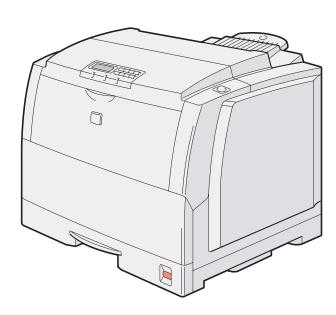


# RICOH COLOR LASER AP305

# **OPERATING INSTRUCTIONS**



Read this manual carefully before you use this product and keep it handy for future reference.

For safety, please follow the instructions in this manual.



## RICOH COMPANY, LTD.

15-5, 1 chome, Minami-Aoyama, Minato-ku, Tokyo Telephone: Tokyo 3479-3111



# **Overseas Affiliates**

#### U.S.A.

RICOH CORPORATION 5 Dedrick Place West Caldwell, New Jersey 07006 Phone: +1-973-882-2000

#### The Netherlands

RICOH EUROPE B.V. Groenelaan 3, 1186 AA, Amstelveen Phone: +31-(0)20-5474111

## United Kingdom

RICOH UK LTD. Ricoh House, 1 Plane Tree Crescent, Feltham, Middlesex, TW13 7HG Phone: +44-(0)181-261-4000

## Germany

RICOH DEUTSCHLAND GmbH Mergenthalerallee 38-40, 65760 Eschborn Phone: +49-(0)6196-9060

## France

RICOH FRANCE S.A. 383, Avenue du Général de Gaulle BP 307-92143 Clamart Cedex Phone: +33-(0)1-40-94-38-38

#### Spair

RICOH ESPAÑA S.A. Avda. Litoral Mar, 12-14, 08005 Barcelona Phone: +34-(0)93-295-7600

## Italy

RICOH ITALIA SpA Via della Metallurgia 12, 37139 Verona Phone: +39-(0)45-8181500

## **Hong Kong**

RICOH HONG KONG LTD. 23/F., China Overseas Building, 139, Hennessy Road, Wan Chai, Hong Kong Phone: +852-2862-2888

## Singapore

RICOH ASIA PACIFIC PTE.LTD. 260 Orchard Road, #15-01/02 The Heeren, Singapore 238855 Phone: +65-830-5888

Model number: G024-57

Printed in Japan

UE (USA) G024-8607

#### Introduction

This manual contains detailed instructions on the operation and maintenance of this machine. To get maximum versatility from this machine all operators should carefully read and follow the instructions in this manual. Please keep this manual in a handy place near the machine.

Please read the Safety Information before using this machine. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

#### **Power Source**

120 V, 60 Hz, 10 A or more

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

#### **Operator Safety:**

This machine is considered a CDRH class I laser device, safe for office/ EDP use. The machine contains 10-milliwatt, 760 - 800 nanometer wavelength, GaAIAs laser diode. Direct (or indirect reflected) eye contact with the laser beam might cause serious eye damage. Safety precautions and interlock mechanisms have been designed to prevent any possible laser beam exposure to the operator.

### **Laser Safety:**

The Center for Devices and Radiological Health (CDRH) prohibits the repair of laser-based optical unit in the field. The optical housing unit can only be repaired in a factory or at a location with the requisite equipment. The laser subsystem is replaceable in the field by a qualified Customer Engineer. The laser chassis is not repairable in the field. Customer engineers are therefore directed to return all chassis and laser subsystems to the factory or service depot when replacement or the optical subsystem is required.

#### **Important**

Parts of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

#### Caution:

Use of controls or adjustment or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

Do not attempt any maintenance or troubleshooting other than that mentioned in this manual. This machine contains a laser beam generator and direct exposure to laser beams can cause permanent eye damage.

Two kinds of size notation are employed in this manual. With this machine refer to the Inch version.

Ricoh shall not be responsible for any damage or expense that might result from the use of parts other than genuine Ricoh parts in your Ricoh office product.

For good copy quality, Ricoh recommends that you use genuine Ricoh toner.

#### Note to users in the United States of America

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#### Notice:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help.

### Warning

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

#### Caution (in case of 100BaseTX environment):

Properly shielded and grounded cables (STP) and connectors must be used for connections to host computer (and/or peripheral) in order to meet FCC emission limits.

## **Declaration of Conformity**

Product Name: Printer Model Number: G024–57

Responsible party: Ricoh Corporation

Address: 5 Dedrick Place, West Caldwell, NJ 07006

Telephone number: 973-882-2000

This device complies with part 15 of FCC Rules.

Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- 2. this device must accept any interference received,

including interference that may cause undesired operation.

Properly shielded cables must be used for connections to host computer (and/or peripheral) in order to meet FCC emission limits.

Network interface cable with ferrite core must be used for RF interference suppression.

Note to users in Canada

#### Note

This Class B digital apparatus complies with Canadian ICES-003.

Remarque concernant les utilisateurs au Canada

# 

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Avertissement:

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

In accordance with IEC 60417, this machine uses the following symbols for the main power switch:

I means POWER ON.

O means POWER OFF.

Copyright © 1999 Ricoh Co., Ltd.

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This manual contains detailed instructions on the operation and maintenance of this machine. To get maximum versatility from this machine all operators should carefully read and follow the instructions in this manual. Please keep this manual in a handy place near the machine.

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120 V, 60 Hz, 10 A or more

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Two kinds of size notation are employed in this manual. With this machine refer to the Inch version.

Savin shall not be responsible for any damage or expense that might result from the use of parts other than genuine Savin parts in your Savin office product.

For good copy quality, Savin recommends that you use genuine Savin toner.

# Note to users in the United States of America

Notice:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

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Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help.

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Network interface cable with ferrite core must be used for RF interference suppression.

Note to users in Canada

•	•	•		•	•		•	•	•	•		•		•	•		•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•		•	•	•	•	•	•		•	•	•	•

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Gestetner shall not be responsible for any damage or expense that might result from the use of parts other than genuine Gestetner parts in your Gestetner office product.

For good copy quality, Gestetner recommends that you use genuine Gestetner toner.

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Notice:

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•	•	•		•	•		•	•	•	•		•		•	•		•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•		•	•	•	•	•	•		•	•	•	•

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means POWER ON.

O means POWER OFF.

#### **Trademarks**

Microsoft<sup>®</sup>, Windows<sup>®</sup>, Windows NT<sup>®</sup>, and MS-DOS<sup>®</sup> are registered trademarks of Microsoft Corporation in the United States and/or other countries.

PostScript<sup>®</sup> is a registered trademark of Adobe Systems. Incorporated.

AppleTalk, Apple, and TrueType are registered trademarks of Apple Computer, Incorporated.

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

#### Notes:

Some illustrations might be slightly different from your machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

#### Notes:

The proper names of the Windows operating systems are as follows:

- Microsoft® Windows® 95 operating system
- Microsoft® Windows® 98 operating system
- Microsoft® Windows® for Workgroups operating system Version 3.11
- Microsoft® Windows NT® Server network operating system Version 4.0
- Microsoft® Windows NT® Workstation operating system Version 4.0

# **Safety Information**

When using your equipment, the following safety precautions should always be followed.

# **Safety During Operation**

In this manual, the following important symbols are used:

## **⚠ WARNING:**

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

# **A** CAUTION:

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

## **↑** WARNING:

- Connect the power cord directly into a wall outlet and never use an extension cord.
- Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.
- To avoid hazardous electric shock or laser radiation exposure, do not remove any covers or screws other than those specified in this manual.
- Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following conditions exists:
  - You spill something into the equipment.
  - You suspect that your equipment needs service or repair.
  - Your equipment's cover has been damaged.
- Do not incinerate spilled toner or used toner. Toner dust might ignite when exposed to an open flame.
- Disposal can take place at our authorized dealer or at appropriate collection sites.
- If you dispose of the used toner containers yourself, dispose of them according to your local regulations.

## **A CAUTION:**

- Protect the equipment from dampness or wet weather, such as rain, snow, and so on.
- Unplug the power cord from the wall socket before you move the equipment. While moving the equipment, you should take care that the power cord will not be damaged under the equipment.
- When you disconnect the power plug from the wall socket, always pull the plug (not the cable).
- Do not allow paper clips, staples, or other small metallic objects to fall inside the equipment.
- Do not eat or swallow toner.
- Keep toner (used or unused) and toner cartridge out of reach of children.
- For environmental reasons, do not dispose of the equipment or expended supply's wastes at a household waste a collection point. Disposal can take place at our authorized dealer or at an appropriate collection site.
- Our products are engineered to meet the highest standards of quality and functionality. When purchasing expendable supplies, we recommend using only those specified by an authorized dealer.
- The inside of the machine could be very hot. Do not touch the parts with a label indicating the "hot surface". Otherwise, it could cause a personal burn.
- If you use this printer in a cold area, leave the printer on. Otherwise, severe cold might damage sensitive components inside the printer.

# **Energy Star Program**



As an ENERGY STAR Partner, we have determined that this machine model meets the ENER-GY STAR Guidelines for energy efficiency.

The ENERGY STAR Guidelines intend to establish an international energy-saving system for developing and introducing energy-efficient office equipment to deal with environmental issues, such as global warming.

When a product meets the ENERGY STAR Guidelines for energy efficiency, the Partner shall place the ENERGY STAR logo onto the machine model.

This product was designed to reduce the environmental impact associated with office equipment by means of energy-saving features, such as Low-power mode.

# Low-power mode (Energy Saver mode)

This printer automatically lowers its power consumption 60 minutes after the last operation has been completed when the Energy Level is set to level 1. To exit Low-power (Energy Saver) mode, press any key on the operation panel. To change the setting of the Energy Saver mode, see P.95 "Making Printer Settings with the Operation Panel".

# Specifications

Lower-power mode	Power Consumption	45W or less
(Energy Saver mode)	Default Time	60 minutes

# Recycled Paper

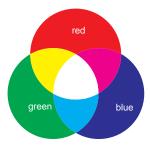
Please contact your sales or service representative for recommended recycled paper types that may be used in this machine.

# **Color Guide**

# **Color Printing Basics**

## Additive (Emitted) and Subtractive (Reflected) Color Models

All light is a mixture of red, green, and blue, which is normally called the RGB model. When red, green, and blue are of equal intensities, the RGB color model produces white.



# Note

□ RGB is also called additive or emitted color. The colors on your computer screen are produced by varying the intensities of RGB.

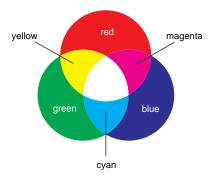
Printed color is a mixture of cyan, magenta, and yellow, which is normally called the CMY color model. When mixed in equal proportions the CMY color model produces black.





☐ CMY is also called subtractive or reflective color. Your printer uses CMY toner plus K (black) toner (CMYK color model) to provide full color printing.

The colors of the RGB color model can be mixed to produce the cyan, magenta, and yellow of the CMY color model and vice versa. Two colors of one model are mixed to produce the color of the other model (mixing blue and green produces cyan, for example). The remaining color is the compliment of the color produced (red in this example). Complimentary colors are: red and cyan, green and magenta, blue and yellow.



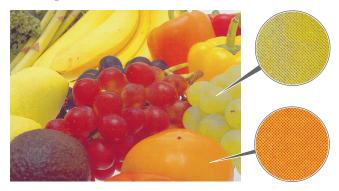
## **Printed Color**

Your printer produces full-color output using four toner colors: cyan, magenta, yellow, and black. These four colors make up the CMYK color model.

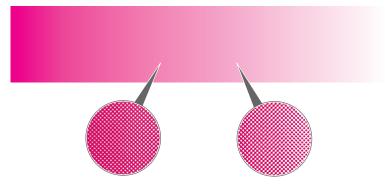
# Note

☐ Mixing CMY in equal proportions should hypothetically produce pure black, but imperfections in the ink cause an equal measure of these colors to produce a muddy or dark brown. Black toner is added to the color model in order to make it possible to produce pure black.

If an image consisted of nothing by cyan, for example, cyan toner would be used by itself and there would be no problem producing the desired color. Full-color printing, on the other hand, requires reproduction of tens of thousands of subtle colors. These can be produced by controlling the relative proportions of the CMYK toner particles printed within a unit area.



Relatively dense and light shades of the same color also can be reproduced by controlling the volume of toner in a unit area.



# **Example of Color Adjustments Using the Printer Driver**

The following provides a number of examples to show you what happens when you change the various color settings provided in the printer driver.

## Resolution

Resolution is the number of dots the printer can print within one inch. Resolution is expressed in units of dpi, which stands for dots per inch. The higher the resolution, the better the quality of the printed image.

# Note

☐ Printing at a high resolution takes longer and requires more printer memory.

# ♦ 600 dpi



# ❖ 300 dpi



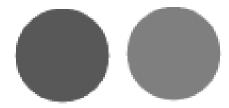
# **Edge Smoothing**

Edge Smoothing is a technique used for improving the print quality of text and graphics. Indentations in curved lines are automatically smoothed to produce a clearer appearance.

# Limitation

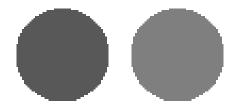
☐ Printing photographs or images containing gradations may result in a change in image quality with Edge Smoothing on.

## ♦ Auto:



Edge Smoothing is effective. However, this setting is ignored when [2 bit] is selected for the [Color Level] on the [Color Setting] tab.

## ◆ Off:



Edge Smoothing is not effective.

# **Toner Saving**

Turning on Toner Saving reduces the amount of toner used for printing. This setting does not help to improve printout quality, but instead is used when printing preliminary drafts of a document.

# Limitation

☐ Turning on the Toner Saving can cause output to become blurred and result in very thin lines not printing at all. It can cause colors to be different than expected when printing color.

## ◆ Off



## On



## **Image Printing**

This setting lets you select the resolution for printing of image data.

## Standard



All image data with a resolution greater than 300 dpi is printed at 300 dpi.

## ◆ Fast



All image data with a resolution greater than 150 dpi is printed at 150 dpi. This increases printing speed, but can make image data appear rough.

## Fine



Prints image data at the resolution set in **[Resolution]**. If 300 dpi is selected, all image data with a resolution greater than 300 dpi is printed at 300 dpi. If 600 dpi is selected, all image data with a resolution greater than 600 dpi is printed at 600 dpi. This slows down printing speed, but produces the best quality.

# **Color Adjustments Using the Printer Driver**

The following provides a number of examples to show you what happens when you change the various color settings provided in the printer driver. The colors produced by the printer do not exactly match those you see on your monitor. This is because the computer uses the emitted color model (RGB) while the printer uses the reflected color model (CMYK). The color settings provide a number of controls that you can use to bring printed colors closer to what they look like on your monitor. You can also use these settings to perform color correction, which changes the clarity of the image.

# 

See the printer driver's online help for details about making this setting.

## **Color Correction**

Use these settings to adjust the color correction pattern.

## ◆ Off



#### Vivid



This setting enhances the basic colors for text and graphics. This setting is best for printing tables, graphs, and presentation materials that contain color.

# Photographic



This setting enhances midtone colors similar to those seen in photographs.

# **Color Level**

Use to set the number of colors used per dot. ( [2 bit] uses a greater number of colors than [1 bit])

# ♣ 1 bit

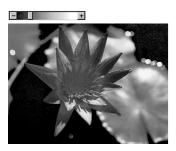


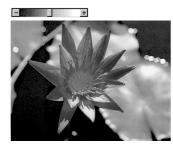
# ❖ 2 bit

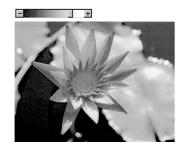


## **Brightness**

This setting controls the overall brightness of the image. Moving the slider to the plus (+) side increases brightness, while moving it to the minus (-) side decreases brightness.

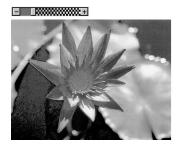


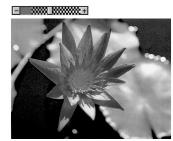


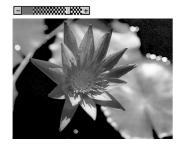


## Contrast

This setting controls the range between the darkest and lightest shade of an image. Moving the slider to the plus (+) side decreases the range and makes contrast stronger, while moving it to the minus (-) side expands the range.

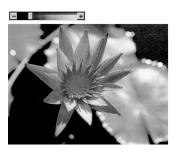


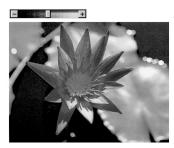


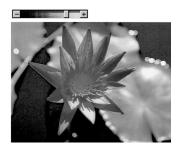


## Saturation

This setting controls the purity of a color. Moving the slider to the plus (+) side increases saturation and makes colors more vivid, while moving it to the minus (-) side decreases saturation.





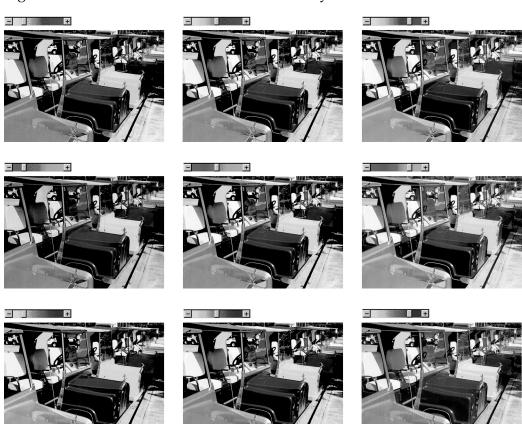


## **Color Balance**

These settings let you control the relative intensity of the individual colors of the additive color model (red, green, blue).

# Note

☐ The position of the color bar also affects the complementary color relationship. Red, for example, is printed using magenta and yellow toner, so increasing the level of red also decreases the level of cyan.



# **Manuals for Your Printer**

# **Manuals for Your Printer**

There are two manuals that describe the procedures separately for the installation of your printer and for the operation and maintenance of your printer and its optional equipment.

To enhance safe and efficient operation of your printer, all users should read and follow the instructions contained in the following manuals.

## Quick Installation Guide

Describes the procedures for installing your printer.

# Operating Instructions (this manual)

Describes the procedures and necessary information on setting up and using your printer and its optional equipment.

# How to Read this Manual

## **Symbols**

In this manual, the following symbols are used:

# **MARNING:**

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

## **↑** CAUTION:

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

\* The statements above are notes for your safety.

# **#Important**

If this instruction is not followed, paper might be misfed, originals might be damaged, or data might be lost. Be sure to read this.

# **Preparation**

This symbol indicates the prior knowledge or preparations required before operating.

# Note

This symbol indicates precautions for operation, or actions to take after misoperation.

# Limitation

This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

# 

This symbol indicates a reference.

# [ ]

Keys that appear on the machine's panel display.

Keys and buttons that appear on the computer's display.

Keys built into the machine's operation panel.

Keys on the computer's keyboard.

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# 5. Paper and Other Media

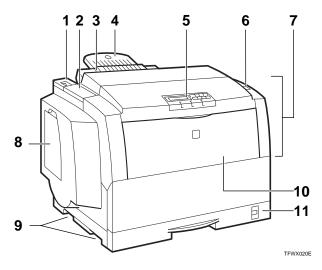
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# 1. Getting Acquainted

# Guide to the Printer

# **Exterior-Front View**



# 1. Power Switch

Use this switch to turn printer power on and off.

#### 2. Fuser Oil Bottle Cover

Open this cover when replacing the fuser oil bottle.

## 3. Output Tray

Printed pages are stacked here.

# 4. Output Tray Extender

Pull out this extender when printing on long paper.

# 5. Operation Panel

Contains keys for printer operation and a panel display that shows the printer status.

## 6. Front Cover Release Button

Use this button to open the front cover.

## 7. Front Cover

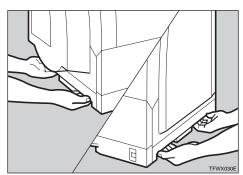
Open this cover when accessing the inside of the printer.

## 8. Left Cover

Open this cover when replacing the toner cartridge.

## 9. Inset Grips

Hold the printer at the location indicated in the illustration when transporting it. Note that there are four grips, two on the left side and two on the right side of the printer.



