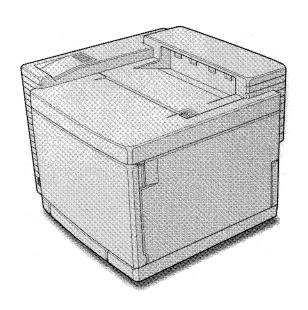# savin®

*Color Laser Printer*
## *SLP416c*

# Operating Instructions

## 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.

### ♀ Notes:

Some illustrations may be slightly different from your machine.

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

### Operator Safety:

This machine is considered a CDRH class I laser device, safe for office/ EDP use. The machine contains two 5-milliwat, 760 - 800 nanometer wavelength, GaAlAs laser diodes. 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.

### Warning:

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

### Notes:

The model names of the machines do not appear in the following pages. Check the type of your machine before reading this manual. (For details, see ⇒ P.1 *"Machine Types"*.)

- Type 1: 9935D
- Type 2: 9935DP
- Type 3: 9945DP

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

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

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

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.

### Power Source:

120 V, 60 Hz, 10 A or more
Please be sure to connect the power cord to a power source as above. For details about power source, see ⇒ P.167 *"Power Connection"*.

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.

# 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.**

⚠ **CAUTION**

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

## ⚠WARNINGS

- *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.*

# ⚠CAUTIONS

- *Protect the equipment from dampness or wet weather, such as rain, snow, and so on.*

- *Unplug the power cord from the wall outlet 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 outlet, 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 cassette out of reach of children.*

- *For environmental reasons, do not dispose of the equipment or expended supply's wastes at a household waste collection point. Disposal can take place at out authorized dealer or at 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 provided by an authorized dealer.*

- *The inside of the machine could be very hot. Do not touch the parts with a label indicating a hot surface. Otherwise, it could cause a personal burn.*

# How to Read this Manual

## Symbols

In this manual, the following symbols are used:

### ⚠ *WARNING:*

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 miss-operation.

### 🕯 Limitation

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

### 🔎 Reference

This symbol indicates a reference.

### 【 】

Keys built into the machine's operation panel. Keys on the computer's keyboard.

### [ ]

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

# Table of Contents

## 1. Getting Acquainted

## 2. Installing Options

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

# 4. Installing the IPDL-C Printer Driver

# 5. Paper and Other Media

# 6. Troubleshooting

# 7. Making Printer Settings with the Operation Panel

# 8. Appendix
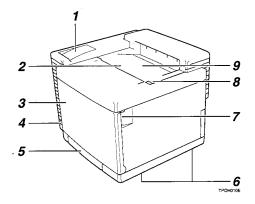
# Features of Your Printer

## Office Color Printer

You can enjoy the versatility of a full color printer and the performance of a monochrome laser in a single compact unit. Text, spreadsheets, presentations, design and other documents containing images can be beautifully printed in full color. Windows applications using monochrome text or gray scale images are rendered quickly in razor-sharp detail. Its compact design allows you to locate it in a small convenient place. The efficient design of the internal mechanism make it easy to access and replace consumables as paper and toner cartridge.

# Guide to the Printer

## Exterior - Front View



TPOH010E

**1. Operation Panel**

Contains keys for printer operation and a display that shows the printer status. =>P.5 *"Operation panel"*

**2. Top Cover**

Open this cover when accessing the inside of the printer.

**3. Front Cover**

Open this cover when accessing the inside of the printer.

**4. Power Switch**

Use this switch to turn printer power on and off.

**5. Paper Tray**

Load up to 250 sheets of plain paper[1] into this tray for printing. You can also load OHP transparencies and custom paper sizes. => P.51 *"Loading Paper in the Paper Tray"*

[1]: 80 g/m² (metric version), 20 lb (inch version)

**6. 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.



TPOH020E

**7. Front Cover Open Lever**

Press this lever to open the front cover.
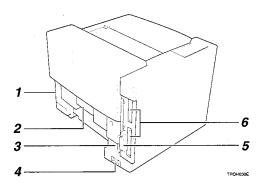
**8. Top Cover Open Lever**

Press this lever to open the top cover.

**9. Output Tray**

Printed pages are stacked here with the print side down.

