the film curls up from one end when it is being held by the other, wind both ends (20 cm for each) in the opposite direction of the curl.</p> 
Severely warped film	<p>If the film has a warpage whose width is <u>5 mm or more</u> for 135-type films or <u>3 mm or more</u> for IX240-type film, wind both ends (20 cm for each) of the film in the opposite direction of the warpage.</p> <p>Warpage width</p> 

Symptom	Corrective action
Badly twisted film	<p>If the film is twisted and there is more than one twist when the film is held by one end, twist the film in the opposite direction. If the twist is not rectified, hold the film with your hands so that it dose not twist while it is being inserted into the film carrier.</p> 

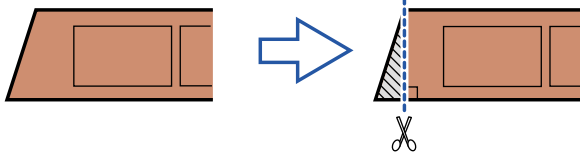
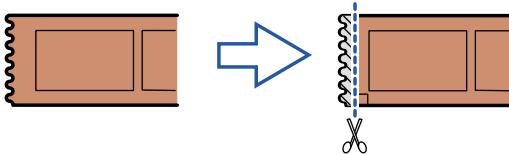
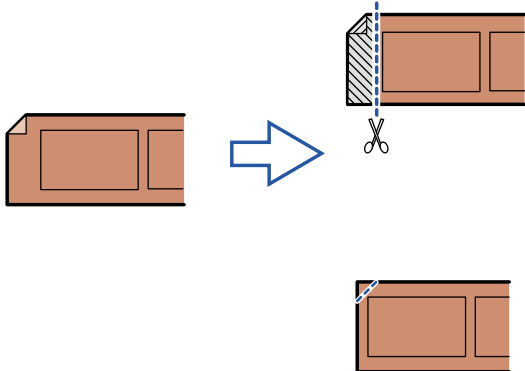
● When the film has irregular ends and perforations

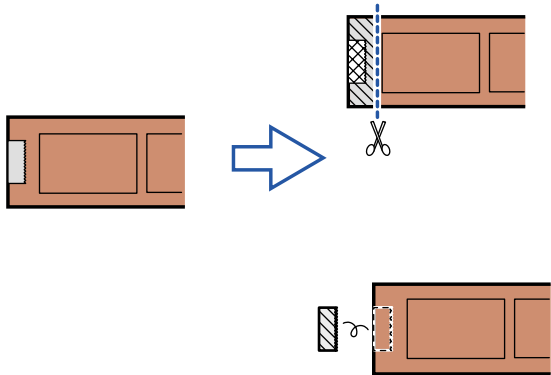
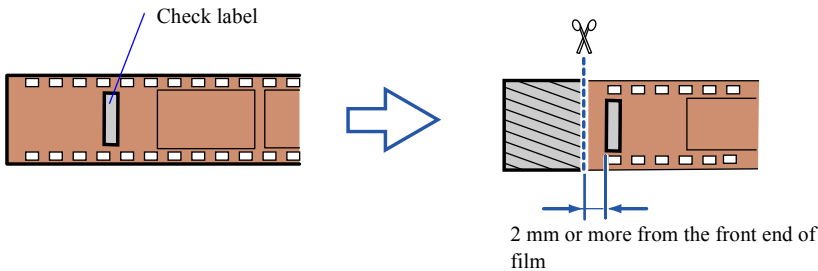
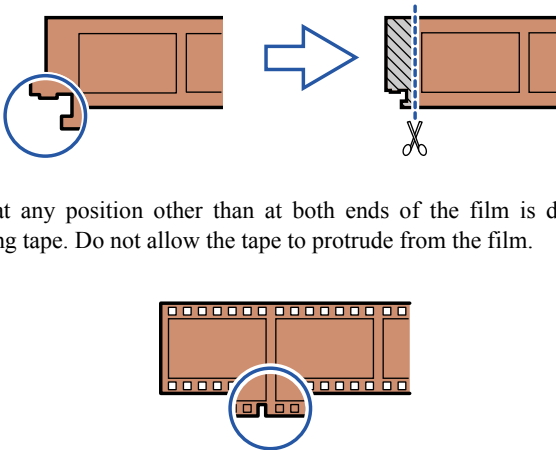


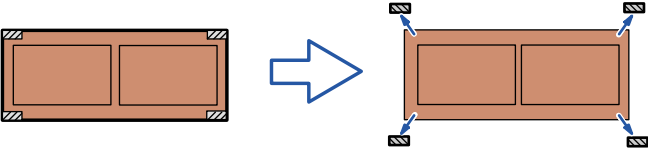
IMPORTANT

- Depending on the film condition, you may need to cut a part of the film.

Take corrective action as shown below.

Symptom	Corrective action
The film does not have a straight end.	<p>If the leading or rear end is diagonally cut, cut the end perpendicularly.</p> 
Either end of the film is torn.	<p>If the leading or rear end is torn, cut the torn end perpendicularly.</p> 
Either end of the film is folded.	<p>If the leading or rear end is folded, cut the folded area perpendicularly if there is enough space. If there is no space, straighten the folded part before you insert it into the film carrier.</p> 

Symptom	Corrective action
Tape (splicing tape etc.) is attached to either end of the film.	<p>If tape is attached to the leading or rear end, cut the end perpendicularly, if there is enough space. If there is not enough space, remove it without leaving any gum and making film end wave.</p> <p>This will prevent a film jam because of the thick and sticky film.</p>  <ul style="list-style-type: none"> • For the heat spliced film, cut the spliced part. • For the R-cut film, remove the splicing tape.
The check label is attached to the film.	<p>If you process a film with the check label on it, cut off the unnecessary part. Cut the film 2 mm or more away from the label attaching position. Do not cut the check label.</p>  <p>2 mm or more from the front end of film</p>
Perforation is damaged. NOTE <ul style="list-style-type: none"> • This occurs only to 135-type films. 	<p>If a perforation is damaged, cut the broken part perpendicularly, if there is enough space.</p>  <p>If a perforation at any position other than at both ends of the film is damaged, mend the damaged part using tape. Do not allow the tape to protrude from the film.</p>

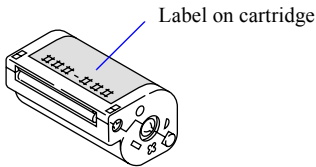
Symptom	Corrective action
Perforations are covered with tape. <div>NOTE</div> <ul style="list-style-type: none">This occurs only to 135-type films.	If perforations are covered by tape, remove the tape so as not to damage the perforations. Remove it thoroughly so that no glue remains. <div></div>

2.3.5 Processing an IX240 film cartridge that cannot be scanned

A broken IX240 film cartridge causes a film jam in the film carrier. It may also cause the film not to be loaded to or from the cartridge normally.

Replace the IX240 film into the spare cartridge if it is either of the following.

- The cartridge is damaged.
- The label comes off or it is coming off from the cartridge.



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3

3. Turing power on/off

This section explains how to turn the product's power on and off.

3.1 Starting up and closing down this product

3.1.1 Starting up the product

There are two methods to start up this product.

If starting up the product from the EZ Controller

- For details, see the **EZ Controller Starting Guide**.

If using as a stand-alone scanner

1. Check whether the USB cable is correctly connected.

The PC side



The scanner side



G088400

2. Turn on the power supply of the PC.

This product starts up.

3.1.2 Closing down the product

There are two methods to close down this product.

If closing down the product with the EZ Controller

- For details, see the **EZ Controller Starting Guide**.

If the scanner is standing-alone

1. Exit all applications.

The Windows desktop display is shown.

2. Turn off the power supply of the PC.

This product shuts down.



4

4. Emergency operation

This chapter explains how to restart this product when an error occurs, how to turn off the power supply in an emergency and how to take corrective actions for the case that the scanner makes abnormal sounds.

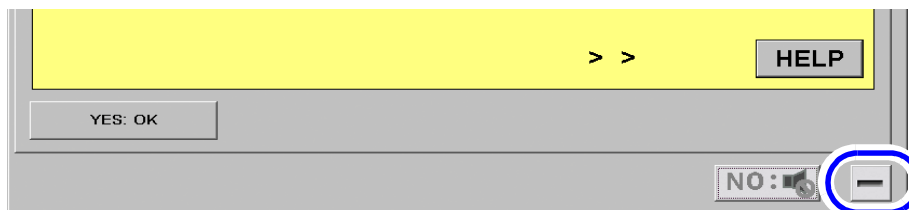
4.1 Emergency operation

This chapter explains how to restart this product when an error occurs or how to turn off the power supply in an emergency.

4.1.1 Restarting the product because an error occurs

Restart the system to take corrective actions for an error by following the steps below.

1. Click the **Minimize** button to reserve the error or attention.



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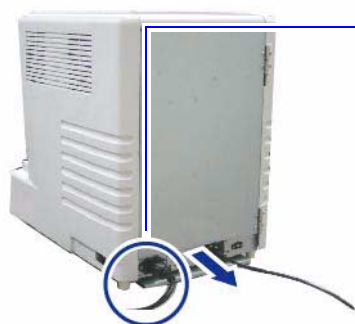
Reserving the error allows you to perform operations temporarily.

2. Exit all applications.
3. Turn off the power supply of the PC.
4. Turn on the power supply of the PC.
5. Access the **Scan Setting** display.

4.1.2 Turning off the power supply in an emergency

In case that you need to immediately turn off the power supply of the product, follow the steps below.

Steps



- 1 Disconnect the power supply cable of the scanner.
- 2 Disconnect the USB cable.
- 3 Consult your technical representative and follow the instructions.

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4.1.3 If the scanner makes abnormal sounds

Follow the instructions below if the scanner emits strange sound and that it is necessary to stop scanning immediately.



Steps

- 1 Open the front cover.
Scanning stops.
- 2 Confirm that no film is jammed. Remove jammed film, if any.
 - For instructions on how to remove jammed film, see [6.8.1 Corrective actions for 135 film jam](#) or [6.8.2 Corrective actions for 240 film jam](#) in the Operator's Manual.
 - For details about how to use the Operator's Manual, see [7.1 Accessing the HELP display](#).
- 3 If abnormal sounds occur despite no film is jammed, consult your technical representative.

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5

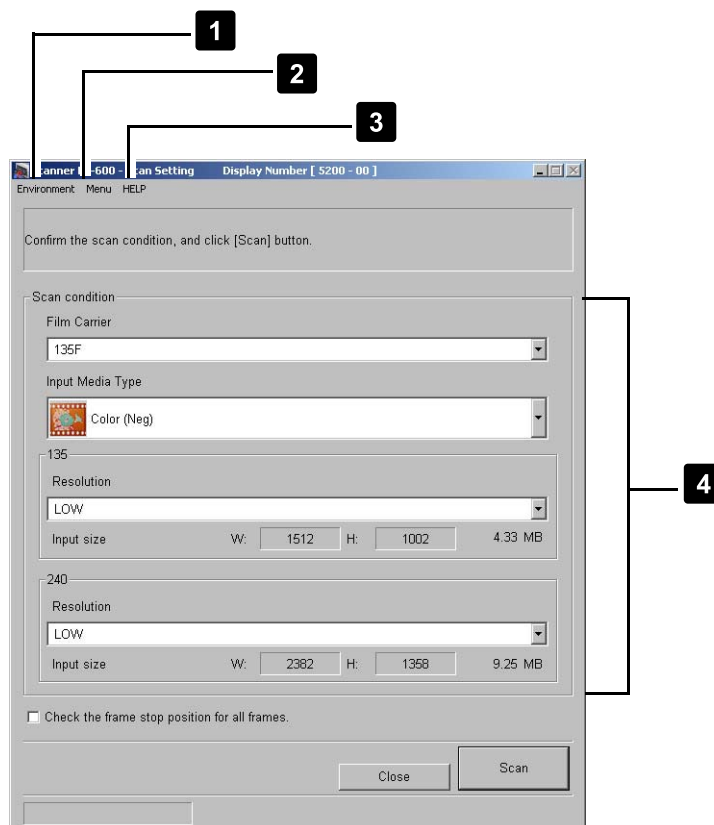
5. Mastering basic operations

This section explains procedures about how to access the **Scan Setting** display or scanning operation.

5.1 Scan Setting display

The **Scan Setting** display is shown when this product is started up separately.

Example: **Scan Setting** display



S5200-00-UM01

No.	Name	Functions
1	Environment display	This is a display where scanning methods settings are configured, such as the image correction, frame feed and frame number. <ul style="list-style-type: none"> For details, see 5.2 Environment display.
2	Menu display	Use this display when configuring various adjustment and function settings of this product. <ul style="list-style-type: none"> For details, see 5.3 Menu display.
3	Help display	Use this display to access the HELP display of this product. <ul style="list-style-type: none"> For details, see 7.1 Accessing the HELP display.
4	Scan condition	Configure the settings of scanning conditions. For details, see the scanning operation from each film type.

5.1.1 Accessing the Scan Setting display

If the display is accessed from the EZ Controller

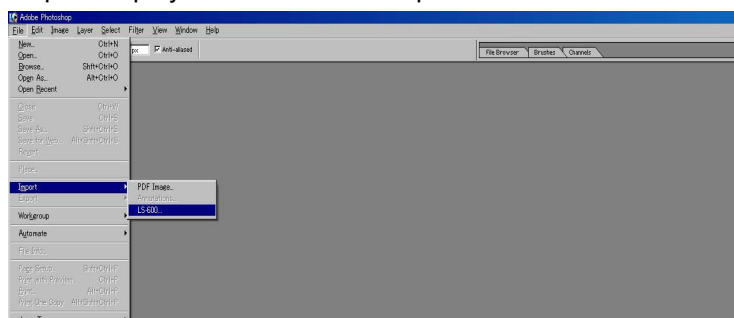
- For details, see the EZ Controller Starting Guide, **Accessing the scanner and printer screens**.

If accessing the display from a stand-alone scanner

1. Start image editing software such as Adobe Photoshop.

2. Select File→Read→LS-600.

Example: Display of Adobe Photoshop



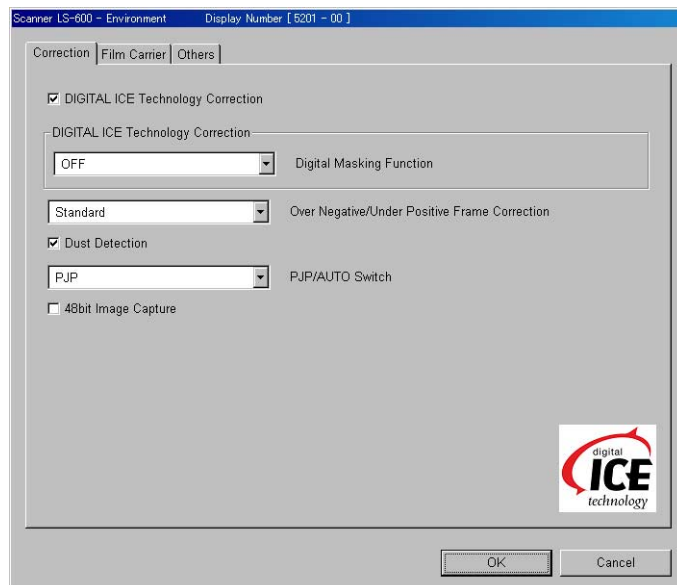
S087590

The **Scan Setting** display is shown.

5.2 Environment display

Use the **Environment** display to configure scanning method settings, such as image correction, frame feed and frame number.

Example: **Environment** display



S5201-00-UM01

5.2.1 Accessing the Environment display

If the display is accessed from the EZ Controller

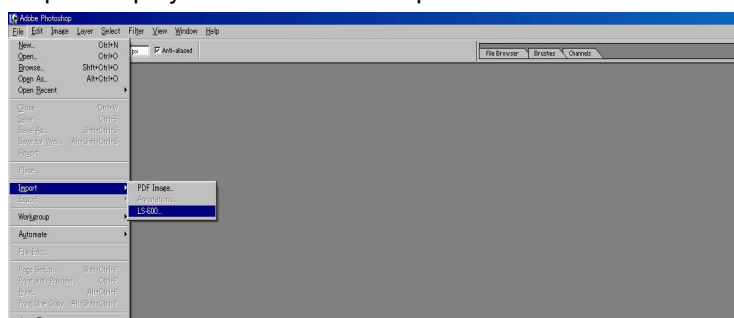
- For details, see the EZ Controller Starting Guide, **Accessing the scanner and printer screens**.

If accessing the display from a stand-alone scanner

1. Start image editing software such as Adobe Photoshop.

2. Select **File**→**Read**→**LS-600**.

Example: Display of Adobe Photoshop



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The **Scan Setting** display is shown.

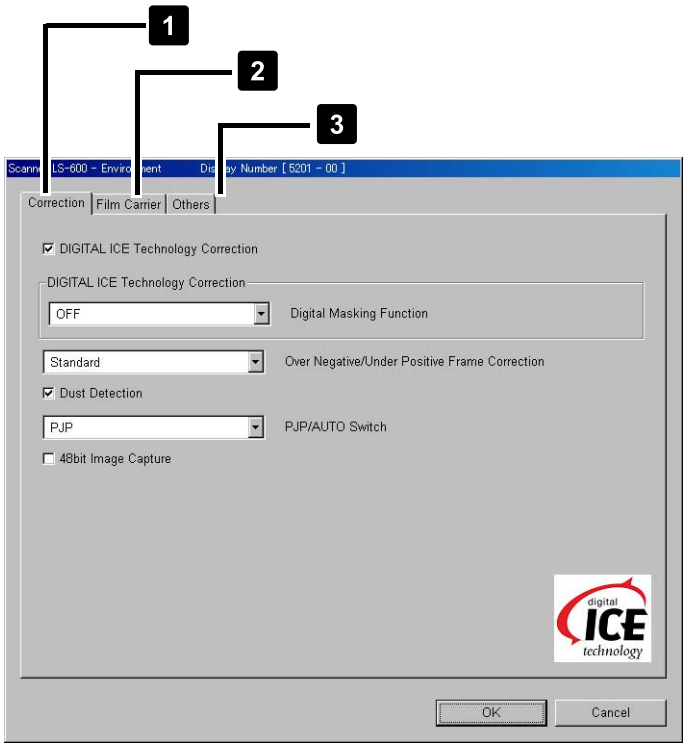
3. Click the **Environment** tab.



S5200-00-UM01

The **Environment** display is shown.

