

# OPERATION GUIDE

## FS-1350DN



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# Legal and Safety Information

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Please read this information before using your machine. This chapter provides information on the following topics:

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# Legal Information

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**CAUTION** NO LIABILITY IS ASSUMED FOR ANY DAMAGE CAUSED BY IMPROPER INSTALLATION.

## Notice on Software

SOFTWARE USED WITH THIS PRINTER MUST SUPPORT THE PRINTER'S EMULATION MODE. The printer is factory-set to emulate the PCL. The emulation mode can be changed.

## Notice

The information in this guide is subject to change without notification. Additional pages may be inserted in future editions.

The user is asked to excuse any technical inaccuracies or typographical errors in the present edition. No responsibility is assumed if accidents occur while the user is following the instructions in this guide. No responsibility is assumed for defects in the printer's firmware (contents of its read-only memory).

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This product was developed using the Tornado™ Real Time Operating System and Tools from Wind River Systems.

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This package is an SSL implementation written by Eric Young ([eay@cryptsoft.com](mailto:eay@cryptsoft.com)). The implementation was written so as to conform with Netscapes SSL.

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## Compliance and Conformity

### FCC Statement (for users in the United States and Canada)

This device complies with Part 15 of FCC Rules and RSS-Gen of IC Rules. Operation is subject to the following two conditions; (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

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 or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the 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.

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

Properly shielded grounded cables and connectors must be used for connection to host computer and/or peripherals in order to meet FCC emission limits.

### Precautions for Use

Any modifications without prior permission of Kyocera may cause harmful interference.

If any modifications or changes are made to this equipment without prior permission of Kyocera, Kyocera as the manufacturer does not guarantee the compliance with the FCC Rules. The use of equipment that does not comply with the FCC Rules is prohibited.

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# Safety Information

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## Laser Safety

This printer is certified as a Class 1 laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to Radiation Control for Health and Safety Act of 1968. This means that the printer does not produce hazardous laser radiation. Since radiation emitted inside the printer is completely confined within protective housings and external covers, the laser beam cannot escape from the printer during any phase of user operation.

## Laser Notice

This printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR Subchapter for Class I (1) laser products, and elsewhere is certified as a Class I laser product conforming to the requirements of IEC 825.



**DANGER** CLASS 3B INVISIBLE LASER RADIATION  
WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.



**CAUTION** Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

## Radio Frequency Transmitter

This machine contains a transmitter module. We, the manufacturer (Kyocera Mita Corporation) hereby declare that this equipment (page printer), model FS-1350DN is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

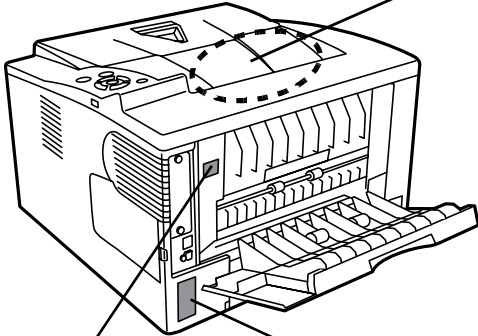
## Radio Tag Technology

In some countries, the radio tag technology used in this equipment to identify the toner container may be subject to authorization, and the use of this equipment may consequently be restricted.

## Caution Labels

The printer bears any of the following labels.

Laser inside the printer  
(Laser radiation warning)



	<p><b>DANGER</b> - CLASS 3B INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.</p> <p><b>ATTENTION</b> - CLASS 3B RAYONNEMENT LASER INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FASCIAU.</p> <p><b>VORSICHT</b> - KLASSE 3B UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.</p> <p><b>ATTENZIONE</b> - CLASSE 3B RADIAZIONE LASER INVISIBLE IN CASO DI APERTURA. EVITARE L'ESPOSIZIONE AL FASCIO.</p> <p><b>PRECAUCION</b> - CLASSE 3B RADIAZIONE LASER INVISIBLE CUANDO SE ABRE. EVITAR EXPOSERSE AL RAYO.</p> <p><b>VARO!</b> - AVATTAESSA OLET ALTTINA LUOKAN 3B NÄKYMÄTÖMÄLLE LASERSÄTELYLLE. ÄLÄ KATSO SÄTEESEEN.</p> <p><b>警告</b> - 该产品为3B类不可见激光产品。打开盖子后会有激光辐射。请避免光束照射。</p> <p><b>警告</b> - 該產品為3B類不可見激光產品。打開蓋子後會有激光輻射。請避免光束照射。</p> <p><b>위험</b> - CLASS 3B 용가시 레이저광선을 직접 보지마십시오.</p> <p><b>警告</b> - ここを覗くとクラス3B不可視レーザー光がでます。ビームを直接照れたり、触れないでください。</p>
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For Europe, Asia, and other countries

<p><b>CAUTION</b> HOT SURFACE</p> <p><b>ACHTUNG</b> HEISSE OBERFLÄCHE</p> <p><b>ATTENTION</b> TEMPÉRATURE ÉLEVÉE</p> <p><b>ATTENZIONE</b> ESTERIOR CALIENTE</p> <p><b>ATTENZIONE</b> SUPERFICIE CHE SCOTIA</p> <p><b>高温注意</b></p> <p><b>고온주의</b></p>	
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<p><b>FS-1350DN</b> AC 220-240V 50/60Hz 3.9A</p> <p>KYOCERA MITA Corporation</p> <p>• Apparatet må tilkoples jordat stikkontakt.</p> <p>• Apparatet skall anslutas till jordat uttag.</p> <p>• Laite on liitettävä suojamaadoituskaakelitimillä varustettuun pistoraasiaan.</p>	<p>CLASS 1 LASER PRODUCT KLASSE 1 LASER PRODUKT</p> <p>0 8 1 8 7 3 - 1 1</p> <p>SAFETY MARK</p>
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For U.S.A. and Canada

<p><b>FS-1350DN</b> AC 120V 60Hz 7.5A</p> <p>KYOCERA MITA Corporation</p> <p>TAMAKI PLANT TOKYO, JAPAN</p> <p>TAMAKI-TOWN WATARAI-COUNTY, MIE-PREF. JAPAN</p> <p>MANUFACTURED: C11</p>	<p>Complies with FDA radiation performance standards 21 CFR Subchapter J.</p> <p><b>FCC LISTED</b></p> <p>This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.</p> <p>FCC ID: E522HS0108</p> <p>This Class B digital apparatus complies with Canadian ICES-003.</p> <p>Cet appareil numérique de la classe B est conforme de la norme NMB-003 du Canada.</p> <p>IC: 1059B-2HS0108</p> <p>REMOVE POWER CORD BEFORE SERVICE AND FUSE REPLACEMENT.</p> <p>POUR PRÉVENIR LES CHOC ÉLECTRIQUES, COUPER L'ALIMENTATION AVANT DE RÉPARER LE FUSIBLE.</p> <p>DESIGNED IN JAPAN / ASSEMBLED IN CHINA</p>
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## CDRH Regulations

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration implemented regulations for laser products on August 2, 1976. These regulations apply to laser products manufactured after August 1, 1976. Compliance is mandatory for products marketed in the United States. A label indicating compliance with the CDRH regulations must be attached to laser products marketed in the United States.

## Ozone Concentration

These printers generate ozone gas (O<sub>3</sub>), which may concentrate in the place of installation and cause an unpleasant smell. To minimize the concentration of ozone gas to less than 0.1ppm, we recommend you not to install the printer in a confined area where ventilation is blocked.

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## Declaration of Conformity for U.S.A.

Model name: Page Printer FS-1350DN

Trade name: Kyocera Mita

Responsible party: Kyocera Mita America, Inc.

Address: 225 Sand Road PO Box 40008 Fairfield, New Jersey 07004-0008, U.S.A.

Telephone: (973) 808-8444

Fax: (973) 882-6000

Manufacturer: Kyocera Mita Corporation (Head Office)

Manufacturer's address: 2-28, 1-Chome, Tamatsukuri, Chuo-ku, Osaka 540-8585, Japan

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The manufacturer and its merchandising companies retain the following technical documentation in anticipation of the inspection that may be conducted by the authorities concerned:

User's instruction that conforms to the applicable specifications.

Technical drawings.

Descriptions of the procedures that guarantee the conformity.

Other technical information.

Kyocera Mita America Inc.

## CE Marking Directive

Hereby, Kyocera Mita Corporation, declares that this page printer is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

According to Council Directive 89/336/EEC, 2006/95/EC, and 1999/5/EC

Manufacturer: Kyocera Mita Corporation (Head Office)

Manufacturer's address: 2-28, 1-Chome, Tamatsukuri, Chuo-ku, Osaka 540-8585, Japan

Declares that the product

Product name: Page Printer

Model number: FS-1350DN (as tested with enhancement optional unit; Paper Feeder PF-100)

Conforms to the following product specifications:

EN 55 022:1998+A1:2000+A2:2003 Class B

EN 61 000-3-2:2000

EN 61 000-3-3:1995+A1:2001

EN 55 024:1998+A1:2001+A2:2003

EN 60 950-1:2001+A11

EN 60 825-1:1994+A1+A2

EN 300330-1

EN 300330-2

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The manufacturer and its merchandising companies retain the following technical documentation in anticipation of the inspection that may be conducted by the authorities concerned:

User's instruction that conforms to the applicable specifications.

Technical drawings.

Descriptions of procedures that guarantee conformity.

Other technical information.

## **Declaration of Conformity (Australia)**

Manufacturer: Kyocera Mita Corporation (Head Office)

Manufacturer's address: 2-28, 1-Chome, Tamatsukuri, Chuo-ku, Osaka 540-8585, Japan

declares that the product

Product name: Page Printer

Model name: FS-1350DN

Description of devices: This Page Printer Model FS-1350DN is 30ppm; A4 size and utilizes plain paper; dry toner; etc. The printer can be equipped with several optional enhancement units, such as a PF-100 paper feeder.

conforms to the following product specifications:

AS/NZS 3548: 1995 (EN 55 022: 1998 Class B)

AS/NZS 4268: 2003

IEC60950-1:2001 (EN 60 950-1: 2001+A11)

The manufacturer and its merchandising companies retain the following technical documentation in anticipation of the inspection that may be conducted by the authorities concerned:

User's instruction that conforms to the applicable specifications

Technical drawings

Descriptions of procedures that guarantee conformity

Other technical information

The manufacturer has been employed with ISO9001 scheme. JQA and BS have attested the manufacturer.

Kyocera Mita Australia Pty., Ltd.

6-10 Talavera Road, North Ryde, NSW 2113, Australia

Telephone: +61 2-9888-9999

Fax: +61 2-9888-9588

## **Canadian Department of Communications Compliance Statement**

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

## **Avis de conformité aux normes du ministère des Communications du Canada**

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

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## EN ISO 7779

Maschinenlärminformations-Verordnung 3. GPSGV, 06.01.2004: Der höchste Schalldruckpegel beträgt 70 dB (A) oder weniger gemäß EN ISO 7779.

## Disclaimer

Kyocera Mita will not be liable to customers or any other person or entity for any loss or damage caused or alleged to be caused directly or indirectly by equipment sold or furnished by us, including but not limited to, any interruption of service, loss of business or anticipatory profits, or consequential damages resulting from the use or operation of the equipment or software.

## Energy Saving Function

This printer comes equipped with a Sleep Mode where printer function remains in a waiting state but power consumption is still reduced to a minimum when there is no activity with the printer within a set amount of time.

### Sleep Mode

This printer automatically enters Sleep Mode when approximately 15 minutes have passed since the printer was last used. The amount of time of no activity that must pass before Sleep Mode is activated may be lengthened.

## Duplex Printing

This printer includes duplex printing as a standard function. For example, by printing two single-sided originals onto a single sheet of paper as a duplex printing, it is possible to lower the amount of paper used.

## Recycled Paper

This printer supports recycled paper which reduces the load on the environment. Your sales or service representative can provide information about recommended paper types.

## Energy Star (ENERGY STAR®) Program



We have determined as a participating company in the International Energy Star Program that this product is compliant with the standards laid out in the International Energy Star Program.



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# Symbols

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The sections of this guide and parts of the machine marked with symbols are safety warnings meant to protect the user, other individuals and surrounding objects, and ensure correct and safe usage of the machine. The symbols and their meanings are indicated below.



**DANGER:** Indicates that serious injury or even death will very possibly result from insufficient attention to or incorrect compliance with the related points.



**WARNING:** Indicates that serious injury or even death may result from insufficient attention to or incorrect compliance with the related points.



**CAUTION:** Indicates that personal injury or mechanical damage may result from insufficient attention to or incorrect compliance with the related points.

The following symbols indicate that the related section includes safety warnings. Specific points of attention are indicated inside the symbol.



.... [General warning]



.... [Warning of danger of electrical shock]



.... [Warning of high temperature]

The following symbols indicate that the related section includes information on prohibited actions. Specifics of the prohibited action are indicated inside the symbol.



.... [Warning of prohibited action]



.... [Disassembly prohibited]

The following symbols indicate that the related section includes information on actions which must be performed. Specifics of the required action are indicated inside the symbol.



.... [Alert of required action]



.... [Remove the power plug from the outlet]



.... [Always connect the machine to an outlet with a ground connection]

Please contact your service representative to order a replacement if the safety warnings in this Operation Guide are illegible or if the guide itself is missing. (fee required)

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# ⚠ Installation Precautions

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## Environment

### ⚠ Caution

Avoid placing the machine on or in locations which are unstable or not level. Such locations may cause the machine to fall down or fall over. This type of situation presents a danger of personal injury or damage to the machine.



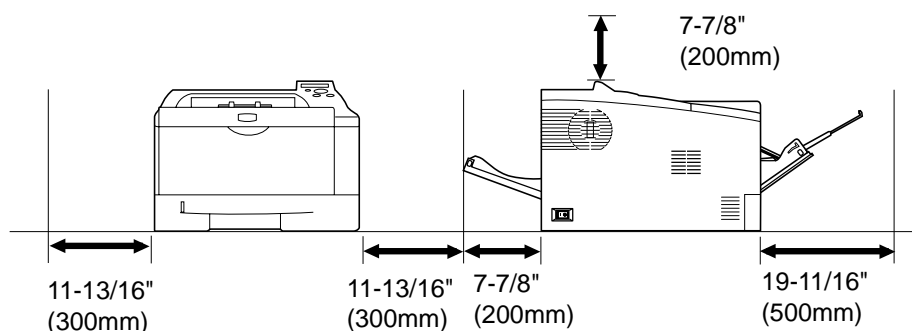
Avoid locations with humidity or dust and dirt. If dust or dirt become attached to the power plug, clean the plug to avoid the danger of fire or electrical shock.



Avoid locations near radiators, heaters, or other heat sources, or locations near flammable items, to avoid the danger of fire.



To keep the machine cool and facilitate changing of parts and maintenance, allow access space as shown below. Leave adequate space, especially around the rear cover, to allow air to be properly ventilated out of the printer.



## Other Precautions

Adverse environmental conditions may affect the safe operation and performance of the machine. Install in an air-conditioned room (recommended room temperature: around 23°C (73.4°F), humidity: around 60 % RH), and avoid the following locations when selecting a site for the machine.

- Avoid locations near a window or with exposure to direct sunlight.
- Avoid locations with vibrations.
- Avoid locations with drastic temperature fluctuations.
- Avoid locations with direct exposure to hot or cold air.
- Avoid poorly ventilated locations.

During printing, some ozone is released, but the amount does not cause any ill effect to one's health. If, however, the printer is used over a long period of time in a poorly ventilated room or when printing an extremely large number of copies, the smell may become unpleasant. To maintain the appropriate environment for print work, it is suggested that the room be properly ventilated.

---

## Power Supply/Grounding the Machine

### **Warning**

Do not use a power supply with a voltage other than that specified. Avoid multiple connections in the same outlet. These types of situations present a danger of fire or electrical shock.



Plug the power cord securely into the outlet. If metallic objects come in contact with the prongs on the plug, it may cause a fire or electric shock.



Always connect the machine to an outlet with a ground connection to avoid the danger of fire or electrical shock in case of an electric short. If an earth connection is not possible, contact your service representative.



### **Other precautions**

Connect the power plug to the closest outlet possible to the machine.

The power supply cord is used as the main disconnect device. Ensure that the socket/outlet is located/installed near the equipment and is easily accessible.

## Handling of plastic bags

### **Warning**

Keep the plastic bags that are used with the machine away from children. The plastic may cling to their nose and mouth causing suffocation.



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## Precautions for Use

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### Cautions when using the machine

#### Warning

Do not place metallic objects or containers with water (flower vases, flower pots, cups, etc.) on or near the machine. This situation presents a danger of fire or electrical shock should they fall inside.



Do not remove any of the covers from the machine as there is a danger of electrical shock from high voltage parts inside the machine.



Do not damage, break or attempt to repair the power cord. Do not place heavy objects on the cord, pull it, bend it unnecessarily or cause any other type of damage. These types of situations present a danger of fire or electrical shock.



Never attempt to repair or disassemble the machine or its parts as there is a danger of fire, electrical shock or damage to the laser. If the laser beam escapes, there is a danger of it causing blindness.



If the machine becomes excessively hot, smoke appears from the machine, there is an odd smell, or any other abnormal situation occurs, there is a danger of fire or electrical shock. Turn the main power switch off (O) immediately, be absolutely certain to remove the power plug from the outlet and then contact your service representative.



If anything harmful (paper clips, water, other fluids, etc.) falls into the machine, turn the main power switch off (O) immediately. Next, be absolutely certain to remove the power plug from the outlet to avoid the danger of fire or electrical shock. Then contact your service representative.



Do not remove or connect the power plug with wet hands, as there is a danger of electrical shock.



Always contact your service representative for maintenance or repair of internal parts.



#### Caution

Do not pull the power cord when removing it from the outlet. If the power cord is pulled, the wires may become broken and there is a danger of fire or electrical shock. (Always grasp the power plug when removing the power cord from the outlet.)



Always remove the power plug from the outlet when moving the machine. If the power cord is damaged, there is a danger of fire or electrical shock.



If the machine will not be used for a short period of time (overnight, etc.), turn the power switch off (O). If it will not be used for an extended period of time (vacations, etc.), remove the power plug from the outlet for safety purposes during the time the machine is not in use.



Always hold the designated parts only when lifting or moving the machine.



For safety purposes, always remove the power plug from the outlet when performing cleaning operations.



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If dust accumulates within the machine, there is a danger of fire or other trouble. It is therefore recommended that you consult with your service representative in regard to cleaning of internal parts. This is particularly effective if accomplished prior to seasons of high humidity. Consult with your service representative in regard to the cost of cleaning the internal parts of the machine.



### Other precautions

Do not place heavy objects on the machine or cause other damage to the machine.

Do not open the upper front cover, turn off the main power switch, or pull out the power plug during printing.

When lifting or moving the machine, contact your service representative.

Do not touch electrical parts, such as connectors or printed circuit boards. They could be damaged by static electricity.

Do not attempt to perform any operations not explained in this handbook.

Use shielded interface cables.

## Caution

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

### Cautions when Handling Consumables

## Caution

Do not attempt to incinerate the Toner Container. Dangerous sparks may cause burns.



Keep the Toner Container out of the reach of children.



If toner happens to spill from the Toner Container, avoid inhalation and ingestion, as well as contact with your eyes and skin.



- If you do happen to inhale toner, move to a place with fresh air and gargle thoroughly with a large amount of water. If coughing develops, contact a physician.
- If you do happen to ingest toner, rinse your mouth out with water and drink 1 or 2 cups of water to dilute the contents of your stomach. If necessary, contact a physician.
- If you do happen to get toner in your eyes, flush them thoroughly with water. If there is any remaining tenderness, contact a physician.
- If toner does happen to get on your skin, wash with soap and water.

Do not attempt to force open or destroy the Toner Container.



### Other precautions

After use, always dispose of the Toner Container in accordance with Federal, State and Local rules and regulations.

Store all consumables in a cool, dark location.

If the machine will not be used for an extended period of time, remove the paper from the cassette, return it to its original package and reseal it.

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## About the Operation Guide

This Operation Guide contains the following chapters:

### **1 Machine Parts**

This chapter explains the names of parts.

### **2 Paper Handling**

This chapter explains how choose, handle and load paper.

### **3 Loading Paper**

This chapter explains paper specifications for this printer and how to load paper into the cassette or MP tray.

### **4 Printing**

This chapter explains how to install the printer driver, print from your PC, and use the application software included in the CD-ROM.

### **5 Maintenance**

This chapter explains how to replace the toner container and how to care for your printer.

### **6 Troubleshooting**

This chapter explains how to handle printer problems that may occur, such as paper jams.

### **7 Using the Operation Panel**

This chapter explains how to use the operation panel to configure the printer.

### **8 Option**

This chapter explains the options for this printer.

### **9 Computer Interface**

This chapter explains the possible connections between the printer and your computer.

### **10 Specifications**

This chapter lists the specifications of this printer.


### **Glossary**

A Glossary of terms used is provided here.

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## Conventions in This Guide

This manual uses the following conventions.

Convention	Description	Example
<b>Italic Typeface</b>	Used to emphasize a key word, phrase or reference to additional information.	Refer to <i>Print Quality Problems</i> on page 5-3.
<b>Bold</b>	Used to denote buttons on the software.	To start printing, click <b>OK</b> .
<b>Bracket Bold</b>	Used to denote operation panel keys.	Press <b>[GO]</b> to resume printing.
<b>Note</b>	Used to provide additional or useful information about a function or feature.	 <b>Note</b> Do not remove the toner container from the carton until you are ready to install it in the printer.
<b>Important</b>	Used to provide important information.	<b>IMPORTANT</b> Take care not to touch the transfer roller (black) during cleaning.
<b>Caution</b>	Cautions are statements that suggest mechanical damage as a result of an action.	<b>CAUTION</b> When pulling the paper, pull it gently so as not to tear it. Torn pieces of paper are difficult to remove and may be easily overlooked, deterring the paper jam recovery.
<b>Warning</b>	Used to alert users to the possibility of personal injury.	<b>WARNING</b> If you ship the printer, remove and pack the developer unit and drum unit in a plastic bag and ship them separately from the printer.

# 1 Machine Parts

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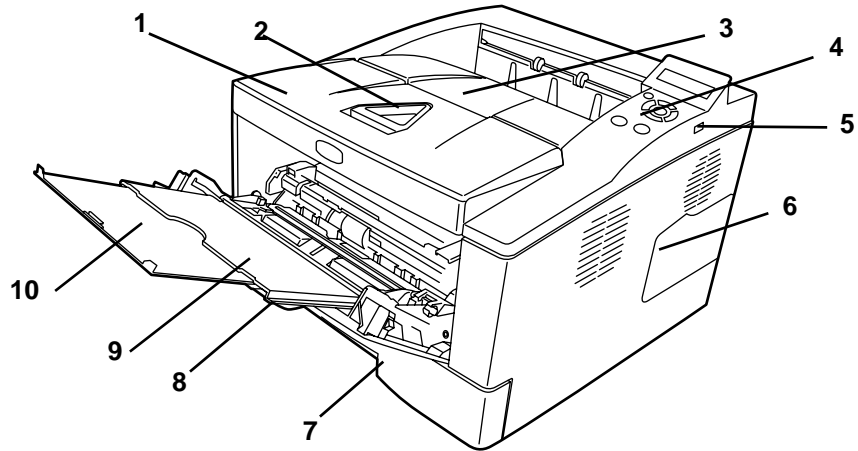
This chapter identifies machine parts and operation panel keys.

<b>Components at the Front of the Printer</b>	<b>1-2</b>
<b>Components at the Rear of the Printer</b>	<b>1-2</b>
<b>Operation Panel</b>	<b>1-3</b>



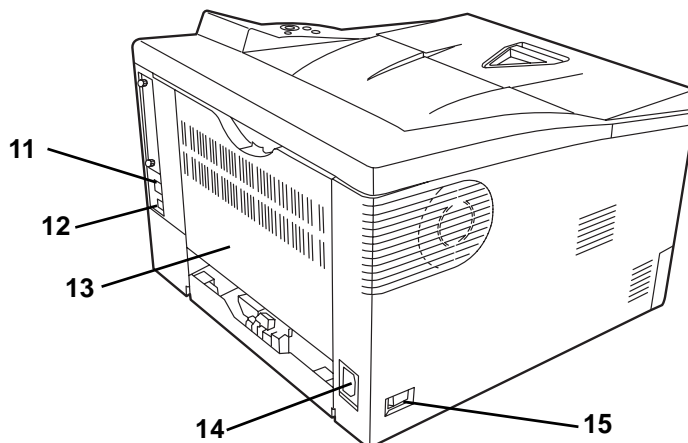
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## Components at the Front of the Printer



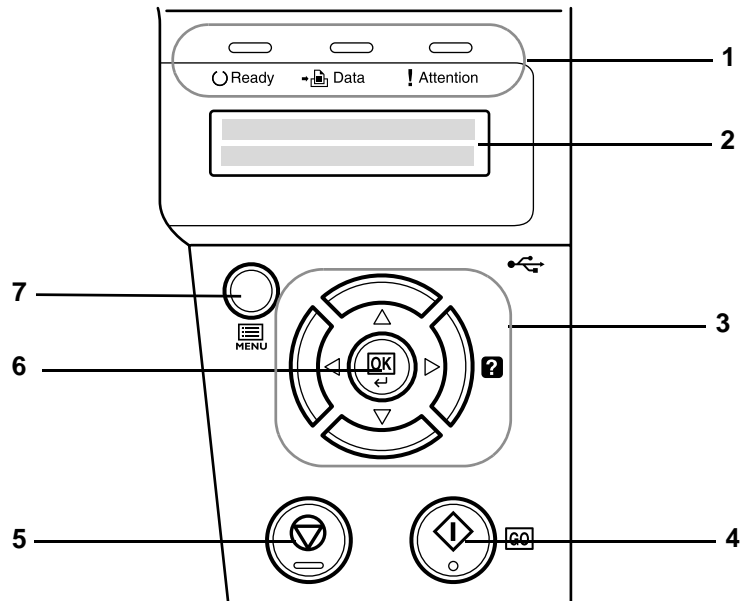
- 1 Top Cover
- 2 Paper Stopper
- 3 Top Tray
- 4 Operation Panel
- 5 USB Memory Slot
- 6 Right Cover
- 7 Paper Cassette
- 8 Front Cover
- 9 MP Tray
- 10 Subtray

## Components at the Rear of the Printer



- 11 Network Interface Connector
- 12 USB Interface Connector
- 13 Rear Cover
- 14 Power Cord Connector
- 15 Power Switch

## Operation Panel



- 1 Indicators
- 2 Message Display
- 3 Cursor Keys
- 4 [GO] Key
- 5 [Cancel] Key
- 6 [OK] Key
- 7 [MENU] Key



## 2 Paper Handling

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This chapter explains paper specifications for this printer.

<b>General Guidelines</b>	<b>2-2</b>
<b>Selecting the Right Paper</b>	<b>2-4</b>
<b>Paper Type</b>	<b>2-11</b>

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## General Guidelines

The machine is designed to print on standard copier paper, but it can also accept a variety of other types of paper within the limits specified below.



**Note** The manufacturer assumes no liability for problems that occur when paper not satisfying these requirements is used.

Selection of the right paper is important. Using the wrong paper can result in paper jams, curling, poor print quality, and paper waste, and in extreme cases can damage the machine. The guidelines given below will increase the productivity of your office by ensuring efficient, trouble-free printing and reducing wear and tear on the machine.

## Paper Availability

Most types of paper are compatible with a variety of machines. Paper intended for xerographic copiers can also be used with the machine.

There are three general grades of paper: economy, standard, and premium. The most significant difference between grades is the ease with which they pass through the machine. This is affected by the smoothness, size, and moisture content of the paper, and the way in which the paper is cut. The higher the grade of paper you use, the less risk there will be of paper jams and other problems, and the higher the level of quality your printed output will reflect.