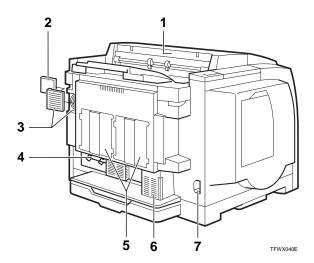
# 10. Bypass tray

Use to print onto thick paper, OHP transparencies, adhesive labels, custom size paper as well as plain paper. When printing on custom size paper, printer driver settings are required.

# 11. Paper Tray

Load paper into this tray for printing.

# **Exterior-Rear View**



# 1. Paper Exit Cover

Open this cover when removing misfed paper at the fusing unit.

## 2. Ozone Filter

This filter reduces the amount of ozone that is discharged into the air.

## 3. Ventilator

This hole allow air to circulate, preventing components inside the printer from overheating.

# **#Important**

☐ Do not leave the ventilator obstructed or blocked. Doing so creates the danger of malfunction due to overheating.

## 4. Parallel Interface Connector

Plug the interface cable that connects the printer to your computer into this connector.

# **#Important**

☐ Rating voltage of the parallel interface connector for the computer; Max. DC 5V.

## 5. Back Plates

Remove to install some options.

# **#**Important

- □ Rating voltage of the network interface connector for the network; Max. DC 5V.
- ☐ Rating voltage of the parallel interface connector for the computer; Max. DC 5V.

## 6. Ventilator

This hole allow air to circulate, preventing components inside the printer from overheating.

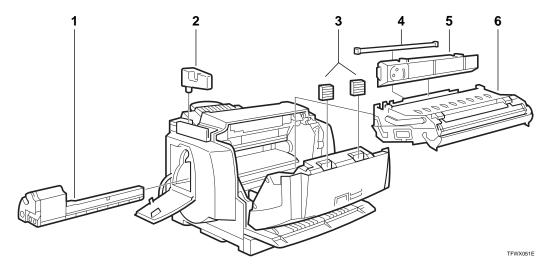
# **#Important**

☐ Do not leave the ventilator obstructed or blocked. Doing so creates the danger of malfunction due to overheating.

## 7. Power Connector

Connect the power cord to this connector.

# Interior



# 1. Toner Cartridge

## 2. Fuser Oil Bottle

This bottle holds oil used for fusing toner to the paper.

## 3. Ozone Filters

These filters reduce the amount of ozone that is discharged into the air.

# 4. Charger

## 5. Waste Toner Bottle

This bottle is a receptacle for waste toner generated during the printing process.

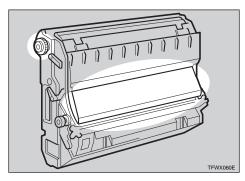
## 6. Photoconductor Unit

This contains a photoconductor unit that is used to compose the image being printed.

# Note

- ☐ Screws are used to hold the photoconductor unit in place. Be sure to remove the screws before attempting to remove the unit.
- ☐ The condition of the photoconductor unit belt directly affects output appearance and quality. Always be careful to prevent the green film in this unit from becoming dirty or damaged. And do not touch the black belt.

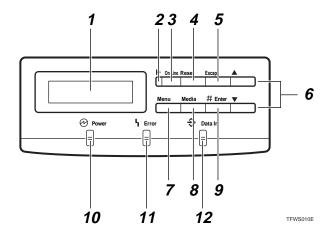
☐ Do not rotate the gear on the right side of the printer. Otherwise, the inside belt gets damaged.



# **Operation Panel**

# **#Important**

☐ Never press any operation panel keys while the **Data In** indicator is flashing on the operation panel.



# 1. Panel Display

The display shows the current status of the printer and error messages.⇒ P.56 "Error & Status Messages on the Operation Panel"

## 2. On Line indicator

Tells you whether the printer is on-line or off-line.

Stays on while the printer is on-line (a state in which the printer can receive data from the computer).

Stays off when the printer is off-line (a state in which printer cannot receive data).

# **3. (On Line)** key

Press this key to switch the printer between on-line and off-line conditions.

# 4. [Reset] key

Pressing this key when the printer is offline resets the printer to its power on default settings.

Pressing this key during the on-line condition cancels the ongoing print job.

# 5. [Escape] key

Press this key to return to the previous condition on the panel display.

# 6. **[**▲**]**[▼] keys

Use these keys to increase or decrease values on the panel display when making settings.

# **7.** [Menu] key

Press this key to make and check the printer settings.

# 8. [Media] key

Use this key to select a tray, change the paper size, and to make other setting for printing.

# 9. [Enter] key

Press this key to execute menu items selected on the panel display.

## 10. Power indicator

Stays on while the printer power is on. Stays off when the power is turned off or while the printer is in the Energy Saver mode.

# 11. Error indicator

Lights up whenever any printer error occurs. A message describing the cause of the error also appears on the panel display. P.56 "Error & Status Messages on the Operation Panel"

# 12. Data In indicator

Blinks while the printer is receiving data from a computer.

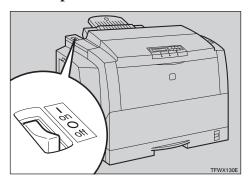
Stays on if there is data to be printed.

#### 1

## Turning the Printer On and Off

#### Turning On the Printer

- 1 Make sure that the power cord is securely plugged into the wall socket and the printer.
- 2 Set the printer's power switch to the On position.



After turning on the printer, it takes about seven minutes to warm up before being able to print. The following message appears on the operation panel.

IPDL-C Warmins UP

When the printer is turned on, the **Power** indicator will blink repeatedly. Once it stops blinking and remains on, you will be able to send data from the computer to the printer. When the following message appears on the operation panel, the printer will be able to begin printing.

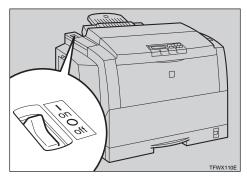
IPDL-C Ready

## **Turning Off the Printer**

Confirm that the Data In and the Error indicators are off.

#### Note

- ☐ The **Data In** indicator blinks while receiving data from the computer and remains lit when printing. Do not turn off the printer while it is receiving data or printing.
- ☐ When the **Error** indicator lights up, a printer error has occurred. Use the message that appears on the operation panel to troubleshoot the problem.
- 2 Set the printer's power switch to the Off position.



The **Power** indicator turns off.

☐ After printing, wait for about two minutes before turning off the printer. The printer uses this time to maintain itself. Turning off the printer immediately after printing may, over time, reduce the print quality. 4

## 2. Installing Options

#### **A** CAUTION:

- Make sure to turn off the printer and wait for about 30 minutes before installing options. Not waiting for the printer to cool down can result in a burn.
- It is recommended that at least two persons are used to lift the machine. Otherwise, the machine might fall and cause personal injury.
- When lifting the machine, use the inset grips on both sides of the machine.
   Otherwise, the machine might fall and cause personal injury.

#### **⚠** CAUTION:

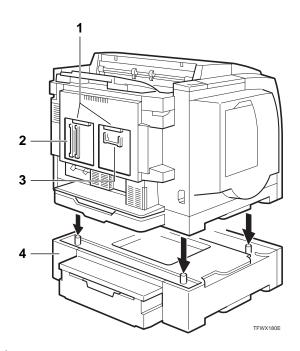
• When you move the machine, unplug the power cord from the wall socket to avoid a fire or an electric shock.

## **Available Options**

The following options can be installed to your printer.

#### 

For more information on the options, see P.118 "Options". Do not use options other than those specified in this manual.



#### 1. Interface Board

- Network Interface Board Type305 ⇒ P.15
- IEEE 1284 Parallel Type305 ⇒ P.17
- 2. Memory Unit  $\Rightarrow$  P.11
- Memory Unit Type204 (16MB) (SIMM)
- Memory Unit Type204 (32MB) (SIMM)
- 3. RICOH-SCRIPT2 Type  $305 \Rightarrow P.13$
- 4. Paper Feed Unit Type  $305 \Rightarrow P.19$

#### Mote

☐ It is impossible to install more than two paper feed units to your printer at a time.

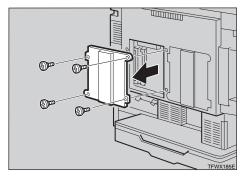
## Installing the Memory Unit (SIMM)

#### **A CAUTION:**

 Make sure to turn off the printer and wait for about 30 minutes before installing options. Not waiting for the printer to cool down can result in a burn.

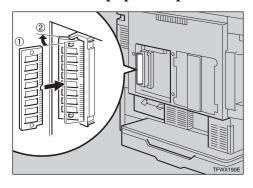
#### **∰**Important

- ☐ The memory unit can be damaged by small amounts of static electricity. Before touching it, touch something metal to discharge static electricity from you.
- 1 Turn off the printer's power switch and remove all cables and cords from the printer.
- 2 Remove screws and remove the left back plate.

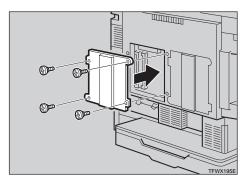


- Note
- ☐ A coin can be used to remove the screws.
- Make sure that the notch in the memory unit is on the bottom side. Insert the memory unit perpendicular to the slot (①). Then tilt it to the left so that it is 30 degrees from perpendicular to the

slot (②). It should make an audible click as it pops into place.



Attach the back plate to its original position, and fasten it with screws that were removed in step 2.



- Note
- ☐ A coin can be used to fasten the screws.
- Plug the printer's power cord back into the printer and the wall socket. Turn on the printer's power switch.
- Print a configuration page to confirm that the memory unit is properly installed.

 $\Rightarrow$  P.107 "Printing the Configuration Page"

#### Note

- ☐ You can check if the memory unit is installed properly by checking the "Total Installed RAM" item of the "Reference" on the configuration page.
- ☐ If the memory unit is not properly installed, repeat steps **1** to **6** again. If you fail again, contact your sales or service representative.

#### **∰**Important

□ To make the printer recognize the installed option properly, you must set up the option with the printer driver. Windows 95/98 ⇒ P.35 "Setting Up Options", Windows 3.1x ⇒ P.38 "Setting Up Options", Windows NT4.0 ⇒ P.41 "Setting Up Options"

## Installing the RICOH-SCRIPT2 Type305

#### riangle CAUTION:

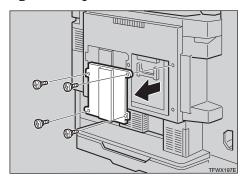
 Make sure to turn off the printer and wait for about 30 minutes before installing options. Not waiting for the printer to cool down can result in a burn.

#### **∰**Important

☐ The RICOH-SCRIPT2 can be damaged by small amounts of static electricity. Before touching it, touch something metal to remove static electricity from you.

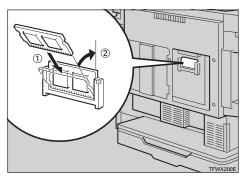
#### Note

- ☐ For this printer, use only RICOH-SCRIPT2 Type305.
- 1 Check the contents of the box for the following items.
  - DIMM (Dual Inline Memory Module)
  - Installation Guide
  - Operating Instructions
- 2 Turn off the printer's power switch and remove all cables and cords from the printer.
- Remove screws and remove the right back plate.

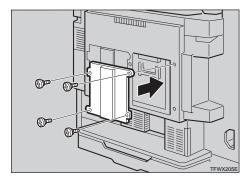


#### Note

- ☐ A coin can be used to remove the screws.
- Make sure that the notch in the module is on the right side. Tilt the module to 30 degrees from perpendicular to the slot and slide it into the slot (①). Then push it in until it makes an audible click as it pops into place (②).



Attach the back plate to its original position, and fasten it with screws that were removed in step **B**.



- ☐ A coin can be used to fasten the screws.
- Plug the printer's power cord back into the printer and the wall socket. Turn on the printer's power switch.

Print a configuration page to confirm that the RICOH-SCRIPT2 is properly installed.

## 

 $\Rightarrow$  P.107 "Printing the Configuration Page"

- ☐ You can check if the module is installed properly by checking the "Firmware Version" item of the "Reference" on the configuration page.
- ☐ If the RICOH-SCRIPT2 is not properly installed, repeat steps ☐ to ☐ again. If you fail again, contact your sales or service representative.

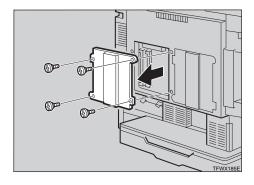
## Installing Network Interface Board Type305

#### **A CAUTION:**

 Make sure to turn off the printer and wait for about 30 minutes before installing options. Not waiting for the printer to cool down can result in a burn.

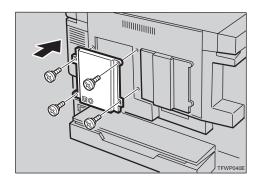
#### Note

- ☐ Use a shielded twisted-pair (STP) network interface cable.
- ☐ The network interface board can be attached to either the left or the right side of the back of your printer. This procedure is for attaching to the left side.
- ☐ You cannot install two network interface boards at a time.
- 1 Check the contents of the box for the following items.
  - Network interface board
  - Ferrite core
  - Installation Guide
- 2 Turn off the printer's power switch and remove all cables and cords from the printer.
- Remove screws and remove the left back plate.

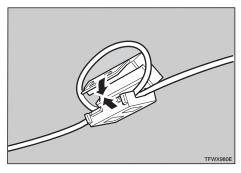


#### Note

- ☐ A coin can be used to remove the screws.
- Insert the network interface board into the slot and fasten it with screws that were removed in step **2**, as shown in the illustration.



- ☐ A coin can be used to fasten the screws.
- Doop the network interface cable. The loop should be about 15 cm (6") from the end of the cable on the end closest to the printer.
- **1** Attach the ferrite core to the loop.



Attach the network interface cable to the network interface connector of the printer.

#### **#Important**

- ☐ Rating voltage of the network interface connector for the network; Max. DC 5V.
- Connect the other end of the network interface cable to the network.
- Plug the printer's power cord back into the printer and the wall socket. Turn on the printer's power switch.
- Print a configuration page to confirm that the network interface board is properly installed.

#### 

 $\Rightarrow$  P.107 "Printing the Configuration Page"

- ☐ You can check if the network interface board is installed properly by checking the "Network" item of the "Status List" on the configuration page.
- ☐ If the network interface board is not properly installed, repeat steps ☐ to ☐ again. If you fail again, contact your sales or service representative.
- ☐ After installing the network interface properly, set up the printer's network environment using the operation panel. ⇒ P.23 "Configuring the Printer for the Network with the Operation Panel"

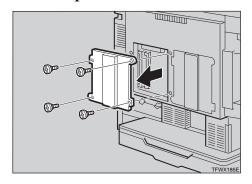
## Installing the IEEE 1284 Parallel Type305

#### riangle CAUTION:

 Make sure to turn off the printer and wait for about 30 minutes before installing options. Not waiting for the printer to cool down can result in a burn.

#### Note

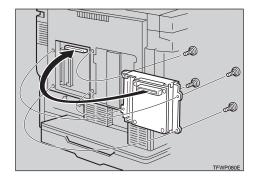
- ☐ The parallel interface board can be attached to either the left or the right side of the back of your printer. This procedure is for attaching to the left side.
- ☐ You cannot install two parallel interface boards at a time.
- 1 Check the contents of the box for the following items.
  - Parallel interface board
  - Installation Guide
- 2 Turn off the printer's power switch and remove all cables and cords from the printer.
- Remove screws and remove the left back plate.



#### Note

- ☐ A coin can be used to remove the screws.
- Insert the IEEE 1284 Parallel Type305 into the slot and fasten it

with screws that were removed in step **3**, as shown in the illustration.



#### Note

- ☐ A coin can be used to fasten the screws.
- Attach the interface cable to the parallel interface connector of the printer. Secure the cable with the metal fittings.

#### **#Important**

- □ Rating voltage of the parallel interface connector for the computer; Max. DC 5V.
- Attach the other end of the interface cable to the interface connector of the computer, and secure the cable.
- Plug the printer's power cord back into the printer and the wall socket. Turn on the printer's power switch.
- Print a configuration page to confirm that parallel interface board is properly installed.

#### 

 $\Rightarrow$  P.107 "Printing the Configuration Page"

- ☐ You can check if the board is installed properly by checking the "Option Interface" item of the "Reference" on the configuration page.
- ☐ If the board is not properly installed, repeat steps ② to ③ again. If you fail again, contact your sales or service representative.

## Installing the Paper Feed Unit Type305

#### **A** CAUTION:

- It is recommended that at least two persons are used to lift the machine. Otherwise, the machine might fall and cause personal injury.
- When lifting the machine, use the inset grips on both sides of the machine. Otherwise, the machine might fall and cause personal injury.
- When moving the printer, be sure to keep it level to avoid spilling the fuser oil. If oil is spilt, wipe it with alkaline cleaner. Otherwise, the oily surfaces can create the danger of slipping and personal injury.

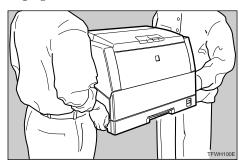
#### **∰**Important

☐ If your printer is equipped with the optional tray, do not pull out more than one tray with paper at a time. If you do, the printer might tilt forward.

#### Note

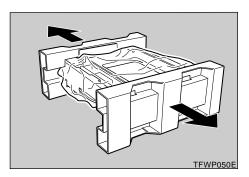
- ☐ It is impossible to install more than two paper feed units to your printer at a time.
- 1 Check the contents of the box for the following items.
  - Paper feed unit
  - Installation Guide
- 2 Turn off the printer's power switch and remove all cables and cords from the printer.

## Move the printer to make installing space.

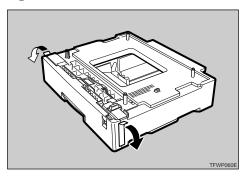


#### ∰Important

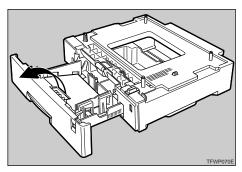
- ☐ Be careful to lift the printer as the right front side of the printer is significantly heavier than the left front side.
- A Remove the paper feed unit from the box, and remove the styro-foam packing and the bag from the side covers.



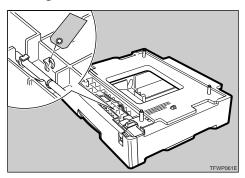
Remove both pieces of adhesive tape.



Pull out the paper tray, and remove the padding.



Remove the ring attached to the red tag.

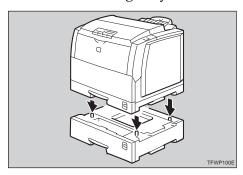


If installing two paper feed units, place one paper feed unit on the other paper feed unit at first. If installing only one paper feed unit, go to step **2**.

Align the paper feed unit onto the 4 upright pins on the other paper feed unit.

Place the printer on the paper feed unit.

Align the printer onto the 4 upright pins on the paper feed unit and then lower it gently.



- Connect all of cables that were removed in step **2**.
- Plug the printer's power cord back into the printer and the wall socket. Turn on the printer's power switch.
- Print a configuration page to confirm that the paper feed unit is properly installed.
  - Reference

 $\Rightarrow$  P.107 "Printing the Configuration Page"

- Note
- ☐ You can check if the paper feed unit is installed properly by checking the "Tray2" and "Tray3" items of the "Printer Information" on the configuration page.
- ☐ If the paper feed unit does not work, follow the above instructions to reinstall it. If it still does not work, contact your sales or service representative.

#### **#Important**

- □ To make the printer recognize the installed option properly, you must set up the option with the printer driver. Windows 95/98 ⇒ P.35 "Setting Up Options", Windows 3.1x ⇒ P.38 "Setting Up Options", Windows NT4.0 ⇒ P.41 "Setting Up Options"
- ☐ After installing the paper feed unit properly, set up the paper size. ⇒ P.49 "Loading Paper"

# 3. Configuring the Printer for the Network with the Operation Panel

## Configuring the Printer for the Network with the Operation Panel

After installing the optional network interface board, configure it for the network using the printer's operation panel.

#### Note

☐ If you want to print from your Macintosh computer, the optional RICOH-SCRIPT2 Type305 is required.

The following table shows the operation panel settings and their default settings. These are included in the "System Menu".

	Items	Default
32	IP Address	011.022.033.044
33	Subnet Mask	000.000.000.000
34	Gateway Add (Gateway Address)	000.000.000.000
35	Access CTL. (Access Control Address)	000.000.000.000
36	Access Mask (Access Control Mask)	000.000.000.000
37	Net Boot (Network Boot)	None
38	Frame NW (Frame type NetWare)	Auto Select
39	Active PTL. (Active Protocol)	All Active

- 1 Press (Menu).
- Press [▲][▼] until the following message appears.

