

DNP

DIGITAL PHOTO PRINTER

DS-RX1

User's Manual

● Safety precautions

Note that the contents of directions for use and safety precautions correspond to the safety standards as of the time this manual has been created.

● Remodeling

For safety, do not remodel this product after purchase.

● Copyrights

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Introduction

Thank you for purchasing this device.
This document explains the handling and operation required to use this printer.
Please read this document well before use.
Be sure to read “For Safe Operation” (Pg 2-4), and operate the printer correctly.

For Safe Operation

- Be sure to read this document before use. After reading, keep it in a safe place, where it can be re-read as needed.
- The warnings listed here are to ensure proper use of the device, to prevent physical injury to the customer or other persons, and to prevent property damage. Please obey these warnings.

■ About “Warning” and “Caution”

Listed below, the possible levels of injury or damage due to misuse are categorized as “Warning” and “Caution”, according to the degrees of danger involved.

 WARNING	Accidents caused by failure to heed the warnings accompanying this symbol could lead to serious or fatal injury.
 CAUTION	Accidents caused by failure to heed the warnings accompanying this symbol could lead to physical injury or property damage.

■ About the symbols

The symbols shown have the following meanings:

	This symbol calls attention to contents of warnings and cautions. Details are indicated in or near this symbol.
	This symbol indicates prohibited actions. Details are indicated in or near this symbol.
	This symbol designates necessary actions, and relevant content. Details are indicated in or near this symbol.



WARNING



- Use only with the designated voltage and frequency. Improper connection could cause electric shock or fire.
- Avoid overstressing outlets and using extension cords. The outlet could overheat and cause a fire.
- Do not damage, destroy, bundle, or alter the power cord. Also, placing heavy objects on, pulling on, or bending the cord excessively can damage it, and could cause a fire.
- Do not set the printer up in places with salinity or corrosive gases in the air. This could cause a fire.
- Do not block the vents. Heat could build up in the printer and cause a malfunction or fire.
- Do not stand on or place heavy objects on the printer. Also, do not use excessive force on the buttons, switches, terminals, etc. This could break the printer and cause injury to the user or others.
- Be careful to avoid injury or damages from the edges in the printer.
- Do not use this printer for applications where malfunction could be life-threatening (such as medical, space, aeronautic, or other applications that require extreme reliability).



- The printer weighs approximately 14 kg (31 lbs). When moving it, lift in a way that avoids excessive physical stress. Lifting recklessly or dropping the printer could cause injury.
- Locate the printer as close to an outlet as possible, and allow easy access to unplug the power cord in case of problems.
- If there is dust on the plug, clean it off thoroughly. It could cause electric shock or a short-out.
- If metal objects or liquids have fallen into the printer, and there is smoke, a strange odor, or any other apparent abnormality, immediately turn the power OFF, and unplug the power cord. Then contact a service representative. Do not continue using the printer if it is not operating properly. This could cause shock, short circuit, or fire.



- Be sure to attach the ground. Otherwise, it could short-circuit, causing electric shock or fire.



- Do not plug or unplug the cord with wet hands. This could cause electric shock.



- Do not open the inside of the printer, disassemble internal parts, or modify the printer. It could cause electric shock, fire, or injury, or break the printer. For internal check-ups, adjustments, or repair, please contact a service representative.
-



CAUTION



- Do not set the printer up in dusty or overly humid places. This could cause fire or electric shock, or damage the printer.
- Do not set the printer up on an unstable surface. It could fall and cause injury to the user or others.
- Do not allow foreign objects to enter the printer. They could cause electric shock, short circuit, or fire, or break the printer. If something falls into the printer, immediately turn the power OFF, and call a service representative.
- Do not open the cover while printing. This could break the printer.
- Do not spill or spray liquids or chemicals into the printer.
- When cleaning the cover, do not use thinner, trichloroethane, benzene, ketone-based cleaners, or chemically treated cloths. They could discolor or deteriorate the cover.



- At least once a year, unplug the power cord, and clean the prongs and the plug. If dust accumulates, it could cause a fire.
- When printing continuously for long periods of time in a small room, be sure to ventilate properly.
- If use is intended on a transportation vehicle (train, truck, ship, etc.), please talk to a representative in advance.
- When disposing of the printer, peripheral items, packaging, or media, please abide by local waste removal ordinances. For details, contact your local government offices.



- When unplugging the cord, grip the plug. Do not pull on the cord. It could damage the cord, and cause electric shock or fire.
- When moving the printer, be sure to unplug the power cord. Otherwise, the cord may be damaged, which could cause fire or electric shock.
- When not using the printer for extended periods of time, for the sake of safety, be sure to unplug the power cord. It could cause electric shock or fire.



- The thermal print head gets very hot. Do not touch after printing. There is a danger of burns.



- Do not touch the gear mechanisms. There is a danger of injury if fingers get caught in the spinning gears.

WEEE MARK

If you want to dispose this product, do not mix with general household waste. There is a separate collection system for used electronics products in accordance with legislation under the WEEE Directive (Directive 2002/96/EC) and is effective only within European Union.