5.2.2 Environment display



S5201-00-UM01

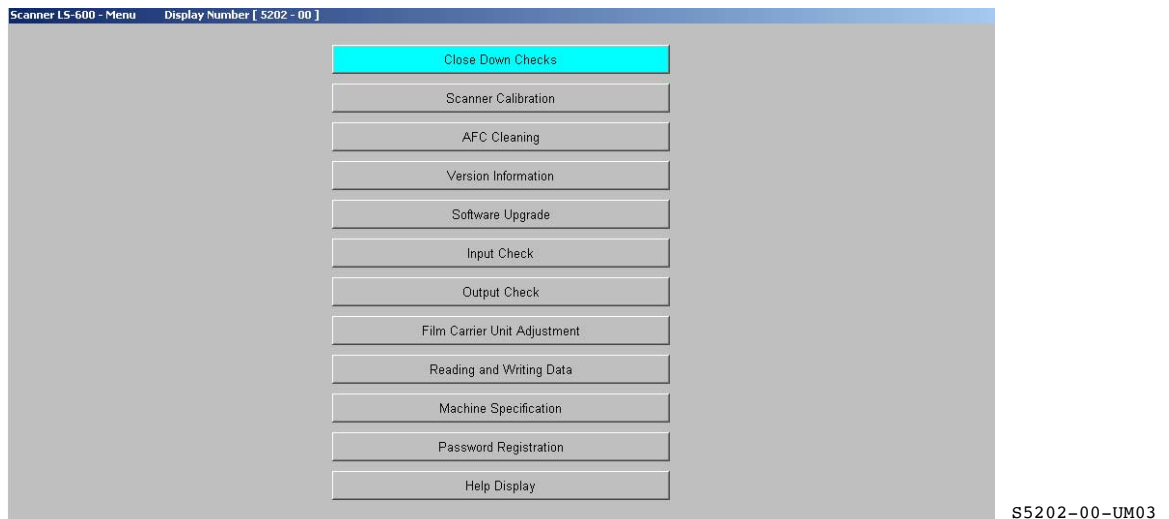
No.	Name	Functions
1	Correction tab	Image correction settings can be configured on this display. <ul style="list-style-type: none">For details, see 3.1 Configuring image correction settings [Environment: Correction tab] in the Operator's Manual^{*1}.
2	Film Carrier tab	Frame feed and frame number settings can be configured on this display. <ul style="list-style-type: none">For details, see 3.2 Configuring settings of frame advance and frame number [Operator Selections: Environment tab] in the Operator's Manual^{*1}.
3	Others tab	The source size unit and the resolution name that are shown on the Scan Setting display can be changed or registered on this display. <ul style="list-style-type: none">For details, see 2.2 Specifying names of displayed unit and resolution [Environment: Others tab] in the Operator's Manual^{*1}.

*1. For details about how to use the Operator's Manual, see [7.1 Accessing the HELP display](#).

5.3 Menu display

The **Menu** display is used when configuring various adjustment and function settings.

Example: **Menu** display



S5202-00-UM03

5.3.1 Accessing the Menu display

If the display is accessed from the EZ Controller

- For details, see the EZ Controller Starting Guide, **Accessing the scanner and printer screens.**

If accessing the display from a stand-alone scanner

There are two methods to access the **Menu** display from a stand-alone scanner.

Step 1

Click **Start** on the Windows screen → **Programs** → **LS-600**.

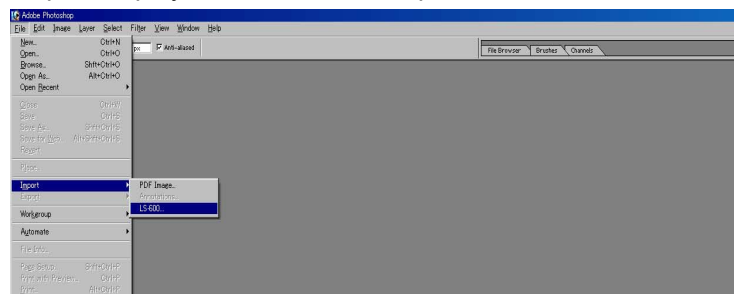
The **Menu** display is shown.

Step 2

1. Start image editing software such as Adobe Photoshop.

2. Select **File** → **Read** → **LS-600**.

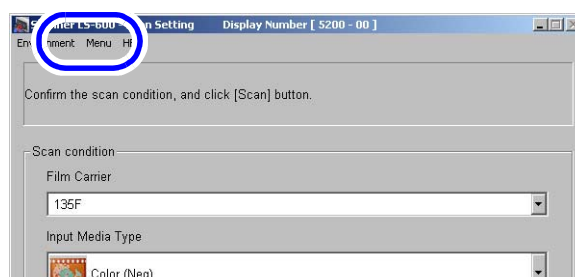
Example: Display of Adobe Photoshop



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The **Scan Setting** display is shown.

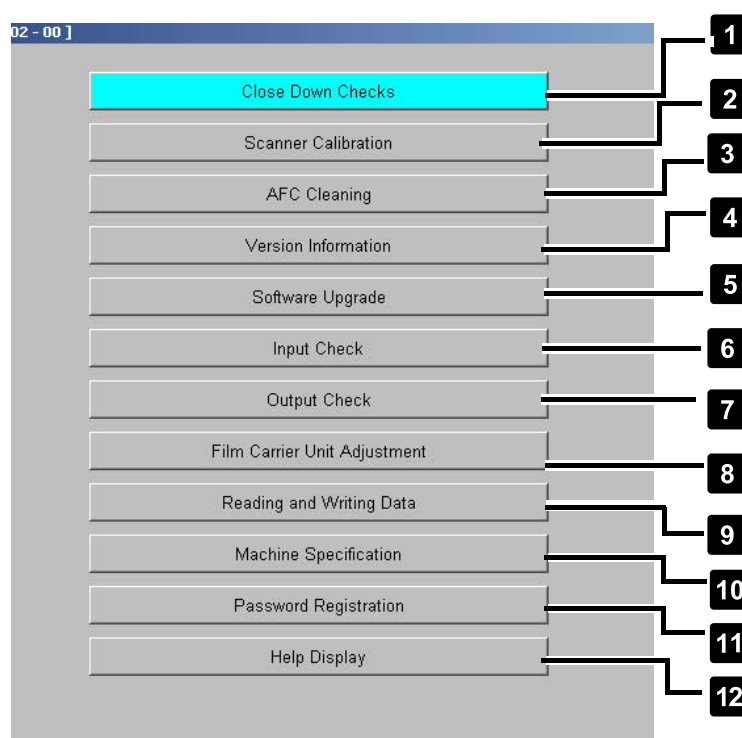
3. Click the **Menu** tab.



S5200-00-UM01

The **Menu** display is shown.

5.3.2 Menu display



S5202-00-UM03

No.	Name	Functions
1	Close Down Checks	Allows you to start the Close Down Checks. <ul style="list-style-type: none"> For details, see 6.2 Weekly Checks.
2	Scanner Calibration	Allows you to perform Light Source Update. <ul style="list-style-type: none"> For details, see 5.4 Correcting fluctuating light source [Scanner Calibration] in the Operator's Manual*¹.
3	AFC Cleaning	Allows you to clean the film feed section. <ul style="list-style-type: none"> For details, see 7.2.1 Cleaning the film feed section [AFC Cleaning] in the Operator's Manual*¹.
4	Version Information	Allows you to confirm the version of the scanner. <ul style="list-style-type: none"> For details, see 5.3.3 Checking the scanner version [Version Information] in the Operator's Manual*¹.
5	Software Upgrade	Clicking this button allows service personnel to upgrade the program of this product. For upgrading the program, see the Installation Manual .

No.	Name	Functions
6	Input Check	Allows you to confirm the status of switches and sensors. <ul style="list-style-type: none"> For details, see 5.3.1 Confirming switch and sensor status [Input Check] in the Operator's Manual*¹.
7	Output Check	Allows you to confirm operation of parts such as motors. <ul style="list-style-type: none"> For details, see 5.3.2 Checking operations of electrical parts [Output Check] in the Operator's Manual*¹.
8	Film Carrier Unit Adjustment	Allows you to perform Sensor Sensitivity Adjustment and Scan Position Auto Correction. <ul style="list-style-type: none"> For details, see 7.2.2 Adjusting the sensor sensitivity on the film feed path [Sensor Sensitivity Adjustment] or 7.3 If black margin (white margin for positive) is printed on the front end or rear end [Scan Position Auto Correction] in the Operator's Manual*¹.
9	Reading and Writing Data	Allows you to save and load the scanner setting data. <ul style="list-style-type: none"> For details, see 5.1 Loading/ saving setting data [Reading and Writing Data] in the Operator's Manual*¹.
10	Machine Specification	Allows you to select the language to use and set the installation date and the date. <ul style="list-style-type: none"> For details, see 2.1 Configuring the installation date and display settings [Machine Specification] in the Operator's Manual*¹.
11	Password Registration	Allows you to register the password or delete the registration. <ul style="list-style-type: none"> For details, see 5.2 Prohibiting unauthorized third parties from modifying settings [Password Registration] in the Operator's Manual*¹.
12	Help Display	Allows you to access the built-in manuals (Help) of this product. <ul style="list-style-type: none"> For details, see 7.1 Accessing the HELP display.

*1. For details about how to use the Operator's Manual, see [7.1 Accessing the HELP display](#).

5.4 Scanning 135-type film

This section explains how to scan 135-type films using this product.

For inserting films, see Step 5 and Step 7.

For scanning method on the EZ Controller, see the **Operator's Manual** of the EZ Controller.

- For details about the precautions in handling films, see [1.5 Precautions for handling films](#).

1. Confirm the power supply of the flatbed scanner is on.

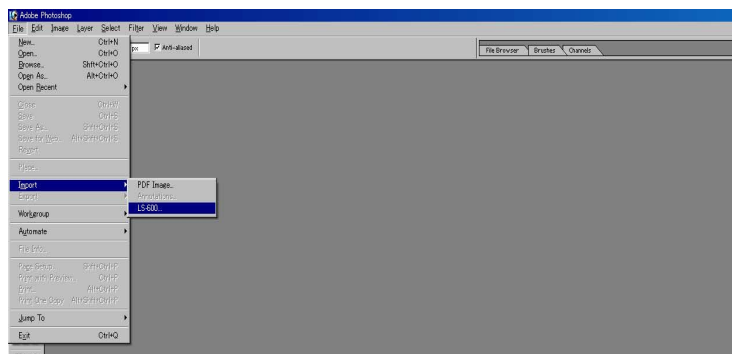
2. Access the **Scan Setting** display.

Accessing the **Scan Setting** display is necessary for scanning.

(1) Start image editing software such as Adobe Photoshop.

(2) Select **File→Read→LS-600**.

Example: Display of Adobe Photoshop

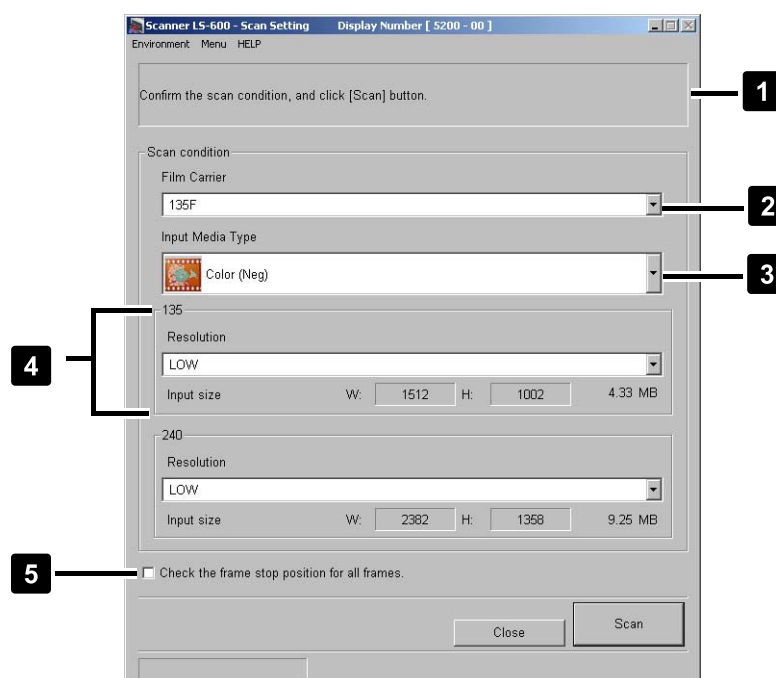


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The **Scan Setting** display is shown.



3. Configure the scan condition settings.



Example: **Scan Setting** display




S5200-00-UM01

	Item	Explanation
1	Scanning status	<p>Displays the status of the scanner.</p> <ul style="list-style-type: none"> Scanner unit is not connected. The PC and the scanner are not connected. The scanner power is off or the USB cable is not connected. One moment please. . . Initializing the scanner, or performing scanner calibration. LED Light Source Standby Performing temperature adjustment of LED light source. Scanner temperature is being adjusted. Performing temperature adjustment of the scanner. Confirm the scan condition, and click [Scan] button. Temperature adjustment of scanner complete, ready for configuring settings. Insert film. Ready for scanning. Scanning. . . Scanning.
2	Film Carrier	Select the size of the film to scan by clicking  .
3	Input Media Type	<p>Select the type of the film to scan by clicking .</p> <ul style="list-style-type: none"> Color (Neg): select this to scan a negative film developed as a color negative, or a sepia film.  B/W Neg. (OB): select this to scan a black and white film developed as a color negative.  B/W (Neg): select this to scan a negative film developed as a black and white negative. The scratch erasing function is not available.  Color (Pos): select this to scan a color positive film. 

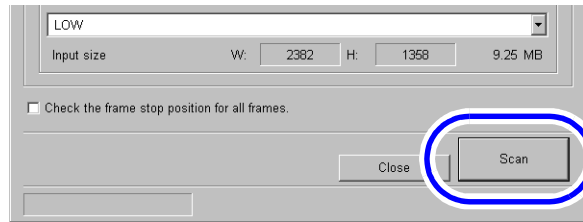
	Item	Explanation
4	Resolution	<p>Select the resolution for the film to scan by clicking  .</p> <p>The source size and the image size at the selected resolution are shown.</p> <ul style="list-style-type: none"> • LOW: Select this if making 89 mm × 127 mm prints using a 300 dpi printer, for example. • MID: Select this if making 127 mm × 178 mm prints using a 300 dpi printer, for example. • HIGH: Select this if making 305 mm × 457 mm prints using a 300 dpi printer, for example. • Automatic (High Quality):^{*1} Scanning is performed with the magnification rate for the biggest print size among C, P and H. For example, if there are three print sizes, C : 89 × 127, P : 89 × 254 and H : 89 × 152, the magnification rate for P size that is biggest among them is to be selected. With Automatic (High Quality), the quality is given priority in scanning. This takes more time for processing than Automatic (High Speed). <p>NOTE</p> <ul style="list-style-type: none"> • The print quality and processing capacity depend on which print sizes are used. For example, when the print sizes included in a scanned film are the same, there is no difference in the quality and the processing capacity regardless of your choice. <ul style="list-style-type: none"> • Automatic (High Speed):^{*1} Scanning is performed with the magnification rate for the smallest print size among C, P and H. For example, if there are three print sizes, C : 89 × 127, P : 89 × 254 and H : 89 × 152, the magnification rate for C size that is smallest among them is to be selected. Automatic (High Speed) gives priority to capability than Automatic (High Quality) for scanning. <p>NOTE</p> <ul style="list-style-type: none"> • The print quality and processing capacity depend on which print sizes are used. For example, when the print sizes included in a scanned film are the same, there is no difference in the quality and the processing capacity regardless of your choice. <p>The resolution name that is shown onscreen can be changed on the Environment display.</p> <ul style="list-style-type: none"> • For details, see  2.2 Specifying names of displayed unit and resolution [Environment:Others tab] in the Operator's Manual^{*2}.
5	Check the frame stop position for all frames.	<p>Select whether to confirm the stop position of all frames.</p> <p>If confirming the stop position of all frames while scanning, select the check box.</p>

- For details about image correction, frame feed, frame number or setting the scanning type, see  3.1 Configuring image correction settings [Environment: Correction tab],  3.2 Configuring settings of frame advance and frame number [Operator Selections: Environment tab] in the Operator's Manual^{*2}.

^{*1}. Displayed only when the EZ Controller or printer is used, and Print Type is Normal Print.

^{*2}. For details about how to use the Operator's Manual, see  7.1 Accessing the HELP display.

4. Click **Scan**.



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5. Put on clean gloves.

6. If you have the film cleaner (option), pass the film through the film cleaner.

Dust can be removed from the film by passing the film through the optional film cleaner.

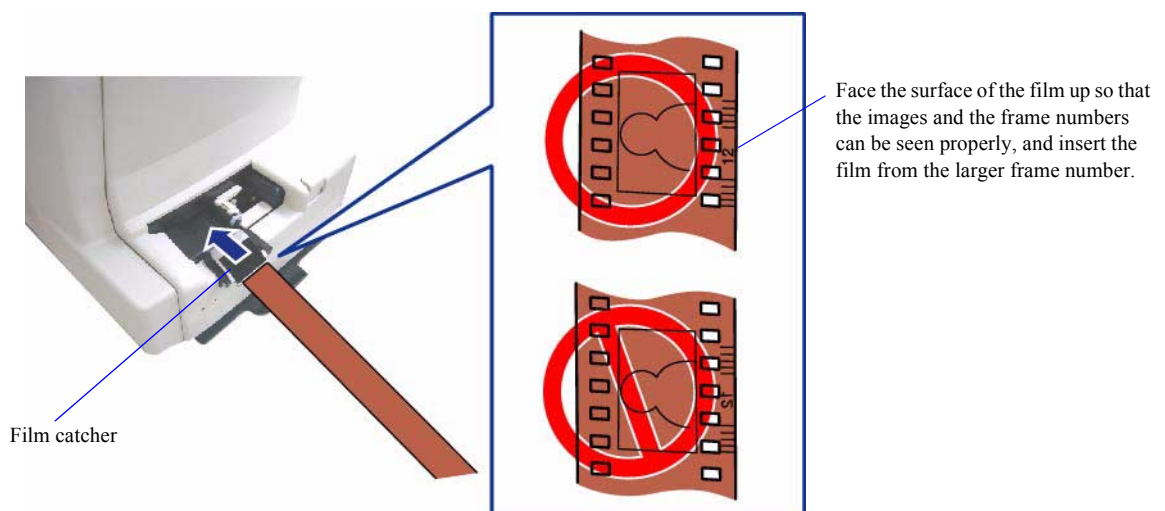
Example:



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7. Insert the film into the film catcher.

Face the surface of the film up so that the images and the frame numbers can be seen correctly. Then, insert the film from the largest frame number.



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The 135 film is fed into the film feed unit and the scanning process starts.

After scanning finishes, the **Judgement Display** is shown. The **Judgement Display** is shown only when **PJP** is selected in **PJP/AUTO Switch** on the **Correction** tab of the **Environment** display.

For details about the **Judgement Display**, see [4.1](#) Configuring color and density settings in the Operator's Manual.

- For details about how to use the Operator's Manual, see [7.1 Accessing the HELP display](#).

Example: Judgment Display



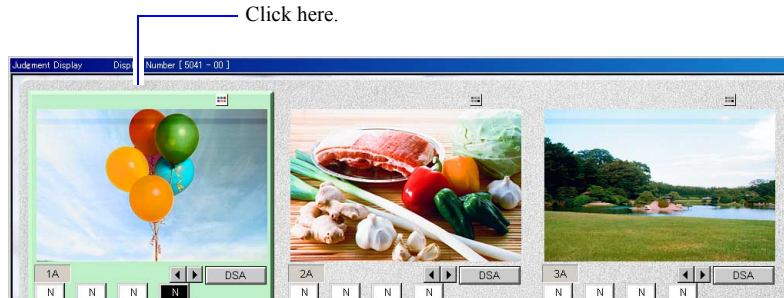
S5041-00-UM01

Press the **F12** key (**F12**) to cancel the operation. Then, follow the message displayed on the monitor. This completes the scanning operation if **AUTO** is selected in **PJP/AUTO Switch** on the **Correction** tab of the **Environment** display. Next, operate with image editing software.

