

# Digital Color Printer

Instructions for Use

**UP-DR100** 

#### **Owner's Record**

The model and serial numbers are located at the rear. Record these number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No.	
Serial No.	

#### **WARNING**

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

THIS APPARATUS MUST BE EARTHED.

#### For the customers in the U.S.A.

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 again harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC rules.

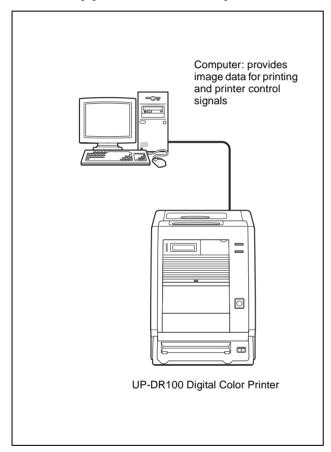
## **Table of Contents**

Introduction	
Features	
Part Names and Functions	4
Preparation	
Supplied Accessories	
DIP Switch Settings	7
Connections	8
Operation	
Loading the Paper and Ink Ribbon	9
Printing from the Computer	14
Adjusting Gray Balance  Displaying the Total Quantity of Pages P and Remaining Amount of Ink Ribbon o 18	rinted
Displaying the Quantity of Pages Printer Displaying the Remaining Amount of Pa Ribbon	per or Ink
Displaying the Firmware Version of the 1	
Miscellaneous	
Precautions	
Safety	
Installation On Transporting the Printer	20
Cleaning	
Ink Ribbon and Paper	
Specifications	
Error and Warning Messages	
Troubleshooting	
Index	

#### **Features**

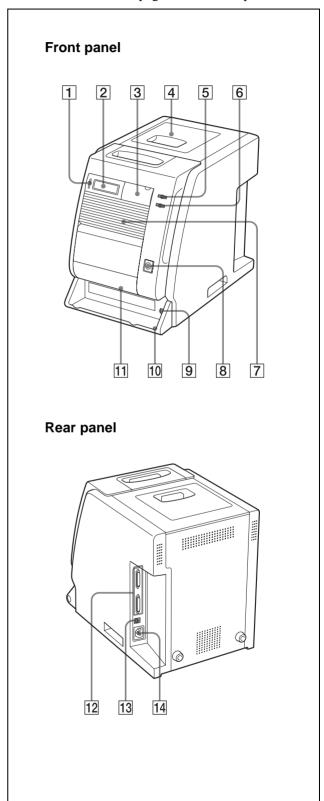
The UP-DR100 Digital Color Printer is a dye sublimation thermal transfer printer providing high quality, high resolution (334 dpi), and high speed printing of computer image data on four sizes of paper in full color (256 gradations and 16.7 million colors).

#### **Basic Application Example**



# Part Names and Functions

For details, refer to the pages indicated in parentheses.



#### 1 ALARM indicator (25)

Lights in green when the system is initialized, or in red when an error, such as a paper jam, occurs.

#### **2** Information Display (14, 18, 25)

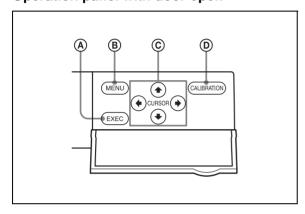
Displays the number of pages printed, or the amount of paper and ink ribbon remaining.

Messages are displayed when an error or warning condition occurs.

#### **3** Operation panel door

Pull the top edge to open the operation panel door.

#### Operation panel with door open



#### (A) EXEC Button

Press this button to print the gray scale adjustment pattern.

#### **B** MENU Button (18)

Press to display the number of pages printed or the amount of paper and ink ribbon remaining. Pressing the MENU button changes the printer to the off-line mode and turns the ONLINE indicator off.

#### © Cursor Buttons (18)

Press these buttons to select the item to be displayed on the information display.

#### **©** CALIBRATION button (16)

Press this button to adjust the gray balance.

#### 4 Maintenance door (22)

Open the maintenance door for cleaning the surface of the paper. The roller used for removing the dust accumulated on the surface of the paper is attached to the door.

#### 5 ONLINE indicator (14, 18)

Lights in green when the printer is controlled only by the computer in the on-line mode.

This indicator goes off when the printer goes offline, for example, when you press the MENU button to display the number of pages printed or the amount of paper and ribbon remaining.

#### 6 PRINT Indicator (14)

Lights in green while printing.

#### **7** Ventilation holes (22)

Behind the ventilation holes panel, there is a builtin fan to prevent the thermal head from overheating

#### 8 FEED button (12, 15)

Press and hold this button for more than one second immediately after you replace the paper and ink ribbon in use. Several sheets of blank paper are then fed through. In this way, soiled paper at the beginning of the roll will be eliminated, and paper improperly loaded at an angle will be straightened in the paper path. Also, pressing the FEED button for more than one second during printing results in cancelling the number of printings set and clearing the images stored in the memory. The printer stops printing when the page currently printing is completed and ejected.

#### 9 ①POWER switch (14)

Press this switch to turn the printer on or off.

#### 10 Paper scrap tray (6)

A margin of about 10mm is put between the current printout and the next printout from the paper roll. This margin of paper is cut off and ejected into the paper scrap tray.

#### 11 Paper Output Slot

Printed pages are output from the printer here.

#### 12 SCSI Connectors (50-pin, half pitch) (7, 8)

Connect the computer used to control the printer and connect other SCSI devices with SCSI cables to one of these connectors. The second connector is used as a pass-through connector when daisy chaining with other SCSI devices. If only one of the SCSI connectors on the printer is used, the internal terminator should be enabled by changing the appropriate DIP switch setting, see "DIP Switch Settings" (page 7).