## Exterior - Rear View

TPOH030E

### 1. Ventilator

These holes help to keep components inside the printer from overheating. Also, this cover should be removed to replace the ozone filter.

#### ✐ Note

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

### 2. Rear Cover

Open this cover to remove misfed paper.

### 3. Power Connector

Connect the power cord to this connector.

### 4. Optional Paper Feed Unit Connector Cover

When installing the optional paper feed unit, plug its cable into this connector.
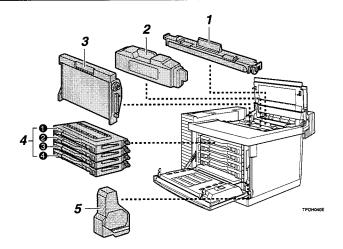
### 5. Parallel Interface Connector

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

### 6. Metal Plates

Remove to install certain options.

3

# Interior



TPOH040E

## 1. Fuser Cleaner

This cleans unnecessary toner from the fuser roller.

## 2. Fuser Oil Bottle

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

## 3. Photoconductor Unit

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

### *✐ Note*

❑ 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.

## 4. Toner Cartridges

❶ K: black toner

❷ Y: yellow toner

❸ M: magenta toner

❹ C: cyan toner

## 5. Waste Toner Bottle

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

## 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 can not receive data).

**3. 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.

**4. [On Line] key**

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

**5. Error indicator**
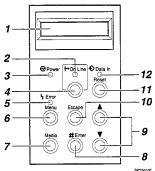
Lights up whenever any printer error occurs. A message describing the cause of the error also appears on the panel display.

**6. [Menu] key**

Press this key to make and check the printer settings.

**7. [Media] key**

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



**8. [Enter] key**

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

**9. [▲] [▼] keys**

Use these keys to increase and decrease values on the panel display, and toggle menus when making settings.

**10.[Escape] key**

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

**11.[Reset] key**

Pressing this key when the printer is off-line resets the printer to its power on default settings.

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

**12.Data In indicator**

Blinks while the printer is receiving data from the computer.
Stays on if there is data to be printed.

**1**

⚠ *CAUTION*
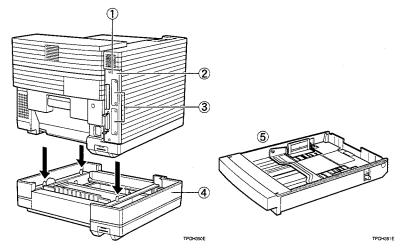
- *Make sure to turn off the printer and wait for about 30 minutes before installing options. Not waiting for the printer to cool down can result in a burn.*
- *It is recommended that at least two persons are used to lift the machine. Otherwise, the machine might fall and cause personal injury.*
- *When 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 outlet to avoid a fire or an electric shock.*

# Available Options

The following options can be installed to your printer.



TPOH350E          TPOH351E

1. **Memory Unit**

   You can install one of the following memory units.
   - Memory Unit Type204 (16MB)
   - Memory Unit Type204 (32MB)

2. **RICOH-SCRIPT 2 Type204**

3. **Interface Board**

   You can install up to two interface boards. However, you cannot install two boards of the same type at the same time. The following board are available.
   - Network Interface Board Type204
   - IEEE 1284 Parallel Type204

4. **Paper Feed Unit Type204**

5. **Paper Cassette Type204**
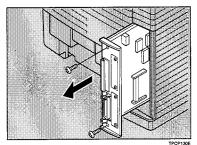
*✒* **Note**

❏ You cannot install more than one paper feed unit at a time.

❏ The standard tray or the tray of the optional paper feed unit can be replaced with Paper Cassette Type204.

# Installing the Memory Unit

### ⚙️Important
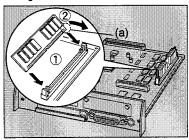
❏ The memory unit can be damaged by small amounts of static electricity. Before touching it, touch something metal to remove static electricity from you.

**1** Turn off the printer's power switch and remove all cables and cords from the printer.

**2** Remove both screws and remove the printer board from the printer as shown in the illustration.



TPOP130E

### 📝 Note

❏ A coin can be used to remove the screws.
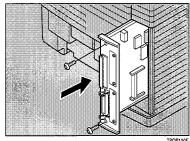
**3** Align the memory unit as shown in the illustration. Tilt it backwards so that it is 45 degrees from perpendicular to the printer board ($\textcircled{1}$), and slide it into the slot. Then tilt it forwards so that it is perpendicular to the board ($\textcircled{2}$). It should make an audible click as it pops into place.



