RICOH

RICOH Pro T7210

Safety Information

Safety Information for This Machine

1

Other Information for This Machine

2

Appendix

3

For information not in this manual, refer to the PDF files on the supplied CD.





Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information in this manual before using the machine.

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How to Read the Manuals

Symbols Used in the Manuals

This manual uses the following symbols:



Indicates points to pay attention to when using the machine, and explanations of likely causes of damage to media or loss of data. Be sure to read these explanations.



Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

[]

Indicates the names of keys and buttons.

Region A (mainly Europe and Asia), (mainly Europe), or (mainly Asia)

Region B (mainly North America)

Differences in the functions of Region A and Region B models are indicated by two symbols. Read the information indicated by the symbol that corresponds to the region of the model you are using.

Disclaimer

To the maximum extent permitted by applicable laws, in no event will the manufacturer be liable for any damages whatsoever arising out of failures of this machine, losses of the registered data, or the use or non-use of this product and operation manuals provided with it.

Make sure that you always copy or have backups of the data registered in this machine. Documents or data might be erased due to your operational errors or malfunctions of the machine.

In no event will the manufacturer be responsible for any documents created by you using this machine or any results from the data executed by you.

Notes

Contents of this manual are subject to change without prior notice.

Some illustrations in this manual might be slightly different from the machine.

For good output quality, the manufacturer recommends that you use genuine ink from the manufacturer.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your products.

1. Safety Information for This Machine

This chapter describes the safety precautions.

Safety Symbols for This Machine

The meanings of the safety symbols for this machine are as follows:

$\overline{\mathbf{V}}$	Caution	
70	Warning; Pinch Point	
	Warning; Crush Hazard	
澿	Warning; UV Light	
	Caution, hot surface	
[A	Caution, risk of having hands or arms caught	
Â	Caution, electric shock	
	Caution, sharp blades	
	Wear eye protection	
	Wear protective gloves	

Warning; Refer to Instruction Manual

Г

Safety Information

Safety During Operation

In this manual, the following important symbols are used:



⚠ DANGER

Indicates a potentially hazardous situation which, if instructions are not followed, will result in death or serious injury.



⚠ WARNING

Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.



ACAUTION

Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

Restrictions on Usage

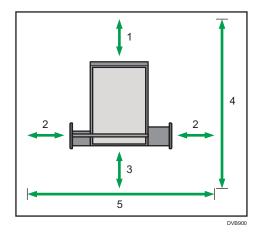
User restrictions

Having a high-speed movable part, a hot part and a UV irradiating part, this machine can be very dangerous. Before using this machine, be sure to understand the danger fully and receive proper training.

Only personnel who have fully understood the content of this document are permitted to use this machine.

Area restrictions

It is prohibited for the users other than those who have received proper training to be around the machine. Set up the restriction area within the range indicated below.



1. Rear: 155 cm (61.0 inches) or more

2. Right and left: 100 cm (39.4 inches) or more

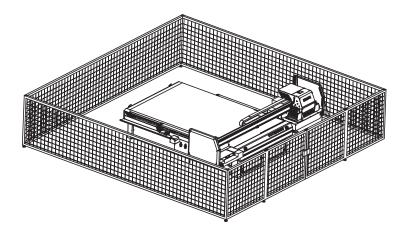
3. Front: 105 cm (41.3 inches) or more

4. Depth: 646 cm (254.3 inches) or more

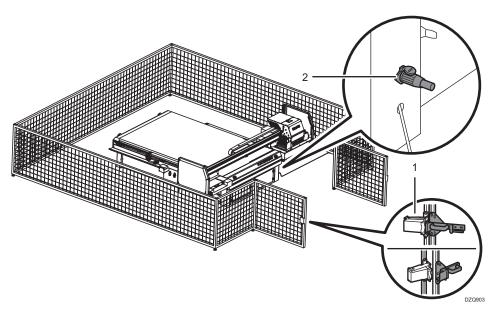
5. Width: 641 cm (252.4 inches) or more

Install this machine in a room dedicated to this machine or set up a fence and make the people recognize that the area is dangerous.

When restricting the area with safety fences, set up the safety fences in accordance with the ISO14120 standards.



DVB901



1. Interlocking system

For details about the interlock switch and connecting the switch signal line, contact your service representative.