Cautions for Set-up

- Prior to operation, read “For Safe Operation” carefully and observe the rules therein.
- Use care when moving the printer. Never try carrying the printer alone. Dropping it could cause injury or damage to other property.
- Do not use or store the printer near fire, excessive moisture, in direct sunlight, near an air conditioner or heater, or any other source of unusually high or low temperature or humidity, or excessive dust.
- Do not place the printer where chemical reactions occur, such as in a laboratory.
- Do not set up the printer where there is salinity or corrosive gas in the air.
- The printer must sit on a firm level surface where there is ample ventilation.
- Do not put anything on the top of the printer.
- Do not place the printer near a radio or television, and do not use the same wall outlet for the printer and radio or television. Radio or television reception could be adversely affected.
- Do not use a power voltage or frequency other than those specified.
- Do not put anything on the power cord or step on it.
- Do not drag or carry the printer by the power cord or USB cable.
- Avoid plugging the power cord into an outlet with many loads.
- Do not bundle the power cord.
- Always grip the plug housing, not the cord, to plug/unplug the power cord.
- Make certain the power is turned off before connecting/disconnecting the USB cable.
- Avoid lengthening the signal cable or connecting it to any noise-producing device. If it is unavoidable, use a shielded cable or twisted pair for each signal.
- Use a USB cable with shielding suitable for the USB 2.0 specification.
- Place the printer near the outlet where the power cord can be unplugged easily to shut off power.
- Use an AC outlet that accepts a three-pronged plug. Otherwise, there may be danger of electric shock.
- Use the appropriate specified cord set.
- Do not apply the power cord set coming with this product to other uses.
- Use the power cord set packaged together with this product.
- Use the appliance certified as meeting the safety standards of the country you are in.

产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
照片打印机	×	○	○	○	○	○

备注（○或×的表示意思）

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。

×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求。

Regulatory compliance statements

American users

FCC part 15

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 or her own expense.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Caution: Use shielded cables to connect this computers.

Any changes or modifications not expressly approved by the grantee of this device could void the users authority to operate the equipment.

For the customers in Canada

This device complies with Industry Canada licence-exempt RSS standard(s). 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.

Pour les utilisateurs au Canada

Le présent appareil est conforme aux CNR d'Industrie 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, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

日本のお客様へ

電波障害について

この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

V C C I - A

Declaration of Conformity

European users

Hereby, Dai Nippon Printing Co., Ltd., declares that this digital color printer is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

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Setting Up the Printer

Checking the Contents

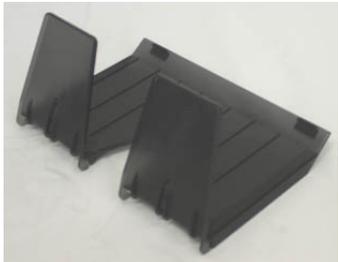
Please check that the printer and all accessories are included in the package.



Printer Unit — Scrap Box



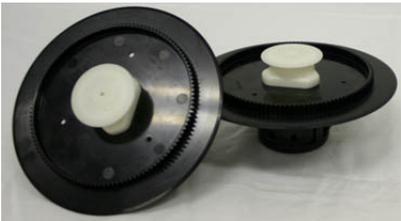
Power Cord (*)



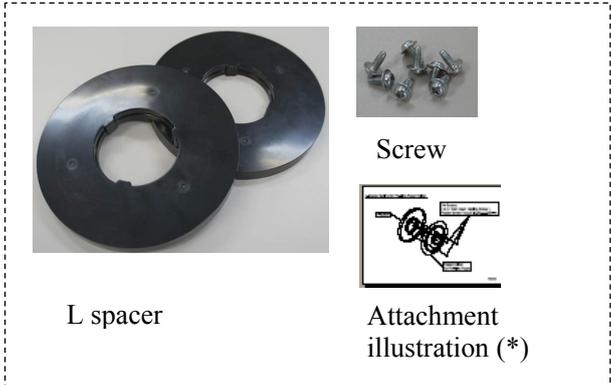
Paper Tray (*)
(Only for L and PC sizes)



CD (*)
User's Manual
Printer Driver



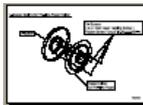
Paper Holder



L spacer



Screw



Attachment illustration (*)



For Safe Operation (*)
Start-up Guide (*)

(*) mark accessories may not be contained according to the destination.

When using, remove the Protective pad.

Please keep the package box and packing material for transportation.