<menu></menu>		.#.
System	Menu	Ţ

Press [Enter].

Select the protocol you want to use. You can select one of items on the table below.

Menu item on the	Active Protocol			
panel display	TCP*1	NW *2	ET *3	NB *4
All Active (Default Setting)	~	~	~	_
None				
TCP/IP Only	<b>✓</b>			_
NetWare Only		<b>✓</b>		_
TCP & NetWare	<b>✓</b>	<b>✓</b>		_
EtherTalk Only			<b>✓</b>	_
TCP & EtherTalk	<b>✓</b>		<b>✓</b>	_
NetW & EtherTalk		<b>~</b>	<b>✓</b>	_
TCP & NW & EtherTk	<b>✓</b>	<b>✓</b>	<b>✓</b>	_
NetBEUI Only				_
TCP & NetBEUI	<b>✓</b>			_
NetW & NetBEUI		<b>✓</b>		_
TCP & NW & NB	<b>✓</b>	<b>✓</b>		_
ETalk & NetBEUI			<b>✓</b>	_
TCP & ETK & NB	<b>✓</b>		<b>✓</b>	_
NW & ETK & NB		~	<b>~</b>	_

- ✓ means that this protocol is active.
- Blank cell means that this protocol is not active.
- — means that this protocol is not supported.
- \*1 TCP/IP
- \*2 NetWare
- \*3 EtherTalk
- \*4 NetBEUI: NetBEUI appears on the panel display, but it is not supported.

#### Note

☐ It is recommended that you do not select protocols that are not used on your network.

#### Limitation

- ☐ If you want to select EtherTalk, you should install the optional RICOH-SCRIPT2 Type305.
- **1** Press [▲][▼] until the following message appears.

⟨System Menu⟩ ▲
39.Active PTL. ▼

#### 2 Press [Enter].

The current setting appears on the panel display.

<Active PTL.> # \*All Active \*

- ③ Press [▲][▼] until the protocol you want to use appears.
- 4 Press [Enter].
- If you use TCP/IP, you should assign the IP address to your printer.

#### Ø Note

- ☐ To get the IP address for your printer, contact your network administrator.
- ☐ If you use TCP/IP, you should assign the IP address to your printer.

Press [▲][▼] until the following message appears.

<System Menu> ▲ 32.IP Address ▼

#### 2 Press [Enter].

The current IP address appears on the panel display.

011.022.033.044 # #\#/#

3 Use [▲][▼] to specify the leftmost digit of the IP address.

111.022.033.044 # #\#

#### 4 Press [Enter].

The pointer  $(\blacktriangle)$  moves to the next digit as shown.

111.022.033.044 # ##/#

#### Note

- ☐ You can return the pointer
  (▲) to the previous (left) digit
  by pressing [Escape].
- ☐ If you press **[Escape]** when the pointer (♠) is on the leftmost position, the specified IP address is reset.
- **6** Use **[**▲**][**▼**]** to specify the second digit of the IP address.

191.022.033.044 # #\#/#

6 Press [Enter].

7 Repeat steps 6 and 6 to specify the rest digit of the IP address.

Check if the pointer (▲) is at the rightmost digit, press [Enter] to register the IP address you specified.

(Sy	ste	m	Menu>		
32.	IP	Ad	dress	#	

- If you use TCP/IP, you should assign "33.Subnet Mask", "34. Gateway Add", "35.Access CTL" and "36.Access Mask" using the same procedure for specifying the IP address. ⇒ P.26 "Address"
- If you use TCP/IP, you should make settings for "37.Net Boot".

You can select how to assign the printer's address using the computer. Select one of items on the table below.

Menu item on	Available method			
the panel display	AR *1	RA *2	во *3	DH *4
ARP+PING	<b>✓</b>			
ARP & RARP	<b>✓</b>	<b>✓</b>		
ARP & BOOTP	<b>✓</b>		<b>✓</b>	
APR & RARP & BOOT	<b>✓</b>	<b>✓</b>	<b>✓</b>	
None (Default Setting)				
RARP+TFTP		<b>✓</b>		
ВООТР			<b>✓</b>	
RARP & BOOTP		~	<b>✓</b>	
DHCP				<b>✓</b>

- \*1 ARP+PING
- \*2 RARP+TFTP
- \*3 BOOTP
- \*4 DHCP

#### Note

- ☐ You should set up your server, if you want to use "RARP+TFTP", "BOOTP", or "DHCP".
- Press [▲][▼] until the following message appears.

(Syste	m Menu>	
37.Net	Boot	Ŧ

#### 2 Press [Enter].

The current setting appears on the panel display.

- 3 Press [▲][▼] until the method you want to use appears.
- 4 Press [Enter].
- If you use NetWare, select the frame type for NetWare.

Select one of items below if necessary.

- Auto Select (Default)
- Ethernet 802.3
- Ethernet 802.2
- Ethernet2
- Ethernet SNAP

#### Note

☐ Usually, use the default setting ("Auto Select"). However if you select "Auto Select", the frame type detected by the printer first is adopted. If your network can use more than two frame types, the printer may fail to select the correct frame type, if the "Auto Select" is selected. In this case, select the appropriate frame type.

Press [▲][▼] until the following message appears.

<System Menu> ▲ 38.Frame NW ♥

#### 2 Press [Enter].

The current setting appears on the panel display.



- 3 Press [▲][▼] until the frame type you want to use appears.
- 4 Press [Enter].
- **6** Press [On Line].
- Reset the printer to implement the settings.
  - Press [On Line] to enter the offline condition.

The **On Line** indicator turns off.

- 2 Press [Reset].
- Print the configuration page to check settings you have made.
  - 1 Press [Menu].
  - 2 Press [▲][▼] until the "List Print" appears.
  - After confirming that "Config.Page" is on the display, press [Enter]
  - 4 Press [Enter].

The configuration page is now printed. Check the contents of the configuration page.

6 Press [On Line].

The normal display screen appears.

## Address

#### Subnet Mask

A number used to mathematically "mask" or hide the IP addresses on the network by eliminating those parts of the address that are alike for all the machines on the network.

#### Gateway Address

A gateway is a connection or interchange point that connects two networks. A gateway address is for the router or host computer used as a gateway.

#### Note

- ☐ To get the addresses, contact your network administrator.
- ☐ If you do not know the addresses, please use the default settings.

#### Access Control Address and Access Control Mask

Access Control Address and Access Control Mask are used to control the IP addresses that have access to the computer used for printing, with the IP address. If it is not necessary for you to control the access rights, select "0.0.0.0".

- □ When the Access Control Address settings coincide with the masked result of the IP address of the computer, print jobs from that IP address can be accepted by the network interface board.
- ☐ For example, if you assign 192.168.15.16 as the Access Control Address to the network interface board, the combination of the Access Control Mask and

IP address that can have access are as follows.

Access Control Mask	IP Address that have access	
0. 0. 0. 0	xxx.xxx.xxx	
255. 0. 0. 0	192.xxx.xxx	
255.255. 0. 0	192.168.xxx.xxx	
255.255.255. 0	192.168. 15.xxx	
255.255.255.255	192.168. 15. 16	

#### Limitation

☐ These settings control only printing requests.

# 4. Installing the IPDL-C Printer Driver

## **Before Installing the Printer Driver**

To print, you must first install software called a printer driver on your computer. The required printer driver is supplied on the CD-ROM that comes with your printer.

## Preparation

Set up the printer and connect it to your computer as described in the "Quick Installation Guide". The procedures in this section assume that the printer is connected to your printer by a parallel interface cable.

#### **#Important**

- ☐ Some applications require their own specific settings, which may be different from those provided by the printer driver. Be sure to check the documentation that comes with your applications for details.
- ☐ Considerable hard disk space is required on your computer for printing complex documents.

#### Note

☐ All of the procedures in this manual assume that you are familiar with general Windows procedures and practices. If you are not, see the documentation that comes with Windows for details.

#### **Installing the Printer Drivers**

#### Limitation

☐ The printer drivers supplied with this printer do not support operation under a system running WindowsNT with a RISC based processor (MIPS R Series, Alpha AXP, Power PC).

#### Note

☐ Recommended PC requirements.

• Memory: 32MB or more

• CPU: Pentium® 100MHz or more

Free Hard disk space: 100MB or more

#### Supported Operating Systems

- Microsoft Windows 95 operating system
- Microsoft Windows 98 operating system
- Microsoft Windows for Workgroups operating system 3.1x
- Microsoft Windows NT Server network operating system Version4.0
- Microsoft Windows NT Workstation operating system Version4.0

## Windows 95/98 - Installing the IPDL-C Printer Driver

#### Preparation

Before starting installation, be sure to carefully read the README file that is on the CD-ROM containing the printer driver.

#### **#Important**

□ Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Normally you can use plug and play to install the printer driver. If your system does not support plug and play, add the printer from the **[Printers]** window.

#### Plug and Play

Plug and play automatically makes the required software settings whenever it detects that a new peripheral device has been connected to the computer. Plug and play operates when the following conditions are present.

- The computer supports plug and play (see the computer's documentation for details).
- The printer is connected to the computer by a bi-directional interface cable.
- Printer power is turned on first, and then the computer is turned on.

#### Printer Driver Installation

- ① Read the README file.
- ② Turn on the printer.
- ③ Turn on the computer.
- 4 Install the driver in accordance with the instructions that appear on your computer screen.
  - If the [New Hardware Found] dialog appears. ⇒ P.32 "Plug and Play Installation 1"
  - If the [Device Driver Wizard] appears.  $\Rightarrow$  P.33 "Plug and Play Installation 2"
  - If Windows 95/98 starts normally. ⇒ P.34 "Installing the Printer Driver Without Using Plug and Play"

## Installing the Printer Driver Using Plug and Play

#### Preparation

Check to make sure that the printer is connected properly to your computer, and that computer power is turned off.

- 1 Turn on the printer's power switch.
- **2** Turn on your computer.

Continue with one of the procedures below in accordance with what appears on your computer's screen.

- Note
- ☐ What happens after you turn on your computer depends on which version of Windows 95/98 you are running and on your system setup.
- ♦ When the [New Hardware Found] dialog appears

  The dialog indicates that plug and play is working. Continue with the procedure under P.32 "Plug and Play Installation 1".
- ♦ When the [Device Driver Wizard] appears

  This indicates that plug and play is working. Continue with the procedure under P.33 "Plug and Play Installation 2".
- ♦ When Windows 95/98 starts normally

This indicates that plug and play is not working. Continue with the procedure under P.34 "Installing the Printer Driver Without Using Plug and Play".

#### Plug and Play Installation 1

Use the following procedure to install the printer when the **[New Hardware Found]** dialog appears after you turn on the printer and then your computer.

- Insert the CD-ROM that comes with the printer, into your computer's CD-ROM drive.
- 2 Click [Browse].

The Windows 95/98 printer driver is on the following directory on the CD-ROM: DRIVERS\IPDL\_C\WIN95\_98.

- Select the CD-ROM drive using the [Drives] list box.
- In the [Folders] box, double-click [DRIVERS], [IPDL\_C] and then [WIN95\_98]. Finally, click [OK].

## Click [OK].

The installer copies the printer driver files from the CD-ROM to your computer's hard disk.

**6** Restart Windows after completing the installation.

#### **#Important**

☐ If your printer is equipped with certain options (ex. paper feed unit or memory unit), you should set up the options with the printer driver. ⇒ P.35 "Setting Up Options"

#### Plug and Play Installation 2

Use the following procedure to install the printer when the **[Device Driver Wizard]** appears after you turn on the printer and then your computer.

- Insert the CD-ROM that comes with the printer into your computer's CD-ROM drive, and then click [Next].
- 2 Click [Finish].
- Change the name of the printer, if you want, and then click [Finish].
- 4 If the next dialog appears, click [OK].
- If the next dialog asking you to specify the CD-ROM drive appears, select the CD-ROM drive from the listbox. Finally, click [OK].
- **f** Follow the instructions on the screen.
- **7** Restart Windows after completing the installation.

#### **∰**Important

☐ If your printer is equipped with certain options (ex. paper feed unit or memory unit), you should set up the options with the printer driver. ⇒ P.35 "Setting Up Options"

## **Installing the Printer Driver Without Using Plug and Play**

Turn on the printer and then your computer, and then use the following procedure to install the printer driver.

- 1 Close all applications that are currently running.
- 2 Click [Start], point to [Settings], and then click [Printers]. The [Printers] window appears.
- Double-click the [Add Printer] icon.
  The [Add Printer Wizard] appears.
- 4 Click [Next].

A dialog for specifying the port where the printer is connected appears.

- After confirming that the [Local Printer] option is selected, click [Next].

  A dialog for selecting the printer manufacturer and model name appears.
- Click [Have Disk].

A dialog for driver installation from a disk appears.

- Insert the CD-ROM that comes with the printer into your computer's CD-ROM drive.
- Click [Browse].

The Windows 95/98 printer driver is on the following directory on the CD-ROM: DRIVERS\IPDL\_C\WIN95\_98.

- Use the [Drives] listbox to select the CD-ROM drive.
- In the [Folders] box, double-click [DRIVERS], [IPDL\_C] and then [WIN95\_98]. Finally, click [OK].
- Click [OK].
- Select the name of the printer whose driver you want to install by clicking it, and then click [Next].

A port selection dialog appears.

In the [Available Ports] box, select [Printer Port] by clicking it, and then click [Next].

A dialog for changing the printer name appears.

Change the name of the printer if you want, and then click [Next].

- Specify whether or not you want to print a test page, and then click [Finish].

  The printer driver files are copied from the CD-ROM to your computer's hard disk.
- If you are asked if you restart Windows, select [Yes]. If you are not asked, restart Windows after completing the installation.
- After Windows restarts, set up any options you have installed on the printer.

## 

⇒ P.35 "Setting Up Options"

## **Setting Up Options**

- Note
- ☐ When setting up options, you should access the [Installable Options] dialog from Windows. You cannot set up options when accessing the [Installable Options] dialog from an application.
- Click [Start], point to [Settings], and then click [Printers].
  - The [Printers] window appears.
- 2 Select the icon of the printer you want to use by clicking it. On the [File] menu, click [Properties].
- Click [Setup] tab, and then click [Installable Options].

The [Installable Options] dialog appears.

- 4 Use the [Option Tray] listbox to specify the optional tray unit.

  Specifying the wrong tray here will make it impossible to use your tray correctly.
- Use the [Total Printer Memory] listbox to specify how much memory is installed on the printer.

Specifying the wrong amount of memory here may cause printing problems. Be sure to change this setting whenever you add more memory.

#### 

You can find out how much memory is currently stored in memory by printing a Configuration Page on the printer.  $\Rightarrow$  P.107 "Printing the Configuration Page"

- Click [OK] to close the dialog.
- Click [OK] to close the printer's Properties dialog.

## **Canceling a Print Job**

**1** Double-click the printer icon on the Windows Task Bar.

This opens a window that shows all the print jobs that are currently queued for printing. Check the current status of the job you want to cancel.

- 2 Select the name of the job you want to cancel by clicking it.
- On the [Document] menu, click [Cancel Printing].

#### Note

- ☐ You can also open the print job queue window by double-clicking the printer icon in the [Printers] window.
- Make sure that the printer's On Line indicator is lit, press the printer's [Reset] key.

The message appears on the operation panel display indicating that the print job is being cancelled.

#### **∰**Important

- ☐ The above procedure cancels the print job that is currently being processed by the printer. In some cases, the printer may already be processing data for the next print job following the one currently being output. In such a case, the next print job is also canceled when you press [Reset].
- ☐ When your printer is being shared by multiple computers, be careful you don't accidentally cancel someone else's print job.

- ☐ You cannot stop printing data that has already been processed internally by the printer. Because of this, printing may continue for a few pages after you press [Reset].
- ☐ A print job that contains a large volume of data may take a considerable time to stop.

## Windows 3.1x - Installing the IPDL-C Printer Driver

## Preparation

Before starting installation, be sure to carefully read the README file that is on the CD-ROM containing the printer driver.

#### **#Important**

□ Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

## **Installing the Printer Driver**

1 From the Program Manager [Main] group, open the [Control Panel] and double-click the Printers icon.

The [Printers] dialog appears.

2 Click [Add] to expand the dialog and display the [List of Printers].

If there are no printers installed on your computer, the **[List of Printers]** appears automatically when you display the **[Printers]** dialog, and the **[Add]** button is grayed out. If this is the case, perform the next step, below.

In the [List of Printers], select [Install Unlisted or Updated Printer] by clicking it, and then click [Install...].

The [Install Drivers] dialog appears.

- Insert the CD-ROM that comes with the printer into your computer's CD-ROM drive.
- Click [Browse...].

The Windows 3.1x printer driver is on the following directory on the CD-ROM: DRIVERS\IPDL\_C\WIN31.

- **1** Use the [Drives] listbox to select the CD-ROM drive.
- In the [Directories] box, double-click [DRIVERS], [IPDL\_C] and then [WIN31]. Finally click [OK].
- Click [OK].
- In the [List of Printers] box, select the name of the printer whose driver you want to install by clicking it, and then click [OK].

The printer driver files are copied from the CD-ROM to your computer's hard disk. After installation is complete, click **[Close]** to close the **[Printers]** dialog.

- After installation is complete, click [Close] to close the [Printers] dialog.
- **1** Restart Windows.
- After Windows restarts, setup any options you have installed on the printer.

## 

⇒ P.38 "Setting Up Options"

## **Setting Up Options**

#### Note

- ☐ When setting up options, you should access the [Installable Options] dialog from Windows. You cannot set up options when accessing the [Installable Options] dialog from an application.
- 1 From the Program Manager [Main] group, open the [Control Panel] and double-click the [Printers] icon.

The [Printers] dialog appears.

In the [Installed Printers] box, select the name of the printer you want to use by clicking it, and then click [Setup...].

A dialog for making printer driver settings appears.

Click [Setup] tab, and then click [Installable Options].

The [Installable Options] dialog appears.

4 Use the [Option Tray] listbox to specify the optional tray unit.

Specifying the wrong tray here will make it impossible to use your tray correctly.

Use the [Total Printer Memory] listbox to specify how much memory is installed on the printer.

Specifying the wrong amount of memory here may cause printing problems. Be sure to change this setting whenever you add more memory.

#### 

You can find out how much memory is currently stored in memory by printing Configuration Page on the printer. ⇒ P.107 "Printing the Configuration Page"

- Click [OK] to close the dialog.
- **7** Click [OK] to close the dialog.
- Click [Close] to close the [Printers] dialog.

## **Canceling a Print Job**

1 In the [Main] group, double-click the [Print Manager] icon.

A window that shows all the print jobs that are currently queued for printing appears.

- 2 Select the name of the job you want to cancel by clicking it.
- 3 On the [Document] menu, click [Delete Document].
- 4 Click [Close] to close the dialog.
- Make sure that the printer's On Line indicator is lit, press the printer's [Reset] key.

The message appears on the operation panel display indicating that the print job is being cancelled.

#### **∰**Important

- ☐ The above procedure cancels the print job that is currently being processed by the printer. In some cases, the printer may already be processing data for the next print job following the one currently being output. In such a case, the next print job is also canceled when you press [Reset].
- ☐ When your printer is being shared by multiple computers, be careful you don't accidentally cancels someone else's print job.

- ☐ You cannot stop printing data that has already been processed internally by the printer. Because of this, printing may continue for a few pages after you press [Reset].
- ☐ A print job that contains a large volume of data may take a considerable time to stop.

## Windows NT4.0 - Installing the IPDL-C Printer Driver

## Preparation

Before starting installation, be sure to carefully read the README file that is on the CD-ROM containing the printer driver.

#### **#Important**

□ Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

#### Limitation

☐ Printer driver installation requires full control access right. To install the printer driver, log on as an Administrators or a Power Users group member.

## Installing the Printer Driver

1 Click [Start], point to [Settings], and then click [Printers].

The [Printers] window appears.

2 Double-click the [Add Printer] icon.

The [Add Printer Wizard] appears.

After confirming that [My Computer] option is selected, click [Next].

A dialog for specifying the port where the printer is connected appears.

4 Click a check box to select the port you want to use, and click [Next].

A dialog for the manufacturer and model of the printer appears.

