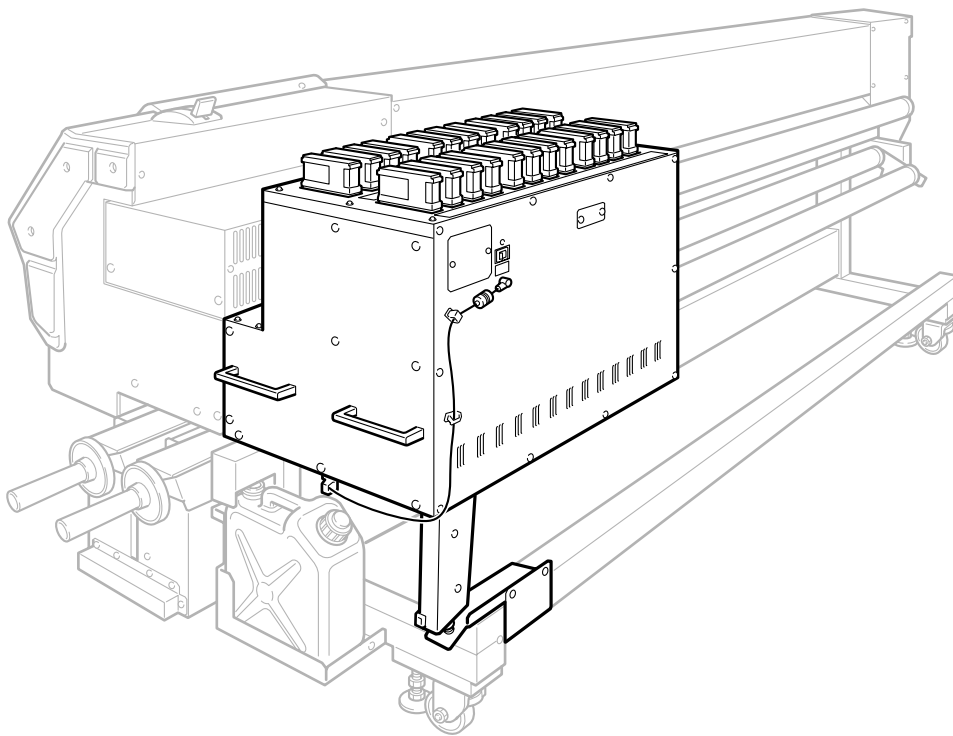


IS-1000

User's Manual



Thank you very much for purchasing this product.

- To ensure correct and safe usage with a full understanding of this product's performance, please be sure to read through this manual completely and store it in a safe location.
- Unauthorized copying or transferral, in whole or in part, of this manual is prohibited.
- The contents of this operation manual and the specifications of this product are subject to change without notice.
- The operation manual and the product have been prepared and tested as much as possible. If you find any misprint or error, please inform us.
- Roland DG Corp. assumes no responsibility for any direct or indirect loss or damage which may occur through use of this product, regardless of any failure to perform on the part of this product.
- Roland DG Corp. assumes no responsibility for any direct or indirect loss or damage which may occur with respect to any article made using this product.

For the USA

**FEDERAL COMMUNICATIONS COMMISSION
RADIO FREQUENCY INTERFERENCE
STATEMENT**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.

For Canada

CLASS A NOTICE

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

CLASSE A AVIS

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.



ROLAND DG CORPORATION

1-6-4 Shinmiyakoda, Hamamatsu-shi, Shizuoka-ken, JAPAN 431-2103

MODEL NAME : See the MODEL given on the rating plate.


RELEVANT DIRECTIVE : EC LOW VOLTAGE DIRECTIVE (73/23/EEC)

EC ELECTROMAGNETIC COMPATIBILITY DIRECTIVE (89/336/EEC)

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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<http://www.rolanddg.com/>






To Ensure Safe Use

Improper handling or operation of this machine may result in injury or damage to property. Points which must be observed to prevent such injury or damage are described as follows.

About WARNING and CAUTION Notices


 WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
 CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.


