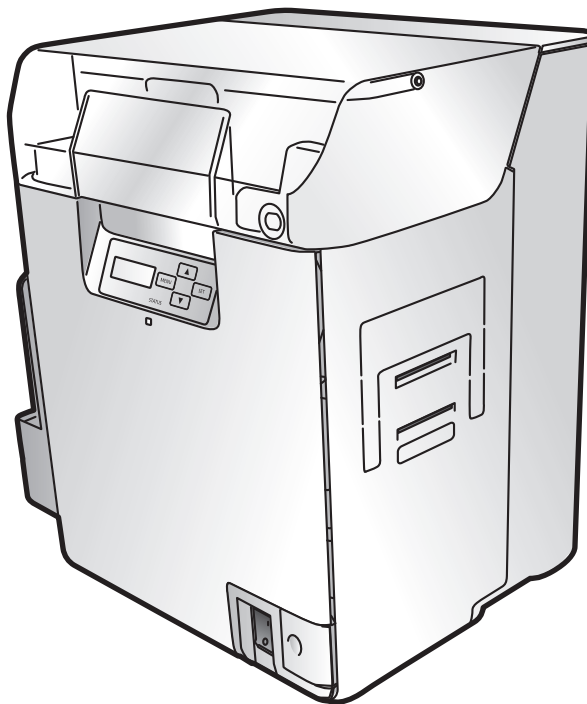


# Operating Manual MC660



## Features of the card printer MC660

### Easy Card Loading

Thanks to the Multifunctional Card Case, it is possible to feed cards without detaching the Card Case. (→ p10)

### Strengthened Security

- You can anchor the printer with a cable using the Security Cable Slot. (→ p55)
- It is easy to store cards in the removable Card Case. (→ p55)

### Easy Operation

Use of Ink Ribbon/Transfer Film Cassettes makes it easy for anyone to change ribbons and films. (→ p16)

### Easy Setup

The printer comes with a printer driver CD, so if you also have the Ink Ribbon, Transfer Film, and cards (available separately), you can use the printer immediately after setup. (→ Easy Setup Guide)

## About Symbols



### WARNING

These are warnings indicating the risk of accidents, fire, or electric shock if the printer is not operated correctly. Be sure to follow these warnings to operate the printer safely.



### CAUTION

These cautions indicate the risk of injury or malfunction if the printer is not operated correctly. Be sure to follow these cautions to operate the printer safely.



### Important

These offer important advice you should follow when operating the printer. Be sure to read this advice to prevent malfunctions or damage to the printer.



### Note

These are notes with helpful or additional information about using the printer.



### REF

These are references that make the manual easier to use.

- Windows is registered trademarks or trademarks of Microsoft Corporation in the U.S. and / or other countries.

## **Regulations for MCC 660**

### **FCC and IC regulations**

This device contains licence-exempt transmitter(s) / receiver(s) that comply with Innovation, Science and Economic Development Canada's licence exempt (RSS)s. Operation is subject to the following two conditions:

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

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) L'appareil ne doit pas produire de brouillage.
- (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### **RF Radiation Exposure Statement**

This product complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. The antenna should be installed and operated with maximum distance of 20 cm between the radiator and your body.

Cet appareil est conforme aux limites d'exposition aux rayonnements de l'ISED pour un environnement non contrôlé. L'antenne doit être installée de façon à garder une distance minimale de 20 centimètres entre la source de rayonnements et votre corps.

产品中有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
1. 电源/ 高压电源	×	○	○	○	○	○
2. 束线	×	○	○	○	○	○
3. 操作面板/ 读取部	×	○	○	○	○	○
4. 印刷电路板	×	○	○	○	○	○
5. 外壳/ 框架	×	○	○	○	○	○
6. 内部部件	×	○	○	○	○	○
本表格依据SJ/T 11364 的规定编制。 ○：表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572 规定的限量要求以下。 ×：表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572 规定的限量要求。						



本标志适用于在中华人民共和国销售的电子电气产品，标志中央的数字代表产品的环保使用期限。  
只要您遵守与本产品相关的安全与使用方面的注意事项，在从生产日期起算的上述年限内，就不会产生环境污染或对人体及财产的严重影响。  
部分产品可能不包含此表部件名称栏中的某些部件。

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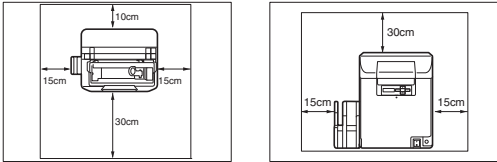
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# Operating the Printer Safely

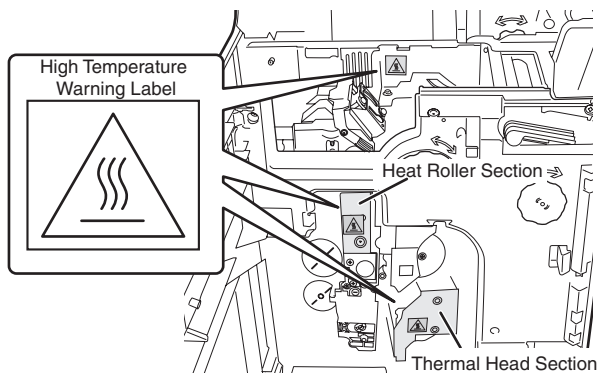
The following precautions must be observed to assure safe operation of the printer. Also, do not do anything that is not described in this manual. Doing so may cause an unexpected accident.

**⚠ WARNING** Failure to observe the following items while using the printer may cause fire, electric shock or other unexpected accident.

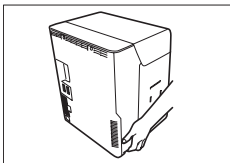
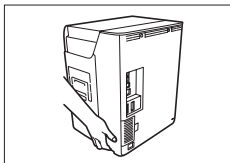
Installation location	Do not install the printer in a damp or dusty location.
	Do not install the printer near flammable or explosive materials or heater, stove or other device that produces heat.
	Place the printer away from walls, as shown in the diagram below, to maintain air flow. Also, maintain at least 30 cm of open space above the printer. Blocking the vents may cause the printer to overheat and catch fire.
	 <p>The left illustration indicates distance values when the Card Stacker is attached.</p>
Power supply	Use a dedicated power cable and do not use an extension cord with multiple outlets.
	Be sure to remove any dust from the plug and outlet. Humidity produces a micro-current on the surface causing overheating or fire.
	Do not damage or modify the Power Cable. Also, do not place heavy objects, pull, or bend excessively.
	Do not plug in or unplug the Power Cable if your hands are wet.
	Ensure a ground wire is connected. When connecting the ground wire, note the following cautions.
	<ul style="list-style-type: none"> <li>• Recommended connections for ground wires           <ul style="list-style-type: none"> <li>Outlet ground terminal</li> <li>Ground terminals installed as type A, B, or C</li> <li>A copper rod 65 cm or longer buried in the ground.</li> </ul> </li> <li>• Not permitted for ground wires           <ul style="list-style-type: none"> <li>Gas piping (risk of fire or explosion.)</li> <li>Water pipes or taps (water pipes that include plastic piping cannot act as a ground. However, if a water pipe is configured to act as a ground, then connection of a ground wire is permitted.)</li> <li>Telephone line ground wires or lightning conductors (danger of high current flow in the event of a lightening strike.)</li> </ul> </li> </ul>
	Be sure to turn off the power and unplug the plug from the outlet before moving the printer.
Handling	Pull on the plug, not the cable, when unplugging it from an outlet.
	Do not use flammable sprays near the printer.
	Do not touch anything inside the printer unless specified in this manual.

**! WARNING**

The lower part of the Top Access Cover, the printer internal heat roller section, and the thermal head section get very hot. Ensure you do not touch these three locations.



**! CAUTION** Failure to observe the following items while using the printer may cause injury, a malfunction or a break of the films and ribbons.

Installation location	Do not install the printer on an unstable table, on a slant, or any place where there is excessive vibration.
	Do not install the printer in a location susceptible to rapid fluctuations in temperature.
	Do not install the printer in a location exposed to direct sunlight.
Power supply	Do not use an under-rated extension cord.
Handling	Do not place heavy items on the printer and do not lean on the printer.
	When moving the printer, carry it as shown below.
	 
	While the printer is operating, do not turn off the power, unplug the power cable, or look inside the printer.
	Please do not insert objects such as cards into the printer.
	Do not turn the card feeding knob, reverse feeding knob or reverse knob without checking the condition of the card inside the printer.

- The cooling fan is always running for cooling the inside of the printer. This is not a malfunction.
- Contact your reseller if there is a current leak.
- The printer may cause static, flickering or interrupt reception of televisions or radios if they are too close to the printer.

**! CAUTION** Regarding copyrights  
 Using portraits (photos or images) or copyrighted material (illustrations or logos) without the permission of their owners is prohibited by law.  
 Do not use copyrighted images without permission or for illegal activities.



- ! CAUTION** Under the following conditions images on cards may deteriorate or cards may warp after printing.
- The surface of the card is in contact for an extended period of time with a vinyl card holder or synthetic leather or other material that contains plasticizer.
  - The surface of the card is exposed to direct sunlight for an extended period of time.
  - The card is repeatedly rubbed against a hard object.
  - The faces of two cards are in contact for an extended period of time.
  - The card is kept for an extended period of time in a very hot location such as a car parked in the sun.
  - The card is bent, or used with excessive force.

If a card with a magnetic strip is placed near a magnetic source, the data on the strip may become corrupted.

Additionally, if the IC card is bent, or used with excessive force, the IC chip may be damaged.

## Regulations for this product FCC Regulations

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Note** This equipment has been tested and found to comply with the limits for class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

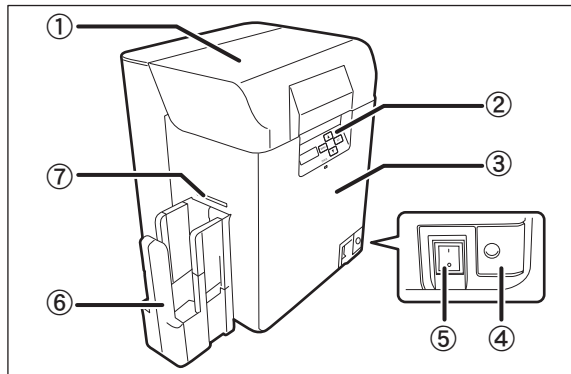
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual.

If such changes or modifications should be made, you could be required to stop operation of the equipment.

# Part Names and Descriptions

## Front Side of the Printer



### ① Top Cover

Open when loading cards or cleaning the feeding roller.

### ② Operation Panel

Includes the keys, the LCD Panel, and LED indicator for operating the printer.

→See "Operation Panel" on page 8 for detailed Operation Panel part names and descriptions.

### ③ Front Cover

Open when changing ink ribbons and transfer film, and when cleaning the Cleaning Roller.