TPOP140E

### 📝 Note

❏ When aligning the memory unit, notice that the lower corner of one side has a notch (a). This is to prevent you from installing the unit backwards.

9

**4** Insert the printer board into the printer. Fasten both screws.



TPOP150E

### ⚙️Important

❏ Make sure that both screws are used to secure the printer board.

### 🖉 Note

❏ A coin can be used to fasten the screws.

**5** Plug the printer's power cord back into the printer and the wall outlet. Turn on the printer's power switch.

**6** Print a configuration page to confirm that the memory unit is properly installed.

### 🔎 Reference

❏ =>P.101 "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**-**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. => P.36, 40, or 44 "Setting Up Options"

# Installing the RICOH-SCRIPT 2 Type204
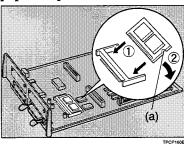
**⚙️Important**

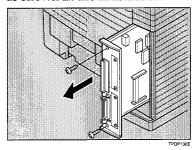❏ The RICOH-SCRIPT 2 can be damaged by small amounts of static electricity. Before touching it, touch something metal to remove static electricity from you.

**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.

**3** Remove both screws and remove the printer board from the printer as shown in the illustration.



TPOP130E

**✍ Note**

❏ A coin can be used to remove the screws.
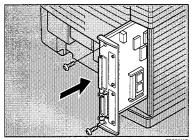
**4** Align the module as shown in the illustration. Tilt it upwards so that it is 45 degrees from parallel to the printer board ((①)), and slide it into the slot. Then tilt it down so that it is parallel to the board ((②)). It should make an audible click as it pops into place.



TPOP160E

**✍ Note**

❏ If the optional interface board has been installed to the printer board, you should remove it from the board before installing the module. After installing the module, reattach the interface board to its original position.

❏ Be careful to notice that one side of the module has a notch (a). This is to prevent you from installing the module backwards.

**2**

**5** Insert the printer board into the printer. Fasten both screws.



TPOP320E

**⚙Important**

❏ Make sure that both screws are used to secure the printer board.

**✐ Note**

❏ A coin can be used to fasten the screws.

**6** Plug the printer's power cord back into the printer and the wall outlet. Turn on the printer's power switch.

**7** Print a configuration page to confirm that the module is properly installed.

**⌀ Reference**

❏ => P.101 *"Printing the Configuration Page"*

**✐ Note**
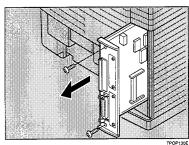
❏ You can check if the module is installed properly by checking the "Firmware Version" item of the "Reference" on the configuration page.

❏ If the module is not properly installed, repeat steps **1**-**5** again. If you fail again, contact your sales or service representative.

# Installing the Network Interface Board Type204

### 📝 Note
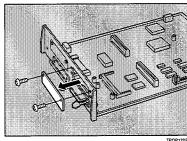
❏ Use a shielded network interface cable.

❏ The network interface board can be attached to either the front or the back side of the printer board. This procedure is for attaching to the front 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.

**3** Remove both screws and remove the printer board from the printer as shown in the illustration.



TPOP130E

### 📝 Note

❏ A coin can be used to remove the screws.

**4** Remove both screws and the metal plate from the printer board.



TPOP170E
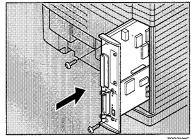
**5** Insert the network interface board into the slot and fasten it with both screws that were removed in step **4**, as shown in the illustration.



TPOP180E

13

**6** Insert the printer board into the printer. Fasten both screws.



TPOP330E

**⚙️Important**

❏ Make sure that both screws are used to secure the printer board.

**📝 Note**

❏ A coin can be used to fasten the screws.