About the Symbols

	The  symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. The symbol at left means "danger of electrocution."
	The  symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. The symbol at left means the unit must never be disassembled.
	The  symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. The symbol at left means the power-cord plug must be unplugged from the outlet.


Incorrect operation may cause injury

WARNING

 **Never allow children near the machine.**
The machine includes locations and components that pose a danger to children, and major accident, including injury, blindness, or choking, may occur.


 **Do not disassemble, repair, or modify.**
Doing so may lead to fire or abnormal operation resulting in injury.


CAUTION


 **Never climb or lean on the machine.**
The machine is not made to support a person. Climbing or leaning on the machine may move away components and cause in a slip or fall, resulting in injury.


 Danger of electrical short, shock, electrocution, or fire


 WARNING


 **Do not use with any electrical power supply that does not meet the ratings displayed on the AC adapter.**
Use with any other power supply may lead to fire or electrocution.


 **Do not use with any power supply other than the dedicated AC adapter.**
Use with any other power supply may lead to fire or electrocution.


 **Never operate the machine or insert or remove its power plug with wet hands.**
Doing so may result in electrical shock or electrocution.


 **Never allow the machine to get wet, or apply gasoline, thinner, or any other flammable material to it.**
Current leakage may cause electrical shock, electrocution, or combustion and fire.


 **Never allow hairpins, coins, matches, or any other object to get inside the machine through the ventilation ports.**
Doing so may cause an electrical short, resulting in shock or electrocution, or the inserted object may catch fire.


 **Never place gasoline, alcohol, thinner, or any other flammable material near the machine, or use an aerosol spray close to the machine.**
Doing so may cause fire.


 **Never damage the power cord or pull it with force.**
Doing so may tear the cord's insulation, causing an electrical short and resulting in electrical shock, electrocution, or fire.


 **Never place any object on the power cord, bend the power cord using excessive force, or allow the power cord to become deformed.**
If it becomes deformed, the deformed location may grow hot and cause fire.


 **Never use the machine with the power cord bound into a bundle or roll.**
If the cord is in a bundle or roll, it may grow hot and cause fire.

 **Never use any power cord other than the power cord included with the machine. Also, never use a power strip or extension cord.**
The power strip or extension cord may grow hot and cause fire.

 **Do not use with a damaged AC adapter, power cord or plug, or with a loose electrical outlet.**
Doing so may lead to fire, electrical shock, or electrocution.

 **When unplugging the electrical power cord from the power outlet, grasp the plug, not the cord.**
Unplugging by pulling the cord may damage it, leading to fire, electrical shock, or electrocution.

 **In the event of an abnormal state (such as smoke or sparks, odor or burning or unusual noise), immediately unplug the power cord.**
Failure to do so may result in fire, electrical shock, or electrocution. Immediately disconnect the power cord and contact your Roland DG Corp. service center.

 **When not in use for several hours, unplug the power-cord plug from the electrical outlet.**
Failure to do so may result in danger of electrical shock, electrocution or fire due to deterioration of electrical insulation.

 **Ink, cleaning liquid, and discharged fluid are flammable and toxic**

 **WARNING**



Never operate in locations such as those near an open flame or heater, or where sparking or static electricity may occur.
Ink or the like may ignite and cause fire.



Never place ink, cleaning liquid, or discharged fluid in any of the following locations.

- **Near open flame**
- **In a hot location, such as near a heater or on the machine's platen or dryer**
- **Near bleach, chemicals, explosives, or the like**

Doing so may cause fire.

 **CAUTION**



Ensure adequate ventilation for the work area.

Odor from ink and the like may cause physical distress, or may cause to fire.



Never drink or sniff ink, cleaning liquid, or discharged fluid, or allow them to come in contact with the eyes or skin.

Doing so may be hazardous to your health.



Store ink cartridges in a location out of the reach of children.