Click [Have Disk...].

A dialog for driver installation from a disk appears.

- Insert the CD-ROM that comes with the printer into your computer's CD-ROM drive.
- Change the drive name in the listbox to the name of the CD-ROM drive, and then click [Browse...].

The Windows NT4.0 printer driver is on the following directory on the CD-ROM: DRIVERS\IPDL\_C\NT4.

- Double-click [DRIVERS], [IPDL\_C] and then [NT4]. Finally, click [Open].
- Oclick [OK].

A printer model selection dialog appears.

Select the name of the printer whose driver you want to install by clicking it, and then click [Next].

A dialog for changing the printer name appears.

- 11 Change the name of the printer if you want, and then click [Next].
- If the printer is to be shared over a network, click [Shared] to select it.

  Selecting [Shared] causes the computer you are on to operate as the printer server. If you select [Not shared] here, skip step E.
- In the [Shared Name] box, type in the name that printer should use on the network.

The initial default Shared name is the same name as the Name box in step **1**, above. You can leave this name as it is, or change to a different one.

- Click [Next].
- E Specify whether or not you want to print a test page, and then click [Finish]. The printer driver files are copied from the CD-ROM to your computer's hard disk.

After installation is complete, the **[Printers]** window appears with the icon of the newly installed printer.

- Restart Windows.
- After Windows restarts, set up any options you have installed on the printer.
  - Reference

⇒ P.41 "Setting Up Options"

## **Setting Up Options**

- 1 Click [Start], point to [Settings], and then click [Printers].
  - The [Printers] window appears.
- Select the icon of the printer you want to use by clicking it. On the [File] menu, click [Properties].
- Click the [Installable Options] tab.
- 4 Use the [Option Tray] listbox to specify the optional tray unit.

Specifying the wrong tray here will make it impossible to use your tray correctly.

Use the [Total Printer Memory] listbox to specify how much memory is installed on the printer.

Specifying the wrong amount of memory here may cause printing problems. Be sure to change this setting whenever you add more memory.

#### 

You can find out how much memory is currently stored in memory by printing a Configuration Page the printer.  $\Rightarrow$  P.107 "Printing the Configuration Page"

**6** Click **[OK]** to close the printer properties.

## Canceling a Print Job

1 Double-click the printer icon on the Windows Task Bar.

A window that shows all the print jobs that currently queued for printing appears. Check the current status of the job you want to cancel.

- 2 Select the name of the job you want to cancel by clicking it.
- On the [Document] menu, click [Cancel Printing].

#### Note

- ☐ You can also open the print job queue window by double-clicking the printer icon in the **[Printers]** window.
- Make sure that the printer's On Line indicator is lit, press the printer's [Reset]key.
- The message appears on the operation panel display indicating that the print job is being cancelled.

#### **#Important**

- ☐ The above procedure cancels the print job that is currently being processed by the printer. In some cases, the printer may already be processing data for the next print job following the one currently being output. In such a case, the next print job is also canceled when you press [Reset].
- ☐ When your printer is being shared by multiple computers, be careful you don't accidentally cancels someone else's print job.

- ☐ You cannot stop printing data that has already been processed internally by the printer. Because of this, printing may continue for a few pages after you press [Reset].
- ☐ A print job that contains a large volume of data may take a considerable time to stop.

# 5. Paper and Other Media

# Paper and Other Media Supported by this Printer

# **Paper Types and Sizes**

This section provides the type, size, feed direction, and maximum capacity of paper that can be loaded into each paper tray in this printer.

### Note

- $\square$  The " $\square$ " symbol means short-edge feed direction.
- $\square$  The " $\square$ " symbol means long-edge feed direction.
- ☐ The paper feed direction depends on the paper size.

### Paper Sizes

	Feed direction	Size (mm)	Bypass Tray	Standard Tray (Tray1)	Paper Feed Unit Type305 (Tray2/3)
A3	₽	297 × 420	☆	О	0
B4 JIS	D	257 × 364	☆	*	*
A4	Ū	210 × 297	×	×	×
	┏	297 × 210	☆	О	О
B5 JIS	D	182 × 257	×	×	×
	G	257 × 182	☆	*	*
A5	D	148 × 210	×	×	×
	<b>□</b>	210 × 148	☆	*	×
B6 JIS	D	128 × 182	☆	×	×
A6	D	$105 \times 148$	☆	×	×
Double Letter (DLT, 11" × 17")	D	279 × 432	☆	0	О
Legal (LG, 8 <sup>1</sup> / <sub>2</sub> " × 14")	D	216 × 356	☆	О	0

	Feed direction	Size (mm)	Bypass Tray	Standard Tray (Tray1)	Paper Feed Unit Type305 (Tray2/3)
Letter (LT, $8^{1}/_{2}" \times 11"$ )	D	216 × 279	×	×	×
	┏	279 × 216	☆	0	О
Half Letter	D	140 × 216	☆	*	×
$(HLT, 5^1/_2" \times 8^1/_2")$					
Executive	D	184 × 276	×	×	×
(Exec., $7^1/_4$ " × $10^1/_2$ ")	D-	276 × 184	☆	0	О
Folio (8 <sup>1</sup> / <sub>4</sub> "×13")	D	210 × 330	☆	*	*
Foolscap (F4, 8 <sup>1</sup> / <sub>2</sub> " × 13")	₽	216 × 330	☆	*	*
F/GL (8" × 13")	D	203 × 330	☆	*	*
Custom Size	_	_	☆	×	×

- ☆ means that the size is supported and needs to specify the paper size using the operation panel. (Regarding the bypass tray, there is no dial on the tray.) ⇒ P.52 "Loading Paper in the Bypass Tray"
- O means that the size is supported and indicated on the tray dial. Be sure to set the paper size dial to match the actual paper size loaded in the tray.
- ★ means that the size is supported but not indicated on the paper size dial. You should set the paper size dial to "★", and specify the paper size using the operation panel. The default setting is Foolscap (8.5"×13"). ⇒ P.51 "Specifying paper size using the operation panel"
- × means that the size is not supported.

The paper tray can support paper  $64 - 105 \text{ g/m}^2 (17 - 28 \text{ lb})$ .

The bypass tray can support paper  $64 - 157 \text{ g/m}^2 (17 - 42 \text{ lb})$ .

The optional paper tray can support paper  $64 - 105 \text{ g/m}^2 (17 - 28 \text{ lb})$ .

# **Precautions for Paper**

Note the following precautions when handling or selecting paper to be used with this printer.

### Cautions in loading paper

# **#Important**

- ☐ Do not use paper that is meant for an inkjet printer. Otherwise, it may stick to the fusing unit and cause a paper misfeed.
- ☐ When printing on an OHP transparency that has a print side, load it with the print side down onto the bypass tray. Otherwise, it may stick to the fusing unit and cause a misfeed.
- Use only the recommended paper types. Print quality cannot be guaranteed if other paper types are used. ⇒ P.47 "Paper not supported by this printer"
- Do not use paper that is already printed on.

### Cautions in storing paper

Paper should always be stored properly. Improperly stored paper might result in poor print quality, paper misfeeds, or printer damage.

Follow the precautions below.

- Avoid storing paper in humid areas.
- Avoid exposing paper to direct sunlight.
- Store on a flat surface.
- Keep open reams of paper in the package in which the paper came.

### Paper types and cautions

# Plain paper

- The standard tray can hold up to 250 sheets. \*1
- The bypass tray can hold up to 50 sheets. \*1
- The Paper Feed Unit Type305 (option) can hold up to 500 sheets. \*1
  - \*1 : Based on paper that is  $80 \, \text{g/m}^2$  (metric version), 20 lb (inch version) in weight.
- If paper is curled or bent, correct it before loading.

#### Thick Paper

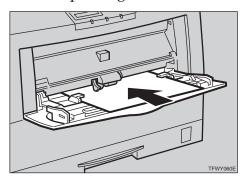
- If you print on paper heavier than  $105 \text{ g/m}^2$  (28 lb), use the bypass tray. The bypass tray can hold paper up to  $157 \text{ g/m}^2$  (42 lb) in weight. The print quality on paper that is thicker cannot be guaranteed.
- The bypass tray can hold up to 25 sheets.

### Note

- ☐ The number of sheets to be set may vary depending on the paper thickness and paper type.
- When printing on thick paper, you should select the thick paper mode with the printer driver.

#### Adhesive labels

• When printing on adhesive labels, use the bypass tray.



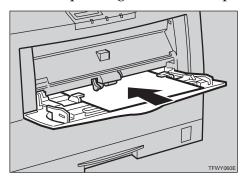
- Load adhesive labels into the tray with the print side down.
- Remove any unused adhesive labels from the tray after you are finished printing. Leaving them in the tray can cause them to curl.
- When printing on adhesive labels, you should select the plain paper mode with the printer driver.
- The bypass tray can hold up to 40 adhesive labels.

### Note

☐ The number of sheets to be set may vary depending on the paper thickness and paper type.

### OHP transparencies

• When printing on OHP transparency, use the bypass tray.



- Load OHP transparencies into the tray with the print side down. Otherwise, it may stick to the fusing unit and cause a misfeed.
- Remove any unused OHP transparencies from the tray after you are finished printing. Leaving them in the tray can cause them to curl.
- When printing on OHP transparencies, you should select the OHP transparency mode with the printer driver.
- The bypass tray can hold up to 50 OHP transparency sheets.

### Note

- ☐ The number of sheets to be set may vary depending on the paper thickness and paper type.
- When the "OHP Slip" settings is set to "Off" ( $\Rightarrow$  P.106 "11. OHP Slip"), be sure to remove each OHP transparency immediately after it is printed.

# Note

☐ If the direction and size of paper loaded in the paper tray is different from the direction and size of the OHP transparency, "OHP Slip" will not work even if "OHP Slip" settings is set to "On". Be sure to remove each OHP transparency immediately after it is printed.

### Paper not supported by this printer

Avoid using the following types of paper that are not supported by this printer:

- Paper whose weight is heavier or lighter than the limitation.
- Bent, folded, or creased paper
- Curled or twisted paper
- Torn paper
- Wrinkled paper
- Damp paper
- Paper stuck together
- Paper that is dry enough to emit static electricity

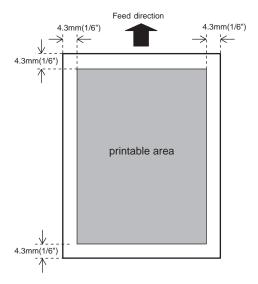
 Paper that has already been printed on (with the exception of preprinted letterhead)

### Note

- ☐ The ink for the format printing by a copier, or an inkjet printer and so on might do harm to the fusing unit of this printer due to a difference in fusing temperatures.
- Coated paper (except the recommended one)
- Special paper like thermal paper, aluminum foil, carbon paper and conductive paper
- Heavily textured paper
- Glued paper
- Label paper on which glue or base paper is exposed
- Paper with clips or stapled
- Paper with tape or ribbons attached
- Paper is meant for an inkjet printer.
- Envelopes

### **Printable Area**

The following shows the printable area for this printer. Be sure to set the print margins correctly.



### Note

☐ The printable area may vary depending on paper size, printer language and printer driver settings.

# **Loading Paper**

# Loading Paper in the Paper Tray

Use the following procedure to load paper in the paper tray and optional tray. See P.52 "Loading Paper in the Bypass Tray" for details on the bypass tray.

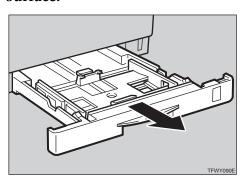
# ∰Important

☐ After you load paper, you must set the paper size dial to match the actual paper size loaded in the tray. Otherwise, the printer might be damaged.

# 

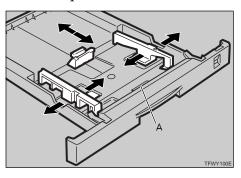
See P.43 "Paper and Other Media Supported by this Printer" for details on supported paper types and sizes.

1 Carefully pull the paper tray out of the printer and place it on a flat surface.



2 Slide the paper guides to positions that match the size of paper you want to load.

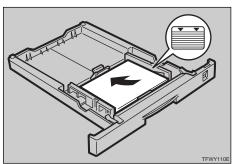
Adjust the paper guides until they click into position.



# **∰**Important

☐ Do not touch the friction pad (A). Otherwise, paper misfeeds or paper multi-feeds might occur.

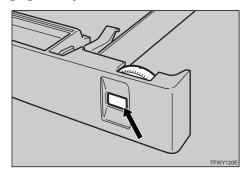
**3** Load paper into the tray with the print side up.



# **#**Important

- Make sure that the stack of paper is no higher than the limit mark (▼▼) inside the tray.
- ☐ Make sure the paper fits under the back paper guide.

Adjust the paper size dial to match the size of the paper in the paper tray.



### Note

☐ The following table shows the position of the paper size dial.

•	1 1	
Paper Size	Standard Tray (Tray1)	Optional Tray (Tray2/3)
A3	A3 🔽	A3 🔽
A4	A4□	A4□
A5	<del>*</del>	_
B4	*	<del>*</del>
B5	<del>*</del>	<del>*</del>
Double Letter (11"×17")	11×17	11×17
Legal (8 <sup>1</sup> / <sub>2</sub> "×14")	8 <sup>1</sup> / <sub>2</sub> ×14	8 <sup>1</sup> / <sub>2</sub> ×14
Letter (8 <sup>1</sup> / <sub>2</sub> "×11")	8 <sup>1</sup> / <sub>2</sub> ×11	8 <sup>1</sup> / <sub>2</sub> ×11
Half Letter (5 <sup>1</sup> / <sub>2</sub> "×8 <sup>1</sup> / <sub>2</sub> ")	*	_
Executive (7 <sup>1</sup> / <sub>4</sub> "×10 <sup>1</sup> / <sub>2</sub> ")	7 <sup>1</sup> / <sub>4</sub> "×10 <sup>1</sup> / <sub>2</sub> "	7 <sup>1</sup> / <sub>4</sub> "×10 <sup>1</sup> / <sub>2</sub> "
F (8"×13")	*	*
Folio (8 <sup>1</sup> / <sub>4</sub> "×13")	*	*
Foolscap (8 <sup>1</sup> / <sub>2</sub> "×13")	*	*

# **∰**Important

- □ When loading B4 JIS  $\Box$ , B5 JIS  $\Box$ , A5  $\Box$ ,  $5^1/2"\times 8^1/2"\Box$ ,  $8"\times 13"$   $\Box$ ,  $8^1/4"\times 13"$   $\Box$  or  $8^1/2"\times 13"$   $\Box$  in the paper tray, set the dial to " $\bigstar$ " and specify the paper size using the operation panel.  $\Rightarrow$  P.51 "Specifying paper size using the operation panel"
- Slide the paper tray completely into the printer.

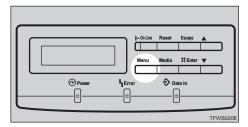
# **#Important**

☐ Be sure to insert the paper tray completely. Otherwise, paper misfeeds might occur.

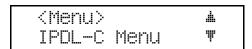
# Specifying paper size using the operation panel

Use the following procedure to specify the paper size from the printer's operation panel after loading paper with mark " $\star$ " in the table mentioned above into tray 1, tray 2 and tray 3.

1 Press [Menu].



The following message appears on the panel display.



Use [▲][▼] to display "System Menu", and then press [Enter].



The following message appears on the panel display.

(System Menu> ▲ 1.Paper Tray ♥

Use [▲][▼] to display "2.Tray Size[★]", and then press [Enter].

(System Menu> ▲ 2.Tray Size[\*]▼

The currently selected paper size appears on the panel display.

Use [▲][▼] to select the paper size you have specified for the paper tray, and then press [Enter].

Press [On Line].

The normal display screen appears.

IPDL-C Ready

Press [On Line] to enter the off-line condition.

The On Line indicator turns off.

Press [Reset].

# **Loading Paper in the Bypass Tray**

### Note

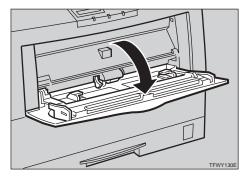
☐ Do not open the front cover when loading paper into the bypass tray.

# 

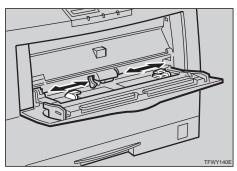
- ⇒ P.43 "Paper Types and Sizes"
- $\Rightarrow$  P.45 "Precautions for Paper"

### Loading paper

1 Open the bypass tray.

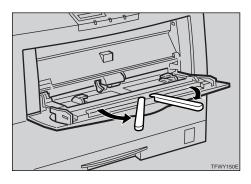


**2** Slide the side guides.

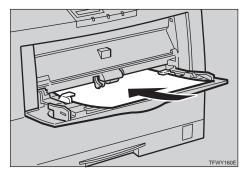


### Note

☐ Slide out the bypass tray extender.



Load paper until it stops with the print side down.



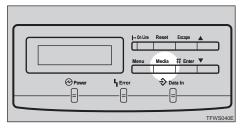
# **∰**Important

- ☐ Make sure the paper fits under the side guides.
- ☐ The side guides should be set to the correct paper size to avoid paper feed problems.
- ☐ Do not load paper when printing.

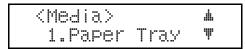
# Specifying paper size using the operation panel

Use the following procedure to specify the paper size from the printer's operation panel after loading paper into the bypass tray.

# 1 Press (Media).



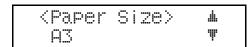
The following message appears on the panel display.



2 After confirming that "1.Paper Tray" is on the display, press [Enter].

- Use [▲][▼] to display "Byps.", and then press [Enter].
  - Note
  - ☐ If there is no paper in the bypass tray, the **Error** indicator stays on.
- Use [▲][▼] to display "2. Paper Size", and then press [Enter].

The current paper size appears on the panel display.

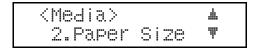


Select the paper size you have specified for the paper tray.

### Standard Paper Size

Use [▲][▼] to display the paper size that is in the tray, and then press [Enter].

The following message appears on the panel display.



### **Custom Size Paper**

**1** Use [▲][▼] to display "Custom", and then press [Enter].

The following message appears on the panel display.

② Use [▲][▼] to change the third (leftmost) digit of the paper width, and then press [Enter].

The pointer (\*\*) moves to the right.



- Note
- ☐ Press **[Escape]** to move the pointer to the left.
- ☐ Press **[Escape]** while the pointer is located at the leftmost digit of the width to cancel the settings and return to step **4**.

# **3** Repeat step **2** to set the value of the width.

While the pointer is located at the first (rightmost) digit of the width, press **[Enter]** to advance to the length setup display.

### Note

- ☐ Press **[Escape]** while the pointer is located at the leftmost digit of the width to return to the width setup display.
- 4 Repeat steps 2 and 3 to set the value of the length.

While the pointer is located at the first (rightmost) digit of the length, press [Enter] to return to "Media".

<media> ▲ 2.Paper Size ▼

# 6 Press [Escape].

The normal display screen appears.

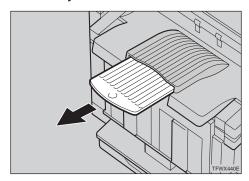
IPDL-C Ready

# Sliding out the Output Tray Extender

If you load paper of A4 $\square$  or  $8^1/_2$ " × 11" $\square$  or larger, slide out the output tray extender.

### **#Important**

☐ Do not place the rear end of the printer near a wall or touch it with barehands. This area can become extremely hot.



### Note

☐ After printing, return the output tray extender to its original position.

# 6. Troubleshooting

# **Error & Status Messages**

There are three types of error messages:

- Printed error message
- Displayed error message
- Getting Printer Information over the Network

# **Printed Error Message**

The error message shown below is output by the printer whenever there is not enough memory to print your data.