8. Click the image to correct color and density.

Right-click on an image to skip it. Then it will not be scanned.

Example: Judgment Display



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9. Confirm the image area of the scanned image.

For images whose position is not easy to adjust, such as a night scene, you can use the **frame stop position adjustment function**.

- For details, see [7.4](#) If a film that has unclear frame boundaries is processed, in the Operator's Manual.
- For details about how to use the Operator's Manual, see [7.1 Accessing the HELP display](#).

Mouse operation

- Click **Fine adjustment** buttons (), and adjust the area.

Example: Judgment Display



Fine adjustment buttons ()

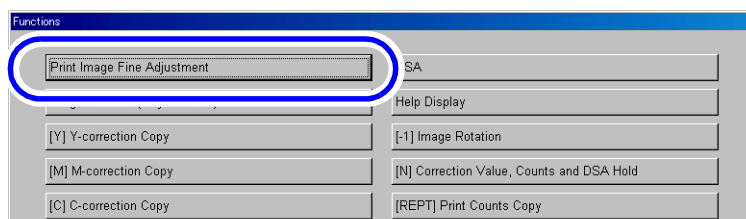
G087602

Keyboard operation

- Press the **F1** key (**F1**) to access the **Functions** display.

- (2) Select **Print Image Fine Adjustment** with the ←, →, ↑ and ↓ keys, then press the **Enter** key (ENTER).

Example: **Functions** display



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- (3) Adjust the image area with the **F10** (F10) and **F9** (F9) keys.

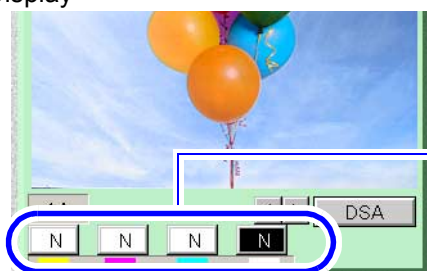
Key	Explanation
F10 key (F10)	The image moves to the right.
F9 key (F9)	The image moves to the left.

10. Click the **Color and density correction** button to correct color and density.

- (1) Select the **color and density correction** button.

- (2) Perform correction.

Example: **Judgment Display**



Color and density correction buttons
Displays each correction value.

G087602

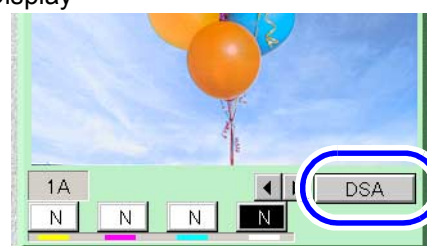
Action	Explanation
Click	Increases the value.
Right-click	Decreases the value.

Alphabetical letters from A to F are substituted for the correction values of 10 or more, or -10 or less.

Correction value	-15	-14	-13	-12	-11	-10	From -9 to -1	0	From 1 to 9	10	11	12	13	14	15
Display	-F	-E	-D	-C	-B	-A	From -9 to -1	N	From 1 to 9	A	B	C	D	E	F

11. Click the **DSA** button and adjust Contrast, Sharpness and Chroma.

Example: **Judgment Display**



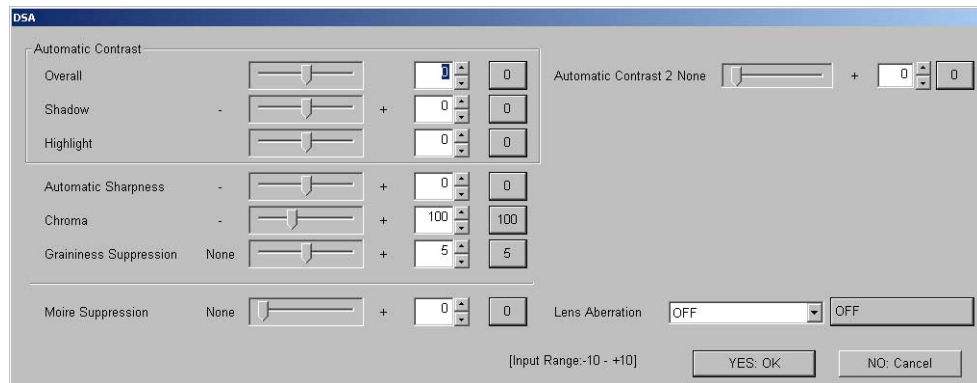
DSA button

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The **DSA** display is shown.
Correct the image if necessary.

- For details, see [4.1.4 Corrections of contrast and sharpness \[DSA\]](#), in the Operator's Manual.
- For details about how to use the Operator's Manual, see [7.1 Accessing the HELP display](#).

Example: **DSA** display

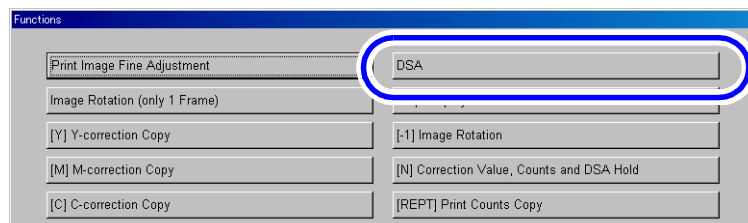


S087603

NOTE

- The **DSA** display can also be accessed from the **Functions** display.

Example: **Functions** display

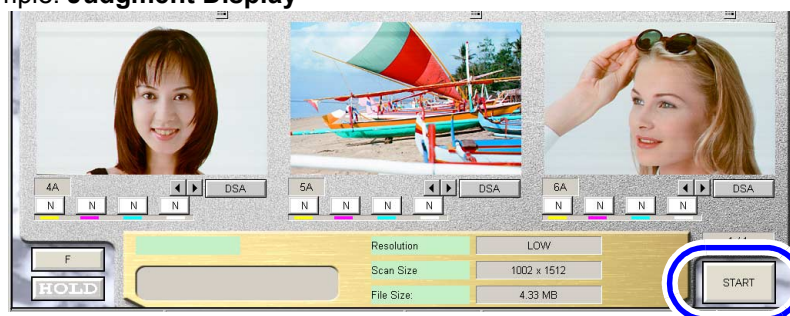


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12. Move the frame to the next image by pressing the keys ←, →, ↑ or ↓, then perform Step 9 to Step 11.

13. Click **START**.

Example: **Judgment Display**



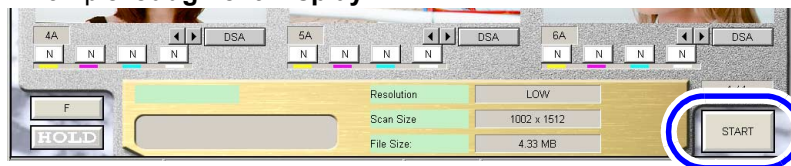
S5041-00-UM01

14. Corrects color and density of other images.

If there are more images, the next page is displayed.

- (1) After you configure the settings of color and density, click **START**.
If you do not have any more images to output, go to the next step.

Example: Judgment Display

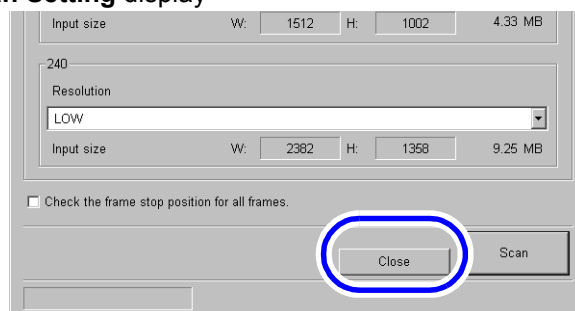


S5041-00-UM01

Scanned image is displayed onscreen.

- 15.** Click **Close** on the **Scan Setting** display.

Example: Scan Setting display



S5200-00-UM01

- 16.** Save the image that is displayed onscreen to any destination using image editing software such as Adobe Photoshop.

After saving the image, correct it as necessary.

This completes scanning 135-type film.

5.5 Scanning IX240 film cartridge

This section explains how to scan IX240 film cartridge using this product.
For inserting films, see Step 5 and Step 6.
For scanning method on the EZ Controller, see the **Operator's Manual** of the EZ Controller.

- For details about the precautions in handling films, see [1.5 Precautions for handling films](#).

NOTE

- It is also possible to process the IX240 film taken out of the cartridge.
 - For details about how to process the film taken out from the cartridge, refer to [5.6 Scanning IX240 film taken out of the cartridge](#).

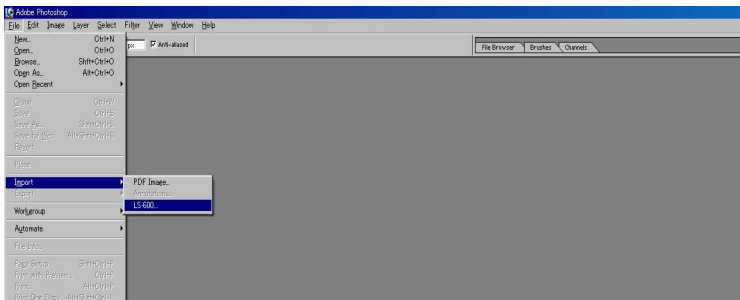
1. Confirm the power supply of the flatbed scanner is on.

2. Access the **Scan Setting** display.

Accessing the **Scan Setting** display is necessary for scanning.

- (1) Start image editing software such as Adobe Photoshop.
- (2) Select **File→Read→LS-600**.

Example: Display of Adobe Photoshop

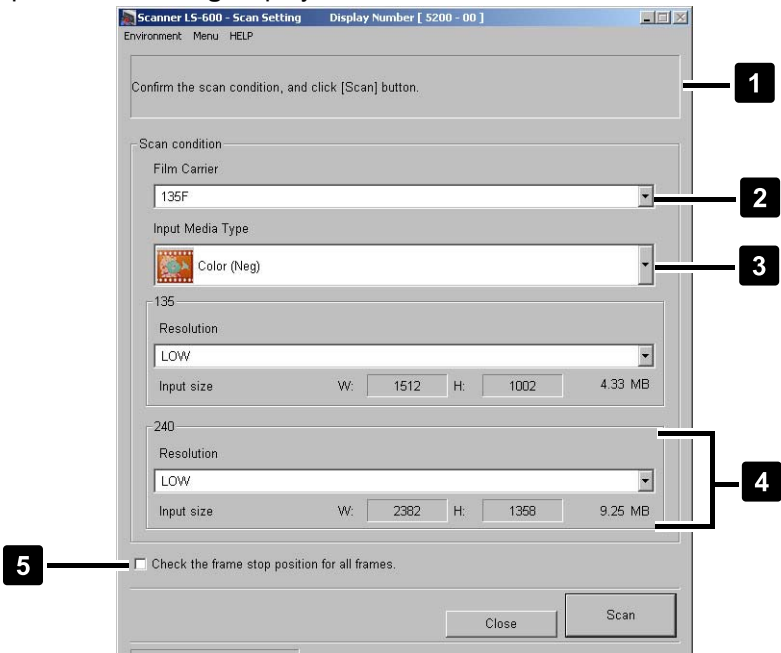


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The **Scan Setting** display is shown.



3. Configure the scan condition settings.



Example: **Scan Setting** display




S5200-00-UM01

	Item	Explanation
1	Scanning status	<p>Displays the status of the scanner.</p> <ul style="list-style-type: none"> Scanner unit is not connected. The PC and the scanner are not connected. The scanner power is off or the USB cable is not connected. One moment please. . . Initializing the scanner, or performing scanner calibration. LED Light Source Standby Performing temperature adjustment of LED light source. Scanner temperature is being adjusted. Performing temperature adjustment of the scanner. Confirm the scan condition, and click [Scan] button. Temperature adjustment of scanner complete, ready for configuring settings. Insert film. Ready for scanning. Scanning. . . Scanning.
2	Film Carrier	Select the size of the film to scan by clicking  .
3	Input Media Type	<p>Select the type of the film to scan by clicking .</p> <ul style="list-style-type: none"> Color (Neg): select this to scan a negative film developed as a color negative, or a sepia film.  B/W Neg. (OB): select this to scan a black and white film developed as a color negative.  B/W (Neg): select this to scan a negative film developed as a black and white negative. The scratch erasing function is not available.  Color (Pos): select this to scan a color positive film. 

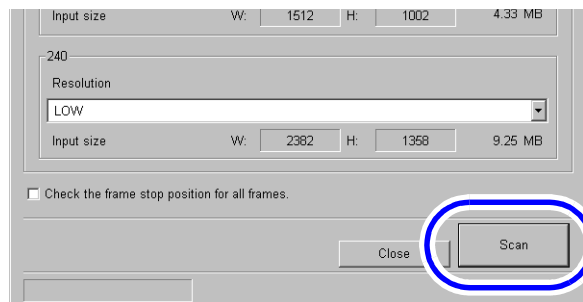
	Item	Explanation
4	Resolution	<p>Select the resolution for the film to scan by clicking  .</p> <p>The source size and the image size at the selected resolution are shown.</p> <ul style="list-style-type: none"> • LOW: Select this if making 89 mm × 127 mm prints using a 300 dpi printer, for example. • HIGH: Select this if making 305 mm × 457 mm prints using a 300 dpi printer, for example. • Automatic (High Quality):^{*1} Scanning is performed with the magnification rate for the biggest print size among C, P and H. For example, if there are three print sizes, C : 89 × 127, P : 89 × 254 and H : 89 × 152, the magnification rate for P size that is biggest among them is to be selected. With Automatic (High Quality), the quality is given priority in scanning. This takes more time for processing than Automatic (High Speed). <p>(NOTE)</p> <ul style="list-style-type: none"> • The print quality and processing capacity depend on which print sizes are used. For example, when the print sizes included in a scanned film are the same, there is no difference in the quality and the processing capacity regardless of your choice. <ul style="list-style-type: none"> • Automatic (High Speed):^{*1} Scanning is performed with the magnification rate for the smallest print size among C, P and H. For example, if there are three print sizes, C : 89 × 127, P : 89 × 254 and H : 89 × 152, the magnification rate for C size that is smallest among them is to be selected. Automatic (High Speed) gives priority to capability than Automatic (High Quality) for scanning. <p>(NOTE)</p> <ul style="list-style-type: none"> • The print quality and processing capacity depend on which print sizes are used. For example, when the print sizes included in a scanned film are the same, there is no difference in the quality and the processing capacity regardless of your choice. <p>The resolution name that is shown onscreen can be changed on the Environment display.</p> <ul style="list-style-type: none"> • For details, see  2.2 Specifying names of displayed unit and resolution [Environment:Others tab] in the Operator's Manual^{*2}.
5	Check the frame stop position for all frames.	<p>Select whether to confirm the stop position of all frames.</p> <p>If confirming the stop position of all frames while scanning, click</p>

- For details about image correction, frame feed, frame number or setting the scanning type, see  3.1 Configuring image correction settings [Environment: Correction tab],  3.2 Configuring settings of frame advance and frame number [Operator Selections: Environment tab] in the Operator's Manual^{*2}.

^{*1}. Displayed only when the EZ Controller or printer is used, and Print Type is Normal Print.

^{*2}. For details about how to use the Operator's Manual, see  7.1 Accessing the HELP display.

4. Click **Scan**.

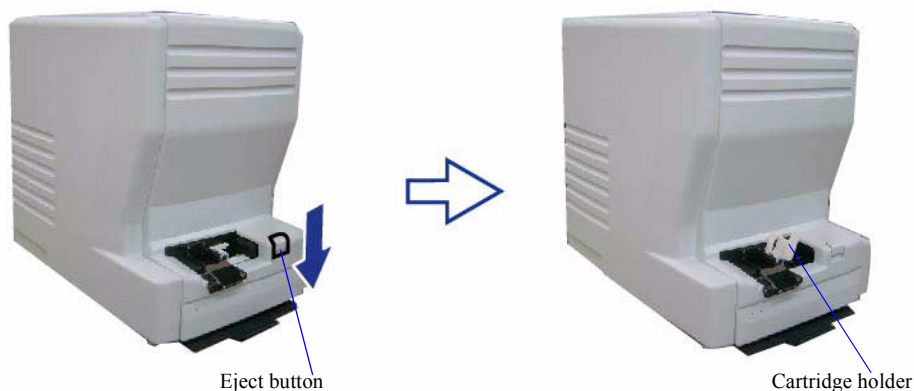


S5200-00-UM01

5. Put on clean gloves.

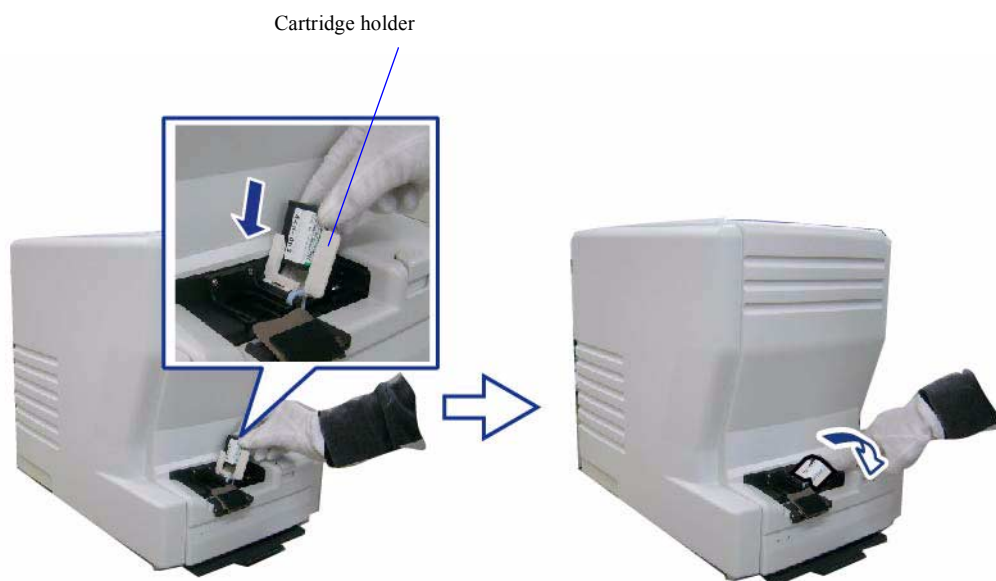
6. Insert the IX240 film cartridge.

(1) Press the eject button in the direction shown by the arrow to raise the cartridge holder.



G088498

(2) Adapt the IX240 film cartridge to the holder and lay the holder.



G088499

The IX240 film is fed into the film feed unit and the scanning process starts.

After scanning finishes, the **Judgement Display** is shown. The **Judgement Display** is shown only when **PJP** is selected in **PJP/AUTO Switch** on the **Correction** tab of the **Environment** display. For details about the **Judgement Display**, see [4.1](#) Configuring color and density settings in the Operator's Manual.

- For details about how to use the Operator's Manual, see [7.1](#) Accessing the HELP display.