2. Interlock switch connector

This connector allows the interlock switch to be used with the machine. Do not detach the connector yourself. If you need to detach it, contact your service representative.

When installing this machine in a dedicated room, provide the door of the room with a lock or interlock, and perform risk assessment for the installation place before using the machine.

Safety Precautions to Be Followed

This section explains safety precautions that should always be followed when using this machine.

Environments where the machine can be used

This section explains safety precautions about environments where the machine can be used.

⚠ DANGER

• Do not use the machine in an environment containing hazardous materials. This machine is not explosion-proof. Doing so could result in an explosion etc.

MARNING

Do not use flammable sprays or solvents in the vicinity of this machine. Also, avoid placing these
items in the vicinity of this machine. Doing so could result in fire or electric shock.

MARNING

- Do not place vases, plant pots, cups, toiletries, medicines, small metal objects, or containers
 holding water or any other liquids, on or close to the machine. Fire or electric shock could
 result if water or metal objects fall inside the machine.
- Make sure that the room where you are using the machine is well ventilated. Otherwise a fire or an electric shock might occur. Be sure to install a ventilator when installing the machine in a sealed room or a room with poor ventilation.
- Make sure to store ink bottles in a cool and dry place.
- Avoid mixing ink with incompatible materials.
- Keep the machine in an environment free from humidity and dust. Otherwise a fire or an electric shock might occur.
- Do not obstruct the machine's vents. Doing so risks fire caused by overheated internal components.

ACAUTION

• Be sure to adjust the level foot to keep the machine flat. Using the machine on an unstable surface might cause an injury or unexpected accident.

Handling power cords and power cord plugs

This section explains safety precautions about handling power cords and power cord plugs.

ADANGER

- Only qualified electricians are allowed to handle electrical work. This machine contains parts that generate high voltages. Failure to observe this caution might result in an electric shock.
- Do not touch energized parts when opening covers. Touching them might result in electric shock.

MARNING

- Do not use any power sources other than those that match the specifications shown. Doing so
 could result in fire or electric shock.
- Do not use any frequencies other than those that match the specifications shown. Doing so
 could result in fire or electric shock.

MARNING

- Do not use power cords that are damaged, broken, or modified. Also, do not use power cords
 that have been trapped under heavy objects, pulled hard, or bent severely. Doing so could
 result in fire or electric shock.
- Do not let the prongs of the power cord plug touch anything metallic. Doing so could result in fire or electric shock.
- It is dangerous to handle the power cord plug with wet hands. Doing so could result in electric shock.
- Be sure to disconnect the plug at least once a year and check for the following:
 - There are burn marks on the plug.
 - The plug is deformed.
- If any of the conditions above exist, do not use the plug and consult your dealer or service representative. Use of the plug could result in fire or electric shock.
- Be sure to disconnect the power cord at least once a year and check for the following:
 - The power cord's inner wires are exposed, broken, etc.
 - The power cord's coating has a crack or dent.
 - When bending the power cord, the power turns off and on.
 - Part of the power cord becomes hot.
 - The power cord is damaged.
- If any of the conditions above exist, do not use the power cord and consult your dealer or service representative. Use of the power cord could result in fire or electric shock.
- Do not pull the power cord. Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.

ACAUTION

- Do not disconnect the power cord plug. If the machine is not going to be used for several days
 or longer, contact your service representative.
- Power Source

Region B (mainly North America)

AC220 V 3P/N/PE, 30 A, 60 Hz

Please be sure to connect the power cord to a power source as above.

Handling the main machine

This section explains safety precautions about handling the main machine.

ADANGER

- Do not remove a cover or part of the machine. Doing so could result in an electrical shock.
- If you find the following, turn off its power immediately and disconnect the power cord plug, and then report the problem to your service representative. If you keep using the machine, fire or electric shock may result:
 - Generating abnormal noises
 - Generating abnormal odors
 - Emitting smoke
 - · Metal objects, water, or other fluids have fallen inside the machine
 - The power cord or power plug is damaged.
- Do not place paper or cloth on the UV lamp or bring flammable objects close to the UV lamp.
 Doing so might cause fire or smoke.

⚠ WARNING

- Do not touch this machine if thunder or lightning occurs in the immediate vicinity. Doing so could result in electric shock.
- Do not bring your clothing or body close to the movable parts of the machine. They might become caught in the machine and injury might result.
- Do not wear bracelets, etc. while using the machine. They might become caught in the machine
 and injury might result.