 **In the Event of Ingestion or Physical Distress**

- In the event of contact with the eyes, immediately flush with running water for at least 15 minutes. If eye irritation continues, seek treatment by a physician.
- In the event of contact with skin, immediately wash with soap. If irritation or inflammation occur, seek treatment by a physician.
- In the event of ingestion, do not induce vomiting, and immediately seek treatment by a physician. Forcibly inducing vomiting may lead to danger of choking.
- If odor leads to physical distress, move to a well-ventilated location and rest quietly. If dizziness or nausea persists, seek treatment by a physician.

⚠ Warning Labels

Warning labels are affixed to make areas of danger immediately clear. The meanings of these labels are as follows. Be sure to heed their warnings.

Also, never remove the labels or allow them to become obscured.



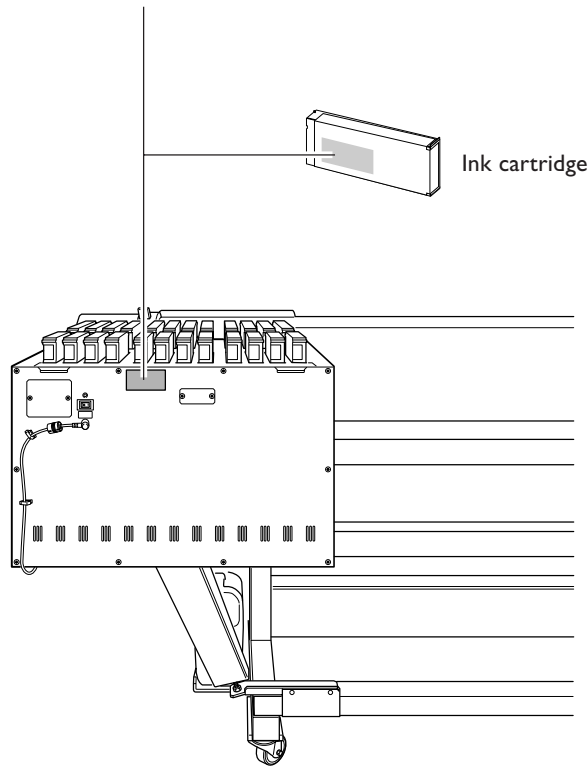
Flammable

Ink and discharged fluid are flammable. Keep away from open flame.



Ink Is Toxic

Ink and discharged fluid are toxic. Avoid contact with the body. Use only in a well-ventilated area.



Important Notes on Handling and Use

This machine is a precision device. To ensure the full performance of this machine, be sure to observe the following important points. Failure to observe these may not only result in loss of performance, but may also cause malfunction or breakdown.

This Machine Is a Precision Device

- Handle carefully, and never subject the machine to impact or excessive force.
- Never needlessly put your hand or fingers inside the ink-cartridge ports, or other internal areas of the machine.

Ink cartridges

Ink Cartridges Come in Various Types

- Use a type that is compatible with the printer. Also, be sure to use only genuine items from Roland DG Corp.

Never Subject to Impact or Attempt to Disassemble

- Never drop or shake forcefully. The impact may rupture the internal pouch and cause the ink to leak.
- Never attempt to disassemble.
- Never attempt to refill the ink.
- If ink gets on your hands or clothing, wash it off as soon as possible. Removal may become difficult if allowed to stand.

Storage

- Store unopened in a well-ventilated location at a temperature of -20 to 40°C (-4 to 104°F).

Important Notes on Replacing Cartridges

- Be sure to replace with an item of identical type. Never mix items of different types.
- Never allow the machine to stand with an ink cartridge removed. The print heads may become clogged.
- Never insert or remove a partially used ink cartridge.

Operation

I. Getting Started

Overview of the System

System Features

- This is an ink-supply system exclusively for use with grand-format printers from Roland DG Corp.
- Now you can load larger amounts of ink than ever before, making possible longer periods of nonstop operation.
- You can change ink cartridges while continuing to print, enabling you to perform ultra large-size output without worry.

Supported Models

- SJ-1000
- SJ-1045EX

Important Notes on Installing the System

- Installation of this system is to be performed by a service technician.
- Note that if the printer is unused (that is, a printer that has never been filled with ink), this system must be installed before filling with ink.