Example: **Judgment Display**



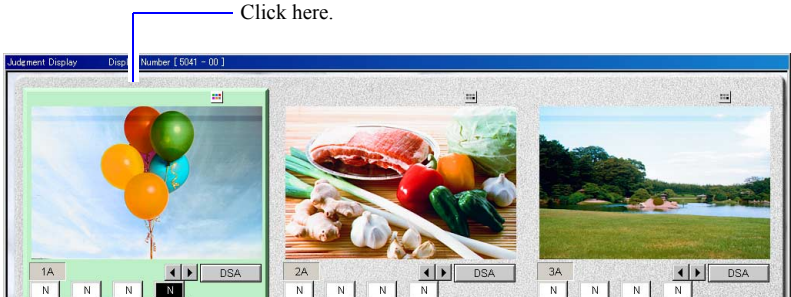
S5041-00-UM01

Press the **F12** key (**F12**) to cancel the operation. Then, follow the message displayed on the monitor. This completes the scanning operation if **AUTO** is selected in **PJP/AUTO Switch** on the **Correction** tab of the **Environment** display. Next, operate with image editing software.

7. Click the image to correct color and density.

Right-click on an image to skip it. Then it will not be scanned.

Example: **Judgment Display**



S5041-00-UM01

8. Confirm the image area of the scanned image.

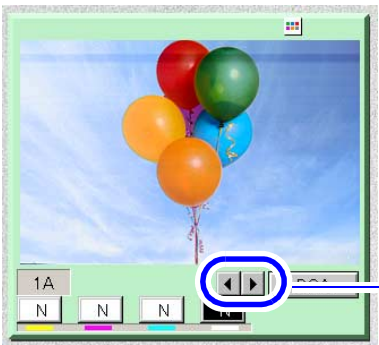
For images whose position is not easy to adjust, such as a night scene, you can use the **frame stop position adjustment function**.

- For details, see [7.4](#) If a film that has unclear frame boundaries is processed, in the Operator's Manual.
- For details about how to use the Operator's Manual, see [7.1](#) Accessing the HELP display.

Mouse operation

- (1) Click **Fine adjustment** buttons (), and adjust the area.

Example: **Judgment Display**



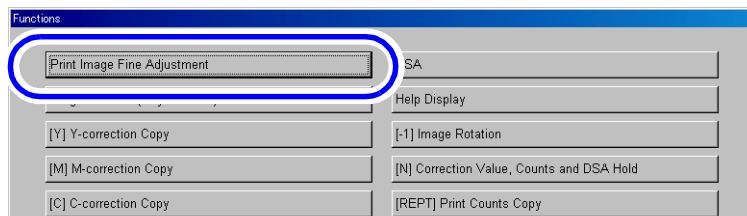
Fine adjustment buttons ()

G087602

Keyboard operation

- (1) Press the **F1** key (**F1**) to access the **Functions** display.
- (2) Select **Print Image Fine Adjustment** with the ←, →, ↑ and ↓ keys, then press the **Enter** key (**ENTER**).

Example: **Functions** display



S087599

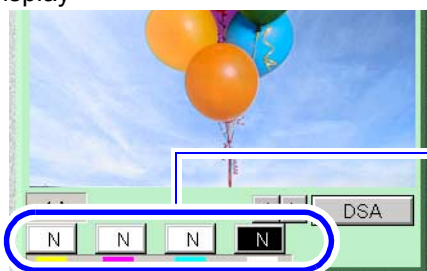
- (3) Adjust the image area with the **F10** (**F10**) and **F9** (**F9**) keys.

Key	Explanation
F10 key (F10)	The image moves to the right.
F9 key (F9)	The image moves to the left.

9. Click the **Color and density correction button to correct color and density.**

- (1) Select the **color and density correction** button.
- (2) Perform correction.

Example: **Judgment Display**



Color and density correction buttons
Displays each correction value.

G087602

Action	Explanation
Click	Increases the value.
Right-click	Decreases the value.

Alphabetical letters from A to F are substituted for the correction values of 10 or more, or -10 or less.

Correction value	-15	-14	-13	-12	-11	-10	From -9 to -1	0	From 1 to 9	10	11	12	13	14	15
Display	-F	-E	-D	-C	-B	-A	From -9 to -1	N	From 1 to 9	A	B	C	D	E	F

10. Click the **DSA** button and adjust Contrast, Sharpness and Chroma.

Example: **Judgment** Display



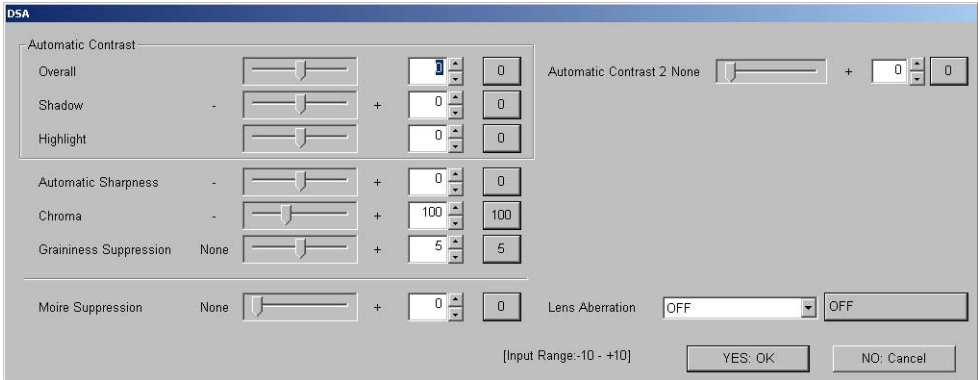
DSA button

S087602

The **DSA** display is shown.
Correct the image if necessary.

- For details, see [4.1.4 Corrections of contrast and sharpness \[DSA\]](#), in the Operator's Manual.
- For details about how to use the Operator's Manual, see [7.1 Accessing the HELP display](#).

Example: **DSA** display

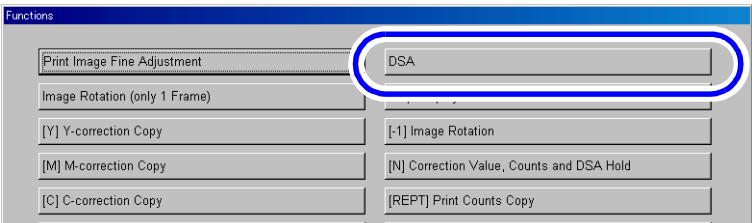


S087603

NOTE

- The **DSA** display can also be accessed from the **Functions** display.

Example: **Functions** display



S087599

11. Move the frame to the next image by pressing the keys ←, →, ↑ or ↓, then perform Step 8 to Step 10.

12. Click **START**.

Example: **Judgment Display**



S5041-00-UM01

13. Corrects color and density of other images.

If there are more images, the next page is displayed.

(1) After you configure the settings of color and density, click **START**.

If you do not have any more images to output, go to the next step.

Example: **Judgment Display**

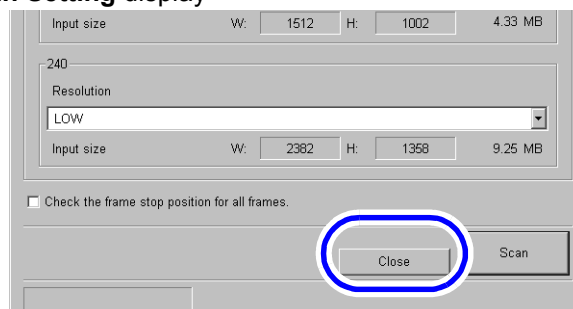


S5041-00-UM01

Scanned image is displayed onscreen.

14. Click **Close** on the **Scan Setting** display.

Example: **Scan Setting** display



S5200-00-UM01


15. Save the image that is displayed onscreen to any destination using image editing software such as Adobe Photoshop.

After saving the image, correct it as necessary.

This completes scanning IX240 film cartridge.

5.6 Scanning IX240 film taken out of the cartridge

This section explains how to scan IX240 film strip taken out of the cartridge using this product.
For inserting films, see Step 5 and Step 9.
For scanning method on the EZ Controller, see the **Operator's Manual** of the EZ Controller.

- For details about the precautions in handling films, see  1.5 Precautions for handling films.

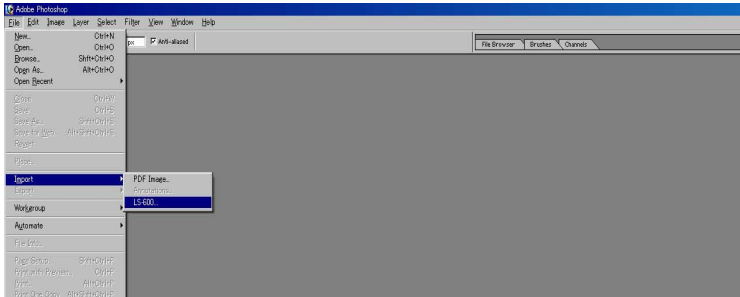
1. Confirm the power supply of the flatbed scanner is on.

2. Access the **Scan Setting** display.

Accessing the **Scan Setting** display is necessary for scanning.

- (1) Start image editing software such as Adobe Photoshop.
- (2) Select **File→Read→LS-600**.

Example: Display of Adobe Photoshop

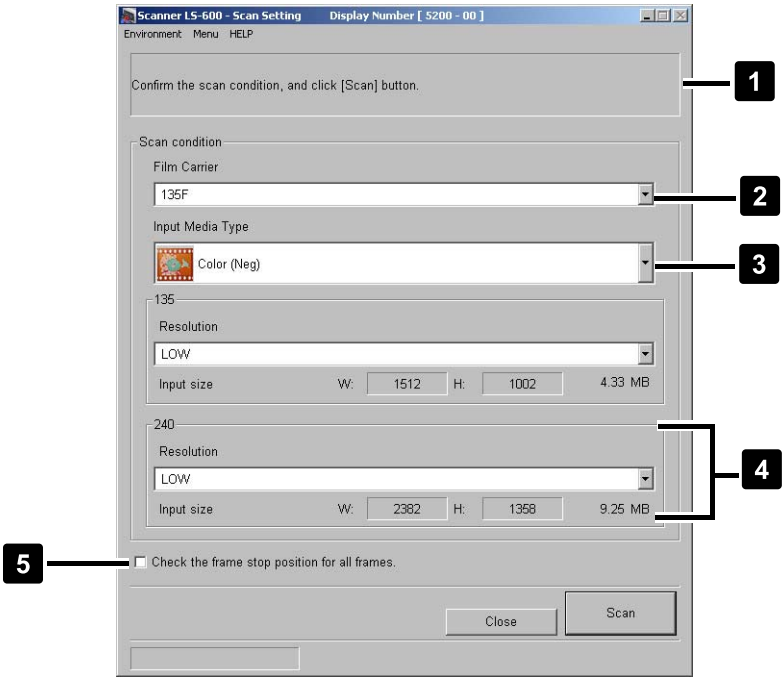


S087590

The **Scan Setting** display is shown.







3. Configure the scan condition settings.



Example: **Scan Setting** display





S5200-00-UM01


5.6 Scanning IX240 film taken out of the cartridge

	Item	Explanation
1	Scanning status	<p>Displays the status of the scanner.</p> <ul style="list-style-type: none"> Scanner unit is not connected. The PC and the scanner are not connected. The scanner power is off or the USB cable is not connected. One moment please. . . Initializing the scanner, or performing scanner calibration. LED Light Source Standby Performing temperature adjustment of LED light source. Scanner temperature is being adjusted. Performing temperature adjustment of the scanner. Confirm the scan condition, and click [Scan] button. Temperature adjustment of scanner complete, ready for configuring settings. Insert film. Ready for scanning. Scanning. . . Scanning.
2	Film Carrier	Select the size of the film to scan by clicking  .
3	Input Media Type	<p>Select the type of the film to scan by clicking .</p> <ul style="list-style-type: none"> Color (Neg): select this to scan a negative film developed as a color negative, or a sepia film.  B/W Neg. (OB): select this to scan a black and white film developed as a color negative.  B/W (Neg): select this to scan a negative film developed as a black and white negative. The scratch erasing function is not available.  Color (Pos): select this to scan a color positive film. 

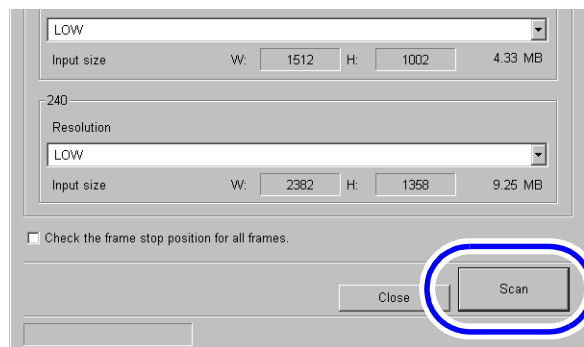
	Item	Explanation
4	Resolution	<p>Select the resolution for the film to scan by clicking  .</p> <p>The source size and the image size at the selected resolution are shown.</p> <ul style="list-style-type: none"> • LOW: Select this if making 89 mm × 127 mm prints using a 300 dpi printer, for example. • HIGH: Select this if making 305 mm × 457 mm prints using a 300 dpi printer, for example. • Automatic (High Quality):^{*1} Scanning is performed with the magnification rate for the biggest print size among C, P and H. For example, if there are three print sizes, C : 89 × 127, P : 89 × 254 and H : 89 × 152, the magnification rate for P size that is biggest among them is to be selected. With Automatic (High Quality), the quality is given priority in scanning. This takes more time for processing than Automatic (High Speed). <p>(NOTE)</p> <ul style="list-style-type: none"> • The print quality and processing capacity depend on which print sizes are used. For example, when the print sizes included in a scanned film are the same, there is no difference in the quality and the processing capacity regardless of your choice. <ul style="list-style-type: none"> • Automatic (High Speed):^{*1} Scanning is performed with the magnification rate for the smallest print size among C, P and H. For example, if there are three print sizes, C : 89 × 127, P : 89 × 254 and H : 89 × 152, the magnification rate for C size that is smallest among them is to be selected. Automatic (High Speed) gives priority to capability than Automatic (High Quality) for scanning. <p>(NOTE)</p> <ul style="list-style-type: none"> • The print quality and processing capacity depend on which print sizes are used. For example, when the print sizes included in a scanned film are the same, there is no difference in the quality and the processing capacity regardless of your choice. <p>The resolution name that is shown onscreen can be changed on the Environment display.</p> <ul style="list-style-type: none"> • For details, see  2.2 Specifying names of displayed unit and resolution [Environment:Others tab] in the Operator's Manual^{*2}.
5	Check the frame stop position for all frames.	<p>Select whether to confirm the stop position of all frames.</p> <p>If confirming the stop position of all frames while scanning, click</p>

- For details about image correction, frame feed, frame number or setting the scanning type, see  3.1 Configuring image correction settings [Environment: Correction tab],  3.2 Configuring settings of frame advance and frame number [Operator Selections: Environment tab] in the Operator's Manual^{*2}.

^{*1}. Displayed only when the EZ Controller or printer is used, and Print Type is Normal Print.

^{*2}. For details about how to use the Operator's Manual, see  7.1 Accessing the HELP display.

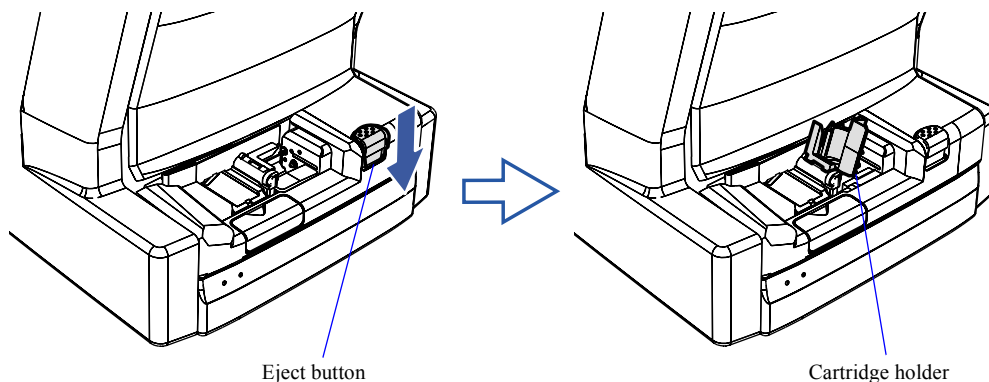
4. Click **Scan**.



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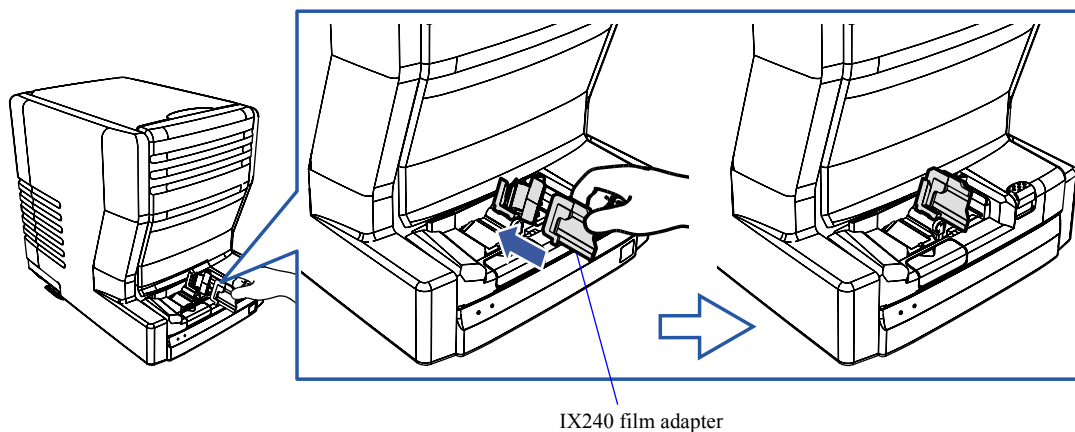
5. Put on clean gloves.

6. Press the eject button to raise the cartridge holder.



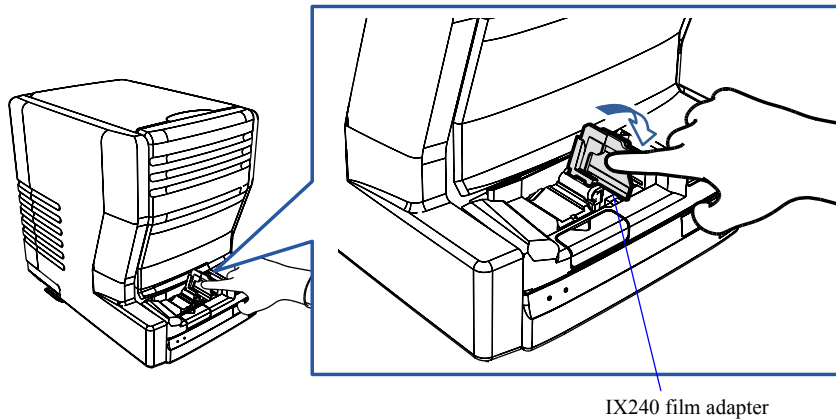
G071842

7. Attach the IX240 film adapter.



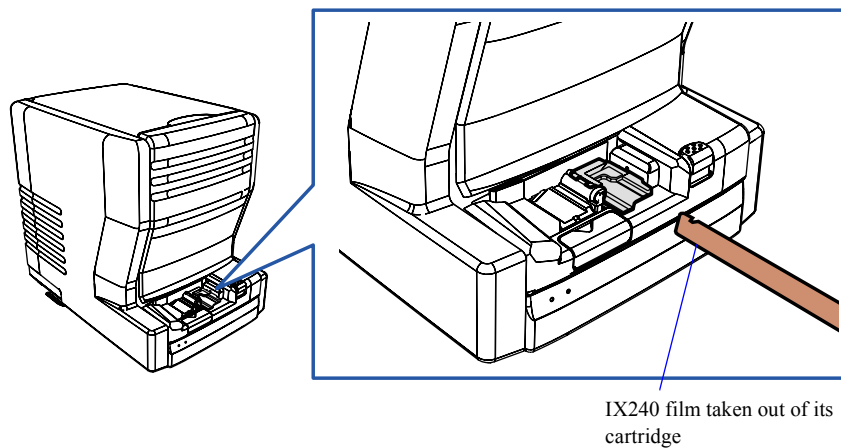
G071851

8. Lay the IX240 film adapter down.



G071852

9. Insert IX240 film strip taken out of the cartridge into the film slot as shown below.



G071853

The IX240 film is fed into the film feed unit and the scanning process starts.