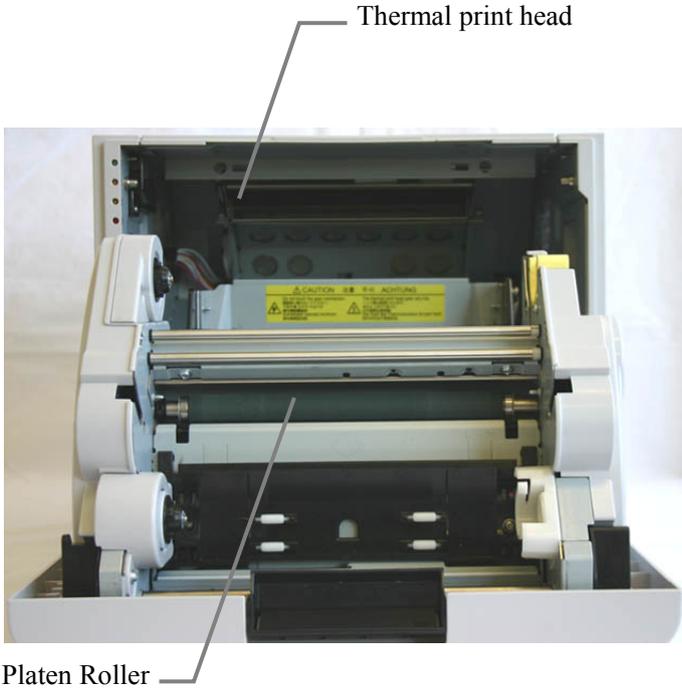
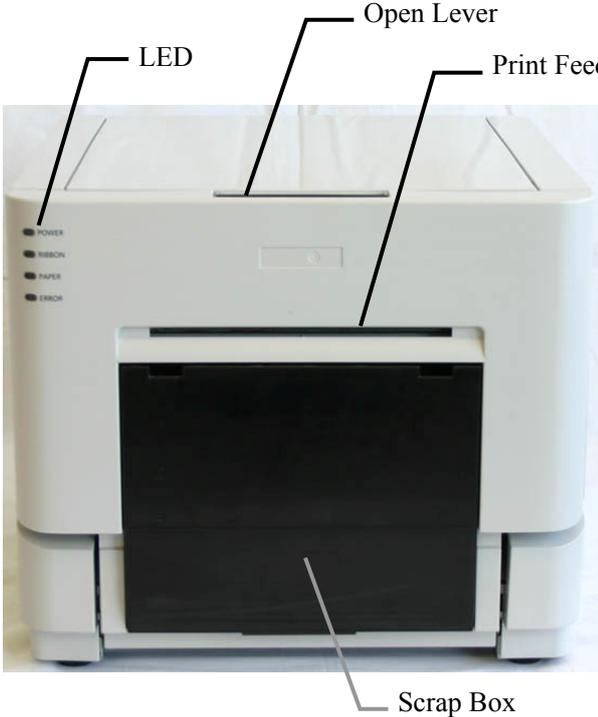
Protective pad

CAUTION

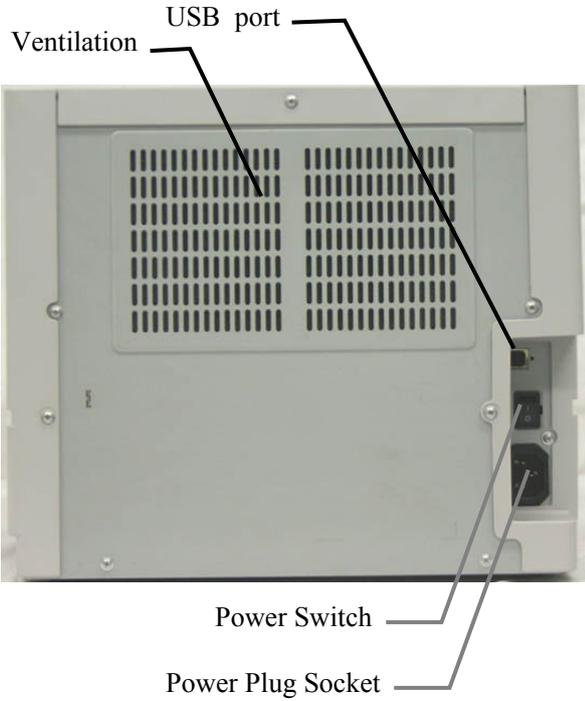
- When removing the printer from its package, carrying it, or moving it, be sure to use care. Dropping the printer could result in personal injury or damage to other items.
- If the printer is lifted by grasping the cushions, the cushions could break and cause the printer to be dropped.

Names of Components

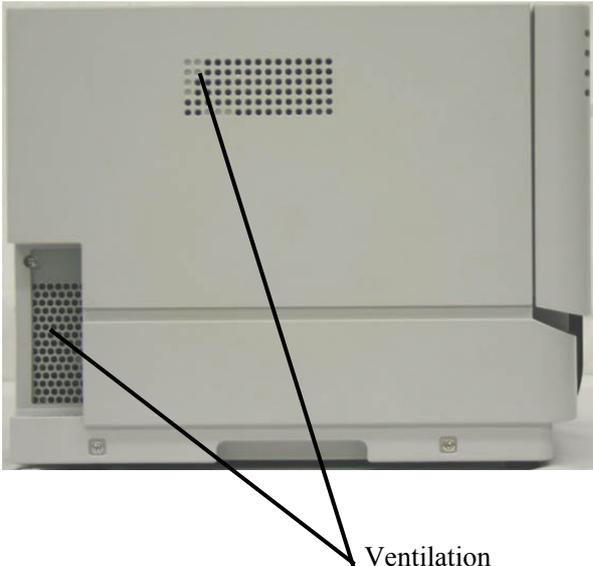
[Front of Unit]



[Back of Unit]



[Side of Unit]

