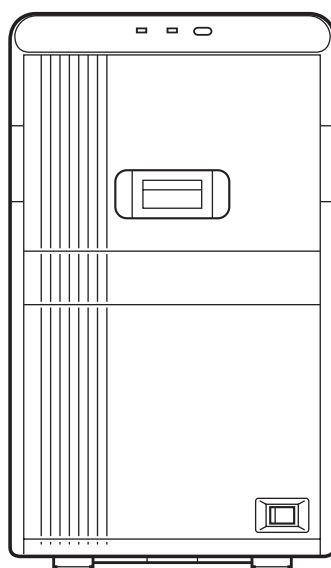


Card Laminator

EDISecure[®] ILM-DS

Instruction Manual



- Thank you for purchasing our product.
- Before operating this unit, please read the instructions carefully to ensure the best possible performance. Be sure to read “Notes for safe operation” and use the unit safely. Keep the instruction manual in a safe place and read it when necessary.
- The manufacturing number is important for quality control. Please check whether the manufacturing number on the back of this unit is correct during the purchase.

Notes regarding this manual

- (1) The contents of this manual shall not be reprinted or redistributed in any form without prior consent.
- (2) The contents of this manual or the specifications and external appearance of this unit may be altered without prior notice.
- (3) Illustrations used in this manual may differ slightly from the actual shape of this unit.

*digital
identification
solutions*

LST1050-001A

Characteristics of this Unit

This laminator attaches a protective layer to one or both sides of the printed card through infrared communication with the card printer.

A hologram that helps to enhance the security level of the card can be formed on the protective layer.

This laminator can be made to operate in conjunction with the printer unit through infrared communication.

It is built in with a function for adjusting the lengthwise position of the laminate film, which enables easy adjustment of the patch in the front-back direction.

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■ In case of disposal

In case of disposal this unit, take care for compliance with the local law and regulations in your country.

READ ME FIRST

Read through the following carefully before operating to ensure proper use of this laminator.

After reading, store this manual at a place that can be easily retrieved when necessary.

Safety precautions

Information for USA

For a Class A digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Information for Canada

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Caution: Changes or modifications not approved by party responsible for compliance could void user's authority to operate the equipment.

Caution: Use a shield cable for the ethernet cable.

Information for Canada

Operation is subject to the following two conditions:

(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Information for EU



Machine noise

Sound power level: less than 70dB(A) according to DIN45635 part 19 (EN27779).

The measurements are to be made according to DIN45635 part 2019 or EN27779, respectively.

Before Use

WARNING

■ If you ignore the warning with this mark, and handle the unit in a wrong way, death or serious injuries may occur.

CAUTION

■ If you ignore the caution with this mark, and handle the unit in a wrong way, injuries or damages to properties may occur.

WARNING

■ If the abnormal phenomena as listed below are seen, immediately stop operating the unit. Continuing operation may cause a fire or electric shock.

- Smoke or odd smell comes out from the machine.
- Water or metal went into the machine.
- The unit fell to the floor, or the cabinet was broken.
- The power cable is damaged (exposed lead, broken cable, etc.)

If you see these phenomena, turn off the power, pull out the power plug, and contact your dealer as soon as possible. Do not try to repair it by yourself. It is dangerous.

■ Do not remove the screws, or disassemble or alter the machine.

- High-voltage components are contained in the unit. Touching these areas may result in an electric shock.
- Ask your dealer if you want your printer inspected or repaired.
- Do not remove the external covers of the machine. You may get an electric shock.

■ Do not work on the power cable, or give excessive force on it. Do not put heavy objects such as furniture on the cable.

- The cable may be damaged, causing a fire or electric shock.
- When you find a defect on the power cable, such as exposed lead, stop using the unit, and consult your dealer.

■ Do not use the machine with the power plug inserted incompletely.

- The machine generates heat due to incomplete contact, causing a fire or electric shock.
- Do not put many cords on a single plug socket. The power cords also heats up.

■ Do not use the machine with dusts piled on the power plug. Do not put a metallic material adjacent to the power plug.

- Dusts and metal are conductive, causing a fire or electric shock.
- Pull out the power plug from the outlet every six months, and clean the dusts piled on the legs and body of the plug.

■ Do not use a line voltage other than instructed.

- Using a line voltage or power supply which is not specified may cause a fire or electric shock.

■ Do not put foreign materials from the openings of the machine (e.g., vents, card slots, cassette inlet, etc.)

- Metals, flammable things, and other foreign materials may cause a fire or electric shock if entering into the machine.
- If these things went into the machine, immediately turn off the power, pull out the power plug, and ask your dealer to repair. Do not try to repair it by yourself. It is dangerous.

■ Do not put a container with liquid in it, or small metal ornaments and the like on the machine.

- The liquid or metal entering into the machine acts as a conductor, causing a fire or electric shock.
- If liquid or metal went into the machine, immediately turn off the power, pull out the power plug, and ask your dealer to repair. Do not try to repair it by yourself. It is dangerous.

■ Do not place the machine on a rickety table or slanting places.

- The machine may fall out of the table or fall over, which may damage the machine or injure you.
- If the machine is damaged by falling or turnover, immediately turn off the power, pull out the power plug, and ask your dealer to repair. Do not try to repair it by yourself. It is dangerous.

■ Do not wet the machine with water.

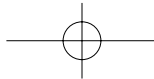
- Using the machine at a place where water splashes on the machine, or wetting the machine with water (applying, throwing, or spilling water over the machine) may cause a fire or electric shock.
- If water entered into the machine, immediately turn off the power, pull out the power plug, and ask your dealer to repair. Do not try to repair it by yourself. It is dangerous.

■ Do not touch the machine with wet hands.

- Touching the machine with wet hands may cause an electric shock.

■ Do not use the laminator when cards are jammed inside.

- Cards may not be discharged correctly such as when the laminator setting for the card is inappropriate. Stop using and remove the jammed cards immediately. Otherwise, you may have problems removing the cards, and fire or electric shock may also occur as a result.



■ **Do not touch the power plug during electrical storms.**

- Lightning may cause an electric shock.

■ **Ground the machine with the attached electric cord when connecting it to the utility outlet.**

- Using a cord other than the one supplied for grounding may cause an electric shock when the machine fails.

■ **Do not put your head or yourself into the packaging bag.**

- Do not play with the packaging bag. You may suffocate yourself.
- Give close attention to small children who may want to play with the packaging bag.

■ **Do not use the machine while it has a fault.**

- Do not use the machine while it has a fault, as this may cause a fire or electric shock.

- Immediately turn off the power, pull out the power plug, and ask your dealer to repair. Do not try to repair it by yourself. It is dangerous.

■ **For users of artificial cardiac pacemakers, keep a distance of at least 22 cm between the printer and the attached pacemaker.**

- Radio waves used by the RF-ID function inside the printer system may affect the operation of the cardiac pacemaker.

CAUTION

■ **Pull out the power plug before cleaning the machine.**

- This is for preventing electric shocks.

■ **Pull out the power plug when you won't use the machine for a prolonged period of time to assure safety.**

- Remove the power plug from the outlet for safety when you won't use the machine for a long time.

■ **Do not move the machine with the power cable and other electric cables connected.**

- The cables may be damaged while being moved, which may cause a fire or electric shock.
- You may stumble over the cable and get injured.

■ **Do not move the machine with objects placed on it.**

- They may fall on you and hurt you.

■ **Do not put heavy objects on the machine.**

- They may fall on you and hurt you.

■ **Do not block the vents.**

- Heat generated inside the machine cannot escape, which may cause a fire.

■ **Do not rest your body on the machine, or leave it suspended above the ground.**

- The machine may drop, causing damage or injury. Pay particular attention when there are young children around.

■ **Be sure to work with two persons when you unpack, move or lift the machine.**

- If you work alone, you may be injured by the fallen machine or hurt your back by lifting a heavy machine by yourself.

■ **Inspection**

- Ask your dealer or a qualified person to inspect the machine, typically once every two to three years. Operating the machine with dusts piling on the components for a prolonged period of time may cause a fire or a malfunction of the machine. It will be particularly effective to inspect the machine before wet rainy season. Consult your dealer on the costs of inspection.

■ **Do not place the machine in the following locations.**

Doing so may cause fire or electric shock.

- Places that are highly humid or dusty.
 - Places that are exposed to oily smoke or steam, such as near a cooking table or humidifier.
 - Places near a heating equipment.
 - Places that are subject to water droplet condensation, such as beside a window.
- Also, placing it at a place that is exposed to direct sunlight may result in deterioration of the cabinet.

■ **Hold the body of the power plug when pulling it out.**

- Do not pull out the plug by holding the cable. The cable may be broken or damaged which may in turn cause a fire or electric shock.

■ **Do not touch the power plug with a wet hand**

- You may get an electric shock.

■ **Do not lay the power cable near the heating equipment.**

- The covering of the cable will melt due to heat from such equipment, which may cause a fire or electric shock.

■ **The heat rollers and adjacent areas become hot during operation.**

- When pulling out the film cassette or removing a jammed card, make sure that you do not touch the heating roller and its surroundings.
- Wait until the heat rollers get cooled down to prevent burns.

■ **Be careful of jamming your hand or fingers in the card bracket of the hopper or printer door.**

- Remove cards from the card tray, or jammed cards and ink ribbon/retransfer film cassette with care not to jam your hand or fingers in the mechanism to prevent any injury.

■ **Do not use a power cable other than the specified cable for connection.**

- If you use an unspecified power cable for connection or extension, heat may accumulate in the cable, causing a fire.

Before Use

About this Manual

Symbols used in this manual

Caution : States precautions to be taken during operation.

Memo : States restrictions on the functions or use of this equipment. for reference purposes.

 : Indicates the page numbers or items to refer to.

Contents of this manual

- The copyright of this manual belongs to JVC. Reprint and duplicate of this manual in part or full without the prior consent of JVC is strictly prohibited.
- Designs, specifications, or other details described in this manual may be modified for improvement without prior notice.

Precautions During Use

Please read through all the following items before using the laminator.

Laminator Installation

When the card laminator is not in use, it is recommended that you turn off the power, and use a cover that is large enough to cover up the card printer and laminator units. Avoid installing at the following locations as doing so may have adverse effects on this unit.

- Carpeted room.
- Places with a busy flow of people.
- Places where paper (corrugated boards, etc.) is handled or stored.
- Places near photocopiers.
- Places exposed to direct sunlight or near a heating equipment (such as a stove).
- Inclined or unstable surfaces.
- Places exposed directly to cold air, such as near an air-conditioner outlet, or places subject to high temperatures.