→See "Front Cover" on page 7 for information about the names of parts inside the cover and their descriptions.

→See "Changing the Ink Ribbon and Transfer Film" on page 16 for details about changing the Ink Ribbon Cartridge.

→See "Cleaning" on page 56 for instructions on cleaning the Cleaning Roller.

### ④ Open Cover Switch

Front cover opening switch. Press to open the Front Cover.

### ⑤ Power Switch

Turns the power on and off.

→See "Turning On and Off the Printer" on page 9 for instructions on turning the power on and off.

### ⑥ Card Stacker

A maximum of 250 cards<sup>\*1</sup> can be stacked by attaching the Card Ejection Slot (Left). Without good reason, there is no need to remove the Card Stacker.

→See the "Easy Setup Guide" for instructions on attaching.

### ⑦ Card Ejection Slot (Left)

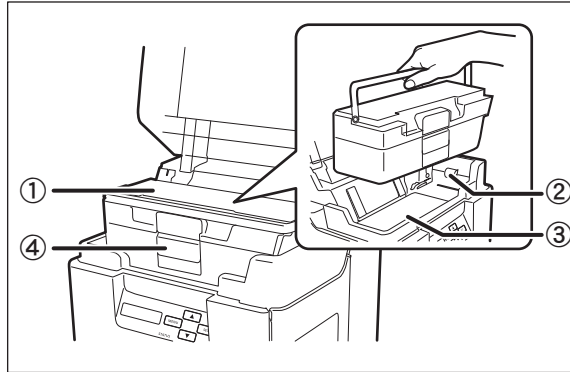
Ejects correctly printed cards and cards with errors. You can select between Card Ejection Slot (Left) and (Right) for card ejection. The factory default is set so both correctly printed cards are output from Card Ejection Slot (Left).

→See "Switching the Card Ejection Slot" on page 48 for information about switching the card ejection slot.

<sup>\*1</sup> When using CR-80 cards (size: 3.375" × 2.125" (86 mm × 54 mm), thickness: 0.03" (0.76 mm)).

## Inside the Top Cover

Interior of the Top Cover.



### ① Card Case

Up to 250\*<sup>1</sup> cards can be loaded at one time. You can adjust the gate gap to match the thickness of the fed cards. The factory default is set so the gap corresponds to feeding of cards of 0.76 mm in thickness.

→See "Loading Cards" on page 10 for instructions on loading cards.

→See "Cards" on page 84 for details about which cards you can use.

→See "Adjusting the Feed Gate Depending on Card Thickness" on page 44 for instructions on adjusting the gate gap.

### ② Feeding Roller

Pulls loaded cards into the printer.

→See "Cleaning the Feeding Roller" on page 61 for feeding roller cleaning instructions.

### ③ Top Access Cover

Open when cards are jammed or similar.

→See "When a Card is Jammed..." on page 75 for instructions on how to eject jammed cards.

### ④ Card Case Lock

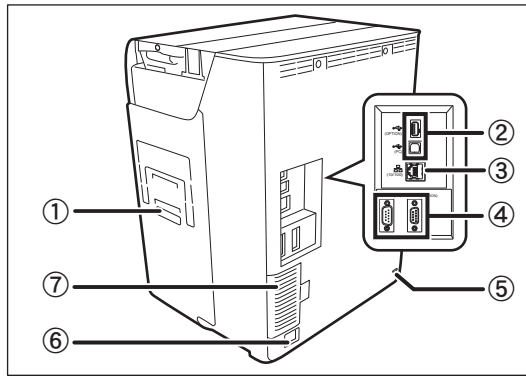
When loading cards, pull the lock to open the card case.

→See "Loading Cards" on page 10 for instructions on loading cards.

---

\*1 When using CR-80 cards (size: 3.375" × 2.125" (86 mm × 54 mm), thickness: 0.03" (0.76 mm)).

## Rear Side of the Printer



### ① Card Ejection Slot (Right)

Ejects correctly printed cards and cards with errors.

Card Ejection Slot (Left) or (Right) can be selected.

The factory default is set so cards with errors are output from Card Ejection Slot (Right).

→See "Switching the Card Ejection Slot" on page 48 for information about switching the card ejection slot.

### ② USB Cable Port

USB (A terminal) ×1 and USB (B terminal) ×1.  
Connect the B terminal and the computer using the provided USB cable. Additionally, connect the optional enhancement unit using the A terminal.

→See the "Easy Setup Guide" for instructions on connecting the cable.

### ③ LAN Cable Port

Connect to the network using the LAN Cable.

→See the "Easy Setup Guide" for instructions on connecting the cable.

### ④ Port for Enhancing Function

Used for enhancing function\*1

### ⑤ Security Cable Slot

Use the Security Cable Slot to prevent theft of the printer.

→See "Preventing Theft and Unauthorized Usage" on page 55 for instructions on using the Security Cable Slot.

### ⑥ Power Cable Port

Used to connect the Power Cable.

→See the "Easy Setup Guide" for instructions on connecting the cable.

### ⑦ Filter

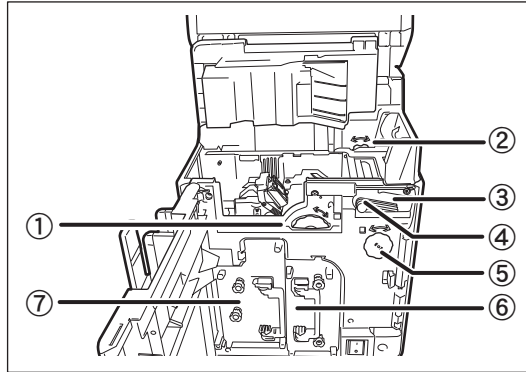
Filters out airborne dirt and other foreign matter, preventing this entering the printer. The filter can be removed for cleaning.

→See "Filter Cleaning" on page 68 for filter cleaning instructions.

\*1 Do not connect other than the specified optional units. Connecting these units could damage them.

## Front Cover

Interior of the Front Cover.



### ① Card Feeding Knob

Rotating the dial to the left or right ejects cards jammed in the secondary transfer section from the Card Ejection Slot (Left) or (Right).

→See "When a Card is Jammed..." on page 75 for instructions on how to eject jammed cards.

### ② Reverse Feeding Knob

Rotating the dial to the left or right ejects cards jammed in the card feed slot and reverse section.

→See "When a Card is Jammed..." on page 75 for instructions on how to eject jammed cards.

### ③ Cleaning Roller

Removes dirt and other foreign matter stuck to the cards.

→See "Cleaning the Cleaning Roller" on page 59 for cleaning instructions.

### ④ Cleaning Tape Cassette

Remove when replacing the Cleaning Tape.

→See "Cleaning Tape Replacement" on page 22 for how to change the Cleaning Tape.

### ⑤ Reverse Knob

Rotate the knob to the left to change the direction of the cards in the reverse section.

→See "When a Card is Jammed..." on page 75 for instructions on how to change the direction of cards in the reverse section.

### ⑥ Ink Ribbon Cassette

Ink Ribbon Cassette.

→See "Changing the Ink Ribbon and Transfer Film" on page 16 for details about changing the Ink Ribbon.

→See "Ink Ribbon/Transfer Film" on page 83 for details about which Ink Ribbon you can use.

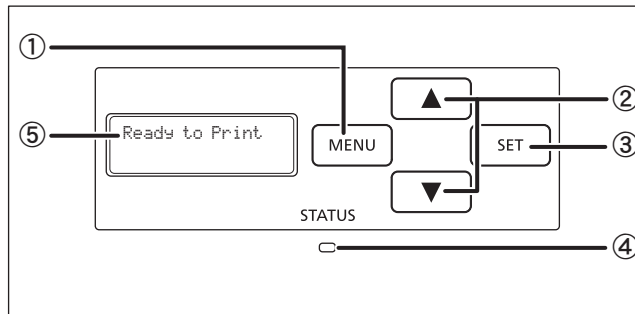
### ⑦ Transfer Film Cassette

Transfer Film Cassette.

→See "Changing the Ink Ribbon and Transfer Film" on page 16 for details about changing the Transfer Film.

→See "Ink Ribbon/Transfer Film" on page 83 for details about which Transfer Film you can use.

## Operation Panel



### ① MENU Key

Switches between Normal Mode and User Mode. In User Mode, it is used to go up one level of the menu.

→See "Normal Mode and User Mode" on page 23 for details about Normal Mode and User Mode.

### ② ▲/▼ Keys

In User Mode, used to select menus and settings values.

### ③ SET Key

Used to clear errors. In User Mode, this opens the display menu.

→See "Troubleshooting" on page 69 when an error occurs.

→See "Basic User Mode Operations" on page 25 for details on changing the User Mode settings.

### ④ LED Indicator

This indicator is lit blue depending on the status of the printer. Is lit or blinks orange when an error occurs.

→See "Troubleshooting" on page 69 when an error occurs.

### ⑤ LCD Panel

Displays the printer status.

→See "Normal Mode Message List" on page 23 for details of the display.

#### Note

- You can check the status of the printer by looking at the LED Indicator.
  - LED Indicator is lit (blue) ... Ready for printing.
  - LED Indicator is blinking (blue, slow) ... Printer is in use.
  - LED Indicator is lit (orange) ... Cards or Ink Ribbon have run out.
  - LED Indicator is blinking (orange) ... Card jammed, or other error has occurred.

# Basic Card Printing Methods

This section explains the basic flow of operations, from turning on the power through printing a card.

## Turning On and Off the Printer

Turn on the printer before starting to print.

Before turning on the power, make sure the following preparations are complete:

- The Ink Ribbon Cartridge is loaded
- The Transfer Film is loaded
- The Front Cover is closed
- The Top Cover is closed
- The printer is connected to the computer
- The printer driver is installed



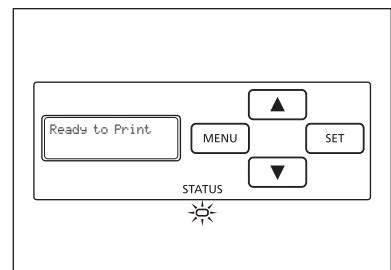
**REF**

- If the preparations above have not been performed, follow the instructions in the "Easy Setup Guide".

**1**

### Press the Power Switch to turn on the power.

- Press "–" on the Power Switch behind of the printer for turning on the power.
- After [Initializing..] appears on the LCD Panel, the operating indicator turns blue and [Ready to Print] appears.
- Press "O" on the Power Switch for turning off the power.



**Note**

- If a card is in the printer when the power is turned on, it is ejected from Card Ejection Slot (Left) (default setting).



**REF**

- If the LED Indicator turns orange/blinks, refer to "Troubleshooting" on page 69.