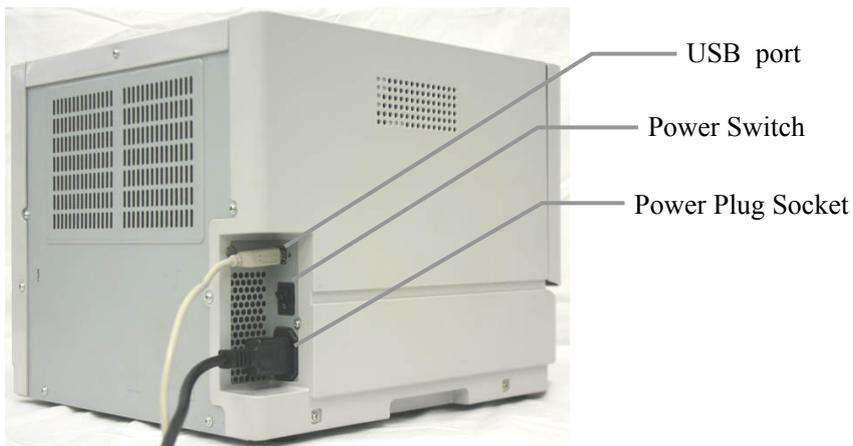


 **CAUTION**

- Please be careful not to hurt yourself or damage anything on the edges of the printer.

Connecting

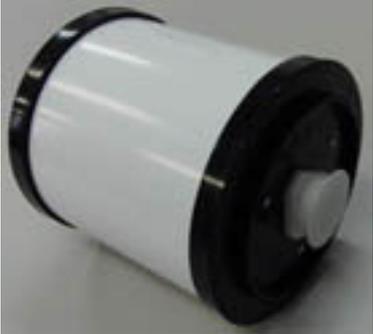
1. Make sure that both the printer and computer power switches are set to the OFF position.
2. Plug the cord connector end into the printer Power Plug Socket.
3. Plug the cord into the wall outlet.
4. Connect the USB cable to the printer and the computer.
5. Turn on the power of the printer and the computer.



CAUTION

- Please use the power cable that came with the printer, and be sure to attach the ground wire.
- Use a USB cable with shielding suitable for the USB 2.0 specification. Otherwise unexpected troubles may arise.

Paper, Ribbon

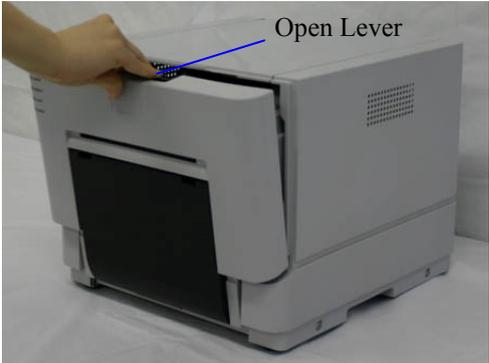
Type	L (5x3.5), 2L (5x7)	PC (6x4), A5 (6x8)
Paper		
	Width: 127mm	Width: 152mm
Ribbon		
	Width: 134mm	Width: 159mm

 **CAUTION**

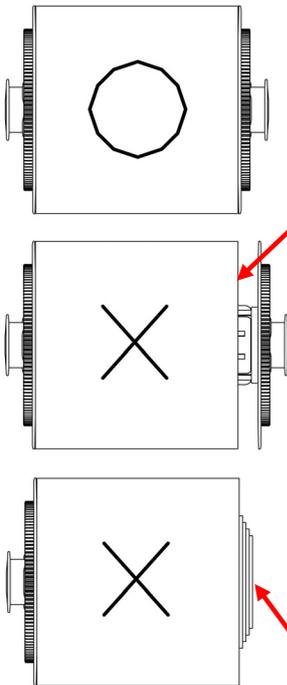
- Set the paper and ribbon without putting them directly on the work surface. Any dust or dirt could get inside the printer and adversely affect the print quality.
- With a new roll of paper, the paper holder weighs approx. 2.6 kg (6 lbs). If dropped, it could cause injury. It could also damage the paper holder.

Setting the Media

- 1. Release the Open Lever, and open the front cover.



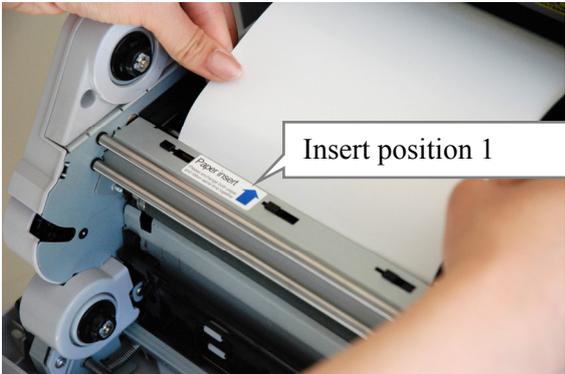
- 2. Set the paper to the paper holder.
When setting it, make sure there are no gaps between the paper and the holder.
Make sure the paper is not sticking out. If the end of roll is uneven (with paper sticking out), remove it from the holder, and flatten it.