#### 13 **DIP Switch (7, 8)**

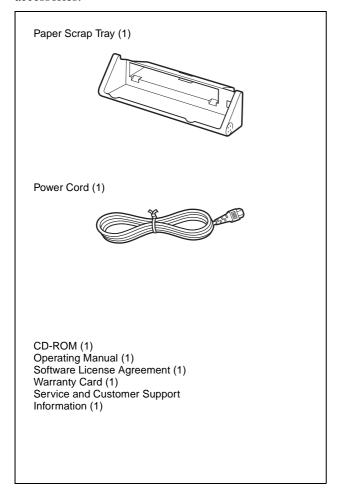
Determines the SCSI device ID number of the printer, and sets the internal terminator on or off. See "DIP Switch Settings" (page 7).

#### 14 $\sim$ AC IN (Power Source) Connector (8)

Connect the supplied power cord here.

## **Supplied Accessories**

Make certain you have received the following accessories:

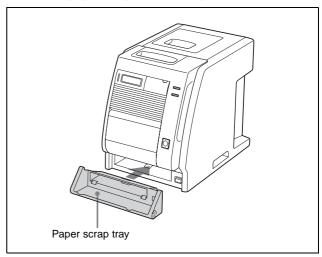


#### Notes

- When taking out the printer, be careful not to hurt your back.
- The packaging materials are needed when transporting the printer, so we suggest you keep them.
- Before moving the printer, remove the ink ribbon and paper.

#### **Assembly**

Mount the paper scrap tray on the printer.



#### To remove the Paper scrap tray

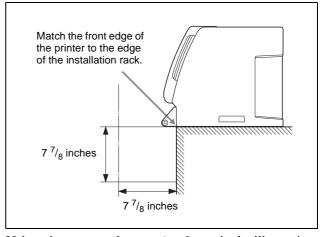
Hold both ends of the paper scrap tray and pull it forward while pushing it down.

#### To accumulate the ejected printed sheets

Use of the UPA-DR100PS PRINT STACKER (not supplied) is recommended. Printed sheets for up to one roll can be accumulated on the stacker regardless of the type of printing pack used.

#### Caution

When the UPC-R57/R57A/R68A printing pack is used, check the location where the printer has been installed. A space of about 20 cm ( $7^{7}/_{8}$  inches) out from the printer, and about 20 cm ( $7^{7}/_{8}$  inches) down from the bottom of the printer is required as shown in the diagram.



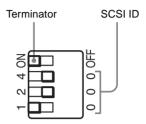
If there is not enough space (as shown in the illustration above), ejected printed sheets may pile up and clog at the Paper Output Slot and trouble may occur.

#### Paper and ink ribbon

For detailed information on how to install the ink ribbon and paper, see "Loading the Paper and Ink Ribbon" on page 9.

## **DIP Switch Settings**

Set the SCSI ID with the DIP switches on the side panel. The DIP switches are set as follows when shipped from the factory.



#### **Terminator ON/OFF Setting**

When the printer is connected as the terminating device on the SCSI bus, set the terminator to the ON position. Otherwise, set it to the OFF position.

Switch	ON	OFF
TERMINATOR	Internal Terminator ON	Internal Terminator OFF

#### **SCSI ID Setting**

Set the printer SCSI ID so that it is different from all other devices on the SCSI bus.

If two devices have the same SCSI ID, malfunctions may result.

SCSI ID	SCSI ID	Switch		
	1	2	4	
0	0	0	0	
1	1	0	0	
2	0	2	0	
3	1	2	0	
4	0	0	4	
5	1	0	4	
6	0	2	4	
7	1	2	4	

The SCSI ID is set to 1 as the factory setting.

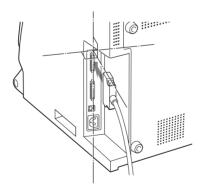
## **Connections**

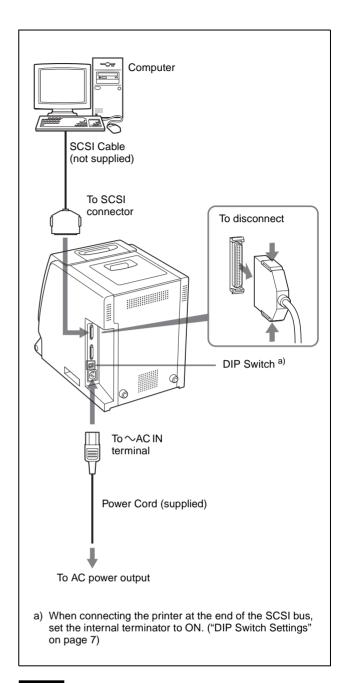
The UP-DR100 can be connected to computers and peripheral devices equipped with a SCSI interface.

#### **Notes**

- Before making connections, always turn off all connected devices.
- Connect the power cord last.
- Refer to the operating manual of each device for details of connections between the printer, computer and peripherals.
- SCSI cable connectors should be firmly mated at each end.
- The total length of SCSI cables connected to a single host computer should not be longer than 3 meters.
- When connecting only the printer to a single host computer, the SCSI cable should not be longer than 1 meter.
- To print, a driver is required that corresponds to the hardware environment in which the printer is to be used.
- Pay attention to the following when connecting the SCSI cable.

The SCSI connector has been mounted onto the slanting surface of the unit for easy insertion of the cable. Be sure to insert the SCSI cable straight into the SCSI connector as shown in the figure. If you insert the SCSI cable into the SCSI connector at angles, this may result in bending the small pins inside the SCSI connector and it may not work.





#### Note

The proper SCSI cable to use depends on the computer or peripheral device to be connected. Refer to the operating manuals for details.

Also, be sure to use a shielded-type cable comforming to the FAST SCSI (high impendance) standards.

#### When turning power on

Turn on any peripheral devices before turning the computer on. Make sure that every device in the SCSI chain is turned on.

# Loading the Paper and Ink Ribbon

Before using the printer for the first time, confirm that you have all of the accessories, and assemble them as described on page 6.

After connecting the printer as described on page 8, load the paper and ink ribbon following the steps below to prepare for actual printing.

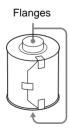
These steps are not required every time you print, but only as necessary.