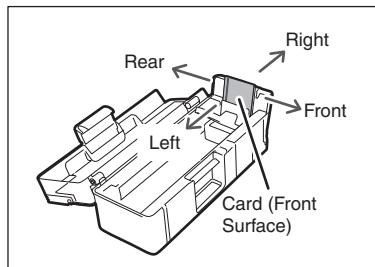
## Loading Cards

Cards can be loaded in two ways: using the card retainer, and using the card feeding slot.

The Card Retainer can be loaded with a large quantity of cards, making it useful for mass printing. Use the Card Feeding Slot to manually load cards when you want to print only 1 particular card or to print many types of cards.



- In this manual, the direction of the card case and of cards is as below.



### CAUTION

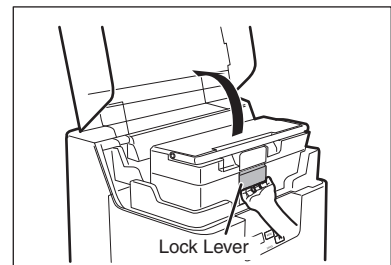
- Use cards recommended by your reseller.  
→See "Cards" on page 84 for details about which cards you can use.
- Do not use the following cards:
  - Cards previously printed with this or any other card printer
  - Wet cards
  - Cards mixed with glass, metallic or other foreign objects
  - Embossed cards
  - Cards coated with oil or other foreign matter
  - Cracked, chipped, bent or otherwise damaged cards
  - Transparent cards
  - Abnormally shaped cards

## ■ Loading Cards into the Card Case

1

### Open the Top Cover, and the Card Case cover.

- Pull the lock lever, and open the Card Case lid.

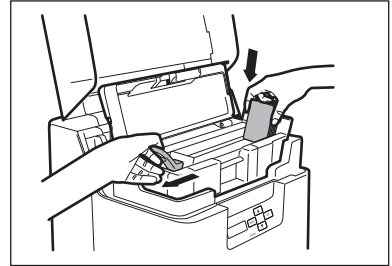
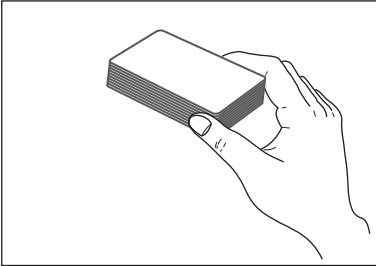




2

**Pull the card retainer, and load cards.**

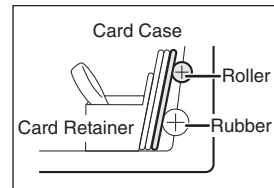
- Hold the card retainer lever with your fingers, and pull it right out.
- Load the card case with the printing side (front surface) to the left.
- When loading the cards, be sure to hold their edges, and never touch the front or rear printing sides.



3

**Return the card retainer, and close the cover.**

- When returning the card retainer, be sure not to get your fingers caught.
- Confirm that the card touches the upper roller of the feeder.

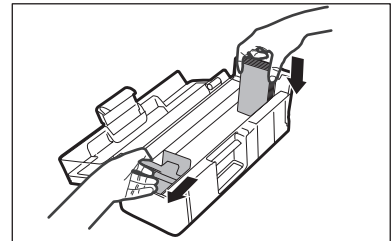


4

**Close the Top Cover.****Note**

- The Card Case can be removed from the printer. After loading the cards as in the diagram at right, return the card retainer to its original position, close the cover, and reattach to the printer.

→See "How to Store Cards (Removing the Card Case)" on page 55 for information on how to remove the Card Case.



- In order to prevent unauthorized printing, we recommend storing loaded Card Cases separately from the printer.

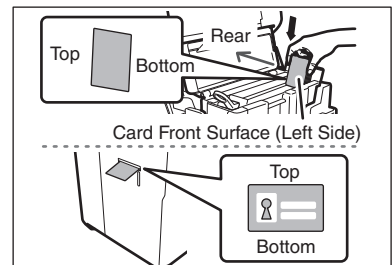
→See "How to Store Cards (Removing the Card Case)" on page 55 for information on how to store the Card Case.

- Load cards in order starting from the right side of the card case. When printing begins the right-most card is pulled into the printer.

- The printing side of the card (front surface) is on the left.

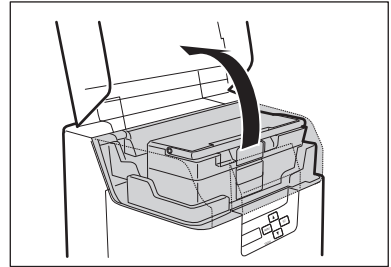
When using cards such as pre-printed cards that have a specified orientation, load the cards so that after printing, the printed upper surface is at the rear of the cassette.

- If cards are stuck to each other and do not correctly feed, then lightly flex and separate the cards before printing.



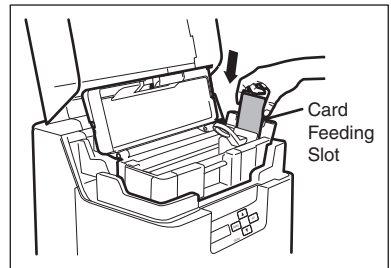
## ■ Manually Loading Cards One by One

### 1 Open the Top Cover.



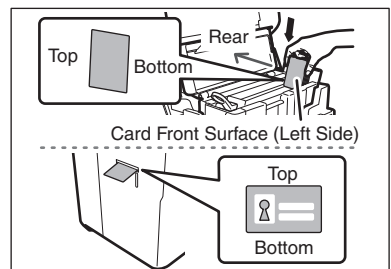
### 2 Open the Card Case, and insert cards into the Card Feeding Slot.

- Pull the lock, and open the Card Case lid.
- Insert cards with the printing side to the left into the Card Feeding Slot.
- If cards are loaded, remove them from the Card Case.



#### Note

- The printing side of the card (front surface) is the left surface. When using cards such as pre-printed cards that have a specified orientation, load the cards so that after printing, the printed upper surface is at the rear of the cassette.



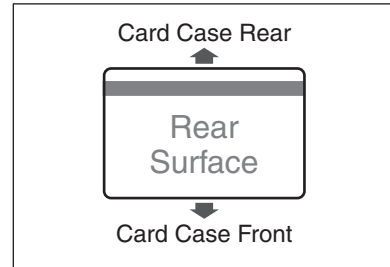
## ■ Loading Magnetic/IC Cards

The factory default for magnetic cards/IC cards is to be loaded as below.

→See "Loading Cards into the Card Case" on page 10 for the procedure on loading cards into the Card Case.

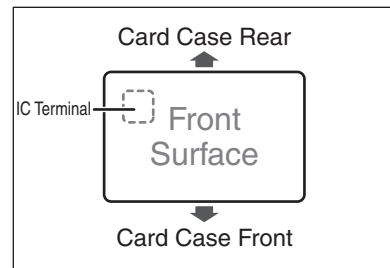
### If using cards with ISO magnetic strips

- Load the ISO magnetic strips so that they are at the right of the Card Case.
- Load the ISO magnetic strips so that they are at the rear of the Card Case.



### If using cards with IC terminals

- Load the IC terminals so that they are at the left of the Card Case.
- Load the IC terminals so that they are at the rear of the Card Case.



#### Note

- Printing on the magnetic strip/IC terminal cannot be guaranteed.
- The surface with the JIS2 magnetic strip and the IC terminal is the printing side (front surface).
- In User Mode, [Set Face], you can set the orientation of loaded magnetic cards.  
→See "Set the Orientation of Magnetic Cards/IC Cards to Load" on page 50 for information on how to load magnetic cards.

## Printing

### REF

- Command/menu names and the order of the procedure may differ depending on your application software. For more information on operations, refer to the instruction manual for your application software.
- Also, for more information about printer driver operations, refer to the driver help files.
- The explanations in this manual are based on screens that appear when using Windows 7.

### 1 Turn on the printer and load the cards.

- See "Loading Cards" on page 10 for information on how to load the cards correctly.

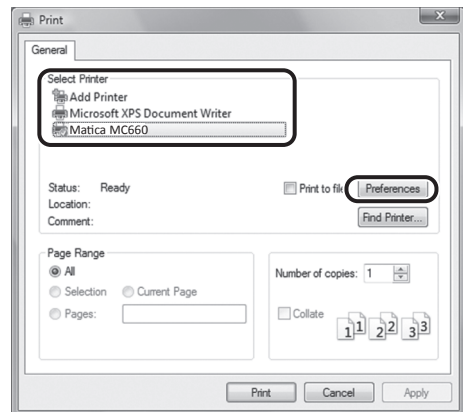
### 2 Launch your application software to create a document.

### 3 From the [File] menu of your application software, select [Print].

- Open the printer driver settings screen.

### 4 Specify various settings for printing if necessary.

- Select [MC660] if it is not already selected.
- Click [Preferences] (or [Properties]), and set the card size and the number of cards to be printed. Click [OK] when setup is complete.



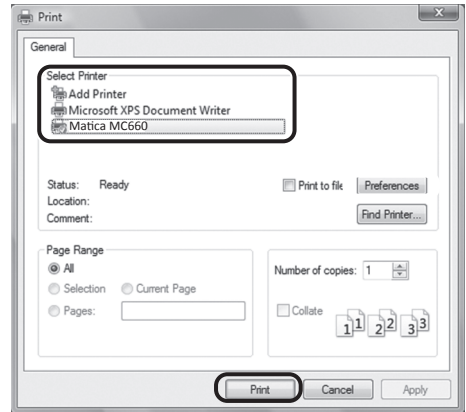
### REF

- For more information about how to change the settings of the printer driver, refer to the driver help files.

## 5

**Click [Print].**

- Printing starts.
- Cards are pulled into the printer and the LED Indicator blinks blue.  
[Now Printing] appears on the LCD Panel.
- If the cards are not loaded, [Card Empty] appears on the LCD Panel.



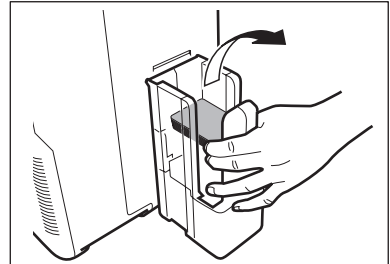
## Removing Cards

The factory default is for printed cards to be ejected from Card Ejection Slot (Left).

## 1

**Removing cards from the Card Stacker.**

- You can remove loaded cards from the slit on the side of the Card Stacker (see diagram at right).

**Note**

- The Card Ejection Slot (Left) Card Stacker has a maximum capacity of approximately 250 cards.  
When ejecting cards from the Card Ejection Slot (Left), empty the Card Stacker when it has approximately 250 cards.
- The factory default is set so that correctly printed cards are output from the Card Ejection Slot (Left), and cards with errors are output from Card Ejection Slot (Right).  
→See "Switching the Card Ejection Slot" on page 48 for information about switching the card ejection location.  
→See the "Easy Setup Guide" for instructions on removing the Card Stacker.
- The factory default status is to have the front face facing down for single-sided printing, and facing up for double-sided printing.  
→See "Set the Orientation of Cards to Eject" on page 51 for the orientation of cards to eject.