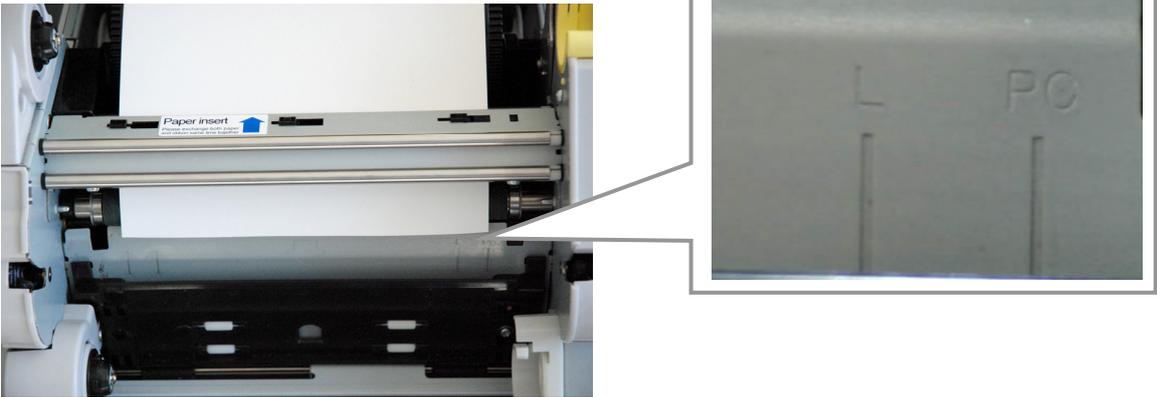
- 3. Set the paper into the printer.



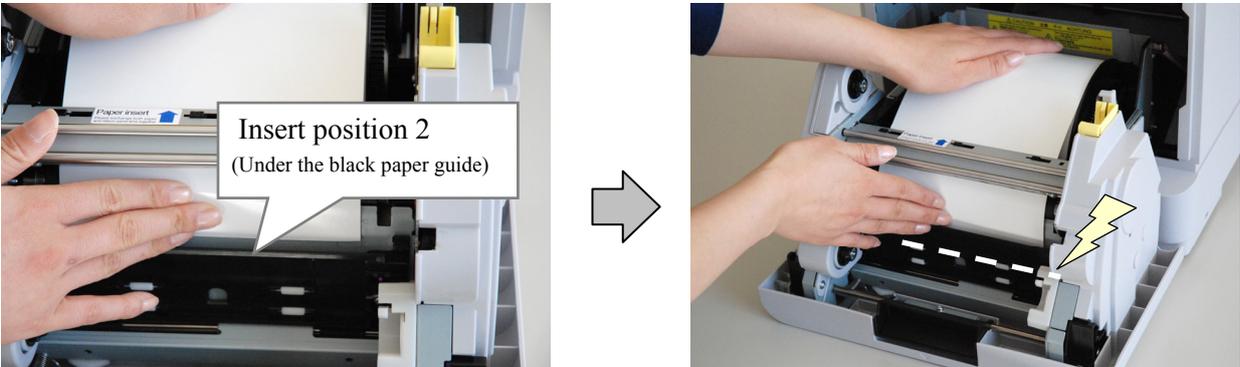
4. Remove a paper fixed tape, and Insert the paper.



5. Fit the paper to the proper position for each size.
L size and 2L size correspond to the line of L, and PC size and A5 size correspond to the line of PC.

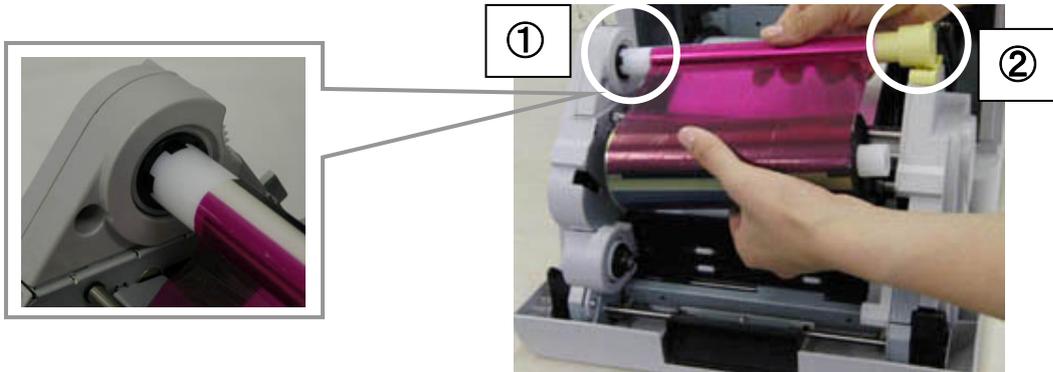


6. Insert the paper under the black paper guide until the buzzer beeps (approx. to the dotted line). Make sure to insert the paper straight. If it isn't inserted straight, the paper will be crooked, which could cause white line on the edges of the print, ribbon wrinkles, and register slippage.