#### Notes

- The printing pack contains an ink ribbon and one paper roll. Use the ink ribbon and the paper roll in the carton as a set. Do not mix with other varieties of ribbon or paper. ("Ink Ribbon and Paper" on page 23.)
- Each printing pack allows you to print the following number of sheets.

Print pack		UPC-R46/ UPC-R46A	UPC-R57/ UPC-R57A	UPC- R68A
Printing capacity	400	350	205	185
Print size	89×127 mm	102×152 mm	127×178 mm	152×204 mm
	3.5×5 inches	4×6 inches	5×7 inches	6×8 inches

- The number of printouts that can be printed may not be guaranteed if you replace the ink ribbon and paper before the ink ribbon and paper run out.
- Place the paper roll vertically with flanges facing up and down. If you place the paper roll horizontally, the paper may roll around and fall. This may cause an injury.

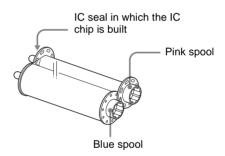


- Hold the right and left flanges of the paper roll so that you do not drop it, because it is heavy. Dropping may result in an injury and may cause accumulation of dust on the paper. Any dust on the printing surface will result in poor printout quality.
- A built-in IC chip is located around one side of the flange of the paper roll. Be careful not to hurt the IC seal or give it a shock. If you do, you may not be able to use the ink ribbon any more.

Hold the right and left flanges with both hands.



- Do not detach the blue and pink spools of the ink ribbon until you start loading the ink ribbon
- A built-in IC chip is located around one side of the pink spool. Be careful not to hurt the IC seal or give it a shock. If you do, you may not be able to use the ink ribbon any more.



#### Loading the paper and ink ribbon

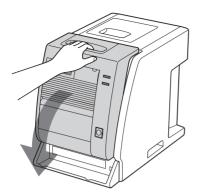
When you use the printer for the first time, load the paper and ink ribbon.

For detailed information on how to remove the paper and ink ribbon, see page 13.

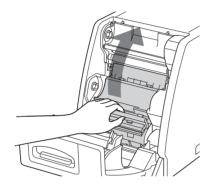
#### Note

Be careful that your fingers or clothes don't get caught in the front door or front door catch.

Pull the top of the front door to open it.

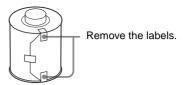


Pull the cover up.

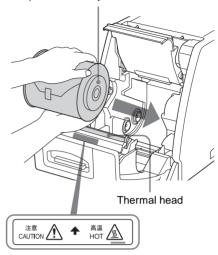


After removing the labels attached at both sides of the paper roll, place the paper roll in the paper holder.

Place the paper roll in the paper holder, so the pink flange is on the right and the blue flange is on the left.



Load the paper after matching the colors of the flange of the paper roll and the flange holder of the printer correctly.

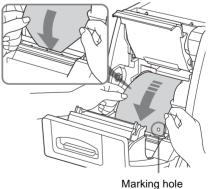


#### Caution

Since the thermal head is still very hot just after printing is finished, be careful not to touch the thermal head when placing the paper roll in the paper holder.

Remove the label attached at the tip of the paper, then, while holding both ends of the paper, insert the paper into to the slot. Feed in the paper with your hand until the marking hole appears.

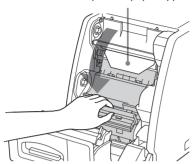
> Roll the paper in properly so that it goes in straight.



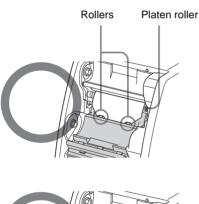
Be sure to remove all of the seals attached to the paper roll. A seal remaining inside the printer may cause problems.

#### **5** Close the cover.

Confirm that the tip of the paper appears.



If the tip of the paper protrudes from the platen roller, be sure to insert the tip of the paper under the rollers.

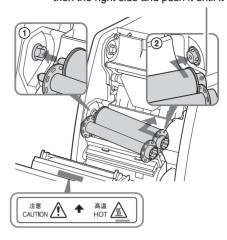




#### Note

Do not touch the printing surface of the paper roll in the paper holder after loading it. Sweat or dust from your hands may have an influence on the quality of the printout. 6 Hold both spools and push the blue spool into the blue spool holders.

Insert the left side of the blue spool first, then the right side and push it until it clicks.

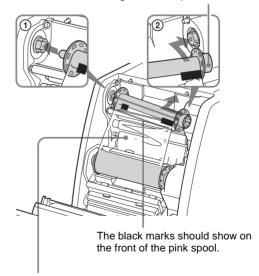


#### Caution

Since the thermal head is still very hot just after printing is finished, be careful not to touch the thermal head when loading the ink ribbon.

**7** Detach the pink spool from the blue spool. Pull it upward and wind it until the transparent part (the laminating part) comes to the position illustrated, and push it into the pink spool holders.

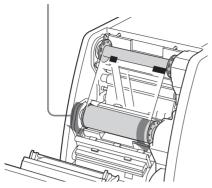
Insert the left side of the pink spool first, then the right side and push it until it clicks.



Transparent part (the laminating part)

**8** After confirming that the spools have been properly inserted, remove any slackness from the ink ribbon.





**9** Close the front door.

Turn on the printer, if it is turned off. When you load a brand new paper roll and ink ribbon, the printer feeds a certain amount of the paper and is then ready to print.

When you load partially used paper roll and ink ribbon, go to step 10.

#### Note

Close the front door so that both sides of the front door are completely locked. An unlocked door may cause a malfunction of the printer.

If you close the front door by pushing one side, both sides of the front door may not be completely locked.

**10** Confirm that READY appears on the information display.

Then, to straighten the paper, which might have been loaded at angle, keep pressing the FEED button for more than one second.

#### Note

Be sure to do this after loading a paper roll used partially.

FEED button

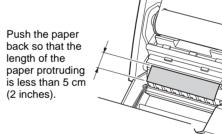


After several sheets of paper are fed out, the printer is ready to print.