Differences between paper from different suppliers can also affect the machine's performance. A high-quality printer cannot produce high-quality results when the wrong paper is used. Low-priced paper is not economical in the long run if it causes printing problems.

Paper in each grade is available in a range of basis weights (defined later). The traditional standard weights are 60 to 120 g/m<sup>2</sup> (16 to 31.9b).

## Paper Specifications

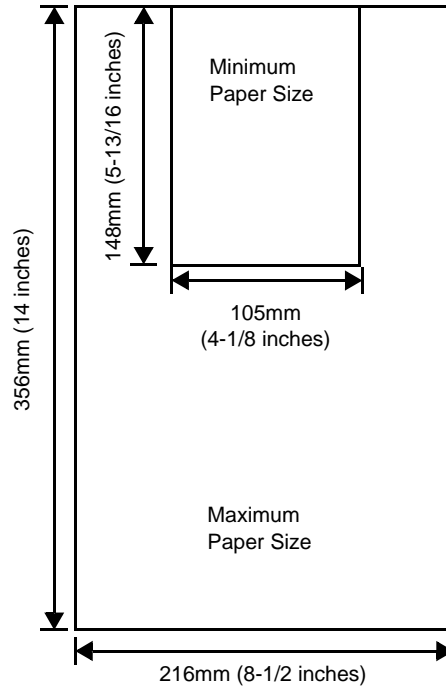
The following table summarizes the basic paper specifications. Details are given on the following pages:

Item	Specifications
Weight	Cassette: 60 to 120 g/m <sup>2</sup> (16 to 31.9 lb/ream) MP tray: 60 to 220 g/m <sup>2</sup> (16 to 58.5 lb/ream)
Thickness	0.086 to 0.110mm (3.4 to 4.3 mils)
Dimensional Accuracy	±0.7 mm (±0.0276 inches)
Squareness of Corners	90±0.2°
Moisture Content	4 to 6%
Direction of Grain	Long grain
Pulp Content	80% or more

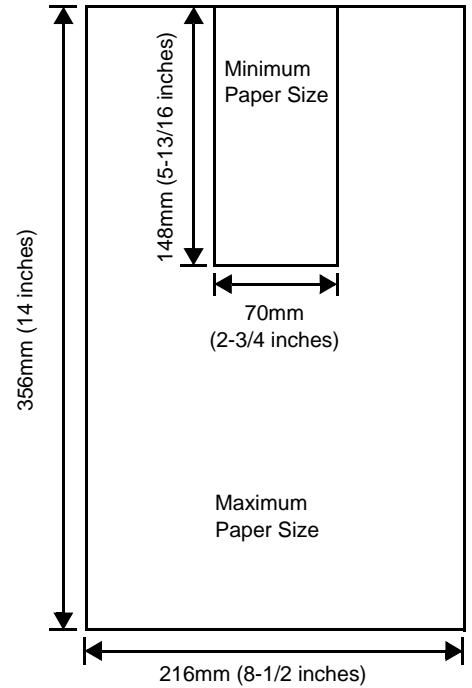
## Minimum and Maximum Paper Sizes

The minimum and maximum paper sizes are as follows. For the paper smaller than JIS B6, postcards, and envelopes, the MP tray must be used.

Paper cassette



MP tray



**Note** The minimum paper size of the optional paper feeder (PF-100) is 148 x 210 mm (5-13/16 x 8-5/16 inches).

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## Selecting the Right Paper

This section describes the guidelines for selecting paper.

### Condition

Avoid using paper that is bent at the edges, curled, dirty, torn, embossed, or contaminated with lint, clay, or paper shreds.

Use of paper in these conditions can lead to illegible printing and paper jams, and can shorten the life of the machine. In particular, avoid using paper with a surface coating or other surface treatment. Paper should have as smooth and even a surface as possible.

### Composition

Do not use paper that has been surface-treated and contains plastic or carbon. The heat of fusing can cause such paper to give off harmful fumes.

Bond paper should contain at least 80% pulp. Not more than 20% of the total paper content should consist of cotton or other fibers.

### Paper Sizes

Cassettes and the MP Tray are available for the paper sizes shown below. The dimensional tolerances are  $\pm 0.7\text{mm}$  for the length and width. The angle at the corners must be  $90^\circ \pm 0.2^\circ$ .

MP Tray:

Envelope Monarch, Envelope #10, Envelope #9, Envelope #6, Envelope C5, Envelope DL, Legal, Letter, Statement, Oficio II, Executive, ISO A4, ISO A5, ISO A6, Folio, ISO B5, JIS B5, JIS B6, Hagaki, Ofuku-Hagaki, Youkei 2, Youkei 4, 16 kai, Custom (70 x 148 to 216 x 356mm (2-13/16 x 5-13/16 to 8-1/2 x 14 inches))



**Note** If the length of custom paper is larger than 297mm (11-11/16 inches), the printer can be specified ISO A4, Oficio II, Folio, and Legal as the standard paper size.

Cassette:

Legal, Letter, Statement (only for machine's paper cassette), Oficio II, Executive, ISO A4, ISO A5, A6 (only for machine's paper cassette), Folio, ISO B5, JIS B5, Envelope C5, 16 kai, Custom (Paper Cassette: 105 x 148 to 216 x 356mm (4-1/8 x 5-13/16 to 8-1/2 x 14 inches), Paper Feeder: 148 x 210 to 216 x 356mm (5-13/16 x 8-5/16 to 8-1/2 x 14 inches))



**Note** If the length of custom paper is larger than 297mm (11-11/16 inches), the printer can be specified ISO A4, Oficio II, Folio, and Legal as the standard paper size.

### Smoothness

The paper should have a smooth, uncoated surface. Paper with a rough or sandy surface can cause blank spaces in the printed output. Paper that is too smooth can cause multiple feeding and fogging problems. (Fogging is a gray background effect.)

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## Basis Weight

Basis weight is the weight of paper expressed in grams per square meter (g/m<sup>2</sup>). Paper that is too heavy or too light may cause feed errors or paper jams as well as premature wear of the product. Uneven weight of paper, namely uneven paper thickness may cause multiple-sheet feeding or print quality problems such as blurring because of poor toner fusing.

The recommended basis weight is between 60 and 120g/m<sup>2</sup> (16 to 31.9 lib/ream) for the cassette and between 60 and 220g/m<sup>2</sup> (16 to 59 lib/ream) for the MP tray.

## Paper Weight Equivalence Table

The paper weight is listed in pounds (lb) and metric grams per square meter (g/m<sup>2</sup>). The shaded part indicates the standard weight.

U. S. Bond Weight (lb)	Europe Metric Weight (g/m <sup>2</sup> )
16	60
17	64
20	75
21	80
22	81
24	90
27	100
28	105
32	120
34	128
36	135
39	148
42	157
43	163
47	176
53	199

## Thickness

The paper used with the machine should be neither extremely thick nor extremely thin. If you are having problems with paper jams, multiple feeds, and faint printing, the paper you are using may be too thin. If you are having problems with paper jams and blurred printing the paper may be too thick. The correct thickness is 0.086 to 0.110mm (3.4 to 4.3 mils).

## Moisture Content

Moisture content is defined as the percent ratio of moisture to the dry mass of the paper. Moisture can affect the paper's appearance, feed ability, curl, electrostatic properties, and toner fusing characteristics.



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The moisture content of the paper varies with the relative humidity in the room. When the relative humidity is high and the paper absorbs moisture, the paper edges expand, becoming wavy in appearance. When the relative humidity is low and the paper loses moisture, the edges shrink and tighten, and print contrast may suffer.

Wavy or tight edges can cause jams and alignment anomalies. The moisture content of the paper should be 4 to 6%.

To ensure correct moisture content, it is important to store the paper in a controlled environment. Some tips on moisture control are:

- Store paper in a cool, dry location.
- Keep the paper in its wrapping as long as possible. Re-wrap paper that is not in use.
- Store paper in its original carton. Place a pallet etc. under the carton to separate it from the floor.
- After removing paper from storage, let it stand in the same room as the machine for 48 hours before use.
- Avoid leaving paper where it is exposed to heat, sunlight, or damp.

## Paper Grain

When paper is manufactured, it is cut into sheets with the grain running parallel to the length (long grain) or parallel to the width (short grain). Short grain paper can cause feeding problems in the machine. All paper used in the machine should be long grain.

## Other Paper Properties

**Porosity:** Indicates the density of paper fiber.

**Stiffness:** Limp paper may buckle in the machine, resulting in paper jams.

**Curl:** Most paper naturally tends to curl one way if left unpacked. When paper passes through the fixing unit, it curls upward a little. To produce flat printouts, load the paper so that the upward pressure from the machine can correct their curling.

**Electrostatic discharge:** During the printing process the paper is electrostatically charged to attract the toner. The paper must be able to release this charge so that printed sheets do not cling together in the Output Tray.

**Whiteness:** The contrast of the printed page depends on the whiteness of the paper. Whiter paper provides a sharper, brighter appearance.

**Quality control:** Uneven sheet size, corners that are not square, ragged edges, welded (uncut) sheets, and crushed edges and corners can cause the machine to malfunction in various ways. A quality paper supplier should take considerable care to ensure that these problems do not occur.

**Packaging:** Paper should be packed in a sturdy carton to protect it from damage during transport. Quality paper obtained from a reputable supplier is usually correctly packaged.

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## Special Paper

The following types of special paper can be used:

Paper type to be used	Paper type to be selected
Thin paper (60 to 64 g/m <sup>2</sup> )	Vellum
Thick paper (90 to 220 g/m <sup>2</sup> )	Thick
Colored paper	Color
Recycled paper	Recycled
Overhead projector transparencies	Transparency
Cardstock	Cardstock
Envelopes	Envelope
Label	Labels

Use paper that is sold specifically for use with copiers or printers (heat-fusing type). When using transparencies, labels, envelopes, cardstock, or thick paper, feed the paper from the MP Tray.

Since the composition and quality of special paper vary considerably, special paper is more likely than white bond paper to give trouble during printing. No liability will be assumed if moisture and so forth given off during printing on special paper causes harm to the machine or operator.



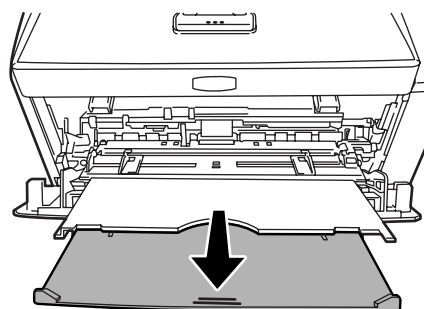
**Note** Before purchasing any type of special paper, test a sample on the machine and check that printing quality is satisfactory.

### Transparency

This printer is available for monochrome printing on transparencies. Transparencies must be fed to the MP Tray. One transparency can be loaded at a time.

Transparencies must be able to withstand the heat of fusing during the printing process.

Transparencies must be placed on the MP tray with the long edge towards the printer.



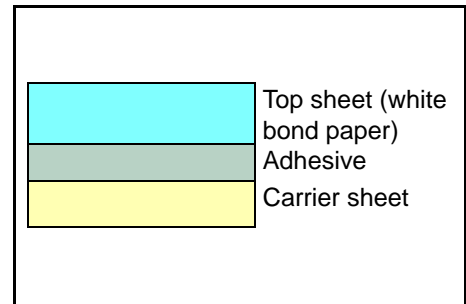
When unloading transparencies (e.g., for clearing jams), hold them carefully by the edges to avoid leaving fingerprints on them.

### Labels

Labels must be fed to the MP tray. One label can be loaded at a time.

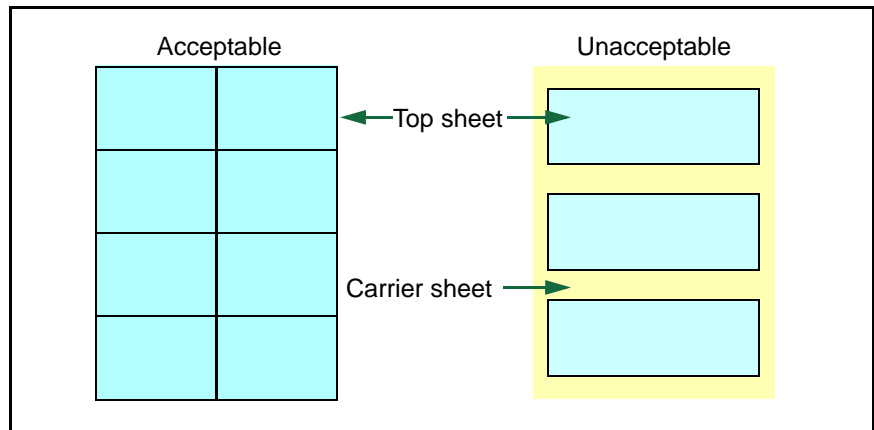
The basic rule for printing on adhesive labels is that the adhesive must never come into contact with any part of the machine. Adhesive paper sticking to the drum or rollers will damage the machine.

Label paper has a structure comprising of three layers, as shown in the diagram. The top sheet is printed on. The adhesive layer consists of pressure-sensitive adhesives. The carrier sheet (also called the linear or backing sheet) holds the labels until used. Due to the complexity of its composition, adhesive-backed label paper is particularly likely to give printing problems.



Adhesive label paper must be entirely covered by its top sheet, with no spaces between the individual labels. Labels with spaces in between are liable to peel off, causing serious paper jam problems.

Some label paper is manufactured with an extra margin of top sheet around the edge. Do not remove the extra top sheet from the carrier sheet until after printing is finished.

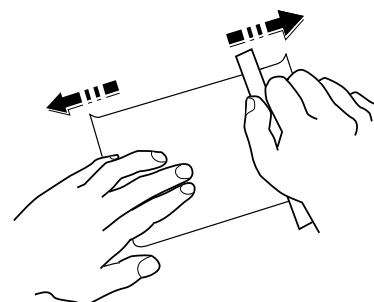


The table below lists the specifications for adhesive label paper.

Item	Specification
Weight of top sheet	44 to 74 g/m <sup>2</sup> (12 to 20 lb/ream)
Composite weight	104 to 151 g/m <sup>2</sup> (28 to 40 lb/ream)
Thickness of top sheet	0.086 to 0.107 mm (3.9 to 4.2 mils)
Composite thickness	0.115 to 0.145 mm (4.5 to 5.7 mils)
Moisture content	4 to 6 % (composite)

### Postcards

Up to 10 postcards can be loaded at a time. Fan the stack of postcards and align the edges before loading them in the MP tray. Make sure the postcards you are going to set are not curled. Feeding curled postcards may cause paper jams.



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Some postcards have rough edges on the back (those are created when the paper is cut). In this case, put the postcards on a flat place and rub the edges with, for example, a ruler to smooth them.

### Envelopes

Up to 5 envelopes can be loaded at a time. Envelopes should be fed in the face-up position, right edge first.

Since the composition of an envelope is more complex than that of ordinary paper, it is not always possible to ensure consistent printing quality over the entire envelope surface.

Normally, envelopes have a diagonal grain direction. Refer to *Paper Grain* on page 2-6. This direction can easily cause wrinkles and creases when envelopes pass through the printer. Before purchasing envelopes, make a test print to check whether the printer accepts the envelope.

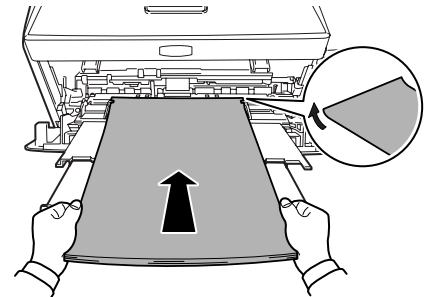
- Do not use envelopes that have an encapsulated liquid adhesive.
- Avoid a long printing session for envelopes only. Extended envelope printing can cause premature printer wear.
- If jams occur, try setting less envelopes on the MP tray.
- To avoid jams caused by curled envelopes, stack no more than 10 printed envelopes on the output tray.

### Thick Paper

Fan the stack of paper and align the edges before loading them in the MP tray. Some types of paper have rough edges on the back (those are created when the paper is cut). In this case, put the paper on a flat place and rub the edges once or twice with, for example, a ruler to smooth them. Feeding rough edged paper may cause paper jams.



**Note** If the paper jams even after you smooth it out, load the paper in the MP tray with the leading edge raised up a few millimeters as shown in the illustration.



### Colored Paper

Colored paper should satisfy the same conditions as white bond paper. Refer to *Paper Specifications* on page 2-2. In addition, the pigments used in the paper must be able to withstand the heat of fusing during the printing process (up to 200 °C or 392 °F).

### Preprinted Paper

Preprinted paper should satisfy the same conditions as white bond paper. Refer to *Paper Specifications* on page 2-2. The preprinted ink must be able to withstand the heat of fusing during the printing process, and must not be affected by silicone oil.

Do not use paper with any kind of surface treatment, such as the type of paper commonly used for calendars.

---

### Recycled Paper

Select recycled paper that meets the same specifications as the white bond paper except for whiteness. Refer to *Paper Specifications* on page 2-2.



**Note** Before purchasing recycled paper, test a sample on the machine and check that the printing quality is satisfactory.

## Paper Type

The printer is capable of printing under the optimum setting for the type of paper being used.

Setting the paper type for the paper source from the printer's operation panel will cause the printer to automatically select the paper source and print in the mode best suited to that type of paper.

A different paper type setting can be made for each paper source including the MP tray. Not only can preset paper types be selected, but it is also possible for you to define and select customized paper types. Refer to *Type Adjust (Creating custom paper type)* on page 7-25. The following types of paper can be used.

Paper Type	Paper source				
	MP tray	Paper Cassette	Paper Weight		Duplex path
			Range	Display in Operation Panel	
Plain	Yes	Yes	70 to 90g/m <sup>2</sup>	Normal2	Yes
Transparency	Yes	No	Transparency	Extra Heavy	No
Preprinted	Yes	Yes	70 to 90g/m <sup>2</sup>	Normal2	Yes
Labels	Yes	No	90 to 120g/m <sup>2</sup>	Heavy1	No
Bond	Yes	Yes	90 to 120g/m <sup>2</sup>	Normal3	Yes
Recycled	Yes	Yes	70 to 90g/m <sup>2</sup>	Normal2	Yes
Vellum	Yes	No	Less than 64g/m <sup>2</sup>	Light	No
Rough	Yes	Yes	90 to 120g/m <sup>2</sup>	Normal3	Yes
Letterhead	Yes	Yes	90 to 120g/m <sup>2</sup>	Normal3	No
Color	Yes	Yes	90 to 120g/m <sup>2</sup>	Normal3	Yes
Prepunched	Yes	Yes	70 to 90g/m <sup>2</sup>	Normal2	Yes
Envelope	Yes	No	120 to 220g/m <sup>2</sup>	Heavy3	No
Cardstock	Yes	No	120 to 220g/m <sup>2</sup>	Heavy3	No
Thick	Yes	No	120 to 220g/m <sup>2</sup>	Heavy3	No
High quality	Yes	Yes	70 to 90g/m <sup>2</sup>	Normal2	Yes
Custom 1 (to 8)*	Yes	Yes	70 to 90g/m <sup>2</sup>	Normal2	Yes

Yes: Can be stored No: Cannot be stored

- \*. This is a paper type defined and registered by the user. Up to eight types of user settings may be defined. User can also enable or disable the duplex path when using Custom. For more information, refer to *Type Adjust (Creating custom paper type)* on page 7-25.



# 3 Loading Paper

---

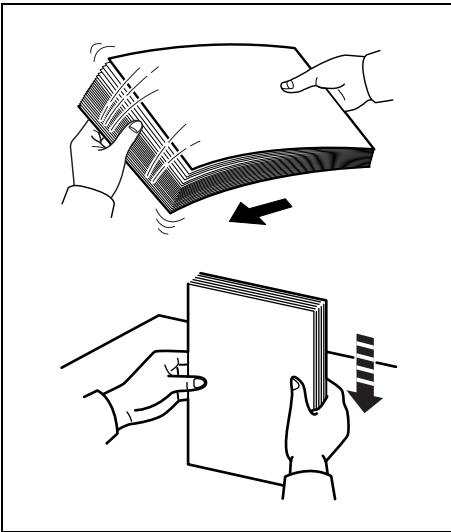
This chapter explains how to load paper into the cassette or MP tray.

<b>Preparing the Paper</b>	<b>3-2</b>
<b>Loading Paper into Cassette</b>	<b>3-2</b>
<b>Loading Paper into MP (Multi-Purpose) Tray</b>	<b>3-5</b>



---

## Preparing the Paper



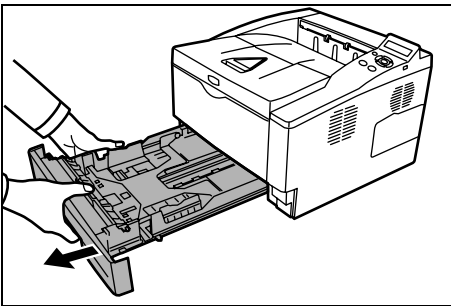
After removing paper from the packaging, fan through the sheets to separate them prior to loading.

If using paper that has been folded or is curled, straighten it prior to loading. Failure to do so may result in a paper jam.

**IMPORTANT** Ensure paper is not stapled and clips are removed.

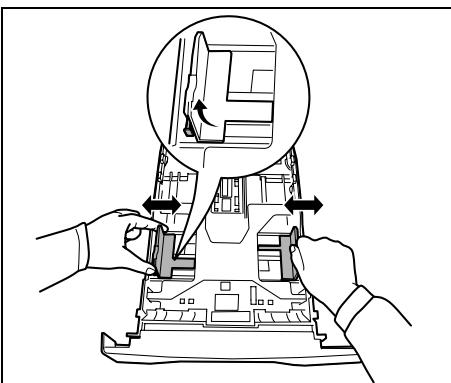
## Loading Paper into Cassette

250 sheets of 11 × 8 1/2" or A4 paper (80 g/m<sup>2</sup>) may be loaded into the Cassette.



- 1 Pull the cassette completely out of the printer.

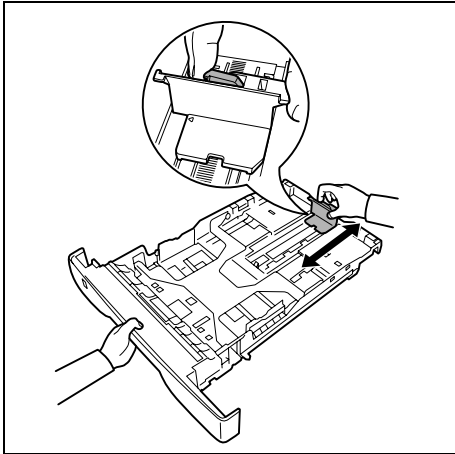
**IMPORTANT** When pulling the cassette out of the printer, ensure it is supported and does not fall out.



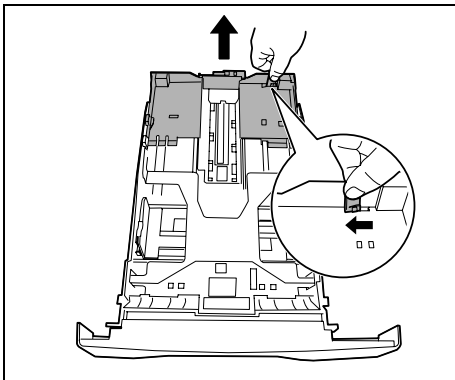
- 2 Adjust the position of the width guides located on the left and right sides of the cassette. Press the release button on the left guide and slide the guides to the paper size required.



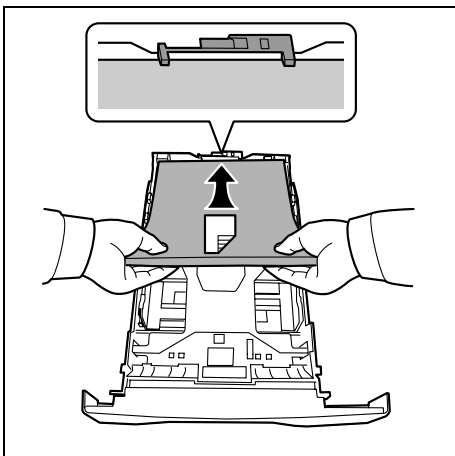
**Note** Paper sizes are marked on the cassette.



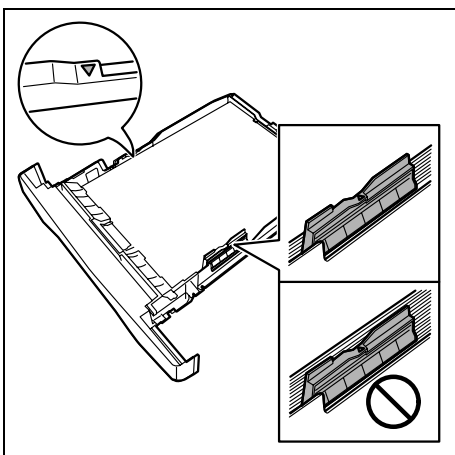
- 3 Adjust the paper length guide to the paper size required.




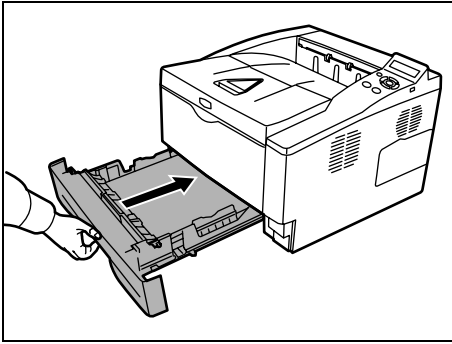
If you are going to use paper that is longer than A4, pull out the extension paper cassette by pushing the release lever one by one and adjust it to the desired paper size.



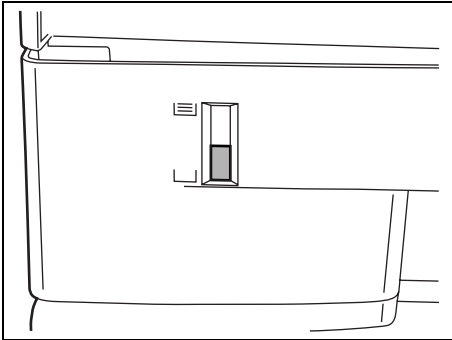
- 4 Load the paper in the cassette. Ensure the side to be printed is facing down and the paper is not folded, curled, or damaged.



 **Note** Do not load paper above the triangle mark located on the width guide.



- 5 Insert the paper cassette into the slot in the printer. Push it straight in as far as it will go.



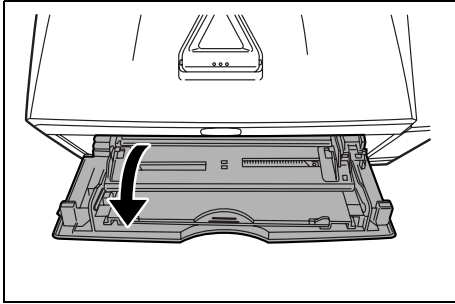
There is a paper gauge on the left side of the front of the paper cassette to indicate the remaining paper supply. When paper is exhausted, the pointer will go down to the level of (empty).

- 6 Specify the paper size and type for the *cassette* using control panel. For more information, refer to *Advanced Operation Guide*.

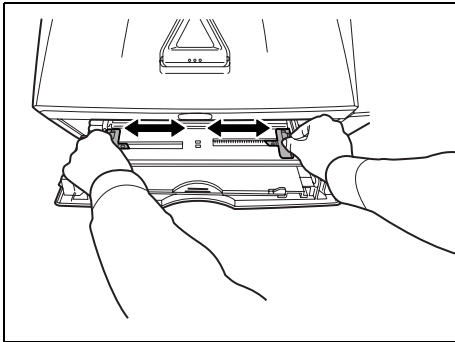
---

## Loading Paper into MP (Multi-Purpose) Tray

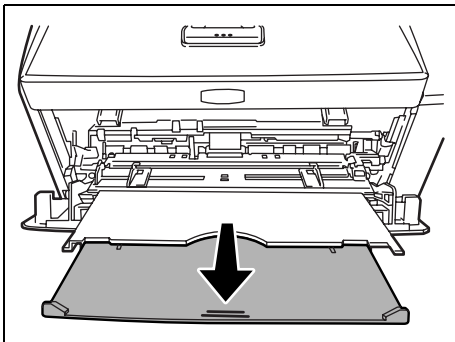
The FS-1350DN can load up to 50 sheets of 11 × 8 1/2" or A4 paper (80 g/m<sup>2</sup>) into the MP tray.