Films

■ Handling procedures

Pay attention to the following points when handling films.

- Do not touch the film surface with your hand. Doing so may result in poor adhesion.
- Foreign objects attached to the surface of the film may result in poor adhesion. Load the film in a clean environment.
- If the film is left unattended for a prolonged period of time with the laminator in the [Ready] state, the heat from the heater may cause the film to change color. When this unit is not in use, turn off the power, or switch it to the [Sleep] mode.
- When replacing films with one that has been stored under a low temperature, store it at the operating ambient temperature of the laminator for at least one hour before using. Otherwise, condensation may occur, causing poor adhesion or malfunction.

■ Storage environment

- Temperature: 26°C and below
- Relative humidity: 50 % and below

■ Storage location

Do not store in the following locations.

- Places exposed to direct sunlight.
- Places with a high humidity.
- Places near organic solvents or diazo copiers.

■ Storage period

Use it as soon as possible after opening.

Cards

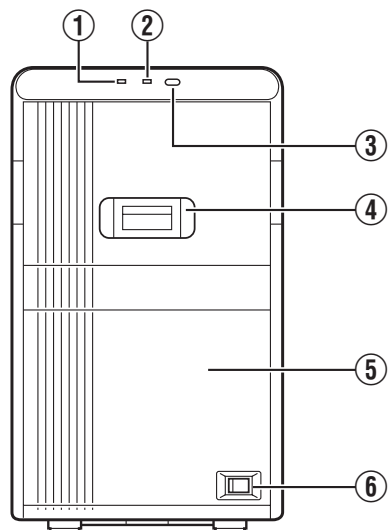
■ Compliant cards

Dimension: 85.6 mm (L) x 54.0 mm (W) x 0.76 mm (D)
Compliant with JIS X 6301

For details on the handling and storage procedures of cards, refer to the "Instruction Manual" of the card printer.

Name and Functions of Parts

Front



① LED display (red)

Blinks or lights up in red, and combines with the ② LED display (blue) to indicate the status of the laminator. (☞ page 11 “LED Display and Laminator Status”)

② LED (blue)

Blinks or lights up in blue, and combines with the ① LED display (red) to indicate the status of the laminator. (☞ page 11 “LED Display and Laminator Status”)

③ Operation button

Pressing it when loading the laminate film initializes the laminator.

Pressing it for two seconds or longer after removing the film cassette in the cleaning mode starts cleaning of the card feed roller. (☞ page 18 “Card Feed Roller/Heating Roller”)

④ Sliding knob

Opens/closes the laminator door.

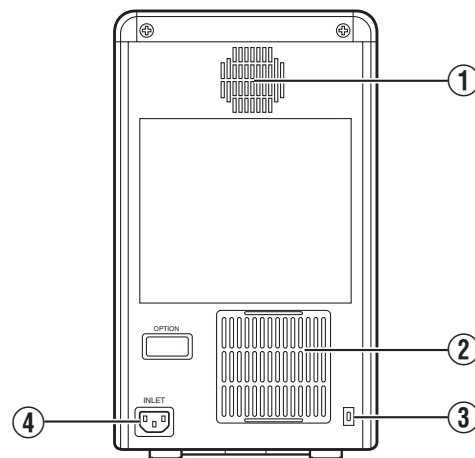
⑤ Laminator door

Initializes the laminator when it is opened and closed.

⑥ Power switch

Turns the power on/off.

Rear



① Exhaust fan

Discharges heat accumulated inside the laminator unit.

② Air suction fan opening

Air inlet of the internal cooling fan.

③ Security slot

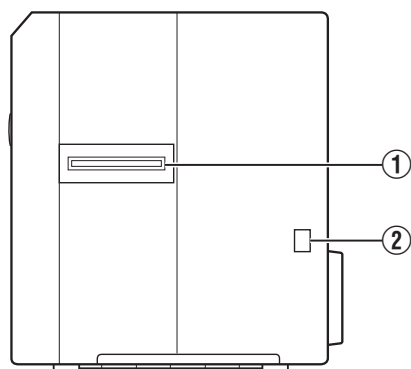
An anti-theft device that supports Kensington locks can be attached.

④ Power supply terminal

For connecting the power cord.

Before Use

Right



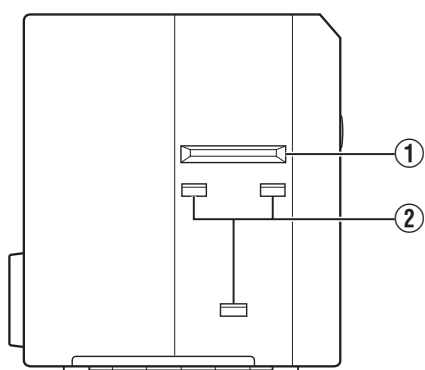
① Card feed port

Feeds the printed card from the card printer that is connected to the laminator.

② Infrared communication panel

Sends or receives data via infrared communication by connecting with the card printer.

Left



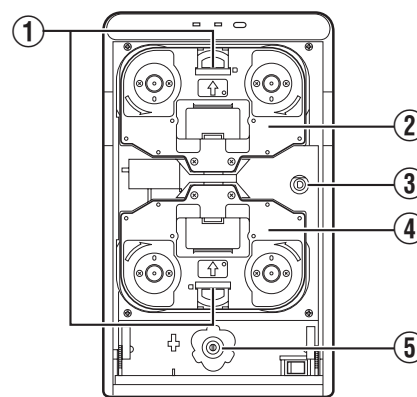
① Card outlet

Discharges the cards.

② Card stacker attachment slot

For attaching the card stacker.

When laminator door is open



① Cassette buttons

Press the buttons to remove the film cassette.

② Bottom face film cassette (orange)

For attaching the laminate film.

③ Jog dial attachment slot

For discharging the card during a card jam by attaching the supplied jog dial to the card printer and turning it.

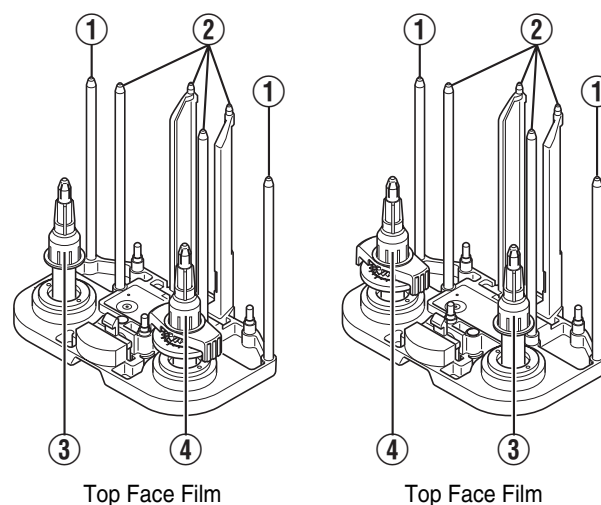
④ Top face film cassette (yellowish-green)

For attaching the laminate film.

⑤ Jog dial attachment slot

Enables attachment of a supplied jog dial to the card printer.

Film Cassette



① Guide shaft

Provides guide to the position for attaching the film cassette.

② Film Guides

When attaching the laminate film, unwind it along the shafts.

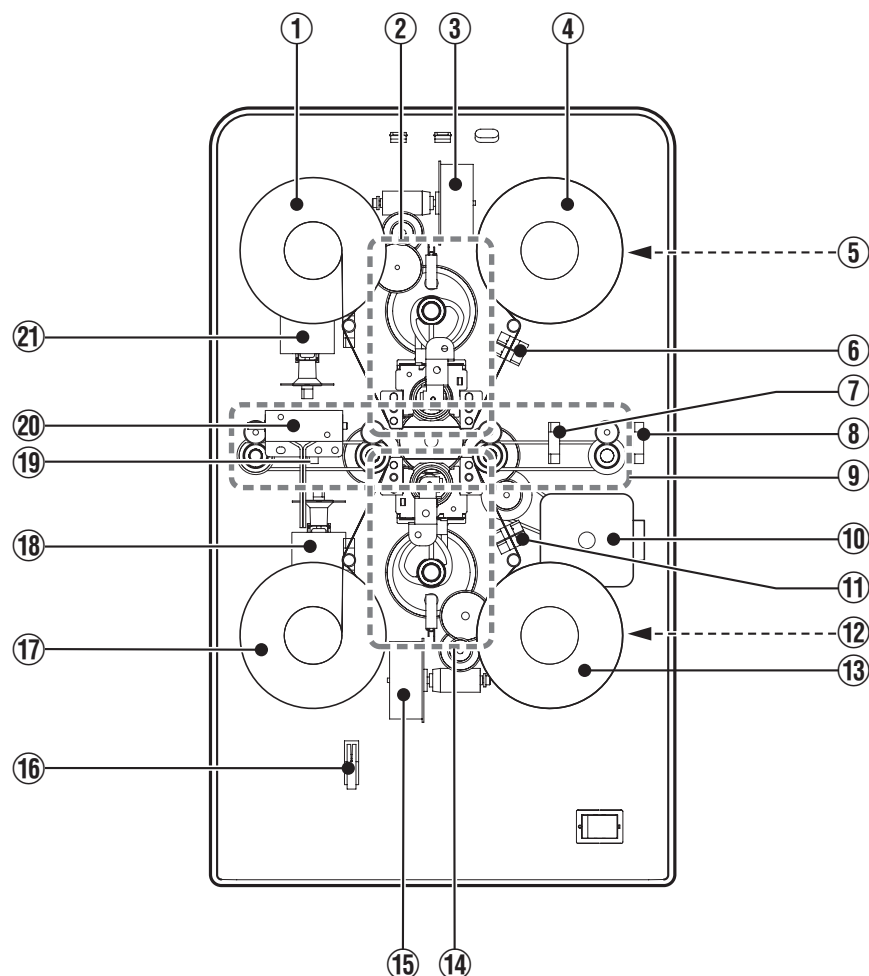
③ Bobbin holder

For securing the take-up side of the laminate film.

④ Sprocket

- For securing the supply side of the laminate film.
- It can also be used to adjust the patch position.