MARNING

- Do not look directly at the UV lamp or apply the UV lamp to your skin. The UV lamp emits harmful ultraviolet (UV) light that might cause serious burns to your skin or eyes. Although you may feel the effect of a heat burn immediately, you might not feel a UV burn for several hours. Being exposed to radiation from the lamp for only a short time means it is likely that your skin or eyes are seriously burnt. UV burns will affect the cornea, and you will need medical treatment. A UV burn is the same as a welding burn, and you will feel something unwashable in your eyes when having a UV burn. This pain is temporary. Be very careful because receiving strong UV radiation is likely to result in the loss of your eyesight.
- Being exposed to UV radiation for a certain period of time will cause erythema on normal skin.
 As the UV radiant quantity reaching the Malpighian layer is very small, such erythema is
 transient and unlikely to cause a blister or sunburn. Be very careful because receiving strong
 UV radiation is likely to result in a serious burn on your skin.
- This machine emits UV radiation and conforms to IEC 62471 RISK GROUP 3. Do not expose your eyes and skin to this machine as it is not shielded from light.
- Do not touch the UV lamp. As it becomes very hot, touching the UV lamp might cause injury or burns.
- If high-temperature caution labels are affixed on parts of the machine, do not touch the parts or areas around them. Touching these parts might cause an injury or burns. When touching a hot section, make sure to protect your hands by wearing heat-resistant gloves etc.
- Do not place your hand under the gantry when the machine is working. Doing so could result in injury.
- Do not touch the gantry when the machine is working. Doing so could result in injury.
- Do not touch the chain when the machine is working. Touching it, you may have your hand caught in the machine and be injured.
- Do not mount the table. Mounting it could result in injury or lowered accuracy of the board face.
- Wash the machine regularly. If dust and dirt accumulate on parts, it might cause short circuit or insulation deterioration, and fire or smoke may result.
- Keep the warning labels on this machine legible. If any of the warning labels become so smeared that the warning message is illegible or has come off, contact your dealer or sales representative.

ACAUTION

- Do not touch buttons, switches, or controls by mistake. Touching them by mistake might activate the machine and cause an injury or unexpected accident.
- Make sure to wear protectors such as safety shoes and gloves when using heavy media. Using heavy media without wearing protections might cause an injury.
- Be sure to perform inspections and replace components regularly.
- Do not disassemble or modify the vacuum. Also, do not cover the vacuum outlet. Doing so might decrease the level of adherence and cause overheating or malfunction.

Handling the machine's interior

This section explains safety precautions about handling the machine's interior.

⚠ WARNING

- Do not attempt to disassemble or modify the machine. Doing so risks burns and electric shock.
- If the machine's interior is not cleaned regularly, dust will accumulate. Fire and machine failure can result from heavy accumulation of dust inside this machine. Contact your sales or service representative for details about and charges for cleaning the machine's interior.

⚠ CAUTION

 Some of the internal components of this machine might be fragile. Do not touch the sensors, connectors, LEDs, or other fragile parts. Doing so may cause malfunctions.

Handling the machine's supplies

Unless handled appropriately, UV ink might cause harmful effects. Before disposing of UV ink or using the machine, be sure to read the Safety Data Sheet (SDS) and follow the descriptions.

As required by law, display the safety-related guidelines explained in the SDS in your working area. You will receive an SDS for all 7 colors of ink. This Safety Information describes the key safety guidelines common to all UV ink, which is explained in the SDS.

For cleaning liquid, carefully read the precautions on the label affixed to the bottle.