#### If you open the front door during operation

When you open the front door after starting to use the printer just after loading the paper and ink ribbon, the tip of the paper may protrude. In that case, push the paper back so that the length of the paper protruding is less than 5 cm, then close the front door.

If you close the door with the paper protruding, the printed paper will not be ejected correctly. This causes paper jamming.



#### Note

Be careful not to touch the printing surface of the paper when pushing it back. Sweat or dust from your hands may have an influence on the quality of the printout.

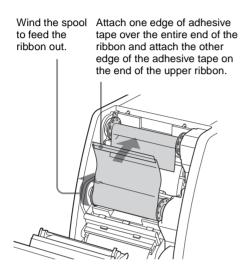
#### Notes on storage

- Avoid placing the printer where subject to: high temperatures, high humidity or dust, direct sunlight.
- After opening the bag, use the ribbon and the paper as soon as possible.
- When storing after partial use, put the ribbon and the paper back in their respective bags.

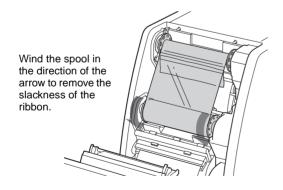
#### If the ribbon breaks during use

The remaining ribbon can be used after repairing it with adhesive tape.

1 Pull out the lower ribbon of the blue spool, attach one edge of a strip of adhesive tape over the entire end of the ribbon, then attach the other edge of the adhesive tape on the end of the upper ribbon of the pink spool.



**2** Turn the lower blue spool in the direction of the arrow to remove the slackness of the ribbon.



The ribbon is ready to be used. Depending on the position of the break in the tape, the ribbon for one sheet of printed paper may be lost.

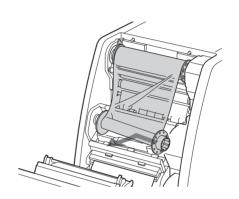
#### Removing the ink ribbon and paper

1 Remove the scraps of paper ejected and accumulated on the paper scrap tray.

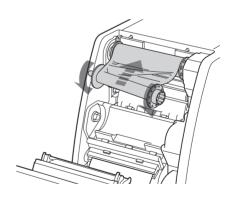
#### Note

If scraps of paper have accumulated on the paper scrap tray, the front door may not open completely.

- **2** Pull the top of the front door to open it.
- **3** Push the right blue spool to the left and pull it toward you to remove the blue spool of the ink ribbon.

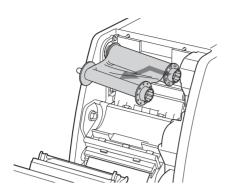


**4** Wind up the loose ink ribbon.



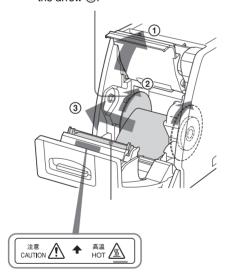
Push the right pink spool to the left and pull it toward you to remove the pink spool of the ink ribbon.

Attach both pink and blue spools of the ink ribbon.



- **6** Remove the paper.
  - 1 Pull the cover up.
  - ② Turn both flanges of the paper toward the inside to wind the remaining paper.
  - 3 Remove the paper roll.

Wind the remaining paper by turning the flanges of the paper roll in the direction of the arrow ②.



#### Caution

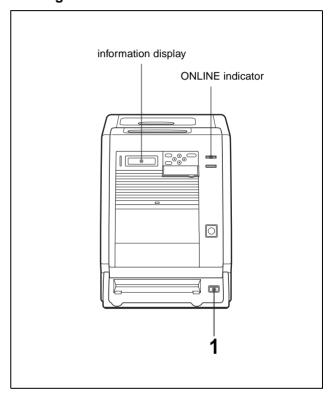
Since the thermal head is still very hot just after printing is finished, be careful not to touch the thermal head when removing the paper roll from the paper holder.

# Printing from the Computer

#### Before starting to print

- Confirm that the printer and computer are connected (page 8).
- Confirm that the paper and the ink ribbon are correctly installed (page 6).
- Confirm that the compatible ink ribbon and printing paper are installed (page 23).

#### **Printing**



1 Turn on the printer and computer.

After a few seconds, the following message should appear on the information display. When READY is displayed and the ONLINE indicator is lit, the printer is ready to print.



Displays the remaining amount of paper or ink ribbon, whichever is less.

## Identification of the printing pack currently being used on the information display

Display on the information display	Printing pack
R35	UPC-R35/R35A
R46	UPC-R46/R46A
R57	UPC-R57/R57A
R68	UPC-R68A

#### Notes

- Turn the printer on first.
- Don't turn the printer on again within 5 seconds after turning it off.
- Do not turn the computer off and on again while it is accessing a hard or floppy disk.
- **2** Send the image data from the computer to be printed.

The printer starts printing.

① While the printer is receiving the image data, the following message should appear.



Indicates the image data is being transferred.

- > : Indicates 20% of the total amount of image data. In the above example, 60% of the total amount of image data has been transferred.
- ② The printer starts printing the transferred image data as soon as the print command is sent from the computer.

The PRINT indicator lights and the following message should appear.

Number of pages to be printed



The color indication changes as the color printing procedes:

Start→YELLOW→MAGENTA→CYAN→LAMI→ Finsih. 3 After printing is finished, the printed paper is ejected from the output slot.

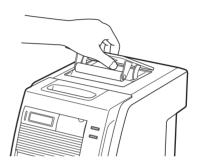
The printing time depends on the print size, ink ribbon and the paper.

Once printing has been completed, the PRINT indicator goes off and READY appears on the information display again.



#### Note

Do not open the maintenance door while the printer is printing. Doing so may have an influence on the quality of the printout.



## To stop sending the image data or to stop printing midway

Press and hold the FEED button for more than one second. The page currently being printed is completed and ejected. After the printout is ejected, the information display returns to READY. The image data stored in the memory and the number of printings set in the queue are cancelled.