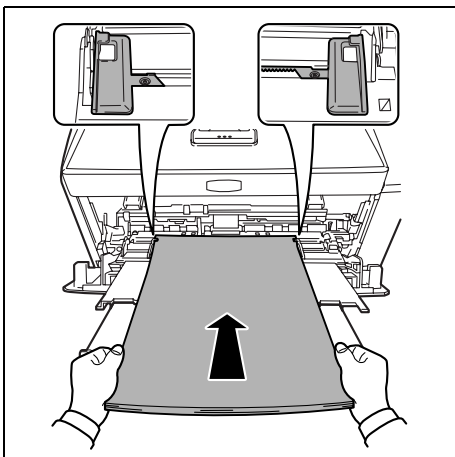
- 1 Pull the MP tray towards you until it stops.



- 2 Adjust the position of the paper guides on the MP tray. Standard paper sizes are marked on the MP tray. For standard paper sizes, slide the paper guides to the corresponding mark.



- 3 Pull out the subtray.



- 4 Align the paper with the paper guides and insert as far as it will go.

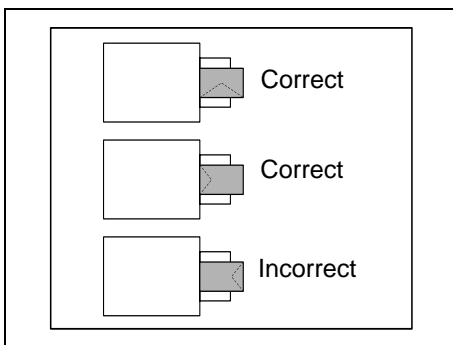


**Note** Do not load more paper than exceeds the tab of the MP tray.



**Note** If the paper is considerably curled in one direction, for example, if the paper is already printed on one side, try to roll the paper in the opposite direction to counteract the curl. Printed sheets will then come out flat.

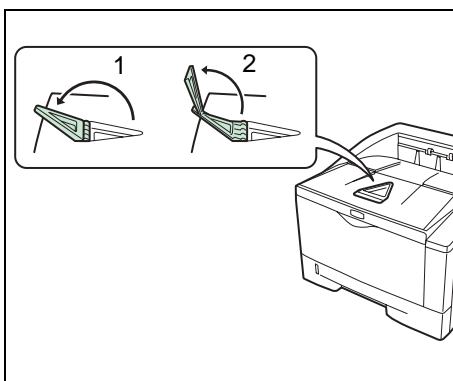
Correct		
Incorrect		



When loading envelope, place with the envelope flap closed and keep the printing side face-up. Insert envelope against the guide with the flap on the front or left side until they stop.

- 5 Specify the paper size and type for MP tray using control panel. For more information, refer to *Advanced Operation Guide*.

## Paper Stopper



Open the paper stopper shown in the figure.

# 4 Connecting and Printing

---

This chapter explains how to start up the printer, print from your PC, and use the application software included in the CD-ROM.

<b>Connections</b>	<b>4-2</b>
<b>Changing Network Interface Parameters</b>	<b>4-4</b>
<b>Printing a Network Interface Status Page</b>	<b>4-12</b>
<b>Installing the Printer Driver</b>	<b>4-13</b>
<b>Printing</b>	<b>4-19</b>
<b>Status Monitor</b>	<b>4-20</b>
<b>Uninstalling Software (Windows PC)</b>	<b>4-24</b>

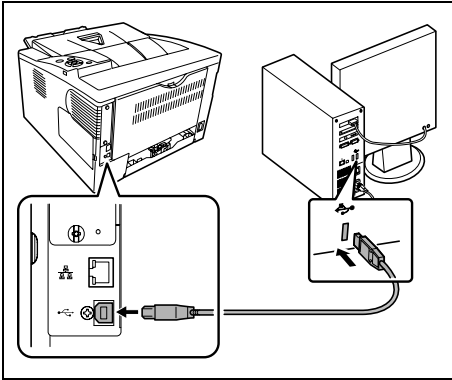
---

## Connections

This section explains how to start up the printer.

### Connecting the USB Cable

Follow the steps as below for connecting the USB cable.



- 1 Connect the USB cable to the USB Interface Connector.

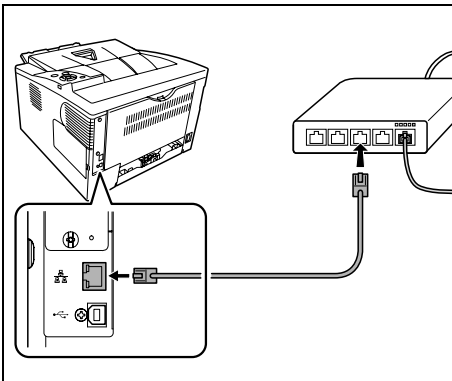


**Note** Use a USB cable with a rectangular Type A plug and a square Type B plug. This cable is sold separately.

- 2 Connect the other end of the USB cable to the computer's USB interface connector.

### Connecting the Network Cable

Follow the steps as below for connecting the network cable.



- 1 Remove the cap attached to the printer.
- 2 Connect the printer to the PC or your network device.




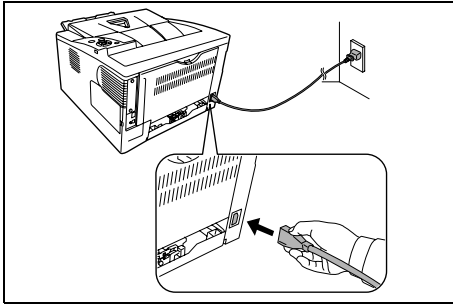
**Note** Use shielded interface cables. These cables are sold separately.

---

## Connecting the Power Cord

Install the printer close to an AC wall outlet. If an extension cord is used, the total length of the power cord plus extension should be 5 meters (16 feet) or less.

 **Note** Ensure the printer's power switch is off. Only use the power cord supplied with the printer.

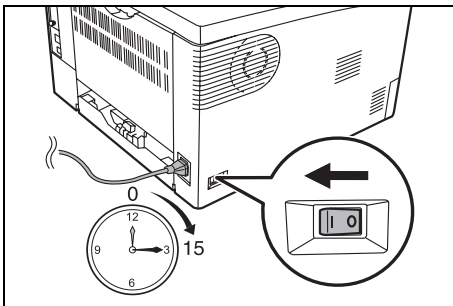


- 1 Connect the power cord to the Power Cord Connector at the rear of the printer.

- 2 Connect the other end of the power cord to a power outlet.

- 3 Press the Power Switch to On ( | ). The printer begins to warm up.

**IMPORTANT** If you install the starter toner container and switch on the power, after a moment the message `Please wait(Adding toner)` is displayed. When the printer is first switched on after toner installation, there will be a delay of approximately 15 minutes before the printer gets ready to print. Once the **[Ready]** indicator lights, printer installation is complete.





---

## Changing Network Interface Parameters

This printer supports TCP/IP, TCP/IP (IPv6), NetWare, AppleTalk, IPP, SSL Server, IPSec protocols, and Security Level. For more information, refer to the *Advanced Operation Guide*.



**Note** After all network related settings have been done, turn the machine OFF and ON again. This is mandatory to make the settings effective.

### TCP/IP, TCP/IP (IPv6) settings

- 1 Press [MENU].
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `Network >` appears.
- 3 Press  $\triangleright$ . Each time you press  $\Delta$  or  $\nabla$ , the selection changes. Refer to the explanations below when specifying the settings.

```
Network >
```

```
>TCP/IP  
Off
```



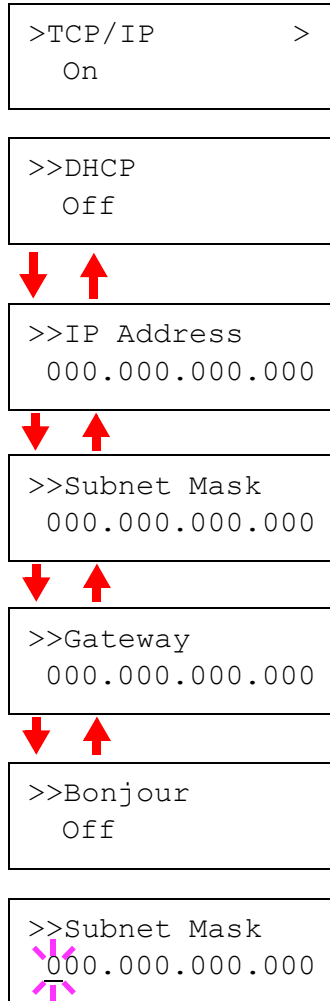
```
>TCP/IP (IPv6)  
Off
```

Set this item to `On` when you connect to a network using `TCP/IP`. Submenu has items including `DHCP`, `IP Address`, `Subnet Mask`, `Gateway` and `Bonjour`.

Set this item to `On` when you connect to a network using `TCP/IP (IPv6)`. Submenu has items including `RA (Stateless)` and `DHCPv6`.

## TCP/IP

This section describes how to enable the TCP/IP protocol.



1 If TCP/IP is set to Off, use  $\Delta$  or  $\nabla$  to select On and press [OK].

2 Press  $\triangleright$ . Each time you press  $\Delta$  or  $\nabla$ , the selection changes.

3 Display the item you want to set and press [OK]. A blinking question mark (?) appears while you are setting DHCP and Bonjour. A blinking cursor ( ) appears while you are setting IP Address, Subnet Mask and Gateway.

4 Press  $\Delta$  or  $\nabla$  to select On or Off as the setting for DHCP and Bonjour.

For the IP Address, Subnet Mask and Gateway settings, press  $\Delta$  or  $\nabla$  to move the blinking cursor to the number you want to change (000 to 255). Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left.



**Note** Check with your network administrator for the network address settings.

5 Press [OK].

6 Press [MENU]. The display returns to Ready.

## TCP/IP (IPv6)

This section describes how to enable the TCP/IP (IPv6) protocol.

```
>TCP/IP (IPv6) >
  On
```

- 1 If `TCP/IP (IPv6)` is set to `Off`, use  $\Delta$  or  $\nabla$  to select `On` and press **[OK]**.

```
>>RA (Stateless)
  Off
```

- 2 Press  $\triangleright$ . Each time you press  $\Delta$  or  $\nabla$ , the selection changes.



```
>>DHCPv6
  Off
```

- 3 Display the item you want to set and press **[OK]**. A blinking question mark (?) appears while you are setting `RA (Stateless)` and `DHCPv6`.

```
>>RA (Stateless)
?Off
```



```
>>DHCPv6
?Off
```

- 4 Press  $\Delta$  or  $\nabla$  to select `On` or `Off` as the setting for `RA (Stateless)` and `DHCPv6`.



**Note** Check with your network administrator for the network address settings.

- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

## NetWare, AppleTalk, IPP, SSL Server, IPSec and Security Level settings

```
Security >
```

- 1 Press **[MENU]**.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `Security >` appears.

- 3 Press  $\triangleright$ . Each time you press  $\triangle$  or  $\nabla$ , the selection changes. Refer to the explanations below when specifying the settings.

```
ID
—
```



```
Password
—
```



If you are using NetWare, AppleTalk, IPP, SSL Server or IPSec to connect to a network, you must enter an administrator ID and press **[OK]**. By default, the administrator ID is the numeric part of your printer's model name "1350".

If you are using NetWare, AppleTalk, IPP, SSL Server or IPSec to connect to a network, you must enter an administrator password and press **[OK]**. By default, the administrator password is the numeric part of your printer's model name "1350".

---

```
>NetWare >
  On
```



```
>AppleTalk
  On
```



```
>IPP
  Off
```



```
>SSL Server
  Off
```



```
>IPSec
  Off
```

Set this item to On when you connect to a network using NetWare. In submenu, frame mode can be selected from Auto, 802.3, Ethernet-II, SNAP and 802.2.

AppleTalk must be activated (On) for networking with Macintosh computers.

Set this item to On when you connect to a network using IPP.

Set this item to On when you connect to a network using SSL Server. Submenu has items including DES, 3DES, AES, IPP over SSL and HTTPS.

Set this item to On when you connect to a network using IPSec.

Continued on next page.



```
>Security Level
  High
```

Set the Security Level to High.

### NetWare

This section explains the procedure for enabling NetWare.

```
>NetWare      >
  On
```

1 Enter the administrator ID and password. Then, if NetWare is set to Off, use  $\Delta$  or  $\nabla$  to select On and press **[OK]**.

```
>>Frame Type
  Auto
```

2 Press  $\triangleright$ .

```
>>Frame Type
?Auto
```

3 Press **[OK]**. A blinking question mark (?) appears. Each time you press  $\Delta$  or  $\nabla$ , the selection changes.



```
>>Frame Type
?802.3
```



```
>>Frame Type
?Ethernet-II
```



```
>>Frame Type
?802.2
```



```
>>Frame Type
?SNAP
```

4 Display the item you want to set and press **[OK]**.

5 Press **[MENU]**. The display returns to Ready.

---

## AppleTalk

This section explains the procedure for enabling AppleTalk.

```
>AppleTalk
  On
```

1 Enter the administrator ID and password. Then, if `AppleTalk` is set to `Off`, use `△` or `▽` to select `On`.

```
>AppleTalk
?On
```

2 Press **[OK]**. A blinking question mark (?) appears.

3 Press **[OK]** again.

4 Press **[MENU]**. The display returns to `Ready`.

## IPP

This section explains the procedure for enabling IPP.

```
>IPP
  On
```

1 Enter the administrator ID and password. Then, if `IPP` is set to `Off`, use `△` or `▽` to select `On`.

```
>IPP
?On
```

2 Press **[OK]**. A blinking question mark (?) appears.

3 Press **[OK]** again.

4 Press **[MENU]**. The display returns to `Ready`.

## SSL Server

This section explains the procedure for enabling SSL Server.

```
>SSL Server >
  On
```

- 1 Enter the administrator ID and password. Then, if `SSL Server` is set to `Off`, use  $\Delta$  or  $\nabla$  to select `On` and press **[OK]**.

```
>>DES
  Off
```

- 2 Press  $\triangleright$ . Each time you press  $\Delta$  or  $\nabla$ , the selection changes.



```
>>3DES
  Off
```



```
>>AES
  Off
```



```
>>IPP over SSL
  Off
```



```
>>HTTPS
  Off
```

```
>>DES
  ?Off
```

- 3 Display the item you want to set and press **[OK]**. A blinking question mark (?) appears.

- 4 Select `On` or `Off` using  $\Delta$  or  $\nabla$ .

- 5 Press **[OK]**.

- 6 Press **[MENU]**. The display returns to `Ready`.

## IPSec

This section explains the procedure for enabling IPSec.

```
>IPSec
  On
```

- 1 Enter the administrator ID and password. Then, if `IPSec` is set to `Off`, use  $\Delta$  or  $\nabla$  to select `On`.

```
>IPSec
  ?On
```

- 2 Press **[OK]**. A blinking question mark (?) appears.

- 3 Press **[OK]** again.

- 4 Press **[MENU]**. The display returns to `Ready`.

---

### Security Level

```
>Security Level  
High
```

Security Level is primarily a menu used by service representative for maintenance work. There is no need for customers to use this menu.



---

## Printing a Network Interface Status Page

You can print out a status page for the network interface. The network status page shows the network addresses, and other information under various network protocols about the network interface.

Adjust/Maintenance

Adjust/Maintenance is used to adjust the print quality and to carry out printer maintenance.

The options available in Adjust/Maintenance are as follows:

- Restart Printer
- Service

**IMPORTANT** *Service* is primarily a menu used by service representative for maintenance work. There is no need for customers to use this menu.

```
Adjust/      >
Maintenance
```

- 1 Press **[MENU]**.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `Adjust/Maintenance >` appears.

- 3 Press  $\triangleright$  while `Adjust/Maintenance >` is displayed.

- 4 Press  $\Delta$  or  $\nabla$  repeatedly until `>Service >` appears.

- 5 Press  $\triangleright$ .

- 6 Press  $\Delta$  or  $\nabla$  repeatedly until `>>Print Network Status Page` appears.

```
>>Print Network
Status Page ?
```

- 7 Press **[OK]**. A question mark (?) appears.

- 8 Press **[OK]**. `Processing` appears and a status page is printed out.


- 9 When printing ends, the display returns to `Ready`.

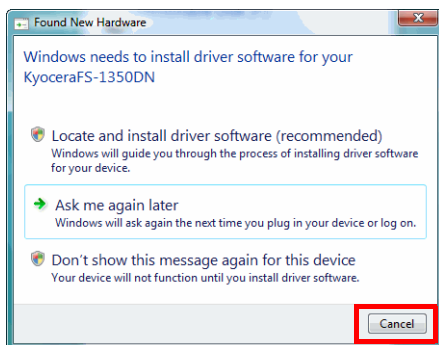
## Installing the Printer Driver

According to the instructions of the Installation Guide, connect the PC to the printer and turn on them to install the printer driver. For more information on printer driver, refer to the *KX Driver User Guide* in the CD-ROM.


### Installing the Printer Driver on Windows PC

This section explains how to install the printer driver in Windows Vista.


 **Note** To install the printer driver, you must log on with administrator privilege.

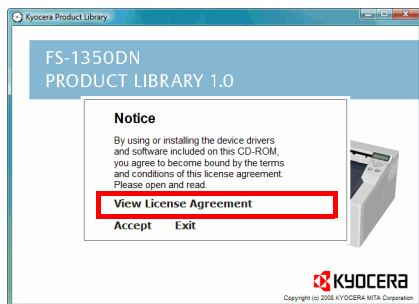


1 Ensure the printer is plugged in and connected to the computer's USB or Network port before installing software from the CD-ROM.

 **Note** If a Plug and Play window like that shown at left appears, click **Cancel**.

2 Insert the CD-ROM (Product Library) into the CD-ROM drive. If the AutoPlay screen appears, click **Run Setup.exe**. The Notice screen appears.


 **Note** If the installation program fails to launch, use Windows Explorer to access the CD-ROM and select Setup.exe.



3 Select **View License Agreement** to read the information and select **Accept** to proceed.



4 Click **Install Software**. The Installation Method screen appears.

 **Note** In Windows XP, click **Install Software** to start the Installation wizard. Click **Next** to display the Installation Method screen.

5 Select Express Mode or Custom Mode as the installation method.

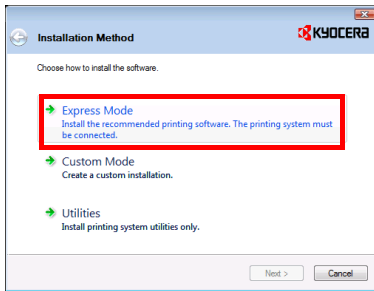
- Express Mode: If the printer is connected via USB or a network and is turned on, the installer detects the printer. Select Express Mode to perform a standard installation.

- Custom Mode: This option allows you to select items to be installed as required and to specify the port.

Proceed the section below according to the installation method.

## Express Mode

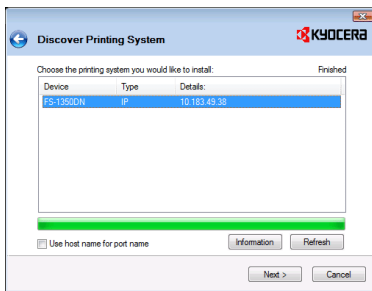
When selecting **Express Mode**, printer driver and fonts are installed. After installing with this mode, the other utilities can be added using **Custom Mode**.



- 1 On the Installation Method screen, click **Express Mode**. The installer searches the connected printers on Discover Printing System screen. If no printer is discovered, ensure the printer is plugged in and connected to the computer's USB or Network port, then check **Refresh** to search printers again.



**Note** If Found New Hardware window appears, click **Cancel**.



- 2 Select the printer you want to install, and click **Next**.

- 3 Confirm the settings and click **Install**. Printer driver installation starts.



**Note** During any point in the installation process, if the Windows Security warning dialog box appears, click **Install this driver software anyway**.

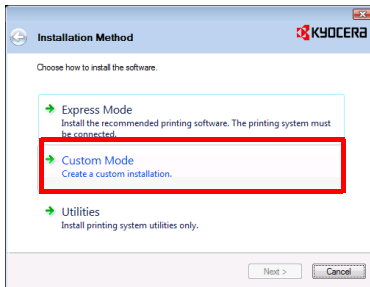
If the Hardware Installation screen appears in Windows XP, click **Continue Anyway**.

- 4 Installation Completed screen appears. Click **Finish** to return to the main menu.

## Custom Mode

When selecting **Custom Mode**, printer port and utilities are changed as necessary.

- 1 On Installation Method screen, click **Custom Mode**.



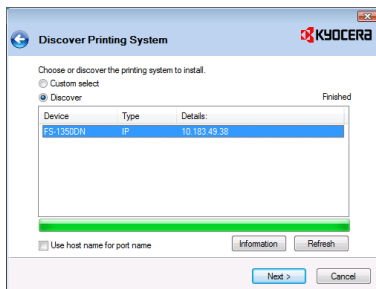
- 2 On Driver tab and Utility tab of the Custom Installation screen, select the printer driver and utilities you want to install, and click **Next**.



- 3 Select the printer you want to install, and click **Next**.



**Note** When you want to add or edit the port connected to the printer, select the printer and **Custom Select**, then click **Next**. Add Standard TCP/IP Printer Port Wizard appears. Follow the steps in the wizard to add or edit the port.



- 4 Confirm the settings and click **Install**. Printer driver installation starts.



**Note** During any point in the installation process, if the Windows Security warning dialog box appears, click **Install this driver software anyway**.

If the Hardware Installation screen appears in Windows XP, click **Continue Anyway**.

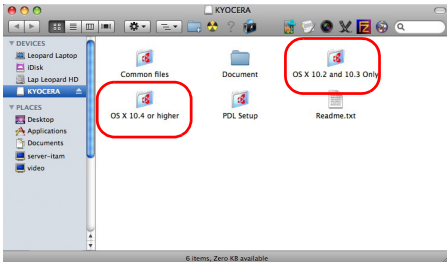
- 5 Installation Completed screen appears. Click **Finish** to return to the main menu.

---

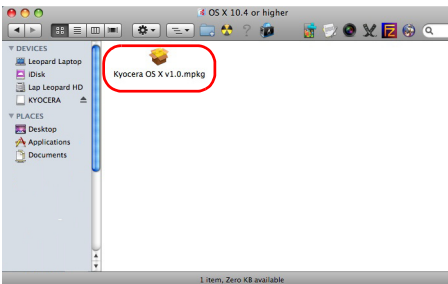
## Installing the Printer Driver on Mac OS

This section explains how to install the printer driver in Mac OS.

- 1 Turn on the printer and the Macintosh.
- 2 Insert the included CD-ROM (**Product Library**) into the CD-ROM drive.
- 3 Double-click the CD-ROM icon.
- 4 Double-click either **OS X 10.2 and 10.3 Only** or **OS X 10.4 or higher** depending on your Mac OS version.



- 5 Double-click **Kyocera OS X x.x.**



- 6 The printer driver installation program starts up.



- 7 Choose **Select Destination, Installation Type** and then install the printer driver as directed by the instructions in the installation software.

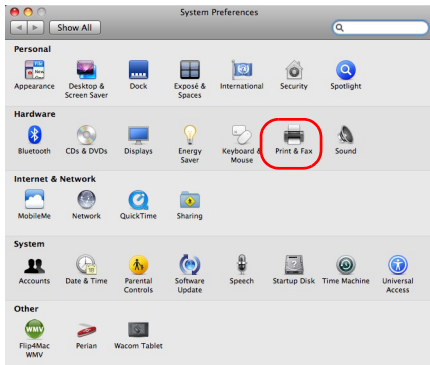


**Note** In addition to **Easy Install**, the **Installation Type** options include **Custom Install**, which allows you to specify the components to be installed.

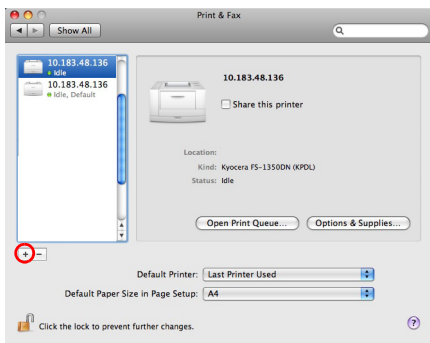
**IMPORTANT** In the Authenticate screen, enter the name and password used to log in to the operating system.

This completes the printer driver installation. Next, specify the print settings.

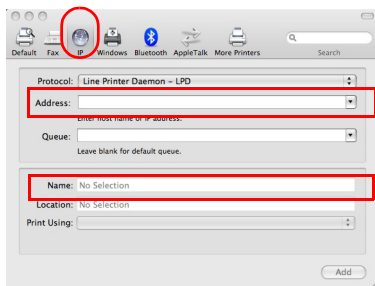
If an IP or AppleTalk connection is used, the settings below are required. If a USB connection is used, the printer is automatically recognized and connected.



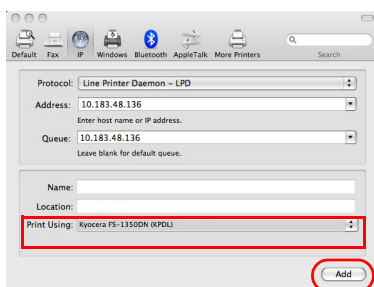
8 Open **System Preferences** and click **Print & Fax**.



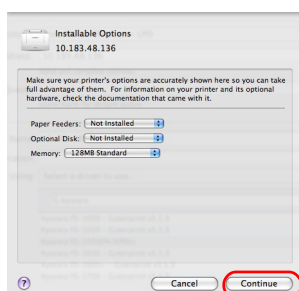
9 Click the plus symbol (+) to add the installed printer driver.



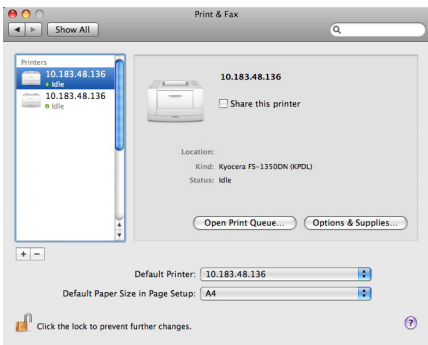
10 Click the IP icon for an IP connection or the AppleTalk icon for an AppleTalk connection and then enter the IP address and printer name.



11 Select the installed printer driver and click **Add**.



12 Select the options available for the printer and click **Continue**.



13 The selected printer is added. This completes the printer setup procedure.

---

## Printing

This section explains the printing procedure from an application software. You can specify the printing settings from each tab on KX Driver. KX Driver is stored in the CD-ROM (Product Library). For more information, refer to the *KX Driver User Guide* in the CD-ROM.

### About KX Driver

KX Driver consists of the following tabs.

#### Basic

Use this tab to select the page size and orientation. The paper source and duplex printing are also selected.

#### Layout

Use to create multiple pages on a single sheet of paper. Also contains the scaling option.

#### Imaging

Select this tab to change the print quality, and the font or graphic settings.

#### Publishing

Use to add covers or page inserts to your output. You can also produce a set of transparencies with a blank or printed sheet interleaved using Transparency Interleaving.

#### Advanced

Use to set up and add watermarks to your output. This tab incorporates the PRESCRIBE commands into the output using the Prologue/Epilogue feature.