Error Message	Required Action
There is not enough memory in your printer to print this page. Change the resolution to 300 dpi in the printer driver and try again. For details, please refer to the troubleshooting section in your manual.	The following are the actions you should take when you encounter memory shortage problems. If these actions do not solve the problem individually, try them in combination with each other. ⇒ P.114 "Low Memory"
	① Increase printer memory.  Install the optional memory unit to increase printer memory capacity. ⇒ P.11 "Installing the Memory Unit (SIMM)"
	<ul> <li>② Change the Color Level to [1 bit].         Use the printer driver to select [Fast] or change the Color Level to [1 bit].         ⇒ The printer driver online help         ⇒ "RICOH-SCRIPT2 Operating Instructions"</li> </ul>
	<ul> <li>③ Reduce resolution.         Use the printer driver to set resolution to 300 dpi.         ⇒ The printer driver online help         ⇒ "RICOH-SCRIPT2 Operating Instructions"</li> </ul>
	④ Turn on "Image Memory". Use the printer's "System Menu" to turn on "Image Memory". ⇒ P.95 "Making Printer Settings with the Opera- tion Panel"

# **Error & Status Messages on the Operation Panel**

### Note

☐ The panel display can show only one error message at a time. Printing a configuration page shows all current printer errors under the Printer Error item of the Printer Information section.  $\Rightarrow$  P.107 "Printing the Configuration Page"

Message	Description	Comments
Add FuserOil (on the upper line)	The fuser oil bottle is empty.	Replace the fuser oil bottle.  ⇒ P.90 "Replacing the Fuser Oil Bottle and Ozone Filter"
Add FuserOil (on the lower line)	Fuser oil is low. You can print about 200 or /more pages after this message appears.	Replace the fuser oil bottle.  ⇒ P.90 "Replacing the Fuser Oil Bottle and Ozone Filter"
Add Toner xxx	Indicated toner is low or runs out.	Replace the indicated toner cartridge. ⇒ P.85 "Replacing the Toner Cartridge"
Change Fuser	The fusing unit is at the end of its service life.	Contact your sales or service representative.
Change PCU	The photoconductor unit is nearly at the end of its life.	If printed side gets dirty, replace the photoconductor unit. ⇒ P.88 "Replacing the Photoconductor Unit"
Close Front Cover	The front cover is open.	Close the front cover. ( $\Rightarrow$ P.1)
Close Left Cover	The left cover is open.	Close the left cover. $(\Rightarrow P.1)$
Close Paper Exit Cover	The paper exit cover is open.	Close the paper exit cover. $(\Rightarrow P.3)$
Load (paper size)	There is no indicated paper size in the paper tray being used.	Load the indicated paper size into the paper tray being used. ⇒ P.49 "Loading Paper"
	There is no correct paper size in the paper tray.	Load the correct paper size.
Load (paper size) Press # key	There is no indicated paper size in any paper tray.	Load the indicated paper size into the bypass tray, and press [Enter] to resume printing.
Open Front Cover Remove Misfeed	There is a paper misfeed in the printer.	Remove the misfed paper.  ⇒ P.76 "Removing Misfed Paper"

Message	Description	Comments
Paper Size Error	There is a difference be- tween the paper size in the tray and the requested pa- per size from the computer.	After confirming that the size, feed direction of paper and the paper size dial in the tray are set correctly, open and close the front cover. ⇒ P.49 "Loading Paper in the Paper Tray"
Power Off/On	There is a malfunction in	Turn the printer off and on.
SC:xxx	the printer.	If this doesn't clear the problem, contact your sales or service representative.
Remove Misfeed From Output Tray	There is a paper misfeed in the printer.	Remove the misfed paper.  ⇒ P.76 "Removing Misfed ""
1 ,		Paper"
Remove Misfeed From Tray #	There is a paper misfeed in the printer.	Remove the misfed paper.  ⇒ P.76 "Removing Misfed Paper"
Reset Charger	The charger is not set cor-	Set the charger correctly. $\Rightarrow$
Correctly	rectly or the charger cleaner is not in the correct position.	P.92 "Replacing the Waste Toner Bottle and Charger"
Reset Fusing	The fusing unit is not in-	Contact your sales or ser-
Unit Correctly	stalled in the printer.	vice representative.
Reset PCU	The photoconductor unit is	Install the photoconductor
Correctly	not installed in the printer.	unit. $\Rightarrow$ P.88 "Replacing the Photoconductor Unit"
Reset Toner	The toner cartridge is not	Install the cartridge cor-
Correctly	installed correctly.	rectly. ⇒ P.85 "Replacing the Toner Cartridge"
Reset Tray	The paper tray is not in-	Install the paper tray cor-
Correctly	stalled correctly.	rectly.
	The tray on the paper feeding path was not set correctly when the printer received the print job.	Install the paper tray correctly. The printer will restart printing automatically.
Reset Waste T	The waste toner bottle is	Install the waste toner bot-
Bottle Correctly	not installed.	tle. ⇒ P.92 "Replacing the Waste Toner Bottle and Charger"

Message	Description	Comments
Warming Up	The printer is preparing for printing.	Wait until the printer is warmed up.
	The printer adjusts itself regularly to maintain print quality. (This message might appear while printing.)	It is not an error message. The printer is working properly. Just wait a while.
Waste T Full (on the lower line)	The waste toner bottle is nearly full.	Replace the waste toner bottle. ⇒ P.92 "Replacing the Waste Toner Bottle and Charger"
Waste Toner is Full	The waste toner bottle is full.	Replace the waste toner bottle. ⇒ P.92 "Replacing the Waste Toner Bottle and Charger"
A3:Error	Ther is too much data for the I/O buffer to handle.	Check if the interface cable is inserted into the printer and your computer securely.
		Check if the interface cable is not damaged or broken.
		Increase the size of I/O buffer. ⇒ P.103 "System Menu"
A6:Error	There is not enough printer memory to print one or more of the pages in the print job.	See P.114 "Low Memory".
AB:Error	The printer is unable to process the data you are trying to print.	Install an optional memory units (SIMM) to increase printer memory capacity.
		Reduce the amount of data being sent to the printer.

Message	Description	Comments
B0:Error	An error has occurred in the optional memory unit. (SIMM)	Turn the printer's power switch off and on. Then, try to print again.
		Turn off the printer's power switch. Reinstall the memory unit and turn on the printer's power switch. Then, try to print again.
		Turn off the printer's power switch. Remove the memory unit and turn on the printer's power switch. Then, try to print again.
		Note  ☐ If you remove the memory unit, you must set up the option with the printer driver. Windows 95/98 ⇒ P.35  "Setting Up Options",  Windows 3.1x ⇒ P.38  "Setting Up Options",  Windows NT4.0 ⇒ P.41  "Setting Up Options".  ☐ In this case, you might not be able print complex print jobs.
B1:Error	An error has occurred in the standard parallel interface.	Contact your sales or service representative.
B3:Error	The printer setting is wrong.	Reset the printer using "Menu Reset" of the "Maintenance" menu. ⇒ P.95 "Making Printer Settings with the Operation Panel"
B5:Error	An error has occurred in the optional RICOH-SCRIPT2 module.	Remove the RICOH- SCRIPT2 module from the printer and turn off and on the printer's power switch. Then, try to print again.

Message	Description	Comments
B6:Error	An error has occurred in the optional parallel interface board.	Turn off the printer's power switch. Remove and reinstall the optional parallel interface board and turn on the printer's power switch. Then, try to print again.
B7: Error	An error has occurred in the optional network interface board.	Turn the printer's power switch off and on. Then, try to print again.
		Turn off the printer's power switch. Reinstall the network interface board and turn on the printer's power switch. Then, try to print again.
		Turn off the printer's power switch. Remove the network interface board from the printer and turn on the printer's power switch.  Then, try to print again.
		<ul> <li>✓ Note</li> <li>☐ If you remove the network interface board, you cannot perform your print job over the network. You can send your print job to the printer only via a parallel cable connection.</li> </ul>
85:Error	An error has occurred in the printer's standard memory.	Turn off and on the printer's power switch.
86:Error	You may be trying to print with the wrong printer driver.	Make sure you are using the correct printer driver.
	You might not use the correct interface cable.	Make sure you are using the correct interface cable.
91:Error	An error has occurred in the printer's standard memory.	Turn off and on the printer's power switch.

Message	Description	Comments
94:Error	The amount of the memory is not set correctly.	Specify the correct memory capacity using the printer driver. Windows 95/98 ⇒ P.35 "Setting Up Options", Windows 3.1x ⇒ P.38 "Setting Up Options", Windows NT4.0 ⇒ P.41 "Setting Up Options"

### Note

☐ If you cannot solve the problem by taking above actions, turn the printer power off and then back on again. If this does not clear the error message, write down the error number and the message, and contact your sales or service representative.

# **Getting Printer Information over the Network**

### Note

☐ The optional network interface board is required to get the information over the network

#### **Printer Current Status**

You can check the printer's current status using the following method.

#### **♦** UNIX

Use the lpq command or stat parameter of rsh, rcp, or ftp.

#### mshell

Use status command.

Message	Description	Comments
Ready	Printer works properly.	_
Add Fuser Oil	The fuser oil bottle is empty.	Replace the fuser oil bottle.  ⇒ P.90 "Replacing the Fuser Oil Bottle and Ozone Filter"
Call Service	There is malfunction in the printer.	Turn the printer off and then on.
		If this doesn't clear the problem, contact your sales or service representative.
Change Fusing Unit	The fusing unit is at the end of its life.	Contact your sales or service representative.

Message	Description	Comments
Change PCU	The photoconductor unit is nearly at the end of its life.	If printed side gets dirty, replace the photoconductor unit. ⇒ P.88 "Replacing the Photoconductor Unit"
Close Front Cover	The front cover is open.	Close the front cover. ( $\Rightarrow$ P.1)
Close Left Cover	The left cover is open.	Close the left cover. $(\Rightarrow P.1)$
Close Paper Exit Cover	The paper exit cover is open.	Close the paper exit cover. $(\Rightarrow P.3)$
Energy Save Mode	The printer is in Energy Saver mode.	Wait for a while.
Error: Power Off/On	There is malfunction in the printer.	Turn the printer off and on.
Fuser Oil is Low	Fuser oil is low. You can print about 200 pages more after this message appears.	Replace the fuser oil bottle.  ⇒ P.90 "Replacing the Fuser Oil Bottle and Ozone Filter"
Load Paper	There is no paper of the indicated paper size in the paper tray being used.	Load paper of the indicated paper size into the paper tray being used.
Misfeed: Front Cover	There is a paper misfeed in the printer.	Remove the misfed paper.  ⇒ P.76 "Removing Misfed Paper"
Misfeed: Output Tray	There is a paper misfed in the printer.	Remove the misfeed paper.  ⇒ P.76 "Removing Misfed Paper"
Misfeed: Paper Tray	There is a paper misfed in the printer.	Remove the misfeed paper.  ⇒ P.76 "Removing Misfed Paper"
Paper Size Error	There is a difference be- tween the paper size in the tray and the requested pa- per size from the computer.	After confirming that the size, feed direction of paper and the paper size dial in the tray are set correctly, open and close the front cover. ⇒ P.49 "Loading Paper in the Paper Tray"
Please Wait	The printer is now preparing for printing.	Wait for a while.
Reset Fusing Unit	The fusing unit is not installed in the printer.	Contact your sales or service representative.

Message	Description	Comments
Reset PCU Correctly	The photoconductor unit is not installed in the printer.	Install the photoconductor unit correctly. ⇒ P.88 "Replacing the Photoconductor Unit"
Reset Toner Correctly	The toner cartridge is not installed correctly.	Install the cartridge correctly. ⇒ P.85 "Replacing the Toner Cartridge"
Reset Tray Correctly	The paper tray is not installed correctly.	Install the paper tray correctly.
	The tray on the paper feeding path is not set correctly when the printer receives the print job.	Install the paper tray correctly. The printer will restart printing automatically.
Reset Waste Toner	The waste toner bottle is not installed correctly.	Install the waste toner bottle correctly. ⇒ P.92 "Replacing the Waste Toner Bottle and Charger"
Toner is Low: XXX	The indicated toner is low or has run out.	Replace the toner cartridge.  ⇒ P.85 "Replacing the Toner Cartridge"
WarmUp	The printer is preparing for printing.	Wait until the printer is warmed up.
Waste Toner is Full	The waste toner bottle is full.	Replace the waste toner bottle. ⇒ P.92 "Replacing the Waste Toner Bottle and Charger"
Waste Toner Nearly Full	The waste toner bottle is nearly full.	Replace the waste toner bottle. ⇒ P.92 "Replacing the Waste Toner Bottle and Charger"

### **Printer Configuration**

You can check the printer's current status using the following method.

#### **♦** UNIX

Use the lpq command or stat parameter of rsh, rcp, or ftp.

#### mshell

Use info command.

# Note

☐ "\*" (asterisk) is displayed with the current setting.

☐ Regarding \*1–\*4, see the attached table.

Item	Description
Printer System	Version of the printer
Network Board	Version of the network board
Input Tray	
No.	ID number of the paper tray
Name	Name of the paper tray*1
PageSize	Paper size loaded in the paper tray*2
Status	Current status of the paper tray*3
Output Tray	
No.	ID number of the output tray
Name	Name of the output tray (The fixed name is "Standard".)
Status	Current status of the output tray (The fixed name is "Normal".)
Emulation	
No.	ID number of the emulation used by the printer
Name	Name of the emulation used in the printer $^{*4}$
Version	Version of the emulation
Program	
No.	ID number of the program
Name	Name of the program (The fixed name is blank.)

# ◆ \*1 Input Tray: Name

Name	Description
Tray1	Standard Tray
Tray2	Paper Feed Unit (upside)
Tray3	Paper Feed Unit (downside)
Bypass Tray	Bypass Tray

# ◆ \*2 Input Tray: Paper Size

Paper Size	Description
A3R	A3 🗸
A4	A4D
A5	A5D
A6R	A6 🗸
B4R	B4 🗸
B5	B5□
B6R	B6 □
DLR	11″×17" <b></b>
LGR	8¹/₂″×14" □
LT	8 <sup>1</sup> / <sub>2</sub> "×11"□
HL	5 <sup>1</sup> / <sub>2</sub> "×8 <sup>1</sup> / <sub>2</sub> "□
EX	7 <sup>1</sup> / <sub>4</sub> "×10 <sup>1</sup> / <sub>2</sub> "□
FR	8"×13" 🔽
FLR	8 <sup>1</sup> / <sub>4</sub> "×13" <b></b>
F4R	8 <sup>1</sup> / <sub>2</sub> "×13"
FRE	Custom size

# ◆ \*3 Input Tray: Status

Status	Description
Normal	_
NoTray	There is no paper tray
PaperEnd	There is no paper in the paper tray

### ◆ \*4 Emulation: Name

Emulation Name	Description
RWC(IPDL-C)	IPDL-C
RPS(RicohScript2)	R-PS2(option)

# **Printer Doesn't Print**

Possible Cause	Solutions
Is the power on?	Make sure that the power cord is securely plugged into the wall socket and the printer's power socket.
	Turn on the printer's power switch. $\Rightarrow$ P.7 "Turning the Printer On and Off"
Is the interface cable properly connecting the	Connect the interface cable properly. If there are any connectors or screws, make sure they are fastened securely.
printer to your computer connected securely?	See the "Quick Installation Guide" for details about the settings.
Are you using a correct interface cable?	The type of interface cable you should use depends on your computer. Be sure to use the correct one.
	If the cable is damaged or worn, replace it with a new one.
	See the "Quick Installation Guide" for details about the settings.
Does the <b>On Line</b> indicator stay on?	Press [On Line] to light it up.
Is the paper set?	Load paper into the paper tray or on the bypass tray. $\Rightarrow$ P.49 "Loading Paper"
Does the <b>Error</b> indicator stay red?	Check the error message on the panel display and do the required action. $\Rightarrow$ P.56 "Error & Status Messages on the Operation Panel"

Possible Cause	Solutions
Is the <b>Data In</b> indicator blinking or lit after starting the print job?	If not, the data is not being sent to the printer. Or the printer may be resetting the print job because there was a long delay in receiving the data from the computer.
	If the printer is using "I/O Timeout" Increase the value of the "I/O Timeout" setting of the "IP-DL-C Menu" or set the "I/O Timeout" value to "0" (this is the off setting). ⇒ P.103 "IPDL-C Menu"
	If your printer is connected to the computer using the interface cable
	Confirm that the printer port settings are correct. For a parallel port connection, port LPT1 or LPT2 should be set.  For more information on the printer port settings, see the notes after this table.
	Network Connection Contact your network administrator.
	If the <b>Data In</b> indicator is blinking or lit.
	The printer may be resetting the print job. Take the following steps to correct the situation.
	• Increase the "Job Timeout" setting of the "IPDL-C Menu".
	Make sure your printer driver settings are correct.
	Change the setting of the "Transfer" of the "System Menu".
	Make sure the "Parallel" of the "System Menu" is correct.
Can you print a test page (configuration page)?	If you can't print a test page, it probably indicates a printer malfunction. You should contact your sales or service repre- sentative.
	If you can print a test page but cannot get the printer to print when you issue a print command from your computer, it probably means there is a problem with your computer.
	Also keep in mind that large, complex data might take long time for the printer process. $\Rightarrow$ P.107 "Printing the Configuration Page"

If you cannot solve the problem by taking the above actions, contact your sales or service representative.

### Note

#### Windows 95/98

- ① Click [Start], point to [Settings], and then click [Printers].
- ② Select the icon of the printer by clicking it. Next, on the [File] menu, click [Properties].
- 3 Click [Details] tab.
- 4 Check the [Print to the following port] box to make sure the correct port is selected.

#### • Windows 3.1x

- ① On the [Control Panel], double-click [Printers] icon.
- ② Confirm that this printer is specified as the default printer.
- 3 Click [Connect].
- ④ Check the **[Ports]** box to make sure the correct port is selected.

#### • Windows NT4.0

- ① Click [Start], point to [Settings], and then click [Printers].
- ② Select the icon of the printer by clicking it. Next, on the [File] menu, click [Properties].
- 3 Click [Port] tab.
- 4 Check the [Print to the following port] box to make sure the correct port is selected.

# **Other Printing Problems**

Status	Possible Causes, Descriptions, and Solutions
The printer prints a message indicating insufficient mem-	This message is printed when the printer does not have enough memory to print a page.
ory.	The following are the actions you should take when you encounter memory shortage problems. If these actions do not solve the problem individually, try them in combination with each other. $\Rightarrow$ P.114 "Low Memory"
	① Increase printer memory.  Install the optional memory unit to increase printer memory capacity. ⇒ P.11 "Installing the Memory Unit (SIMM)"
	<ul> <li>② Change the Color Level to [1 bit].         Use the printer driver to select [Fast] or change the Color Level to [1 bit].         ⇒ The printer driver online help         ⇒ "RICOH-SCRIPT2 Operating Instructions"</li> </ul>
	<ul> <li>③ Reduce resolution.</li> <li>Use the printer driver to set resolution to 300 dpi.</li> <li>⇒ The printer driver online help</li> <li>⇒ "RICOH-SCRIPT2 Operating Instructions"</li> </ul>
	④ Turn on "Image Memory". Use the printer's "System Menu" to turn on "Image Memory". ⇒ P.95 "Making Printer Settings with the Operation Panel"
Image is printed on the reverse side of the paper.	<ul> <li>The paper in the paper tray is upside down.</li> <li>Standard Tray (Tray 1) Load paper with the print side up.</li> <li>Bypass Tray Load paper with the print side down.</li> <li>Optional Paper Feed Unit (Tray 2, Tray 3) Load paper with the print side up.</li> </ul>

Status	Possible Causes, Descriptions, and Solutions
Paper misfeeds occur frequently.	Check the paper size settings. The size specified with the paper size dial might be different from the actual paper size. Make the correct dial setting. ⇒ P.49 "Loading Paper in the Paper Tray"
	Check if the paper tray is set correctly. If not, set it correctly. $\Rightarrow$ P.49 "Loading Paper in the Paper Tray"
	Paper is not loaded correctly in the paper tray. Remove the paper from the tray and reload it correctly. $\Rightarrow$ P.49 "Loading Paper in the Paper Tray"
	Check the paper type settings. The type of paper set with the printer driver might be different from the actual paper or media type. Make the correct paper or media type setting.
	You might use paper not supported by this printer. Use the appropriate type of paper. $\Rightarrow$ P.45 "Precautions for Paper"
Multiple pages are fed through the printer at once.	Clean the friction pad, if it is dirty. $\Rightarrow$ P.80 "Cleaning the Friction Pad"
Operation panel error message stays on after removing the misfed paper.	After removing misfed paper, open the front cover of your printer and then close it. ⇒ P.76 "Removing Misfed Paper"
It takes too much time to print the first page.	The data is so large or complex that it takes time to process it. If the <b>Data In</b> indicator is blinking, the data processing is being done. Just wait until it resumes.
	The Energy Saver mode might be enabled. In the Energy Saver mode, it takes time for the machine to warm up.
It takes too much time to print.	Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data.
	You can also speed up printing by using the printer-driver to select <b>[Fast]</b> as the print mode, and by setting the resolution to 300 dpi.
	The printer takes more time to print documents that contain a large volume of data. A blinking or lit <b>Data In</b> indicator means that data is reaching the printer, so just wait for the data to be processed and printed.
	If "Warming Up" appears on the panel display, the printer is now warming up. Wait for a while.