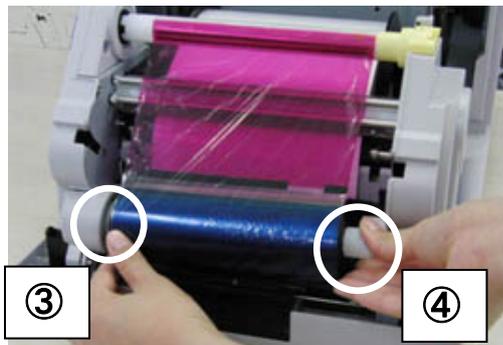


Setting Up the Printer

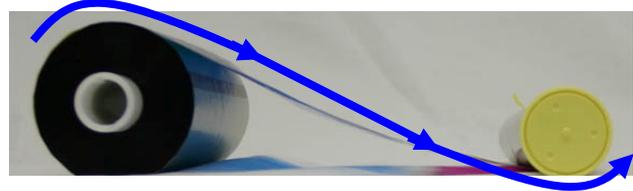
7. Set the take-up side core of the ribbon to the printer. Insert the protrusion of the core left side in the hole on the printer, then set the right side to the holder of the same color (yellow).



8. Set the supply side of the ribbon to the printer carefully to take out any slack. Insert the protrusion of the core left side in the hole on the printer, then set the right side to the holder of the same color (white). Take up the ribbon slack by rotating the ribbon on the supply side.



Ribbon winding direction



9. Close the front cover.
When the front cover is closed, the paper initialization process will be carried out (5 blank sheets will be fed out).



- * In order to facilitate media color adjustment, media type recognition, and print quantity management, an IC chip is built into the ink ribbon. Media without an IC chip, which has not been evaluated and cleared, may not function properly. (If correct data cannot be read from the IC chip, an alarm will sound. In this case, in order to protect the printer, it will lower the concentration for printing.)
- * Please change the media as a set, because the IC chip for each ribbon has unique information. Otherwise, errors could occur.
- * If different width media (for example L-size and PC-size) are used on the same printer, problems with the print quality could arise. Therefore, it is preferable not to mix the use of different width media on one printer.

Setting the Scrap Box



 **CAUTION**

- When the scrap box is removed, do not insert your fingers in the cutter at the top. They could be cut or severed.
- As prints are cut, the scrap box fills with scrap paper. Be sure to empty it when you change the paper and ribbon. If it becomes over-filled with scraps, it could cause problems with the printer.
- Exchange the paper and ribbon as a set, in order to avoid a trouble.

Setting the Paper Tray

1. Attach the Paper Tray to the Scrap Box.



Paper Tray

- *The tray can hold about 50 photos, but please remove them frequently.
- *Remove the printouts frequently particularly when using 2x6 paper sheets.

 **CAUTION**

- Use with sizes other than L or PC, or allowing too many photos to accumulate could cause problems. Moreover, there is a possibility that a paper tray may be damaged.
- Open and close a paper tray softly. There is a possibility of damaging if unreasonable power is applied.

Error Displays



The flashing LED indicates the printer status

Status	LED display				Solution
	Power	Ribbon	Paper	Error	
Paper End *1	●		⚡		Put in a new roll of paper
Ribbon End *1	●	⚡			Put in a new roll of ribbon
Door is Open (No paper)	●		⚡	⚡	Set the paper properly and close the front cover
Door is Open	●			⚡	Close the front cover
Paper Error	●		●	●	Free the paper, and reset it correctly
Ribbon Error	●	●		●	Fix the ribbon, and set it correctly
System Error	●			●	Re-boot the printer (turn off, then on)
Head Cool Down	⚡				The head is cooling off (auto-recovery)

*● indicates lit, ⚡ indicates flashing, and blank is not lit

*1 Exchange the paper and ribbon as a set.

Solving Media Errors

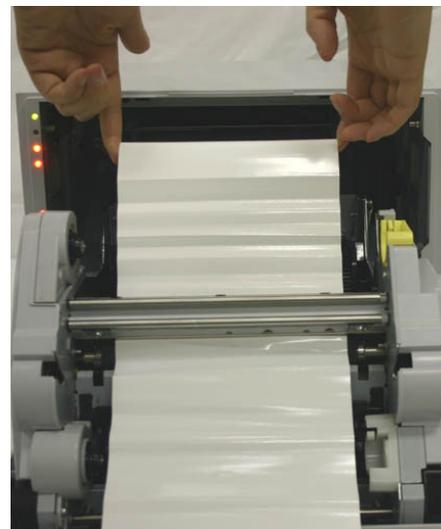
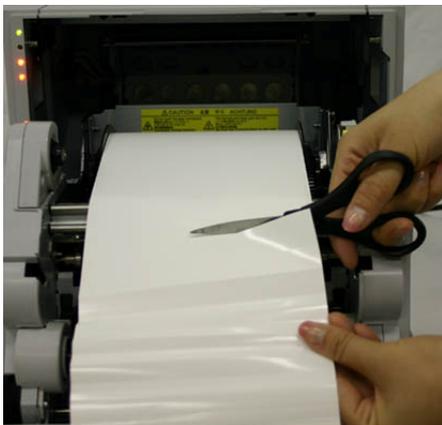
1. Release the Open Lever, and open the front cover.
2. Remove the ribbon.

a. If the paper is jammed:

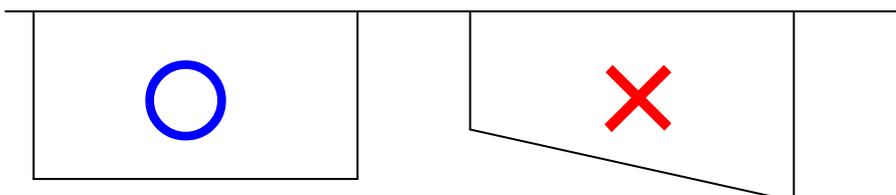
1. Pull out any paper remaining in the printer, and cut off any wrinkled or partially printed areas evenly with scissors.