MARNING

- When the printer is in a poorly ventilated area it is recommended that anyone handling ink wear a organic vapor mask or similar protection in order to prevent the direct breathing of the ink vapors. If you breathe it in, one can experience sharp pain to the respiratory system, vertigo, weakness, tiredness, nausea, headaches, and unconsciousness could occur as a result. If this is the case, move to another area with fresh air and take a posture that facilitates respiration.
- As this ink irritates your eyes severely, wear protective eyeglasses and make sure that the ink
 does not come into contact with your eyes. If it does, wash your eyes thoroughly with water for
 several minutes. If you are wearing contact lenses which can be easily removed, remove them.
 After removing the contact lenses, continue to wash your eyes. If irritation persists, consult a
 doctor for treatment.
- This ink may have adverse effects on fertility and unborn children, so read and understand the safety precautions before handling the ink, wear protectors (protective gloves, protective clothing, safety glasses, face protections), and take care so that ink does not come into contact with your skin, eyes, and clothing. If it does, wash them thoroughly. Also, be sure to handle the ink in a place with suitable ventilation, and after use, store it in a cool place. Dispose of ink and containers in an approved waste treatment facility (or entrust the disposal to an industrial waste treatment firm).
- As this ink is toxic to aquatic organisms such as fish and algae, do not release it into rivers or the sea.
- Be careful not to accidentally swallow ink or cleaning liquid for maintenance. Swallowing them
 may cause abdominal discomfort, nausea, vomiting, diarrhea, etc. If this is the case, dilute it
 instead of vomiting. Consult a doctor immediately.
- Be careful not to spill ink. Avoid ink flowing into the natural water system or household wastewater. Ink causes irritation and is toxic.
- Make sure to store ink in a cool, dark place. Also store the ink in a place that can be locked so
 that the ink is out of the reach of children.
- Make sure to store cleaning liquid for maintenance in a cool and dark place and in a place that is out of the reach of children.

ACAUTION

- While replacing ink, be sure to wear gloves, a protective apron, and other protectors so that
 ink does not come into contact with your skin. If your skin is smeared with ink, strong pains,
 degreasing, dermatitis, etc. may result. If it does, take off the clothing immediately after it is
 smeared with ink, and wash it using soap and water, and then consult your doctor. If reusing
 contaminated clothing, wash it promptly after contamination.
- Replace gloves regularly. Also wash protectors regularly. After using them and before eating
 or drinking, wash your hands and any other exposed parts with soap and water. It is
 recommended to wear a coverall for the skin and clothes with long sleeves.
- Do not give a shock to the ink bottles. Doing so might cause the ink to leak.

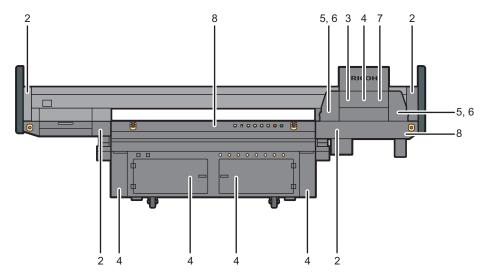
Safety Labels of This Machine

This section explains the machine's safety information labels.

Positions of WARNING and CAUTION labels Region B (mainly North America)

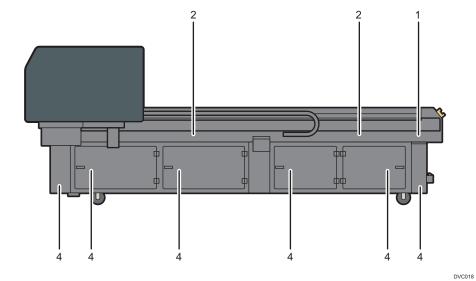
This machine has labels for \triangle DANGER, \triangle WARNING, \triangle CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.