After scanning finishes, the **Judgement Display** is shown. The **Judgement Display** is shown only when **PJP** is selected in **PJP/AUTO Switch** on the **Correction** tab of the **Environment** display.

For details about the **Judgement Display**, see [4.1](#) Configuring color and density settings in the Operator's Manual.

- For details about how to use the Operator's Manual, see [7.1](#) Accessing the HELP display.

Example: **Judgment Display**

S5041-00-UM01

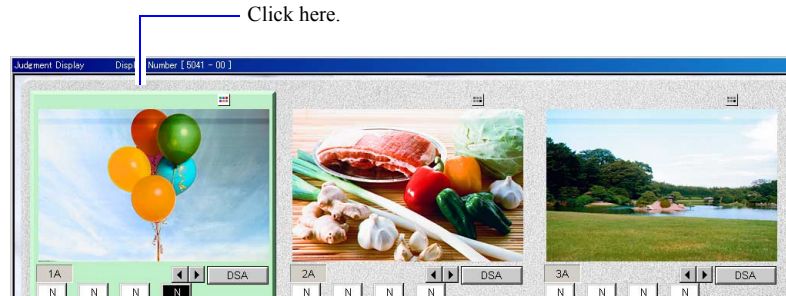
Press the **F12** key (**F12**) to cancel the operation. Then, follow the message displayed on the monitor.

This completes the scanning operation if **AUTO** is selected in **PJP/AUTO Switch** on the **Correction** tab of the **Environment** display. Next, operate with image editing software.

10. Click the image to correct color and density.

Right-click on an image to skip it. Then it will not be scanned.

Example: **Judgment Display**



S5041-00-UM01

11. Confirm the image area of the scanned image.

For images whose position is not easy to adjust, such as a night scene, you can use the **frame stop position adjustment function**.

- For details, see [7.4](#) If a film that has unclear frame boundaries is processed, in the Operator's Manual.
- For details about how to use the Operator's Manual, see [7.1](#) Accessing the HELP display.

Mouse operation

- (1) Click **Fine adjustment** buttons (◀ ▶), and adjust the area.

Example: **Judgment Display**



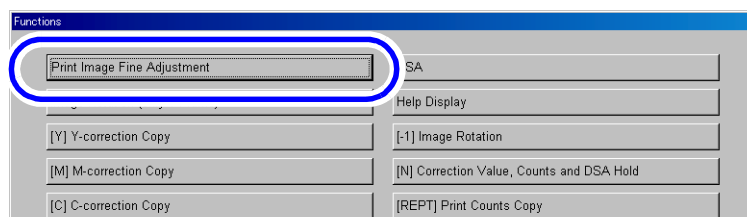
Fine adjustment buttons (◀ ▶)

G087602

Keyboard operation

- (1) Press the **F1** key (**F1**) to access the **Functions** display.
- (2) Select **Print Image Fine Adjustment** with the ←, →, ↑ and ↓ keys, then press the **Enter** key (**ENTER**).

Example: **Functions** display



S087599

(3) Adjust the image area with the **F10** (**F10**) and **F9** (**F9**) keys.

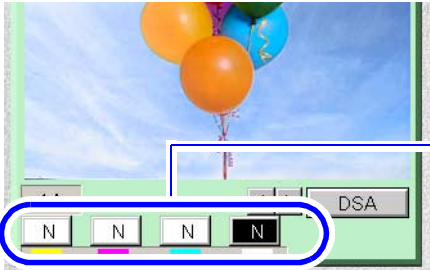
Key	Explanation
F10 key (F10)	The image moves to the right.
F9 key (F9)	The image moves to the left.

12. Click the **Color and density correction button to correct color and density.**

(1) Select the **color and density correction** button.

(2) Perform correction.

Example: **Judgment Display**



Color and density correction buttons
Displays each correction value.

G087602

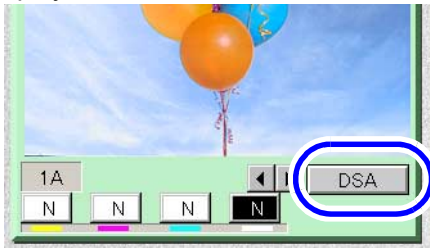
Action	Explanation
Click	Increases the value.
Right-click	Decreases the value.

Alphabetical letters from A to F are substituted for the correction values of 10 or more, or -10 or less.

Correction value	-15	-14	-13	-12	-11	-10	From -9 to -1	0	From 1 to 9	10	11	12	13	14	15
Display	-F	-E	-D	-C	-B	-A	From -9 to -1	N	From 1 to 9	A	B	C	D	E	F

13. Click the **DSA button and adjust Contrast, Sharpness and Chroma.**

Example: **Judgment Display**



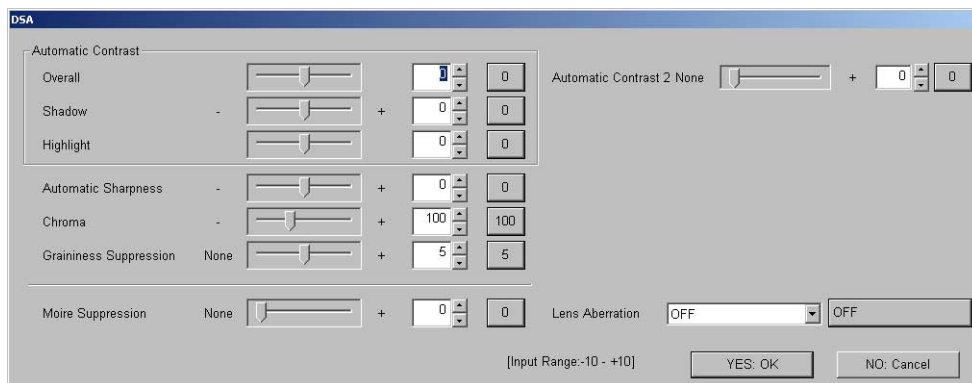
DSA button

G087602

The **DSA** display is shown.
Correct the image if necessary.

- For details, see [4.1.4 Corrections of contrast and sharpness \[DSA\]](#), in the Operator's Manual.
- For details about how to use the Operator's Manual, see [7.1 Accessing the HELP display](#).

Example: **DSA** display

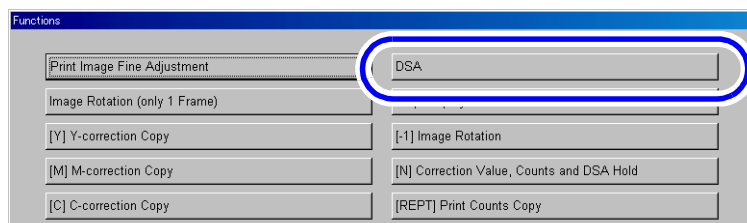


S087603

NOTE

- The **DSA** display can also be accessed from the **Functions** display.

Example: **Functions** display



S087599

14. Move the frame to the next image by pressing the keys ←, →, ↑ or ↓, then perform Step 11 to Step 13.

15. Click **START**.

Example: **Judgment Display**



S5041-00-UM01

16. Corrects color and density of other images.

If there are more images, the next page is displayed.

- After you configure the settings of color and density, click **START**.
If you do not have any more images to output, go to the next step.

Example: **Judgment Display**

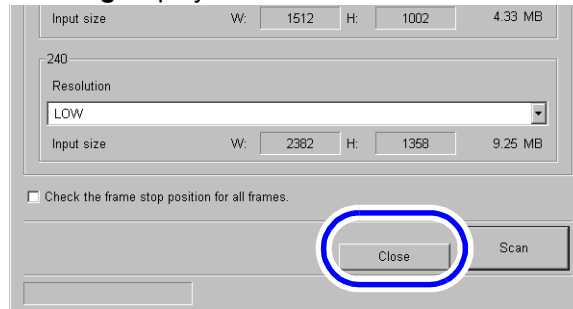


S5041-00-UM01

Scanned image is displayed onscreen.

17. Click **Close** on the **Scan Setting** display.

Example: **Scan Setting** display



S5200-00-UM01

18. Save the image that is displayed onscreen to any destination using image editing software such as Adobe Photoshop.

After saving the image, correct it as necessary.

This completes scanning IX240 film taken out of the cartridge.

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6



6. Daily maintenance

This chapter explains the necessary maintenance for maintaining the quality of this product.

6.1 Introduction of daily maintenance

This section shows maintenance items and their timing.

6.1.1 Maintenance items and timing

Timing	Part	Operation	Reference
Weekly Checks	Film feed unit (cleaning the film feed section) <ul style="list-style-type: none">• Roller• Magnetic head	Cleaning	 6.2.1
Monthly Checks	Scanner section <ul style="list-style-type: none">• Scanner dust-proof glass	Cleaning	 6.3
	135 rewinding unit		
	Film feed unit <ul style="list-style-type: none">• Rollers• Film path• Brushes• Magnetic head		
	Film inlet of the 240 rewinding box		
	Air filter		

6.2 Weekly Checks

Access the **Close Down Checks** display after finishing all processes of the day.
Follow the instructions on the display to perform the checks.

NOTE

- If film jams frequently occur or the film stop position is unstable, clean the film feed section according to need.
 - For details about the procedures, refer to [7.2.1 Cleaning the film feed section \[AFC Cleaning\]](#), in the Operator's Manual.
 - For details about how to use the Operator's Manual, see [7.1 Accessing the HELP display](#).

6.2.1 Cleaning the film feed section

Dust on the rollers or magnetic head in the film feed unit can be removed with the cleaning leader.
Dust accumulating on the rollers or magnetic head in the film feed unit may cause film jams.

Conditions

Perform this maintenance operation with the power on.

Requirements

- Clean gloves
 - IX240 adapter
 - Cleaning leader
- There are two types of cleaning leaders; for 135 lane and for 240 lane. Use the appropriate one for your cleaning.



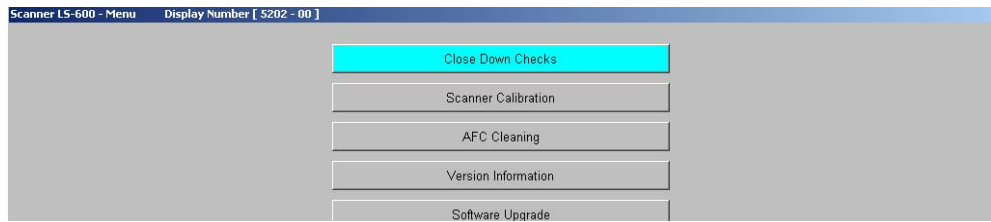
IMPORTANT

- Do not apply alcohol or other solvents to the cleaning leader.

1. Access the **Close Down Checks display.**

Bringing up the display
On the **Scan Setting** display, click the **Menu** tab. → Menu

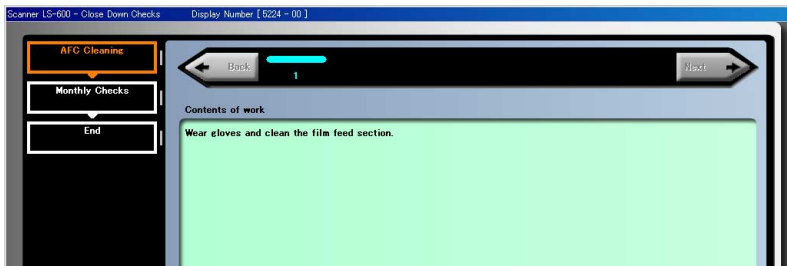
2. Click **Close Down Checks.**



S5202-00-UM03

3. Click **YES: Start processing.**

Example: **Close Down Checks** display



S5224-00-UM01

Would you like to clean the 240 lane? is shown.

4. Click **Execute**.

Set the **Cleaning Leader**, is shown.

5. Put on clean gloves.

6. Insert the 240 lane cleaning leader.

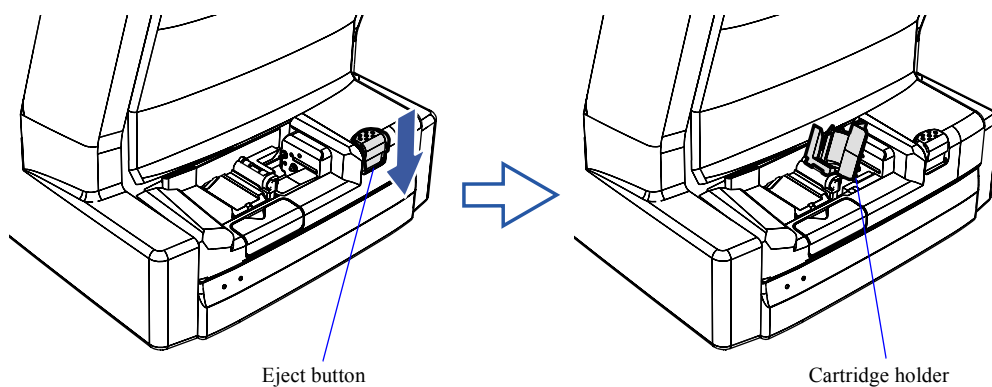


IMPORTANT

- Be sure to clean both the 135 and the 240 lanes.

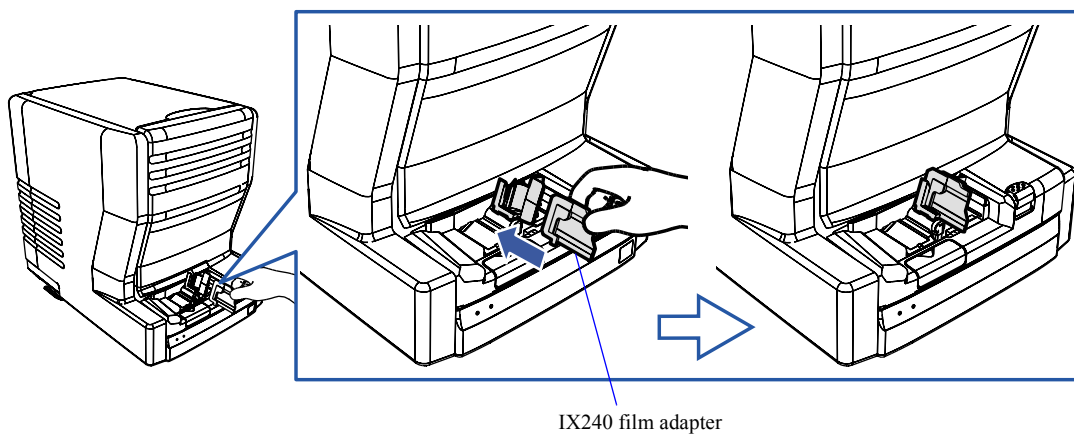
(1) Press the eject button.

The cartridge holder will rise.



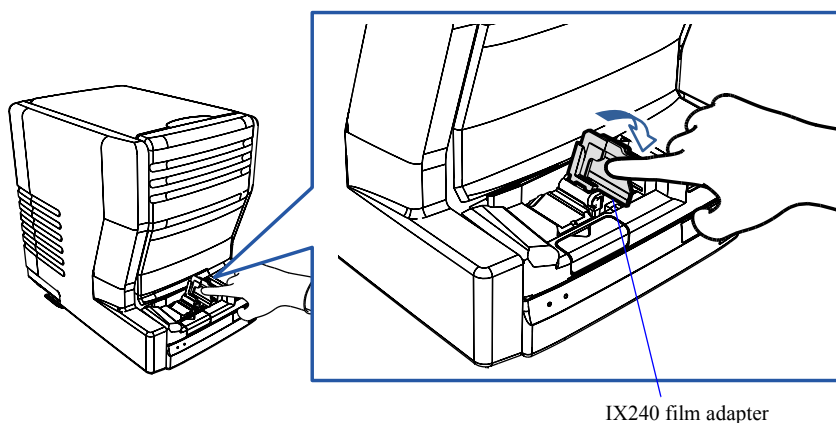
G071842

(2) Attach the IX240 film adapter.



G071851

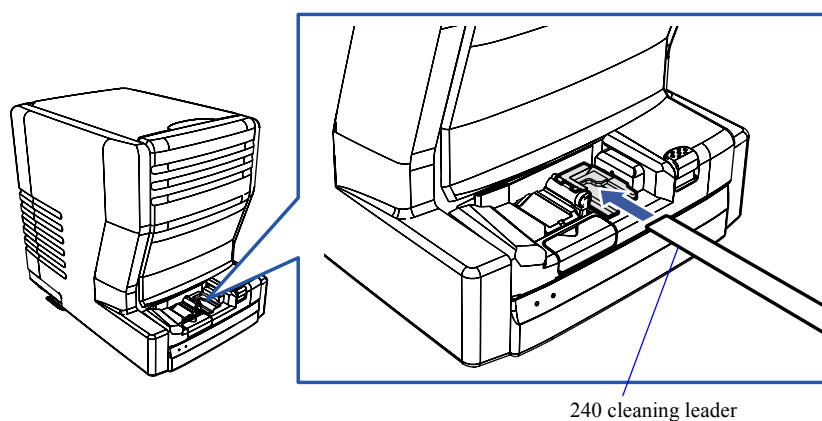
- (3) Lay the IX240 film adapter down.



IX240 film adapter

G071852

- (4) Insert the supplied cleaning leader for the 240 lane into the film inserting slot.



240 cleaning leader

G073165

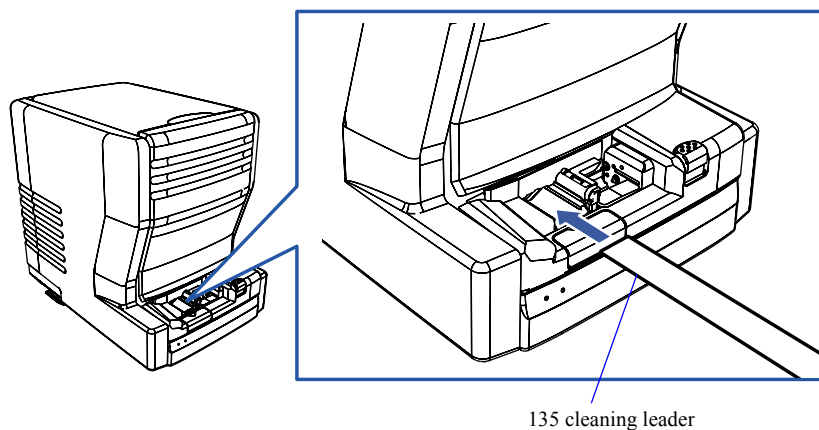
Cleaning operation is automatically performed, and the leader is output.