Printing over an already printed area will cause the ribbon to stick, and the paper will jam again.

When pulling the paper out, pull it slowly. Application of too much force could damage the printer.



Cutting the paper



If the paper is not cut evenly, it may cause abnormal printing and or the paper to jam. Then follow the methods as for setting the media (P.13).

b. If the ribbon is cut:

1. Remove any ribbon remaining in the printer.

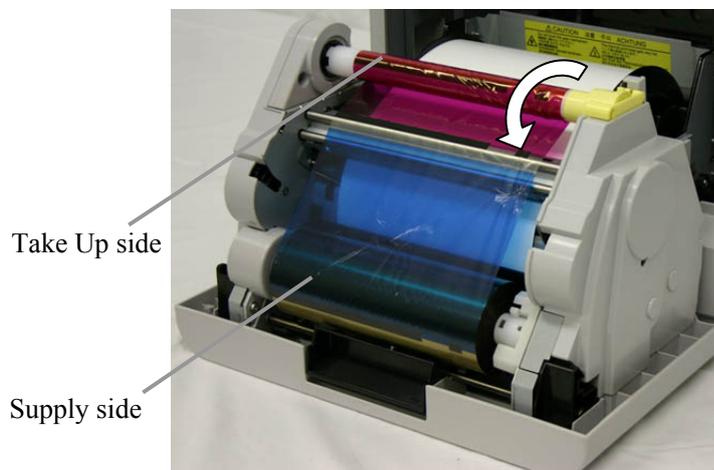


2. Remove any incomplete prints.
If the next image is printed over the previous image, the ribbon may stick, and it may cause the paper to jam.
3. Reattach the ribbon with cellophane (or similar) tape.



Attach with tape

4. Set the ribbon into the printer.
5. Rotate the take-up side of the ribbon several times until the tape is out of sight.



Then follow the methods as for setting the media (P.13).

c. If the printer is stopped in the middle of cutting:

1. Turn the power back ON. Jammed paper is cleared, and the cutter blade returned to its ready position.

If the jammed paper cannot be freed, please contact a service representative.

2. Remove any partially printed material from inside the printer.

Then follow the methods as for setting the media (P.13).

d. If power is cut during printing:

* If the power is cut during printing, you will not be able to open the front cover.

1. Turn the power back ON. The partial print will be cut into scrap-size pieces and removed. After this, you will be able to open the front cover.
2. Check that there is no printed material in the printer.
If the paper is jammed, refer to a. If the paper is jammed. (P.18)



CAUTION

- Do not turn the power OFF while printing. This could damage the printer.

Platen Roller

If there is an indent on the pictures at a regular interval, or if the back of the picture (white side) is dirty, clean the platen roller.

There may be dust, grime, adhesives, etc. from the ribbon or paper on the platen roller.

1. Prepare a piece of gauze or other soft cloth soaked in ethyl alcohol.
Benzenes or thinners other than ethyl alcohol may permeate the resin, so they should not be used.
2. Wipe off any grime while turning the platen roller.



Thermal Print Head

When dirt has adhered to the print head, the unevenness of print and the poor fixation of print may occur.

1. Prepare a piece of gauze or other soft cloth soaked in ethyl alcohol.
2. Wipe the thermal print head gently, without touching the thermal print head by the direct hand.