PLEASE WAIT R46 349

#### **About memory**

Since the printer has memory for image data spooling, image data to be printed can be transferred to the printer while printing an image.

#### If the printer does not print

The printer cannot print in the following cases:

- When the remaining amount of ink ribbon or the quantity of printing is displayed on the information display because the MENU button was pressed and the printer is off-line, the printer cannot receive a print command from the computer.
- When an error message is displayed on the information display, you cannot operate the printer. Take remedies according to the advice given in "Error and Warning Messages" on page 25.

#### Notes on storing your printouts

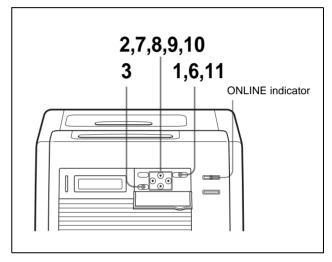
- Avoid exposure to direct sunlight, or conditions of high temperature and high humidity, which could cause the colors to fade.
- Avoid applying tape to a printout, and avoid contact with plastic objects such as erasers and desk mats.
- Do not allow alcohol or other volatile organic solvents to come into contact with the printouts.

## **Adjusting Gray Balance**

The gray balance differs between different packages where ink ribbons and papers are contained as a set. To avoid imbalance, use the ink ribbon with the paper that is supplied as a set in the same package. Also, when a new ribbon and paper are loaded, we recommend that the gray balance be adjusted. The gray balance of the printer is set to No.0 as the factory setting. This setting is retained even when the printer is turned off.

#### Note

The gray balance of images cannot be adjusted during printing.



- 1 Press the CALIBRATION button.
  The ONLINE indicator goes off and the printer is switched to off-line.
- 2 Press the ☆ and ❖ buttons to select GRAY PATCH PRINT.

Press ☆ and ∜ to display GRAY PATCH PRINT.



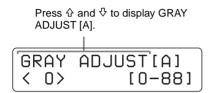
**3** Press the EXEC button.

The printer returns to the on-line mode and starts printing.

When using the UPC-R35/R35A or UPC-R46/R46A, gray adjustment patterns Group A and Group B are printed on two sheets separately. When using the UPC-R57/R57A or UPC-R68A, gray patterns Group A and Group B are printed on one sheet.

- 4 Look at the printout of Group A to determine the best gray balance from this group.
- 5 Next, look at the printout of Group B to determine the best gray balance from this group, too.
- 6 Press the CALIBRATION button. The ONLINE indicator goes off and the printer is switched to off-line.
- Press the ☆ and ❖ buttons to select GRAY ADJUST

The printer enters the gray balance adjustment mode.



number determined in step 4. For example, select 18 if you determined that pattern No. 18 in the sample provides the best gray



Press 

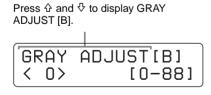
and 

to display 18.

balance.

Press the ☆ and ∜ buttons to select GRAY ADJUST [B].

The printer enters the gray balance adjustment mode.



**10** Press the *⇔* and *⇒* buttons to display the pattern number determined in step 5. For example, select 39 if you determined that pattern No. 39 in the sample provides the best gray



Press 

and 

to display 39.

balance.

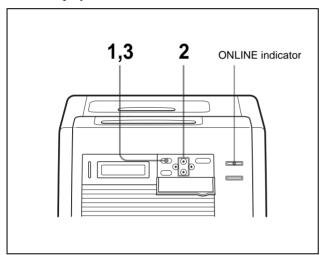
**11** Press the CALIBRATION button. The printer returns to the on-line mode, and the ONLINE indicator lights.



# Displaying the Total Quantity of Pages Printed and Remaining Amount of Ink Ribbon or Paper

## **Displaying the Quantity of Pages Printed**

The total number of pages printings done since turning on the printer can be displayed. If no printings have been done since the printer was turned on, "0" is displayed on the information display. Also, the total number of printings made so far since you started to use the printer can be displayed.

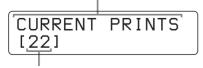


- 1 Press the MENU button.
  The ONLINE indicator goes off and the printer is switched to off-line.
- 2 Press the ☆ and ❖ buttons to select the item you want to be displayed.

## To display the total number of printings since turning on the printer:

Select "CURRENT PRINTS."

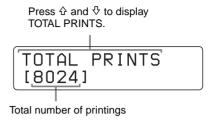
Press ☆ and ∜ to display CURRENT PRINTS.



Total number of printings since turning on the printer

## To display the total number of printings made so far since you started to use the printer:

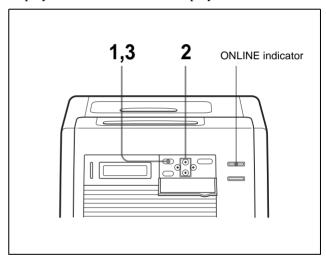
Select "TOTAL PRINTS".



Press the MENU button after confirming.
The printer returns to the on-line mode, and the ONLINE indicator lights.

## Displaying the Remaining Amount of Paper or Ink Ribbon

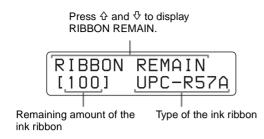
The remaining amount of paper or ink ribbon can be displayed on the information display.



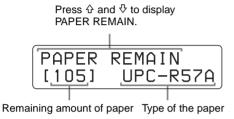
- 1 Press the MENU button.
  The ONLINE indicator goes off and the printer is switched to off-line.
- 2 Press the ☆ and ❖ buttons to select the item you want to be displayed.

## To display the remaining amount of the ink ribbon:

Select "RIBBON REMAIN."



## To display the remaining amount of paper: Select "PAPER REMAIN".



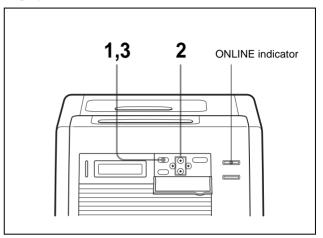
Press the MENU button after confirming.
The printer returns to the on-line mode, and the ONLINE indicator lights.