## Changing the Ink Ribbon and Transfer Film

Change the Ink Ribbon and Transfer Film when these run out.

→See "Ink Ribbon/Transfer Film" on page 83 for details about Ink Ribbon and Transfer Film.

### Note

- You can check the amount of Ink Ribbon and Transfer Film remaining.

→See "Correcting image and text misalignment (horizontal)" on page 38 for instructions on how to check the amount of Ink Ribbon and Transfer Film remaining.

## ■ Checking Replacement Period, and Preparation

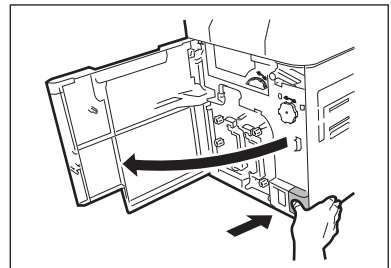
If [Ribbon Empty] or [Film Empty] messages are displayed on the LCD panel, then it is necessary to replace the Ink Ribbon or Transfer Film.

This section explains how to change the Cleaning Tape together with the Ink Ribbon and Transfer Film.

### 1

#### Before replacement, open the Front Cover.

- Press the open cover switch, and pull the Front Cover out.  
→See "Changing the Ink Ribbon" on page 17 when replacing the Ink Ribbon.  
→See "Cleaning Tape Replacement" on page 22 when replacing the Cleaning Tape.  
→See "Transfer Film Replacement" on page 19 when replacing the Transfer Film.



### Note

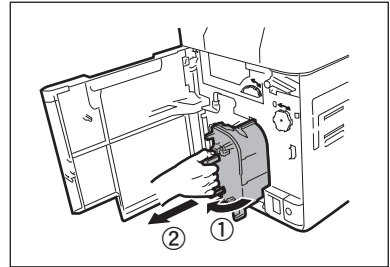
- The Ink Ribbon, Transfer Film, and Cleaning Tape can be replaced while the Front Cover is open.
- The number of printable sides with the Ink Ribbon and Transfer Film may decrease under the following conditions:  
→See "Ink Ribbon/Transfer Film" on page 83 for the number of printable sides with Ink Ribbon and Transfer Film.
  - Changing the Ink Ribbon or Transfer Film during use
  - When an error occurs during printing
  - Performing operations not listed in this manual
- Use Ink Ribbon and Transfer Film as soon as possible after purchase.

## ■ Changing the Ink Ribbon

Use the following procedure when replacing the Ink Ribbon.

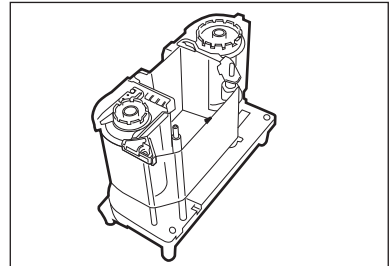
### 1 Remove the Ink Ribbon Cassette.

- Pull out the handle of the ink ribbon cassette with the handle turned up.



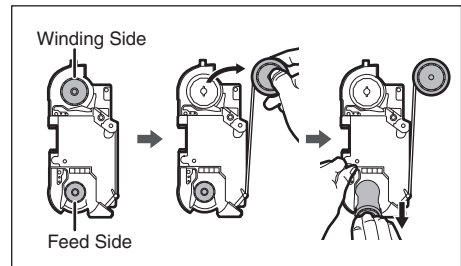
#### Note

- When placing the Ink Ribbon Cassette down, prevent contamination adhering by placing it with the handle on the bottom.



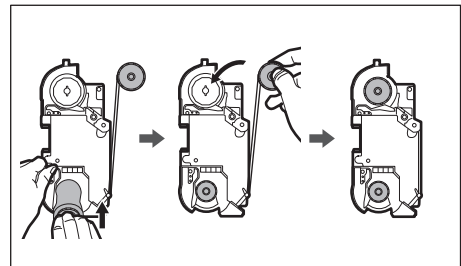
### 2 Remove the Ink Ribbon from the Cassette.

- First, remove the spool spindle from the winding side (black) holder, then remove the spool spindle from the feed side (magenta) holder.
- When removing the spool spindle, pressing the spool spindle downwards and tilting it to the side makes it easy to remove.



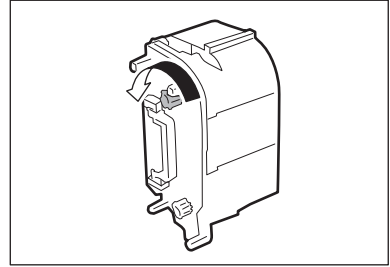
### 3 Load new Ink Ribbon in the Cassette.

- Insert the spool spindle into the feed side (magenta) holder. As in the diagram at right, unwind and load onto the shaft. Finally, insert the spool spindle into the winding side holder.
- When inserting the spool spindle, first inserting the bottom, then standing the spool spindle makes it easy to insert.
- When setting the used Ink Ribbon, take up used parts of the ribbon to the spool spindle for the winding side (black). Otherwise, images may not be printed on a card correctly.



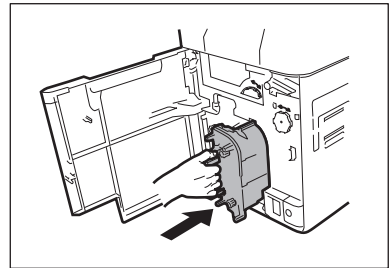
## 4 Take up the Ink Ribbon slack.

- Turn the knob as in the diagram at right, and take up the ribbon slack.
- If the slack is not taken up properly, then the Ink Ribbon may jam.



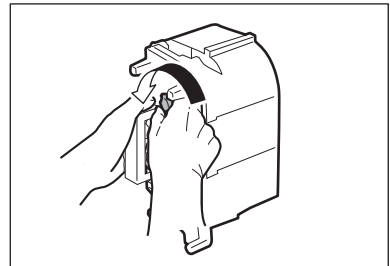
## 5 Insert the Ink Ribbon Cassette.

- Insert the Ink Ribbon Cassette until a "click" is heard.  
→For replacing Transfer Film or Cleaning Tape, See "Transfer Film Replacement" on page 19, or "Cleaning Tape Replacement" on page 22.



### Note

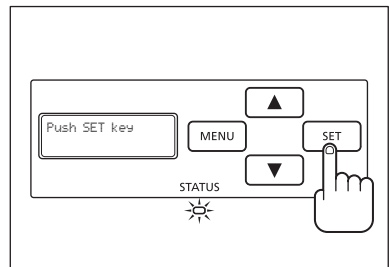
- When inserting the Ink Ribbon Cassette, insert while turning the knob in order to prevent slack. Slack of Ink Ribbon may lead to print abnormalities.



## 6 Close the Front Cover.

## 7 When [Push SET key] appears on the screen, press the SET Key.

- Clear an error first if the error message such as [Card Empty] appears, then press the SET Key.  
→See "When an Error Message Appears" on page 69 for clearing error messages.



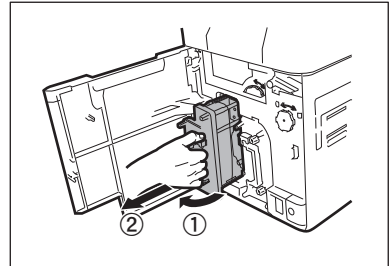


## ■ Transfer Film Replacement

Use the following procedure when replacing the Transfer Film.

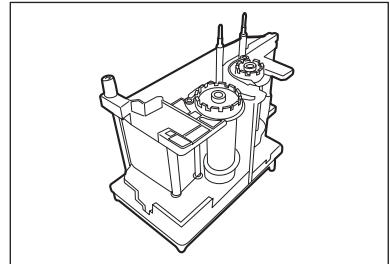
### 1 Remove the Transfer Film Cassette.

- Pull out the handle of the transfer film cassette with the handle turned up.

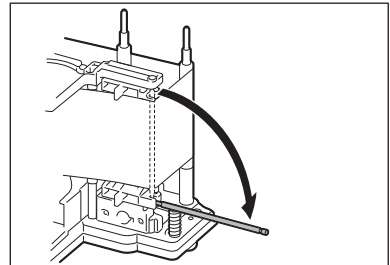


#### Note

- When placing the Transfer Film down, prevent contamination adhering by placing it with the handle on the bottom.

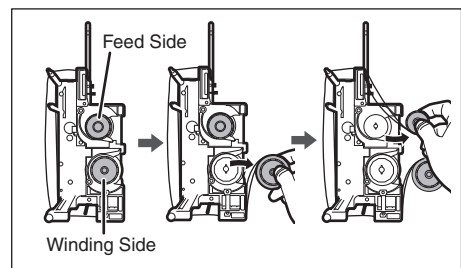


### 2 Push down the pin on top of the Transfer Film Cassette.



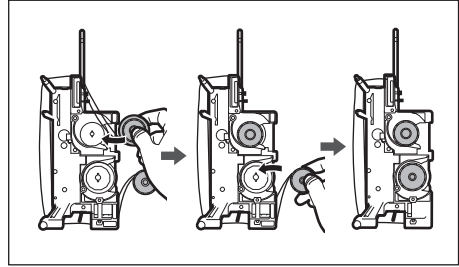
### 3 Remove the Transfer Film from the Cassette.

- First, remove the spool spindle from the winding side (black) holder, then remove the spool spindle from the feed side (white) holder.
- When removing the spool spindle, pressing the spool spindle downwards and tilting it to the side makes it easy to remove.



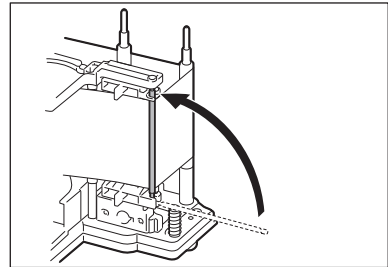
## 4 Load new Transfer Film in the Cassette.

- Insert the spool spindle into the feed side (white) holder. As in the diagram at right, unwind and load onto the shaft. Finally, insert the spool spindle into the winding side holder.
- When inserting the spool spindle, first inserting the bottom, then standing the spool spindle makes it easy to insert.
- When setting the used Transfer Film, take up unused parts of the film to the spool spindle for the feed side (white). Otherwise, images may not be transferred to a card correctly.



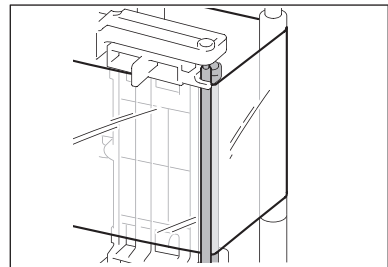
## 5 Attach the pin on top of the Transfer Film Cassette.

