

DIGITAL PRINTER
KIP 7700
USER'S MANUAL

Version A.0 May 15, 2009

- Please read this **USER'S MANUAL** before using the printer.
- Please keep this **USER'S MANUAL** for future reference.



Thank you for purchasing the KIP 7700.

This USER'S MANUAL contains functional and operational explanations for the KIP 7700.

Please read this USER'S MANUAL carefully before using the Printer.

Please keep this USER'S MANUAL for future reference.

1. When this machine is installed in North America.

FCC ID: VP8-K120

This equipment satisfies the requirements in Part 15 of FCC Rules for a Classic A computing device. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

In order to comply with FCC radio-frequency radiation exposure guidelines for an uncontrolled exposure, this device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC 15.105(a)

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

FCC 15.21

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

2. When this machine is installed in Canada

IC Company No. & UPN No. : 7391A-K120

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.

3. When this machine is installed in Europe

This equipment complies with the requirements in Pub.22 of CISPR Rules for a Class B computing device.

Operation of this equipment in a residential area may cause unacceptable interference to radio and TV reception requiring the operator to take whatever steps are necessary to correct the interference.

Do not install Machine around other electronic equipment or other precision instruments. Other devices may be affected by electrical noise during operation.

If the Machine is installed near other electronic equipment, such as a TV or a radio, interference to said equipment, such as noise or flickering, may occur.

Use a separate power line and install the PRINTER as far as possible from said equipment.

As an ENERGY STAR ® Partner, Katsuragawa Electric Co., Ltd. has determined that this product meets the ENERGY STAR ® guidelines for energy efficiency.



The International ENERGY STAR ® Office Equipment Program is an international program that promotes energy saving through the penetration of energy efficient computers and other office equipment. The program backs the development and dissemination of products with functions that effectively reduce energy consumption. It is an open system in which business proprietors can participate voluntarily. The targeted products are office equipment such as computers, monitors, printers, facsimiles, copiers, scanners, and multifunction devices. Their standards and logos are uniform among participating nations.

The symbol shown indicates that this product conforms to Directive 2002/96/EC of the European Parliament and the council of 27 January 2003 on waste electrical and electronic equipment (WEEE) and does not apply to countries outside of EU.



Only For EU Member States

The symbol shown indicates that this product conforms to SJ/T11364-2006 of People's Republic of China Electronic Industry Standard and does not apply to countries outside of People's Republic of China.



The symbol shown indicates that this product conforms to GB 18455-2001 11364-2006 of National Standard of the People's Republic of China and does not apply to countries outside of People's Republic of China.



Safety Warning

The following warnings are very important in order to safely use this product.
These notes are important in preventing danger to the operator or operation of the printer.

The following symbols are found throughout the USER'S Manual and have the following meaning:



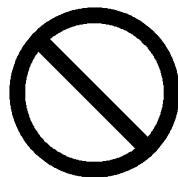
WARNING

This WARNING mark means that there is a possibility of death or serious injury if you ignore or do not follow the said instruction.



CAUTION

This CAUTION mark means that there is a possibility of injury or physical damage if you ignore or do not follow the said instruction.



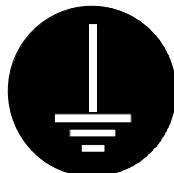
When marked with this symbol, "DO NOT ATTEMPT"



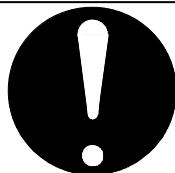
When marked with this symbol, "pay close attention to"



WARNING



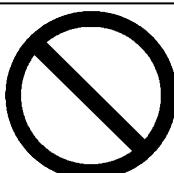
Ground the product with a correct ground source or you may be electrically shocked.



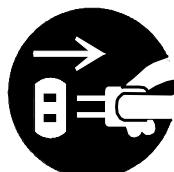
1. The Power source should be as follows:
220 to 240V plus 6% or minus 10%, 50/60Hz, 20A or higher
2. Use a circuit with a dedicated breaker.
3. Install the product as close to the wall outlet as possible.
4. If you wish to move the printer, please contact your service personnel.



1. Do not remove the screw and do not open the cover if not instructed to do so in this User's Manual. If you ignore this warning, you may be burnt or receive an electric shock due to a hot item or electrically charged part inside of the printer.
2. Do not disassemble or tamper with the printer.
It may result in a fire or an electrical shock.



1. Do not plug in the printer into a multi-wire connector in which some other equipment is plugged into.
It may cause a fire due to outlet overheating.
2. Do not damage the Power Cord by stepping on or placing heavy items on it.
If the Power Cord is damaged, it may cause a fire or you may receive an electric shock. REPLACE THE CORD IF DAMAGED!