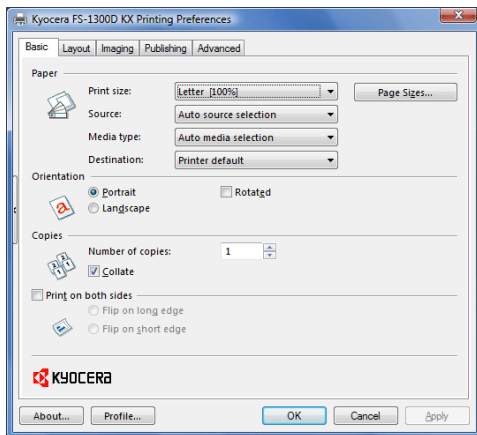
## Printing from Application Software

The steps required to print a document created with an application are explained below. You can select the printing paper size.



**Note** You can also select the various settings by clicking **Properties** to open the Properties dialog box.

- 1 Load the paper required into the paper cassette.
- 2 From the application **File** menu, select **Print**. The Print dialog box appears.
- 3 Click the drop-down list of printer names. All the installed printers are listed. Click the name of the printer.
- 4 Use Number of copies to enter the number of copies required. Up to 999 copies can be printed. For Microsoft Word, we recommend that you click **Options and specify Use printer settings** for the Default tray.
- 5 To start printing, click **OK**.





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## Status Monitor

The *Status Monitor* monitors the printer status and provides an ongoing reporting function. It also allows you to specify and modify settings for printers not included in the KX Driver.

The *Status Monitor* is installed automatically during KX Driver installation.

## Accessing the Status Monitor

Use either of the methods listed below to launch the Status Monitor.

- **Launch when printing starts:**  
When you specify a printer and start a print job, one Status Monitor is launched for each printer name. If Status Monitor startup is requested from multiple printers, Status Monitors are launched for each printer that issues the request.
- **Launch from the KX Driver properties:**  
Right-click the Version Info button in the KX Driver Properties dialog box. Then click **Status Monitor** in the Version Info dialog box to launch the Status Monitor.

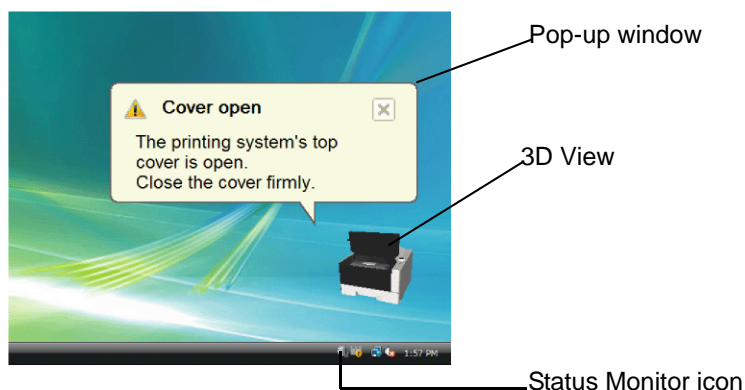
## Exiting the Status Monitor

Use either of the methods listed below to exit the Status Monitor.

- **Exit manually:**  
Right-click the Status Monitor icon in the taskbar and select **Exit** in the menu to exit the Status Monitor.
- **Exit automatically:**  
The Status Monitor automatically shuts down after 5 minutes if it is not being used.

## Screen Overview

The screen overview of the Status Monitor is as follows.



### Pop-up window

If an information notification event occurs, a pop-up window appears. This window only appears when the 3D View is open on the desktop.

### 3D View

This shows the status of the monitored printer as a 3D image. You can choose whether to show or hide the 3D view from the menu displayed when you right-click the Status Monitor icon.

---

If an information notification event occurs, the 3D view and an alert sound are used to notify you. For information on the sound notification settings, refer to *Status Monitor Settings* on page 4-22.

### **Status Monitor icon**

The Status Monitor icon is displayed in the taskbar notification area when the Status Monitor is running. When you position the cursor over the icon, the printer name appears.

---

## Status Monitor Settings

The Status Monitor has two tabs to configure its settings. Use the **Preference** option to set up the Status Monitor.

### Sound Notification Tab

The Event Notification tab contains the following items.

**IMPORTANT** To confirm the settings on Sound Notification tab, the computer requires the sound capabilities such as sound card and speaker.

#### Enable Event Notification

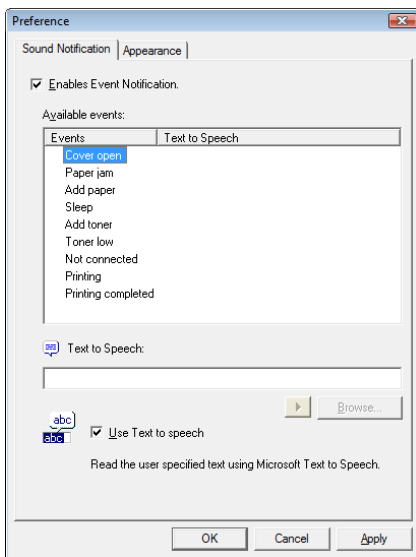
Select to enable or disable monitoring the events in Available events.

#### Sound file

A sound file can be selected if you require an audible notification. Click **Browse** to search for the sound file.

#### Use Text to speech

Select this check box to enter text you would like to hear played for events. Although a sound file is unnecessary, this function is applicable for Windows XP and Windows Vista.



To use this function, follow these steps.

- 1 Select **Enable Event Notification**.
- 2 Select an event or sound file to use with the text to speech function in *Available events*.
- 3 Click Browse to notify the event by sound file.



**Note** The available file format is WAV.

Select **Use Text to speech** to speech the text entered in *Text to speech* box when an event occurred.

- 4 Click **Play** to confirm the sound or text is played correctly.

---

## Appearance Tab

The Appearance tab is contains the following items.

### Enlarge window

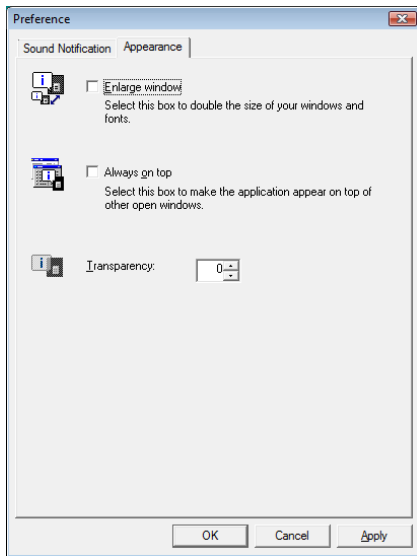
Doubles the size of the Status Monitor window.

### Always on top

Positions the Status Monitor in front of other active windows.

### Transparency

Displays the Status Monitor as a transparent window.



---

## Uninstalling Software (Windows PC)

The software can be uninstalled (removed) using the CD-ROM (Product Library) supplied with the printer.

**IMPORTANT** On Macintosh computers, because the printer settings are specified using a PPD (PostScript Printer Description) file, the software cannot be uninstalled using the CD-ROM (Product Library).

- 1 Exit all active software applications.
- 2 Insert the enclosed CD-ROM (Product Library) into the CD-ROM drive.
- 3 Following the procedure used to install the printer driver, click **Remove Software**. The Kyocera Uninstaller wizard appears.
- 4 Select the software package to remove.
- 5 Click Uninstall.



**Note** In Windows Vista, Remove Driver and Package screen appears. Select **Remove driver and driver package**, and click **OK**.

The uninstaller starts.

- 6 When Uninstall complete screen appears, click **Next**.
- 7 Select whether you restart your computer or not, click **Finish**.

# 5 Maintenance

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This chapter explains how to replace the toner container and clean the printer.

<b>General Information</b>	<b>5-2</b>
<b>Toner Container Replacement</b>	<b>5-2</b>
<b>Cleaning the Printer</b>	<b>5-6</b>
<b>Prolonged Non-Use and Moving of the Printer</b>	<b>5-9</b>

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## General Information

This chapter describes basic maintenance tasks you can perform for the printer. You can replace the toner container according to the printer's display.

Also, the internal parts need periodic cleaning.



**Note** Information Collection on Memory Chips - The memory chip attached to the toner container is designed to improve convenience for the end user; to support the recycling operation of empty toner containers; and to gather information to support new product planning and development. The information gathered is anonymous - it cannot be associated to any specific individual and the data is intended to be used anonymously.

## Toner Container Replacement

The message identifies the toner status at two stages of toner usage.

- When the printer becomes low on toner, the message `Toner low` is displayed. Note the replacement is not always necessary at this stage.
- If you ignore the above status and continue printing, the message `Replace toner Clean printer` is displayed just before the toner is used up. The toner container must then be replaced immediately.

In either case, replace the toner container.

## Frequency of Toner Container Replacement

According to ISO/IEC 19798 and EcoPrint switched off the toner container can print 7,200 pages.

You can print a status page to check how much toner remains in the toner container. The Toner Gauge in the consumables status section on the status page shows a progress bar, which roughly represents how much toner is left in the toner container.

## Starter Toner Container

The toner container packed with the new printer is a starter toner container. The starter toner container lasts an average of 3,600 pages.

## Toner Kits

For best results, we recommend that you only use genuine Kyocera Parts and Supplies. Should any damage be caused by the application of a toner other than the original Kyocera Mita toner, then this damage is excluded from the guarantee.

A new toner kit contains the following items:

- Toner Container
- Plastic waste bag for old toner container
- Installation Guide



**Note** Do not remove the toner container from the carton until you are ready to install it in the printer.

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## Replacing the Toner Container

This section explains how to replace the toner container.



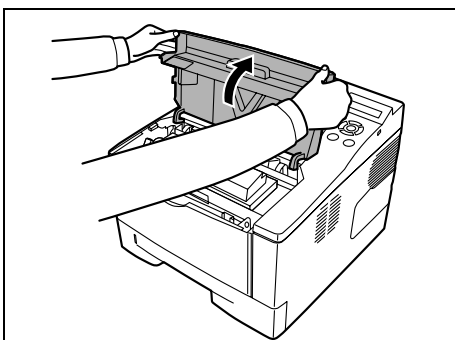
**CAUTION** Do not attempt to incinerate the Toner Container. Dangerous sparks may cause burns.

**IMPORTANT** During toner container replacement, temporarily move storage media and computer supplies (such as floppy disks) away from the toner container. This is to avoid damaging media by the magnetism of toner.

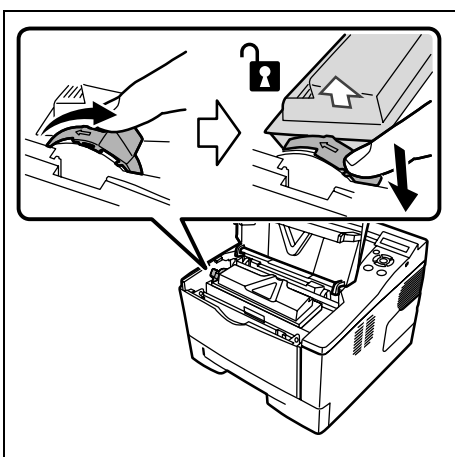
**IMPORTANT** Kyocera Mita Corporation is not liable against any damages or problems arising from the use of toner containers other than those designated as original Kyocera toner containers. For optimum performance, it is also recommended to use only the Kyocera toner containers which are specifically intended for use in your country or region. If the toner container for another destinations is installed, the printer will stop printing.



**Note** You do not have to turn printer power off before starting the replacement. Any data that may be processing in the printer will be deleted if you turn the printer power off.



- 1 Open the top cover.

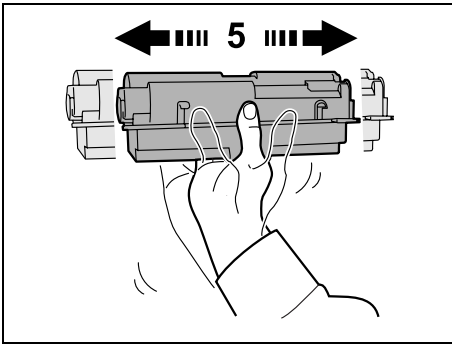


- 2 Turn the lock lever to the unlock position. Push the lock lever to the position marked by the arrow and pull out the toner container.

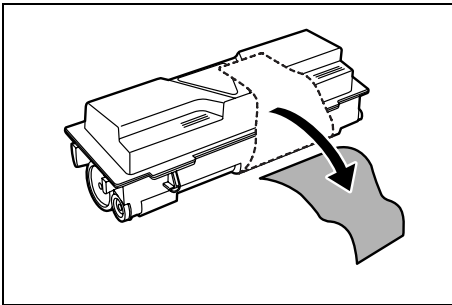


**Note** Put the old toner container in the plastic bag (supplied with the new toner kit) and discard it later according to the local code or regulations for waste disposal.

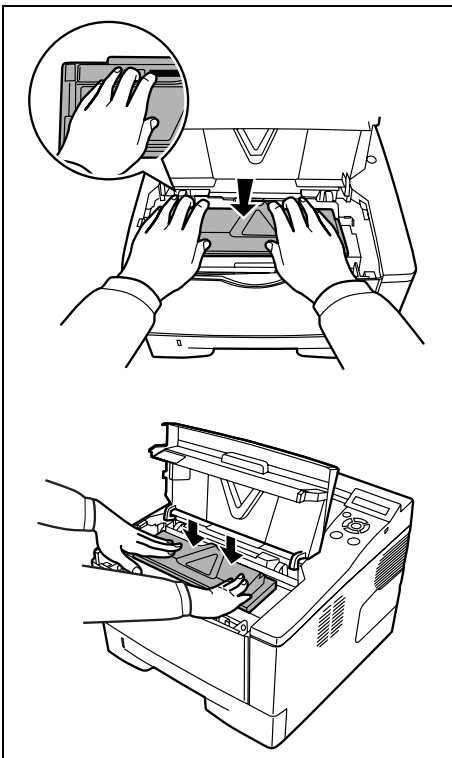




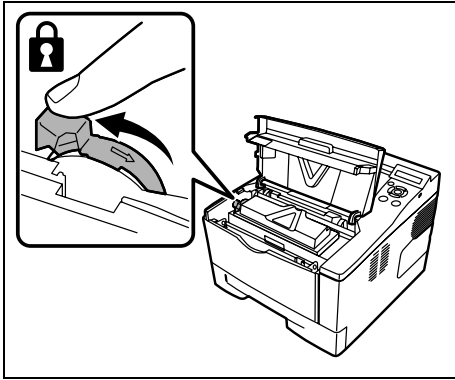
- 3 Take the new toner container out of the toner kit. Shake the new toner container at least 5 times as shown in the figure in order to distribute the toner evenly inside the container.



- 4 Remove the label from the toner container.



- 5 Install the new toner container in the printer. Push firmly on the top of the container at the positions marked PUSH, until you hear a click.

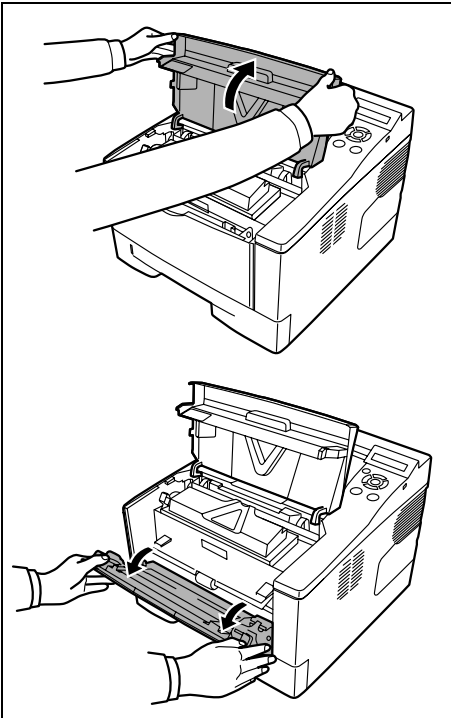


- 6 Turn the lock lever to the lock position.
- 7 Close the top cover.

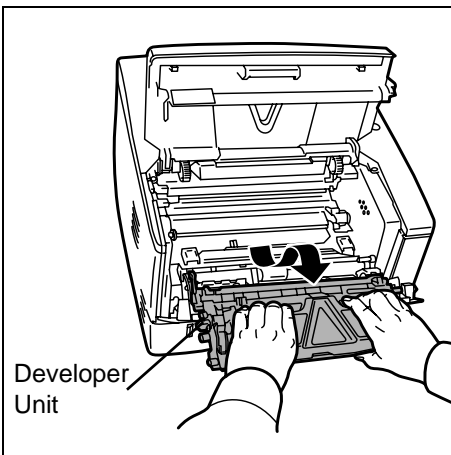
## Cleaning the Printer

To avoid print quality problems, the interior of the printer must be cleaned with every toner container replacement.

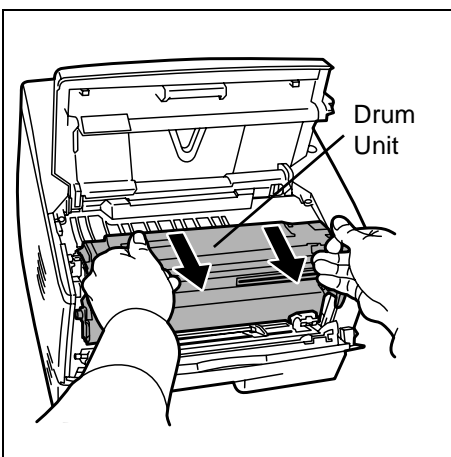
- 1 Open the top cover and front cover.



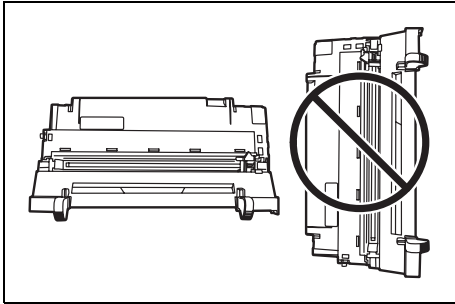
- 2 Lift the developer unit together with the toner container out of the printer.



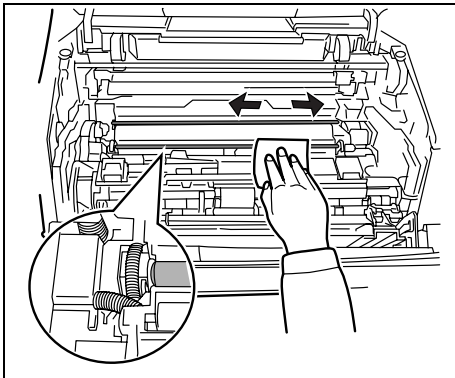
- 3 Remove the drum unit from the printer by holding the green levers with both hands.



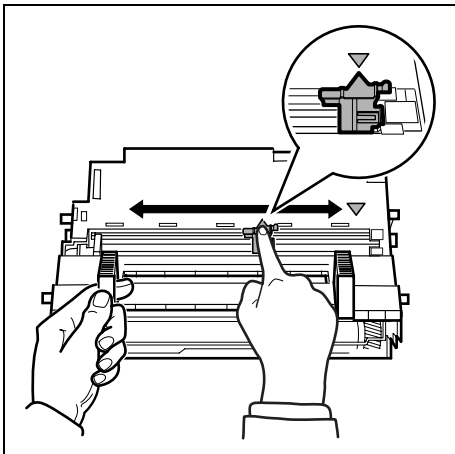
**Note** The drum unit is sensitive to light. Never expose the drum unit to light for more than five minutes.



- 4 Place the drum unit flat on a clean, level surface.  
**IMPORTANT** Do not place the drum unit on end.

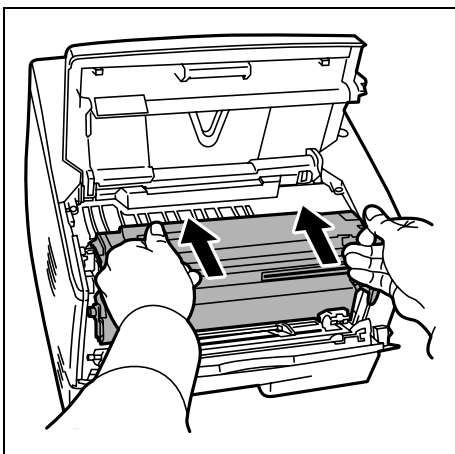


- 5 Use a clean, lint free cloth to clean dust and dirt away from the metal registration roller.  
**IMPORTANT** Take care not to touch the transfer roller (black) during cleaning.

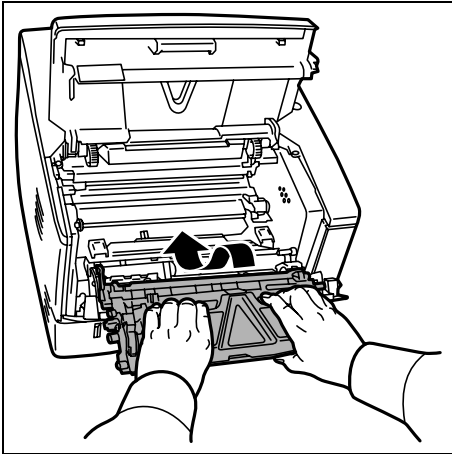


- 6 On the drum unit, slide the charger cleaner (green) back and forth 2 or 3 times to clean the charger wire, then return it to its original position (CLEANER HOME POSITION).  
**IMPORTANT** Remove the fixing tape on the charger cleaner in case of the first cleaning.

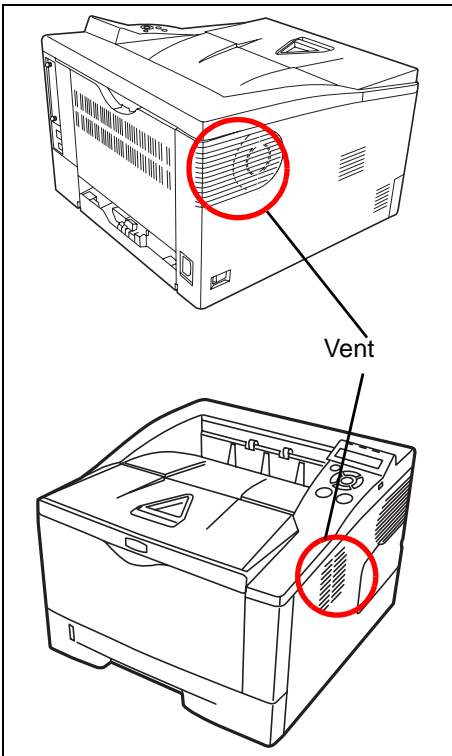
After cleaning, make sure you restore the charger cleaner to its home position.



- 7 When cleaning is complete, return the drum unit to the original position.



- 8 Return the developer unit to its position, aligning the guides at both ends with the slots in the printer. Then, close the front cover and top cover.



- 9 Use a lint free cloth to clean dust and dirt away from the vent on the left and the right side of the machine.

---

## Prolonged Non-Use and Moving of the Printer

### Prolonged Non-use

If you ever leave the printer unused for a long period of time, remove the power cord from the wall outlet.

We recommend you consult with your dealer about the additional actions you should take to avoid possible damage that may occur when the printer is used next time.

### Moving the Printer

When you move the printer:

- Move it gently.
- Keep it as level as possible to avoid spilling toner inside the printer.
- Be sure to consult a service representative before attempting long distance transportation of the printer.



**WARNING** If you ship the printer, remove and pack the developer unit and drum unit in a plastic bag and ship them separately from the printer.



# 6 Troubleshooting

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This chapter explains how to handle printer problems, understand error messages, and clear paper jams.

<b>General Guidelines</b>	<b>6-2</b>
<b>Print Quality Problems</b>	<b>6-3</b>
<b>Error Messages</b>	<b>6-5</b>
<b>Ready, Data, and Attention Indicators</b>	<b>6-9</b>
<b>Clearing Paper Jams</b>	<b>6-10</b>



## General Guidelines

The table below provides basic solutions for problems you may encounter with the printer. We suggest you consult this table to troubleshoot the problems before calling for service repairs.

Symptom	Check Items	Corrective Actions
Print quality is poor.	–	Refer to <i>Print Quality Problems</i> on page 6-3.
Text is missing on the Windows test page.	–	This is a problem specific to the Windows OS. It is not a printer problem. It does not affect print quality.
Paper is jammed.	–	Refer to <i>Clearing Paper Jams</i> on page 6-10.
Nothing lights on the operation panel even when power is turned on and the fan makes no noise.	Check the power cord is property plugged into power outlet.	Connect both ends of the power cord securely. Try replacing the power cord. Refer to <i>Installation Guide</i> for more information.
	Check the power switch is in the On (   ) position.	Refer to the <i>Installation Guide</i> for more information.
The printer prints a status page but data from the computer is not being printed.	Check program files and application software.	Try printing another file or using another print command. If the problem occurs with a specific file or application, check the printer settings for that application.
	Check the interface cable.	Connect both ends of the interface cable securely. Try replacing the printer cable. Refer to the <i>Installation Guide</i> for more information.
Vapor is emitted near the top tray.	Check if the temperature is low near the location of the printer, or if the paper that is being used has been exposed to humidity.	Depending on the operating environment of the printer and the condition of the paper, heat generated during printing can evaporate water moisture in the printed paper, emitting vapor from the printer. In this case, printing can be continued without any problem.  To correct this, increase the temperature in the room, and use paper that has been stored in a dry place.

## Tips

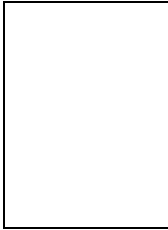

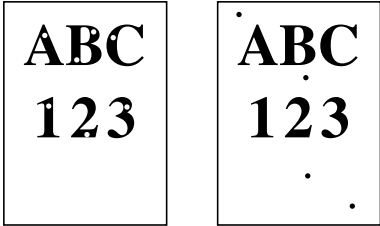
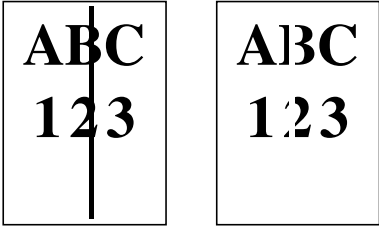
Printer problems may be solved easily by following the tips below. When you have encountered a problem that cannot be solved following the guidelines above, try the following:

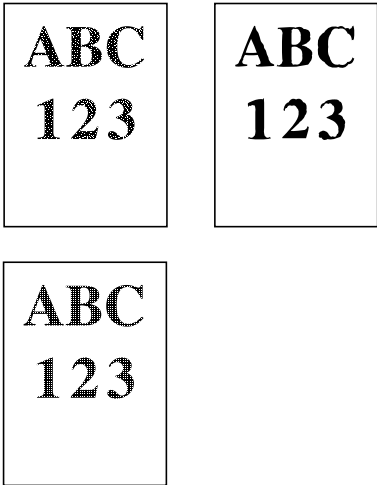
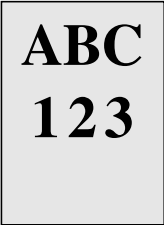
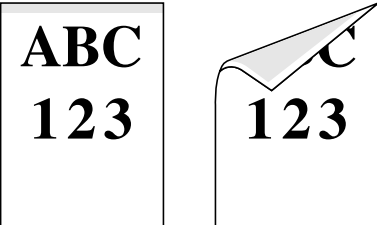
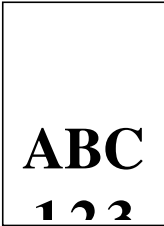
- Restart the computer you are using to send print jobs to the printer.
- Obtain and use the latest version of the printer driver. The latest versions of printer drivers and utilities are available at: <http://www.kyoceramita.com/download/>.
- Make sure that the procedures for printing are correctly followed in the application software. Consult the documentation supplied with the application software.

## Print Quality Problems

The tables and diagrams in the following sections define print quality problems and the corrective action you can conduct to solve the problems. Some solutions may require cleaning or replacing parts of the printer.

If the suggested corrective action will not solve the problem, call for service representative.