Internal mechanism diagram



- | | |
|---|---|
| <p>① Take-up side bottom face laminate film (upper)
For installing the take-up side of the laminate film.</p> <p>② Bottom face laminate pressure motor</p> <p>③ Bottom face laminate heater pressure mechanism</p> <p>④ Supply side bottom face laminate film (upper)
For attaching the supply side of the laminate film.</p> <p>⑤ Bottom face laminate film supply motor (upper)</p> <p>⑥ Bottom face laminate film position sensor (upper)</p> <p>⑦ Card lamination position sensor</p> <p>⑧ Inlet sensor
Feeds the printed card from the card printer.</p> <p>⑨ Card feeder unit
This is the roller for feeding cards.</p> <p>⑩ Card feed motor</p> <p>⑪ Top face laminate film position sensor (lower)</p> <p>⑫ Top face laminate film supply motor (lower)</p> | <p>⑬ Supply side top face laminate film (lower)
For attaching the supply side of the laminate film.</p> <p>⑭ Top face laminate heater pressure mechanism</p> <p>⑮ Top face laminate pressure motor</p> <p>⑯ Interlock switch
Disconnects the 24 V power supply to ensure safety when the laminator door is opened.</p> <p>⑰ Take-up side top face laminate film (lower)
For installing the take-up side of the laminate film.</p> <p>⑱ Top face laminate film take-up motor (lower)
For taking up the laminate film.</p> <p>⑲ Card discharge sensor
Discharges the cards.</p> <p>⑳ Security lock solenoid
Lock to prevent theft of the films.</p> <p>㉑ Bottom face laminate film take-up motor (upper)
For taking up the laminate film.</p> |
|---|---|

Before Use

Specifications

Main specifications

Item	Description
Recording system	DC heat roller system
Transfer time	Approx. 16 sec. to 36 sec. (Time varies according to the setting.)
Operating environment conditions	Temperature: 15°C to 30°C Humidity: 35 % to 70 % (no condensation)
Storage environment conditions	Temperature: -15°C to 55°C Humidity: 20 % to 80 %
Power supply	AC 100 V to 120 V /AC 220 V to 240 V (tolerance: ± 10 %) 50 Hz/60 Hz (tolerance: ± 5 %)
Current consumption	3 A
Power consumption	Approx. 200 W
Mass	Approx. 9.0 kg
Dimension (mm)	210 x 360 x 330 (W x H x D)
Regulatory Compliance	VCCI-A

Accessories/Separately Sold Items

Accessories

Please check to ensure that the printer accessories are in place when unpacking the product package.

- Power cord (2 m) x 1
- Empty bobbin x 2
- Instruction Manual x 1
- Cleaning card x 1
- Unit connection adapter x 1

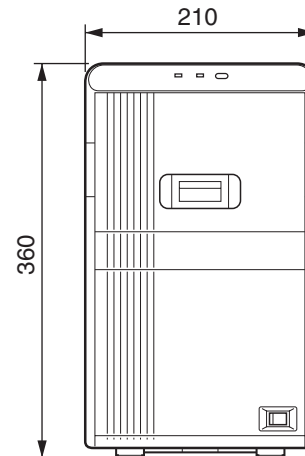
Products sold separately

To purchase these items, please consult our authorized dealers.

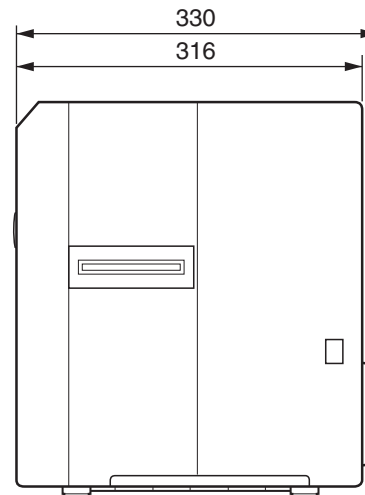
- 0.6 mil patch film
- 1 mil patch film
- Overlay film
- Cleaning cards: 10 cards/set (model: CX210-CC1)

Outline dimensional drawing

■ Front View



■ Side View

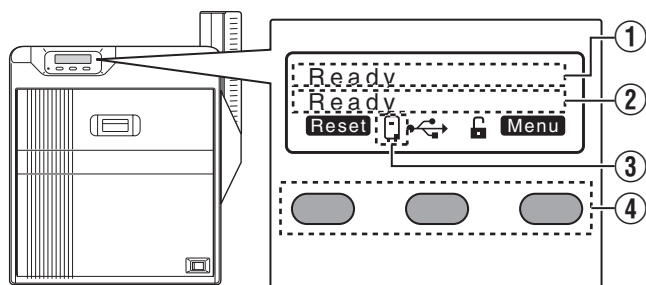


Operating the Laminator

Operation Panel

- The operating status of the laminator is displayed on the operation panel of the card printer as well as the status monitor of the computer that is connected to the card printer. For details, refer to the “Instruction Manual” of the card printer.
- The status is indicated on the laminator unit using a combination of solid and blinking LED displays in red and blue colors.

■ Card printer operation panel



① Printer status display

- Displays the status of the card printer.

② Laminator display

- Displays the status of the laminator when the display mode of the card printer is set to [Laminator State].
(☞ Page 12 “Setting Using the Operation Panel”)

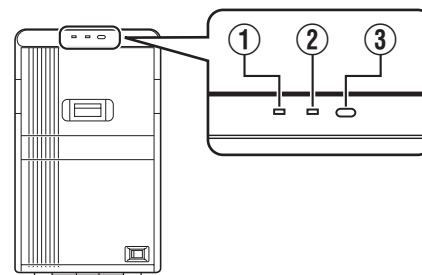
③ Status icon display

- A laminator icon is displayed once the card printer recognizes the laminator.

④ Operation button

- For selecting a button function displayed on the operation

■ Laminator operation panel



① LED display (red)

- Indicates an error when only the red light is lit or blinking.

② LED display (blue)

- Indicates that the laminator is functioning normally when only the blue light is lit or blinking.

③ Operation button

- Pressing it when loading the film initializes the laminator.
- When no film cassette is loaded on the upper and lower ends, pressing the button for two seconds or longer starts the cleaning operation. (The cleaning operation does not start if the heating roller is still hot.)
(☞ Page 18 “Card Feed Roller/Heating Roller”)

■ LED display and laminator status

LED display (red)	LED display (blue)	Card Printer's Operation Panel Display	Laminator Status	Description
Off	Blinking (Slow)	Initializing..	Mechanism is initializing	Immediately after the power is turned on
		Preheating..	Preheating	After mechanism initialization is complete
		Sleeping..	Power-saving mode	Low power consumption standby mode
Off	On	Ready	Ready	Lamination enabled (online mode)
On				Lamination enabled (self-diagnostic printing mode)
Off	Blinking (Fast)	Laminating..	Laminating	When in the online mode
On				
Blinking (Slow)	Off	Error message	Recoverable error	Trouble that does not require reboot of the power, such as insufficient media space, media error, cassette not loaded, and card jam.
Blinking (Fast)	Off	Error message	Fatal error	Troubles that requires reboot of the power
Blinking (Slow)	Blinking (Slow)	Cleaning..	Roller cleaning in progress	Returns to the original state if a cleaning card is not inserted after a specific time interval.
On	On	Download	Download data reception standby Process complete	Standby state for receiving data or after processing is complete
Blinking (high speed)	Blinking (Fast)	Download	Downloading	Processing data • The blinking speed is faster than that when laminating is in progress.

Operating the Laminator

Settings

Settings can be changed on the status monitor of the computer that is connected to the card printer.
Settings can be viewed on the card printer's operation panel.
For details, refer to the "Instruction Manual" of the card printer.

Setting modes

Setting Mode	Description	Setting Values
Mode	For selecting the operation mode.	Laminate, Pass
Cassette	Indicates whether a cassette is loaded.	None, T Only, B Only, Both
Film-T	For selecting the film to be used for the top face.	Patch, Overlay
Film-B	For selecting the film to be used for the bottom face.	Patch, Overlay
Film-T Pos	For setting the patch position for the moving direction of the top face.	-7, -6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7
Film-B Pos	For setting the patch position for the moving direction of the bottom face.	-7, -6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7
HR-T Temp	For setting the top face heating roller temperature.	90°C to 180°C (in increments of 5°C)
HR-B Temp	For setting the bottom face heating roller temperature.	90°C to 180°C (in increments of 5°C)
Speed	For setting the card feed speed during lamination.	3.0mm/s 12.0mm/s (in increments of 0.5 mm/s)
Cooling Time	For setting the standby time for cooling down the card immediately before lamination starts.	0sec, 5sec, 7sec, 10sec, 15sec, 20sec, 30sec
Count	Displays the number of laminations performed after the last roller cleaning. This number is reset to 0 each time roller cleaning is performed.	Number of laminations after roller cleaning

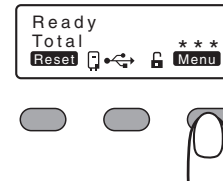
Setting using the card printer's operation panel

■ Display mode setting

You can display the laminator status on the operation panel of the card printer.

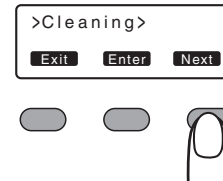
1. Press [Menu]

- A [Cleaning] message appears.



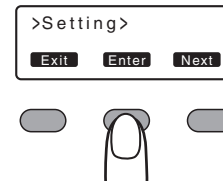
2. Press [Next] to set to [Setting]

- Pressing the [Next] button each time displays the next screen.



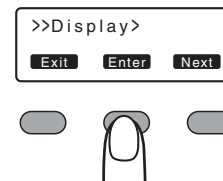
3. Press [Enter]

- A [Display] message appears.



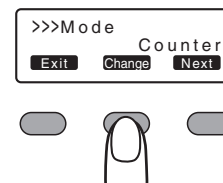
4. Press [Enter]

- A [Mode] message appears.




5. Press [Change]

- A setting selection screen appears.



6. Press , and select [Laminator State]

7. Press  to confirm the setting value.

-  confirms the setting and returns you to the previous screen.

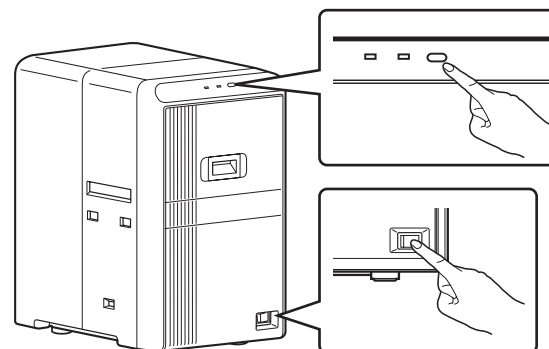
8. Press [Exit]

- Pressing [Exit] each time returns you to the previous screen.