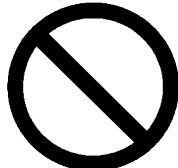
1. Do not put a flower vase, a flowerpot or any water-filled item on the product.
Spilt water could cause a fire or an electric shock.
2. If the product generates an abnormal smell or noise, turn it off and unplug it from the wall electrical outlet immediately.



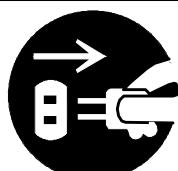
Do not throw the toner into a fire or other sources of heat, as it can explode.



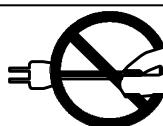
CAUTION



Do not install the printer in a humidified room or a dusty room.
Also, do not install the printer on an unstable floor as injuries may occur.



1. Unplug the printer before you move it.
The power cord may be damaged and it may result in a fire or electric shock.
2. If you do not use the printer for a long duration (holidays, company shutdown) turn off and unplug the printer from the outlet for safety.



Do not pull the cord when you unplug the printer as you may damage the Power Cord.



There are hot items inside of the printer.
Take great care not to touch these items when you remove mis-fed media.



Ventilate the room well if you print in a small area.

POWER CORD INSTRUCTION

The installation of (or exchange to) a power plug which fits in the wall outlet of the installation location shall be conducted in accordance with the following:



WARNING

Select a power plug which meets the following criteria;

- The plug has a voltage and current rating appropriate for the product's rating marked on its name plate.
- The plug meets regulatory requirements for the area.
- The plug is provided with a grounding pin or terminal.

If the appropriate plug does not fit the wall outlet in the installation, the customer shall install an appropriate outlet.

Connector Type:

Configuration	Standard	Rating	Usually found in
	IEC60320:C19	20A 250V (UL) 16A 250V (IEC)	

Plug Type: Model Rating 220-240V

Configuration	Standard	Rating	Usually found in
	NEMA6-20	20A 250V	North America (UL Listed)
	CEE7/7	16A 250V	European countries
	KS C 8305	16A 250V	Korea
	AS/NZS 3112	16A 250V	Australia New Zealand
	GB1002 GB2099.1	16A 250V	China
	IRAM 2073	16A 250V	Argentina

Cord Type

Standard	Rating	Usually found in
SJT 3X12AWG Long <4.5m	20A 250V	North America (UL Listed)
HO5VV-F 3X1.5mm ²	16A 250V	European countries Argentina
RVV 3X1.5mm ²	16A 250V	China

Chapter 1

Before Use

	page
1. 1 Installation Requirements	1- 2
1. 2 Originals Prohibited from Duplication	1- 3
1. 3 Features	1- 4
1. 4 Specifications	1- 5
1. 5 Appearance	1- 7
1. 5. 1 Front	1- 7
1. 5. 2 Rear	1- 8
1. 6 Optional Configurations	1- 9
1. 7 Specifications for Printing Media	1-10
1. 7. 1 Available Print Size	1-10
1. 7. 2 Media not to be used	1-11
1. 7. 3 Maintaining Media	1-12
1. 7. 4 Environmental Condition - Correction	1-13

1. 1 Installation Requirements

The following conditions are required for installation of the equipment.



1. Power source should be rated as follows.
220V - 240V plus 6% or minus 10%, 50/60Hz, 20A or higher
2. The equipment must be on an exclusive circuit.
3. The outlet must be near the equipment and easily accessible.



1. Make sure to connect this equipment to a grounded outlet.
2. For PLUGGABLE EQUIPMENT, the socket-outlet shall be installed near the equipment and shall be easily accessible.

The site temperature range = 10 to 32 degrees Centigrade, with the humidity between 15% to 85% RH. (NON CONDENSING)

Keep the printer away from water sources, boilers, humidifiers or refrigerators.



1. The installation site must not have open flames, dust or ammonia gases.
2. The equipment must not be exposed to the air vents from air conditioners.
It may affect the image quality.
3. The equipment should not be exposed to the direct sunlight.
Please draw curtains to block any sunlight.
When you open the Movable Unit, do not expose the Photoconductive Drum to strong (intense) light as this will damage the Drum.