**7** Loop the network interface cable. The loop should be about 15 cm (6") from the end of the cable.

**8** Attach the ferrite core to the loop.



TPOH390E

**9** Attach the network interface cable to the network interface connector of the printer as shown in the illustration.



TPOH440E

**10** Connect the other end of the network interface cable to the network.

**11** Plug the printer's power cord back into the printer and the wall outlet. Turn on the printer's power switch.

**12** Print a configuration page to confirm that the network interface board is properly installed.

**🔎 Reference**

❏ => P.101 "*Printing the Configuration Page*"

**📝 Note**
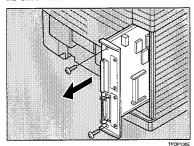
❏ You can check if the network interface board is installed properly by checking the "Network" item of the "Status List" on the configuration page.

❏ If the network interface board is not properly installed, repeat the above steps again. If you fail again, contact your sales or service representative.
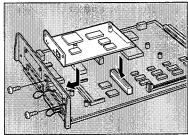
❏ After installing the network interface properly, set up the printer's network environment using the operation panel. => P.23 "*Configuring the Printer for the Network with the Operation Panel*"

# Installing the IEEE 1284 Parallel Type204

### 📝 Note
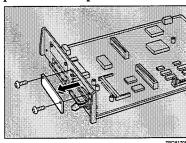
❏ The parallel interface board can be attached to either the front or the back side of the printer board. This procedure is for attaching to the front side.

❏ 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.

**3** Remove both screws and remove the printer board from the printer as shown in the illustration.



TPOP130E

### 📝 Note

❏ A coin can be used to remove the screws.

**4** Remove both screws and the metal plate from the printer board.



TPOP170E
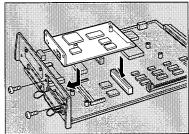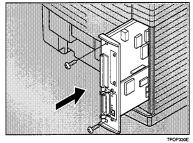
**5** Insert the IEEE 1284 Parallel Type 204 board into the slot and fasten it with both screws that were removed in step **4**, as shown in the illustration.



TPOP180E

15

**2**

**6** Insert the printer board into the printer. Fasten both screws.



TPOP330E

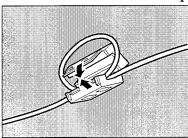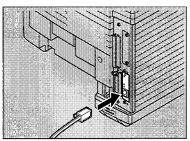⚙️**Important**

☐ Make sure that both screws are used to secure the printer board.

📝 **Note**

☐ A coin can be used to fasten the screws.
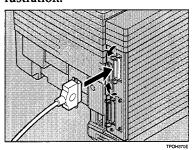
**7** Attach the interface cable to the parallel interface connector of the printer. Secure the cable with the metal fittings as shown in the illustration.



TPOH370E

**8** Attach the other end of the interface cable to the interface connector of the computer, and secure the cable.

**9** Plug the printer's power cord back into the printer and the wall outlet. Turn on the printer's power switch.

**10** Print a configuration page to confirm that the IEEE 1284 Parallel Type 204 board is properly installed.

🔍 **Reference**

☐ => P.101 "Printing the Configuration Page"

📝 **Note**
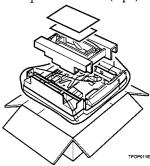
☐ You can check if the board is installed properly by checking the "Option Interface" item of the "Reference" on the configuration page.

☐ If the board is not properly installed, repeat the above steps again. If you fail again, contact your sales or service representative.
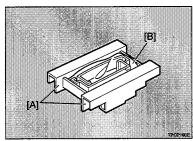
# Installing the Paper Feed Unit Type204

⚠ *CAUTION*
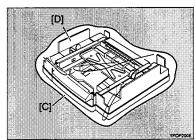
- *It is recommended that at least two persons are used to lift the machine. Otherwise, the machine might fall and cause personal injury.*
- *When lifting the machine, use the inset grips on both sides of the machine. Otherwise, the machine might fall and cause personal injury.*

**1** Check the contents of the box for the following items.

- Installation Guide (1 pc)
- Right side cover (1 pc)
- Left side cover (1 pc)
- Screw (2 pcs)
- Securing bracket (2 pcs)
- Paper Feed Unit (1 pc)
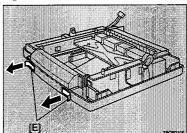


**2** Remove the styrofoam packing [A] and the bag [B] from the side covers.



**3** Remove the bag [C] and the styrofoam packing [D] from the paper feed unit.
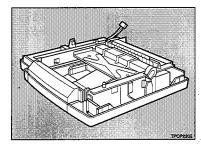


**4** Remove both pieces of adhesive tape [E].
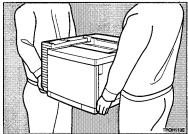


**5** Turn off the printer's power switch, and remove all cables and cords from the printer.

**2**

**6** Place the paper feed unit on a flat surface.
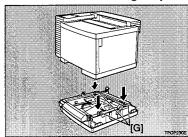


**7** Lift the printer using the inset grips on both sides of the printer.
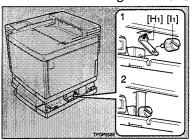


**❋Important**
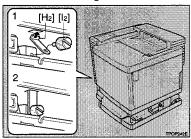
☐ It is recommended that at least two people are used to lift the printer.