■ Firmware update

1. Press and hold down the operation button, and turn on the power at the same time

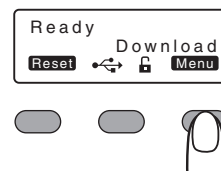
- Both the LED displays are lit.



2. Turn on the power of the card printer

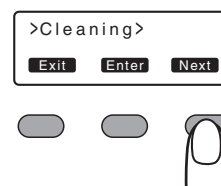
3. Press [Menu]

- A [Cleaning] message appears.



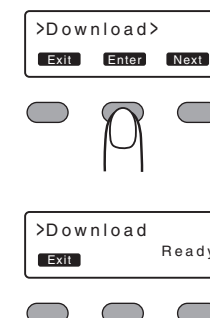
4. Press [Next] to set to [Download]

- Pressing the [Next] button each time displays the next screen.



5. Press [Enter]

- A [Download Ready] message appears, indicating that the laminator is ready to download data from the host computer.



Operating the Laminator

- A [Downloading] message during data download from the host computer.

Downloading...
Keep Power On



Note:

Do not turn off the power during data download from the host computer. Doing so may damage the printer firmware and cause malfunction.

- A [Download Ready] message when data download from the host computer is complete.

>Download Ready
Exit



6. Press [Exit]

7. When the [Please Power Off] message appears, turn off the power of the laminator

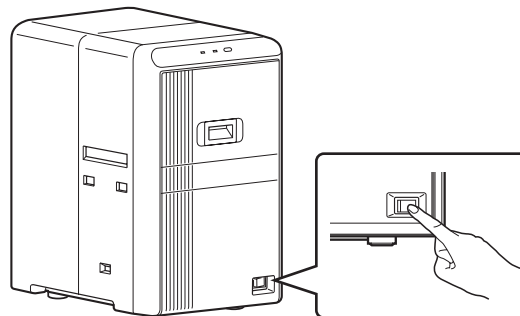
8. Turn off the power of the card printer

- The firmware is updated after the power is turned on again.

Initializing

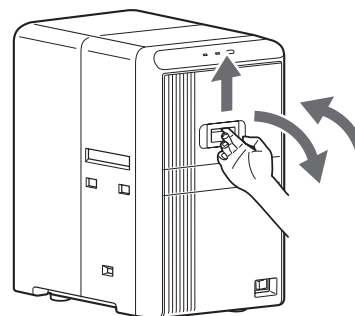
Power switch

- Upon turning on the power, the unit initializes, and switches to [Ready] after [Preheat] is complete.



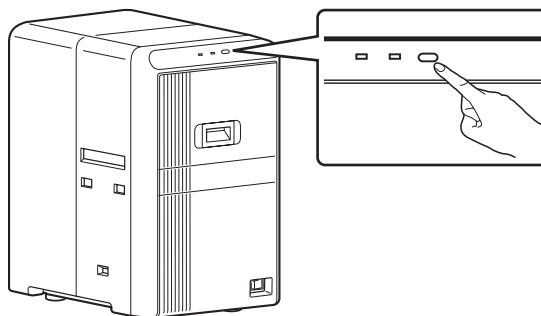
Laminator door

- When a patch film is used, opening and closing the laminator door forwards the laminate film by one image and starts initialization.



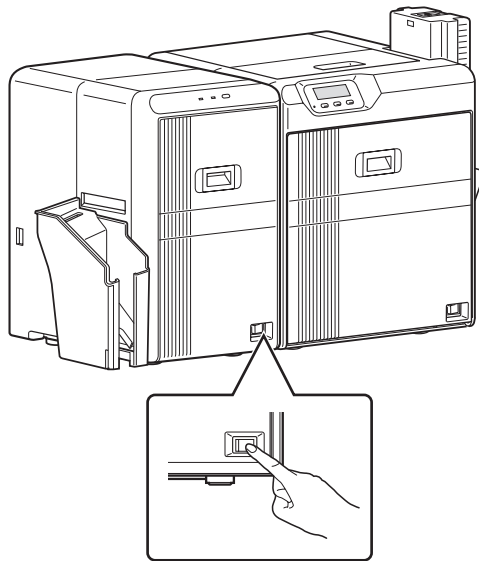
Operation button

- Pressing the operation button forwards the laminate film by one image and starts initialization.

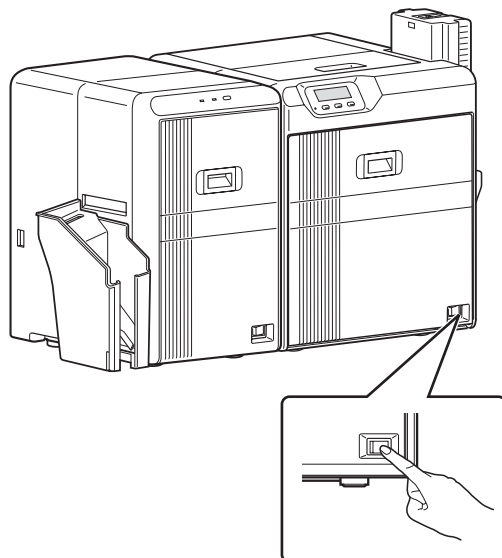


Turning On the Power

1. Check to ensure that the card printer and laminator are properly connected
2. Turn on the power of the laminator



3. Turn on the power of the card printer



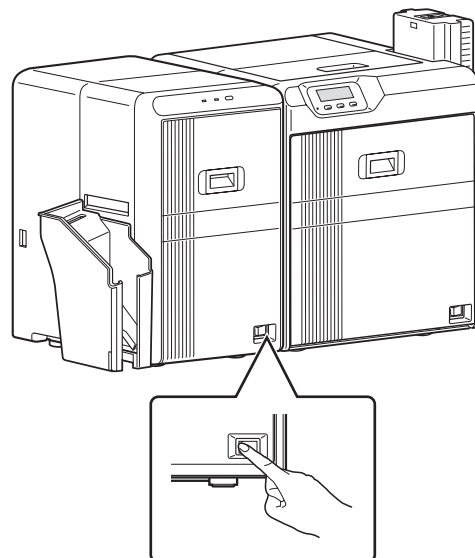
Caution: _____

Do not interrupt the laminator when it is operating. Doing so may cause cards to adhere to the interior of the laminator, thus causing it to malfunction. Make sure to observe the following.

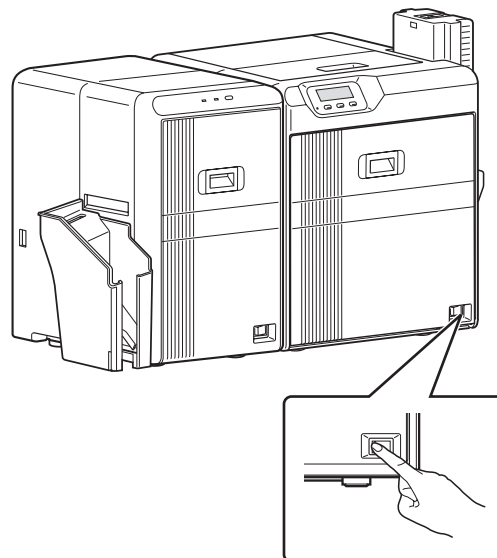
- Do not open the laminator door and remove the film cassette.
- Do not turn off the power.
- Do not unplug the power cord.

Turning Off the Power

1. Turn off the power of the laminator



2. Turn off the power of the card printer



Caution: _____

- Do not turn off the power of the card printer when the power of the laminator is still on. Make sure that the power for both the laminator and card printer are turned off.

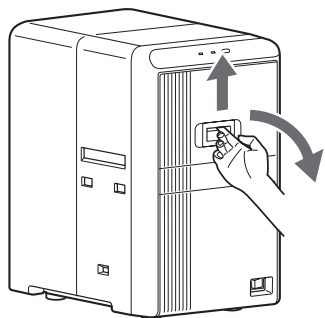
Replacement

Laminate Films

Caution:

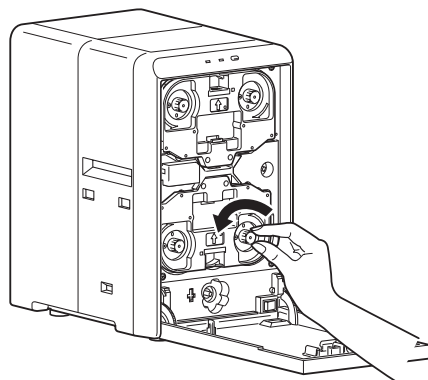
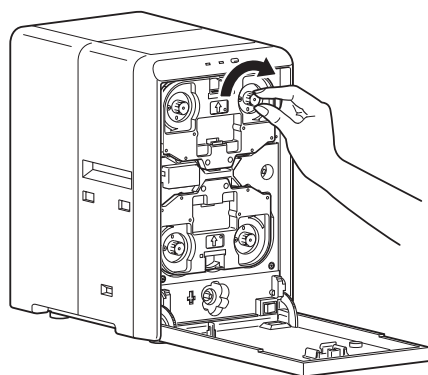
- If the security lock of the card printer is on, deactivate it. After work is complete, activate the security lock again.
- Stand the film cassette on a flat surface. Avoid doing so on a floor as dust attached to the film may cause poor adhesion or malfunction.
- When handling the film cassette, hold it with both hands. Accidentally dropping the cassette may damage it or result in injuries.
- Make sure that the laminate film is attached in the right direction. Otherwise, film detection error may occur.

1. Open the laminator door

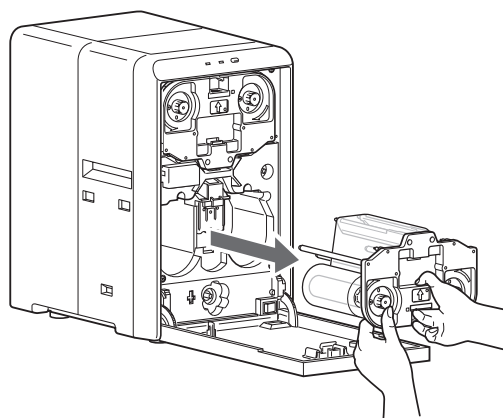
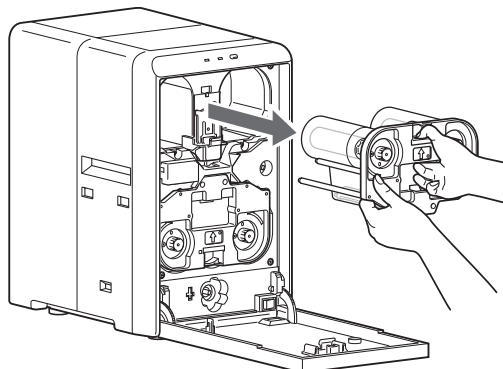


2. Remove any slack in the laminate film

Turn the knob on the film cassette in the direction indicated by the arrow.