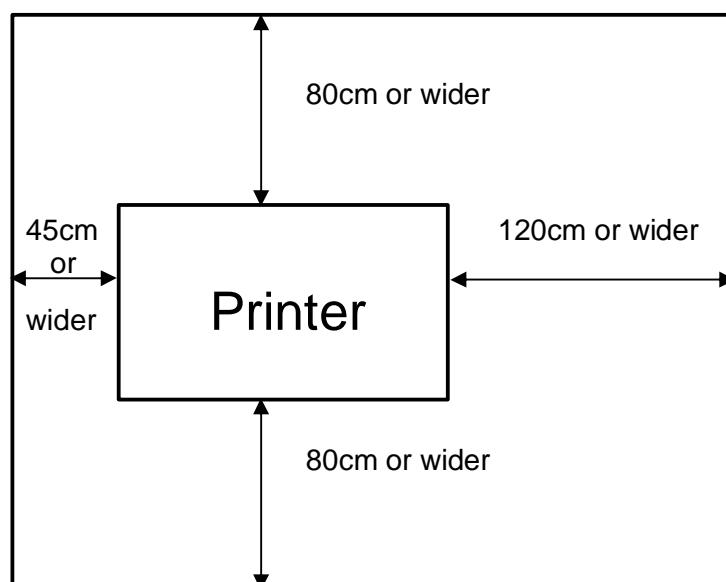


Ozone will be generated while this equipment is use, although the quantity generated is within safe levels. (see certifications)
Ventilate the room, if required.

Keep ample room around the equipment to ensure comfortable operation.

(Refer to the following figure.)

The equipment must be levelled and the floor strength must be ample to sustain the weight of the equipment.



1. 2 Originals Prohibited from Duplication

It is not necessarily allowed to copy every kind of original.

You may be punished by the law if only you possess the copy of some kind of original.

We recommend you to consider enough before you copy such original.

[Originals prohibited from copying by the law]

1. It is not allowed to copy Currency (Bill, Money, Bank Note, etc.), Government issued Negotiable Instruments (National Bonds, Security, Local Debt Bonds, etc.).
2. It is not allowed to copy Foreign Currency or Foreign Negotiable Instruments.
3. It is not allowed to copy unused postal stamps or government postcards without permission to make replica from Government.
4. It is not allowed to copy Government issued revenue stamps, certificate stamps which are prescribed by Liquor Tax Act or the Commodity Tax Act.

[Special items to be cared]

1. It is warned by the government to copy private issued securities (stock certificate, draft, check, goods ticket, etc.), commutation ticket or book of tickets, excluding that some specific company copies such originals as many as it requires for its own business.
2. We recommend you not to copy freely such originals as government issued passport, public or private issued licenses, automobile inspection certification, IDs and tickets like pass or meal.

Reference Law	Prohibited items to copy
Regulations to control fake currency and Bond.	Currency (Bill, Money, Bank Note, etc.), Government issued Negotiable Instruments (National Bonds, Security, Local Debt Bonds, etc.)
Control Law against Forged & faked Foreign Currency, Bill, Bank Note and Bond	Foreign Currency or Foreign Negotiable Instruments
Forged postal stamps control law	Unused postal stamps or government postcards
Forged revenue stamps control law	Government issued revenue stamps, and certificate stamps prescribed by Liquor Tax Act or Commodity Tax Act
Currency similarity securities Control Law	Private issued securities (stock, draft, check, goods ticket, etc.), commutation or book tickets

[Originals protected by the copyright]

It is prohibited to copy such originals as book, music, paintings, printed copy, maps, drawings, movie and pictures which are protected by the copyright, except for personnel or family use or similar purpose.

1. 3 Features

- KIP 7700 Digital Printer can make a print in a speed of 120mm per second. The maximum print size is 36 inches (914mm) wide, and the minimum one is 8.5 inches (210mm) for cut sheet media, and 11 inches (294mm) for roll media.
- The print image is more stabilized than before since we adopt a minute toner for mono-component development.
- The combination of KIP Contact Development System and mono-component minute toner can produce a high definition line, distinctive grayscale and consistent solid black. The KIP HDP process generates no Waste Toner.
- Many user operations can be made on the Touch Screen Panel (User Interface).