Important Notes on Support for Six-color Inks

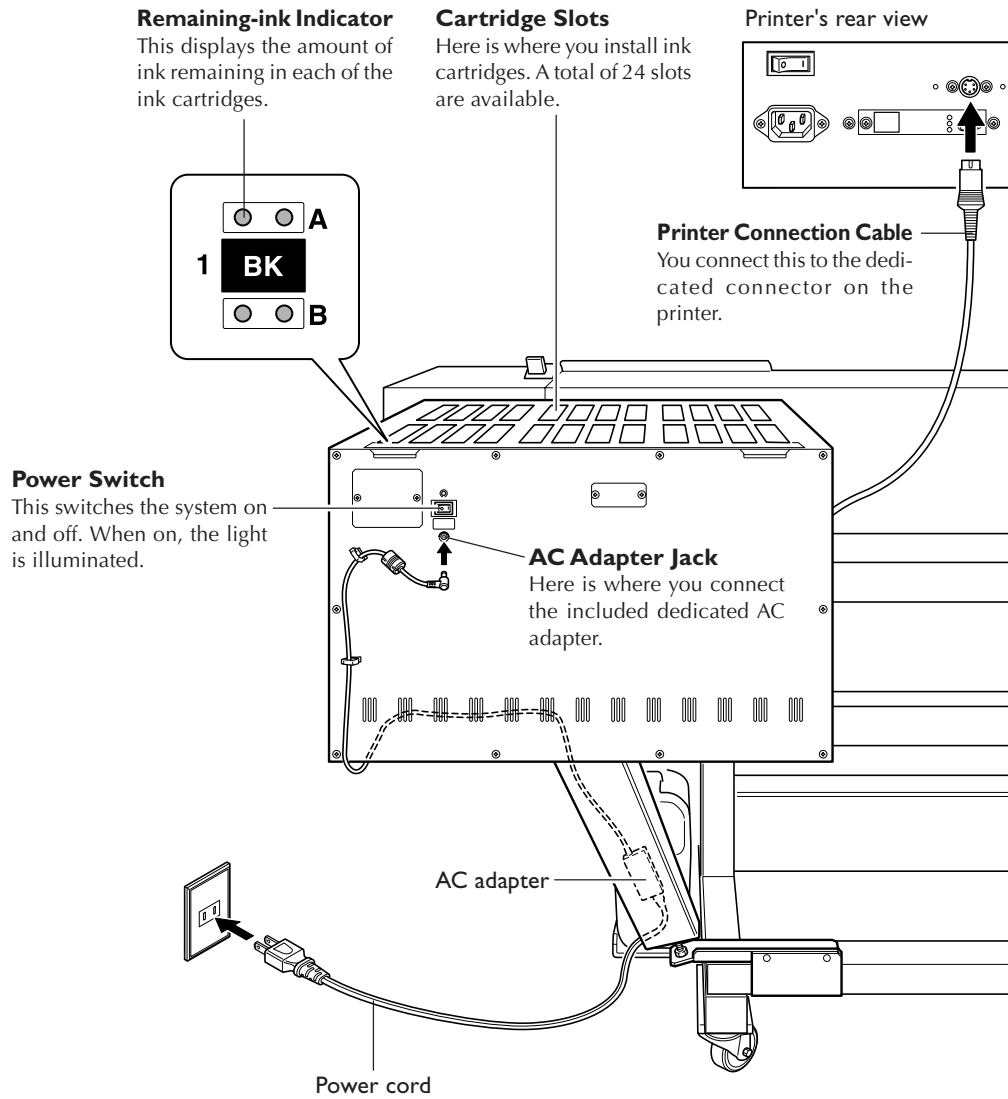
- Installing this system on one of the printers listed above enables use of six-color inks (cyan, magenta, yellow, black, light cyan, and light magenta) in addition to four-color inks (cyan, magenta, yellow, and black). Purchase the ink mode you intend to use from your authorized Roland DG Corp. dealer in advance.
- Please note that the ink mode cannot be changed at a later date once this system has been installed.
- To use the SJ-1000 in six-color ink mode, use a RIP that supports six-color inks.