- (5) Put the cleaning leader and the IX240 film adaptor back.

7. When **Would you like to clean the 135 lane?** is shown, click **Execute**.

Set the Cleaning Leader. is shown.

8. Insert the 135 lane cleaning leader.



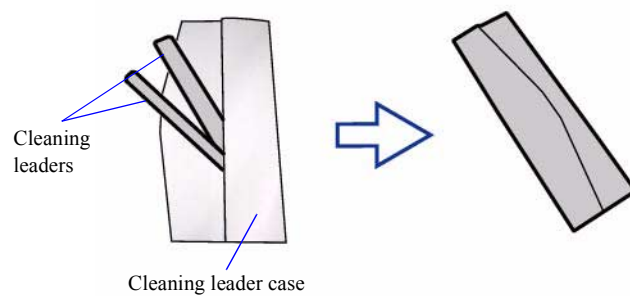
135 cleaning leader

G073164

Cleaning operation is automatically performed, and the leader is output.

9. Put the cleaning leader back.

To store the cleaning leader, put the cleaning leader in a nylon bag, then put it in the cleaning leader case.



This completes cleaning the film feed section.

G088639

6.3 Monthly Checks

6.3.1 Cleaning the scanner dust-proof glass

Conditions

Perform this maintenance operation with the power on.

Requirements

- Blower brush

1. Select the 240 lane of the film feed unit.



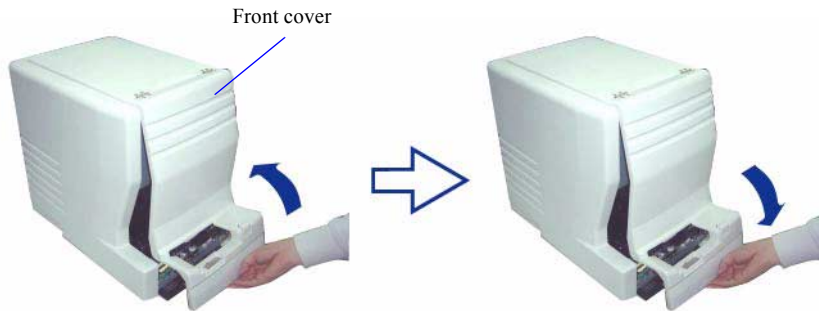
IMPORTANT

- If the 135 lane of the film advance unit is selected, it is necessary to select the 240 lane by following the procedure below. If the 135 lane is selected, the film advance top cover cannot be opened fully.

(1) Slightly open the front cover, then close it.

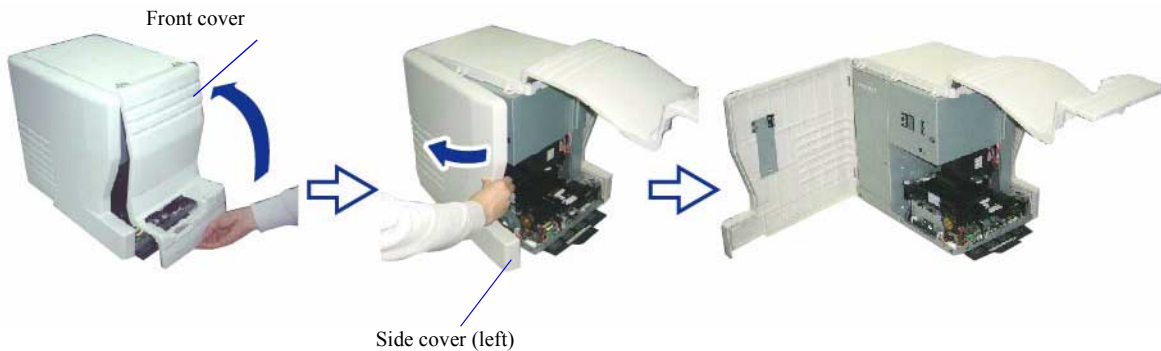
NOTE

- Closing the front cover selects the 240 lane of the film feed unit.



G088421

2. Open the front cover and side cover (left).



G087613

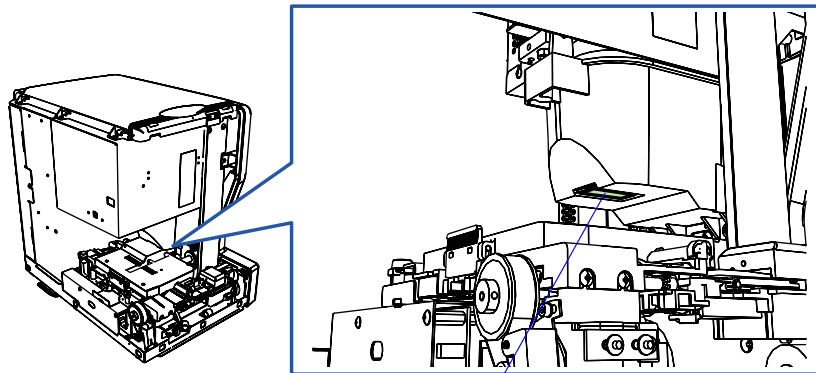
3. Clean the dust-proof glass of the scanner with the blower brush, etc.

If dirt is hard to remove, wipe it off using cleaning cloth.



IMPORTANT

- Do not use alcohol to clean. It may adversely affect print quality.



Scanner dust-proof glass

G082964

4. Close the side cover (left) and front cover.

If cleaning the 135 rewinding unit, it is not necessary to close the side cover (left) and front cover.
This completes cleaning the scanner dust-proof glass.

6.3.2 Cleaning the 135 rewinding unit

Conditions

Perform this maintenance operation with the power on.

Requirements

- Firmly-squeezed damp cloth
- Isopropyl alcohol
- Cotton swab

1. Select the 240 lane of the film feed unit.



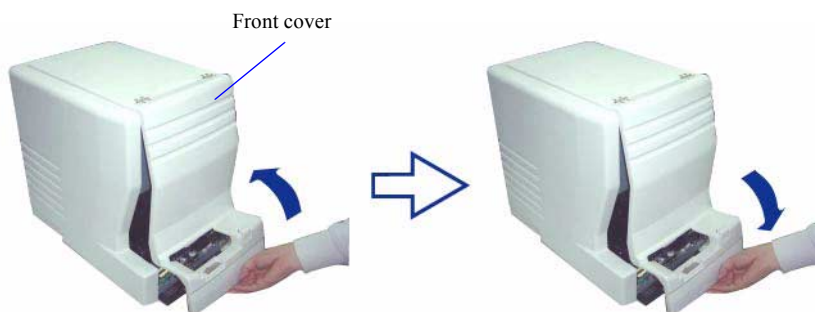
IMPORTANT

- If the 135 lane of the film advance unit is selected, it is necessary to select the 240 lane by following the procedure below. If the 135 lane is selected, the film advance top cover cannot be opened fully.

(1) Slightly open the front cover, then close it.

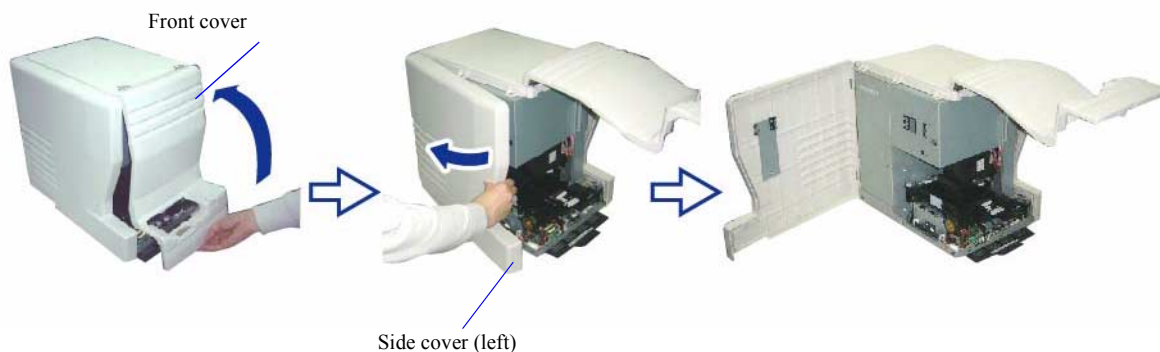
NOTE

- Closing the front cover selects the 240 lane of the film feed unit.



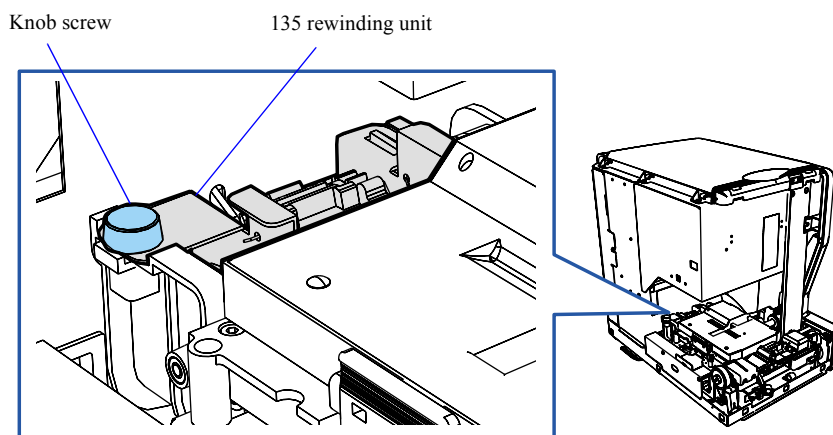
G088421

2. Open the front cover and side cover (left).



G087613

3. Loosen a knob screw of the 135 rewinding unit, and remove the 135 rewinding unit.



G071858

4. Open the rewinding guide and wipe the inside of the 135 rewinding unit with firmly squeezed damp cloth.

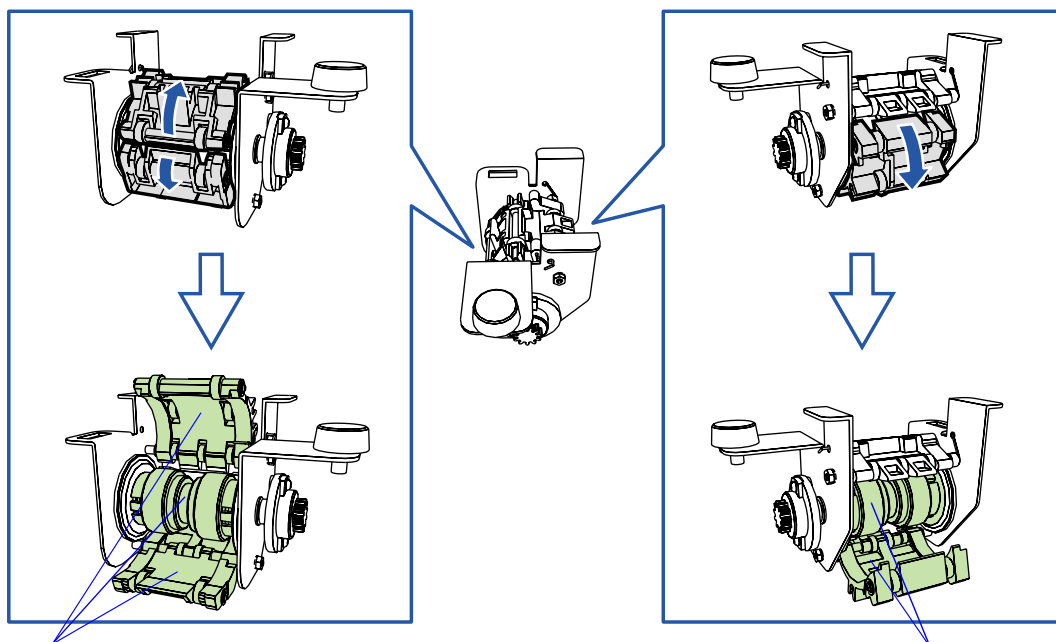
If it is hard to remove dirt, wipe it with a cotton swab dipped in isopropyl alcohol.
After wiping each part, dry it completely.



IMPORTANT

- Isopropyl alcohol is flammable. Keep it away from open flame, and carefully follow the instructions on labels on the chemical bottles.
- After cleaning, do not touch the rollers with your bare hands.

- After wiping each part using firmly-squeezed damp cloth, completely dry the parts. Do not insert film unless the cleaned parts are completely dry.



Inside of the 135 rewinding unit

Inside of the 135 rewinding unit

G073185

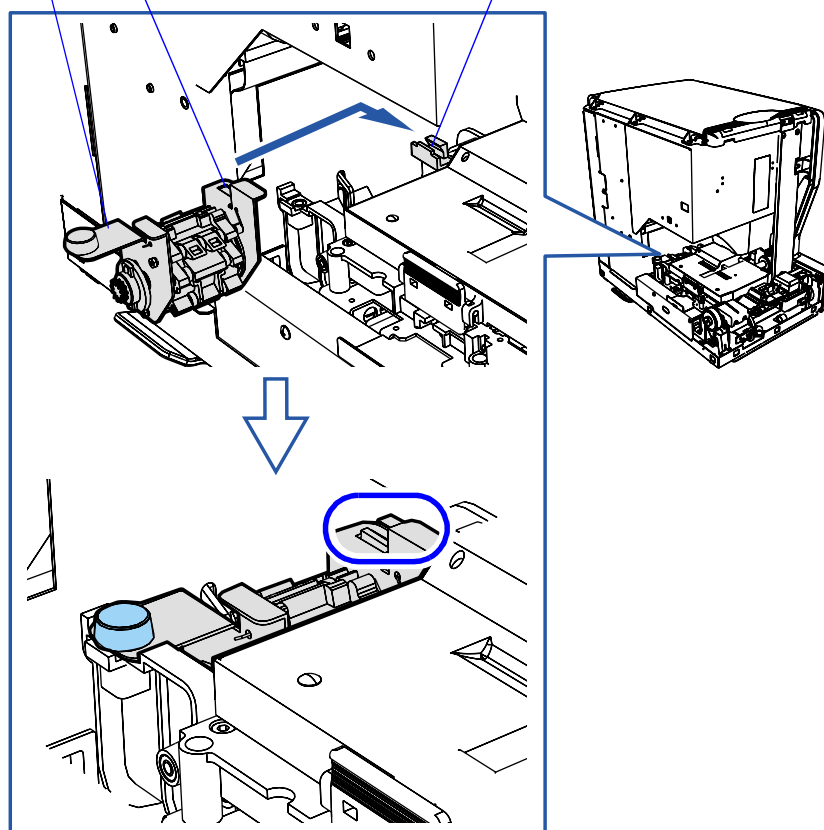
5. Reattach the 135 rewinding unit. (one knob screw)

Attach the 135 rewinding unit so that the square hole of the 135 rewinding unit fits the protruding section of the rewinding frame unit.

135 rewinding unit

Square hole

Protruding



G082962

6. Close the side cover (left) and front cover.

If cleaning each roller of the film advance unit and film path, it is not necessary to close the side cover (left) and front cover.

This completes cleaning the 135 rewinding unit.

6.3.3 Cleaning each roller and the film path of the film feed unit

Conditions

Perform this maintenance operation with the power on.

Requirements

- Firmly-squeezed damp cloth



IMPORTANT

- If you clean each roller and the film path, do not use thinner, alcohol or other solvents.
- After wiping each part using firmly-squeezed damp cloth, completely dry the parts. Do not insert film unless the cleaned parts are completely dry.

1. Select the 240 lane of the film feed unit.



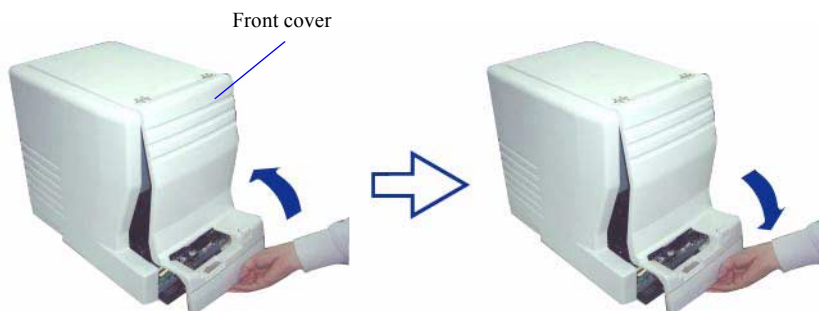
IMPORTANT

- If the 135 lane of the film advance unit is selected, it is necessary to select the 240 lane by following the procedure below. If the 135 lane is selected, the film advance top cover cannot be opened fully.

(1) Slightly open the front cover, then close it.

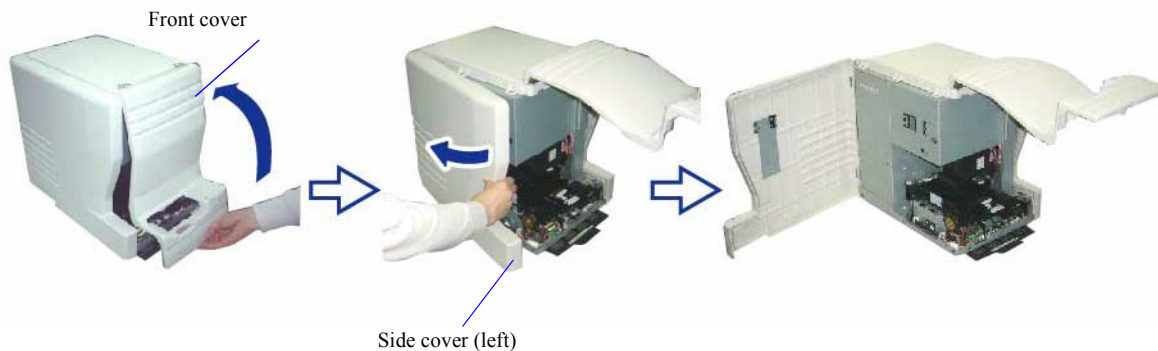
NOTE

- Closing the front cover selects the 240 lane of the film feed unit.