#### Note

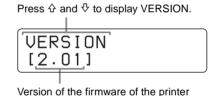
If the ink ribbon and paper have not been used from the beginning, the remaining amount displayed may be incorrect.

# Displaying the Firmware Version of the Printer

The version of the firmware of the printer can be displayed.



- 1 Press the MENU button.
  The ONLINE indicator goes off and the printer is switched to off-line.
- **2** Press the ☆ and ❖ buttons to display VERSION.



**3** Press the MENU button after confirming. The printer returns to the on-line mode, and the ONLINE indicator lights.

Access the following site to get the latest information on the printer. http://www.sony.co.jp/DP-driver-E/

## **Precautions**

#### **Safety**

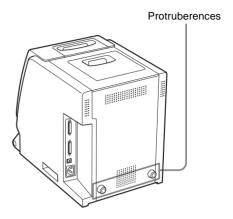
- Operate the printer using the power source specified in "Specifications" (page 24)
- Be careful not to damage the power cable by placing or dropping heavy objects on it; it is dangerous to use the unit with a damaged power cable.
- If you do not intend to use the unit for a long time, disconnect the power cable.
- Unplug the power cable by grasping the plug, not the cable itself.
- Do not disassemble the unit. There is a danger of electric shock from the internal parts.
- Be careful not to spill water or other liquids on the unit, or to allow combustible or metallic material to enter the cabinet. If used with foreign matter in the cabinet, the unit is liable to fail, or present a risk of fire or electric shock.
- If the unit malfunctions or if a foreign body falls into the cabinet, disconnect the power immediately and consult your Sony service facility or your Sony dealer.

#### Installation

- Avoid placing the unit in a location subject to:
- mechanical vibration
- high humidity
- excessive dust
- direct or excessive sunlight
- extremely high or low temperatures
- Ventilation holes are provided on the back of the unit to prevent the unit from overheating. Be careful not to obstruct them with other objects or by covering the unit with a cloth etc.

#### Note

Two protruberences placed on the rear of the printer are provided to prevent the ventilation holes being covered over by a wall, etc., when installing the printer near the wall. These protruberences are not to be used as feet to install the printer laying on its back.



#### On condensation

- If the printer is subjected to wide and sudden changes in temperature, such as when it is moved from a cold room to a warm room or when it is left in a room with a heater that tends to produce large amounts of moisture, condensation may form inside the printer. In such cases the printer will probably not work properly, and may even develop a fault if you persist in using it. If moisture condensation forms, turn off the power and leave the printer standing for at least one hour.
- If the printing pack is subjected to wide and sudden changes in temperature, condensation may form on the ink ribbon or paper inside. This will cause the printer to malfunction. Also if the printing pack is used in this state, spots are likely to appear on the printout.
- To store a half-used printing pack, replace it in its original packing and reseal the package. If possible, keep the sealed printing pack in a cool, dark location. To subsequently use the printing pack, place it, in its sealed package, in a warm room for several hours. Doing so prevents condensation from forming when the printing pack is removed from its package.

#### On Transporting the Printer

Do not transport the printer with the supplied accessories attached. Doing so may cause a malfunction.

#### Cleaning

#### Note

Be sure to turn off the power of the printer before cleaning it.

#### When the cabinet becomes dirty

Clean the cabinet, panel and controls with a soft dry cloth, or a soft cloth lightly moistened with a mild detergent solution.

Do not use any type of solvent, such as alcohol or benzine, which may damage the finish.

#### After you replace the paper roll with the new one

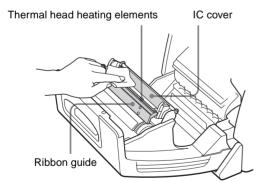
After you spent one paper roll and load the new one, perform the following cleaning.

#### Note

Be sure to use the printer only after it has been dried completely, if you intend to use the printer just after you have cleaned it. If it has not been dried completely, this may have an influence on the quality of the printout.

#### To clean the thermal head:

Clean the thermal head heating elements, IC cover and ribbon guide gently with a soft cloth.



#### To clean the platen roller:

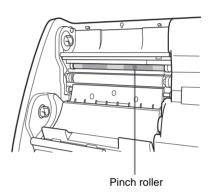
Clean the platen roller gently with a soft cloth moistened with alcohol.

> Clean the platen roller gently with a soft cloth moistened with alcohol while turning the platen roller.



#### To clean the pinch roller:

Clean the pinch roller gently with a soft cloth moistened with alcohol while turning the pinch roller.

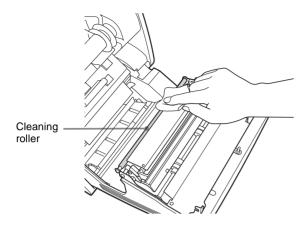


#### To clean the cleaning roller for the ink ribbon:

Clean the cleaning roller gently with a soft cloth moistened with alcohol to remove the dust accumulated on the roller.

#### Note

The surface of the rubber roller is soft and easily scratched. When cleaning it, be carefull not to scratch and not to pull the surface of the rubber roller.



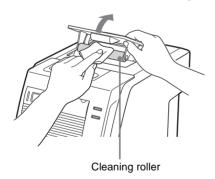
## To clean the cleaning roller used for removing dust accumulated on the paper:

Open the maintenance door, and then clean the roller with a soft cloth or the like moistened with alcohol.

#### Note

The surface of the rubber roller is soft and easily scratched. When cleaning it, be carefull not to scratch and not to pull the surface of the rubber roller.

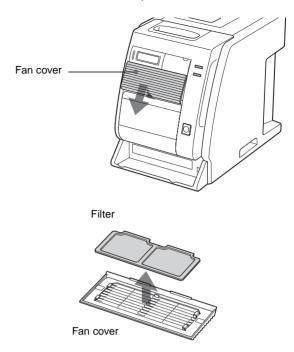
Be sure to hold the maintenance door open while cleaning the roller.