CAUTION

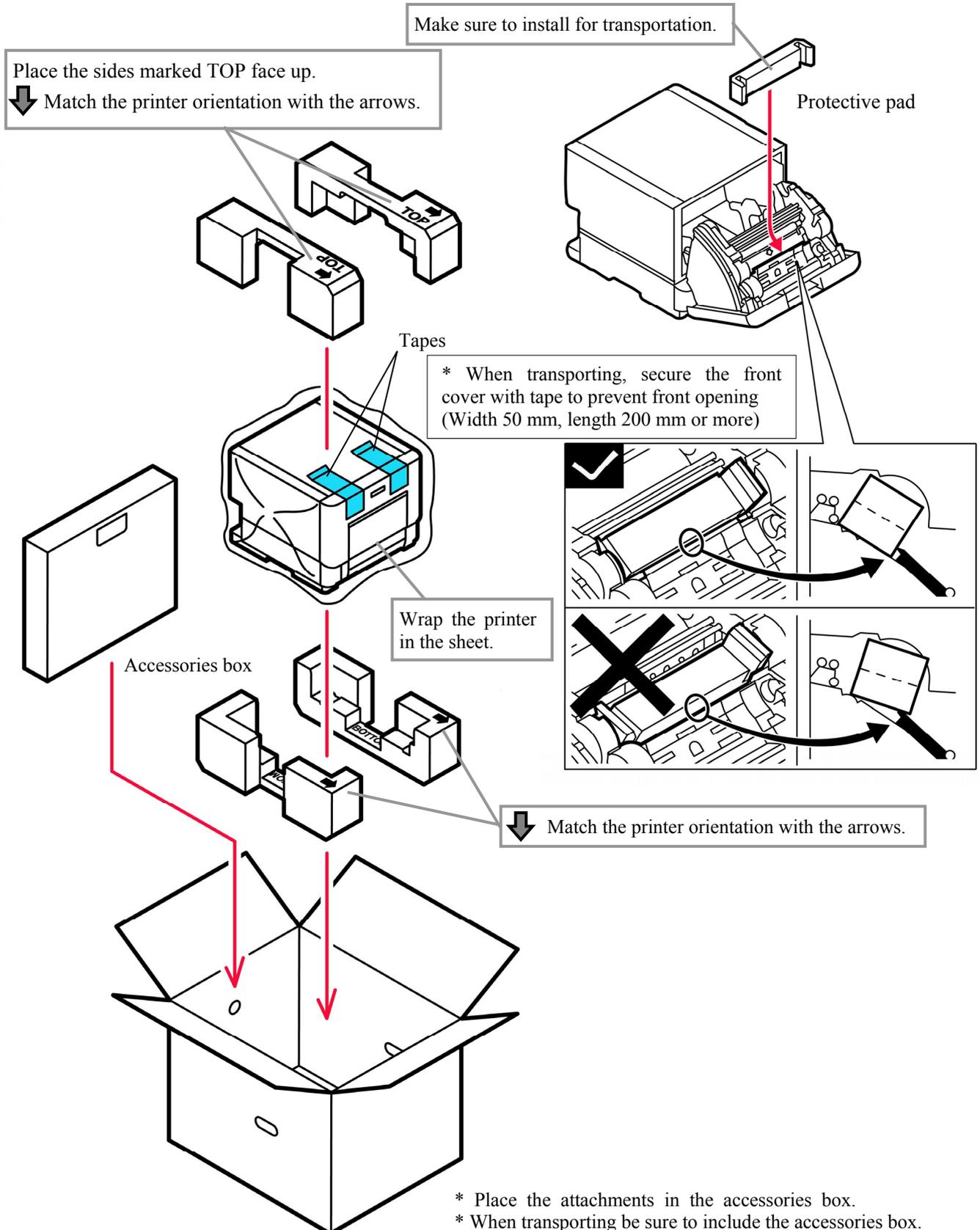
- Never use benzenes or thinners other than ethyl alcohol, as they may permeate the resin.
- Before cleaning, always switch off the printer. Otherwise, there is a possibility of becoming causes, such as an injury and a burn.
- The thermal print head will be hot just after printing. Please wait for the print head to cool off before beginning cleaning.

Repacking

When transporting the printer for service, please use the original packaging materials. The printer must be packed in the same way it was at the time of purchase. If the original packaging materials are not used and the printer is not packed correctly, the printer may be broken during transport.

Remove all attachments (media, paper holder, power cable and paper tray) from the printer.

Please save and do not throw away the packaging and removed protective pad as you will need them for transport.



Specifications

Model		JR10-M01	
Manufacturer		CITIZEN SYSTEMS JAPAN CO., LTD.	
Print type		Thermal dye sublimation transfer	
Print mode		High-speed mode	High quality mode
Resolution		11.8 × 1.8 dot/mm (300 × 300 dpi)	11.8 × 23.6 dot/mm (300 × 600 dpi)
			23.6 × 23.6 dot/mm (600 × 600 dpi) ※
Print size	L (5x3.5)	89 x 127mm	
	PC (6x4)	101 x 152mm	
	2L (5x7)	127 x 178mm	
	A5 (6x8)	152 x 203mm	
Print sheet	L (5x3.5)	700 sheets	
	PC (6x4)	700 sheets	
	2L (5x7)	350 sheets	
	A5 (6x8)	350 sheets	
Print time	L (5x3.5)	Approx. 13.9 sec	Approx. 17.9 sec
	PC (6x4)	Approx. 14.9 sec	Approx. 19.9 sec
	2L (5x7)	Approx. 23.9 sec	Approx. 30.9 sec
	A5 (6x8)	Approx. 26.9 sec	Approx. 34.9 sec
Ribbon type		YMC + overcoat	
Interface		USB2.0 (Max 480Mbps) TYPE B connector	
Driver-compatible OS		Windows XP/ Windows Vista(32/64bit)/Windows 7(32/64bit) /Windows 8(32/64bit)	
Dimensions		322mmW × 351mmD × 281mmH	
Weight		Approx. 13.8kg (printer only)	
Power		AC100V-240V 50/60Hz	
Power consumption		100V 2.9A 240V1.2A	
Noise		Printing 66dB Stand-by 19dB (background noise: less than 15dB)	
Operating environment		Temp. 5~35°C in natural conditions	
		Humidity 35~80% with no condensation	

※ In applications where a different resolution cannot be set for the vertical and horizontal, use with the 23.6 × 23.6 dot/mm (600x600 dpi) setting.
(The size is converted to 11.8 × 23.6 dot/mm (300x600 dpi) inside the driver and the data is then sent to the printer.)

*These specifications may be changed without prior notice.

Information on servicing the printer

For information on use and repair service of the units, please contact your sales agent.

Dai Nippon Printing Co., Ltd.