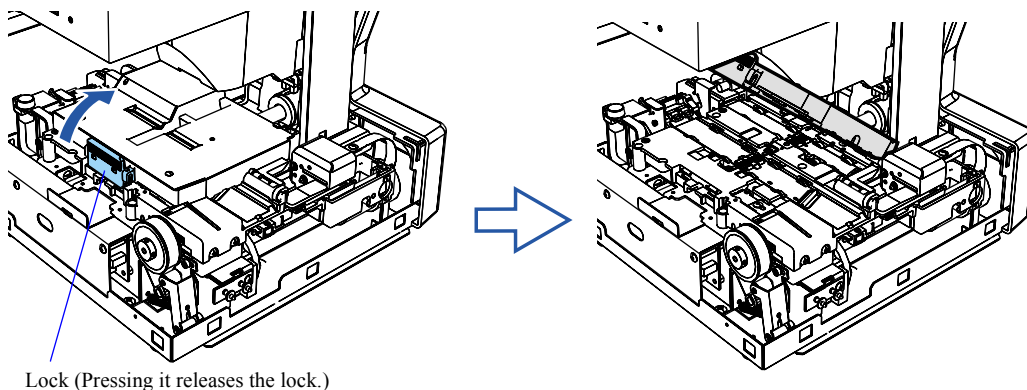
G088421

2. Open the front cover and side cover (left).



G087613

3. Release the lock to open the film advance top cover.



G071848

4. Wipe off each roller and the film path with firmly-squeezed damp cloth.

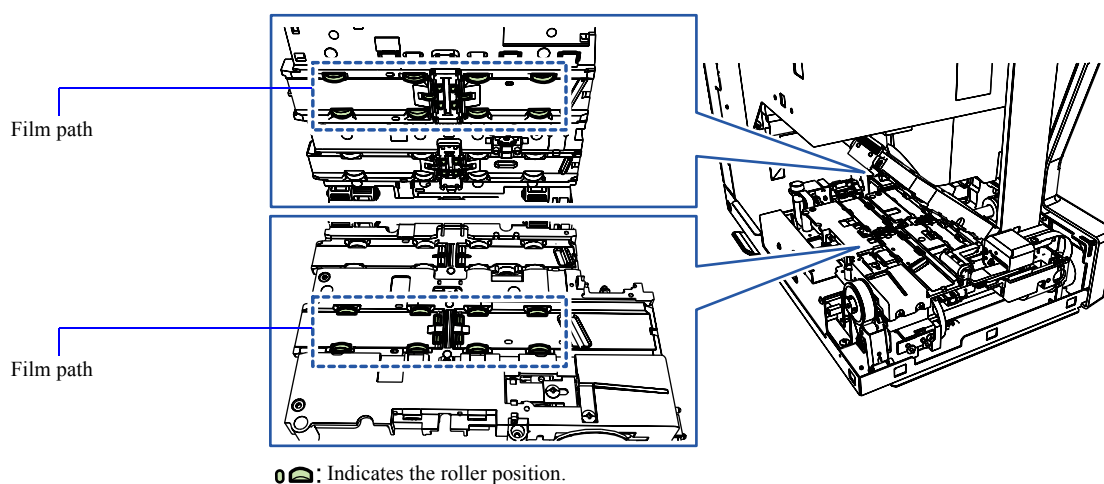


IMPORTANT

- Do not touch the film path or sensors with your bare hands.

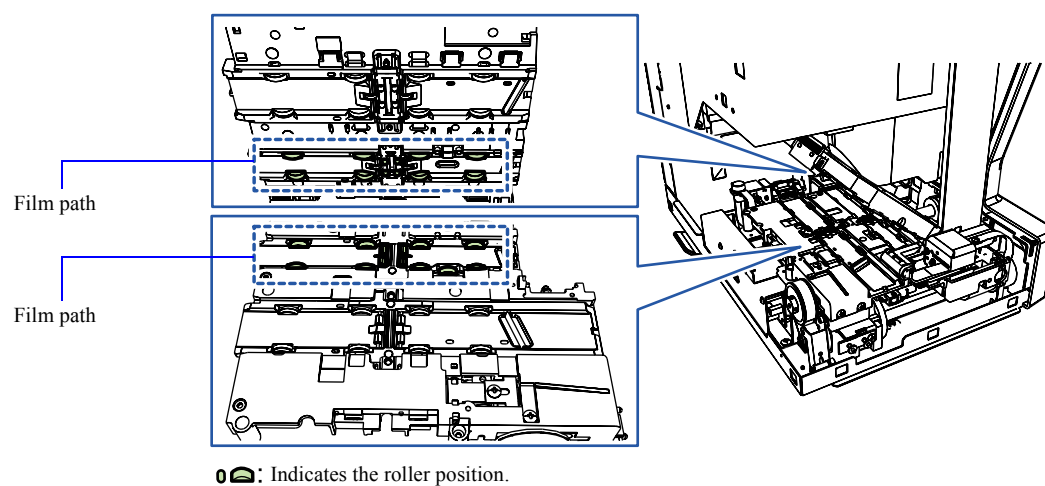
After wiping each part, dry it completely.

The 135 lane



G073187

The 240 lane



G073193

5. Close the film advance top cover, side cover (left) and front cover.

If cleaning each brush of the film advance unit, it is not necessary to close the film advance top cover, side cover (left) and front cover.

This completes cleaning each roller, and the film path of the film feed unit.

6.3.4 Cleaning each brush of the film feed unit

Conditions

Perform this maintenance operation with the power on.

Requirements

- Clean gloves
- Blower brush

1. Select the 240 lane of the film feed unit.



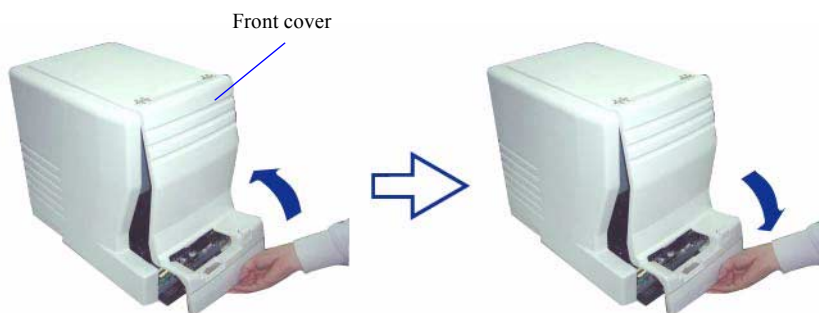
IMPORTANT

- If the 135 lane of the film advance unit is selected, it is necessary to select the 240 lane by following the procedure below. If the 135 lane is selected, the film advance top cover cannot be opened fully.

(1) Slightly open the front cover, then close it.

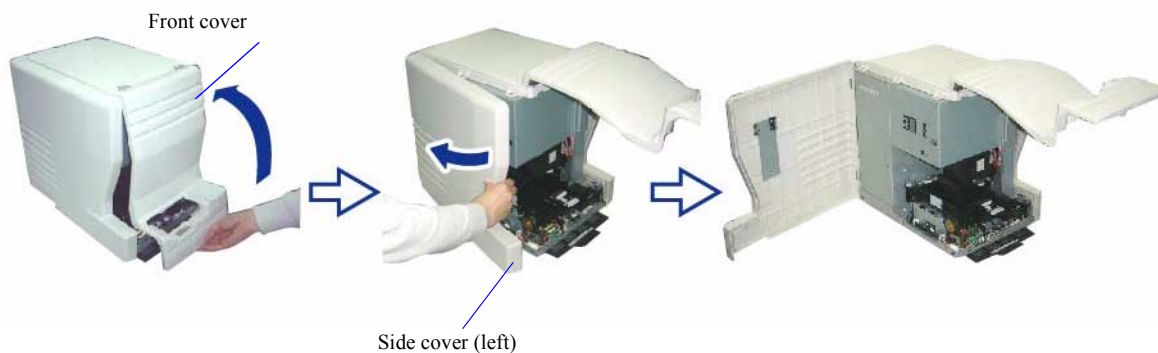
NOTE

- Closing the front cover selects the 240 lane of the film feed unit.



G088421

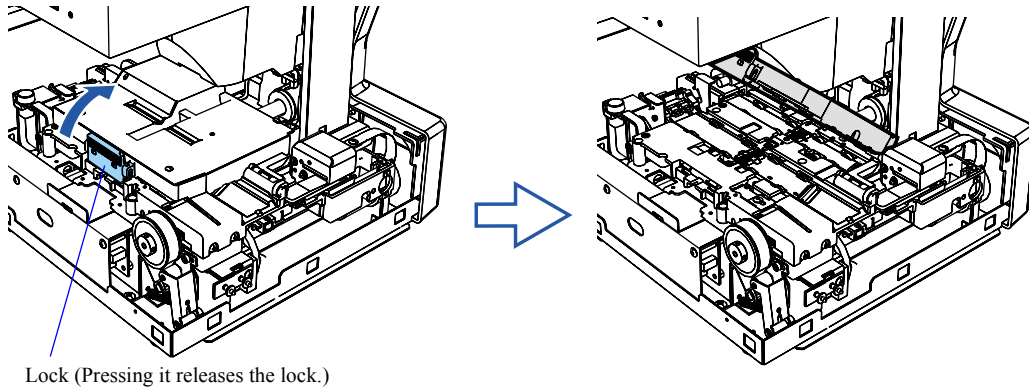
2. Open the front cover and side cover (left).



G087613

3. Put on clean gloves.

4. Release the lock to open the film advance top cover.



G071848

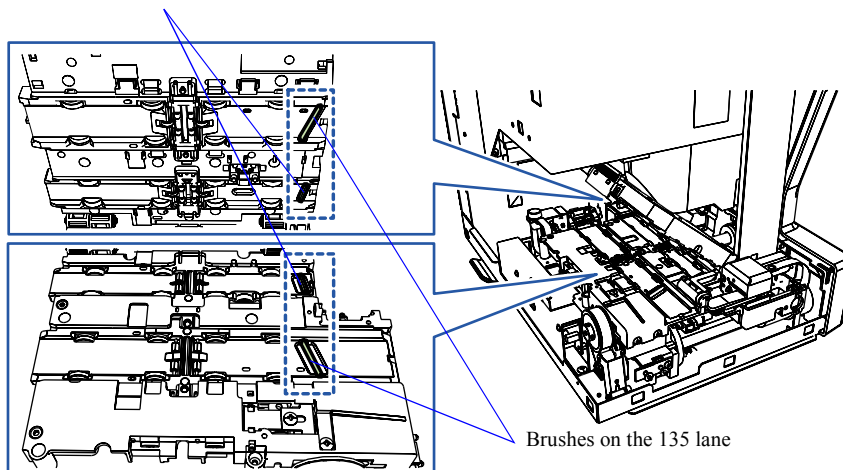
5. Clean each brush using a blower brush.



IMPORTANT

- Gently handle each brush to prevent damaging it.

Brushes on the 240 lane



G071855

6. Close the film advance top cover, side cover (left) and front cover.

If cleaning the magnetic head, it is not necessary to close the film advance top cover, side cover (left) and front cover.

This completes cleaning each brush of the film feed unit.

6.3.5 Cleaning the magnetic head

Conditions

Perform this maintenance operation with the power on.

Requirements

- Isopropyl alcohol
- Cotton swab

1. Select the 240 lane of the film feed unit.



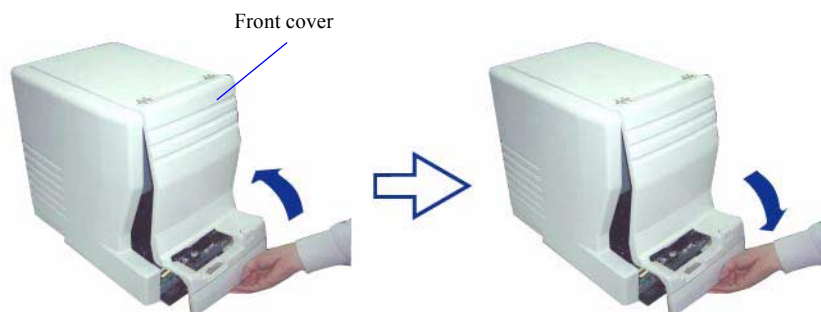
IMPORTANT

- If the 135 lane of the film advance unit is selected, it is necessary to select the 240 lane by following the procedure below. If the 135 lane is selected, the film advance top cover cannot be opened fully.

(1) Slightly open the front cover, then close it.

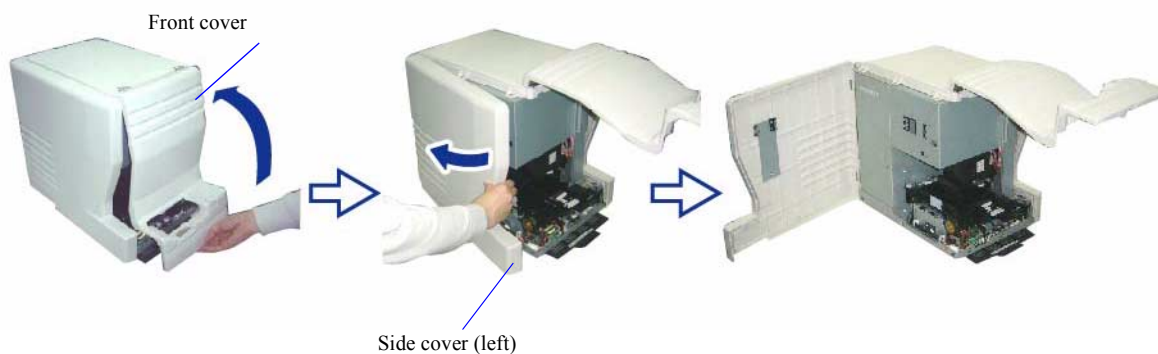
NOTE

- Closing the front cover selects the 240 lane of the film feed unit.



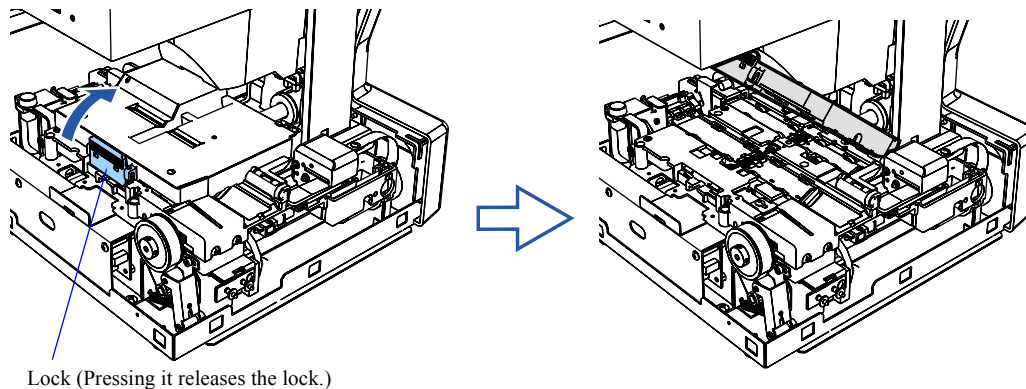
G088421

2. Open the front cover and side cover (left).



G087613

3. Release the lock to open the film advance top cover.



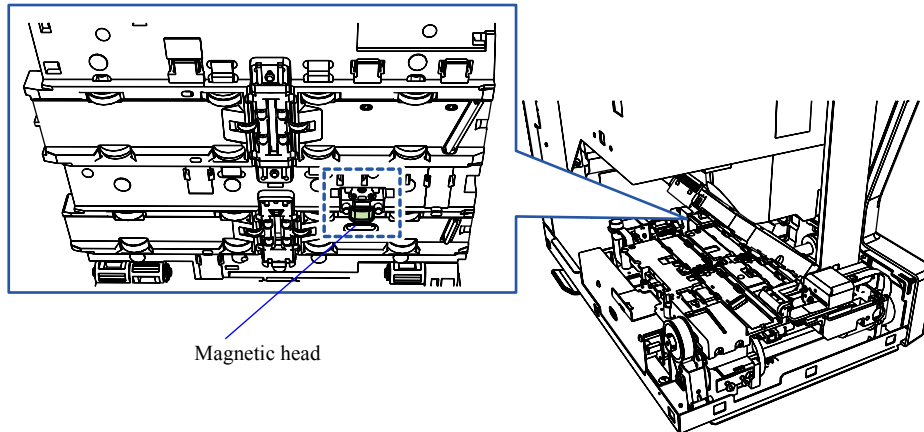
G071848

4. Clean the magnetic head by wiping it with a cotton swab dipped in isopropyl alcohol.



IMPORTANT

- Isopropyl alcohol is flammable. Keep it away from open flame, and carefully follow the instructions on labels on the chemical bottles.
- Make sure isopropyl alcohol is applied only to the magnetic head.



G082958

5. Close the film advance top cover, side cover (left) and front cover.

If cleaning the film inserting slot of the 240 rewinding box, it is not necessary to close the film advance top cover, side cover (left) and front cover.

This completes cleaning the magnetic head.

6.3.6 Cleaning the film inserting slot of the 240 rewinding box

Conditions

Perform this maintenance operation with the power on.

Requirements

- Clean gloves
- Blower brush

1. Select the 240 lane of the film feed unit.



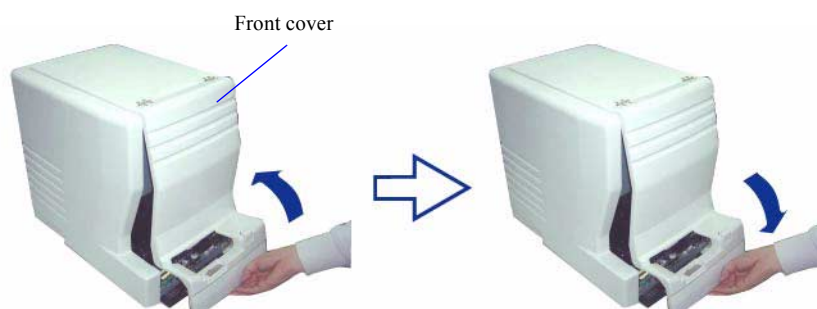
IMPORTANT

- If the 135 lane of the film advance unit is selected, it is necessary to select the 240 lane by following the procedure below. If the 135 lane is selected, the film advance top cover cannot be opened fully.

(1) Slightly open the front cover, then close it.

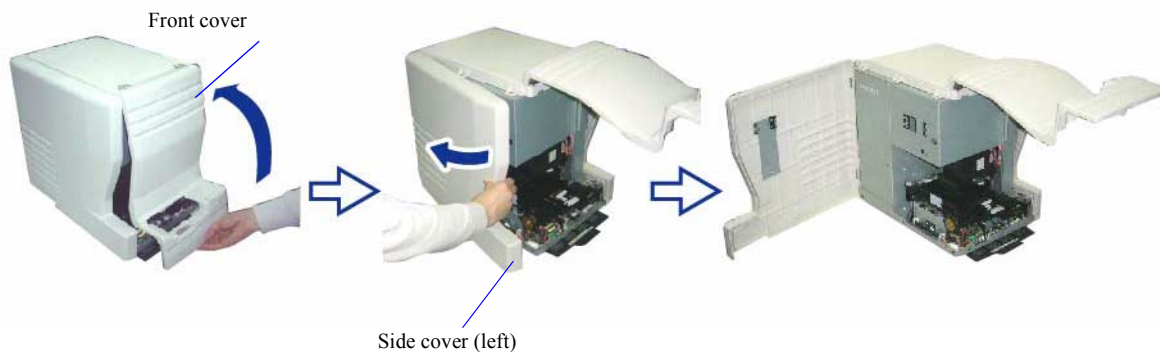
NOTE

- Closing the front cover selects the 240 lane of the film feed unit.