**8** Align the printer onto the 3 upright pins [G] on the paper feed unit and then lower it gently.
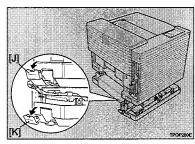


**9** Insert the securing bracket [H1] into the rectangular hole on the right lower side of the printer. Secure the bracket using a screw [I1].
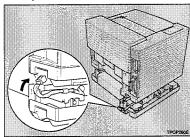


**10** Insert the securing bracket [H2] into the rectangular hole on the left lower side of the printer. Secure the bracket using a screw [I2].
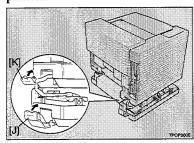


**11** Remove the connector cover [J] from the printer, and the connector cover [K] from the paper feed unit.
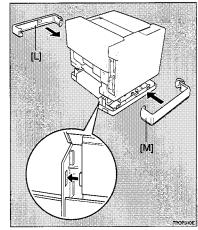
**12** Attach the paper feed unit cable to the socket inside the printer securely.



**13** Attach the connector cover [J], removed from the printer in step **11**, to the paper feed unit. Attach the connector cover [K], removed from the paper feed unit in step **11**, to the printer.



**14** Attach the right side [L] and the left side [M] covers onto the printer. When attaching them, make sure the projections on the covers are inserted into the rectangular holes on the printer.



**15** Connect all of cables that were removed in step **5**.

**16** Turn on the printer's power switch.

**🔟 Print out the configuration page to confirm that the paper feed unit is properly installed.**

### 🔎 Reference

❑ => P.101 *"Printing the Configuration Page"*

### 📝 Note

❑ If the paper feed unit is properly installed, you can see "Tray2" under the "Printer Information" of 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. => P.36, 40 or 44 *"Setting Up Options"*
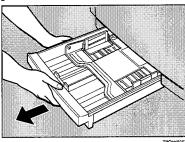
# Installing the Paper Cassette Type204

⚠ *CAUTION*

- *The paper tray does not have a stopper. When pulling it out, be careful not to pull it strongly. If you do, the tray might fall and cause personal injury.*

### 📝 Note
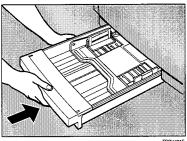
❏ The standard tray (tray 1) or the tray of the optional paper feed unit (tray2) can be replaced with the Paper Cassette Type204.

**1** Check the contents of the box for the following items.
- **Paper cassette**
- **Installation Guide**

**2** Carefully pull the paper tray (tray1 or tray2) out of the printer and place it on a flat surface.



TPOH450E

### 📝 Note

❏ Keep the paper tray with paper in a cool and dark place.

**3** Slide the Paper Cassette Type 204 completely into the printer.



TPOH451E

### 📝 Note

❏ When loading paper, => P.51 *"Loading Paper"*

2

21

**2**

## 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-SCRIPT 2 Type204 is required.

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

| | Items | Default Settings |
|---|---|---|
| 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 |

🔳 Press **[Menu]**.

🔁 Check if the following message appears on the panel display. If not, press **[▲] [▼]** until the following message appears.

```
<Menu>          ▲
System Menu     ▼
```

🔳 Press **[Enter]**.