1. 4 Specifications

Subject	Specification		
Model	KIP 7700		
Configuration	Console		
Printing method	Electro photography		
Photoconductor	Organic Photoconductive Drum		
Print speed	120mm per second (Inch) E: 5 sheets/min (Metric) A0: 5 sheets/min		D Landscape: 9 sheets/min A1 Landscape: 9 sheets/min
Print head	LED		
Resolution	600dpi		
Print width	Maximum 36" (914mm) Minimum Roll: 11" / 297mm Cut sheet (Portrait): 8.5" / 210mm		
Print length	Maximum (Standard) 6,000mm (bond, 36" / A0 wide only) or "5 x Standard length" (bond) "2 x Standard length" (vellum) "1 x Standard length" (film) (Option) 24,000mm / Unlimited Minimum 8.5" (210mm) NOTE: If the print is longer than the maximum listed above, its image quality or the reliability of paper feeding is not guaranteed.		
Warm up time	Less than 2 minutes (23 degrees Centigrade, 60% RH and the rated voltage / Plain)		
First print time	21 seconds (A0 from Roll 1)		
Fusing method	Roll Fuser		
Development method	Dry type with non-magnetic mono-component toner		
Exposure method	LED		
Charging method	Corona		
Transfer method	Corona		
Separation method	Corona		
Input power	220V - 240V plus 6% or minus 10%, 50/60Hz, 13A		
Average power consumption	230V, 50/60Hz and Dehumidify Heater is ON Stand by 1.0kwh Printing 2.0kwh		
Acoustic noise	less than 67db (Printing) less than 55db (Standby)		
Ozone	less than 0.1ppm (Average)		
Dimensions	1369mm (Width) x 735mm (Depth) x 962mm (Height) (w/o UI) 1392mm (Width) x 854mm (Depth) x 1588mm (Height, max) (w/ UI)		
Weight	Approx. 330kg (2 Roll model) Approx. 370kg (4 Roll model)		
Media	(Recommended Media) Plain Paper US Bond (PB-20) Tracing Paper US Vellum (XV-20) Film 4MIL (OMM4X)		
Environmental condition for usage	Temperature: 10 to 32 degrees Centigrade Humidity: 15 to 85% RH		
Interface	Ethernet (10 BASE-T, 100 BASE-TX, 1000 Base-T) KIP Interface VIII		

(continued on the next page)

Storage of consumables	(Media) Wrap the media surely to shut out the humidity. (Toner cartridge) Keep the toner cartridge away from the direct sunlight, and store it in the condition of 0 to 35 degrees Centigrade and 10 to 85% RH.
------------------------	--

 **NOTE**

The above specifications are subject to change without notice.