Printed Results	Corrective Action
<p><b>Completely blank printout</b></p> 	<p>Check the toner container. Open the front cover and check that the toner container is correctly installed in the printer. Refer to <i>Toner Container Replacement</i> on page 5-2.</p>
<p><b>Full single-color printout</b></p> 	<p>Contact your service representative.</p>
<p><b>Dropouts, stray dots</b></p> 	<p>Drum or developer unit may be damaged. If the problem is not solved even after printing several pages, call for service representative.</p>
<p><b>Vertical streaks</b></p> 	<p>Check the toner container and if necessary replace. Refer to <i>Toner Container Replacement</i> on page 5-2.</p> <p>Clean the charger wire. Refer to <i>Cleaning the Printer</i> on page 5-6.</p> <p>Check the charger cleaner of the drum unit is in its original position. Refer to <i>Cleaning the Printer</i> on page 5-6.</p>

Printed Results	Corrective Action
<p><b>Faint or blurred printing</b></p>  <p>The image shows three separate boxes, each containing the text 'ABC' on the top line and '123' on the bottom line. The text in all three boxes is significantly faded and blurry, illustrating the 'Faint or blurred printing' issue.</p>	<p>Check the toner container and if necessary replace. Refer to <i>Toner Container Replacement</i> on page 5-2.</p> <hr/> <p>Clean the charger wire. Refer to <i>Cleaning the Printer</i> on page 5-6.</p>
<p><b>Gray background</b></p>  <p>The image shows a single box containing the text 'ABC' on the top line and '123' on the bottom line. The entire background of the box is a uniform light gray color, illustrating the 'Gray background' issue.</p>	<p>Check the toner container and if necessary replace. Refer to <i>Toner Container Replacement</i> on page 5-2.</p> <hr/> <p>Check the developer unit and drum unit are installed correctly. Refer to <i>Cleaning the Printer</i> on page 5-6.</p>
<p><b>Dirt on the top edge or back of the paper</b></p>  <p>The image shows two boxes. The left box contains the text 'ABC' and '123' normally. The right box shows a sheet of paper with the text 'ABC' and '123' printed on it, but the top edge of the paper is curled up, and there is a dark smudge or dirt mark on the top edge of the paper, illustrating the 'Dirt on the top edge or back of the paper' issue.</p>	<p>If the problem is not solved even after printing several pages, clean the registration roller. Refer to <i>Cleaning the Printer</i> on page 5-6.</p> <p>If the problem is not solved after cleaning, call for service representative.</p>
<p><b>Printing incomplete or out of position</b></p>  <p>The image shows a single box containing the text 'ABC' on the top line and '1 2 2' on the bottom line. The final '3' in the sequence '123' is missing, illustrating the 'Printing incomplete or out of position' issue.</p>	<p>Check that the printing settings are correct in the application software and the printer driver.</p> <hr/> <p>Check whether the problem is being caused by a PRESCRIBE command error. If the problem occurs only with a specific file or program, the most likely cause is an error in a parameter to a command or command syntax.</p>

## Error Messages

The following table lists errors and maintenance messages that you can be dealt with by yourself.

If `Call service` or `Error.Power off.` is displayed, turn off the printer then turn it back on to see if the printer has recovered. If the printer has not recovered, turn off the printer, disconnect the power cord, and contact your service representative or authorized service center.

Some errors cause the alarm to sound. To stop the alarm, press **[Cancel]**.

Message	Corrective Action
Add paper MPTray	The paper has run out in the paper source displayed. Supply paper according to the paper source displayed (paper cassettes, MP tray, or optional paper feeders). This message is displayed alternately with messages indicating the printer status, such as, <code>Ready</code> , <code>Please wait</code> , and <code>Processing</code> .
Call service F###:	F### represents a controller error (#=0, 1, 2, ...). Call for service representative. The printer does not operate when this message is displayed.
Call service ####:0123456	#### represents a mechanical error (#=0, 1, 2, ...). Call for service representative. The printer does not operate when this message is displayed. The total number of pages printed is also indicated, e.g. 0123456.
Canceling data	Displayed when data is being canceled.
Cassette # not loaded	The corresponding paper cassette is not installed. Install the cassette. The cassette number can be 1 (topmost) to 4 (bottom).
Clean printer Press GO	Please clean the inside of the printer. Refer to <i>Cleaning the Printer</i> on page 5-6. This message will be displayed when replacing the toner container after the message <code>Replace toner Clean printer</code> is displayed. After cleaning the inside of the printer, press <b>[GO]</b> and the printer will be ready for printing.
Close top cover	The top cover of the printer is open. Close the printer top cover.
Device busy	This message is displayed when <code>Remove Device</code> was selected while a USB flash memory was being used. The previous screen is displayed again 1 or 2 seconds.
Duplex disabled Press GO	You attempted to print with a paper size and paper type that cannot be used for duplex printing. Press <b>[GO]</b> to print onto one-side of the paper only. You can select an alternative paper size and type by pressing the $\triangle$ or $\nabla$ . You can also press <b>[MENU]</b> and change the tray setting inside the menu, which will automatically cancel the error and output resumes. At the same time <b>[ATTENTION]</b> indicator will light up and <b>[READY]</b> indicator will start flashing.
Error.Power off. F###	Turn the power switch off and then back on again. If this message still remains, turn the power switch off, and contact your service representative or authorized service center.
Error.Power off. F000	The printer controller and operation panel cannot exchange data. Turn the printer off and unplug it from the mains power supply. Then contact your service representative or authorized service center. See the back page of this manual for the relevant phone numbers.

Message	Corrective Action
Format error Memory card	The CF card inserted in the printer is not formatted, and therefore cannot be read or written. To format a CF card, follow the procedure in <i>Memory Card (Using the memory card)</i> section in the <i>Advanced Operation Guide</i> .
KPDL error ## Press GO	Current print processing cannot continue because of occurrence of KPDL error which is categorized by ##. To print out an error report, display >>Error Report from the menu system, and select On. Press <b>[GO]</b> to resume printing. You can abandon printing by pressing <b>[Cancel]</b> . If Auto Error Clear is set to On, printing will be automatically resumed after a preset period of time.
Load Cassette # (A4) / (PLAIN)	The paper cassette matching the paper size and paper type of the print job is empty. Load paper into the paper cassette as displayed in place of #. Press <b>[GO]</b> to resume printing. If you want to print from a different paper source, press $\Delta$ or $\nabla$ to display Use alternative? and you can change the source for paper feeding. After selecting a paper source and pressing <b>[MENU]</b> , Paper Settings > appears. By pressing the $\Delta$ , the paper type settings menu appears. After setting the correct paper type, press <b>[OK]</b> and printing starts.
Load MP Tray (A4) / (PLAIN)	There is no paper cassette installed in the printer that matches the paper size and paper type of the print job. Set paper in the MP tray. Press <b>[GO]</b> to resume printing. (Note that feeding the paper having a paper size which does not match the current paper size from the MP tray can cause paper jam.) If you want to print from a different paper source, press $\Delta$ or $\nabla$ to display Use alternative? and you can change the source for paper feeding. After selecting a paper source and pressing <b>[MENU]</b> , Paper Settings > appears. By pressing the $\Delta$ , the paper type settings menu appears. After setting the correct paper type, press <b>[OK]</b> and printing starts.
Low security	This message is displayed when Low was selected in Security Level.
Memory overflow Press GO	The total amount of data received by the printer exceeds the printer's internal memory. Try adding more memory. Press <b>[GO]</b> to resume printing. You can abandon printing by pressing <b>[Cancel]</b> . If Auto Error Clear is set to On, printing will be automatically resumed after a preset period of time.
MemoryCard err## Press GO	A CompactFlash (CF) card error has occurred. Look at the error code given in place of ## and refer to <i>CompactFlash (CF) Card and USB Flash Memory Errors</i> on page 6-8. To ignore the CF card error, press <b>[GO]</b> .
MemoryCard err20	The CompactFlash (CF) card is accidentally inserted and removed from the printer's slot during the printer is on. Turn the power switch off and then back on again.
Missing developer unit	The developer unit is either not installed or incorrectly inserted. Insert the developer unit securely.
No multi copies Press GO	Multiple copies cannot be printed because the RAM disk is disabled or the hard disk is not installed. There is no available RAM disk or hard disk space. Delete unnecessary files. Press <b>[GO]</b> to print error report.
Original toner installed	Displayed when the installed toner is the original Kyocera product.
Paper jam #####	A paper jam has occurred. The location of the paper jam is indicated in place of the #'s. For details, refer to <i>Clearing Paper Jams</i> on page 6-10.

Message	Corrective Action
Paper path error	When one or more optional feeders are installed, this message will appear if any of the paper feeders or the printer cassette upper than the selected one is not properly closed.
Print overrun Press GO	The print job transferred to the printer was too complex to print on a page. Press <b>[GO]</b> to resume printing. (A page break may be automatically inserted in some places.) You can abandon printing by pressing <b>[Cancel]</b> . If <code>Auto Error Clear</code> is set to <code>On</code> , printing will be automatically resumed after a preset period of time.
RAM disk error## Press GO	A RAM disk error has occurred. Look at the error code given in place of ## and refer to <i>Storage Error Codes</i> on page 6-8. To ignore the RAM disk error, press <b>[GO]</b> .
Replace toner Clean printer	Toner has run out in the toner container. Replace the toner container using a new toner kit. The printer does not operate when this message is displayed.
Toner low	Replace the toner container using a new toner kit.
Unknown toner installed	Displayed when the installed toner is not the original Kyocera product. Install original Kyocera toner.
USB memory err## Press GO	An error has occurred in the USB flash memory. Look at the error code given in place of ## and refer to <i>CompactFlash (CF) Card and USB Flash Memory Errors</i> on page 6-8. To return the printer to the print-ready status, press <b>[GO]</b> .
Use alternative? Cassette 1	When the cassette does not contain any paper that matches the print data (paper size and type), this message allows you to specify an alternative cassette to use instead. A paper source number is only displayed when an optional paper feeder is installed. To print from a different paper source, refer to <i>Paper Feed Mode (Setting the paper feed source)</i> section in the <i>Advanced Operation Guide</i> .
Wrong ID	The ID or Password entered for the Security or Administrator function is not correct. Check the ID or Password. For more information, refer to <i>Security</i> section and <i>Admin (Administrator settings)</i> section in the <i>Advanced Operation Guide</i> .
Wrong Password	The password does not match the password set. Enter the correct password. For more information, refer to <i>Security</i> section and <i>Admin (Administrator settings)</i> section in the <i>Advanced Operation Guide</i> .

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## Storage Error Codes

### CompactFlash (CF) Card and USB Flash Memory Errors

Code	Meaning
01	The printer does not support the CF card inserted, or the CF card is broken. Insert the correct CF card. For more information, refer to <i>Memory Card (Using the memory card)</i> section in the <i>Advanced Operation Guide</i> .
02	The CF card is not installed. Recheck the requirements for using the system and the CF card.
03	The CF card is write protected. Check the CF card's status.
04	There is not enough space in the CF card. Delete unnecessary files or use a new CF card.
05	The specified file is not on the CF card or the USB flash memory.
06	There is not enough printer memory to support the CF card system. Increase printer memory.
50	The USB flash memory is write protected, or invalid. Check the USB flash memory's status.




### RAM Disk Errors

Code	Meaning
01	Format error. Try turning the power off and on again.
02	RAM disk mode is <code>Off</code> . Turn RAM disk mode <code>On</code> from the operation panel.
04	No disk space. Purge unnecessary files.
05	Specified file is not on disk.
06	Insufficient printer memory to support the RAM disk system. Expand printer memory.

---

## Ready, Data, and Attention Indicators

The following indicators light during normal operation and whenever the printer needs attention. Depending on the status of lighting, each indicator has the following meaning:

Indicator	Description
 Ready	<p><b>Flashing.</b> Indicates an error that you can resolve. For details, refer to the <i>Troubleshooting</i> section in the <i>Operation Guide</i>.</p> <p><b>On.</b> Indicates that the printer is ready. The printer prints the data it receives.</p> <p><b>Off. [Cancel]</b> was pressed during Ready is displayed. Data can be received but will not be printed. To resume printing, press <b>[Cancel]</b> again.</p> <p>Printing is canceling.</p> <p>Also, indicates when paper jam occurred, toner has run out, cover is open, and so on. For details, refer to the <i>Troubleshooting</i> section in the <i>Operation Guide</i>.</p>
 Data	<p><b>Flashing.</b> Indicates that a data is being received.</p> <p><b>On.</b> Indicates either that data received is being processed before printing starts, or that data received is being written to or read from a CompactFlash (CF) card, RAM disk, or USB flash memory.</p>
 Attention	<p><b>Flashing.</b> Indicates that the printer is ready to print when <i>Please wait</i> is displayed. Also indicates that the corresponding paper cassette is not installed.</p> <p>Indicates that the printer requires maintenance such as adding paper, cleaning the printer, preparing the toner container, formatting of hard disk and CF card.</p> <p><b>On.</b> Indicates when paper jam occurred, toner has run out, cover is open, and so on. If the message includes <i>Press GO</i>, press <b>[GO]</b> to resume printing. For details, refer to the <i>Troubleshooting</i> section in the <i>Operation Guide</i>.</p> <p>The ID or Password entered for the Security, Administrator, or Job Accounting function is not correct. Check the ID or Password, and enter the correct ID or password.</p>

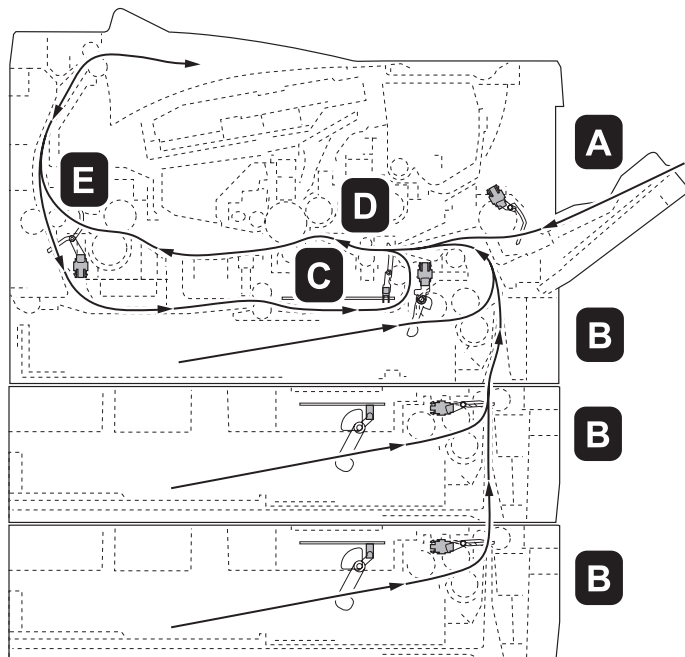


## Clearing Paper Jams

If paper jams in the paper transport system, or no paper sheets are fed at all, the `Paper jam` message appears and the location of the paper jam (the component where the paper jam has occurred) is also indicated. Status Monitor or COMMAND CENTER can indicate the location of the paper jam (the component where the paper jam has occurred). Remove the paper jam. After removing the paper jam, the printer will resume printing.

### Possible Paper Jam Locations

The figure below shows the printer's paper paths including the optional paper feeder. The locations where paper jams might occur are also shown here, with each location explained in the table below. Paper jams can occur in more than one component on the paper paths.



Paper jam message	Paper jam location	Description	Reference page
Paper jam MP Tray	A	Paper jam at the MP tray.	page 6-12
Paper jam Cassette 1	B	Paper jam at the paper cassettes. The cassette number can be 1.	page 6-13
Paper jam Duplexer	C	Paper jam inside the duplexer.	page 6-14

Paper jam message	Paper jam location	Description	Reference page
Paper jam Printer	D	Paper jam inside the printer.	<i>page 6-15</i>
Paper jam Rear Cover	E	Paper jam at the rear cover.	<i>page 6-17</i>

### General Considerations for Clearing Jams

Bear in mind the following considerations when attempting paper jam removal:

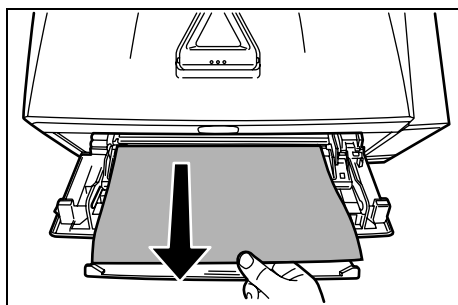


**CAUTION** When pulling the paper, pull it gently so as not to tear it. Torn pieces of paper are difficult to remove and may be easily overlooked, deterring the paper jam recovery.

- If paper jams occur frequently, try using a different type of paper, replace the paper with paper from another ream, or flip the paper stack over. The printer may have problems if paper jams recur after the paper is replaced.
- Whether or not the jammed pages are reproduced normally after printing is resumed, depends on the location of the paper jam.

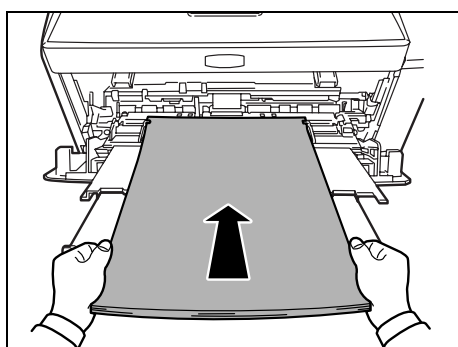
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## MP Tray



- 1 Remove the paper jammed at the MP tray.

**IMPORTANT** Do not try to remove paper that has already been partially fed. Proceed to *Inside the Printer* on page 6-15.



- 2 Reload the MP tray. Open and close the top cover to clear the error and the printer warms up and resumes printing.

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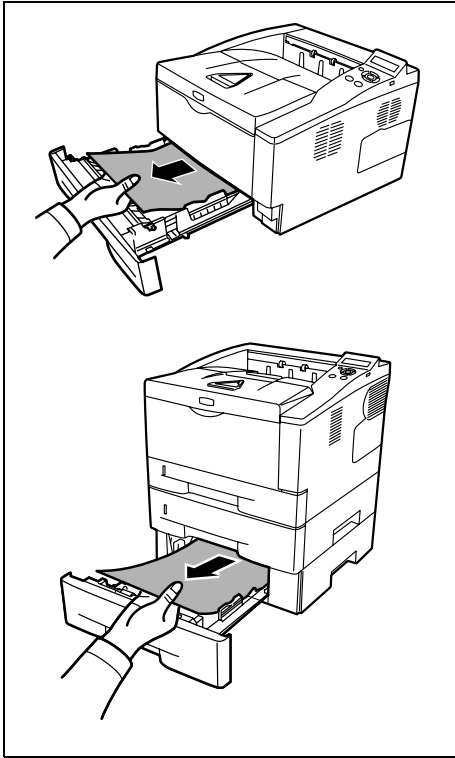
## Paper Cassette/Paper Feeder

- 1 Pull out the cassette or optional paper feeder.
- 2 Remove any partially fed paper.

**IMPORTANT** Do not try to remove paper that has already been partially fed. Proceed to *Inside the Printer* on page 6-15.



**Note** Check to see if paper is loaded correctly. If not, reload the paper.



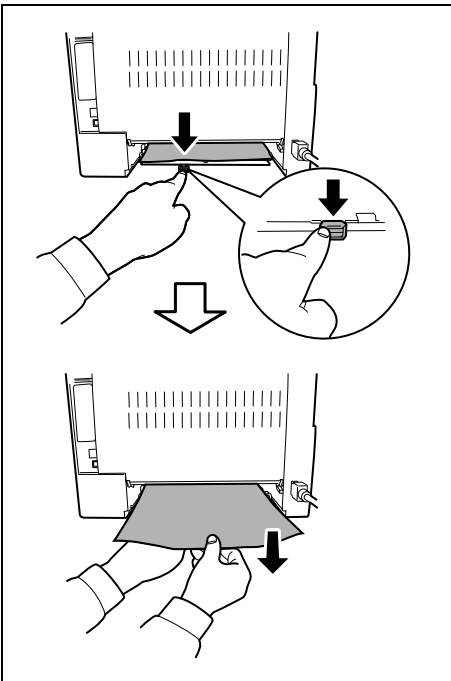
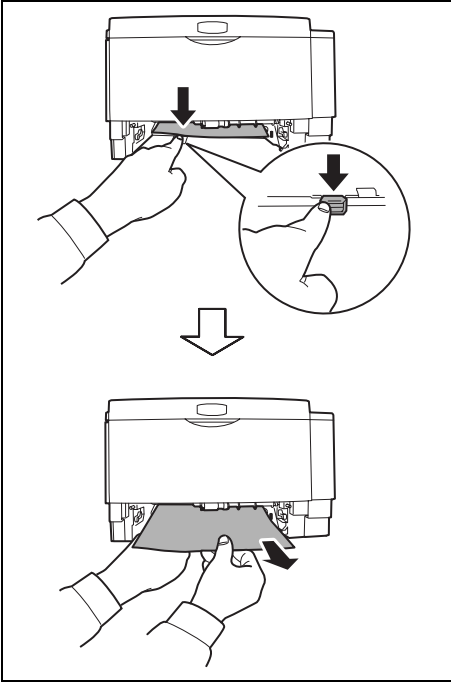
- 3 Push the cassette back in securely. The printer warms up and resumes printing.

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## Duplexer

Paper is jammed in the duplexer. Remove the jammed paper using the procedure given below.

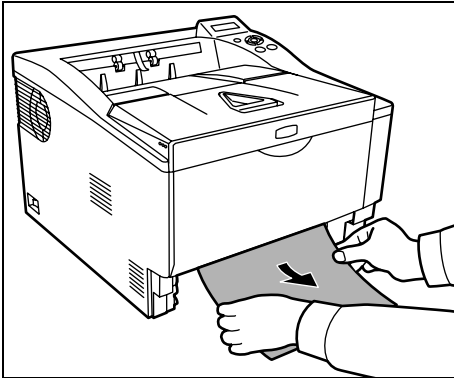
- 1 Pull the paper cassette all the way out of the printer.
- 2 Open the duplexer's cover in front of the printer and remove any jammed paper.



Open the duplexer's cover at the rear of the printer and remove any jammed paper.

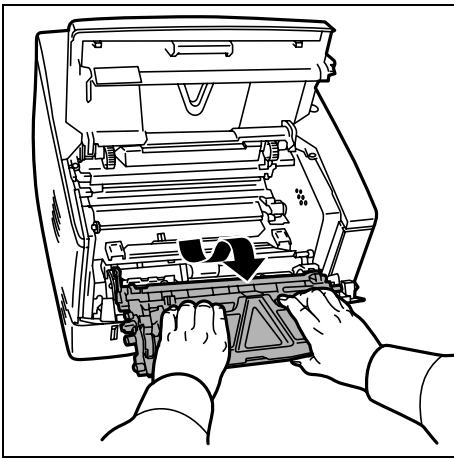
- 3 Push the cassette back in securely, and open and close the top cover to clear the error. The printer warms up and resumes printing.

## Inside the Printer

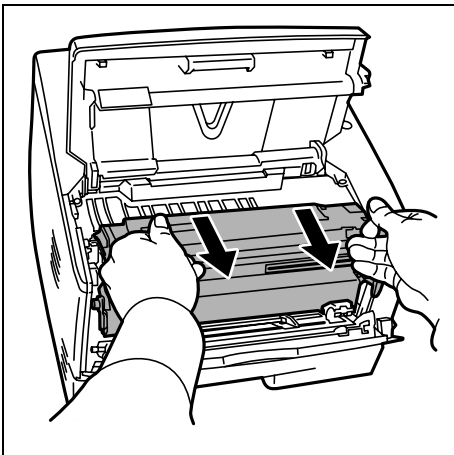


- 1 Pull the paper cassette all the way out of the printer. Remove any partially fed paper.

**IMPORTANT** Do not try to remove paper that has already been partially fed. Proceed to step 2.



- 2 Open the top cover and front cover, and lift the developer unit together with the toner container out of the printer.



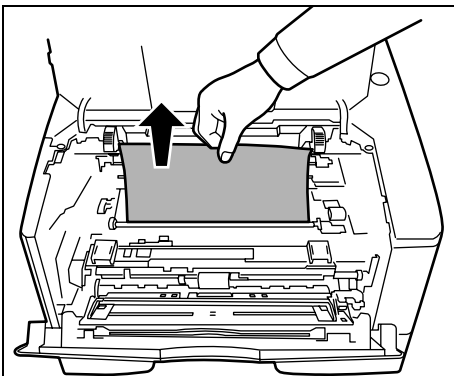
- 3 Remove the drum unit from the printer by holding the green levers with both hands.



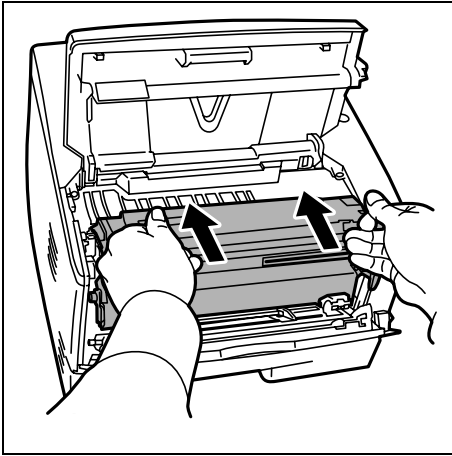
**CAUTION** The fuser unit inside the printer is hot. Do not touch it, as it may result in burn injury.



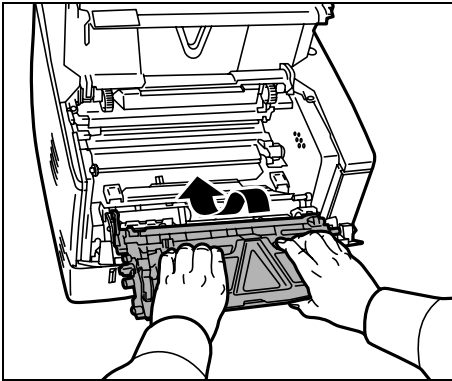
**Note** The drum is sensitive to light. Never expose the drum unit to light for more than five minutes.



- 4 If the jammed paper appears to be pinched by rollers, pull it along the normal running direction of the paper.



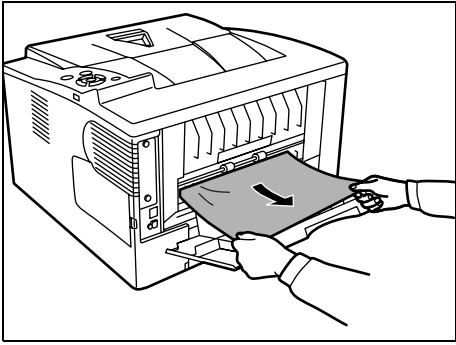
- 5 Return the drum unit to its position, aligning the guides at both ends with the slots in the printer.



- 6 Insert the developer unit together with the toner container, back into the machine. Close the top cover and the front cover. The printer warms up and resumes printing.

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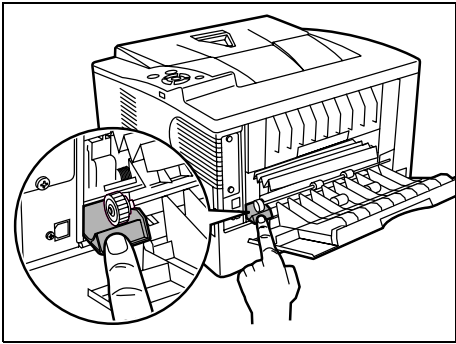
## Rear Cover



- 1 Open the rear cover and remove the jammed paper by pulling it out.



**CAUTION** The fuser unit inside the printer is hot. Do not touch it, as it may result in burn injury.



If the paper is jammed inside the fuser unit, open the fuser cover and remove the paper by pulling it out.

- 2 Close the rear cover, and open and close the top cover to clear the error. The printer warms up and resumes printing.