Status	Possible Causes, Descriptions, and Solutions
It takes too much time to perform black and white printing.	<b>[Color]</b> is selected on the printer driver's <b>[Setup]</b> tab. Change this setting to <b>[Black &amp; White]</b> . See the printer driver's online help for details about changing the settings on this tab. Note, however, that some applications ignore the color mode setting made with the printer driver.
Paper isn't fed from the desired paper tray.	The printer driver setting is not correct. Change the setting. See the printer driver's online help for further details.
Desired paper size isn't used for the output.	The printer driver setting is not correct. Change the setting. See the printer driver's online help for further details.
	Check the paper size settings. The size specified with the paper size dial might be different from the actual paper size. Make the correct dial setting. ⇒ P.49 "Loading Paper in the Paper Tray"
	Specified paper is not loaded correctly in the paper tray. Remove the paper from the tray and reload the specified paper correctly. ⇒ P.49 "Loading Paper in the Paper Tray"
Printed side gets dirty.	The charger and dust-proofing glass are dirty. Clean the charger and dust-proofing glass. ⇒ P.80 "Cleaning the Charger" and P.81 "Cleaning the Dust-proofing glass"
	Check the image density setting. $\Rightarrow$ P.82 "Adjusting the Image Density"
	If the message "Change PCU" appears on the panel display, replace the photoconductor unit. ⇒ P.88 "Replacing the Photoconductor Unit"
Image density is too light.	If turning on the <b>[Toner Saving]</b> setting on <b>[Quality Setting]</b> tab, it can cause blurring or fine lines might not be printed. With color printing, toner saving can cause abnormal coloring. Try printing again after turning <b>[Toner Saving]</b> off. See the printer driver's online help for details about changing the settings on this tab.
	If the message "Add Toner XXX" is on the panel display, replace the toner cartridge for the indicated color. ⇒ P.85 "Replacing the Toner Cartridge"
	You might be using paper not supported by this printer. Use the appropriate type of paper. $\Rightarrow$ P.45 "Precautions for Paper"

Status	Possible Causes, Descriptions, and Solutions
Black or white lines appear on the print side.	The charger and dust-proofing glass are dirty. Clean the charger and dust-proofing glass. ⇒ P.80 "Cleaning the Charger" and P.81 "Cleaning the Dust-proofing glass"
Smeared toner appears on the printed side.	The charger is dirty. Clean the charger. $\Rightarrow$ P.80 "Cleaning the Charger"
Part of the printout is blurred or light.	If the message "Add Toner XXX" is on the panel display, replace the toner cartridge for the indicated color. ⇒ P.85 "Replacing the Toner Cartridge"
Toner is not fused well when printing on thick paper or OHP transparencies.	The printer is not in "Thick Paper" or "OHP Transparency" mode. Select [Thick Paper] or [OHP Transparency] in the [Paper Type] box of the printer driver's [Setup] tab. See the printer driver's online help for details about changing the settings on this tab.
The color of the printout does not match the color on the computer's display.	The toner based color system used by the printer is different from the light based color system of the computer screen. ⇒ P.vi "Color Guide"
	Turning on the <b>[Toner Saving]</b> feature of the printer driver's <b>[Quality Setting]</b> tab can cause color irregularities. See the printer driver's online help for details about changing the settings on this tab.
	Check the settings of the printer driver's <b>[Color Setting]</b> tab. See the printer driver's online help for details about changing the settings on this tab.
The printout does not match the image on the computer screen.	Certain applications or image creation methods produce images that cannot be printed exactly as they appear on the computer screen.
	Checking the [Print as bitmap_] item of the printer driver's [Setup] tab causes the print data to be converted to image data before it is sent to the printer, which produces a printout that is closest to what appears on your computer screen. See the printer driver's online help for details about changing the settings on this tab.
	<ul> <li>✓ Note</li> <li>☐ The setting also causes large-volume print jobs which take longer to print because of the required conversion process.</li> </ul>

Status	Possible Causes, Descriptions, and Solutions
Changing the color settings with the printer driver causes a drastic change in printout color.	Do not make radical changes in the settings of the <b>[Color Setting]</b> tab.
	Also note that the sample shown by the printer driver is intended to show what processes are being applied, not exactly what your printout will look like. See the printer driver's online help for details about changing the settings on this tab.
Photograph printing looks rough.	Select [Fine] on the [Print Quality] tab.
	Printing from some applications results in a loss of resolution.
Color documents are printed in black and white.	The printer driver is not set up for color printing. Select <b>[Color]</b> on the printer driver's <b>[Setup]</b> tab. See the printer driver's online help for details about changing the settings on this tab.
	Some applications normally print color text as black and white. You can obtain correct color printing with such applications by checking the [Change data processing] option in the printer driver's [Setup] tab. See the printer driver's online help for details about changing the settings on this tab.
Fine dot pattern does not print.	Select [Text] in the [Dithering] list box of the [Color Setting] tab. See the printer driver's online help for details about changing the settings on this tab.
Black parts are shiny or glossy, when created as a mixture of cyan, magenta, yellow.	Select <b>[K]</b> on the printer driver's <b>[Graphic Mode]</b> . See the printer driver's online help for details about changing the settings on this tab.
Black gradation is not natural.	Select [CMY + K] on the printer driver's [Graphic Mode] . See the printer driver's online help for details about changing the settings on this tab.
Thin lines are blurred or light.	Check [Print thin lines darker] box on the printer driver's [Print Quality] tab. See the printer driver's online help for details about changing the settings on this tab.
When printing on OHP transparencies, a sheet of paper is not placed between printed OHP transparencies.	The size and direction of the paper loaded in the paper tray are different from the those of the OHP transparency. Load the same size and direction paper as the OHP transparency into the paper tray.
	The "OHP Slip" setting is set to "Off" ( $\Rightarrow$ P.106). Change the setting with operation panel.



☐ If you cannot solve the problem by taking above actions, contact your sales or service representative.

# **Removing Misfed Paper**

When a paper misfeed occurs, an error message appears on the panel display. The procedure you should follow to remove the misfed paper depends on its location which is indicated on the panel display.

#### $\triangle$ CAUTION:

- When removing misfed paper, do not touch the fusing section because it could be very hot.
- When accessing the inside of the machine, do not touch any sections other than those specified in this manual. If you do, it might result in receiving a burn or injury.

### **#Important**

- ☐ If your printer is equipped with the optional tray, do not pull out more than one tray with paper at a time. If you do, the printer might tilt forward.
- ☐ Check the following points if paper continues to misfeed.
  - Make sure paper is properly loaded in the paper tray.
  - Make sure the number of sheets do not exceed the maximum capacity of the tray.
  - Make sure you are using only the appropriate type of paper.
  - Make sure misfed paper is still not inside the printer when you resume printing.
  - Check the paper type settings.
     The type of paper set with the printer driver might be different from the actual paper or media type. Make the correct paper or media type setting.

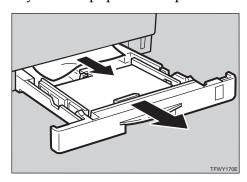
- ☐ Make sure the size of the paper loaded in the paper tray is same as the size of the OHP transparency.
- ☐ If misfeeds persist, contact your sales or service representative.
- ☐ Do not touch the photoconductor unit when removing misfed paper. If you do, the photoconductor unit might be damaged.
- ☐ Exposing the photoconductor unit to light for too long can reduce its performance. Close the cover as quickly as possible.
- ☐ After removing the misfed paper, the back sides of the next printout might get dirty. Print a few pages to absorb the toner.

# When the Message "Remove Misfeed From Tray" Appears

# Standard Tray (Tray1) or Paper Feed Unit (Tray2/3)

Pull out the paper tray gently, being careful not to tear the misfed paper, and remove the misfed paper.

Make sure that you do not leave any misfed paper in the printer.



### Note

- ☐ If your printer has an optional paper feed unit installed, check all paper trays for misfeeds.
- 2 Slide the paper tray completely into the printer.

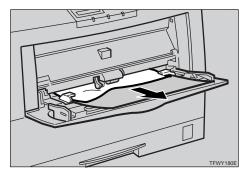
# **∰**Important

- ☐ Be sure to insert the paper tray completely. Otherwise, misfeeds might occur, or the front cover might touch the paper tray.
- Open the front cover, and then close it to reset the misfeed condition.

### Bypass tray

1 Carefully pull the misfed paper.

Make sure that you do not leave any misfed paper in the printer.



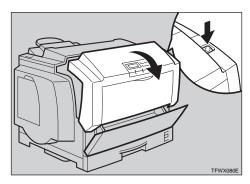
- When paper is left in the bypass tray, remove the paper.
- Close the bypass tray, open the front cover, and then close it to reset the misfeed condition.
- A Reload paper into the bypass tray.

# When the Message "Open Front Cover Remove Misfeed" Appears

### 

 When removing misfed paper, do not touch the fusing section because it could be very hot.

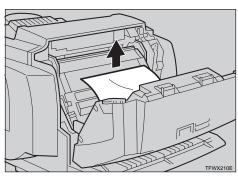
# 1 Open the front cover by pushing the front cover release button.



2 If the paper is in the front side of the photoconductor unit, carefully pull it out.

### Note

☐ When removing misfed paper, be careful not to touch the fusing section because it could be very hot.



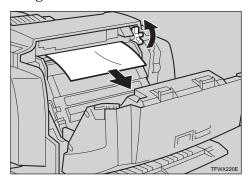
When the misfed paper is in the main section of the photoconductor unit, turn the dial downward then remove the misfed paper in the printer.

Make sure that you do not leave any misfed paper in the printer.

# 

☐ If it is difficult to turn the dial, turn it slightly upward in the

opposite direction, and then try again.



**4** Close the front cover.

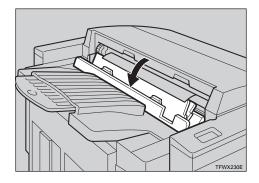
# When the Message "Remove Misfeed From Output Tray " Appears

#### **A** CAUTION:

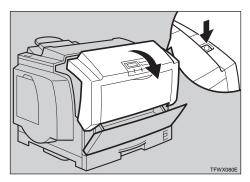
- When removing misfed paper, do not touch the fusing section because it could be very hot.
- 1 Open the paper exit cover.

### Note

☐ When opening the paper exit cover, be careful as it may be hot.



# 2 Open the front cover by pushing the front cover release button.



Turn the dial downward, then remove the misfed paper in the printer.

### Note

When removing misfed paper, be careful not to touch the fusing section because it could be very hot.

When you can see the misfed paper inside the printer.

### 

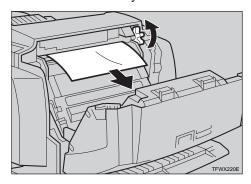
- ☐ If it is difficult to turn the dial, turn it slightly upward in the opposite direction, and then try again.
- Remove the misfed paper from inside of the printer.

While turning the dial, remove the misfed paper as shown in the illustration. Be careful not to leave any misfed paper in the printer.

### Note

☐ When removing misfed paper, be careful not to touch

the fusing section because it could be very hot.



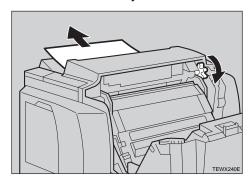
When you cannot see the misfed paper inside the printer.

# • Remove the misfed paper from the output tray.

While turning the dial, remove the misfed paper as shown in the illustration. Be careful not to leave any misfed paper in the printer.

### 

☐ When removing misfed paper, be careful not to touch the fusing section because it could be very hot.



- 1 Close the paper exit cover.
- **5** Close the front cover.

### Cleaning and Adjusting the Printer

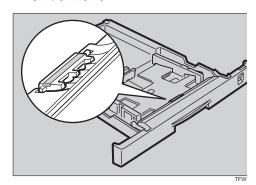
### Cleaning the Friction Pad

If the friction pad becomes dirty, misfeeds or multi-feeds of paper might occur. In this case, clean the pad as follows:

- Slide the paper tray out until it stops. After that, lift it slightly, then pull it out of the printer. Then remove the paper from the paper tray.
- 2 Clean the friction pad with a soft damp cloth. After wiping it with a damp cloth, wipe it with a dry cloth to remove the water.

### **∰**Important

Do not use chemical cleaners or organic solvents such as thinner or benzene.



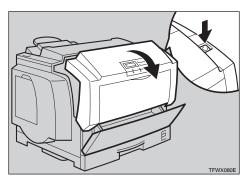
Load paper with the print side up into the paper tray. While lifting the front side of the tray, insert the paper tray into the printer. Then push in until it stops.

### **Cleaning the Charger**

The charger requires cleaning when your printouts appear dirty.

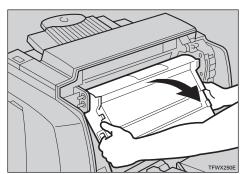
#### A CAUTION:

- When accessing the inside of the machine, do not touch any sections other than those specified in this manual. If you do, it might result in receiving a burn or injury.
- 1 Open the front cover by pushing the front cover release button.

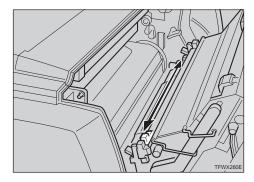


### **#Important**

- ☐ Exposing the photoconductor unit to light for too long can reduce its performance. Clean the charger as quickly as possible.
- 2 Hold the inset grips (green part) of the photoconductor unit, and pull the top side of the photoconductor unit forward.



Move the charger cleaner (light blue part) left and right 2 or 3 times, and return it to the left side. Set the arrow of the charger cleaner to the arrow of the photoconductor unit.



### **∰**Important

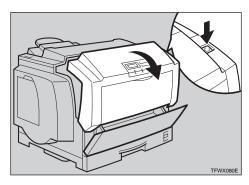
- ☐ If the charger cleaner is not on the left side, an error message or print problem might occur.
- 4 Hold the inset grips (green part) of the photoconductor unit, and push the photoconductor unit to its original position.
- **5** Close the front cover.

# Cleaning the Dust-proofing glass

The dust-proofing glass may require cleaning if black or white lines appear on the print side of the document.

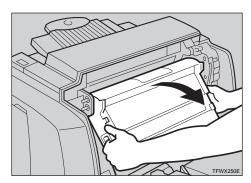
#### riangle CAUTION:

 When accessing the inside of the machine, do not touch any sections other than those specified in this manual. If you do, it might result in receiving a burn or injury. Open the front cover by pushing the front cover release button.

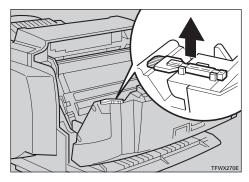


### **#Important**

- ☐ Exposing the photoconductor unit to light for too long can reduce its performance. Clean the dust-proofing glass as quickly as possible.
- 2 Hold the inset grips (green part) of the photoconductor unit, and pull the top side of the photoconductor unit forward.



Remove the cleaning brush from back of the front cover.



Insert the cleaning brush into the back of the guide (light blue) until it stops, and then move it left and right 4 or 5 times.



- **5** Return the cleaning brush to its original position.
- 6 Hold the inset grips (green part) of the photoconductor unit, and push the photoconductor unit to its original position.
- **7** Close the front cover.

### **Adjusting the Image Density**

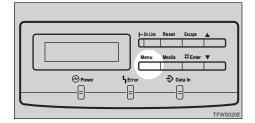
Changing the image density setting might cause a deterioration of color balance. We recommend that you normally leave the image density at its factory default setting.

The following procedure describes how to change the magenta image density. You can use the same procedure to change the image density for the other toner colors as well.

### **∰**Important

- ☐ Extreme settings may create output that appears dirty.
- ☐ Image density settings should be made from your application or the printer driver whenever possible.
- Turn on the printer's power switch.

Press [Menu].



The following message appears on the panel display.



Use [▲][▼] to display "Maintenance", and then press [Enter].



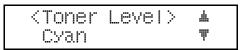
The following message appears on the panel display.



Use [▲][▼] to display "2.Toner Level", and then press [Enter].



The following message appears on the panel display.



Use [▲][▼] to display "Magenta", and then press [Enter].

The following message appears on the panel display.

### 

Use [▲][▼] to adjust the toner density, and then press [Enter].

The "2.Toner Level" menu appears.



□ To make the image density darker, press [▲] to move the ‡ to the right. To make lighter, press [▼] to move the ‡ left.

### Press [On Line].

The normal display screen appears.

### Adjusting the Setting of "Registration" of the Optional Tray

Adjusting the registration refers to changing the position of the printed image on paper fed from the optional tray so it matches that of the standard tray. Probably you will never need to perform this procedure.

The following procedure describes how to adjust the tray 2. You can use the same procedure to adjust the other tray as well.

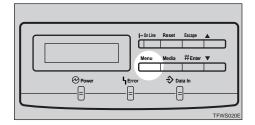
### **#Important**

☐ Select the tray with "Paper Tray" with the operation panel( $\Rightarrow$  P.103), and then print the configuration page ( $\Rightarrow$  P.107).

### Note

- ☐ Use A4 or  $8^{1}/_{2}$ "×11" paper to print the configuration page.
- 1 Turn on the printer's power switch.

### Press [Menu].

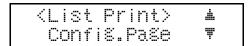


The following message appears on the panel display.



Use [▲][▼] to display "List Print", and then press [Enter].

The following message appears on the panel display.



- After confirming that "Config.Page" is on the display, press [Enter].
- **5** Press [Enter] again.

This prints the configuration page.

### **#Important**

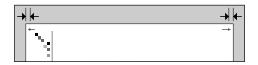
- ☐ If printing does not start, check the panel display for any error messages and take the action required to correct the problem.

  ⇒ P.55 "Error & Status Messages"
- After confirming that the "Config.Page" on the display, press [Escape].

The following the message appears on the panel display.

<Menu> ▲ List Print ♥

You can find the crop marks on the long edge of the configuration page. Check if the left and right margins on the long edge of the configuration page as shown in the illustration.



If the left and right margins are not the same use [▲][▼] and to display "Maintenance", and then press [Enter].



The following message appears on the panel display.

<maintenance> ▲ 1.Toner Select♥

Use [▲][▼] to display "4.Registration", and then press [Enter].

The following message appears on the panel display.

Use [▲][▼] to display the tray name, and then press [Enter].

The following message appears on the panel display.



# Use [▲][▼] to adjust the registration.

To move the image to the left side, press [▲] to move the # to the right. To move the image to the right side, press [▼] to move the # to the left.

# After you are finished, press [Enter].

This registers your setting and returns to the "Registration".

### Press [On Line].

The normal display screen appears.

### 6

### **Replacing Consumables**

### Replacing the Toner Cartridge

You should replace toner cartridges whenever the message "Add Toner" appears on the panel display.

Add Toner xxx

#### **MARNING:**

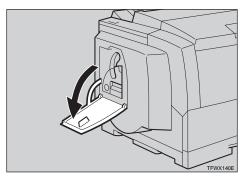
- Do not incinerate spilled toner or used toner. Toner dust might ignite when exposed to an open flame.
- Disposal can take place at our authorized dealer or at appropriate collection sites.
- If you dispose of the used toner containers yourself, dispose of them according to your local regulations.