Changes in Printer Functioning

Installing this system changes the printer's menus and other behavior in the following ways.

- Insertion and removal of ink cartridges even while printing is in progress becomes possible.
- The [INK REMAINING] menu item no longer appears. Use the system's remaining-ink indicator to check the amount of ink remaining.
- When ink runs out, the printer displays an [INK EMPTY] message. Use the remaining-ink indicator on the system to determine which cartridge has run out of ink.

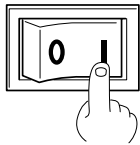
Part Names and Functions



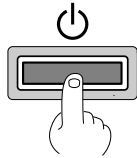
2. Switching the Power On and Off

Power-up Sequence

Power to the
ink-supply system
ON



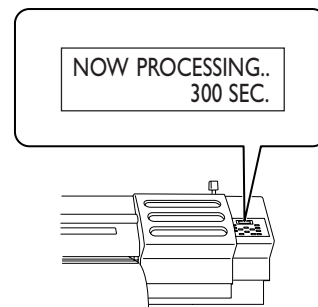
Power to the printer
ON



First switch on the power to the system, and then switch on the printer.

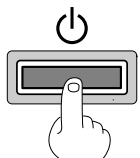
Important Note on Switching On the Power

Switching on the printer first causes the message shown in the figure to appear, and operation cannot be started immediately. If this happens, switch off the power to the printer, then turn on the devices in the correct order.

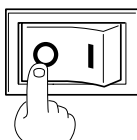


Power-down Sequence

Power to the printer
OFF



Power to the
ink-supply system
OFF



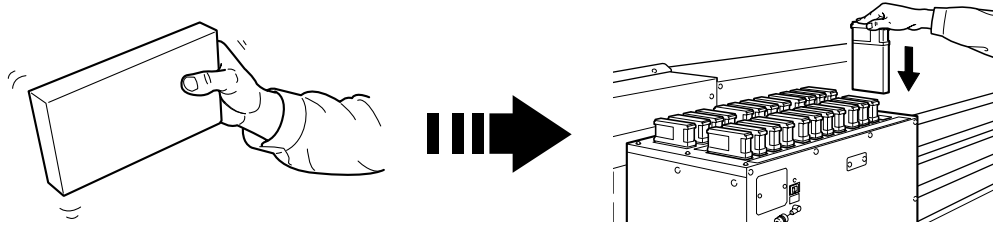
First switch off the power to the printer, and then switch off the system.

Important Note on Switching Off the Power

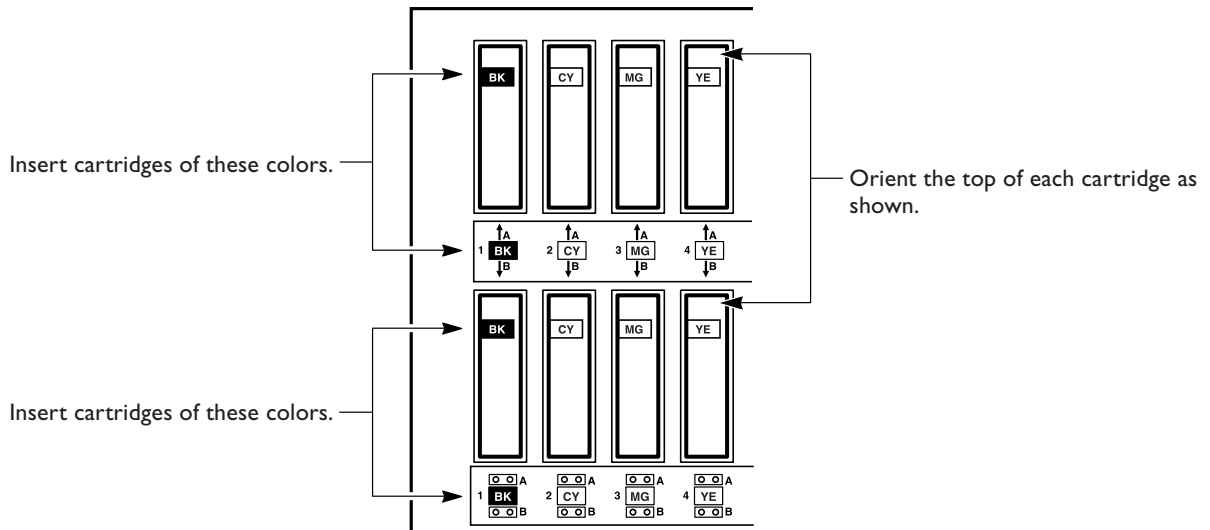
Never switch off the power to the system while printing is in progress. Doing so halts the supply of ink, interrupting printing.