The following message appears.

```
<System Menu>   ▲
1.Paper Tray    ▼
```

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

| Menu item on the panel display | Active Protocol | | | |
|---|---|---|---|---|
| | TCP/IP | NetWare | EtherTalk | NetBEUI *1 |
| All Active (Default) | ✓ | ✓ | ✓ | – |
| None | | | | – |
| TCP/IP Only | ✓ | | | – |
| NetWare Only | | ✓ | | – |
| TCP & NetWare | ✓ | ✓ | | – |
| EtherTalk Only | | | ✓ | – |
| TCP & EtherTalk | ✓ | | ✓ | – |
| NetW & EtherTalk | | ✓ | ✓ | – |
| TCP & NW & EtherTK | ✓ | ✓ | ✓ | – |
| NetBEUI Only | | | | – |
| TCP & NetBEUI | ✓ | | | – |
| NetW & NetBEUI | | ✓ | | – |
| TCP & NW & NB | ✓ | ✓ | | – |
| ETalk & NetBEUI | | | ✓ | – |
| TCP & ETK & NB | ✓ | | ✓ | – |
| NW & ETK & NB | | ✓ | ✓ | – |

· ✓ means that this protocol is active.
· Blank cell means that this protocol is not active.
· – means that this protocol is not supported.

*1: NetBEUI appears on the panel display, but is not supported.

### 🖉 Note

❏ It is recommended that you should not select protocols that are not used on your network.

### 💡 Limitation

❏ If you want to select EtherTalk, you should install the optional RICOH-SCRIPT 2 Type204.

❶ Press 【▲】【▼】 until the following message appears.

```
<System Menu>   ▲
     39.Active PTL. ▼
```

❷ Press 【Enter】.

The current setting appears on the panel display.

```
<Active PTL.>   ▲
  *All Active    ▼
```

❸ Press 【▲】【▼】 until the protocol you want to use appears.

❹ Press 【Enter】.

**⑤** If you use TCP/IP, you should assign the IP address to your printer.

**✐Note**

❑ To get the IP address for your printer, contact your network administrator.

❶ Press 【▲】【▼】 until the following message appears.

```
<System Menu>   ▲
     32.IP Address ▼
```

❷ Press 【Enter】.

The current IP address appears on the panel display.

```
 011.022.033.044
▲            ▲▼/#
```

❸ Use 【▲】【▼】 to specify the leftmost digit of the IP address.

```
 111.022.033.044
▲            ▲▼/#
```

❹ Press 【Enter】.

The pointer (▲) 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.

❺ Use 【▲】【▼】 to specify the second digit of the IP address.

```
 191.022.033.044
   ▲          ▲▼/#
```

❻ Press 【Enter】.

❼ Repeat steps ❺ and ❻ to specify the rest digit of IP address.

```
 191.168.015.016
                ▲
```

**❽** Check if the pointer (▲) is at the rightmost digit, press 【Enter】 to register the IP address you specified.

**⑥** 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.

**⑦** 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 the panel display | Available method | | | |
|---|---|---|---|---|
| | ARP+PING | RARP+TFTP | BOOTP | DHCP |
| ARP+PING | ✓ | | | |
| ARP & RARP | ✓ | ✓ | | |
| ARP & BOOTP | ✓ | | ✓ | |
| ARP & RARP & BOOT | ✓ | ✓ | ✓ | |
| None (Default) | | | | |
| RARP+TFTP | | ✓ | | |
| BOOTP | | | ✓ | |
| RARP & BOOTP | | ✓ | ✓ | |
| DHCP | | | | ✓ |

### ✐ Note

❏ Select "None", if you want to specify the address using the printer's operation panel.

❏ You should set up your server, if you want to use "RARP+TFTP", "BOOTP", or "DHCP".

**❶** Press 【▲】 【▼】 until the following message appears.

> <System Menu> ▲
> 37.Net Boot ▼

**❷** Press 【Enter】.

The current setting appears on the panel display.

> <Net Boot> ▲
> *ARP+PING ▼

**❸** Press 【▲】 【▼】 until the method you want to use appears.

**❹** Press 【Enter】.

**8** **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 fails to select the correct frame type, if the "Auto Select" is selected. In this case, select the appropriate frame type.
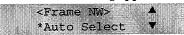
**❶ Press 【▲】 【▼】 until the following message appears.**

```
<System Menu>    ▲
   38. Frame NW
```

**❷ Press 【Enter】.**

The current setting appears on the panel display.

```
<Frame NW>       ▲
 *Auto Select    ▼
```
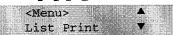
**❸ Press 【▲】 【▼】 until the frame type you want to use appears.**

**❹ Press 【Enter】.**

You have completed the printer's network settings.