- Tightly fit the tip of the pin into the grooves.



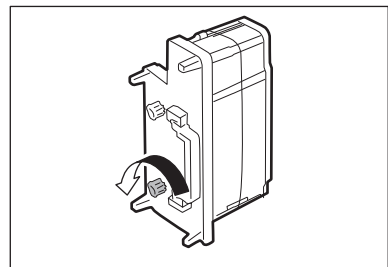
### Note

- Make sure that the Transfer Film is running between the two pins on top of the Transfer Film Cassette.



## 6 Take up the Transfer Film slack.

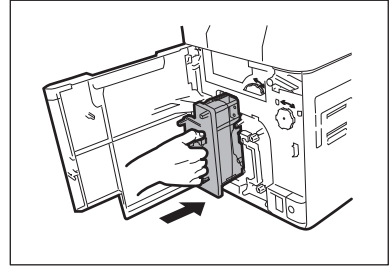
- Turn the knob as in the diagram at right, and take up the film slack.
- If the slack is not taken up properly, then the Transfer Film may jam.



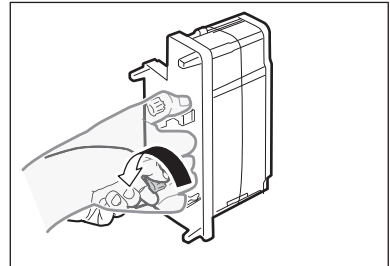
## 7

**Insert the Transfer Film Cassette.**

- Insert the Transfer Film Cassette until a "click" is heard.  
→For replacing Cleaning Tape, See "Cleaning Tape Replacement" on page 22.

**Note**

- When inserting the Transfer Film, insert while turning the knob in order to prevent slack. Slack of Transfer Film may lead to print abnormalities.



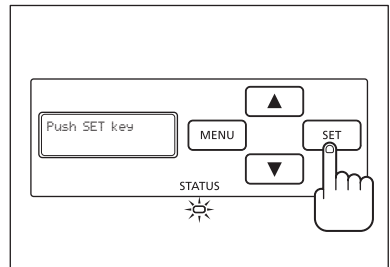
## 8

**Close the Front Cover.**

## 9

**When [Push SET key] appears on the screen, press the SET Key.**

- Clear an error first if the error message such as [Card Empty] appears, then press the SET Key.  
→See "When an Error Message Appears" on page 69 for clearing error messages.

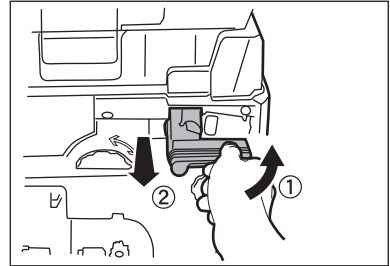


## ■ Cleaning Tape Replacement

### 1

#### Remove the Cleaning Tape Cassette.

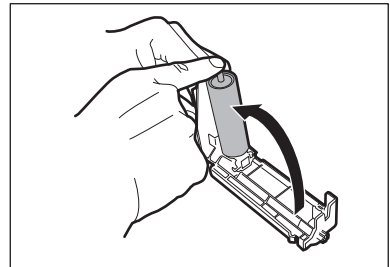
- Hold the Cleaning Tape Cassette handle, lift it, and pull.



### 2

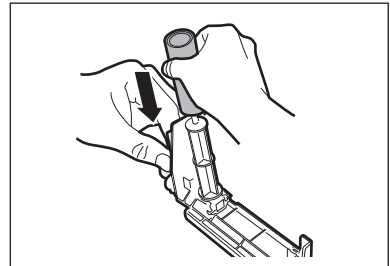
#### Lift up the tape spindle.

- As in the diagram at right, lift the tape spindle by hand.



### 3

#### Remove the used Cleaning Tape, insert the new tape, and return the tape spindle.



### 4

#### Insert the Cleaning Tape Cassette.

- Set the slide of the Cleaning Roller with the rail on the printer and insert it all the way.

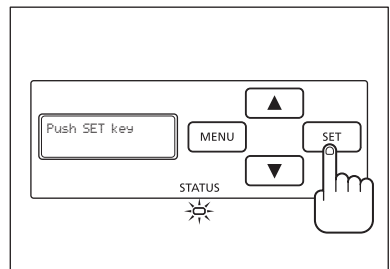
### 5

#### Close the Front Cover.

### 6

#### When [Push SET key] appears on the screen, press the SET Key.

- Clear an error first if the error message such as [Card Empty] appears, then press the SET Key.  
→See "When an Error Message Appears" on page 69 for clearing error messages.



#### Note

- A protective tape is attached to the new Cleaning Tape. Use the cleaning tape after removing the protective tape.

# Normal Mode and User Mode

You can switch the printer from Normal Mode to User Mode while it is operating. This section provides an outline of both modes, explains how to change modes and explains the basic operations of the User Mode.

## Normal Mode and User Mode

### ■ Normal Mode

Normal Mode is used for printing cards. When the power is turned on the printer starts in Normal Mode.

The printer status, such as [Ready to Print] and [Now Printing] appears on the LCD Panel. Additionally, details of errors, such as [Ribbon Empty] appear.

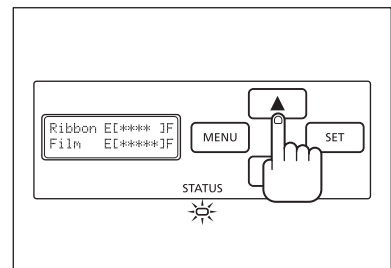
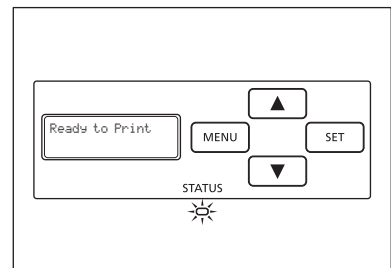
In Normal Mode, while the ▲ Key is pressed, you can confirm the remaining Ink Ribbon and Transfer Film (diagram at right). Releasing the ▲ Key returns the display to the standard Normal Mode display.

A single "\*" indicates approximately 20% remaining. When this is not displayed, then replacement of the Ink Ribbon or Transfer Film is necessary. Additionally, if "\*" is blinking, this indicates that it is nearly time for replacement.

→See "Changing the Ink Ribbon and Transfer Film" on page 16 for details about changing the Transfer Film or Transfer Film.

→See "Correcting image and text misalignment (horizontal)" on page 38 for instructions on how to check the remaining quantities from User Mode.

→See "Notification of Time for Ink Ribbon and Transfer Film Replacement" on page 43 for setting replacement times.



### Normal Mode Message List

Initializing	The printer is initializing. Remaining cards (abnormal card) are ejected from the card ejection slot.
Ready to Print	In standby. This is awaiting a request to print cards.
Now Printing	Printing cards.

## ■ User Mode

User Mode is used to set operations and check the status of the printer.

Menu names such as [Card Count] and [Ribbon Type] appear on the LCD Panel.

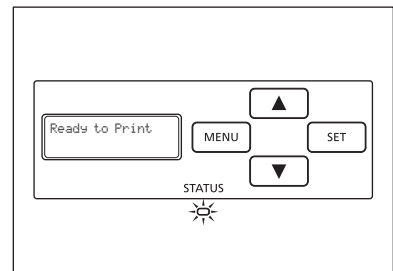
### Switching to User Mode

This section explains how to switch from Normal Mode to User Mode.

→See "Switching to Normal Mode (Exiting User Mode)" on page 26 for how to switch from User Mode to Normal Mode.

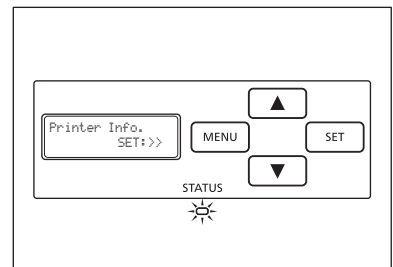
#### 1 Press the Power Switch to turn on the power.

- When the power starts and the printer turns on in Normal Mode, and [Ready to Print] appears on the LCD Panel.



#### 2 Press the MENU Key.

- The User Mode top menu is displayed on the LCD Panel.



#### Note

- You can use the procedure above to enter the User Mode even when a printer error occurs.
- While the top menu is displayed, pressing the MENU Key will display [Exit Menu ?]. Then pressing the SET Key will return to Normal Mode.

## Basic User Mode Operations

The User Mode has multiple menus in a hierarchical tree organized according to function.

This section explains how to switch menus in the User Mode hierarchy tree and how to switch from User Mode to Normal Mode.

→See "Menu Route Map (User Mode)" on page 86 for details about the menu tree configuration.

→See "Printer Settings" on page 27 for details on the functions of each menu.

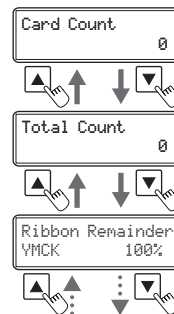
### Note

- Look at "Menu Route Map (User Mode)" on page 86 while reading this section.

### ■ Moving to the Next Menu (Switching to Menus on the Same Level)

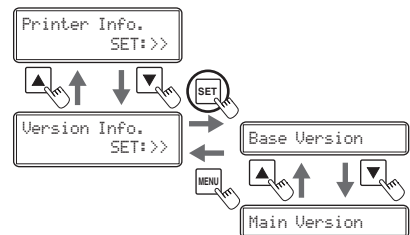
You can move to the next menu from any menu in the User Mode by pressing the ▼ Key.

Press the ▲ to return to the previous menu.



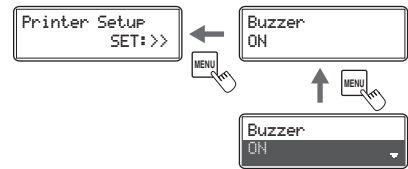
### ■ Moving to a Sub-menu (Switching to Menus on a Lower Level)

You can move to available sub-menus by pressing the SET Key ([SET:>>]) on a menu's right indicates a sub-menu).



## ■ Returning to the Main Menu (Switching to Menus on a Higher Level)

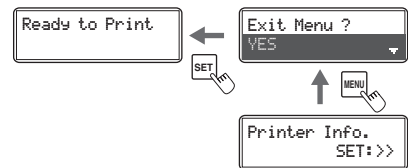
You can return to a higher level by pressing the MENU Key. You can return to the main menu by pressing the MENU Key several times.



## ■ Switching to Normal Mode (Exiting User Mode)

After pressing the MENU Key several times to display [Exit Menu ?], you can return to Normal Mode by pressing the SET Key.

After pressing the ▼ Key several times to display [NO], you can return to User Mode by pressing the SET Key.



### Important

- After changing settings values using the ▲/▼ Keys in each menu, press the SET Key to make the changes. Either pressing the MENU Key or turning off the power without pressing the SET Key will mean that changes are not saved in the printer. (Changed contents are saved when the SET Key is pressed.)