### Note

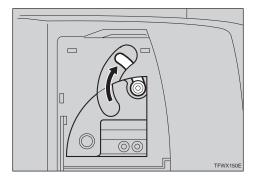
- ☐ Before removing a toner cartridge from the printer, spread paper or some other material around the area you are working to keep toner from making floor dirty.
- ☐ When several toner colors run out at the same time, a message appears on the operation panel. Replace them in the following order:
  - ① Black
  - Yellow
  - 3 Cyan
  - 4 Magenta
- ☐ When there is no all color toner cartridges that you want to replace, you can specify the replacing toner cartridges. ⇒ P.87

"Specifying the replacing toner cartridge"

### 1 Open the left cover.

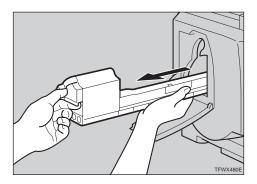


**2** Slide the lock lever up.

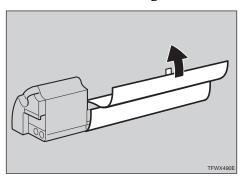


- Carefully pull out the toner cartridge.
  - Hold the grip of the toner cartridge, and slide it out until you can see the green tape.

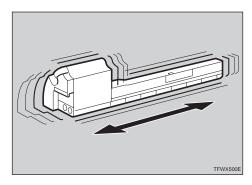
2 With your hand under the green tape, remove the toner cartridge carefully as shown in the illustration.



A Remove the protective sheet from the new toner cartridge.



Hold the new toner cartridge and shake it with a horizontal motion, about 10 times, as shown in the illustration.

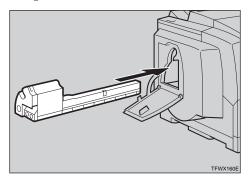


### #Important

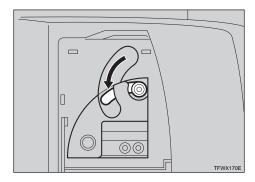
☐ If the toner cartridge is not shaken enough, toner might not be evenly distributed in the car-

tridge. In this case, the print quality might be reduced.

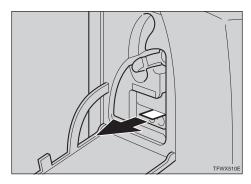
**6** Slide the new toner cartridge into the printer.



Return the lock lever to its original position.



Pull the tape out as shown in the illustration.



### **∰**Important

☐ Be sure to pull the tape horizontally. Pulling it upward or downward causes toner scattering. ☐ After pulling the tape out of the cartridge, toner scatters easily. Do not shake or give a shock to the cartridge.

### 9 Close the left cover.

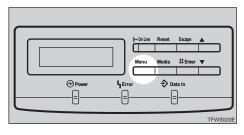
The "Add Toner" message clears from the panel display and the printer starts warming up. It takes a few minutes.

### Specifying the replacing toner cartridge

When several toner colors run out at the same time, you can replace only the specific toner cartridges. If you don't have all indicated toners, you should do this before following P.85 "Replacing the Toner Cartridge".

The following procedure describes how to replace the magenta toner cartridge. You can use the same procedure to replace the toner cartridges for the other toner colors as well.

### 1 Press [Menu].



The following message appears on the panel display.



Use [▲][▼] to display "Maintenance", and then press [Enter].



The following message appears on the panel display.

<Maintenance> #
1.Toner Select

After confirming that "1.Toner Select" is on the display, press [Enter].

The following message appears on the panel display.



Use [▲][▼] to display "Magenta", and then press [Enter].

The machine prepares itself for a new toner cartridge. Prepare the new toner cartridge for installation.

<Toner Select> Please Wait

When the machine is ready, the following message is displayed.

<Toner Select> Add Toner

E Replace the toner cartridge. ⇒ P.85 "Replacing the Toner Cartridge"

# Replacing the Photoconductor Unit

The message shown below indicates that the photoconductor unit is approaching the end of its life.

> IPDL-C Chanse PCU

You can still continue to use the current photoconductor unit if you are satisfied with the quality of the output being produced by the printer.

When the printed image starts looking soiled (horizontal lines along the edges of the page, for example), replace the photoconductor unit as soon as possible.

#### **⚠ WARNING:**

- Do not incinerate the photoconductor unit. Toner dust might ignite when exposed to an open flame.
- Disposal can take place at our authorized dealer or at appropriate collection sites.
- If you dispose the used photoconductor unit yourself, dispose of it according to your local regulations.

#### **A** CAUTION:

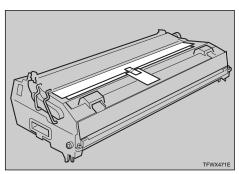
 When accessing the inside of the machine, do not touch any sections other than those specified in this manual. If you do, it might result in receiving a burn or injury.

### **#Important**

 Exposing the photoconductor unit to light for too long can reduce its performance. Replace the unit as quickly as possible.

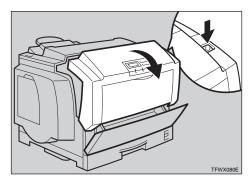


- ☐ Before removing the photoconductor unit from the printer, spread paper or some other material around the area you are working to keep toner from making floor dirty.
- ☐ The "Change PCU" message is based on a printed page counter kept internally by the printer. It is meant as a general guide to photoconductor unit life only. Actual photoconductor unit life depends on the printing conditions.
- Remove the new photoconductor unit from the box.
- Remove the protective sheet by pulling the red tab from the new photoconductor unit.



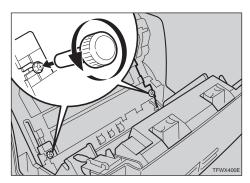
Turn off the printer's power switch.

Open the front cover by pushing the front cover release button.

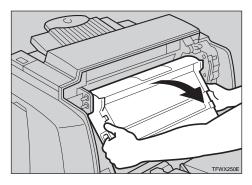


Dosen the screws that hold the photoconductor unit in the printer with the screw driver in the new photoconductor unit's box.

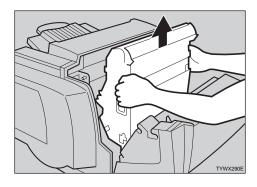
The screws cannot be completely removed from the photoconductor unit.



6 Hold the inset grips (green part) of the photoconductor unit, and pull the top side of the photoconductor unit forward.

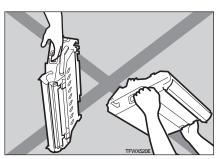


Hold the inset grips (green part) of the photoconductor unit, remove the photoconductor unit from the printer, and place it carefully inside the new photoconductor unit's box.



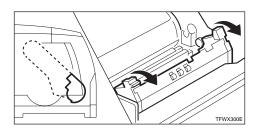
### **∰**Important

☐ To prevent accidental spilling of toner, do not shake, rotate, drop or hold the toner cartridge upside down.



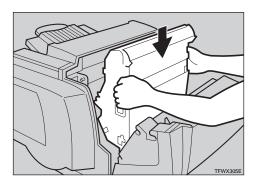
### Note

☐ Do not close the front cover removing the photoconductor unit. Otherwise, you cannot replace the photoconductor unit because the photoconductor unit holder will be closed. If you do this by mistake, return the photoconductor unit holder to its original position before replacing the photoconductor unit.



Hold the inset grips (green part) of the new photoconductor unit, and insert the photoconductor unit into the photoconductor unit holder.

When inserting the photoconductor unit, be careful not to damage the surface of it.



### Note

☐ The white powder on the photoconductor unit is to protect it after installation into the printer. This white powder does not have any adverse effect on the interior of the printer.

- Hold the inset grips (green part) of the new photoconductor unit, and push the photoconductor unit to its original position.
- Fix the photoconductor unit with fastening the screws using the screw driver.
- Close the front cover.

  Make sure that the front cover close properly.
- Turn on the printer's power switch.

# Replacing the Fuser Oil Bottle and Ozone Filter

Replace the oil bottle and ozone filter whenever the message shown below appears on the panel display.

> IPDL-C Add FuserOil

Add FuserOil

There is the fuser oil bottle and the ozone filter in the Fuser Oil Type305.

#### **⚠ WARNING:**

- Do not incinerate the oil bottle.
   This action could cause a fire or getting burned.
- Spilt oil is very slippery. If oil is spilt, wipe it with alkaline cleaner. Otherwise, the oily surfaces can create the danger of slipping and personal injury.

#### riangle CAUTION:

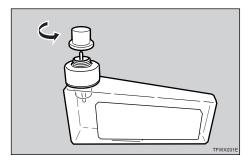
 When accessing the inside of the machine, do not touch any sections other than those specified in this manual. If you do, it might result in receiving a burn or injury.

### **∰**Important

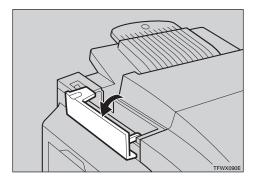
- ☐ There are three ozone filters in this printer. Two of them are set inside in the front, one of them is set in the rear. Be careful when replacing the ozone filters as the front side filter is a different shape from the rear side filter.
- ☐ Disposal can take place at our authorized dealer or at appropriate collection sites.
- ☐ Dispose of used ozone filters as general burnable refuse.
- 1 Turn off the printer's power switch.
- **2** Replace the oil bottle.
  - Remove the green cap from the new oil bottle.

### **#Important**

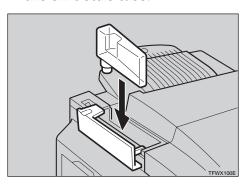
☐ Hold the clear cap while turning the green cap. Do not remove the clear cap.



2 Open the fuser oil bottle cover of the printer.



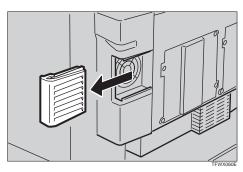
- **3** Remove the used oil bottle from the printer carefully.
- **4** Insert the new oil bottle into the oil bottle case.



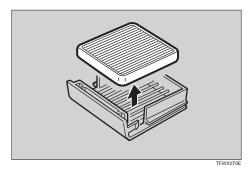
**6** Close the fuser oil bottle cover.

### **#Important**

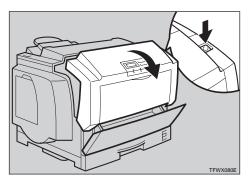
- ☐ The fuser oil bottle cover should be kept closed.
- Replace the ozone filter on the back side of the printer.
  - Remove the ventilator hole cover.



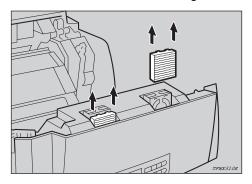
2 Remove the ozone filter from inside the ventilator hole cover.



- **3** Install a new ozone filter on the ventilator hole cover.
- **4** Replace the ventilator hole cover onto the printer.
- A Replace the ozone filters inside the printer. (There are two filters.)
  - Open the front cover by pushing the front cover release button.

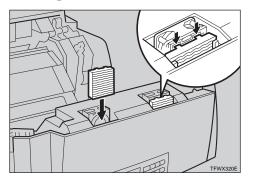


**2** Grasping the ozone filter by its tab, remove it from the printer.



## 3 Insert a new ozone filter into the printer.

Slide the filter into the stopper. Two small thin plastic tabs of the top of the filter should pop into place.



#### **4** Close the front cover.

Make sure that the front cover close properly.

Turn on the printer's power switch.



☐ After replace the fuser oil bottle, it takes a few minutes until the message clears.

# Replacing the Waste Toner Bottle and Charger

You should replace waste toner bottle and charger whenever the following messages appear on the panel display.

IPDL-C Waste T Full

Waste Toner is Full

#### **↑** WARNING:

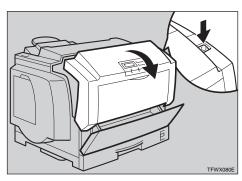
- Do not incinerate spilled toner or used toner. Toner dust might ignite when exposed to an open flame.
- Disposal can take place at our authorized dealer or at appropriate collection sites.
- If you dispose of the used toner containers yourself, dispose of them according to your local regulations.

#### **⚠** CAUTION:

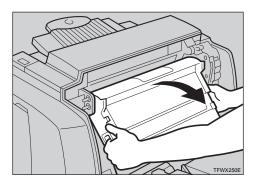
 When accessing the inside of the machine, do not touch any sections other than those specified in this manual. If you do, it might result in receiving a burn or injury.



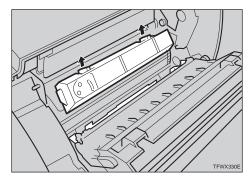
- ☐ Before removing the waste toner bottle from the printer, spread paper or some other material around the area you are working to keep toner from making floor dirty.
- 1 Turn on the printer's power switch.
- 2 Open the front cover by pushing the front cover release button.



Hold the inset grips (green part) of the photoconductor unit, and pull the top side of the photoconductor unit forward.

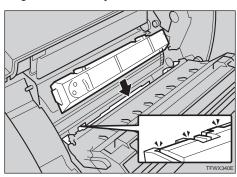


- **A** Replace the waste toner bottle .
  - **1** Grasping the waste toner bottle by its green tabs, remove it from the printer.



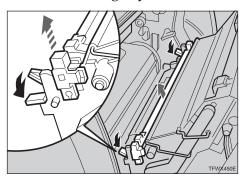
2 Insert a new waste toner bottle at the rear of the photoconductor unit.

Insert a new waste toner bottle completely. Otherwise, print problem may occur.



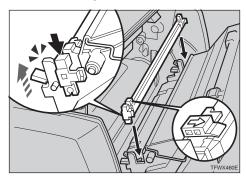
- **5** Replace the charger.
  - **1** Push the right and left lock levers of the charger.

The locks release, and the charger is lifted slightly.



- 2 Remove the charger.
- 3 Install a new charger into the printer.

Insert the new charger into the printer with the arrow of the charger cleaner's lever facing toward you. The charger locks automatically.



- Note
- ☐ Return the charger cleaner to the left side. Otherwise, print problem may occur.
- 6 Hold the inset grips (green part) of the new photoconductor unit, and push the photoconductor unit to its original position.

**2** Close the front cover.

Make sure that the front cover close properly.

Turn on the printer's power switch.

# 7. Making Printer Settings with the Operation Panel

Though the factory default settings of the printer are suitable for most printing jobs, the Printer Menu gives you access to a number of settings that control basic printer operations. Printer Menu settings you make retained even when you turn off the printer.

This section provides the following Printer Menu Information.

### Setting Menus

Describes the basic procedures for changing Printer Menu settings.

### Protecting the Menus

Describes how to protect System Menu settings against accidental changes.

#### Menu Table

A table chart that shows all of the Printer Menu.

### Menu Settings

Provides short explanations of each Printer Menu setting and what it does.

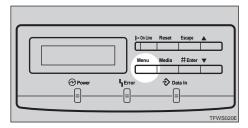
### Ø Note

### ♦ [Menu] and [Media] setting priorities

Some of the settings accessed by [Menu] can be accessed by [Media]. Settings made by [Menu] take priority over settings by [Media].

### **Setting Menus**

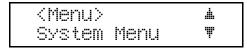
### 1 Press (Menu).



The following message appears on the panel display.



Use [▲][▼] to display the screen for the setting you want to change, and then press [Enter].



The following message appears on the panel display.

Use [▲][▼] to display the screen for the menu item you want to change, and then press [Enter].

```
(System Menu> ▲
2.Tray Size[*]♥
```

An asterisk "\*" is indicated at the left side of the currently selected item.

7

Use [▲][▼] to display the screen for the setting you want to change, and then press [Enter].

This registers the setting.

- B Repeat steps 3 and 4 to change the settings of other items.
- 6 Press [On Line].

The following message appears on the panel display.



**7** Press [On Line] to enter the off-line condition.

The **On Line** indicator stays off.

Press [Reset].

This restarts the printer with the new settings.

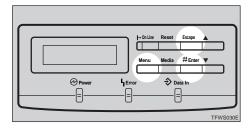
- Note
- ☐ You can check the current Menu settings by printing a Configuration Page. ⇒ P.107 "Printing the Configuration Page"

### **Protecting the Menus**

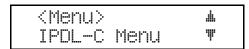
This procedure lets you protect System Menu settings against accidental changes. It makes it impossible to change the System Menu settings you make with the normal procedure unless you perform the required key operation. In a network environment, protecting settings restricts changes to System Menu settings to network administrators.

### **Protecting the Menus**

- 1 Check if the On Line indicator stays on. If not, press [On Line] to enter the on-line condition.
- Press [Enter], then [Escape], and then [Menu].



The following message appears on the panel display.



**3** Use [▲][▼] to display "Maintenance", and then press [Enter].



The following message appears on the panel display.

```
<Maintenance> ▲
1.Toner Select♥
```

7

### 4 Use [▲][▼] to display "5.Menu Protect", and then press [Enter].

The following message appears on the panel display.

### Use [▲][▼] to display "On", and then press [Enter].

This registers the setting and the "Maintenance" menu appears.

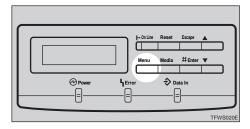
### 6 Press (On Line).

The normal display screen appears.

### **Changing the Menu Settings without Removing Protect**

This procedure allows you to change System Menu settings without turning off menu protection. The changes you make are automatically protected as soon as you register them.

### Press [Menu].



### 2 Use [▲][▼] to display "System Menu", and then press [Enter].

A message telling you that System Menu settings are protected appears.

Menu Protect Press Escape key

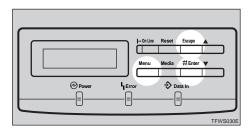
### Press [Media].

The following message appears on the panel display.

**1** Change the setting following the normal procedure. ⇒ P.96 "Setting Menus"

### **Removing Protect**

- 1 Check if the On Line indicator stays on. If not, press [On Line] to enter the on-line condition.
- Press [Enter], then [Escape], and then [Menu].



The following message appears on the panel display.

3 Use [▲][▼] to display "Maintenance", and then press [Enter].



The following message appears on the panel display.

### Use [♠][▼] to display "5.Menu Protect", and then press [Enter].

The following message appears on the panel display.

Use [▲][▼] to display "Off", and then press [Enter].

This turns off protection and the "Maintenance" menu appears.

### 6 Press [On Line].

The normal display screen appears.

### Menu Table

IPDL-C Menu	1. Job Timeout	
	2. I/O Timeout	
System Menu	1. Paper Tray	
	2. Tray Size[*]	
	3. I/O Buffer	
	4. Energy Saver	
	5. Energy Level	
	6. Transfer	
	7. Image Memory	
	8. Parallel IF1	
	9. Parallel IF2	
	10. Bi-direction	
	11. OHP Slip	
	12. PrinterLang. (Printer Language)	
	13. Language	
	32. IP Address	
	33. Subnet Mask	
	34. Gateway Add	
	35. Access CTL.	
	36. Access Mask	
	37. Net Boot	
	38. Frame NW	
	39. Active PTL.	
Maintenance	1. Toner Select $\Rightarrow$ P.87 "Specifying the replacing toner cartridge"	
	2. Toner Level $\Rightarrow$ P.82 "Adjusting the Image Density"	
	3. Menu Reset ⇒ P.111 "Resetting Menus"	
	4. Registration $\Rightarrow$ P.83 "Adjusting the Setting of "Registration" of the Optional Tray"	
	5. Menu Protect ⇒ P.98 "Protecting the Menus"	
List Print	1. Config.Page ⇒ P.107 "Printing the Configuration Page"	
	2. Color Sample $\Rightarrow$ P.110 "Printing the Color Sample"	

### **Menu Settings**

### IPDL-C Menu

The following are the settings you can make with the "IPDL-C Menu".

### **𝚱** Note

☐ Italicized settings indicate default settings.

#### 1. Job Timeout

You can specify how long the printer waits before terminating a print job when the printer doesn't receive the end of that print job.

- 000 second (Off: endless wait)
- 10 to 999 seconds

#### ❖ 2. I/O Timeout

You can specify how long the printer waits for more print data before ending its waiting condition for data and terminating a job.

- 10 to 999 seconds (300 seconds)
- 000 second (Off: endless wait)

### System Menu

The following are the settings you can make with the "System Menu".

### Note

☐ Italicized settings indicate default settings.

### ♦ 1. Paper Tray

You can specify the default paper tray that is selected whenever you turn on the printer.

- *Tray 1*
- Tray 2 (option)
- Tray 3 (option)
- Bypass

### ❖ 2. Tray Size[\*]

You can specify the size of the paper tray whenever you set the paper size dial to " $\star$ ".

- B4 JIS
- B5 JIS
- 5.5×8.5

- 8×13
- 8.25×13
- 8.5×13
- A5

### Note

- ☐ Paper size specified here is applied to all paper trays (tray1, 2 and 3 excluding bypass tray). You cannot specify paper size individually for each tray.
- □ A5 is supported only by tray1. If you select A5, tray2 and 3 ignore the setting, and the default paper size (8×13) will be selected automatically. For more information on loading paper, see P.43 "Paper and Other Media".