G088421

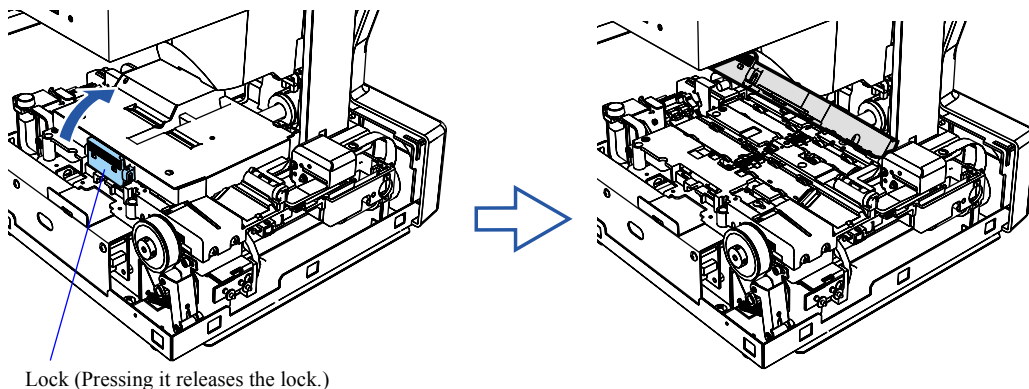
2. Open the front cover and side cover (left).



G087613

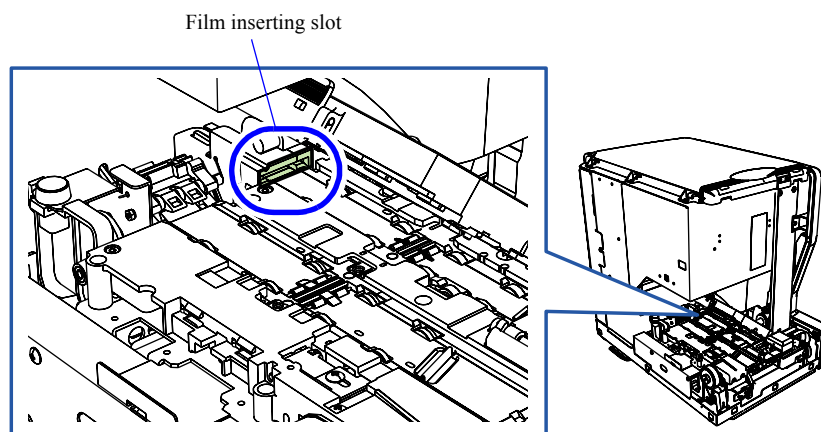
3. Put on clean gloves.

4. Release the lock to open the film advance top cover.



G071848

5. Clean the film inserting slot of the 240 rewinding box using a blower brush.



G073170

6. Close the film advance top cover, side cover (left) and front cover.

This completes cleaning the film inserting slot of the 240 rewinding box.

6.3.7 Cleaning the air filter

The air filter is attached in the air intake section for cooling the heating part and removing dust.

6.3 Monthly Checks

If dust accumulates on the air filter, air intake and exhaust cannot be performed normally, and that adversely affects the product.

Conditions

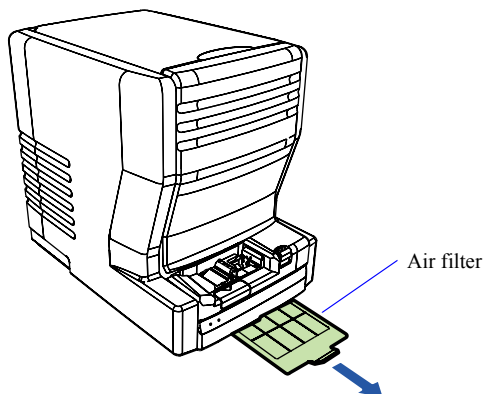
Perform this maintenance operation with the power on.

Requirements

- Vacuum cleaner

Procedure

1. Remove the air filter and clean it.



G082938

Vacuum dust from the dust accumulated surface using a vacuum cleaner.

If dust cannot be removed, face the dust accumulated surface down and wash it under running water.

2. Reattach the air filter.



IMPORTANT

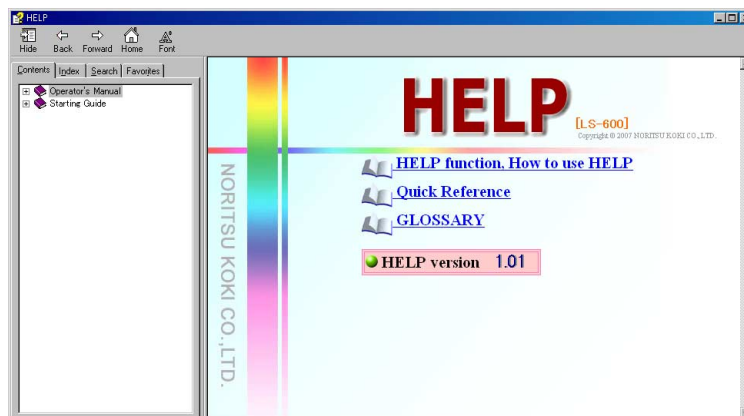
- After washing the air filter, completely dry it and then attach it. If the wet air filter is attached, this product may be damaged.

This completes cleaning the air filter.

7

7. How to access the HELP display

You can view the built-in manuals (HELP) on the display. This chapter explains how to access the **HELP** display.



S088497

7.1 Accessing the HELP display

7.1.1 Accessing the HELP display

There are three ways to access the **HELP** display of this product.

- **Accessing from the icon on the display**

Click the **HELP** icon on the display.

Example:



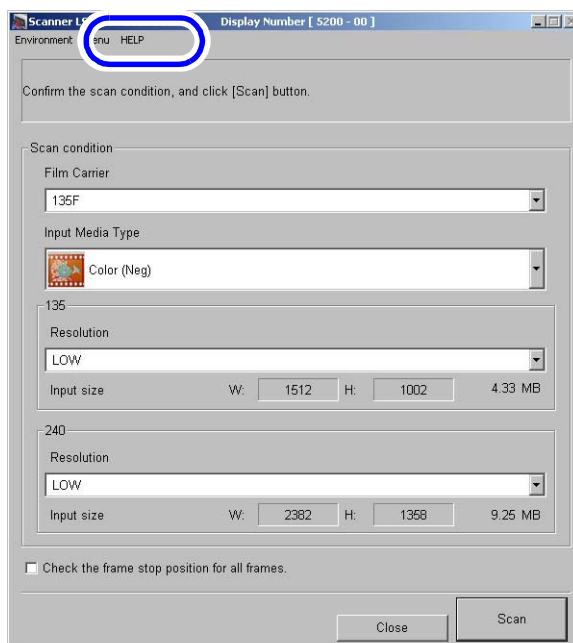
Some **HELP** icons are displayed.
Pointing each icon shows each **HELP** name.

G087850

- **Accessing from the Scan Setting display**

On the **Scan Setting** display, click **HELP**.

Example: **Scan Setting** display



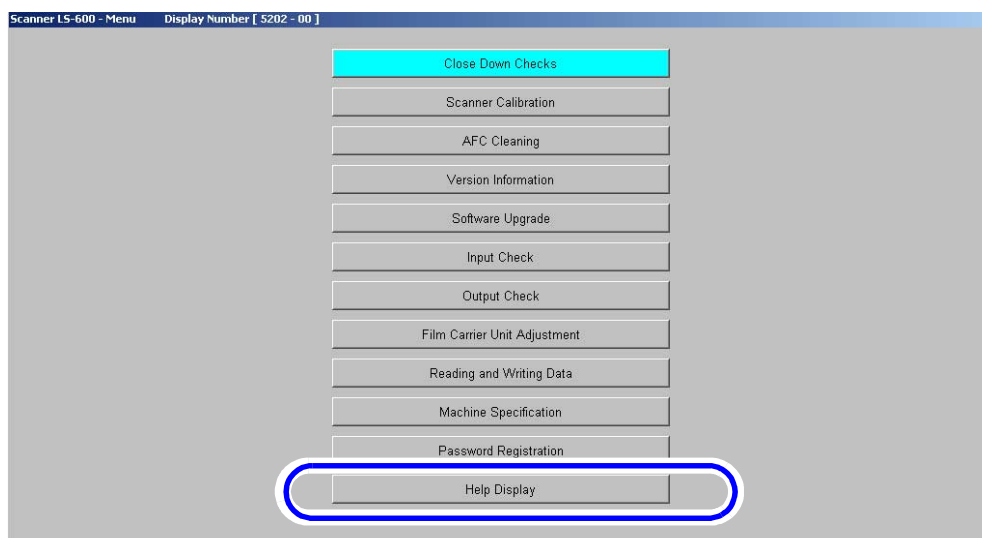
The **Help** display is shown.

S5200-00-UM01

- **Accessing from the Menu display**

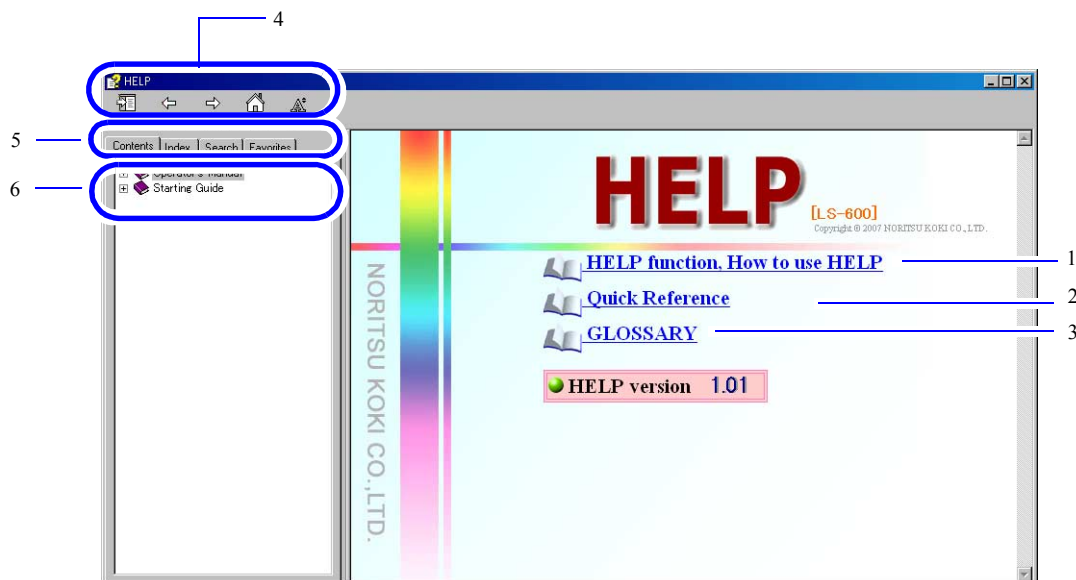
Bringing up the display

On the **Scan Setting** display, click **Menu**. → Menu → Help Display

Example: **Menu** display

S5202-00-UM03

The **Help** display is shown.

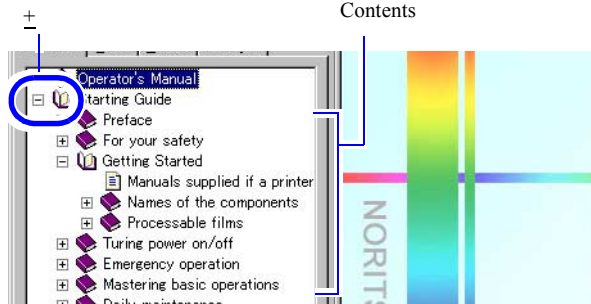
Example: **HELP** display

S088497

The numbers in the table below correspond to those in the illustration above.

No.	Item	Explanation
1	HELP functions, How to use HELP	Explains how to use HELP, such as the explanation of the buttons in the HELP display and how to search.
2	Quick Reference	Allows you to see common inquiries.
3	Glossary	Explains terms and digital terms necessary for operating the product.
4	Buttons on the HELP display	Allows you to view the HELP display. Allows you to return to the previous page or change character size on the display. For details about how to use these buttons, see HELP Functions and how to use HELP (No. 1) .
5	Contents Index Search Favorites	Allows you to use any of these functions, Search from Contents , Search from Index , Search from all texts with a keyword and Add to Favorite . For details about how to use these buttons, see HELP Functions and how to use HELP (No. 1) .

7.1 Accessing the HELP display

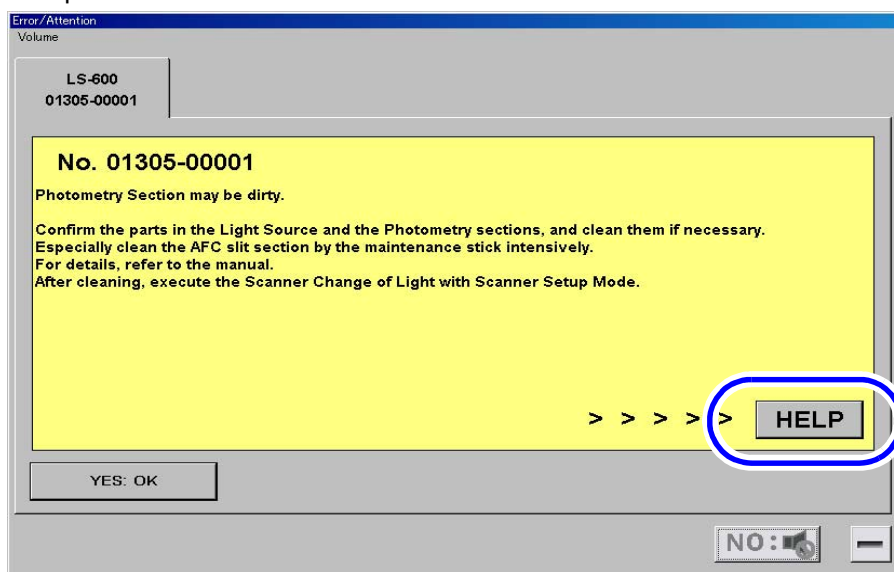
No.	Item	Explanation
6	Bookmark	<p>The contents or the search results are displayed here. Selecting the desired item in this bookmark shows its explanation.</p> <p>To display all the information of the table of contents, click the + mark.</p> 

This completes accessing the **HELP** display .

7.1.2 Accessing the HELP display from the Error/Attention display

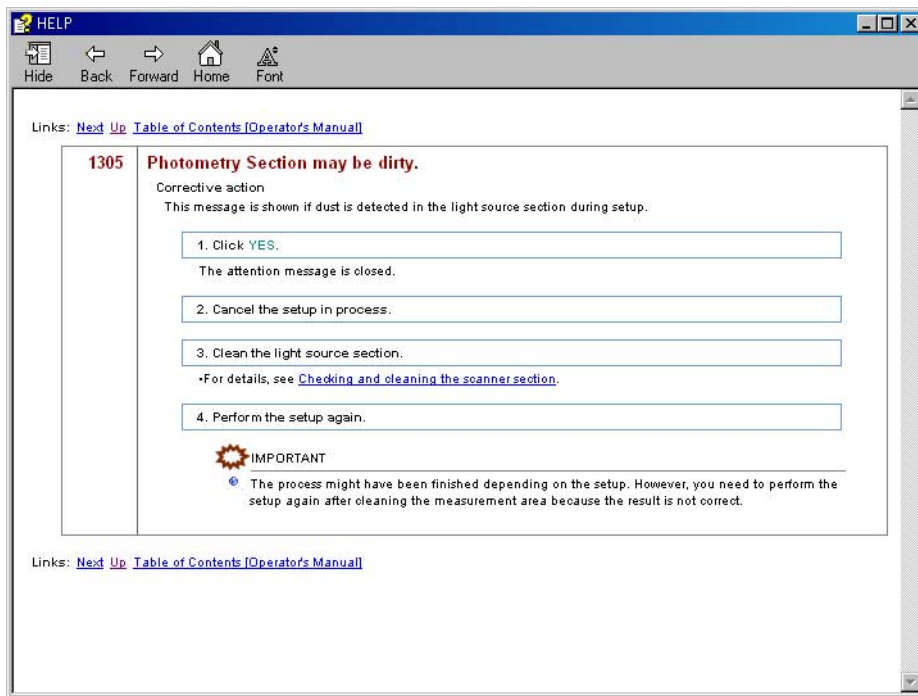
1. Click **HELP** on the **Error/Attention** display.

Example:



S088485

The corrective actions for the error or attention message is shown.

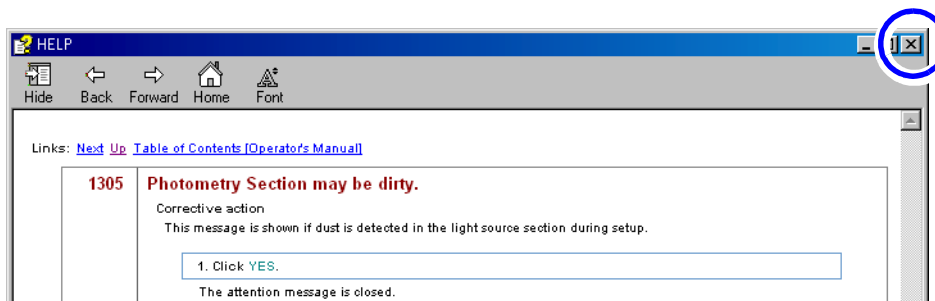


S088483

This completes accessing the **HELP** display from the **Error/Attention** display.

7.1.3 Closing the HELP display

1. Click × on the **HELP** display.



S088483

The **HELP** display is closed.

7.1.4 Hiding the HELP display

The **HELP** display hides other displays.

7.1 Accessing the HELP display

You can hide the **HELP** display by clicking the **Minimize** button. The button is in the upper right corner of the **HELP** display.



S088497

If the EZ Controller is used

To access the **HELP** display again, click the **HELP** icon on the display.



G087850

This completes hiding the **HELP** display.



8

8. Accessories and consumable parts

This chapter explains part numbers of accessories and consumable parts.

8.1 Accessories and consumable parts

⚠ WARNING

- Pay attention to avoid electric shock, burn and injury.
For replacing parts that are not explained in the Operator's Manuals, contact your place of purchase and leave them to service personnel.

This section explains the part numbers of consumable parts, supplied parts and others used for daily maintenance.

To order the consumable parts, confirm the following items and consult your technical representative.

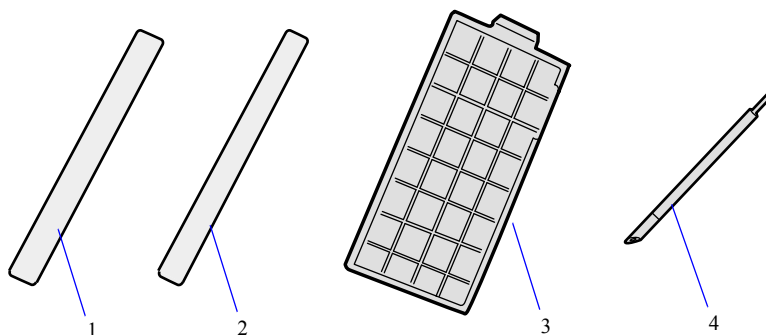
- Model name
- Part number and name
- Quantity



IMPORTANT

- They are not covered by warranty even in the product's guarantee period, if the following parts are wasted or damaged due to consumption, or if parts that are not specified by us are used.
- Be sure to use the specified parts. If you use unspecified parts, they may adversely affect the print quality and may cause some problems.
- If discarding supplied or consumable parts, comply with the local ordinance and regulation.

No.	Description	Part number	Remarks
1	135 cleaning leader	H089032-00	Cleaning leader for the 135 lane (five sheets)
2	240 cleaning leader B	H089037-00	Cleaning leader for the 240 lane (five sheets)
3	Air filter	B018546-00	Attached to the bottom of this product.
4	Maintenance stick	A051259-01	Maintenance tool for cleaning the slot of the advance unit.



G087607