#### When the following symptoms appears

# When the message "HEAD IN COOLING" begins to appear on the information display frequently:

Ventilation holes are provided on the front and rear of the printer. Clean the filter placed on the front panel of the printer. If the filter is dirty, the time required for cooling the thermal head is lengthened and this causes the printing time to become longer. 1 Remove the fan cover, and then the filter.



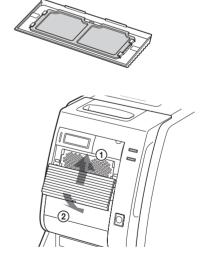
**2** Wash the filter with water to remove the dust.

#### Note

Do not rub the netting of the filter roughly.

**3** After the filter has been dried completely, reset the filter and fan cover on the front panel as they were.

Reset the filter on the fan cover correctly.

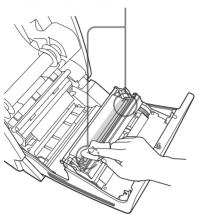


#### Note

Be sure to attach the filter onto the fan cover correctly. If not, dust may accumulate on the printout. This may have an influence on the picture quality. When you make printouts using the UPC-R46/R46A/ R68A self-laminating color printing pack, after you have used several rolls of the UPC-R35/R35A/R57/ R57A self-laminating color printing pack, the printout quality may deteriorate, for example, white stripes or scratches may appear on the printout.

In such a case, clean the thermal head gently with a soft cloth moistened with alcohol.

> Clean both ends of the thermal head gently with a soft cloth moistened with alcohol.



## Ink Ribbon and Paper

The ink ribbon and paper are supplied as a set in the same package and are intended to be used together.

#### UPC-R35/R35A Self-Laminating Color Printing Pack

Contains color ink ribbon and paper. Ink ribbon for printing: 1 roll L-size print paper: 1 roll

#### **UPC-R46/R46A Self-Laminating Color Printing Pack**

Contains color ink ribbon and paper. Ink ribbon for printing: 1 roll King-size print paper: 1 roll

#### **UPC-R57/R57A Self-Laminating Color Printing Pack**

Contains color ink ribbon and paper. Ink ribbon for printing: 1 roll 2L-size print paper: 1 roll

#### **UPC-R68A Self-Laminating Color Printing Pack**

Contains color ink ribbon and paper. Ink ribbon for printing: 1 roll 2KG-size print paper: 1 roll

#### Note

When using the UPC-R57/R57A, or UPC-R68A Self-Laminating Color Printing Pack, check the location where the printer has been installed (page 6).

#### **Printing capacity**

Print pack		UPC-R46/ UPC-R46A		
Printing capacity	400	350	205	185
Print size	89×127 mm	102×152 mm	127×178 mm	152×204 mm
	3.5×5 inches	4×6 inches	5×7 inches	6×8 inches

However the number of sheets that can be printed may not be guaranteed if you replace the ink ribbon and paper before the ink ribbon and paper run out.



## **Specifications**

Power requirements

100-120 V/220-240 V AC, 50/60 Hz

Current consumption

Max. 2.7 A/1.2 A (while printing)

Operating temperature range

5 to 35°C

Operating humidity range

20 to 80%

External dimensions

Approx.  $280 \times 362 \times 434 \text{ mm (WHD)}$  $(11 \frac{1}{8} \times 14 \frac{3}{8} \times 17 \frac{1}{8} \text{ inches)}$ 

(excluding projecting parts)

Approx.  $280 \times 362 \times 448 \text{ mm (WHD)}$   $(11^{-1}/_8 \times 14^{-3}/_8 \times 17^{-3}/_4 \text{ inches)}$ (including the maximum projecting

parts)

Weight Approx. 17.5 kg (38lb 9 oz) (printer

only)

Printing system Dye sublimation thermal transfer
Thermal head 13.1 dot/mm, 2048 elements (334 dpi)
Gradations 8 bits each for yellow, magenta and

cyan

Picture size UPC-R35/R35A:  $89 \times 127 \text{ mm}$  (3.5 ×

5 inches)

UPC-R46/R46A:  $102 \times 152 \text{ mm}$  (4 × 6

inches)

UPC-R57/R57A:  $127 \times 178 \text{ mm}$  (5 × 7

inches)

UPC-R68A:  $152 \times 204 \text{ mm}$  (6 × 8

inches)

Printable pixels UPC-R35/R35A: 1170 × 1670 dots

UPC-R46/R46A: 1341 × 1999 dots UPC-R57/R57A: 1670 × 2341 dots UPC-R68A: 1999 × 2683 dots

Printing time UPC-R35/R35A: Approx. 23 sec.

UPC-R46/R46A: Approx. 24 sec. UPC-R57/R57A: Approx. 36 sec. UPC-R68A: Approx. 40 sec.

Input connector AC IN (for power)

Control connectors

SCSI-2 interface  $\times$  2 (50-pin, half-

pitch)

Accessories supplied

Paper scrap tray (1) Power Cord (1) CD-ROM (1)

Software License Agreement (1)

Operating Manual (1) Warranty Card (1)

Service and Customer Support Info. (1)

#### **Optional accessories**

Self-Laminating Color Printing Pack UPC-R35

UPC-R35A UPC-R46 UPC-R46A UPC-R57 UPC-R57A UPC-R68A

#### **SCSI-2 Interface**

Connectors Two 50-pin, half-pitch

PRINT STACKER UPA-DR100PS

Terminator Internal (DIP switch enable/disable) SCSI ID setting 0 to 7 (DIP switch selectable) Transfer speed Max. 10 MB/sec (Fast SCSI)

Design and specifications are subject to change without notice.

## **Error and Warning Messages**

Error and warning messages appear on the information display under the following conditions. Please take the remedial actions shown next to the message to correct the condition.