#### ❖ 3. I/O Buffer

You can specify the size of the I/O buffer. Normally it is not necessary to change this setting.

- 16KB
- 32KB
- 64KB
- 128KB
- 256KB
- 512KB

### ❖ 4. Energy Saver

You can specify after how many minutes the printer should enter the Energy Saver mode if no operation is performed. The Energy Saver mode reduces electric power consumption.

- Off
- 5 minutes
- 15 minutes
- 30 minutes
- 45 minutes
- 60 minutes

### **∰**Important

☐ After the printer enters the Energy Saver mode, it takes some time to warm up again when print data is received.

#### ❖ 5. Energy Level

You can specify the level of the Energy Saver mode. "Level 1" is the default mode and save more power consumption than "Level 2".

- Level 1
- Level 2

#### 6. Transfer

You can specify the data transfer speed of the parallel interface. If you are having trouble with data transfers, try changing this setting to "Normal".

- Hi-speed
- Normal
- Note
- ☐ This setting is effective only for "Parallel 1".

### ❖ 7. Image Memory

This setting controls what the printer does when the printer memory is not enough to print a certain page.

- Off
- On

"Off" causes the message shown below to be printed when there is not enough memory to process.

There is not enough memory in your printer to print this page. Change the resolution to 300 dpi in the printer driver and try again. For details, please refer to the troubleshooting section in your manual.

Selecting "On" reduces the resolution of the image to reduce memory requirements.

#### 8. Parallel 1

You can specify the parallel interface timing setting. Normally it is not necessary to change this setting.

- ACK Inside
- ACK Outside
- STB Down

#### 9. Parallel IF2

You can specify the optional parallel interface timing setting. Normally it is not necessary to change this setting.

- ACK Inside
- ACK Outside
- STB Down
- Note
- ☐ Do not use the "ACK Outside" setting.

#### 10. Bi-direction

You can specify the printer response mode for status fetch requests when the standard parallel interface is being used. Use the "Standard" setting when you are experiencing problems while the printer is connected to another manufacturer's print box.

- Original Mode
- Standard

### Note

☐ This setting is effective only for "Parallel 1".

### 11. OHP Slip

The OHP Slip is a sheet of paper placed between printed OHP transparencies. You can set this option off and on. For more information, see  $\Rightarrow$  P.47 "OHP transparencies".

- On
- Off

### 12. PrinterLang.

You can specify the printer language that is automatically set when the printer is turned on.

- IPDL-C
- Option (RPS)

### ◆ 13. Language

You can specify the language of the text that appears on the panel display.

- English
- French
- German
- Italian
- Dutch
- Japanese

#### ❖ 32. IP Address – 39. Active PTL.

These items appear when an optional network interface board is installed in the printer.

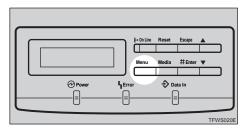
### Reference

 $\Rightarrow$  P.23 "Configuring the Printer for the Network with the Operation Panel"

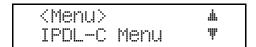
### **Printing the Configuration Page**

Use the following procedure to print the Configuration Page which shows the current printer settings.

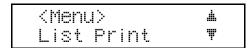
### 1 Press (Menu).



The following message appears on the panel display.



2 Use [▲][▼] to display "List Print", and then press [Enter].



The following message appears on the panel display.

<List Print> ▲ Confi&.Pa%e ▼

Confirm that "Config.Page" is on the display, press [Enter].

The following message appears on the panel display.

```
<Confis.Pase> ▲
Press # key ▼
```

Press [Enter].

This starts printing the Configuration Page.

Press [On Line].

The normal display screen appears.

### **Interpreting Configuration Page**

#### Reference

#### Firmware Version

This shows the printer firmware version.

#### Printer ID

This is the serial number assigned to the printer board by its manufacturer.

#### Reference

This is the total amount of memory installed in the printer.

#### Option Interface

This indicates whether there is an optional parallel interface board or network interface board installed in the printer.

### **Printer Information**

### ❖ Tray 1, Bypass Tray

This shows the paper sizes specified with the paper size dial and the operation panel for the standard paper tray and the bypass tray.

If you install the paper feed unit, it is described as "Tray2" and/or "Tray3".

### Note

 $\square$  If "FRE" is indicated for bypass tray, it means "Custom Size" is set for bypass tray. "R" after paper size (A3, for example) means that paper is set in the short-edge  $\square$  feed direction.

Paper Size	Indication on the Configuration Page
A3 🔽	A3R
B4 JIS □	B4R
A4D	A4
B5 JIS□	B5
A5□	A5
B6 JIS <b>□</b>	B6R
A6 🗸	A6R
11"×17" 🔽	DLR
8 <sup>1</sup> / <sub>2</sub> "×14"	LGR

Paper Size	Indication on the Configuration Page
8 <sup>1</sup> / <sub>2</sub> "×11"□	LT
$5^{1}/_{2}$ "× $8^{1}/_{2}$ " $\Box$	HL
$7^{1}/_{4}$ "× $10^{1}/_{2}$ "□	EX
8"×13" 🔽	FR
$8^{1}/_{4}$ "×13" $\square$	FLR
8 <sup>1</sup> / <sub>2</sub> "×13" □	F4R
Custom	FRE

#### Pages Printed

This is the total number of pages printed by the printer to date.

#### Printer Error

This shows information about the status of consumable items, etc.

### **Status List**

#### ❖ IPDL-C

This shows current "IPDL-C" settings. ⇒ P.103 "IPDL-C Menu"

#### System

This shows current "System Menu" settings. ⇒ P.103 "System Menu"

#### Network

These are the settings and status of the optional network interface board. They appear when an optional network interface board is installed in the printer.

### **Error Log**

This is a log of printer errors.

### **Printing the Color Sample**

Use the following procedure to print the Color Sample.

 $\square$  You should select A4 or  $8^{1}/_{2}$ "×11" paper to print the Color Sample.

1 Press [Menu].

The following message appears on the panel display.

<Menu> ▲
IPDL—C Menu ▼

2 Use [▲][▼] to display "List Print", and then press [Enter].



The following message appears on the panel display.

3 Use [▲][▼] to display "Color Sample", and then press [Enter].

```
<List Print> ▲
Color Sample ▼
```

The following message appears on the panel display.

```
<Color Sample> ▲
Press # key ▼
```

Press [Enter].

This starts printing the Color Sample.

Press [On Line].

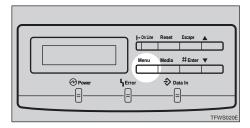
The normal display screen appears.

### **Resetting Menus**

Use the following reset procedure to return the settings of all menus to their initial default settings.

#### Limitation

- ☐ The following items do not reset.
  - Registration ( $\Rightarrow$  P.83)
  - Image Density ( $\Rightarrow$  P.82)
  - Paper Size of the bypass tray ( $\Rightarrow$  P.53)
- 1 Turn on the printer's power switch.
- Press [Menu].



The following message appears on the panel display.



3 Use [▲][▼] to display "Maintenance", and then press [Enter].

<menu></menu>	.14.
Maintenance	Ŧ

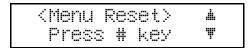
The following message appears on the panel display.

```
<maintenance> ▲
1.Toner Select♥
```

Use [▲][▼] to display "5.Menu Reset", and then press [Enter].

```
<Maintenance> ▲
5.Menu Reset ♥
```

The following message appears on the panel display.



### Press [Enter].

The following message appears on the panel display.

Take Offline Then Press Reset

### 6 Press [On Line].

The normal display screen appears.

**7** Press [On Line] to enter the off-line condition.

The **On Line** indicator stays off.

### Press [Reset].

This resets all menus to their initial factory defaults, and returns to the normal display screen.

# 8. Appendix

### **Memory Capacity and Paper Size**

The following table shows the relationship between printable paper sizes and memory capacity.

### Resolution: 300 dpi

Paper Size	32MB	48MB	64MB	80MB	96MB
Custom (Maximum: 297×432mm)	0	0	0	0	0
A3, 11"×17"	0	0	0	0	0
B4 JIS, 8 <sup>1</sup> / <sub>2</sub> "×14"	0	0	0	0	0
A4, 8 <sup>1</sup> / <sub>2</sub> "×11", 8"×13", 8 <sup>1</sup> / <sub>2</sub> "×13", 8 <sup>1</sup> / <sub>4</sub> "×13"	0	0	0	0	0
B5 JIS, 7 <sup>1</sup> / <sub>4</sub> "×10 <sup>1</sup> / <sub>2</sub> "	0	0	0	0	0
A5, B6 JIS, A6, 5 <sup>1</sup> / <sub>2</sub> "×8 <sup>1</sup> / <sub>2</sub> "	0	0	0	0	0

• O: Printing is possible regardless of data volume.

### Resolution: 600 dpi

Paper Size	32MB	48MB	64MB	80MB	96MB
Custom (Maximum: 297×432mm)	<b>A</b>	<b>A</b>	•	•	•
A3, 11"×17"	<b>A</b>	<b>A</b>	•	•	0
B4 JIS, 8 <sup>1</sup> / <sub>2</sub> "×14"	<b>A</b>	•	•	0	0
A4, 8 <sup>1</sup> / <sub>2</sub> "×11", 8"×13", 8 <sup>1</sup> / <sub>2</sub> "×13", 8 <sup>1</sup> / <sub>4</sub> "×13"		•	0	0	0
B5 JIS, 7 <sup>1</sup> / <sub>4</sub> "×10 <sup>1</sup> / <sub>2</sub> "	•	0	0	0	0
A5, B6 JIS, A6, 5 <sup>1</sup> / <sub>2</sub> "×8 <sup>1</sup> / <sub>2</sub> "	0	0	0	0	0

- O: Printing is possible regardless of data volume.
- • Printing is possible when the Color Level is set [1 bit].
- **\( \Lambda**: Printing jobs including large data might not be printed.

### **Low Memory**

The error message shown below is output by the printer whenever there is not enough memory to print your data.

There is not enough memory in your printer to print this page. Change the resolution to 300 dpi in the printer driver and try again. For details, please refer to the troubleshooting section in your manual.

The following are the actions you should take when you encounter memory shortage problems. If these actions do not solve the problem individually, try them in combination with each other.

- ① Increase printer memory.
   Install the optional memory unit to increase printer memory capacity. ⇒ P.11
   "Installing the Memory Unit (SIMM)"
- ② Change the Color Level. Use the printer driver to set the image resolution to [Fast], or change the Color Level to [1 bit].
  - $\Rightarrow$  The printer driver online help
  - ⇒ "RICOH-SCRIPT2 Operating Instructions"
  - If the setting is [2 bit], change it to [1 bit].
  - If the setting is already [1 bit], it cannot be reduced further.
- ③ Reduce resolution.

Use the printer driver to set resolution to 300 dpi.

- $\Rightarrow$  The printer driver online help
- ⇒ "RICOH-SCRIPT2 Operating Instructions"
- ④ Turn on "Image Memory".
  Use the printer's "System Menu" to turn on "Image Memory". ⇒ P.95 "Making Printer Settings with the Operation Panel"

## 8

# **Moving and Transporting the Printer**

### **A** CAUTION:

- It is recommended that at least two persons are used to lift the machine. Otherwise, the machine might fall and cause personal injury.
- When lifting the machine, use the inset grips on both sides of the machine.
   Otherwise, the machine might fall and cause personal injury.
- When you move the machine, unplug the power cord from the wall socket to avoid a fire or an electric shock.
- When you pull out the plug from the socket, grip the plug to avoid damaging the cord and causing a fire or an electric shock.
- When moving the printer, be sure to keep it level to avoid spilling the fuser
  oil. If oil is spilt, wipe it with alkaline cleaner. Otherwise, the oily surfaces
  can create the danger of slipping and personal injury.

#Important
------------

- ☐ Be sure to disconnect all cables from the printer before transporting it.
- ☐ The printer is a precision piece of machinery. Take care to avoid damage during shipment.

# **Specifications**

## **Mainframe**

### Configuration:

Desktop

### **❖** Print Process:

Laser beam and dry toner electrical photographic system

## Printing Speed:

Monochrome: 17 pages per minute (A4,  $8^1/_2$ "×11") Color: 5 pages per minute (A4,  $8^1/_2$ "×11")

### Resolution:

600 dpi/300 dpi

### Parallel Interface:

Conforms to the standard centronics

#### **Interface**

A standard 36-pin printer cable and a parallel port on the host computer **Mode** 

Compatible, Nibble

#### Connector

**IEEE P1284-B** 

• Do not use a cable more than 2.5 meters (8.2 feet) long.

### Printer Language:

IPDL-C, RICOH-SCRIPT2

### ❖ Paper Size:

⇒ P.43 "Paper and Other Media Supported by this Printer"

### Paper Weight:

⇒ P.43 "Paper and Other Media Supported by this Printer"

#### Power Source:

⇒ Inside of the front cover of this manual

## Power Consumption:

Standby (Maximum)	150 W or less
Printing (Maximum)	1,200 W or less
Printing (Average)	750 W or less
Energy Saver (Maximum)	45 W or less

## **♦ Noise Emission (Sound Power Level):**

Printing	Less than 64 db(A)
Stand-by	Less than 43 db(A)

### Note

☐ The above measurements are made in accordance with ISO7779.

### Dimensions:

	Width	Depth	Height
Printer only	660 mm (26")	625 mm (24.7")	475 mm (18.8")
With one optional paper feed unit	660 mm (26")	625 mm (24.7")	601 mm (23.7")
With two optional paper feed units	660 mm (26")	625 mm (24.7")	727 mm (28.7")

Measurement conditions: With paper tray, bypass tray and output tray extender closed.

### ♦ Weight:

Approximately 62 kg (136.7 lb) (including consumables)

## **❖** Warm-up Time:

Less than 450 seconds (23°C)

## ❖ Paper Capacity:

Standard paper tray	250 sheets *1
Bypass tray	50 sheets *1
Optional paper feed unit	500 or 1,000 sheets *1

 $<sup>^{*1}</sup>$  Paper weight:  $80 \text{ g/m}^2$ , 20 lb

## **❖** Paper Output Capacity:

A4: 250 sheets (80 g/m<sup>2</sup>, 20 lb) A3: 100 sheets (80 g/m<sup>2</sup>, 20 lb)

### CPU:

R4310-176MHz

#### **❖** Memory:

Standard 32MB, Up to 96MB (with optional memory unit)

## Network (optional network interface board required):

**Topology:** Ethernet (10BaseT/100BaseTX) **Protocol:** TCP/IP, IPX/SPX, AppleTalk

## Optional Equipment:

- Paper Feed Unit Type305
- RICOH-SCRIPT2 Type305
- Network Interface Board Type305
- IEEE 1284 Parallel Type305
- Memory Unit Type204 (16MB)
- Memory Unit Type204 (32MB)

## **Options**

## **PAPER FEED UNIT Type305**

### **❖** Paper Size:

⇒ P.43 "Paper Types and Sizes"

### ❖ Paper Weight:

⇒ P.43 "Paper Types and Sizes"

## RICOH-SCRIPT2 Type305

An interpreter that conforms to PostScript Level 2, developed independently by Ricoh Company, Ltd..

## **Network Interface Board Type305**

## **❖** Topology:

Ethernet (10BaseT/100BaseTX)

### Protocols:

TCP/IP, IPX/SPX, AppleTalk

#### Interface Connector:

**RJ45** 

### Required Cable:

STP (Shielded Twisted-Pair) cable Category/Type5 or better \*A cable is not enclosed with this option.

## **IEEE 1284 Parallel Type305**

❖ Mode:

Compatible

**♦** Interface Connector:

**IEEE P1284-B** 

## Memory Unit Type204 (16MB) and Memory Unit Type204 (32MB)

**❖** Memory Type:

EDO (Extended Data Output) DRAM

**❖** Number of Pins:

72 pins

**♦** Access Time:

60 ns

# Consumables

#### riangle CAUTION:

 Our products are engineered to meet the highest standards of quality and functionality. When purchasing expendable supplies, we recommend using only those specified by an authorized dealer.

## **❖** Toner Cartridge

	Average printable number of pages per cartridge *1
COLOR TONER Type305 Cyan	15,000 pages
COLOR TONER Type305 Magenta	15,000 pages
COLOR TONER Type305 Yellow	15,000 pages
TONER Type305 Black	15,000 pages

<sup>\*1</sup> A4 5% test chart

## Note

- ☐ The actual number of printed pages you get from a particular toner cartridge depends on the type and size of paper you are using, the contents of your print images, and printing environment conditions. The life of a toner cartridge also shortens as the cartridge becomes older. All this means that a toner cartridge might require replacement sooner than the normal life described above.
- ☐ Toner cartridges that come with the printer are for setup purposes, and will not provide the number of pages described above. The average number of printable pages that can be expected from the toner cartridges included in the printer are as follows:
  - Black toner cartridge: about 6,000 pages,
  - Cyan, magenta and yellow toner cartridges: about 3,000 pages for each

#### Other Consumables



☐ Actual life of consumables depends on the type and size of paper you are using, the contents of your print images, and printing environment conditions. The life of consumables also shortens as the consumables become older. All that means that consumables might require replacement sooner than the life indicated.

	Service Life *1
Waste Toner Bottle Type305	20,000 pages *2
	5,000 pages *3
Photo Conductor Unit Type305	60,000 pages *2
	15,000 pages *3
Fuser Oil Type305 *4	20,000 pages

<sup>\*1</sup> A4 5% test chart

<sup>\*2</sup> For monochrome printing

<sup>\*3</sup> For full color printing

<sup>\*4</sup> Waste Toner Bottle Type305 includes a charger.

# **Glossaries**

#### Color Correction

This is the process of making adjustments in order to more closely match colors produced by the RGB model of your computer display with those produced by the CMYK model of the printer.

#### ❖ CMYK

Cyan (C), magenta (M), yellow (Y), and black (K) toner colors that are combined to produce other colors for color printing.

## dpi (dots per inch)

A measure of resolution that indicates the number of dots that can be printed in one inch (25.4mm). Detail is greater as the dots per inch increase.

## Dithering

Creating the illusion of colors and shades by varying the pattern of dots, as done with newspaper photographs. In printing, dithering is usually called halftoning, and shades of gray are called halftones.

### Ethernet®

A network protocol used by Local Area Networks (LANs). Installing an optional network board in the printer allows it to be connected to a network and serve as a network printer.

## Graphics Command

Command is for printing lines, circles, ellipses, and other graphics.

### I/O Buffer

Temporary memory area for receiving data from the computer. Automatically smooths edges of characters and figures.

## **❖ Page Description Language**

A command system for printing data sent from a computer on a page printer. Generally, computer data is converted to commands that a printer can interpret. The command system that can be interpreted by the printer is called printer commands, and the command system used by a page printer is called the page description language.

## Plug and Play

A function that automatically specifies the necessary information and allows immediate use of new peripherals, expansion cards, and other option connected to a computer (Windows 95/98). Peripherals must support Plug and Play for this capability to be available.

## ◆ PostScript®

A page description language developed by Adobe Systems Incorporated.

#### Print Port

Output port of print data from the computer to the printer. With a parallel connection, for example, your computer outputs data from its LPT1 printer port. In the case of a network printer, data is output from the port that is configured for printing.

### Printer Properties

A screen for specifying print conditions in accordance with printer functions when printing in Windows 95.

### Proportional Fonts

Fonts for which the widths of characters are varied in order to achieve a balanced look in the printed text. MSP Mincho and MSP Gothic, included in Windows95, are proportional fonts.

#### RGB

Red (R), green (G), and Blue (B) colored light that are combined to produce other colors on a computer display screen.

### ❖ RPS2

An optional interpreter that conforms to PostScript Level 2, developed independently by Ricoh Company, Ltd.

## Edge Smoothing

Edge Smoothing is a technique used for improving the print quality of text and graphics. Indentations in curved lines are automatically smoothed to produce a clearer appearance.

## ❖ Toner Saving

A print mode that saves toner.

## ❖ TrueType Fonts

Windows standard outline fonts that make it possible to print screen fonts as image data. TrueType fonts make it easier to produce printed output that closely resembles the image on your computer screen.

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