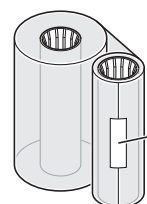


3. Press and hold down the cassette button, and pull out the film cassette



4. Attach the laminate film to the bobbin

- ① Place the new laminate film and the take-up bobbin side by side on a clean and flat platform.
- ② Attach the tip of the new laminate film to the take-up bobbin using the fixing tape.



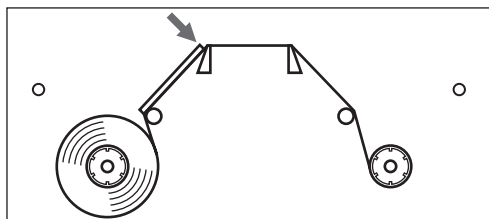
Use the fixing tape after peeling off the adhesive label of the laminate film.

Caution:

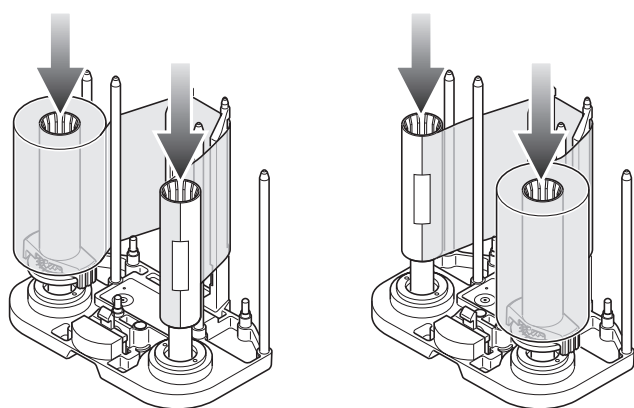
- Attach the laminate film to the take-up bobbin such that they are parallel to each other. Otherwise, it may result in poor adhesion or cause film detection errors.

5. Install the new laminate film

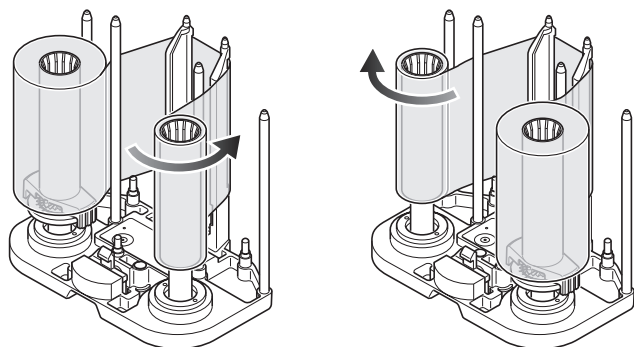
Install while referring to the indication on the label of the cassette.



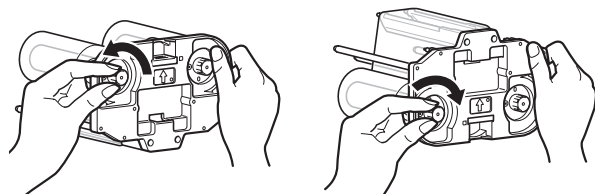
- ① Insert the supply side of the film into the sprocket.
- ② Unwind the laminate film along the film guides, and insert the take-up side into the bobbin.



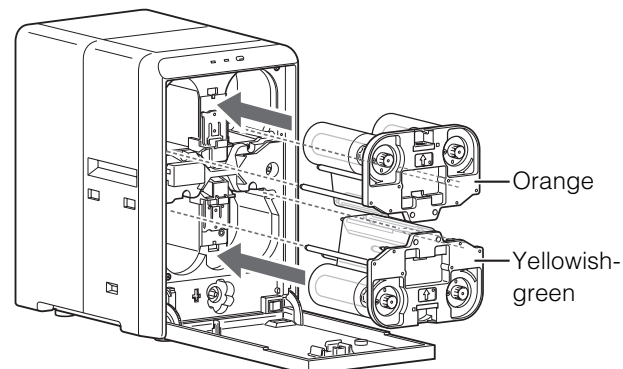
- ③ Wind the film twice around the take-up side.



6. Remove any slack in the laminate film



7. Insert the film cassette all the way in along the guide rail until a “click” sound is heard, and close the laminator door



Caution:

- Make sure that the film cassette is inserted into the correct position (upper or lower). Otherwise, the film cassette cannot be inserted all the way in and the cassette button does not eject. Also, you will not be able to close the laminator door. Make sure to insert the film cassette all the way in until a “click” sound is heard.

Cards

Refer to the “Instruction Manual” of the card printer.

Maintenance

Caution:

After servicing or cleaning is complete, check to ensure that all dismantled parts are restored to their original positions. Failure to restore the parts may result in malfunction of the laminator.

■ Request for routine servicing

- In order to prevent printing errors and malfunctions from occurring in advance, please request for routine servicing by the servicing personnel. For details on servicing, please consult our authorized dealers.

Card Feed Roller/Heating Roller

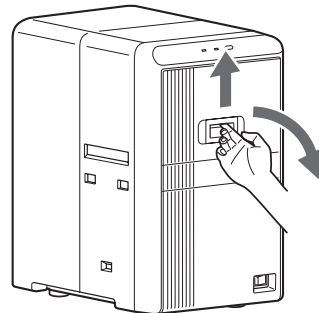
- Cards may jam easily if the card feed roller is dirty.
- Clean the roller after laminating about 1,000 cards.

Caution:

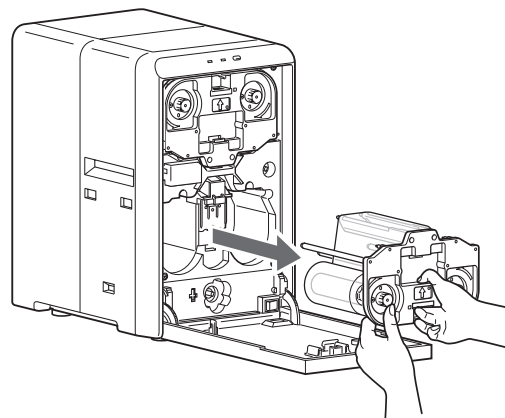
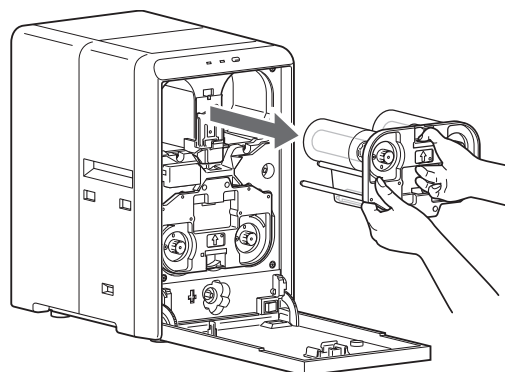
- If the security lock of the card printer is on, deactivate it.
- After work is complete, activate the security lock again.
- Stand the film cassette on a flat surface. Avoid doing so on a floor as dust attached to the film may cause poor adhesion or malfunction.
- When handling the film cassette, hold it with both hands. Accidentally dropping the cassette may damage it or result in injuries.
- Each cleaning card can only be used once. Reusing a dirty card may dirty the roller or cause the laminator to malfunction. For details on the cleaning card, please consult our authorized dealers.
- Cleaning cannot be performed while the heating roller is still hot. Turn off the power, and perform cleaning after it has cooled down.

■ Cleaning the laminator together with the card printer

1. Open the laminator door



2. Press and hold down the cassette button, and pull out the film cassette



3. Close the laminator door, and turn on the power of the laminator

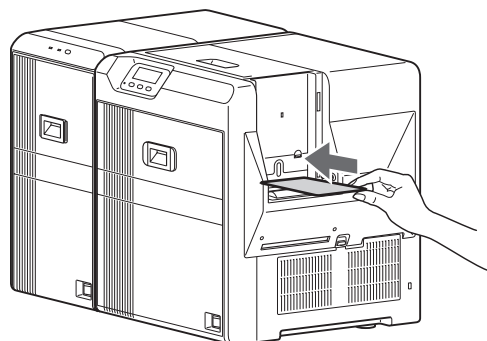
- The LED display (red) starts blinking.

4. Remove the retransfer film cassette (left) from the card printer, close the printer door, and remove the card hopper

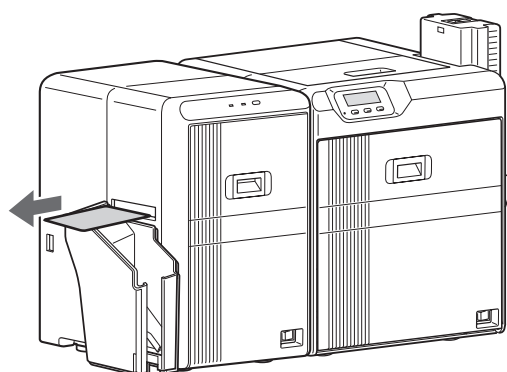
5. Turn on the power of the card printer, and set it to the card feed roller/heating roller cleaning mode

- For details on cleaning of the card printer's card feed roller/heating roller, refer to the "Instruction Manual" of the card printer.

6. Insert the cleaning card into the card printer



- The cleaning card is discharged from the card outlet of the laminator.

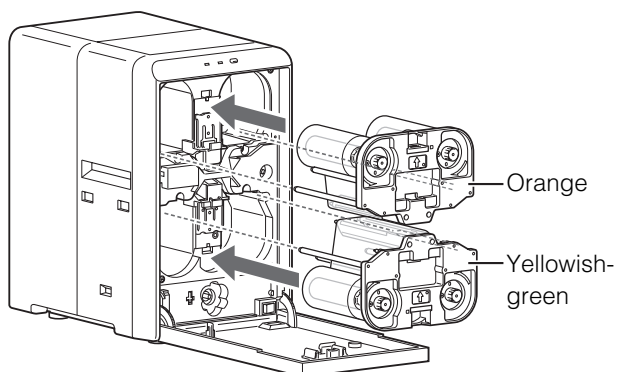


7. Reverse the adhesive face of the cleaning card, and insert it into the card printer again

- The cleaning card is discharged from the card outlet of the laminator.