# 7 Using the Operation Panel

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This chapter contains explanations on the following topics:

<b>General Information</b>	<b>7-2</b>
<b>Understanding the Operation Panel</b>	<b>7-3</b>
<b>Using the Menu Selection System</b>	<b>7-8</b>
<b>Report Print</b>	<b>7-11</b>
<b>USB Memory (USB flash memory selection)</b>	<b>7-16</b>
<b>Counter (Viewing the counter value)</b>	<b>7-18</b>
<b>Paper Settings</b>	<b>7-19</b>
<b>Print Settings</b>	<b>7-27</b>
<b>Network (Network settings)</b>	<b>7-39</b>
<b>Device Common (Selecting/Setting the common device)</b>	<b>7-44</b>
<b>Security</b>	<b>7-55</b>
<b>Admin (Administrator settings)</b>	<b>7-63</b>
<b>Adjust/Maintenance (Adjust/Maintenance selection/setting)</b>	<b>7-65</b>

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## General Information

This chapter provides the information you need to configure the Ecosys printer. In general you need to use the operation panel only to make default settings. You can make most changes to the printer settings using the printer driver through the application software.



**Note** Changes to printer settings made using a software application override changes made using the operation panel.

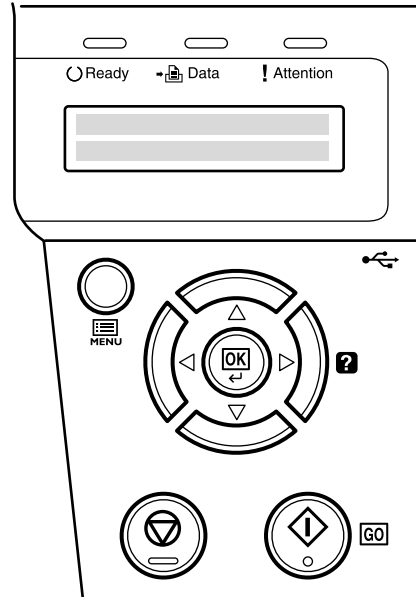
You can also access the printer's various settings from a remote location, by using the control panel, the printer driver or other utilities such as the Status Monitor Utility. Other printer utilities can be installed using the CD-ROM supplied with the printer.

The chapter describes the operation panel in detail, including its menus and the procedures for changing various printer settings.

---

## Understanding the Operation Panel

The operation panel on the top of the printer has a 2-line by 16-character liquid crystal display (LCD), eight keys, and three indicators (LED).



Messages that appear on the display and functions of indicators and keys are explained in this chapter.

---

## Message Display

The message display on the operation panel shows:

- Status information, the ten messages listed below which are displayed during normal operation.
- Error codes, when the printer requires the operator's attention; as explained in the *Operation Guide*.

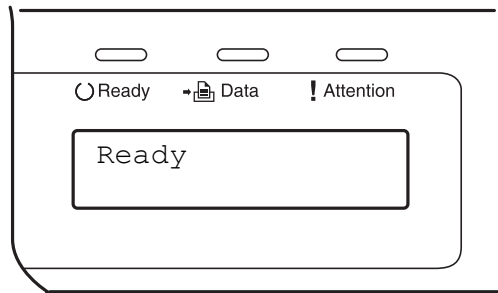
## Status Information

Message	Meaning
Self test	The printer is performing self-diagnostics after power-up.
Please wait	The printer is warming up and is not ready. When the printer is switched on for the first time, this message will take several minutes.
Please wait (Adding toner)	Toner is currently being replenished. This message may be displayed during continuous printing of a large volume of pages which require a large amount of toner such as with photographs, etc.
Ready	The printer is ready to print.
Processing	The printer is receiving data to print. This is also shown when the printer is reading a CF card, USB flash memory or RAM disk.
Sleeping	The printer is in Auto Sleep. The printer wakes from Auto Sleep whenever a print job is received. The printer then warms up and goes on-line. For details on Auto Sleep, refer to <i>Sleep Timer (Sleep timer timeout time)</i> on page 7-52.
Canceling data	Jobs inside the printer are being canceled. To cancel a job, refer to <i>Canceling a Printing Job</i> on page 7-6.

## Error Codes




Refer to the *Troubleshooting* section in the *Operation Guide*.

## Indicators in Message Display



### Ready, Data, and Attention Indicators

The following indicators light during normal operation and whenever the printer needs attention. Depending on the status of lighting, each indicator has the following meaning:

Indicator	Description
 Ready	<p><b>Flashing.</b> Indicates an error that you can resolve. For details, refer to the <i>Troubleshooting</i> section in the <i>Operation Guide</i>.</p> <p><b>On.</b> Indicates that the printer is ready. The printer prints the data it receives.</p> <p><b>Off. [Cancel]</b> was pressed during Ready is displayed. Data can be received but will not be printed. To resume printing, press <b>[Cancel]</b> again. Printing is canceling.</p> <p>Also, indicates when paper jam occurred, toner has run out, cover is open, and so on. For details, refer to the <i>Troubleshooting</i> section in the <i>Operation Guide</i>.</p>
 Data	<p><b>Flashing.</b> Indicates that a data is being received.</p> <p><b>On.</b> Indicates either that data received is being processed before printing starts, or that data received is being written to or read from a CompactFlash (CF) card, RAM disk, or USB flash memory.</p>
 Attention	<p><b>Flashing.</b> Indicates that the printer is ready to print when <i>Please wait</i> is displayed. Also indicates that the corresponding paper cassette is not installed. Indicates that the printer requires maintenance such as adding paper, cleaning the printer, preparing the toner container, formatting of hard disk and CF card.</p> <p><b>On.</b> Indicates when paper jam occurred, toner has run out, cover is open, and so on. If the message includes <i>Press GO</i>, press <b>[GO]</b> to resume printing. For details, refer to the <i>Troubleshooting</i> section in the <i>Operation Guide</i>. The ID or Password entered for the Security, Administrator, or Job Accounting function is not correct. Check the ID or Password, and enter the correct ID or password</p>

---

## Keys

The operation panel keys are used to configure the printer operation. Note that certain keys have a secondary function.

### GO Key



Use this key to:

- Recover from certain errors.
- Recover from Auto Sleep mode.

### Cancel Key



This key is used to:

- Cancel a printing job.
- Stop the alarm sound.
- Reset numeric values or cancel a setting procedure while using menu system.

### Canceling a Printing Job

- 1 While the printer displays *Processing*, press **[Cancel]**.

*Print Cancel?* appears on the message display followed by the job name currently in progress.

- 2 Press  $\triangle$  or  $\nabla$  to display the desired job and **[OK]**.

*Canceling data* appears on the message display and printing stops after the current page is printed.

### MENU Key

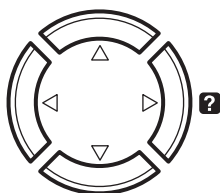


**[MENU]** lets you enter the menu system to change the setup and printing environment of the printer.

Pressing this key during a menu selection will terminate the selection and return the printer to the normal operation.

---

## Cursor Keys



The four cursor keys are used in the menu system to access an item or enter numeric values. Use  $\triangle$  and  $\nabla$  to change menus, and  $\triangleleft$  and  $\triangleright$  to move to the sub menu.

The cursor key with the question mark (**?**) may be pressed when the paper jam message has appeared on the message display. A help message will then appear to facilitate jam clearing in the location.

When `Use alternative?` is shown in the message display, use the  $\triangle$  and  $\nabla$  key to select the paper source.

## OK Key



This key is used to:

- Finalize settings of numeric values and other selections.
- Set the paper source when `Use alternative?` is shown in the message display.



---

## Using the Menu Selection System

### Menu Selection System

This section explains how to use the menu selection system. **[MENU]** on the operation panel allows you to use the menu to configure the printer settings to your specific needs. Settings can be made when *Ready*, *Please wait*, *Sleeping* or *Processing* is on the printer message display.

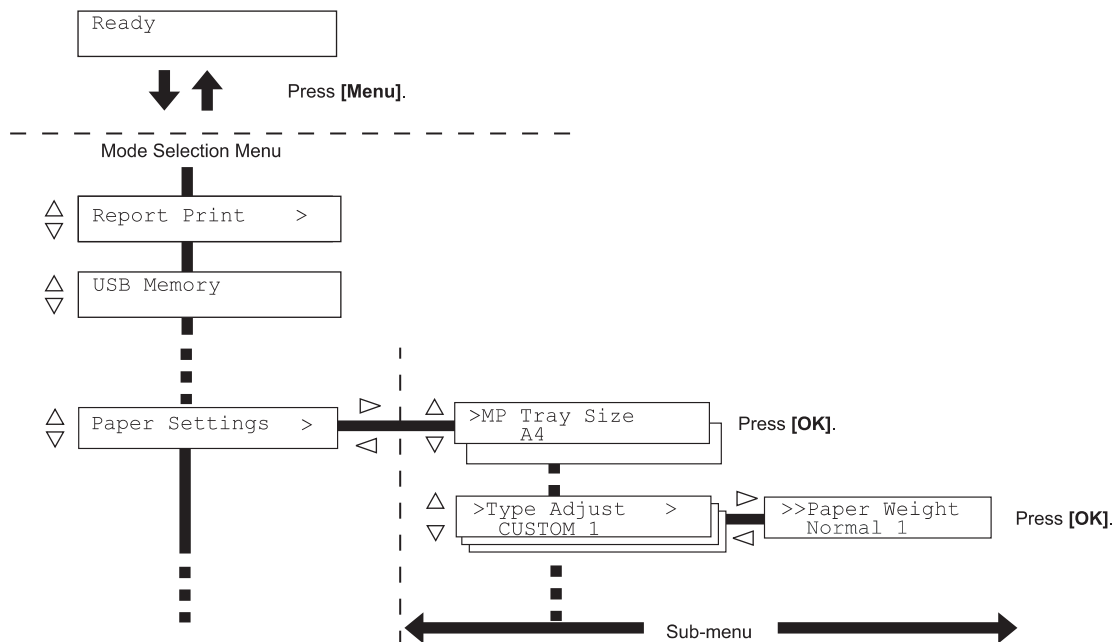


**Note** Settings that are received from application software and the printer driver will take priority over settings made in the operation panel.

### Entering the Mode Selection Menu

Press **[MENU]** when *Ready*, *Please wait*, *Sleeping* or *Processing* is indicated on the printer message display.

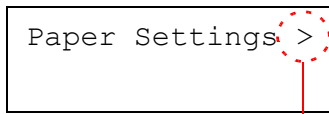
The mode selection menu is displayed.



---

## Selecting a Menu

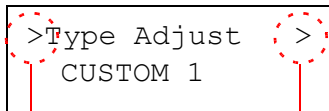
The mode selection menu is hierarchical. Press  $\triangle$  or  $\nabla$  to display the desired menu.



Indicates that there is a sub-menu

If the selected menu has a sub-menu, > is displayed after the menu.

Press  $\triangleright$  to move to the sub-menu or  $\triangleleft$  to go back.

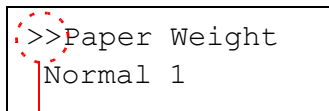


Indicates that this is the sub-menu

Indicates that there is another sub-menu

> is displayed before the sub-menu.

Press  $\triangleright$  to move to another sub-menu or  $\triangleleft$  to go back.



Indicates that this is the second sub-menu

>> is displayed before the second sub-menu.

## Setting a Menu

Select the desired menu and press **[OK]** to set or change the configuration.

Press  $\triangle$  or  $\nabla$  to display the desired item and **[OK]** to finalize the value or selections set.

## Cancelling Menu Selection

If you press **[MENU]** when a menu is selected, the message display returns to *Ready*.

---

## Setting a Mode Selection Menu

This section explains the setting procedures used for each menu item in the mode selection menu.

Report Print >

- 1 While the printer displays *Ready*, *Please wait*, *Sleeping* and *Processing*, press **[MENU]**. The mode selection menu is displayed. (For example: *Report Print*)
- 2 Each time you press  $\Delta$  or  $\nabla$ , the selection changes.
  - Report Print
  - USB Memory
  - Counter
  - Paper Settings
  - Print Settings
  - Network
  - Device Common
  - Security
  - Admin
  - Adjust/Maintenance



**Note** If you use the mode first selected when the printer is turned on, *Report Print* is displayed. For the second and subsequent times, the last menu option you selected the previous time is displayed.

---

## Report Print

The printer prints the report. Report Print includes the following items:

- Print Menu Map
- Print Status Page
- Print Fonts List
- Print RAM Disk File List
- Print Mem. Card File List

- 1 Press **[MENU]**.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `Report Print >` appears.

```
Report Print >
```

Note that menus shown in the list may vary depending on which optional units installed in the printer.

## Print Menu Map

The printer prints a full list of the menu selection system menu map.

- 1 Press  $\triangleright$  while `Report Print >` is displayed.
- 2 `>Print Menu Map` appears. In other displays, press  $\Delta$  or  $\nabla$  repeatedly until the map appears.
- 3 Press **[OK]**. A question mark (?) appears.
- 4 Press **[OK]**. The message `Processing` appears and the printer prints a Menu Map.

```
>Print  
Menu Map ?
```

## Menu Map Sample

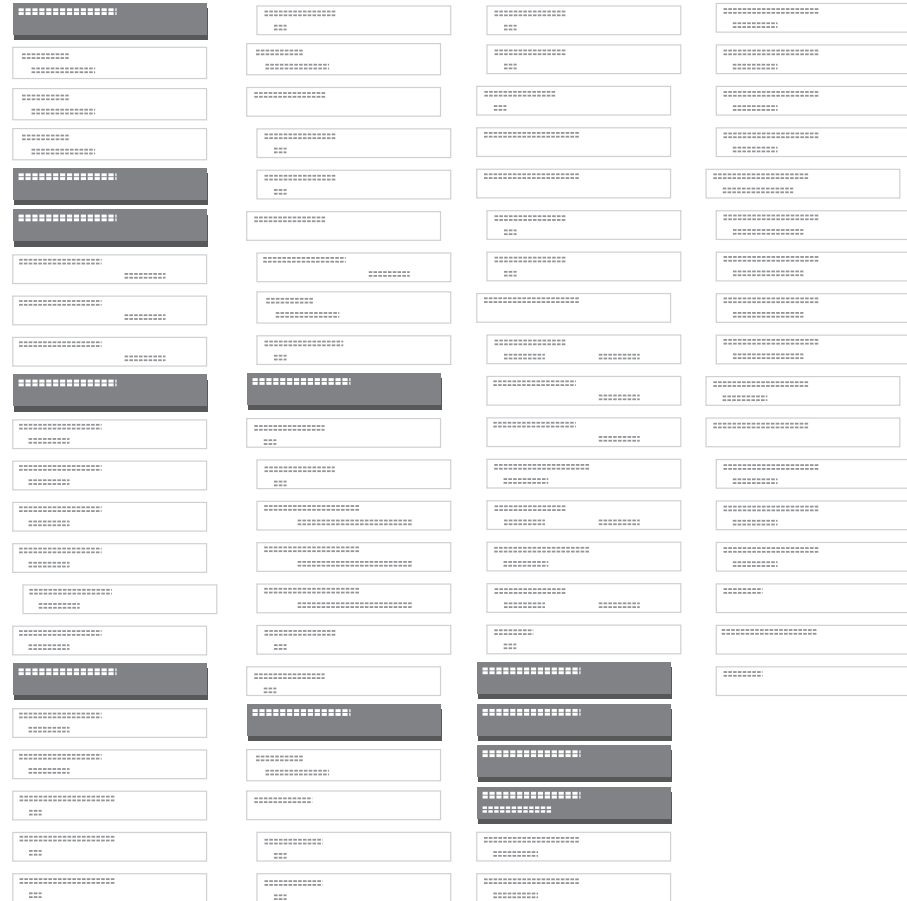
# Menu Map

## Printer

### FS-1350DN



Firmware version



## Print Status Page

You can check the printer's current status, including available memory space and option settings by printing a status page.

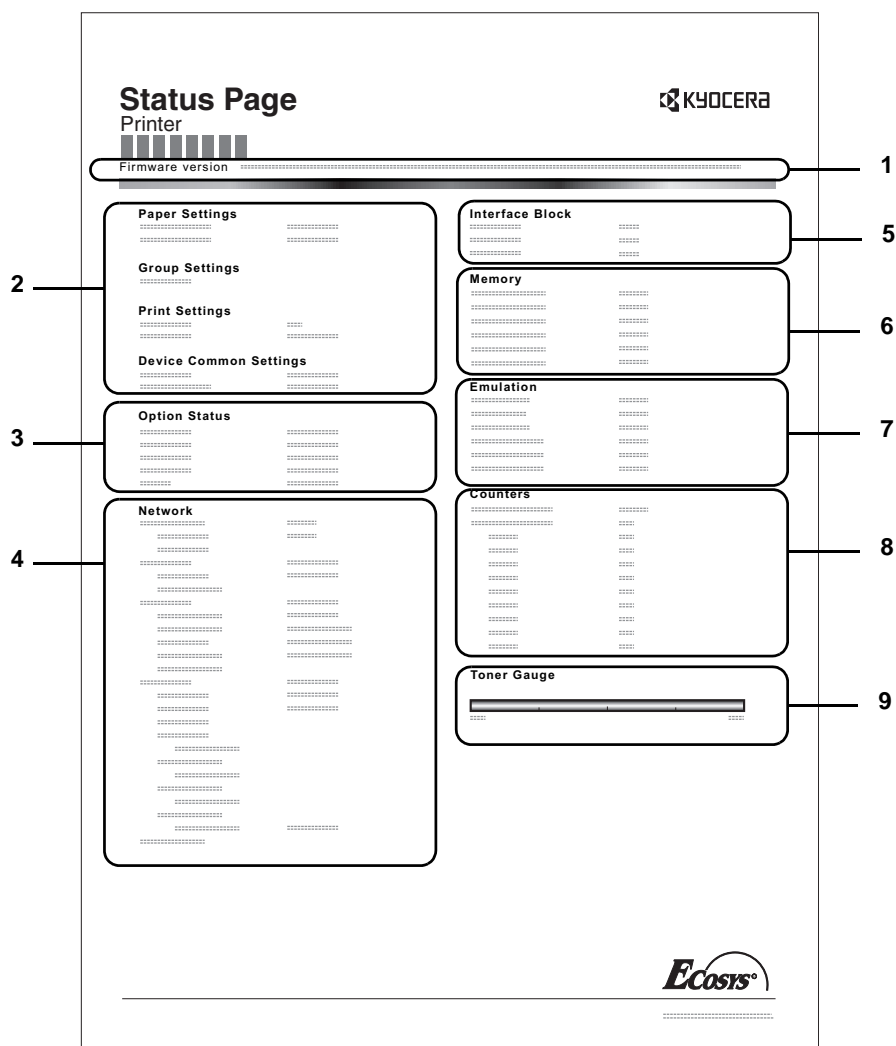
- 1 Press  $\triangleright$  while `Report Print >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>Print Status Page` appears.
- 3 Press **[OK]**. A question mark (?) appears.
- 4 Press **[OK]** again. The message `Processing` appears and the printer prints a status page.

```
>Print
  Status Page ?
```

For a sample status page and its full description, refer to the next section *Understanding the Status Page*.

## Understanding the Status Page

The numbers in the following diagram refer the items explained below the diagram. The items and values on the status page may vary depending on the printer's firmware version.



---

## 1 Firmware Version

This item shows the version and release date of the printer firmware.

## 2 Printer Settings Information

This item shows various printer settings for hardware-related items:

- MP tray paper size and type
- Paper cassette size and type
- Sleep time
- Formfeed timeout time

## 3 Installed Options

This item shows the option installed in the printer:

- Memory card (CompactFlash card)

## 4 Network Status

This item shows the IP address, subnet mask address, and default gateway address for the network interface card in the printer.

## 5 Interface Information

This information shows the settings for all interfaces installed in the printer.

## 6 Memory

This item shows:

- Standard memory in the printer
- Option memory slot status in kilobytes
- Total memory in the printer
- Current status of the RAM disk

## 7 Emulation

This item shows all available emulations of the printer. The PCL 6 emulation is set as default when the printer is shipped from the factory. The emulations are:

- PCL 6
- KPDL
- Line Printer
- IBM Proprinter
- DIABLO 630
- EPSON LQ-850

## 8 Page Information

This item shows the page related items:

- Total printed page count
- Total page count of each paper size

## 9 Consumable Status

This item shows the approximate level of remaining toner. When the value is 100, the toner container is full. The closer to 0, the smaller the amount of remaining toner.

---

## Print Fonts List

To help you decide in selecting a font, you can printout lists of the internal fonts or the optional fonts.

- 1 Press  $\triangleright$  while `Report Print >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>Print Fonts List ?` appears.
- 3 Press **[OK]**. A question mark (?) appears.
- 4 Press **[OK]** again. The message `Processing` appears and the printer prints a list of fonts with a sample and font ID (number) for each of them.

```
>Print
  Fonts List ?
```

## Print RAM Disk File List

This allows you to print a list of the files on the RAM disk.

**IMPORTANT** This is displayed when RAM disk mode is enabled.

- 1 Press  $\triangleright$  while `Report Print >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>Print RAM Disk File List` appears.
- 3 Press **[OK]**. A question mark (?) appears.
- 4 Press **[OK]** again. The message `Processing` appears and the printer prints a list of files stored in a RAM disk.

```
>Print RAM Disk
  File List ?
```

## Print Mem. Card File List

This allows you to print a list of the files on a CompactFlash (memory) card.

**IMPORTANT** This message will be displayed when the CompactFlash (CF) card installed in the printer.

- 1 Press  $\triangleright$  while `Report Print >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>Print Mem. Card File List` appears.
- 3 Press **[OK]**. A question mark (?) appears.
- 4 Press **[OK]** again. The message `Processing` appears and the printer prints a list of files stored in a CF card.

```
>Print Mem. Card
  File List ?
```



---

## USB Memory (USB flash memory selection)

This specifies the settings for removing the USB flash memory and printing USB flash memory content. The USB Memory menu automatically appears when you install the USB memory.

**IMPORTANT** This message is displayed only when the USB host block is set to `Unblock`. For more information, refer to *Interface Block (Interface (external device) block setting)* on page 7-57.

The options available in USB flash memory are as follows:

- Print File (Printing a file)
- Copies (Number of copies)
- Paper Source (Selecting the paper feed source)
- Remove Device (Removing the USB flash memory)
- Print File List (Printing a list of the files on a USB flash memory)

1 Press **[MENU]**.

2 Press  $\Delta$  or  $\nabla$  repeatedly until `USB Memory >` appears.

Note that menus shown in the list may vary depending on which optional units installed in the printer.

```
USB Memory >
```

### Print File (Printing a file)

You can use this to specify printing for files in the USB flash memory.

1 Press  $\triangleright$  while `USB Memory >` is displayed.

2 `>Print File` appears. In other displays, press  $\Delta$  or  $\nabla$  repeatedly until the map appears.

3 Press **[OK]**. A question mark (?) appears.

4 Press **[OK]** again. The folder or file appears.

(For example: `Folder 1`)

Each time you press  $\Delta$  or  $\nabla$ , the next folder or file appears in succession.

To view lower-level folders or files, press  $\triangleright$ .

(For example: `Folder 2`)

```
/
/00:Folder 1
```

```
/00:Folder 1
/01:Folder 2
```

```
/.../01:Folder 2
02:File 3
```

To view folders or files on still lower levels, press  $\triangleright$ .

(For example: `File 3`)

**IMPORTANT** The `Print File` menu option is only displayed when there is a PDF, TIFF or XPS file in the USB flash memory. Note also that up to 3 levels of folders or files are displayed. It might take some time before the folder or file name appears, depending on the size of the USB flash memory or the number of files.

You can move between the folder levels by pressing  $\Delta$  and  $\nabla$  or  $\triangleleft$  and  $\triangleright$ .

5 Press **[OK]**. A question mark (?) appears.

(For example: `File 3`)

```
/.../01:Folder 2
? 02:File 3
-----
Copies
001
```

6 Press **[OK]** again. `Copies` appears.

---

### Copies (Number of copies)

Sets the number of copies printed of the specified file in USB flash memory.

**IMPORTANT** To use this feature, the RAM disk must be set to On.

```
Copies
010
```

While `Copies` in step 5 above is displayed, press  $\Delta$  and  $\nabla$  or  $\triangleleft$  and  $\triangleright$  to display the number of copies. (E.g.: 10)

```
Paper Source
? Cassette 1
```

7 Press **[OK]**. `Paper Source` and a question mark (?) appears.

### Paper Source (Selecting the paper feed source)

Sets the paper used for printing the specified file in USB flash memory.

```
Paper Source
? Cassette 2
```

1 While `Paper Source` in step 2 above is displayed, press  $\Delta$  and  $\nabla$  or  $\triangleleft$  and  $\triangleright$  repeatedly until the paper source appears. (For example : `Cassette 2`)

Note that menus shown in the list may vary depending on which optional units installed in the printer.

2 Press **[OK]**. The message `Processing` appears and the printer prints a file stored in a USB flash memory.

### Remove Device (Removing the USB flash memory)

Specifies the setting for USB flash memory removal.

```
>Remove Device ?
```

1 Press  $\triangleright$  while `USB Memory >` is displayed.

2 Press  $\Delta$  or  $\nabla$  repeatedly until `>Remove Device` appears.

3 Press **[OK]**. A question mark (?) appears.

4 Press **[OK]** again. Menu display ends and the USB flash memory device can be removed.

### Print File List (Printing a list of the files on a USB flash memory)

This allows you to print a list of the files on a USB flash memory device.

```
>Print
File List ?
```

1 Press  $\triangleright$  while `USB Memory >` is displayed.

2 Press  $\Delta$  or  $\nabla$  repeatedly until `>Print File List` appears.

3 Press **[OK]**. A question mark (?) appears.

4 Press **[OK]** again. The message `Processing` appears and the printer prints a list of files stored in a USB flash memory.

---

## Counter (Viewing the counter value)

This only displays the total number of pages printed. You cannot change the displayed number.

A rectangular box representing a display screen. Inside, the word "Counter" is on the left and a right-pointing chevron "&gt;" is on the right.

- 1 Press **[MENU]**.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until Counter > appears.

A rectangular box representing a display screen. The top line shows "&gt;Printed Pages" and the bottom line shows the number "0002000".

- 3 Press  $\triangleright$ . >Printed Pages appears as the total number of pages printed. (E.g.: 2000)
- 4 Press **[MENU]**. The display returns to Ready.

---

## Paper Settings

This sets the paper size and type for the MP tray and cassettes from which paper is supplied.

The options available in Paper Settings are as follows:

- MP Tray Size (Setting MP tray paper size)
- MP Tray Type (Setting the MP tray paper type)
- Cassette (1 to 3) Size (Setting the cassette paper size)
- Cassette (1 to 3) Type (Setting the cassette paper type)
- Type Adjust (Creating custom paper type)
- Reset Type Adjust (Resetting the custom paper type)

1 Press **[MENU]**.

2 Press  $\Delta$  or  $\nabla$  repeatedly until Paper Settings > appears.

Paper Settings >

---

## MP Tray Size (Setting MP tray paper size)

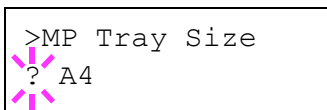
When you use the MP tray, you should set the MP tray size to the paper size that is used to format the job to print. If the sizes do not match, printing will not be performed on the correct size paper.

The default setting is *Letter* size for the U.S. and Canada and *A4* for other countries. For more information about the paper sizes that you can feed from the MP tray, refer to *Paper Specifications* on page 2-2.



**Note** Feeding the paper having a paper size which does not match the current paper size from the MP tray can cause paper jam.

- 1 Press  $\triangleright$  while *Paper Settings >* is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until *>MP Tray Size* appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



>MP Tray Size  
? A4

- 4 Press  $\triangle$  or  $\nabla$  to display the desired paper size. The message display toggles through the following paper sizes:

Env. Monarch  
Envelope #10  
Envelope #9  
Envelope #6  
Envelope DL  
Envelope C5  
A6  
B6  
A5  
B5  
ISO B5  
A4  
Executive  
Letter  
Legal  
Custom  
Oficio II  
Statement  
Folio  
Youkei 2  
Youkei 4  
16K  
Hagaki  
OufukuHagaki

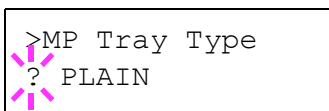
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to *Ready*.