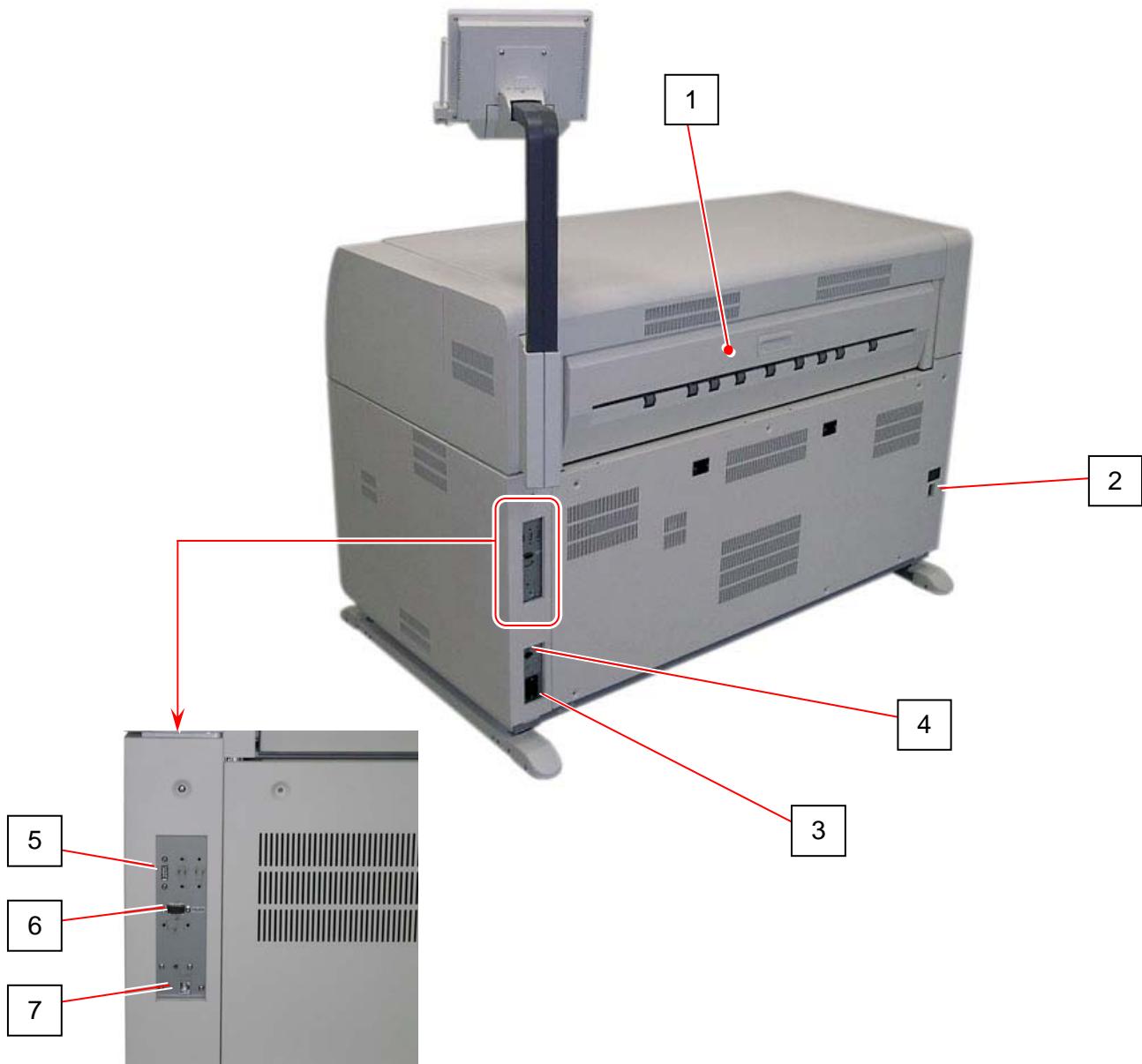
1. 5 Appearance

1. 5. 1 Front



	Name of part	Function
1	User Interface (UI)	This is a Touch Screen, and many user operations are available.
2	Top Cover	Open here to clear the mis-fed paper.
3	Manual Table	Open here to insert a cut sheet or to pull the Upper Frame Unit.
4	Roll Decks	Each Roll Deck drawer holds 2 rolls of print media.
5	Power Switch	You can turn on/off the KIP 7700.
6	Stylus	This pen is used to operate the User Interface (UI).

1. 5. 2 Rear



	Name of part	Function
1	Exit Cover	Open the Exit Cover when you remove the mis-fed media.
2	Dehumidify Heater Switch	Press "H" to turn on the Dehumidify Heater, and press "L" to turn it off.
3	Inlet Socket	Connect the power cord here. NOTE: Specification for the power cord used in North America Use the following type of power cord (UL-Listed). (1) Rating 250VAC, 20A (2) Plug type NEMA6-20 (3) Socket type IEC60320 : C19 (4) Cord SJT 3xAWG12 L <4.5m (5) UL-Listed
4	Breaker	It is possible to shut off supplying the AC power.
5	USB connector (USB2.0)	Connect the cable to this terminal for a KIP Scanner (option). (max.5Vdc)
6	COM Port	Connect the cable from a finishing device (option). (D-Sub Connector 9 pins: max.12Vdc (Small))
7	LAN Port	Connect the LAN Cable to connect the KIP 7700 to the network. (Do not connect a telephone line.)

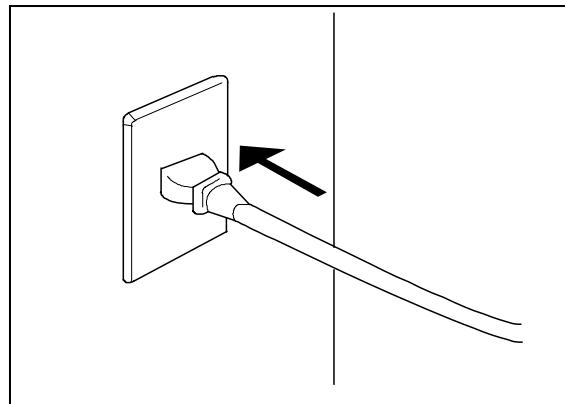
Chapter 2

Basic Operations

2. 1	Turning on KIP 7700	page 2- 2
2. 2	Turning off KIP 7700	2- 4
2. 3	Replacing Roll Media	2- 5
2. 4	Replacing Toner Cartridge	2-13
2. 5	Placing Cut Sheet Media	2-17
2. 6	Canceling Sleep Mode	2-18
2. 7	Dehumidifying Roll Media	2-19