**❺ Press 【On Line】.**

This returns to the normal display screen.

**9** **Print the configuration page to check settings you have made.**

**❶ Press 【Menu】.**

**❷ Press 【▲】 【▼】, until the following message appears.**

```
<Menu>           ▲
  List Print     ▼
```

**❸ Press 【Enter】.**
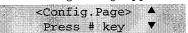
**❹ Check if the following message appears. If not, press 【▲】 【▼】 until the following message appears.**

```
<List Print>     ▲
  Config.Page    ▼
```

**❺ Press 【Enter】.**

The following message appears.

```
<Config.Page>    ▲
  Press # key    ▼
```

**❻ Press 〖Enter〗.**

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

**❼ Press 〖On Line〗.**

The normal display screen appears.

**❽ Press 〖On Line〗 to enter the off-line condition.**

The On Line indicator turns off.

**❾ Press 〖Reset〗.**

### ☀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 right, select "0.0.0.0".

### 🖉 Note

❑ When the setting of Access Control Address coincides 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.xxx |
| 255. 0. 0. 0 | 192.xxx.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 |

# Before Installing the Printer Drivers

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 Windows NT® 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® WindowsNT® Server network operating system Version4.0

❐ Microsoft® WindowsNT® Workstation Network 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
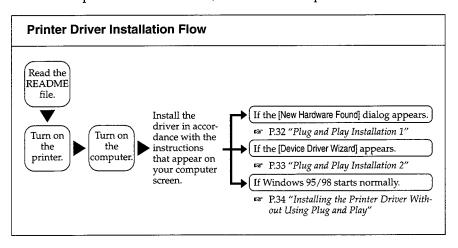
❏ Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

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 Flow**

Read the README file.

Turn on the printer.  ▶  Turn on the computer.  ▶  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.
☞ 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.

**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

This dialog indicates that plug and play is working. Continue with the procedure under "Plug and Play Installation 1" on page 32.

## When the [Device Driver Wizard] appears

This indicates that plug and play is working. Continue with the procedure under "Plug and Play Installation 2" on page 33.

## When Widows 95/98 starts normally

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

## 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.

**1** **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.

**3** **Select the CD-ROM drive using the [Drives] list box.**

**4** **In the Folders box, double-click [DRIVERS], [IPDL_C] and then [WIN95_98]. Finally, click [OK].**

**5** **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.36 "*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.

**1** Insert the CD-ROM that comes with the printer into your computer's CD-ROM drive, and then click [Next].

**2** Click [Finish].

**3** Change the name of the printer, if you want, and then click [Finish].

**4** If the next dialog appears, click [OK].

**5** If the next dialog asking you to specify the CD-ROM drive appears, select the CD-ROM drive from the listbox. Finally, click [OK].

**6** 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 memoryunit), you should set up the options with the printer driver.
=> P.36 "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.

**3** 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.

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

A dialog for selecting the printer manufacturer and model name appears.

**6** Click [Have Disk].

A dialog for driver installation from a disk appears.

**7** Insert the CD-ROM that comes with the printer into your computer's CD-ROM drive.

**8** Click [Browse].

The Windows 95/98 printer driver is on the following directory on the CD-ROM: DRIVERS\IPDL_C\WIN95_98.

**9** Use the [Drives] listbox to select the CD-ROM drive.

**10** In the [Folders] box, double-click [DRIVERS], [IPDL_C] and then [WIN95_98]. Finally, click [OK].

**11** Click [OK].

A port selection dialog appears.

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

A port selection dialog appears.

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

A dialog for changing the printer name appears.

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

**15** 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.

**16** If you are asked if you restart Windows, select [Yes]. If you are not asked, restart Windows after completing the installation.

**17** After Windows restarts, set up any options you have installed on the printer.

🔎 **Reference**

❐ => P.36 *"Setting Up Options"*.

## Setting Up Options

**1** 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].

**3** 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 install your tray correctly.

**5** 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.

### 🔎 Reference

❏ You can find out how much memory is currently stored in memory by printing a Configuration Page on the printer. => P.101 "*Printing the Configuration Page*".

**6** Click [OK] to close the dialog.

**7** 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.**

**3** **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 [Printer] window.

**4** **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.

*∅* **Note**

❒ 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.