# Printer Settings

This section explains how to check the printer's status and change the printer's settings.

## Counting the Number of Cards that Are Printed

You can count the number of cards that are printed.

You can also count the number of cards that have been printed in a specified period of time by resetting the count with the SET Key.

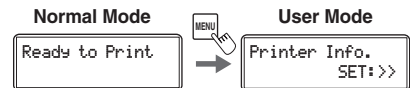
### Note

- You can also count the number of cards printed by using the printer driver (→See "Opening the Printer Driver Settings Screen" on page 89).
- Maximum [Card Count] is 10,000.

# 1

### Switch from Normal Mode to User Mode.

→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.



# 2

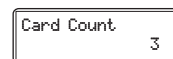
### Confirm that [Printer Info.] appears, and press the SET Key.



# 3

### Confirm the [Card Count] display.

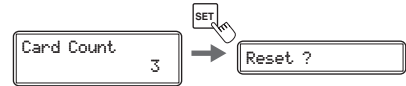
- The number of cards that are printed appears.



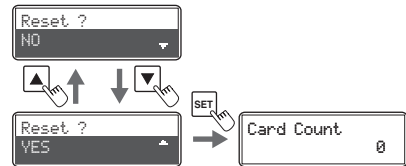
To reset the value, proceed to Step 4.

**4****Press the SET key.**

- The display changes to [Reset ?].

**5****Change the setting to [YES] by using the ▲/▼ Keys then press the SET key.**

- The display returns to [Card Count] and the value becomes [0].



## Displaying the Total Number of Sides that Are Printed

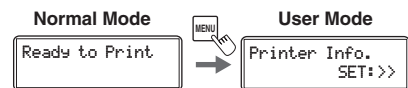
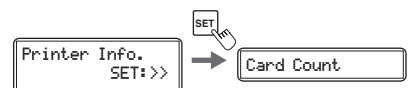
You can display the total number of sides (each card has two sides) that are printed. This can be used as a guideline for doing maintenance.

**Note**

- You can also display the status on the printer driver (→See "Opening the Printer Driver Settings Screen" on page 89).

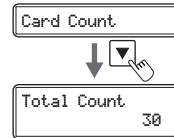
**1****Switch from Normal Mode to User Mode.**

→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.

**2****Confirm that [Printer Info.] appears, and press the SET Key.**

### 3 Press the ▼ Key until [Total Count] is displayed.

- The total number of sides is displayed.



**CAUTION** • The count cannot be reset.

## Checking the type and remaining quantity of the Ink Ribbon or Transfer Film

You can check the type and remaining quantity of the Ink Ribbon or Transfer Film.

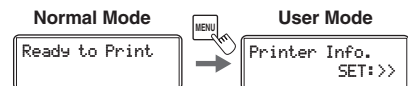
→See "Setting the Type of Ink Ribbon or Transfer Film to Use" on page 41 for details on how to set the Ink Ribbon or Transfer Film type.

**Note**

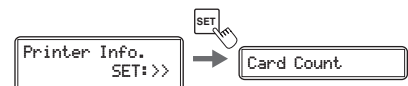
- You can also display the status on the printer driver (→See "Opening the Printer Driver Settings Screen" on page 89).

### 1 Switch from Normal Mode to User Mode.

→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.

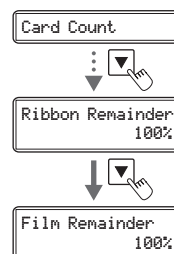


### 2 Confirm that [Printer Info.] appears, and press the SET Key.



### 3 Press the ▼ Key until [Ribbon Remainder] or [Film Remainder] appears.

- [Ribbon Remainder] displays the type and remaining quantity of the Ink Ribbon as a percentage.
- [Film Remainder] displays the type and remaining quantity of the Transfer Film as a percentage.



## Checking the Program Version and Serial Number

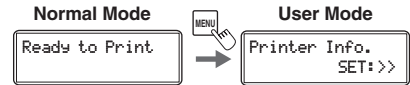
You can check the version of the program and the printer's serial number.

### Note

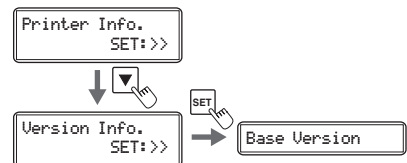
- You can also display the status on the printer driver (→See "Opening the Printer Driver Settings Screen" on page 89).
- You can confirm the following information.
  - Version of the base program (display is [Base Version])**
  - Version of the main program (display is [Main Version])**  
The version of the program that starts when the power is turned on.  
You can download a file to update the program.  
→See "Updating the Printer's Software" on page 85 for updating instructions.
  - Printer's serial number (display is [Serial Number])**
  - Head serial number (display is [Head Number])**
  - Magnetic encoder version (display is [Magnetic Encoder])**  
Magnetic encoder specifications (ISO/JIS2) and version information.
  - IC R/W connection status (display is [IC R/W 1], [IC R/W 2])**
  - External box connection status (display is [External Box])**

### 1 Switch from Normal Mode to User Mode.

→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.

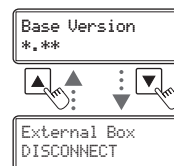


### 2 Press the ▼ Key until [Version Info.] is displayed, then press the SET Key.



### 3 Press the ▲/▼ Keys to display the information to check.

- The ▲/▼ Keys switch between [Base Version] ⇔ [Main Version] ⇔ [Serial Number] ⇔ [Head Number] ⇔ [Magnetic Encoder] ⇔ [IC R/W 1] ⇔ [IC R/W 2] ⇔ [External Box].



## Turning the Error Alarm On or Off

The initial setting is for the buzzer to sound when an error occurs.  
You can set the buzzer so that it does not sound.

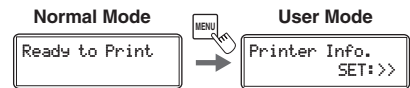
### Note

- You can also change the settings by using the printer driver (→See "Opening the Printer Driver Settings Screen" on page 89).

# 1

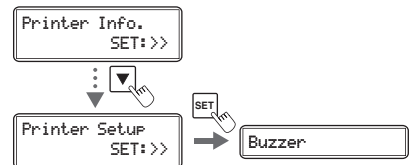
### Switch from Normal Mode to User Mode.

→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.



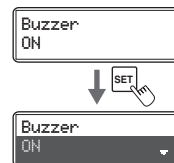
# 2

### Press the ▼ Key until [Printer Setup] is displayed, then press the SET Key.



# 3

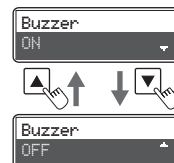
### Confirm that [Buzzer] appears, and press the SET Key.



# 4

### Change the settings by using the ▲/▼ Keys, then press the SET Key.

- Pressing the ▲/▼ Keys switches between [ON] and [OFF].
- Set it to [ON] to sound the buzzer or [OFF] to turn the buzzer off.

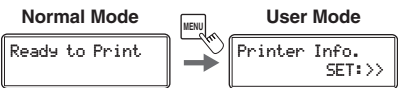


# Reduce Printer Power Consumption

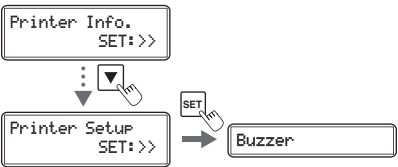
Select the power-saving mode for when the printer is not being used. Additionally, you can set a time to switch to heater stop state.

**Note** • You can also change the settings by using the printer driver (→ See "Opening the Printer Driver Settings Screen" on page 89).

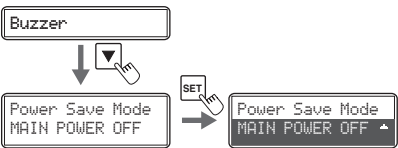
**1 Switch from Normal Mode to User Mode.**  
→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.



**2 Press the ▼ Key until [Printer Setup] is displayed, then press the SET Key.**

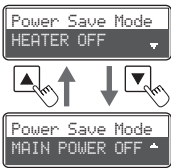


**3 Press the ▼ Key until [Power Save Mode] is displayed, then press the SET Key.**



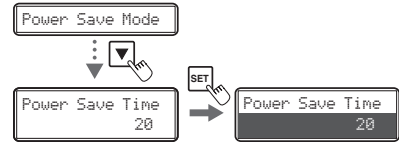
**4 Change the settings by using the ▲/▼ Keys, then press the SET Key.**

- Pressing the ▲/▼ Keys switches between [HEATER OFF] ⇔ [MAIN POWER OFF].
- Settings values are as below.



Settings Value	Details
HEATER OFF	If the printer is on standby for a preset time, the heater will turn off.
MAIN POWER OFF	If the printer is on standby for a preset time, the heater will turn off. Additionally, if the printer is in standby for one hour, the printer will turn off.

- 5 Press the ▼ Key until [Power Save Time] is displayed, then press the SET Key.**



- 6 Change the settings by using the ▲/▼ Keys, then press the SET Key.**

- Figures show the duration (minute) for which the printer will turn to become heater stop state from standby mode.
- You can set the duration from 5-60 minutes to make the printer enter into heater stop state from standby mode.
- Use the ▲/▼ Keys to change the value, and press the SET Key to fix the changes.
- If the MENU Key is pressed prior to pressing the SET Key to fix the changes, then the changes will be canceled.
- It will display [Ready to Print / Heater Power Off] when the printer enters into heater stop state.



**Note**

- The factory default setting is [MAIN POWER OFF]. Additionally, [Power Save Time] is set at [20](20 minutes).
- If the printer is off ([MAIN POWER OFF]), turn it on by pressing the Power Switch to use it (→See "Turning On and Off the Printer" on page 9).
- When temperature control of the heater stops, it will resume if you receive print data or press the SET Key.

## Adjusting the Print Results

You can adjust the print results by changing the hue and the strength of the edge.

**Note**

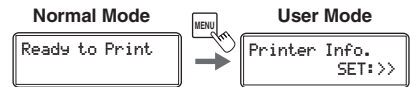
- You can also change the settings by using the printer driver (→See "Opening the Printer Driver Settings Screen" on page 89).

### ■ Adjusting the printing position

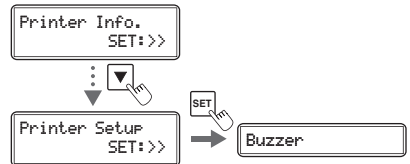
You can adjust the printing position (vertical/horizontal) of the image and black text that will be printed on the card.

## 1 Switch from Normal Mode to User Mode.

→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.