3. Installing the Ink Cartridges

Installing the Ink Cartridges



- Gently shake the cartridge, then insert.
- Insert and remove slowly, one at a time.
- Insert firmly, as far as it will go.



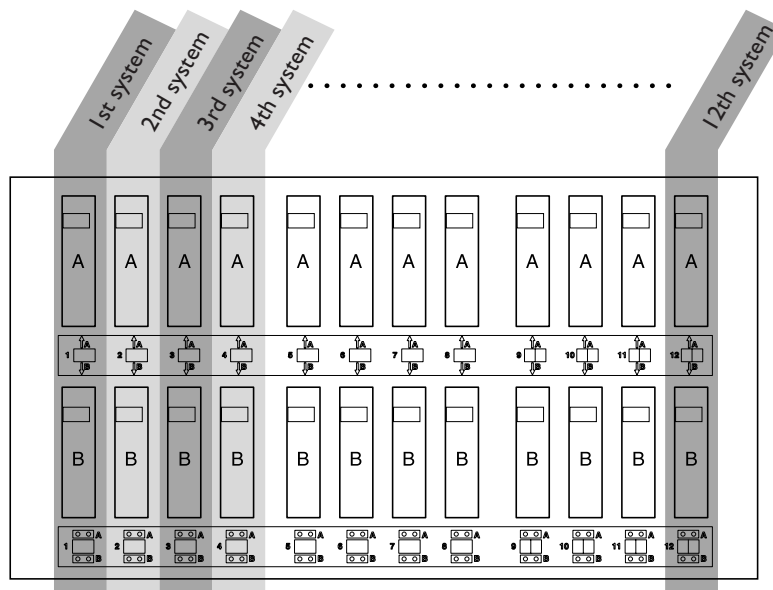
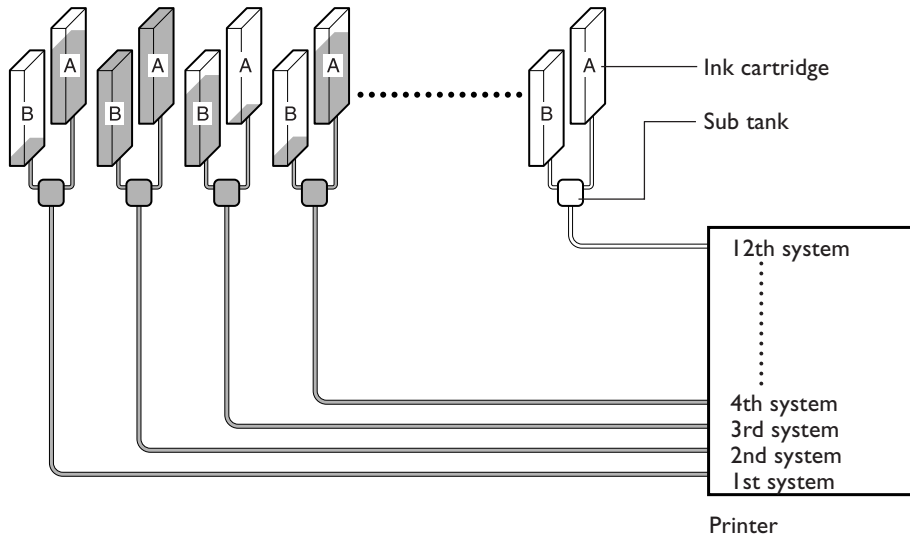
Important Notes on Inserting and Removing Cartridges

- Insert and remove cartridges only while the power to the system is switched on.
- Insert cartridges into all slots. An empty slot may allow ink to dry and cause clogging.
- Never insert or remove a partially used ink cartridge.