8. Open the laminator door

9. Insert the film cassette all the way in along the guide rail until a “click” sound is heard, and close the laminator door

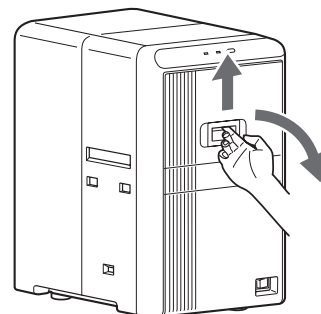


Caution:

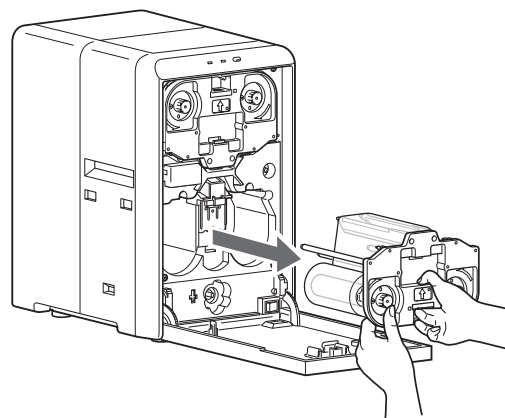
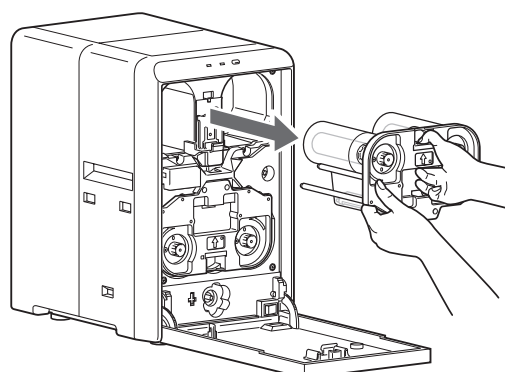
- Make sure that the film cassette is inserted into the correct position (upper or lower). Otherwise, the film cassette cannot be inserted all the way in and the cassette button does not eject. Also, you will not be able to close the laminator door. Make sure to insert the film cassette all the way in until a “click” sound is heard.

■ Cleaning the laminator alone

1. Open the laminator door



2. Press and hold down the cassette button, and pull out the film cassette

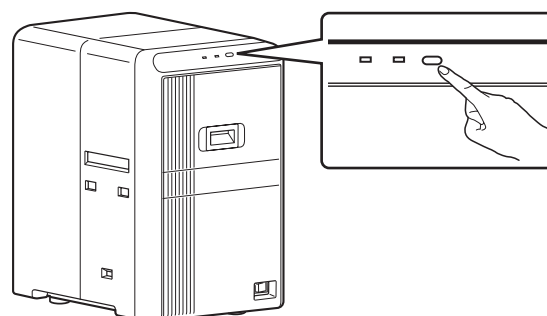


3. Close the laminator door, and turn on the power of the laminator

- The LED display (red) starts blinking.

4. Press the operation button for two seconds or longer

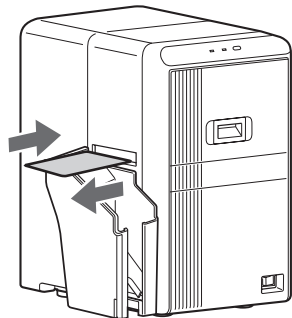
- The unit switches to the cleaning mode.



Maintenance

5. Insert the cleaning card into the card outlet of the laminator

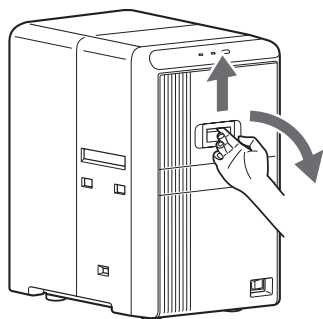
The card is drawn in by the roller. Cleaning starts automatically, and is discharged from the card outlet.



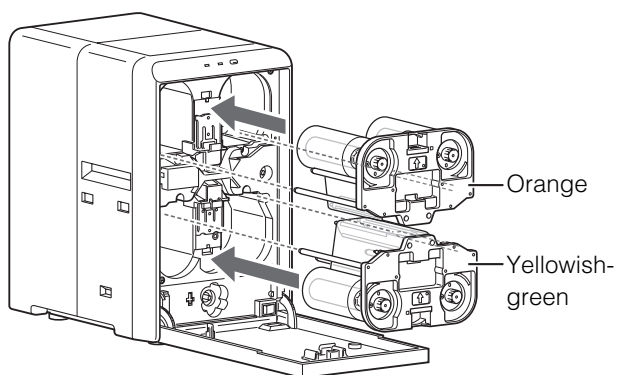
6. Press the operation button again for two seconds or longer, reverse the adhesive face of the cleaning card, and insert it into the card outlet

- The cleaning card is discharged from the card outlet of the laminator.

7. Open the laminator door



8. Insert the film cassette all the way in along the guide rail until a “click” sound is heard, and close the laminator door



Caution:

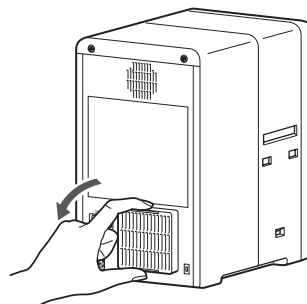
- Make sure that the film cassette is inserted into the correct position (upper or lower). Otherwise, the film cassette cannot be inserted all the way in and the cassette button does not eject. Also, you will not be able to close the laminator door. Make sure to insert the film cassette all the way in until a “click” sound is heard.

Fan Filter

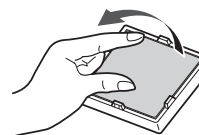
Caution:

- Start work after ensuring that the power has been turned off.
- Replace the fan filter with a new one after using it for about one year. For details on its replacement, please consult our authorized dealers.

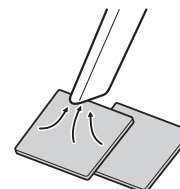
1. Remove the filter cover at the back of the laminator



2. Remove the fan filter.



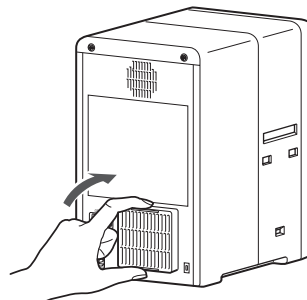
3. Remove any dirt that is attached to the fan filter using a vacuum cleaner.



4. Set the fan filter.



5. Set the filter cover.



Film Cassette

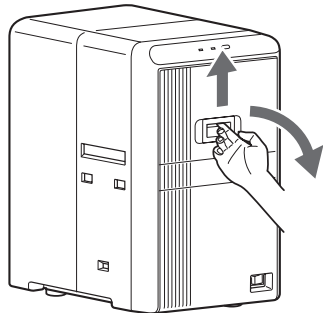
Due to the characteristics of the patch film, residues at the back of the laminate film may be attached to the film guide of the film cassette. Also, inserting and removing the film cassette repeatedly causes it to rub against the laminator, and scraps may be attached to the unit as a result. Although this does not impede the function of the laminator, scraps or residues on the adhesive face of the laminate film may result in poor adhesion.

When replacing the laminate film, check to ensure that no scraps or residues are attached to the film guides.

Caution:

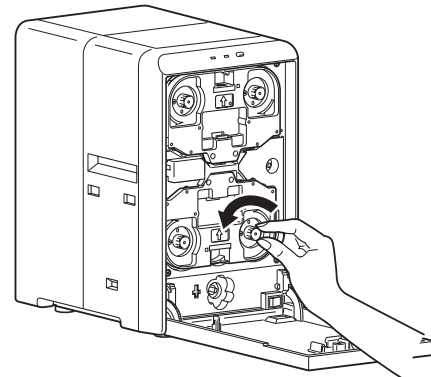
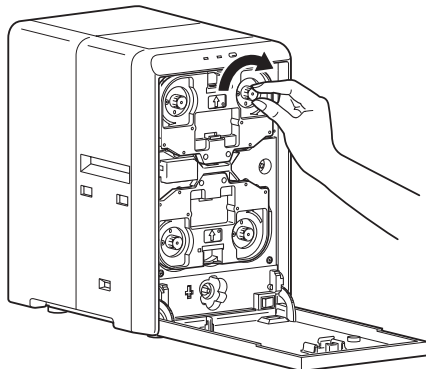
- If the security lock of the card printer is on, deactivate it. After work is complete, activate the security lock again.
- Stand the film cassette on a flat surface. Avoid doing so on a floor as dust attached to the film may cause poor adhesion or malfunction.
- When handling the film cassette, hold it with both hands. Accidentally dropping the cassette may damage it or result in injuries.

1. Open the laminator door

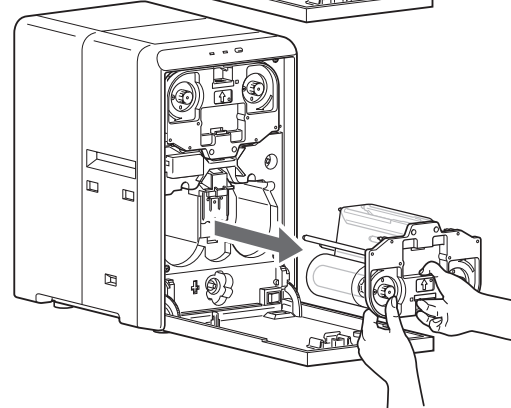
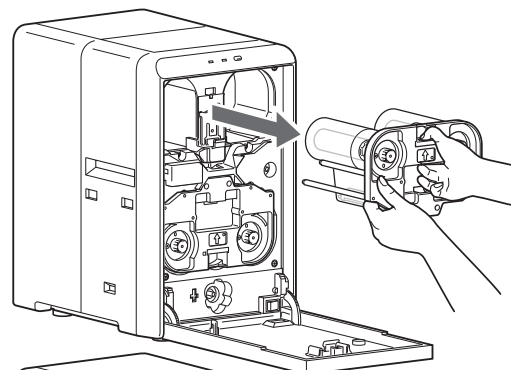


2. Remove any slack in the laminate film

- Turn the knob on the film cassette in the direction indicated by the arrow.