2. 1 Turning on KIP 7700

1. Plug the printer into an exclusive wall outlet.

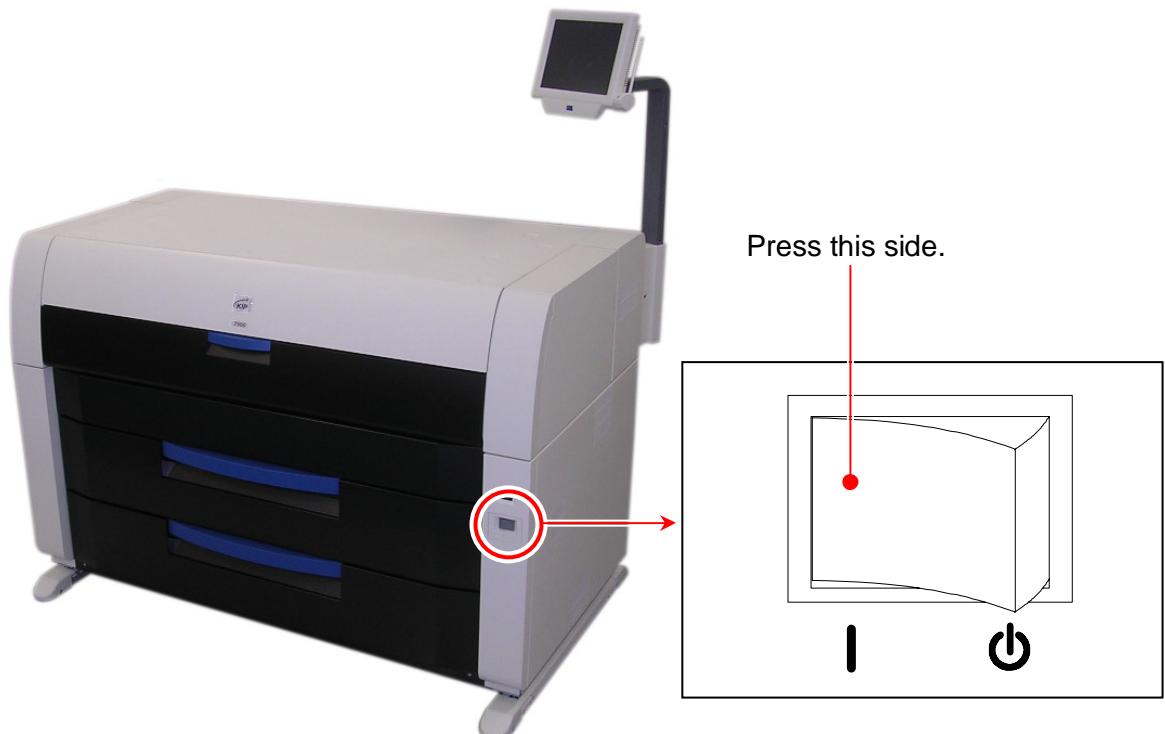


⚠ WARNING

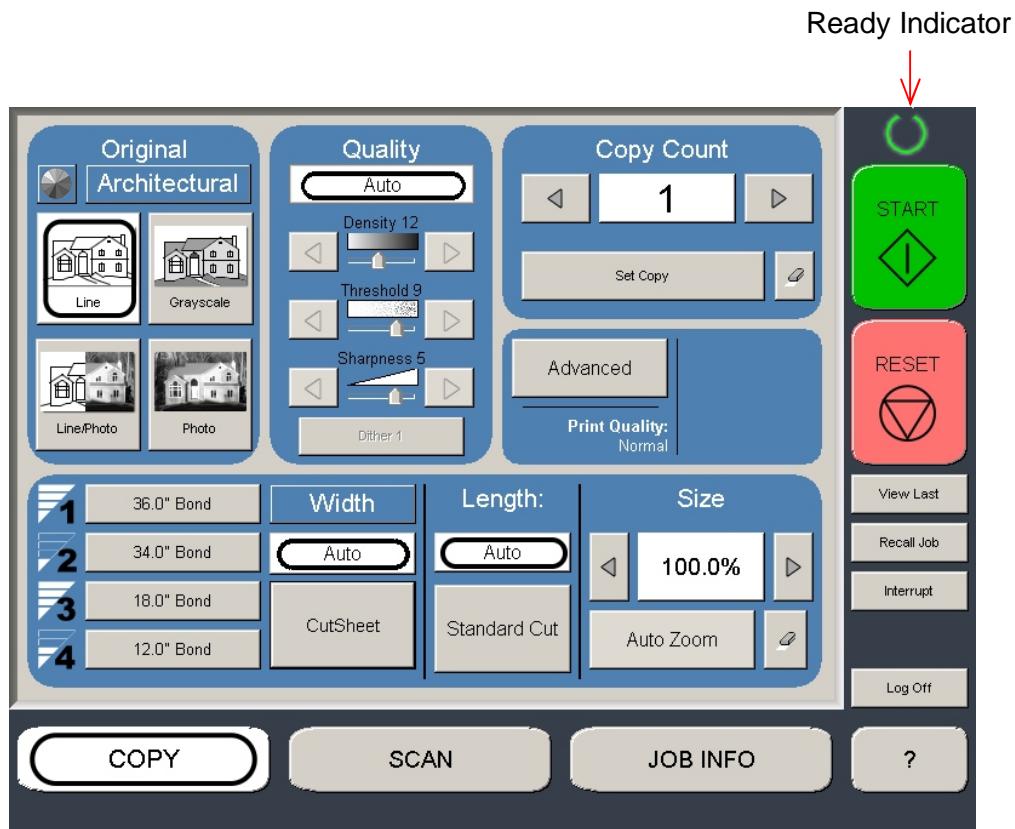
- (1) Do not handle the Power Plug with wet hands, or you may receive an electrical shock.
- (2) Ground the printer for safety.
- (3) Do not plug the printer into a multi-wiring connector in which other devices are plugged into. It may overheat the outlet and may result in a fire.
- (4) The outlet must satisfy the following rated power condition.
220V to 240V plus 6% or minus 10%, 50/60Hz, 20A or higher