4. Checking the Amount of Ink Remaining

How Ink Is Supplied

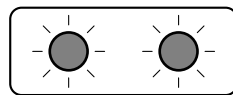
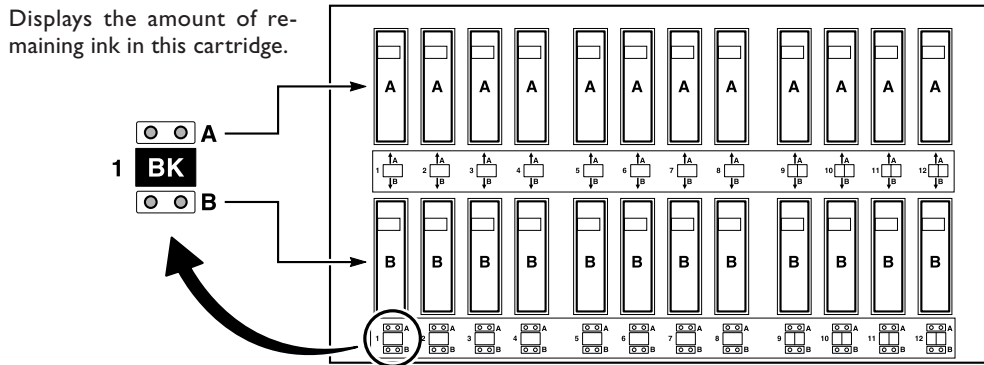
This system supplies each individual ink system with ink from two cartridges (A and B). Ink runs out when these both become empty.



Ink is not depleted evenly from the A and B cartridges. This is done to prevent the two cartridges from becoming empty at the same time.

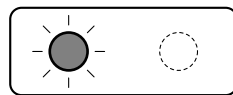
Viewing the Amount of Remaining Ink

The remaining-ink indicator makes it possible to check the amount of ink remaining in each of the ink cartridges.



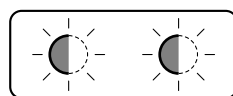
Lighted Lighted

Amount remaining: 50 to 100%



Lighted Dark

Amount remaining: 50% or less



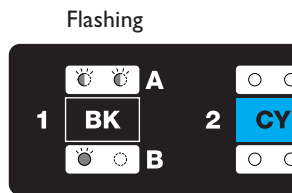
Flashing Flashing

No ink

The display shows an approximate guide to the amount of remaining ink, which may differ somewhat from the actual amount remaining. Also, the displayed information may differ greatly from the actual amount remaining if you insert a partly used ink cartridge or change cartridges while the power is off.

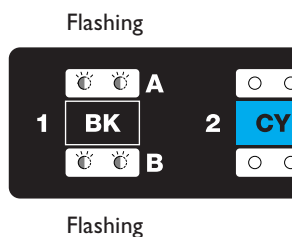
5. When Ink Cartridges Become Empty

When Either A or B Is Empty



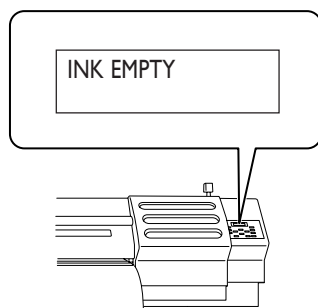
- When either A or B (but not both) becomes empty, printing can continue without interruption.
- Replace the cartridge before the other one becomes empty.

When Both A and B Are Empty



- The indicator flashes and repetitive beeping occurs.
- Replace the cartridges immediately. Otherwise ink will shortly run out and printing will stop.