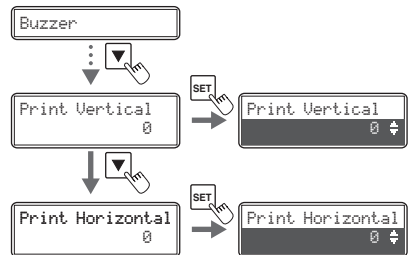


## 2 Press the ▼ Key until [Printer Setup] is displayed, then press the SET Key.



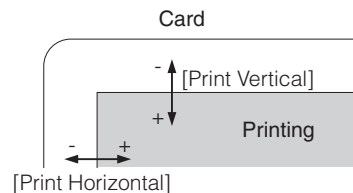
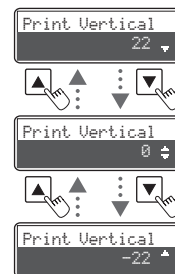
## 3 Press the ▼ Key until [Print Vertical] or [Print Horizontal] is displayed, then press the SET key.

- Adjust the vertical printing position using the [Print Vertical] menu and adjust the horizontal printing position using [Print Horizontal].



## 4 Change the settings by using the ▲/▼ Keys, then press the SET key.

- If you increase the setting value of [Print Vertical], the printing position will move downwards. (Setting values are by increments/decrements of approximately 0.04 mm)
- If you increase the setting value of [Print Horizontal], the printing position will move to the right. (Setting values are by increments/decrements of approximately 0.1 mm)



### Note

- The optimum value is set for each unit as factory default.

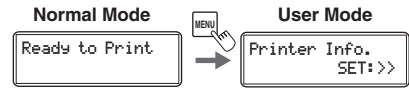


## ■ Adjusting the contour level

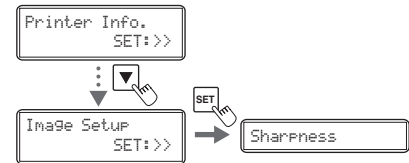
You can adjust the sharpness of edges such as facial contour.

### 1 Switch from Normal Mode to User Mode.

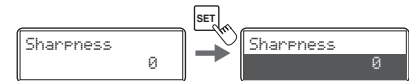
→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.



### 2 Press the ▼ Key until [Image Setup] is displayed, then press the SET Key.



### 3 Confirm that [Sharpness] appears, and press the SET Key.



### 4 Change the settings by using the ▲/▼ Keys, then press the SET Key.

- If you increase the setting value, contours will be more pronounced. If you increase the setting value too much, the image quality may appear grainy.

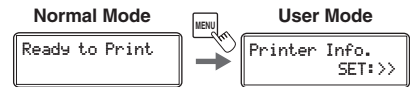


## ■ Adjusting the hue

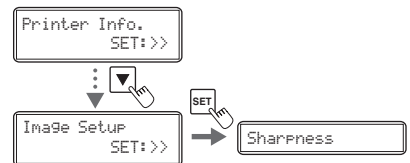
You can adjust the level of each hue (Yellow, Magenta, Cyan, Black). Adjusting the levels changes the hues of Yellow, Magenta, and Cyan for color images, and the thickness of black text for Black printing.

### 1 Switch from Normal Mode to User Mode.

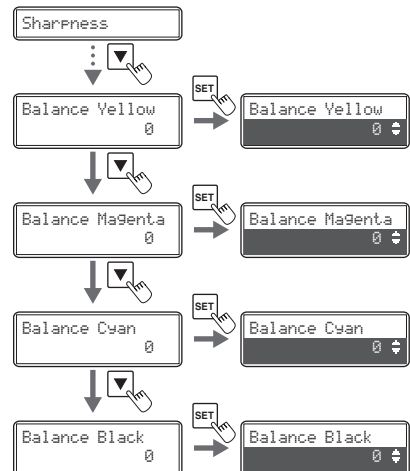
→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.



### 2 Press the ▼ Key until [Image Setup] is displayed, then press the SET Key.



### 3 Press the ▼ Key until [Balance Yellow], [Balance Magenta], [Balance Cyan], or [Balance Black] is displayed, then press the SET key.



### 4 Change the settings by using the ▲/▼ Keys, then press the SET key.

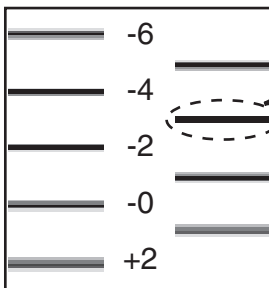
- If you increase the setting value, the level of the selected color will increase.
- If you decrease the setting value, the level of the selected color will decrease.



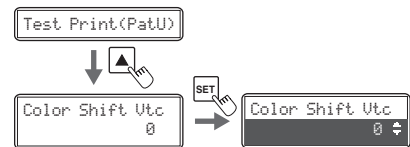
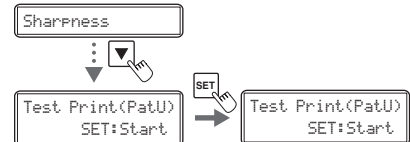
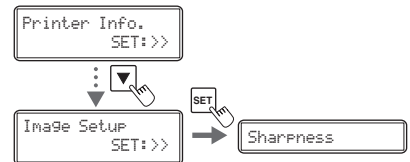
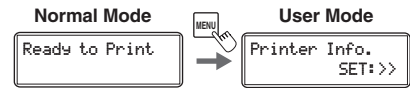
## ■ Adjusting the color shift (vertical) of an image

You can adjust the color shift (vertical) of a color image.

- 1 **Switch from Normal Mode to User Mode.**  
→ See "Switching to User Mode" on page 24 for details on how to switch to User Mode.
- 2 **Press the ▼ Key until [Image Setup] is displayed, then press the SET key.**
- 3 **Press the ▼ key until [Test Print(PatU)] is displayed, then press the SET Key.**
  - The pattern for color shift adjustment is printed.  
(Feed one piece of card from the Card Case. The card is ejected from the Card Ejection Slot (Left) after the pattern for adjustment is printed.)
- 4 **Press the ▲ Key until [Color Shift Vtc] is displayed, then press the SET Key.**
- 5 **Change the settings by using the ▲/▼ Keys, then press the SET Key.**
  - Set to the value printed beside the line that have the least amount of color shift (clearly visible) from the pattern printed out in Step 3.



Set the value of the line most clearly visible.  
(The diagram shows a value of "-3")



### Note

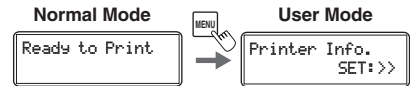
- Use a test print card since a used card cannot be reused.

## ■ Correcting image and text misalignment (horizontal)

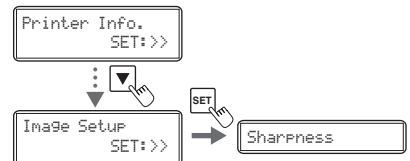
You can correct the misalignment (horizontal) of the color image and black text printing position.

### 1 Switch from Normal Mode to User Mode.

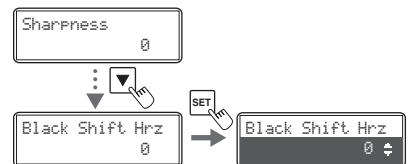
→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.



### 2 Press the ▼ Key until [Image Setup] is displayed, then press the SET Key.



### 3 Press the ▼ Key until [Black Shift Hrз] is displayed, then press the SET Key.

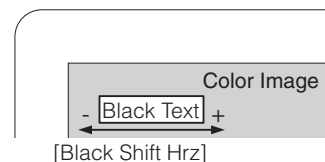


### 4 Change the settings by using the ▲/▼ Keys, then press the SET Key.

- If you increase the setting value, the black text will move towards the right of the color image. (Setting values are by increments/decrements of approximately 0.1 mm)



Card



## ■ Adjusting the color shift of an image (horizontal)

You can adjust the color shift (horizontal) of a color image.

### 1 Issue 1 card with the design that you want to adjust.

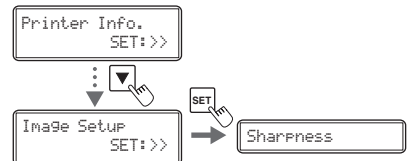
- Please print a sample card from the application you are using.
- Processing with a magnet or IC card is not required. Please select only printing the card surface.
- Please consult with the sales agent regarding how to use the application.

### 2 Switch from Normal Mode to User Mode.

→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.

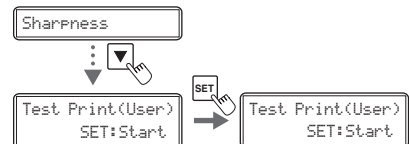


### 3 Press the ▼ key until [Image Setup] is displayed, and then press the SET key.

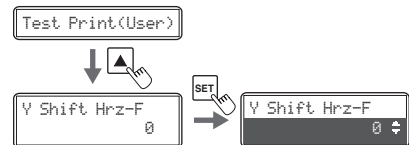


### 4 Press the ▼ key until [Test Print(User)] is displayed, and then press the SET key.

- A card will be issued with a composite of the procedure 1 design and the color bleed confirmation pattern (5 places).

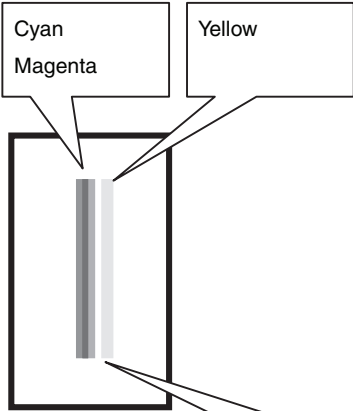
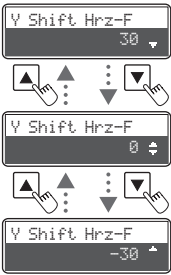


### 5 Press the ▲ key until [Y Shift Hrз-F] is displayed, and then press the SET key.



6 Change the settings by using the ▲/▼ Keys, then press the SET key.

- Confirm the confirmation pattern on the card issued by procedure 3 and adjust so that the cyan line is aligned with the yellow line.
- If you increase the setting value, the yellow line will move towards the right of the cyan line.  
(Setting values are by increments/decrements of approximately 0.05 mm)
- Magenta is adjusted in the same way. (Cyan is the base color so does not need to be adjusted)
- In the case of double-sided printing, adjust the rear surface in the same way. Because color bleed is affected by printing design the adjustment value differs for the front and rear surface.



Menu	Adjustment
Y Shift Hrz-F	Moves the card front surface yellow printing.
M Shift Hrz-F	Moves the card front surface magenta printing.
C Shift Hrz-F	Moves the card front surface cyan printing.
Y Shift Hrz-B	Moves the card rear surface yellow printing.
M Shift Hrz-B	Moves the card rear surface magenta printing.
C Shift Hrz-B	Moves the card rear surface cyan printing.