Front View

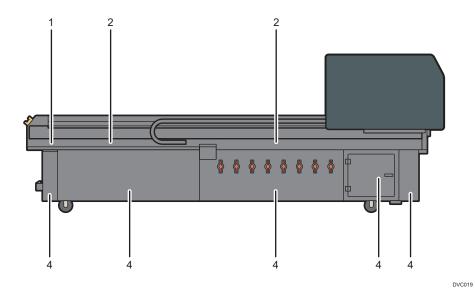


DZQ017

Right Side View

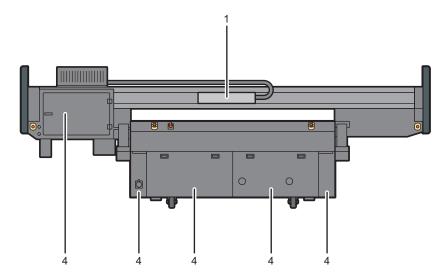


Left Side View



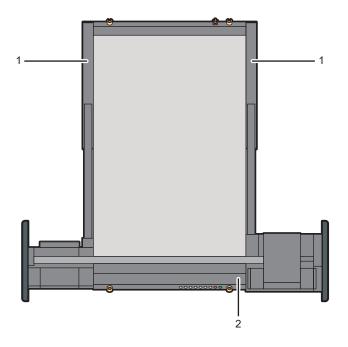
1

Rear View



DYJ020

Upper View



DYJ021

	Symbol	Description
1	Moving partscan crush andcut. Do not operate with guard removed. Les pièces en mouvement peuvent écraser et couper. N'utilisez pas le dispositif de protection.	Warning Safety Label: Moving Parts Can Crush And Cut, Do Not Operate With Guard Removed
2	Moving parts can crush and cut. Keep hands clear. Follow lockout procedure before servicing. ATTENTION Les pièces en mouvement peuvent écraser et couper les procédures la procédure de verrouillage avant l'entretien.	Warning Safety Label: Moving parts can crush and cut. Keep hands clear. Follow lockout procedure before servicing-LB-0128
3	Burn hazard. Hot surface inside. Allow to cool before serving. Allow to cool before serving.	Hot-Surface-Hazard-Safety-Label
4	Electrical Hazards. Authorized personnal only. Danger électrique. Personnel autorisé seulement.	Electrical-hazards-authorized-personnel-label
5	WARNING UV LIGHT. Do not look directly at light. Lig	Warning Safety Label: UV LIGHT. Do not look directly at light.
6	Eye protection required. Protection des yeux nécessaire.	Caution Safety Label: Eye protection required.
7	Wear protective gloves. ATTENTION Porter des gants de protection.	Caution Safety Label: Wear protective gloves

	Symbol	Description	
8	Read and fully understand operator's meanual before using this machine. Failure to follow operating instructions could result in death or serious injury.	Warning Label: Read and fully understand operator's manual before using this machine	

Symbols for Power Switch

The meanings of the symbols for the switches on this machine are as follows:

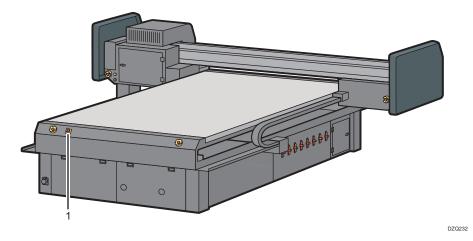
• I : POWER ON

• O : POWER OFF

• U: STANDBY

Notes on the Main Power Switch

Do not turn the machine off using the main power switch on the back of the machine. Turning the machine off with the main power switch stops the application of pressure to the print head, resulting in ink leakage. If you need to turn the machine off with the main power switch, contact your service representative.



1. Main power switch

Locations of Safety Measures

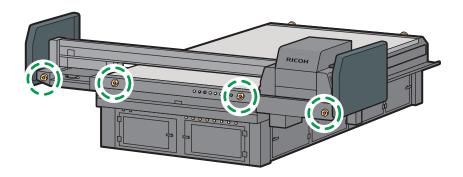
Safety measures have been installed on this machine in the locations shown below.

Emergency Buttons

Press them when stopping the machine urgently for safety reasons.

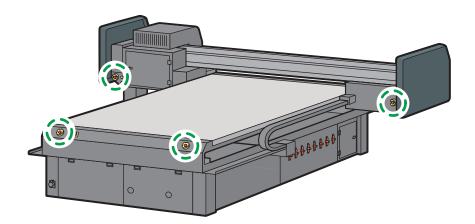
The emergency buttons are located in 4 positions: 2 buttons on the front of the machine, 2 buttons on the rear of the machine, 2 buttons on the front side of the gantry, and 2 buttons on the rear side of the gantry. After performing an emergency stop, confirm that everything is safe before canceling the emergency stop.

Front View



DYJ144

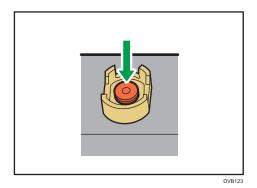
Rear View



DYJ146

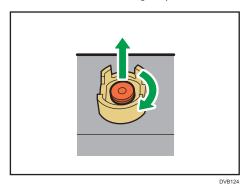
To stop the machine in case of emergency

Press the emergency button.



To release an emergency stop

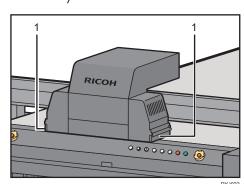
Turn the base of the emergency button in the direction of the arrow.



If pressing any of the emergency buttons, the machine turns off the power automatically. After releasing the emergency button, be sure to turn the power switch on the control section on the front part of the machine off and then back on.