When [INK EMPTY] Appears on the Display



- Ink has run out. Printing stops. (* See note.)
- When printing has stopped, it cannot be resumed immediately when the cartridge is changed. Filling the sub tank with ink takes about five minutes, during which no other operation takes place.

NOW PROCESSING..
300 SEC.

Replace cartridges before ink runs out.

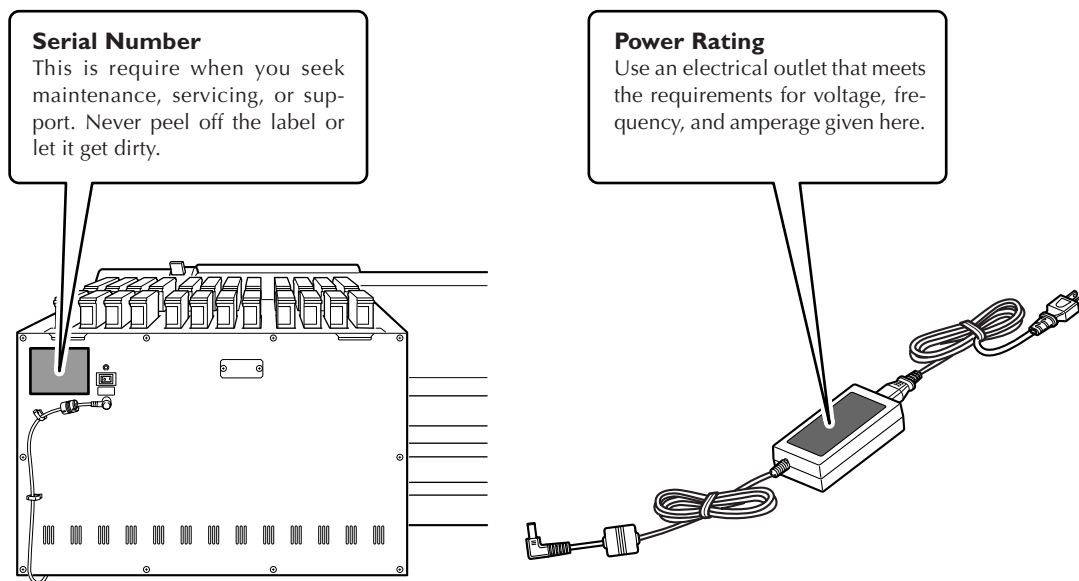
- Even when both the A and B cartridges are emptied, around 30 to 50 cc of ink remains in the sub tank. Ink runs out when the sub tank is emptied.
- Printing that has stopped can be resumed after replacing the cartridges, but streaking may occur at the seam where printing stopped and resumed. Be sure to replace cartridges before ink runs out completely.

* Note

By default, when ink runs out, printing simultaneously stops as well. The timing with which printing stops is changed by the setting made for the printer's [EMPTY MODE] menu item. For more information, refer to the documentation for the printer.

6. Appendix

Locations of the Power Rating and Serial Number Labels



Specifications

		IS-1000
Cartridge slots		24
Ink	Type	Exclusive ECO-SOL INK
	Colors	4 colors (cyan, magenta, yellow, and black) or 6 colors (cyan, magenta, yellow, black, light cyan, and light magenta)
Power supply		Dedicated AC adapter Input: AC 100 V \pm 10% 50/60 Hz 1.7 A Output: DC 24 V 2.8 A
Power consumption		Approx. 35 W
Dimensions		732 (W) x 445 (D) x 433 (H) mm (28-7/8 (W) x 17-9/16 (D) x 17-1/16 (H) in.) (excluding the stay)
Weight		46 kg (102 lb.)
Packed dimensions		860 (W) x 660 (D) x 830 (H) mm (34 (W) x 26 (D) x 32-3/4 (H) in.)
Packed weight		68 kg (150 lb.)
Environment	Power on	Temperature: 20 to 32°C (68 to 89.6°F), humidity: 35 to 80% (no condensation)
	Power off	Temperature: 5 to 40°C (41 to 104°F), humidity: 20 to 80% (no condensation)
Included items		Dedicated AC adapter, power cord, and User's Manual