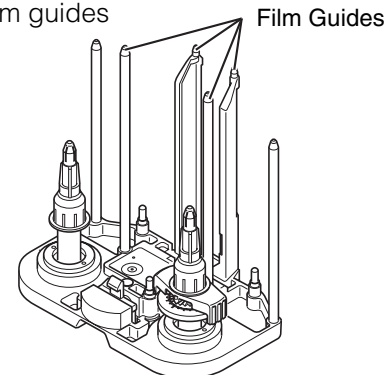
3. Press and hold down the cassette button, and pull out the film cassette



4. Remove the laminate film from the film cassette

5. Apply alcohol to a rag that does not produce lint easily (such as a cleaning wipe)

6. Wipe the film guides



Caution:

- Apply alcohol to a rag that does not produce lint easily, and use it for cleaning.
- Perform cleaning at a location away from the laminator so that scraps or residues do not enter the unit.

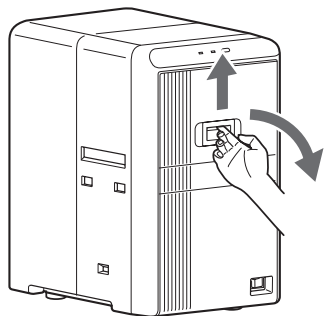
Troubleshooting

Card jams

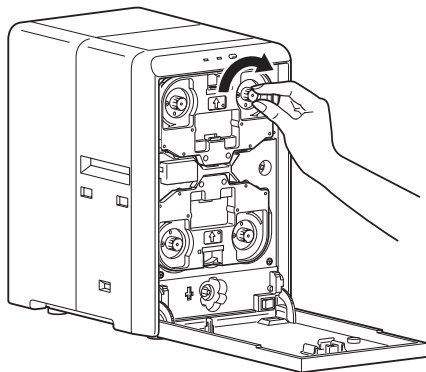
1. Check the position of the jammed card

- You can identify the position from the operation panel display of the card printer or the status monitor of the computer that is connected to the card printer.

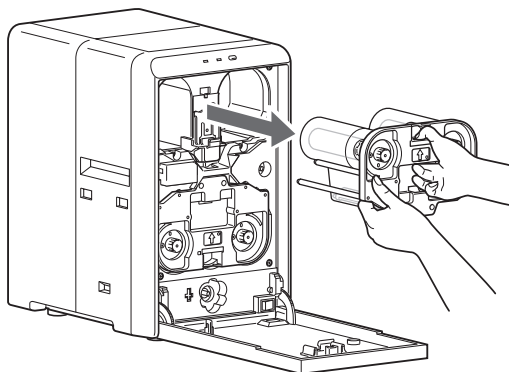
2. Open the laminator door



3. Remove any slack in the laminate film

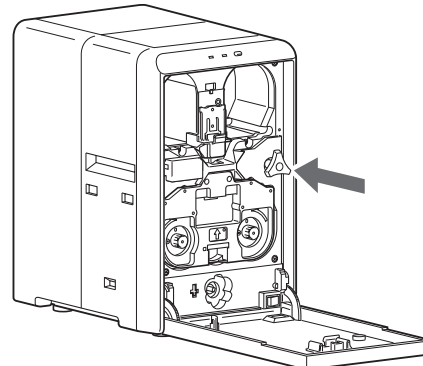


4. Press and hold down the cassette button, and pull out the film cassette (upper)

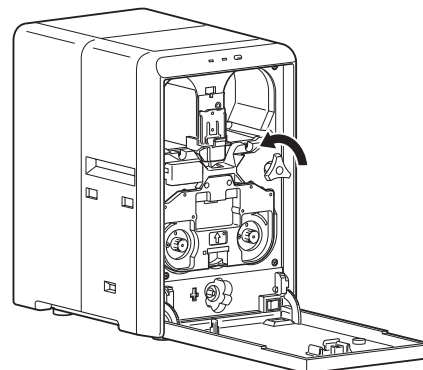


5. Remove the jog dial from the card printer

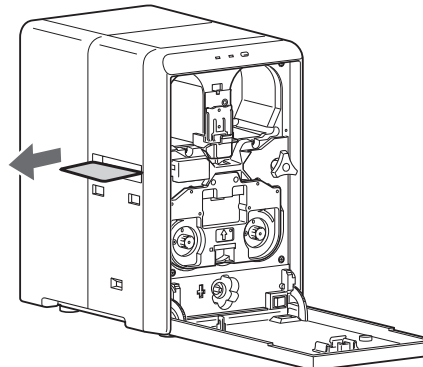
6. Attach the jog dial to the jog dial attachment slot



7. Turn the jog dial in the anti-clockwise direction



- The card is discharged from the card outlet.



8. Restore the jog dial to its original position.

9. Insert the film cassette all the way in along the guide rail until a "click" sound is heard, and close the laminator door

Laminate Film is Detached

If the laminate film is detached from the film cassette while removing the film cassette, check to ensure that the laminate film is not damaged.

Caution:

- If the security lock of the card printer is on, deactivate it. After work is complete, activate the security lock again.
- Stand the film cassette on a flat surface. Avoid doing so on a floor as dust attached to the film may cause poor adhesion or malfunction.
- When handling the film cassette, hold it with both hands. Accidentally dropping the cassette may damage it or result in injuries.

■ **If the laminate film is not damaged**

1. Install the new laminate film to the film cassette
2. Turn the take-up side using your hand to take up the used portion of the film
3. Remove any slack in the laminate film
4. Insert the film cassette all the way in along the guide rail until a “click” sound is heard, and close the laminator door

■ **If the laminate film is damaged**

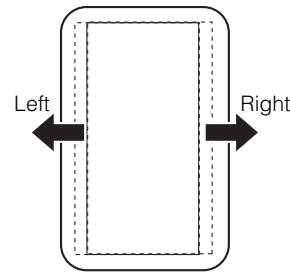
1. Cut away the damaged portion using a pair of scissors
2. Insert the supply side of the film into the sprocket, and the take-up side into the bobbin
3. Attach the unused portion at the supply side to the other end at the take-up side using an adhesive tape, while making sure that the joint surface is even
4. Turn the take-up side using your hand until the broken portion can no longer be seen
5. Remove any slack in the laminate film
6. Install the laminate film to the film cassette
7. Insert the film cassette all the way in along the guide rail until a “click” sound is heard, and close the laminator door

Misaligned Patch Position

The patch position may vary slightly with respect to the card depending on the type of film used.

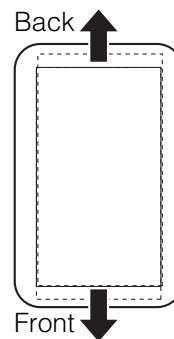
If the patch position is not properly aligned, adjust it accordingly.

■ **If patch position is displaced to the left/right**

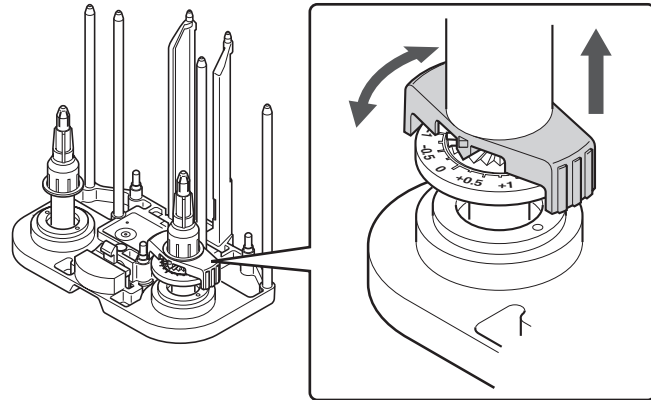


- You can adjust the setting on the status monitor of the computer that is connected to the card printer.
- For details on the setting procedures, refer to the “Instruction Manual” of the card printer.

■ **If patch position is displaced to the front/back**



- Turning the sprocket of the film cassette enables you to adjust the patch position to the front or back by 0.25 mm.
- The maximum displacement of the sprocket is ± 1 mm from the standard position.



Caution:

- Apply the above procedures if there is significant misalignment in the patch position.
- Do not turn the sprocket in the anti-clockwise direction from the +1 position. Doing so may damage it.
- Do not turn the sprocket in the clockwise direction from the -1 position. Doing so may damage it.

Troubleshooting

Card Warpage

During laminating, heating by the heating roller may cause warpage in cards with a low heat resistance, such as PVC ones. Such warpage may be significant depending on the type of card used.

Using the setting examples below as reference, adjust the settings appropriately according to the type of card in use. Settings can be changed on the status monitor of the computer that is connected to the card printer.

Laminating condition settings

Caution:

- As the material of PVC cards is weaker in heat resistance as compared to other cards, such as PET ones, double-sided lamination of 1 mil patch films is not recommended.
- Otherwise, warpage of the PVC cards may become significant after laminating, thereby causing card jams.

■ Setting example for double-sided lamination

When double-sided printing and double-sided lamination are performed on a heat-resistant card

Film		1mil	0.6mil	Overlay
Estimated Ambient Temperature Range		15°C to 30°C	15°C to 30°C	15°C to 30°C
Card Material		PET	PET and PVC	PET and PVC
ILM-DS	Temperature (Top Face/Lower)	135°C	115°C	95°C
	Temperature (Bottom Face/Upper)	150°C	125°C	105°C
	Speed	5.5 mm/s	6 mm/s	4 mm/s
	Cooling Time	0 sec		
XID8300	Retransfer Settings	Temperature Level	0	
		Speed (Top Face)	-1	
		Speed (Bottom Face)	1	
	Warpage Correction	Temperature Level	Not corrected	

■ Setting example for single-sided (front face/lower) lamination

When double-sided printing and single-sided lamination (side that faces down when card is discharged) are performed on a PVC card

Film		1mil	0.6mil	Overlay
Estimated Ambient Temperature Range		15°C to 30°C	15°C to 30°C	15°C to 30°C
Card Material		PET and PVC	PET and PVC	PET and PVC
ILM-LS	Temperature (Top Face/Lower)	150°C	125°C	105°C
	Speed	5.5 mm/s	6 mm/s	4 mm/s
	Cooling Time	0 sec		
XID8300	Retransfer Settings	Temperature Level	0	
		Speed (Top Face)	1	
		Speed (Bottom Face)	-1	
	Warpage Correction	Temperature Level	Not corrected	

■ If card is significantly warped

Caution:

Due to the characteristics of the PVC card material, which has a weaker heat resistance as compared to other cards, such as PET ones, applying a large heat load at once causes the PVC card to deform significantly, and this may in turn cause card jams inside the laminator unit. Alter the temperature and speed in small increments.