## MP Tray Type (Setting the MP tray paper type)

You can use this to set the paper type that can be supplied from the MP tray. The default setting is *PLAIN*.

For more information about paper types that you can feed from the MP tray, refer to *Paper Specifications* on page 2-2.

- 1 Press  $\triangleright$  while *Paper Settings >* is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until *>MP Tray Type* appears.



3 Press **[OK]**. A blinking question mark (?) appears.

4 Press  $\Delta$  or  $\nabla$  to display the desired paper type. The message display toggles through the following paper types:

PLAIN  
TRANSPARENCY  
PREPRINTED  
LABELS  
BOND  
RECYCLED  
VELLUM  
ROUGH  
LETTERHEAD  
COLOR  
PREPUNCHED  
ENVELOPE  
CARDSTOCK  
THICK  
HIGH QUALITY  
CUSTOM 1 (to 8)



**Note** You can define any paper type and store that definition in the printer. For more information, refer to *Type Adjust (Creating custom paper type)* on page 7-25.

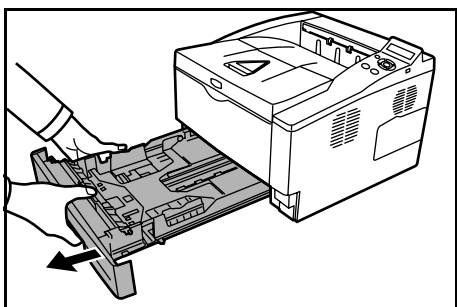
5 Press **[OK]**.

6 Press **[MENU]**. The display returns to Ready.

### Cassette (1 to 3) Size (Setting the cassette paper size)

To set the size for the paper cassette, load the paper into a paper cassette, adjust the paper size, and select the paper size from the operation panel.

If the PF-100 optional paper feeder is installed, use the same procedure to load paper into the paper feeder cassettes.



1 Pull the cassette out of the printer.

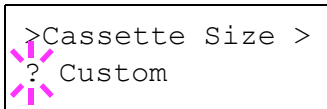
2 Adjust the position of the width guides located on the left and right sides of the cassette. Press the release button on the left guide and slide the guides to the paper size required, and load the paper into the cassette.

Proceed to the next section to select the paper size from the operation panel.

---

## Setting the Paper Size from the Operation Panel

Use the operation panel to set the size of paper loaded in the cassette on the printer.



- 1 Press  $\triangleright$  while Paper Settings > is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until >Cassette Size > appears. If optional paper feeders are added, Cassette1 Size will appear for the standard paper cassette and Cassette2 Size, and Cassette3 Size will appear for the optional paper feeders.
- 3 Press **[OK]**. A blinking question mark (?) appears.

- 4 Press  $\triangle$  or  $\nabla$  to display the desired paper size. The message display toggles through the following paper sizes:

Envelope C5  
A6  
A5  
B5  
ISO B5  
A4  
Executive  
Letter  
Legal  
Custom  
Oficio II  
Statement  
Folio  
16K



**Note** A6 and Statement will not appear if Cassette 2 to 3 of optional paper feeder PF-100 is selected.

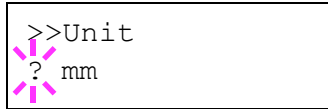
- 5 When the desired paper size is displayed, press **[OK]**. The paper size is set for the paper cassette.

If you selected Custom in step 4, be sure to set the unit of measurement and the dimensions of the paper as described in the following sections.

Select the units of measurement as described in the next section.

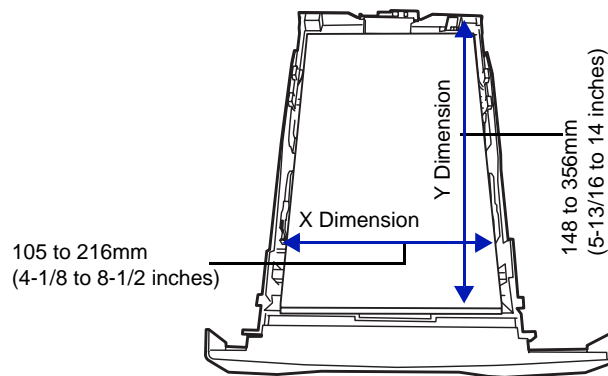
## Unit (Selecting the unit of measurement)

- 1 Press  $\triangleright$ .
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until  $\gg$ Unit appears. The unit of measurement can be selected between millimeters and inches. The current unit of measurement is displayed (the default setting is mm).
- 3 Press **[OK]**. A blinking question mark (?) appears.
- 4 Select mm or inch using  $\triangle$  or  $\nabla$ .
- 5 Press **[OK]**.  
Set the dimensions of the paper as described in the next section.

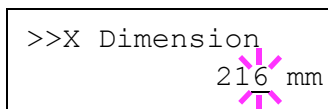


## Entering the Width and Length

Enter the paper size for X Dimension and Y Dimension as shown in the figure.



- 1 When the unit of measurement is set, press  $\nabla$ .  
 $\gg$ X Dimension appears (the paper width setting).
- 2 Press **[OK]**. A blinking cursor (  $\_$  ) appears.
- 3 Press  $\triangle$  or  $\nabla$  to increase or decrease the value of the figure where the cursor is blinking and display the desired width.  
Acceptable paper widths are as follows:
  - Cassette: 105 to 216 mm (4.13 to 8.5 inches)
  - Paper Feeder PF-100 (optional): 148 to 216 mm (5.83 to 8.5 inches)
- 4 Display the paper width and press **[OK]**.
- 5 When the width is set, press  $\nabla$ .  $\gg$ Y Dimension appears (the paper length setting). Set the desired length in the same way as the width.  
Acceptable paper lengths are as follows:
  - Cassette: 148 to 356 mm (5.83 to 14.02 inches)
  - Paper Feeder PF-100 (optional): 210 to 356 mm (8.5 to 14.02 inches)
- 6 Display the paper length, press **[OK]**.
- 7 Press **[MENU]**. The display returns to Ready.





---

## Cassette (1 to 3) Type (Setting the cassette paper type)

By setting a paper type (plain, recycled, etc.) for the paper cassette, you can automatically select the paper in the paper cassette according to the paper type you command on the printer driver. The default setting is plain paper for all paper cassettes.

If the PF-100 optional paper feeder is installed, use the same procedure to setting the cassette paper type.

For more information about paper types that you can feed from the paper cassette, refer to *Paper Specifications* on page 2-2.

1 Press  $\triangleright$  while Paper Settings  $\triangleright$  is displayed.

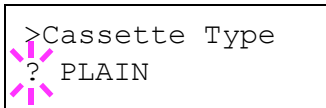
2 Press  $\triangle$  or  $\nabla$  repeatedly until  $\triangleright$ Cassette Type appears.

If optional paper feeders are added, Cassette 1 Type will appear for the standard paper cassette and Cassette 2 Type, and Cassette 3 Type will appear for the optional paper feeders.

3 To change paper type, press **[OK]**. A blinking question mark (?) appears.

4 Press  $\triangle$  or  $\nabla$  to display the desired paper type. The message display toggles through the following paper types:

PLAIN  
PREPRINTED  
BOND  
RECYCLED  
ROUGH  
LETTERHEAD  
COLOR  
PREPUNCHED  
HIGH QUALITY  
CUSTOM 1 (to 8)



$\triangleright$ Cassette Type  
?  
PLAIN



**Note** You can define any paper type and store that definition in the printer. For more information, refer to *Type Adjust (Creating custom paper type)* on page 7-25.

5 Press **[OK]**.

6 Press **[MENU]**. The display returns to Ready.

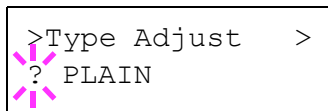
---

## Type Adjust (Creating custom paper type)

The following describes the procedure used to set a user-defined paper type for the printer. Eight custom user settings may be registered. After having been set, any of these may be called up when setting the paper type for a paper source.

The paper weight and duplex path can be set (refer to *Paper Weight (Setting the paper weight)* on page 7-25, and *Duplex Path (Setting the duplex path)* on page 7-26) after selecting the paper type to be customized as follows. For how to reset the customized settings, refer to *Reset Type Adjust (Resetting the custom paper type)* on page 7-26.

- 1 Press  $\triangleright$  while `Paper Settings >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>Type Adjust >` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



```
>Type Adjust >
? PLAIN
```

- 4 Press  $\triangle$  or  $\nabla$  to display the desired paper type. The display changes as shown below.

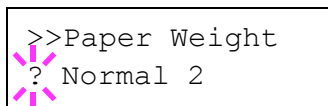
```
PLAIN
TRANSPARENCY
PREPRINTED
LABELS
BOND
RECYCLED
VELLUM
ROUGH
LETTERHEAD
COLOR
PREPUNCHED
ENVELOPE
CARDSTOCK
THICK
HIGH QUALITY
CUSTOM 1 (to 8)
```

- 5 Press **[OK]**.
- 6 Press  $\triangleright$  and proceed to the next step *Paper Weight (Setting the paper weight)*.

## Paper Weight (Setting the paper weight)

You can set the paper thickness for your custom paper type to be customized.

- 1 Display the custom paper type (refer to *Type Adjust (Creating custom paper type)* on page 7-25) and press  $\triangleright$ .
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>>Paper Weight` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



```
>>Paper Weight
? Normal 2
```

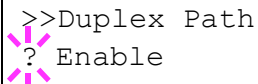
- 
- 4 Press  $\Delta$  or  $\nabla$  to display the desired paper thickness. The display changes as shown below. For details of the default setting for each paper type, refer to *Paper Specifications* on page 2-2.

Light  
Normal 1  
Normal 2  
Normal 3  
Heavy 1  
Heavy 2  
Heavy 3  
Extra Heavy

- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to Ready.

### Duplex Path (Setting the duplex path)

- 1 Display the custom paper type (refer to *Type Adjust (Creating custom paper type)* on page 7-25) and press  $\triangleright$ .
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `>>Duplex Path` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



```
>>Duplex Path  
? Enable
```

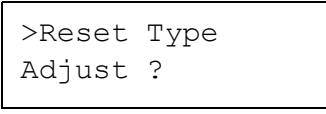
- 4 Select `Enable` or `Disable` using  $\Delta$  or  $\nabla$ . For details of the default setting for each paper type, refer to *Paper Specifications* on page 2-2.
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to Ready.

The custom paper type setting is completed.

### Reset Type Adjust (Resetting the custom paper type)

Reset all the custom paper type that was set in *Type Adjust (Creating custom paper type)* on page 7-25.

- 1 Press  $\triangleright$  while `Paper Settings >` is displayed.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `>Reset Type Adjust` appears.
- 3 Press **[OK]**. A question mark (?) appears.



```
>Reset Type  
Adjust ?
```

- 4 Press **[OK]** again. All customized paper types will be reset to the default. The display returns to Ready.

---

## Print Settings

These settings specify printing parameters such as the print quality used for printing (Normal or Fine), the gloss mode (Low or High), the number of copies, reduced printing and the page orientation.

The options available in Print Quality are as follows:

- Paper Source (Selecting the paper feed source)
- Paper Feed Mode (Setting the paper feed source)
- Duplex (Duplex Printing)
- Override A4/LT (Overriding difference between A4 and Letter)
- Emulation (Setting the emulation)
- Font Select (Selecting the default font)
- Code Set (Setting the code set)
- Print Quality (Setting print quality)
- Page Set (Setting pagination)

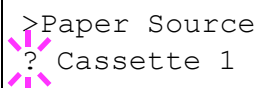


```
Print Settings >
```

- 1 Press **[MENU]**.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `Print Settings >` appears.

## Paper Source (Selecting the paper feed source)

You can select the paper source, from which the printer feeds paper as the default. If an optional paper feeder(s) is installed, it is also available for the default paper source.



```
>Paper Source  
? Cassette 1
```

- 1 Press  $\triangleright$  while `Print Settings >` is displayed.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `>Paper Source` appears.
- 3 To change the current paper feed source, press **[OK]**. A blinking question mark (?) appears.
- 4 Press  $\Delta$  or  $\nabla$  to display the desired paper feed source. The message display toggles through the following paper feed sources, depending on the installed optional paper feeders (from the top most paper cassette to the bottom paper cassette):

```
MP tray  
Cassette 1  
Cassette 2  
Cassette 3
```

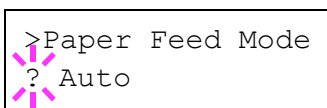
Cassettes 2 and 3 are available for selection when the optional paper feeders are installed.

- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

---

## Paper Feed Mode (Setting the paper feed source)

This mode specifies how the paper should be fed, after the paper feed source and paper type has been chosen. If `Auto` is selected, the printer searches for a paper feed source that matches the paper size and type, and paper is delivered from that source. An error message is displayed if `Fixed` is selected, but a match is not found. The default setting is `Auto`. To change the settings, follow the steps described below.



- 1 Press `▷` while `Print Settings >` is displayed.
- 2 Press `△` or `▽` repeatedly until `>Paper Feed Mode` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.
- 4 Press `△` or `▽` until `Auto` or `Fixed` appears.
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

### When the Paper Runs Out During Printing

When `Paper Feed Mode` is set to `Fixed`, if the paper in the cassette runs out during printing, `Load Cassette 1` is displayed and the printer stands by. In this event, either replenish the paper in the empty cassette or use the procedure below to print from another paper source.

- 1 While `Load Cassette 1` is displayed, press `△` or `▽` repeatedly until `Use alternative?` appears.
- 2 Press `△` or `▽` repeatedly until the desired paper source and size appears.

Each time you press `△` or `▽`, another paper cassette or the paper size that can currently be fed from the MP tray appears.

- 3 Press **[OK]**. Printing continues.

## Duplex (Duplex printing)

Using the duplexer, you can automatically print on both sides of the paper. The duplexer is mounted underneath the printer.

Duplex printing is available for the following paper types:

PLAIN  
PREPRINTED  
BOND  
RECYCLED  
ROUGH  
COLOR  
PREPUNCHED  
HIGH QUALITY  
CUSTOM 1 (to 8)

Activating the duplexer is done by selecting either short edge or long edge binding mode.

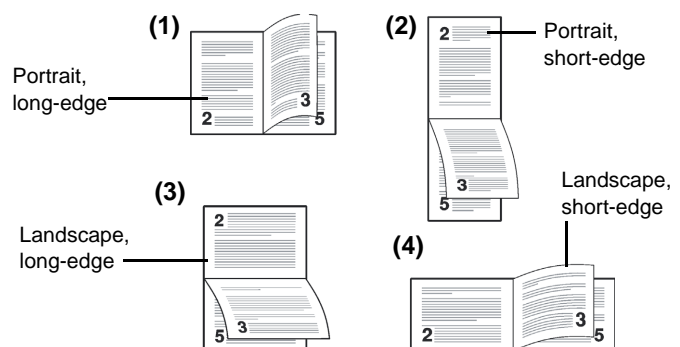


**Note** Duplex printing can be also performed from the MP tray. If the paper to be fed from the MP tray does not match the paper size and paper type of the current paper feed source cassette, a paper jam may occur.

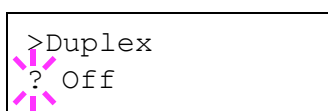
## Binding Modes

Binding refers to the manner in which printed pages of paper are joined together (by gluing, stitching, etc.) in book form. The two possible types of binding are: long-edge binding, in which pages are joined together along their long edge; and short-edge binding, in which they are joined together along their short edge. In selecting a binding type, you must also consider the orientation of the printed page. You can use long-edge or short-edge binding with either landscape or portrait printing.

Depending on the binding type and print orientation, the duplexer provides four types of binding. These are: (1) portrait, long-edge, (2) portrait, short edge, (3) landscape, long-edge, and (4) landscape, short-edge. The figure below shows these binding methods.



- 1 Press  $\triangleright$  while `Print Settings >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>Duplex` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



- 4 Press  $\Delta$  or  $\nabla$  to display the desired binding mode. The message display toggles through the following:

Off (default)  
Short edge bind  
Long edge bind

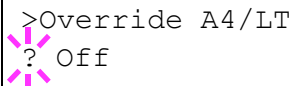
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to Ready.

## Override A4/LT (Overriding difference between A4 and Letter)

When the `Override A4/LT` is turned On using the operation panel, the printer ignores the difference between A4 and Letter paper sizes. Printing is performed without an error message even if the actual paper size in the current cassette differs from the paper size formatting the job.

By default, this feature is On.

- 1 Press  $\triangleright$  while `Print Settings >` is displayed.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `>Override A4/LT` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



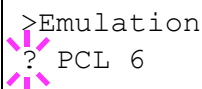
```
>Override A4/LT
? Off
```

- 4 Select `On` or `Off` using  $\Delta$  or  $\nabla$ .
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to Ready.

## Emulation (Setting the emulation)

You can change the emulation mode for the current interface. Use the procedure below to select the mode.

- 1 Press  $\triangleright$  while `Print Settings >` is displayed.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `>Emulation >` appears on the message display. One of the emulation modes appears, indicating the emulation currently in use.
- 3 Press **[OK]**. A blinking question mark (?) appears.



```
>Emulation
? PCL 6
```

- 4 Press  $\Delta$  or  $\nabla$  repeatedly until the desired emulation mode is displayed.

PCL 6 (default)  
KPDL  
KPDL (AUTO)  
Line Printer  
IBM Proprinter  
DIABLO 630  
EPSON LQ-850

- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to Ready.

### Alternative Emulation for KPD L Emulation

KPD L is Kyocera's implementation of the PostScript language. The KPD L (AUTO) emulation enables the printer to automatically change the emulation mode according to the data received when printing.

In addition to KPD L (AUTO) emulation, you can use the operation panel to set another emulation mode that is used very often. The default setting is PCL 6.

```
>Emulation
? PCL 6
```

```
>Emulation
? KPD L (AUTO)
```

```
>>Alt. Emulation
PCL 6
```

- 1 Press **[MENU]**.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `>Emulation >` appears on the message display.
- 3 Press **[OK]**. A blinking question mark (?) appears.
- 4 Press  $\Delta$  or  $\nabla$  repeatedly until `KPD L (AUTO)` appears.
- 5 Press **[OK]**.
- 6 Press  $\triangleright$ . When `>>Alt. Emulation` is displayed, press  $\Delta$  or  $\nabla$ . The names of alternative emulations appear - PCL 6, Line Printer, IBM Proprinter, DIABLO 630 or EPSON LQ-850.
- 7 Press **[OK]**. A blinking question mark (?) appears.
- 8 Press  $\Delta$  or  $\nabla$  repeatedly until the desired alternative emulation appears.
- 9 Press **[OK]**.
- 10 Press **[MENU]**. The display returns to `Ready`.

### Error Report (Printing KPD L errors)

The printer can print error descriptions when printing error occurs during KPD L emulation. The default changes according to the destination.

```
>Emulation
? PCL 6
```

```
>Emulation >
? KPD L (AUTO)
```

```
>>Error Report
? On
```

- 1 Press  $\triangleright$  while `Print Settings >` is displayed.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `>Emulation >` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.
- 4 Select `KPD L` or `KPD L (AUTO)` using  $\Delta$  or  $\nabla$ . Press **[OK]**.
- 5 Press  $\triangleright$ . `>>Error Report` appears.
- 6 Press **[OK]**. A blinking question mark (?) appears.
- 7 Select `On` or `Off` using  $\Delta$  or  $\nabla$ . Press **[OK]**.
- 8 Press **[MENU]**. The display returns to `Ready`.



---

## Font Select (Selecting the default font)

You can select the default font for the current interface. The default font can be one of the internal fonts or a font that is downloaded to the printer memory or stored on CompactFlash (CF) card.

In this menu, you can also set the type and pitch for Courier and Letter Gothic; as well as to print a font list.

```
>Font Select >
  Internal
```

```
>> I000
```

```
>>?I000
```

- 1 Press  $\triangleright$  while `Print Settings >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>Font Select >` appears.
- 3 To select an internal font, make sure that `Internal` is displayed and press  $\triangleright$ . The display changes. If `Internal` is not displayed, press **[OK]**, then press  $\triangle$  or  $\nabla$  until it appears.

To select an optional font, press **[OK]** while `>Font Select >` is displayed. Press  $\triangle$  or  $\nabla$  repeatedly until `Option` appears and then press **[OK]**. Press  $\triangleright$  next to display the font selection shown above. You can perform this operation only when optional fonts are installed in the printer.

The letter before the number indicates the location of the font, as shown below.

I: Internal font

S: Soft (downloaded) font

M: Fonts in optional CompactFlash card

H: Fonts in RAM disk

- 4 Press **[OK]**. A blinking question mark (?) appears.
- 5 Press  $\triangle$  or  $\nabla$  repeatedly until the desired font number appears. For font numbers of the internal fonts, refer to *Print Fonts List* on page 7-15.
- 6 When the desired font is displayed, press **[OK]**.
- 7 Press **[MENU]**. The display returns to `Ready`.

## Selecting Regular or Dark Courier/Letter Gothic

Courier or Letter Gothic font thickness can be selected as `Regular` or `Dark`. In the procedure below, it is assumed that `Courier` is selected. The procedure is the same for `Letter Gothic`.

```
>Font Select >
  Internal
```

```
>>Courier
  Regular
```

- 1 Press  $\triangleright$  while `Print Settings >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>Font Select >` appears.
- 3 Make sure that `Internal` is displayed and press  $\triangleright$ .
- 4 Press  $\triangle$  or  $\nabla$  repeatedly until `>>Courier` appears. If you are selecting the thickness of the `Letter Gothic` font, choose `>> Letter Gothic` here instead.

```
>>Courier
?Regular
```

5 Press **[OK]**. A blinking question mark (?) appears.

6 Select `Regular` or `Dark` using  $\Delta$  or  $\nabla$ .

7 Press **[OK]**.

8 Press **[MENU]**. The display returns to `Ready`.

### Changing the Default Font Size

You can change the size of the default font. If you selected a proportional font, the character size can also be changed.

1 Press  $\triangleright$  while `Print Settings >` is displayed.

2 Press  $\Delta$  or  $\nabla$  repeatedly until `>Font Select >` appears.

```
>Font Select >
Internal
```

3 Make sure that `Internal` is displayed and press  $\triangleright$ .

4 Press  $\Delta$  or  $\nabla$  repeatedly until `>>Size` appears.

```
>>Size
012.00 point(s)
```

5 Press **[OK]**. A blinking question mark (?) appears.

```
>>Size
012.00 point(s)
```

6 Press  $\Delta$  or  $\nabla$  to increase or decrease the value at the blinking cursor. The font size can be set between 4 and 999.75 points, in 0.25-point increments. Use  $\triangleright$  or  $\triangleleft$  to move the cursor right and left.

7 When the desired size is displayed, press **[OK]**.

8 Press **[MENU]**. The display returns to `Ready`.

### Character Pitch

You can set the character pitch for fixed fonts.

1 Press  $\triangleright$  while `Print Settings >` is displayed.

2 Press  $\Delta$  or  $\nabla$  repeatedly until `>Font Select >` appears.

```
>Font Select >
Internal
```

3 Make sure that `Internal` is displayed and press  $\triangleright$ .

4 Press  $\Delta$  or  $\nabla$  repeatedly until `>>Pitch` appears.

```
>>Pitch
10.00 cpi
```

5 Press **[OK]**. A blinking question mark (?) appears.

```
>>Pitch
10.00 cpi
```

6 Press  $\Delta$  or  $\nabla$  to increase or decrease the value at the blinking cursor. The character pitch can be set 0.44 and 99.99 characters per inch, in 0.01 character-per-inch increments. Use  $\triangleright$  or  $\triangleleft$  to move the cursor right and left.

- 7 When the desired size is displayed, press **[OK]**.
- 8 Press **[MENU]**. The display returns to *Ready*.

### Code Set (Setting the code set)

You can change the character code set. Available character code sets vary depending on the current font. (The default is *IBM PC-8*.)

```
>Code Set
  IBM PC-8
```

```
>Code Set
?IBM PC-8
```

- 1 Press **▷** while *Print Settings >* is displayed.
- 2 Press **△** or **▽** repeatedly until *>Code Set* appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.
- 4 Press **△** or **▽** until the desired character code set appears.
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to *Ready*.

### Print Quality (Setting print quality)

In *Print Quality* menus, you can set the following settings.

The options available in *Print Quality* are as follows:

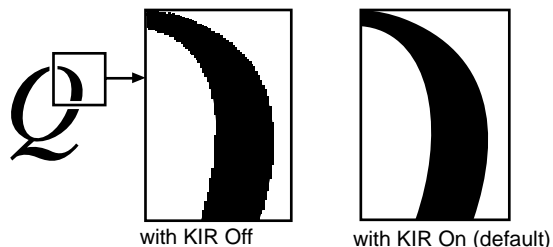
- KIR Mode (Selecting the KIR mode)
- EcoPrint Mode (Selecting the EcoPrint mode)
- Resolution (Selecting the Print Resolution)

```
>Print Quality >
```

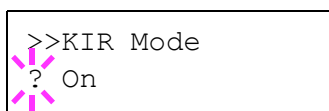
- 1 Press **▷** while *Print Settings >* is displayed.
- 2 Press **△** or **▽** repeatedly until *>Print Quality >* appears.

### KIR Mode (Selecting the KIR mode)

This printer incorporates the KIR (Kyocera Image Refinement) smoothing function. KIR uses the software to enhance resolution, resulting in high quality printing at resolution of 600 dpi and 300 dpi. The default is *On*. KIR has no effect on the printing speed.



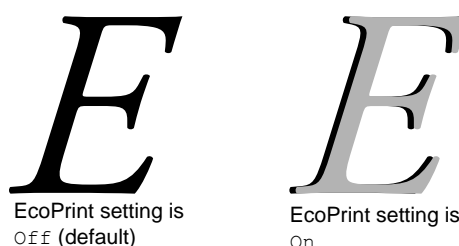
- 1 Press **▷** while *>Print Quality >* is displayed.
- 2 Press **△** or **▽** repeatedly until *>>KIR Mode* appears.



- 3 Press **[OK]**. A blinking question mark (?) appears.
- 4 Select **On** or **Off** using  $\Delta$  or  $\nabla$ .
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to **Ready**.

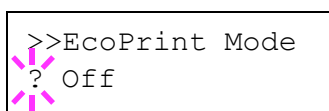
### EcoPrint Mode (Selecting the EcoPrint mode)

By enabling EcoPrint mode, you can minimize the amount of toner used during printing. Because images printed in this mode may be slightly coarser than those printed in standard resolution, you should use EcoPrint for test prints or other situations where high-quality prints are not required.



Use the procedure below to select EcoPrint mode. The default setting is **Off**.

- 1 Press  $\triangleright$  while **>Print Quality >** is displayed.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until **>>EcoPrint Mode** appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.

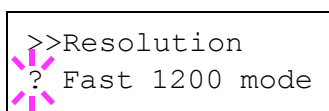


- 4 Select **On** or **Off** using  $\Delta$  or  $\nabla$ .
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to **Ready**.

### Resolution (Selecting the print resolution)

You can set the default print resolution in four ways: 300dpi, 600dpi, Fast 1200 mode and Fine 1200 mode. The clarity of printed characters and graphics becomes sharper in this order.

- 1 Press  $\triangleright$  while **>Print Quality >** is displayed.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until **>>Resolution** appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



- 4 Select **Fine 1200 mode, Fast 1200 mode, 600 dpi or 300 dpi** using the  $\Delta$  or  $\nabla$ .
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to **Ready**.

---

## Page Set (Setting pagination)

In Page Set menus, you can set the number of copies, page orientation, and other settings regarding pagination.