2. There is Power Switch on the right-front of the printer.

Press "I" side to turn on the printer.



3. The User Interface (UI) starts operating, and displays UI Screen in one minute.
Ready Indicator on the UI will flash during warming up.



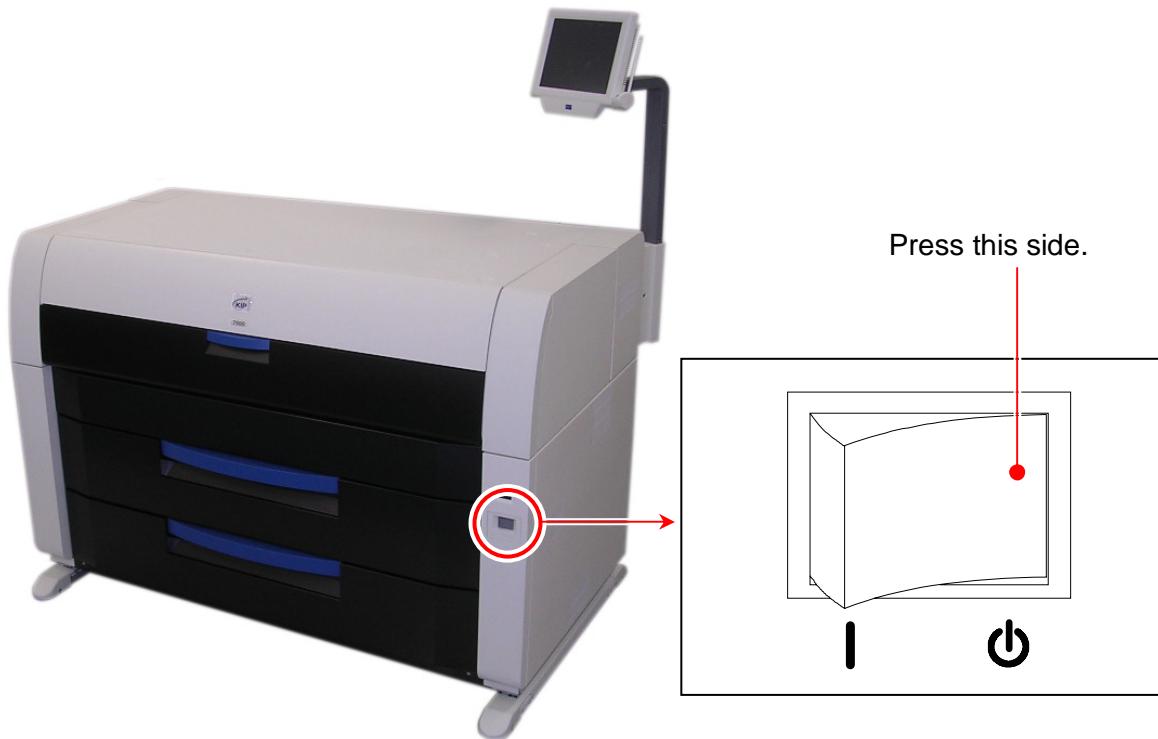
The UI screen may vary depending on your system configuration.
(Shown with available options)

4. When Ready Indicator stops flashing, the KIP 7700 is ready for operation.

⚠ NOTE

It is impossible to make any prints while Ready Indicator is flashing in orange.
Please wait until it turns in green.

2. 2 Turning off KIP 7700

1. Press “

The diagram illustrates the location of the power switch on the KIP 7700 printer. The printer is shown from a three-quarter perspective, highlighting the front panel with a black and grey design. A red circle with an arrow points to the power switch, which is a small rectangular button located on the right side of the front panel. To the right of the printer, a callout box contains a 3D-style diagram of a rectangular block. On the front face of the block, there are two icons: a vertical line representing the 'I' position and a power symbol (a circle with a vertical line) representing the 'OFF' position. A red line with an arrow points from the text 'Press this side.' to the power symbol icon in the diagram.