List of Error Codes

■ LED displays and error codes

The error codes are displayed on the operation panel of the card printer as well as the status monitor of the computer that is connected to the card printer.

LED display (red)	LED display (blue)	Error Code	Laminator Status	Actions
Blinking (Slow)		Jam(In) 50	Card jam near the card load slot.	<ul style="list-style-type: none"> Check to ensure that the laminator is properly connected to the card printer. (☞ Page 26 "Card Printer Connection") Remove the jammed card. (☞ Page 22 "Card Jams")
		Jam(Middle) 51	Card jam near the heating roller.	<ul style="list-style-type: none"> The transfer temperature may be too high, or the speed may be too slow. For details on the optimal settings, please consult our authorized dealers. Remove the jammed card. (☞ Page 22 "Card Jams")
		Jam(Out) 52	Card jam near the card outlet.	
		Film-T RunOut 53	The bottom face (upper) laminate film has run out.	
		Film-B RunOut 54	The top face (lower) laminate film has run out.	Replace the laminate film with a new one.
		Film-T Search 55	The bottom face (upper) laminate film cannot be detected.	<ul style="list-style-type: none"> Check to ensure that the laminate film is correctly set. Check to ensure that the settings are appropriate for the type of laminate film in use.
		Film-B Search 56	The top face (lower) laminate film cannot be detected.	
		Film-T Search 57	The bottom face (upper) laminate film cannot be detected.	Check to ensure that the laminate film is correctly set.
		Film-B Search 58	The top face (lower) laminate film cannot be detected.	
		Door Open 59	The laminator door is open.	Close the laminator door properly.
		No Cassette 5A	Film cassette is not inserted.	Insert the film cassette for the side to be laminated.
Blinking (Fast)	Light off	Thermostat 60	The thermostat is not connected.	Turn off the power and turn it on again. If the same problem recurs, consult our authorized dealers or servicing personnel.
		HR-T Overheat 61	Bottom face (upper) heating roller temperature error. (temperature is too high)	
		HR-B Overheat 62	Top face (lower) heating roller temperature error. (temperature is too high)	
		Overheat-T 63	Bottom face (upper) internal temperature error. (temperature is too high)	
		Overheat-B 64	Top face (lower) internal temperature error. (temperature is too high)	
		Heater-T 65	Bottom face (upper) heater error.	
		Heater-B 66	Top face (lower) heater error.	
		Thermistor-T 67	Bottom face (upper) heating roller temperature sensor error.	
		Thermistor-B 68	Bottom face (upper) heating roller temperature sensor error.	
		Cam-T 6B	Bottom face (upper) heating roller pressing operation error.	
		Cam-B 6C	Top face (lower) heating roller pressing operation error.	
		Overcool 6D	Internal temperature error. (temperature is too low)	The operating ambient temperature is too low. Use the laminator within the prescribed range. When starting up the laminator in a low-temperature environment, the temperature of the interior may remain low even though the surrounding temperature has gone up. Turn on the power again after waiting for about one hour.
		Supply ENC-T 6E	Bottom face (upper) supply side motor encoder (rotation detection) error.	Turn off the power and turn it on again. If the same problem recurs, consult our authorized dealers or servicing personnel.
		Supply ENC-B 6F	Top face (lower) supply side motor encoder (rotation detection) error.	
		Wind ENC-T 70	Bottom face (upper) take-up side motor encoder (rotation detection) error.	
		Wind ENC-B 71	Top face (lower) take-up side motor encoder (rotation detection) error.	
		Other Error 7D	Other errors	

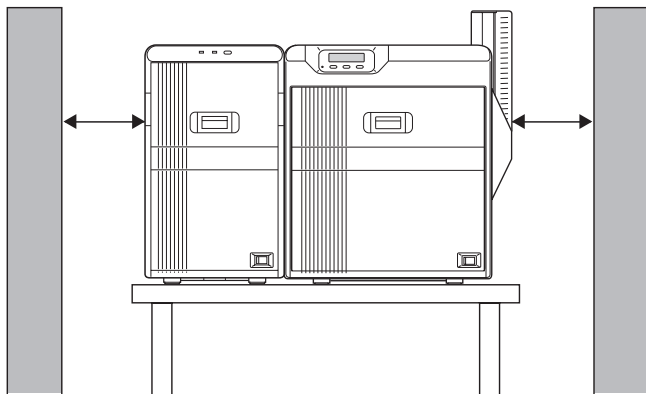
Setup

Installation and Connection

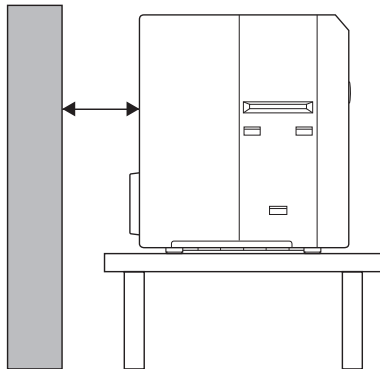
Installation location

Ventilation holes for the cooling fan are located at the rear of the laminator as well as the side and rear of the card printer.

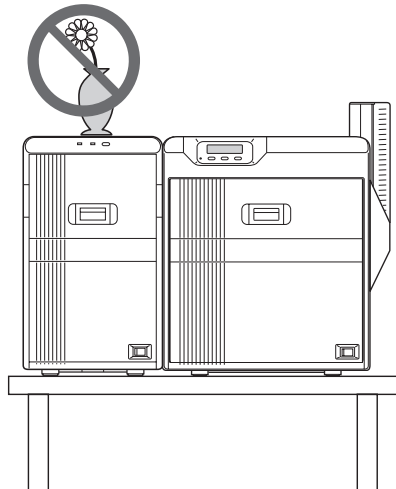
- Install the laminator by allowing a clearance of at least 20 cm between its sides and surrounding walls.



- Allow a clearance of at least 20 cm between the rear of the laminator and the wall.

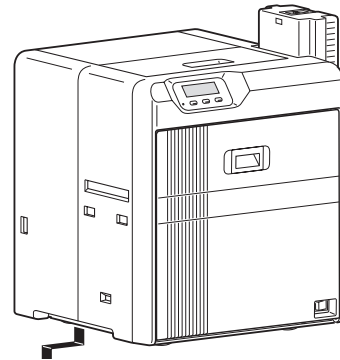


- Do not place any object on the laminator.

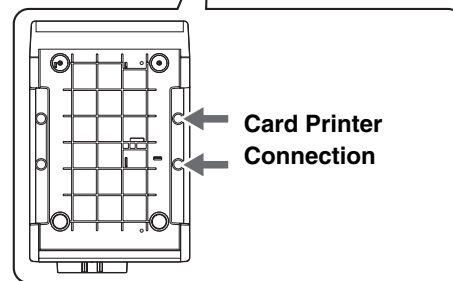
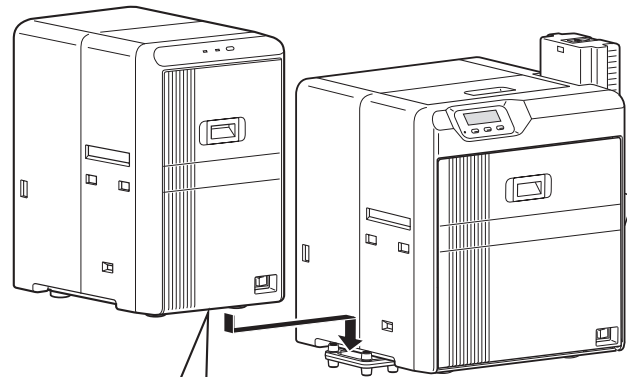


Card printer connection

1. Fit the card printer to the supplied unit connection adapter



2. Fit the laminator to the supplied unit connection adapter

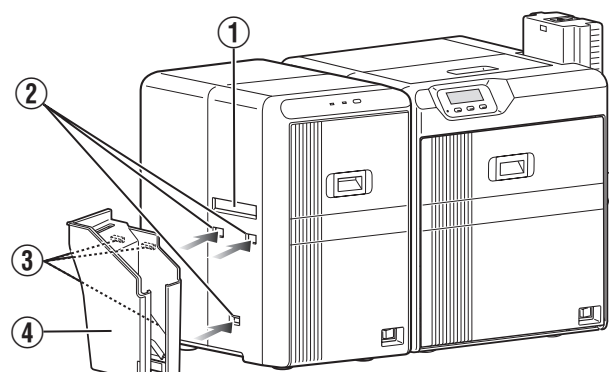


Caution:

- Make sure that you connect the units on a flat and firm surface.
- Insert the unit connection adapter firmly into the card printer connection. Cards cannot be fed if there is a difference in level.

Card stacker

1. Hook the tab of the card stacker that is supplied with the card printer to the card attachment slot.



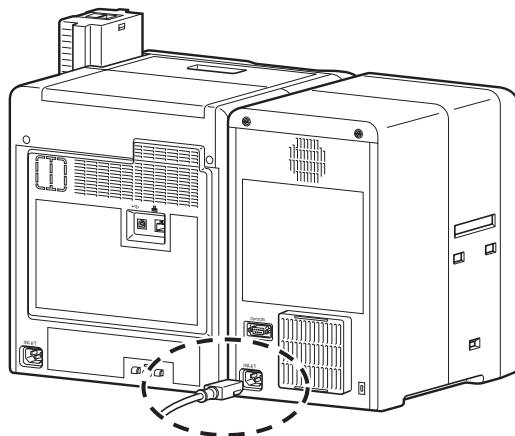
- ① Card outlet
- ② Card stacker attachment slot
- ③ Tab
- ④ Card stacker

Laminate Films

For details on installation of laminate films, refer to “Laminate Films” (page 16).

Power Cord Connection

1. Insert the power cord (supplied) to the power input terminal at the rear of the laminator
2. Plug the power cord (supplied) into an outlet.



Caution:

- Make sure that the power outlet is grounded and used as a dedicated power source for the laminator. It must not be shared with other power supply facilities.

Memo:

Make use of an AVR (automatic voltage regulator) to prevent any fluctuation in voltage. Alternatively, an uninterruptible power supply is recommended in case momentary power outage occurs.

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