Adjust so that the the line can be seen clearly.  
(In the picture yellow is moved to the left)

- Note
- Use a test print card since a used card cannot be reused.
  - [Color Shift Hrz] in the [Image Setup] hierarchy tree is a function to automatically correct color bleed (horizontal) of color images.  
When it is set to [ON (AUTO)], correction is performed according to the design to reduce color bleed.  
Please use [ON (AUTO)] unless instructed otherwise by your reseller.  
The factory default setting is [ON (AUTO)].

## Setting the Type of Ink Ribbon or Transfer Film to Use

Set the type of Ink Ribbon or Transfer Film to use.

→See "Changing the Ink Ribbon and Transfer Film" on page 16 for details about changing the Ink Ribbon and Transfer Film.

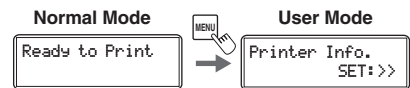
→See "Ink Ribbon/Transfer Film" on page 83 for details about which Ink Ribbon and Transfer Film you can use.

**Note**

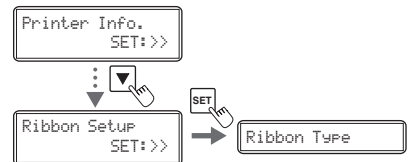
- You can also display the status on the printer driver (→See "Opening the Printer Driver Settings Screen" on page 89).

### 1 Switch from Normal Mode to User Mode.

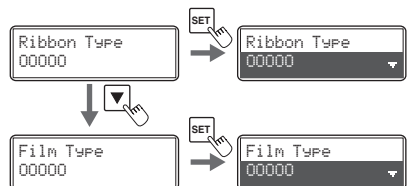
→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.



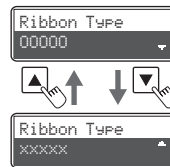
### 2 Press the ▼ Key until [Ribbon Setup] is displayed, then press the SET Key.



### 3 Press the ▼ Key until [Ribbon Type] or [Film Type] is displayed, then press the SET key.



## 4 Change the settings by using the ▲/▼ Keys, then press the SET Key.



---

**Note**

- If the Ink Ribbon type set in the printer and the [Ribbon Type] setting are different, an Ink Ribbon error or a transfer problem occurs.
  - See "Ribbon Type" and "Ribbon Wind up" in "How to Clear an Error" on page 69.
  - See "General Print Problems (In correct Colors, etc.)" in "When Cards are Not Printed Correctly..." on page 80 about signs of transfer problems.
- If the set Transfer Film type and the [Film Type] setting on the printer are different, a transfer error occurs since the transfer condition is not appropriate.
  - See "The card is bent" and "Print flakes off" in "When Cards are Not Printed Correctly..." on page 80 about signs of transfer problems.



## Notification of Time for Ink Ribbon and Transfer Film Replacement

If there is little remaining Ink Ribbon or Transfer Film, the LCD Panel will display the remaining quantity to notify you that it should be replaced soon.

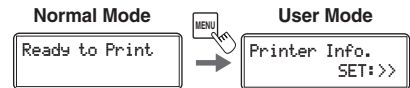
### Note

- You can also change the settings from the printer driver (→See "Opening the Printer Driver Settings Screen" on page 89).
- The factory default status is not to give this notification.

# 1

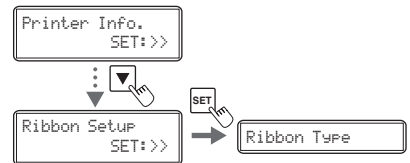
### Switch from Normal Mode to User Mode.

→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.



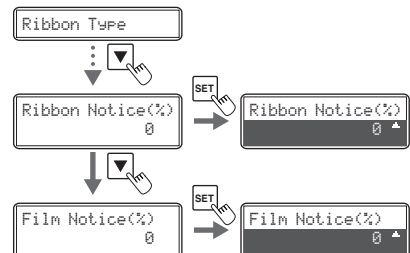
# 2

### Press the ▼ Key until [Ribbon Setup] is displayed, then press the SET Key.



# 3

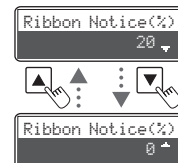
### Press the ▼ Key until [Ribbon Notice(%)] or [Film Notice(%)] is displayed, then press the SET Key.



# 4

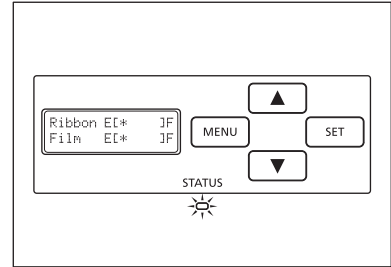
### Change the settings by using the ▲/▼ Keys, then press the SET Key.

- The notification shows the remainder (%) at the time of notification.
- The remainder can be set to a figure from 0-20%. If the settings value is set to [0], then there will be no notification.
- Use the ▲/▼ Keys to change the value, and press the SET Key to fix the changes.
- If the MENU Key is pressed prior to pressing the SET Key to fix the changes, then the changes will be canceled.



## 5 As time approaches for replacement of the Ink Ribbon or Transfer Film, a remaining quantity notification for these is displayed.

- In Normal Mode, if the Ink Ribbon and Transfer Film remaining quantity drops below the settings value (%), then the remaining quantity notification will appear at a set frequency (approximately 4 seconds).  
→See "Changing the Ink Ribbon and Transfer Film" on page 16 for details about changing the Ink Ribbon or Transfer Film.



### Note

- The factory default setting for [Ribbon Notice(%)] and [Film Notice(%)] is [0].

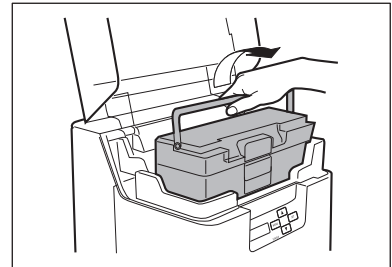
## Setting the Types of Card to Use

### ■ Adjusting the Feed Gate Depending on Card Thickness

Adjust the card case and the gate gap to match the fed cards.

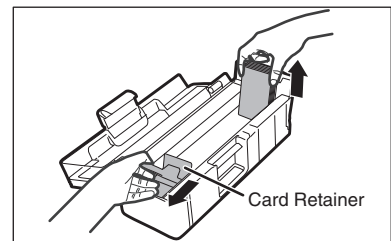
## 1 Open the top cover, and remove the Card Case.

- Hold the Card Case handle, and remove.



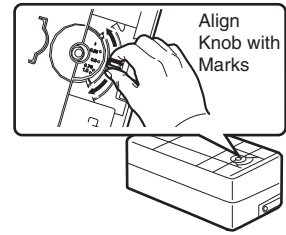
## 2 Open the Card Case, and remove the cards from the cassette.

- Pull the lock, and open the Card Case cover.
- Pull the card retainer, and after removing the cards, return the card retainer to its original position.
- Remove the cards, and close the Card Case cover.



### 3 Rotate the dial on the lower surface of the Card Case and adjust the gate gap.

- The figures on the knob indicate the size of the gate gap.
- If cards do not pass through the gate, turn the knob to the right.
- If multiple cards pass through the gate, turn the knob to the left.



#### Note

- The factory default setting for the gate gap is [0.76 mm].

### 4 Close the Top Cover.

- Face the Card Case outwards, and after returning it to its original location, close the Top Cover.

## ■ Optimizing Transfer Conditions

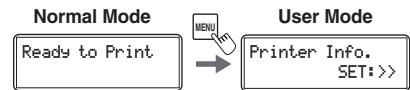
Carry out secondary transfer under optimal conditions for the cards used.

#### Note

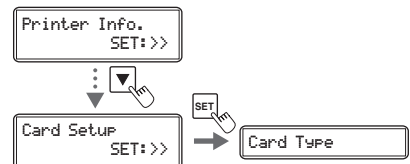
- You can also change the settings by using the printer driver (→See "Opening the Printer Driver Settings Screen" on page 89).

### 1 Switch from Normal Mode to User Mode.

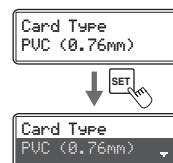
→See "Switching to User Mode" on page 24 for details on how to switch to User Mode.



### 2 Press the ▼ Key until [Card Setup] is displayed, then press the SET Key.

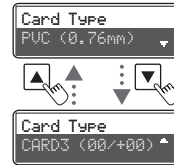


### 3 Confirm that [Card Type] appears, and press the SET Key.



## 4 Change the settings by using the ▲/▼ Keys, then press the SET Key.

- Settings values that can be changed are as below.
- If CARD1-3 are selected, then go to Step 5. If other settings values are selected, then you have finished.



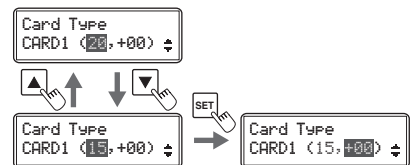
Settings Value	Details
PVC (0.76 mm)	Carry out secondary transfer using conditions corresponding to 0.76 mm thickness standard PVC card.
PET (0.76 mm)	Carry out secondary transfer using conditions corresponding to 0.76 mm thickness standard PET card.
PET-G (0.76 mm)	Carry out secondary transfer using conditions corresponding to 0.76 mm thickness standard PET-G card.
Composite PVC	Carry out secondary transfer using conditions corresponding to 0.76 mm thickness standard Composite PVC card.
PC (0.76 mm)	Carry out secondary transfer using conditions corresponding to 0.76 mm thickness standard PC card.
CARD1 (XX,+XX) CARD2 (XX,+XX) CARD3 (XX,+XX)	Carry out secondary transfer using conditions set for values set for CARD 1-3. The left value is the transfer speed, and the right is the transfer temperature. Selecting either of these settings will then transition to transfer speed/transfer temperature settings. →See Step 5

### Note

- The factory default setting is [PVC (0.76 mm)].

## 5 (Only if [CARD 1-3] are selected) Use the ▲/▼ Keys and the SET Key to set the transfer speed/transfer temperature.

- Use the ▲/▼ Keys to change the value, and press the SET Key to fix the changes.
- If the MENU Key is pressed prior to pressing the SET Key to fix the changes, then the changes will be canceled.
- The left value shows the transfer speed, and the right the transfer temperature.



Settings Menu	Details
Transfer speed (left value)	Higher values mean a greater transfer speed, and lower values mean a lower transfer speed.
Transfer temperature (right value)	Higher values mean a greater temperature, and lower values mean a lower temperature.

### Note

- Settings can be configured using [Heater Setup] [CARD 1 (-3) Heat Speed]/[CARD 1 (-3) Heat Temp.] when setting the [CARD 1-3] transfer speed/transfer temperature from the printer driver.  
(→See "Opening the Printer Driver Settings Screen" on page 89).

Settings Menu	Details
CARD1(-3) Heat Speed	Higher values mean a greater transfer speed, and lower values mean a lower transfer speed.
CARD1(-3) Heat Temp.	Higher values mean a greater temperature, and lower values mean a lower temperature.