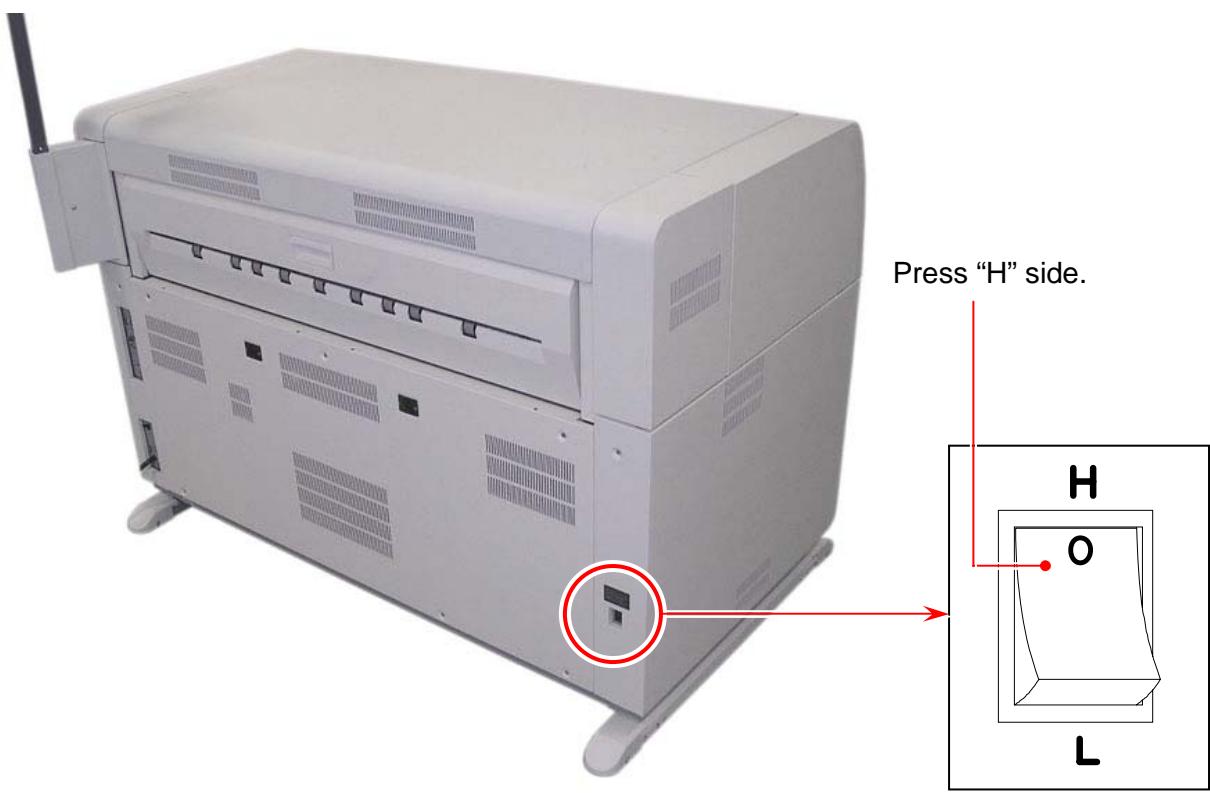
CAUTION

- (1) KIP 7700 and the UI look to be shut down when you turn off KIP 7700. However, IPS (embedded controller) is still operating in approximately 2 minutes after Power Switch operation for IPS shutdown.
Do not unplug the KIP 7700 before IPS shutdown. Doing so may damage data or the device.
- (2) If you use Dehumidify Heater for Roll Decks, the printer should be plugged while the printer is OFF. Refer to [2.6 Dehumidifying Roll Media] on page 2-19.

⚠ NOTE

- (1) There are several dehumidifying settings which can be set by service personnel. When these settings are determined, the dehumidifier functions. With any setting, the printer must be plugged in and the switch noted above must be in the "H" position.
Call your service personnel if you would like to change the switch setting.
Note that the user can not change the setting.
- (2) To achieve the best image quality, we recommend that you use media that is unpacked from the manufacture right before installing it into the printer. If media is unpacked long before installation, poor image quality may occur.

"Dehumidify Heater Switch" is located on the left-rear side of the machine.
Press "H" to turn on the Dehumidify Heater.



Dehumidify Heater Switch

Digital Printer
KIP 7700 User's Manual
Version A.0 (Issued on May 15, 2009)

Published by Katsuragawa Electric Co., Ltd.
21-1 Shimomaruko 4-Chome,
Ohta-ku, Tokyo 146-8585, Japan

All rights reserved.

Please note that some articles, illustrations and photographs might be partially different from the actual machine because of the modification of machine and so on.