#### **Error messages**

When a problem occurs, the ALARM indicator on the front panel lights in red, and an error message appears on the information display. Please take the remedial actions shown next to the message to correct the condition.

Message	Description and Remedy
DOOR OPEN	The front door is open.  → Close the front panel until it is locked securely (page 12).
FEED ERROR	Paper cannot be fed or ejected correctly.  → Load the paper roll correctly.  (page 10)
MECHA TROUBLE	<ul> <li>The ink ribbon may break.         — Repair it with adhesive tape.         (page 13)</li> <li>The paper corresponding to the designated number of sheets is exhausted.         — Load a new ink ribbon and paper roll. (page 9)</li> <li>The ink ribbon corresponding to the designated number of sheets is exhausted.         — Load a new ink ribbon and paper roll. (page 9)</li> <li>Mechanical trouble has occurred in the printer.         — The ink ribbon and paper roll are not loaded correctly. Load them correctly. (page 9)</li> <li>— If the message does not disappear even after performing the above remedy. Contact your supplier or nearest Sony Service Center.</li> </ul>
MEDIA MISMATCH	An incompatible ink ribbon and paper are loaded.  → Load the compatible ink ribbon and paper roll taken from the same package. (page 23)
NO PAPER	The paper roll is not loaded.  → Load paper roll.(page 9)
NO RIBBON	The ink ribbon is not loaded.  → Load an ink ribbon.(page 9)

Message	Description and Remedy
PAPER END	The paper corresponding to the designated number of sheets is exhausted.  → Load a new ink ribbon and paper roll. (page 9)
PAPER ERROR	<ul> <li>The paper corresponding to the designated number of sheets is exhausted.         → Load a new ink ribbon and paper roll. (page 9)     </li> <li>Something is wrong with the data on the IC seal attached to the paper roll.         → Replace the ink ribbon and paper roll with a new ink ribbon and paper roll. (page 9)     </li> </ul>
RIBBON END	The ink ribbon corresponding to the designated number of sheets is exhausted.  → Load a new ink ribbon and paper roll. (page 9)
RIBBON ERROR	<ul> <li>The ink ribbon may break.         →Repair it with adhesive tape.         (page 13)</li> <li>Something is wrong with the data on the IC seal attached to the paper roll.         →Replace the ink ribbon and paper roll with a new ink ribbon and paper roll. (page 9)</li> <li>The ink ribbon corresponding to the designated number of sheets is exhausted.         →Load a new ink ribbon and paper roll. (page 9)</li> </ul>

#### Warning messages

When a warning condition occurs, the warning message appears, but the ALARM indicator does not light. The remedy is listed below next to each message.

Message	Description and remedy
HEAD IN COOLING	The thermal head is too hot.  → Wait for the message to disappear.  Printing will then resume automatically.
PLEASE WAIT	The printer ejects the paper because the printer has received the stop command or the printer stops printing due to some problem.  → Wait for the message to disappear.

## **Troubleshooting**

Before submitting the product for repair, please recheck the following. If the unit still does not operate properly, contact your supplier or nearest Sony Service Center.

Problem	Cause and Remedy
Cannot load the paper	You may be trying to load the paper with the right and left sides reversed.  → Load the paper after matching the colors of the flange of the paper and the flange holder of the printer correctly. (page 11)
Cannot load the ink ribbon	You may be trying to load the spools of the ink ribbon wrongly.  → Load the ink ribbon after matching the colors of the spools of the ink ribbon and the spool holders of the printer correctly. (page 11)
NO PAPER is displayed even though paper roll is loaded.	The paper roll is not loaded correctly.  → Load the paper correctly. (page 9)
NO RIBBON is displayed even though the ink ribbon is loaded.	The ink ribbon is not loaded correctly.  → Load the ink ribbon correctly.  (page 9)
The image is printed out of place on the paper.	The paper is loaded at an angle. Try to eject several sheets of paper by keeping the FEED button pressed for more than one second after loading.  → Ejecting the paper by pressing the FEED button helps to put the remaining paper in the correct position. (page 12)
Paper is left even though PAPER END is displayed.	This is not a malfunction. Extra sheets of paper are provided with each roll of paper.  → Remove the remaining paper and load a new ink ribbon and paper roll. (page 9)
Ink ribbon is left even though RIBBON END is displayed.	This is not a malfunction. Extra ink ribbon is provided.  → Remove the remaining ink ribbon and load a new ink ribbon and paper roll. (page 9)
HEAD IN COOLING is displayed frequently.	The filter may be dirty.  →Clean the filter. (page 22)
A vertical white stripe appears on the printout.	Dust may have accumulated on the thermal head.  → Clean the thermal head elements with a soft dry cloth. (page 23)

# Index

A
Accessories supplied assembly 6 confirmation 6 Paper Scrap Tray 6 Power Cord 6
Adjusting gray balance 16
В
Basic Application Example 4
С
Cleaning cabinet 21 cleaning roller 22 pinch roller 21 platen roller 21 thermal head 21 Connections 8
D
DIP Switch Settings SCSI ID 7 terminator 7 Displaying quantity of printing 18 remaining amount of paper or ink ribbon 18 version of the printer 19
<b>F</b> Features 4
<b>G</b> Gray balance 16
I

Ink ribbon

18 loading 9 removing 13

Introduction 4

if the ribbon breaks 13

usable printing pack 23

displaying the remaining amount

Ink ribbon and paper

Message error message 25 warning message 25
Operation 9
<b>P</b> Paper and ink ribbon
loading 9 Part Names and Functions Front panel 4 Operation panel door 5 Rear panel 4
Precautions condensation 20 Installation 20 on transportation 21 Safety 20 Preparation 6
Printing 14 Printing pack printing capacity 23 UPC-R35/R35A 23 UPC-R46/R46A 23 UPC-R57/R57A 23 UPC-R68A 23
Remaining Ribbon 18
SCSI ID 7 Specifications 24
<b>T</b> Troubleshooting 26

M



Sony Corporation http://www.sony.net/