Jam-detecting Feeler

When the carriage interferes with media, a jam-detecting feeler detects an error and stops the carriage immediately.

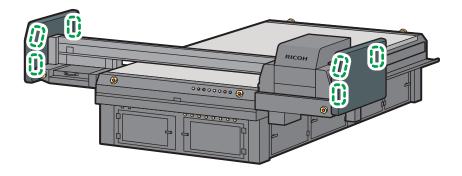


1. Jam-detecting feeler

Proximity Sensor

The sensor stops the machine if it senses someone approaching the carriage's movable range.

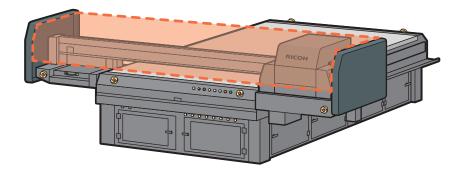
There are 3 proximity sensors on each side of the machine.



DYJ251

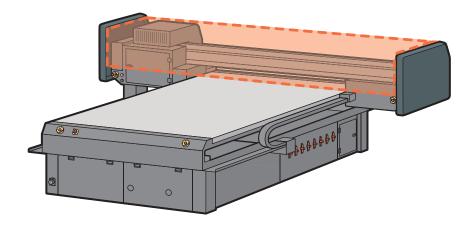
The sensors cover the following areas.

As seen from the front of the machine



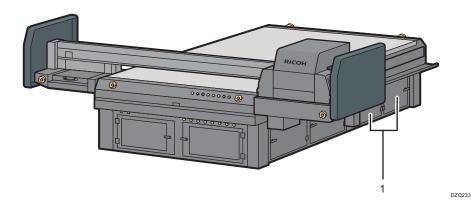
DYJ221

As seen from the back of the machine



DYJ222

Opening and Closing the Covers



1. Two Covers on the Right Side of the Rear Part

- If you open either of the covers on the right side of the rear part, the main power switch turns off.
 Because this could cause ink leakage, do not leave the covers open. After closing them, turn on the power switch on the control section on the front part of the machine.
- When you open any other cover, the machine will stop. To resume machine operation, close the
- There is a lock for each cover handle. Lock the covers if necessary.

2. Other Information for This Machine

This chapter describes laws and regulations relating to this machine and provides other relevant information.

Laws and Regulations

Duplication and Printing Prohibited

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

Notes on Disposing

When disposing of waste ink and containers, gloves, etc. to which ink has adhered, follow the rules determined by the country or local government. The material might become subject to incineration as industrial waste or the combustion-mixed program. This classification might differ depending on the judgment of waste management suppliers. If possible, recycle the material. When disposing of machines, contact your service representative. Perform waste disposal properly based on the laws of the local government in each region.

Notes to Canadian Users of ICES-003 Conformance

CAN ICES-3 (A)/NMB-3(A)

Notes to Users in the United States of America

FCC Rules

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.

Caution:

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

Supplier's Declaration of Conformity

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

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

Responsible party: Ricoh USA, Inc

Address: 70 Valley Stream Parkway Malvern, Pennsylvania 19355

Telephone number: 610-296-8000

Product Name: Inkjet Printer

Model Number: RICOH Pro T7210

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20 cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

Notes to users in the state of California (Notes to Users in USA)

Perchlorate Material - special handling may apply. See: www.dtsc.ca.gov/hazardouswaste/perchlorate

Important Notes for Users

Noise Emission

In normal operations, the printer's noise level does not exceed 75 dB (A).

We recommend using a noise reduction enclosure.

Ventilation

When you use this product for a long period of time or carry out large-volume printing, the machine may emit volatile organic compounds and give off odors. We recommend providing suitable ventilation when you use the product.

Use the process enclosure, a local exhaust/ventilation system, or another control system to keep the concentration of volatile organic compounds below the safety threshold * 1.

* 1 The chemical substance safety threshold specified by the American Conference of Governmental Industrial Hygienists (ACGIH).

Recommended ventilation capacity: 2,500 m³/hour (for a deployment location having an installation area twice the minimum and 3 meters headroom)

3. Appendix

This appendix describes trademarks for the machine.

Trademarks

Adobe is a trademark of Adobe Systems Incorporated in the United States and/or other countries.

Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

MEMO

MEMO

MEMO