The options available in Page Set are as follows:

- Copies (Number of copies)
- Orientation (Print orientation)
- LF Action (Linefeed)
- CR Action (Carriage-Return)
- Wide A4 (Wide A4 pitch)
- XPS FitTo Page (Print area setting for XPS data)
- TIFF Size (Print mode setting for TIFF files)

- 1 Press  $\triangleright$  while `Print Settings >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>Page Set >` appears.



### Copies (Number of copies)

You can set the number of copies of each page to be printed for the current interface.

- 1 Press  $\triangleright$  while `>Page Set >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>>Copies` appears.
- 3 Press **[OK]**. A blinking cursor (`_`) appears.

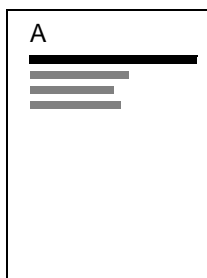


- 4 Press  $\triangle$  or  $\nabla$  to increase or decrease, respectively, the value at the blinking cursor. The number of copies can be set between 1 and 999. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left.
- 5 When the desired size is displayed, press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

### Orientation (Print orientation)

You can select portrait (upright) or landscape (sideways) page orientation.

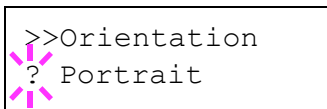
Portrait Orientation



Landscape Orientation



- 1 Press  $\triangleright$  while `>Page Set >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>>Orientation` appears.



3 Press **[OK]**. A blinking question mark (?) appears.

4 Select `Portrait` or `Landscape` using  $\Delta$  or  $\nabla$ .

5 Press **[OK]**.

6 Press **[MENU]**. The display returns to `Ready`.

### LF Action (Linefeed)

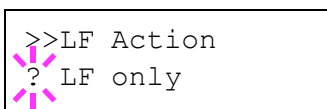
This procedure instructs the printer what to do when it receives a linefeed code (0AH).

- `LF only`: Linefeed is performed (Default).
- `CR and LF`: A linefeed and carriage return are performed.
- `Ignore LF`: The linefeed is ignored.

1 Press  $\triangleright$  while `>Page Set >` is displayed.

2 Press  $\Delta$  or  $\nabla$  repeatedly until `>>LF Action` appears.

3 Press **[OK]**. A blinking cursor ( `_` ) appears.



4 Press  $\Delta$  or  $\nabla$  repeatedly until the desired linefeed action appears.

5 When the desired action is displayed, press **[OK]**.

6 Press **[MENU]**. The display returns to `Ready`.

### CR Action (Carriage-Return)

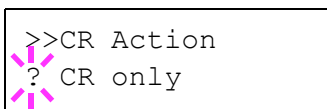
This procedure instructs the printer what to do when it receives a carriage return code (0DH).

- `CR only`: A carriage-return is performed (Default).
- `CR and LF`: A linefeed and carriage return are performed.
- `Ignore CR`: The carriage-return is ignored.

1 Press  $\triangleright$  while `>Page Set >` is displayed.

2 Press  $\Delta$  or  $\nabla$  repeatedly until `>>CR Action` appears.

3 Press **[OK]**. A blinking cursor ( `_` ) appears.



4 Press  $\Delta$  or  $\nabla$  repeatedly until the desired carriage-return appears.

5 When the desired action is displayed, press **[OK]**.

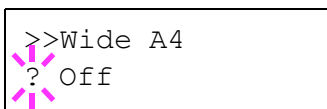
6 Press **[MENU]**. The display returns to `Ready`.

### Wide A4 (Wide A4 pitch)

Turn this to `On` to increase the maximum number of characters that can be printed in a line for an A4 page (78 characters at 10 pitch) and Letter size page (80 characters at 10 pitch). This setting is only effective in PCL 6 emulation.

1 Press  $\triangleright$  while `>Page Set >` is displayed.

2 Press  $\Delta$  or  $\nabla$  repeatedly until `>>Wide A4` appears.



3 Press **[OK]**. A blinking question mark (?) appears.

4 Select *On* or *Off* using  $\Delta$  or  $\nabla$ .

5 Press **[OK]**.

6 Press **[MENU]**. The display returns to *Ready*.

### **XPS FitTo Page (Print area setting for XPS data)**

If you select *On* in this setting, XPS data is scaled to fit the paper size during printing. If you select *Off*, the data is printed at its original size.

1 Press  $\triangleright$  while *>Page Set >* is displayed.

2 Press  $\Delta$  or  $\nabla$  repeatedly until *>>XPS FitTo Page* appears.

3 Press **[OK]**. A blinking question mark (?) appears.



4 Select *On* or *Off* using  $\Delta$  or  $\nabla$ .

5 Press **[OK]**.

6 Press **[MENU]**. The display returns to *Ready*.

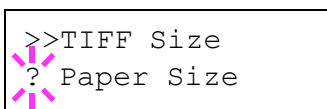
### **TIFF Size (Print mode setting for TIFF files)**

Sets the print mode for TIFF files. The default setting is *Paper Size*.

1 Press  $\triangleright$  while *>Page Set >* is displayed.

2 Press  $\Delta$  or  $\nabla$  repeatedly until *>>TIFF Size* appears.

3 Press **[OK]**. A blinking question mark (?) appears.



4 Press  $\Delta$  or  $\nabla$  repeatedly until the desired print mode is displayed. The list shows the following print modes:

*Paper Size* (scaled to fit the paper size)

*ImageResolution* (matched to the image resolution)

*PrintResolution* (matched to the print resolution)

5 Press **[OK]**.

6 Press **[MENU]**. The display returns to *Ready*.

---

## Network (Network settings)

This printer supports TCP/IP and TCP/IP (IPv6) protocols.

IP is an abbreviation for Internet Protocol. This printer routinely uses the TCP/IP (IPv4) protocol, but provides a separate setting for the next-generation IP, IPv6.

TCP/IP (IPv4) uses 32-bit IP addresses, but the rapid growth in the number of Internet users has resulted in a shortage of IP addresses. IPv6 was developed to expand the range of available IP addresses by using 128-bit IP addresses.

The options available in the Network settings are as follows:

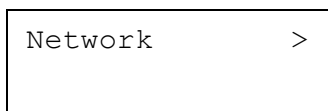
- TCP/IP (IPv4 settings)
- TCP/IP (IPv6) (IPv6 settings)



**Note** Check with your network administrator when selecting the network setting.

After all network related settings have been done, turn the machine OFF and ON again. This is mandatory to make the settings effective.

- 1 Press **[MENU]**.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `Network >` appears.



### TCP/IP (IPv4 settings)

This selects the settings for TCP/IP (IPv4).

The TCP/IP system refers to the Internet system, which has a 5-layer structure consisting of the interface layer, link layer, network (IP) layer, transport (TCP/UDP) layer and application layer.

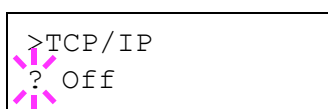
The interface layer is a key layer in the TCP/IP system that provides an abstracted interface that is not dependent on the link (communication line: frame relay or Ethernet, etc.) to the IP module (IP layer). This means that the IP module can use this abstracted interface (which is not dependent on the link type) to exchange IP packets back and forth with the link layer.

The options available in the TCP/IP (IPv4) settings are as follows:

- DHCP (DHCP setting)
- IP Address (IP address setting)
- Subnet Mask (Subnet mask setting)
- Gateway (Gateway setting)
- Bonjour (Bonjour setting)

**IMPORTANT** The DHCP, IP address, subnet mask, gateway and Bonjour menu options for TCP/IP are displayed when TCP/IP is enabled.

- 1 Press  $\triangleright$  while `Network >` is displayed.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `>TCP/IP >` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



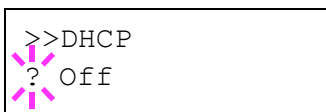


- 4 Select `On` or `Off` using  $\Delta$  or  $\nabla$ .
- 5 Select `On` and press **[OK]**. The display changes to the settings shown below.

### DHCP (DHCP setting)

DHCP (Dynamic Host Configuration Protocol) is the protocol that assigns the information required to establish a network connection when a host attempts to connect to the network (Internet). This information includes the IP address of the local node and the default router (the router in the host's own network system) and the DNS (Domain Name System) server. DHCP is an extension of the BOOTP (Bootstrap) startup protocol.

- 1 Press  $\triangleright$  while `>TCP/IP On >` is displayed.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `>>DHCP` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



- 4 Select `On` or `Off` using  $\Delta$  or  $\nabla$ .
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

### IP Address (IP address setting)

An IP address is the address of a network device such as a computer and is included in IP packets as needed for the sending and receiving of Internet data (IP packets). (IP addresses can be either destination addresses or source addresses.)

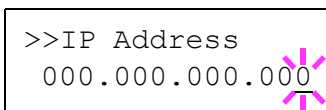
Specifically, an IP address is a bit string consisting of a host address (or host section) that identifies a computer (host) connected to the Internet and a network address (or network section) that identifies the network to which that computer belongs (or more specifically, the computer's network interface). Bit strings (IP addresses) that are unique throughout the entire Internet system are allocated to each computer or interface.

The IP addresses currently used on the Internet (IPv4) have a fixed length of 32 bits.



**Note** When you enter the IP address, be sure to set the DHCP setting to `Off`.

- 1 Press  $\triangleright$  while `>TCP/IP On >` is displayed.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `>>IP Address` appears.
- 3 Press **[OK]**. A blinking cursor ( `_` ) appears.



- 4 Press  $\Delta$  or  $\nabla$  to increase or decrease, respectively, the value at the blinking cursor. You can set any value between `000` and `255`. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left.
- 5 Display the desired IP address and press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

### Subnet Mask (Subnet mask setting)

The subnet mask is a way of augmenting the network address section of an IP address.

A subnet mask represents all network address sections as 1 and all host address sections as 0. The number of bits in the prefix indicates the length of the network address. The term "prefix" refers to something added to the beginning and, in this context, indicates the first section of the IP address.

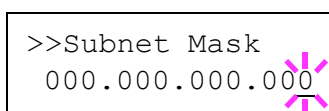
When an IP address is written, the length of the network address can be indicated by the prefix length after a forward slash (/). For example, "24" in the address "133.210.2.0/24". In this way, "133.210.2.0/24" denotes the IP address "133.210.2.0" with a 24-bit prefix (network section).

This new network address section (originally part of the host address) made possible by the subnet mask is referred to as the subnet address.



**Note** When you enter the subnet mask, be sure to set the DHCP setting to Off.

- 1 Press  $\triangleright$  while  $\text{>TCP/IP On >}$  is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until  $\text{>>Subnet Mask}$  appears.
- 3 Press **[OK]**. A blinking cursor (  $\_$  ) appears.



- 4 Press  $\triangle$  or  $\nabla$  to increase or decrease, respectively, the value at the blinking cursor. You can set any value between 000 and 255. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left.
- 5 Display the desired subnet mask and press **[OK]**.
- 6 Press **[MENU]**. The display returns to Ready.

### Gateway (Gateway setting)

Gateway generally refers to a protocol conversion device used to allow networks with differing protocol systems to interconnect.

For example, a "Gateway" device is required to connect a different closed network (using its own protocols) to the open Internet (using TCP/IP).

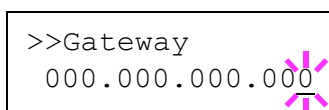
By installing a gateway, the communications protocols and data display modes on different networks can be made compatible.

On TCP/IP networks, the term gateway is used to refer to routers.



**Note** Before you input the gateway, be sure to set the DHCP setting to Off.

- 1 Press  $\triangleright$  while  $\text{>TCP/IP On >}$  is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until  $\text{>>Gateway}$  appears.
- 3 Press **[OK]**. A blinking cursor (  $\_$  ) appears.



- 4 Press  $\triangle$  or  $\nabla$  to increase or decrease, respectively, the value at the blinking cursor. You can set any value between 000 and 255. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left.
- 5 Display the desired gateway and press **[OK]**.

---

6 Press **[MENU]**. The display returns to *Ready*.

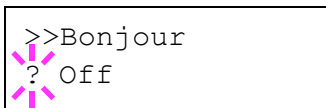
### Bonjour (Bonjour setting)

Bonjour, also known as zero-configuration networking, is a service that automatically detects computers, devices and services on an IP network.

Bonjour, because an industry-standard IP protocol is used, allows devices to automatically recognize each other without an IP address being specified or DNS server being set.

Bonjour also sends and receives network packets by UDP port 5353. If a firewall is enabled, the user must check that UDP port 5353 is left open so that Bonjour will run correctly. Some firewalls are set up so as to reject only certain Bonjour packets. If Bonjour does not run stably, check the firewall settings and ensure that Bonjour is registered on the exceptions list and that Bonjour packets are accepted. If you install Bonjour on Windows XP Service Pack 2 or later, the Windows firewall will be set up correctly for Bonjour.

- 1 Press  $\triangleright$  while *>TCP/IP On >* is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until *>>Bonjour* appears.
- 3 Press **[OK]**. A blinking cursor ( $\_$ ) appears.



- 4 Select *On* or *Off* using  $\triangle$  or  $\nabla$ .
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to *Ready*.

### TCP/IP (IPv6) (IPv6 settings)

This selects the settings for TCP/IP (IPv6).

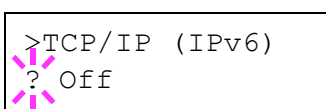
TCP/IP (IPv6) is based on the current Internet protocol, TCP/IP (IPv4). IPv6 is the next-generation Internet protocol and expands the available address space, which resolves the problem of the lack of addresses under IPv4, while also introducing other improvements such as additional security functionality and the capacity to prioritize data transmission.

The options available in the TCP/IP (IPv6) settings are as follows:

- RA(Stateless) (RA (Stateless) setting)
- DHCPv6 (DHCPv6 setting)

**IMPORTANT** The RA (Stateless) and DHCPv6 menu options for TCP/IP (IPv6) are displayed when TCP/IP (IPv6) is enabled.

- 1 Press  $\triangleright$  while *Network >* is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until *>TCP/IP (IPv6) >* appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



- 4 Select *On* or *Off* using  $\triangle$  or  $\nabla$ .
- 5 Select *On* and press **[OK]**. The display changes to the settings shown below.

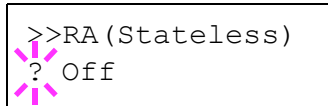
---

### RA(Stateless) (RA (Stateless) setting)

The IPv6 router communicates (transmits) information such as the global address prefix using ICMPv6. This information is the Router Advertisement (RA).

ICMPv6 stands for Internet Control Message Protocol, and is a IPv6 standard defined in the RFC 2463 "Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification".

- 1 Press  $\triangleright$  while  $\text{>TCP/IP (IPv6) On >}$  is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until  $\text{>>RA(Stateless)}$  appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



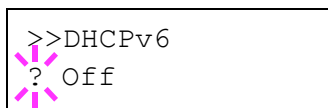
- 4 Select **On** or **Off** using  $\triangle$  or  $\nabla$ .
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to *Ready*.

### DHCPv6 (DHCPv6 setting)

DHCPv6 is the next-generation of the Internet's Dynamic Host Configuration Protocol and supports IPv6. It extends the BOOTP startup protocol that defines the protocols used for transferring configuration information to hosts on the network.

DHCPv6 permits the DHCP server to use its expanded functionality to send configuration parameters to an IPv6 node. Because the network addresses that can be used are allocated automatically, the IPv6 node management workload is reduced in systems where the administrator has to exercise close control over IP address allocation.

- 1 Press  $\triangleright$  while  $\text{>TCP/IP (IPv6) On >}$  is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until  $\text{>>DHCPv6}$  appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



- 4 Select **On** or **Off** using  $\triangle$  or  $\nabla$ .
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to *Ready*.

---

## Device Common (Selecting/Setting the common device)

Selects/sets all the functions in this printer.

The options available in Device Common are as follows:

- MSG Language (Selecting the message language)
- Buzzer (Alarm (Buzzer) setting)
- RAM Disk Mode (Using the RAM disk)
- Memory Card (Using the CF card)
- Error Handling (Error detection setting)
- Timer (Timer setting)

- 1 Press **[MENU]**.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `Device Common >` appears.

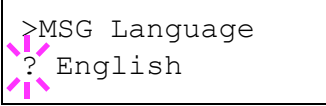


Device Common >

## MSG Language (Selecting the message language)

You can select the language of the message display by following the procedure given below. You can optionally download messages in other languages. Contact your service representative for information.

- 1 Press  $\triangleright$  while `Device Common >` is displayed.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `>MSG Language` appears. The default message language is `English`.
- 3 To change the language, press **[OK]**. A blinking question mark (?) appears.



>MSG Language  
? English

- 4 Press  $\Delta$  or  $\nabla$ . The display cycles through the available selection in the following order:

English  
Français  
Deutsch  
Italiano  
Nederlands  
Español  
Русский  
Português

- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

---

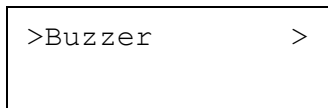
## Buzzer (Alarm (Buzzer) setting)

This function uses tones to notify the user of printer operations and the printer status. This setting is useful, for example, when the printer is located some distance from the user.

The options available in Buzzer are as follows:

- Key Confirm. (Key confirmation tone setting)
- Job End (Job completed tone setting)
- Ready (Preparation completed tone setting)
- Error (Error tone setting)

- 1 Press  $\triangleright$  while `Device Common >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>Buzzer >` appears.

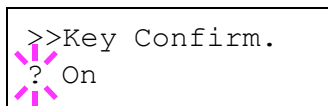


>Buzzer >

### Key Confirm. (Key confirmation tone setting)

When `On` is selected in this setting, a tone sounds each time a key is used. The default setting is `On`.

- 1 Press  $\triangleright$  while `>Buzzer >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>>Key Confirm.` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



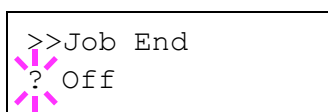
>>Key Confirm.  
? On

- 4 Select `On` or `Off` using  $\triangle$  or  $\nabla$ .
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

### Job End (Job completed tone setting)

When `On` is selected in this setting, a tone sounds when printing ends. The default setting is `Off`.

- 1 Press  $\triangleright$  while `>Buzzer >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>>Job End` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



>>Job End  
? Off

- 4 Select `On` or `Off` using  $\triangle$  or  $\nabla$ .
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

---

### Ready (Preparation completed tone setting)

When **On** is selected in this setting, a tone sounds when print preparation has been completed. The default setting is **Off**.

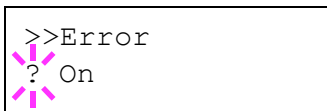


- 1 Press **▷** while **>Buzzer >** is displayed.
- 2 Press **△** or **▽** repeatedly until **>>Ready** appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.

- 4 Select **On** or **Off** using **△** or **▽**.
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to **Ready**.

### Error (Error tone setting)

When **On** is selected in this setting, a tone sounds when a problem such as running out of paper or a paper jam occurs during printing. The default setting is **On**.



- 1 Press **▷** while **>Buzzer >** is displayed.
- 2 Press **△** or **▽** repeatedly until **>>Error** appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.

- 4 Select **On** or **Off** using **△** or **▽**.
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to **Ready**.

---

## RAM Disk Mode (Using the RAM disk)

The RAM disk is a memory space shared within the printer memory that can temporarily store print jobs. The stored print job can then be used to print multiple copies of the job reducing the total amount of time required to print the whole job.

To use the RAM disk, activate and enter the desired size of the RAM disk in the manner described below. The maximum RAM disk size can be calculated as follows:

When the RAM disk is activated = The maximum RAM disk size is 4MB (when no options are attached)

When the optional memory is installed = The maximum RAM disk size is 1/2 of the total optional memory installed

To activate RAM disk in the printer's memory, first you must set the RAM disk mode to `On` and set the desired data size for the RAM disk as described in the following section. This allows you to perform the following operations on the RAM disk.



**Note** The printer also supports CF card as a storage device. The CF card is installed into the dedicated slot of the printer. The RAM disk is an allocated part of the printer's memory.

**IMPORTANT** The RAM disk stores data only temporarily. When the printer is reset or turned off, the stored data will be erased.

The RAM disk is allocated from the printer memory available to users. If the size of the RAM disk is set too large, the printing speed may decrease or the memory may become insufficient.

- 1 Press `▷` while `Device Common >` is displayed.
- 2 Press `△` or `▽` repeatedly until `>RAM Disk Mode >` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.
- 4 Select `On` or `Off` using `△` or `▽`.
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

```
>RAM Disk Mode
? Off
```

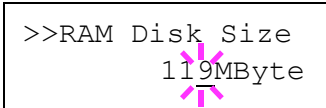


---

### RAM Disk Size (Setting the RAM disk size)

Use this procedure to set the amount of memory used for the RAM disk.

**IMPORTANT** The RAM Disk Size menu option only appears when RAM Disk Mode is set to On.



```
>>RAM Disk Size
  119MByte
```

- 1 Press  $\triangleright$  while `>RAM Disk Mode On >` is displayed.
- 2 Press **[OK]**. The message display shows a blinking cursor ( $\ast$ ). Press  $\triangle$  or  $\nabla$  to display the desired size. Definable RAM disk size is 001 to 512. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left.

This range varies depending on the total memory size of the printer. The setting exceeding this range is automatically adjusted to the maximum RAM disk size.

- 3 When the desired RAM disk size is displayed, press **[OK]**.
- 4 Press **[MENU]**. The display returns to `Ready`. Turn the printer off and then on again. The selected RAM disk size is activated after the printer is restarted.

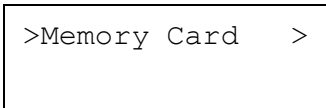
### Memory Card (Using the CF card)

The printer is equipped with a slot for a CF card (memory card). By inserting a CF card into the printer, the following operations become available.

- Format (Formatting CF card)

For details about the handling of the CF card, refer to *CompactFlash (CF) Card* on page 8-6.

**IMPORTANT** The Memory Card menu options are only displayed when a CF card is installed in the printer.



```
>Memory Card >
```

- 1 Press  $\triangleright$  while `Device Common >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>Memory Card >` appears.

---

## Format (Formatting CF card)

A new CF card must be formatted before it can be used in the printer. Formatting allows data to be written to the CF card..

**IMPORTANT** Format is only displayed when a CF card is installed in the printer and protection is disabled.



**Note** Format is only displayed when a CF card is installed in the printer and protection is disabled.

Formatting will destroy any existing data on a storage device including a used CF card.

Formatting of the CF card must be executed from the printer.

When a new CF card is inserted in the printer's slot, `Format error Memory card` will appear on the message display.

- 1 Press `▷` while `>Memory Card >` is displayed.
- 2 `>>Format` appears.
- 3 Press **[OK]**. A question mark (?) appears.

```
>>Format ?
```

- 4 Press **[OK]**.

`Processing` appears and formatting of the CF card starts. When the formatting is successfully completed, the display returns to `Ready`.

## Error Handling (Error detection setting)

This specifies the settings for the detection methods used for duplex printing errors and for paper size and paper type errors when the paper source is fixed.

The options available in Error Handling are as follows:

- Duplex (Duplex printing error detection setting)
- Paper Mismatch (Detection settings for paper size/type errors when the paper source is fixed)
- MP Tray Empty (Warning when the MP tray is empty)

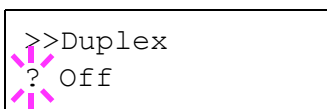
- 1 Press `▷` while `Device Common >` is displayed.
- 2 Press `△` or `▽` repeatedly until `>Error Handling >` appears.

```
>Error Handling>
```

### Duplex (Duplex printing error detection setting)

If the error detection setting for duplex printing has been turned **On**, and you attempt to print onto a paper size and paper type that cannot be used for duplex printing, the **Duplex disabled Press GO** error message will be displayed and printing will stop.

<b>On</b>	<ul style="list-style-type: none"><li>To print onto one-side of the paper only when this message is displayed, press <b>[GO]</b>.</li><li>Press <b>[Cancel]</b> to cancel the printing itself.</li></ul>
<b>Off</b>	<ul style="list-style-type: none"><li>To print onto one-side of the paper.</li></ul>

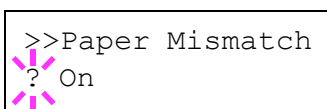


- 1 Press **▷** while **>Error Handling >** is displayed.
- 2 Press **△** or **▽** repeatedly until **>>Duplex** appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.

- 4 Select **On** or **Off** using **△** or **▽**.
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to **Ready**.

### Paper Mismatch (Detection settings for paper size/type errors when the paper source is fixed)

Turn this setting to **Off** if you want to continue printing even if the paper size or type you specified is different from the fixed paper source, or turn it to **On** to have the paper feed error displayed.



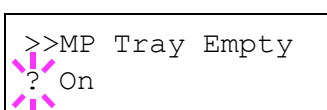
- 1 Press **▷** while **>Error Handling >** is displayed.
- 2 Press **△** or **▽** repeatedly until **>>Paper Mismatch** appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.

- 4 Select **On** or **Off** using **△** or **▽**.
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to **Ready**.

### MP Tray Empty (Warning when the MP tray is empty)

Turn this setting to **On** if you want the error displayed when the MP tray is configured as the default paper source, and there is no paper in the MP tray, or turn it to **Off** not to have the error displayed.

The setting **On** enables the paper-empty message to display when the MP tray is empty.



- 1 Press **▷** while **>Error Handling >** is displayed.
- 2 Press **△** or **▽** repeatedly until **>>MP Tray Empty** appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.

- 4 Select **On** or **Off** using **△** or **▽**.
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to **Ready**.

---

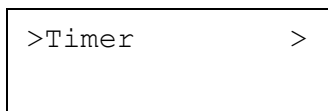
## Timer (Timer setting)

This specifies timer-related settings such as the automatic form-feed timeout and the timeout settings for Auto Sleep.

The options available in Timer are as follows:

- Form Feed Time Out (Automatic form feed timeout setting)
- Sleep Timer (Sleep timer timeout time)
- Auto Error Clear (Auto error clear setting)
- Error Clear Timer (Setting the error clear time)
- Auto Panel Reset (Auto panel reset settings)
- Panel Reset Timer (Setting the panel reset timer)
- Auto Sleep (Setting the sleep timer)

- 1 Press  $\triangleright$  while `Device Common >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>Timer >` appears.

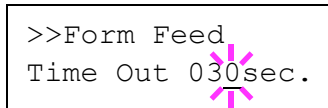


A screenshot of a printer's LCD display showing the text ">Timer >" in a monospaced font. The text is centered on the screen, with a space character before and after the word "Timer".

### Form Feed Time Out (Automatic form feed timeout setting)

If the printer receives no data for a certain period, it will time out and release the current interface. It prints whatever data it has in its buffer and feeds out the page. The default form feed timeout time is 30 seconds.

- 1 Press  $\triangleright$  while `>Timer >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>>Form Feed Time Out` appears.
- 3 Press **[OK]**. A blinking cursor ( `_` ) appears.



A screenshot of a printer's LCD display showing the text ">>Form Feed Time Out 030sec." in a monospaced font. The number "3" in "030" is highlighted with a pink starburst, and a pink blinking cursor is positioned over it. The text is centered on the screen.

- 4 Press  $\triangle$  or  $\nabla$  to increase or decrease the value at the blinking cursor and set the desired time. The timeout time can be between 5 and 495 seconds, in 5-second increments. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left.
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

---

### Sleep Timer (Sleep timer timeout time)

You can adjust the length of time the printer waits before entering Auto Sleep in the absence of data.

The printer reverts to normal operation mode when the printer receives a print job, the operation panel is operated, or one of the exterior covers is opened. The default time is 15 minutes.



**Note** Calibration is automatically executed before the printer reverts to normal operation mode.

- 1 Press  $\triangleright$  while `>Timer >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>>Sleep Timer` appears.
- 3 To change the timeout time, press **[OK]**. A blinking cursor ( $\_$ ) appears.
- 4 Press  $\triangle$  or  $\nabla$  to increase or decrease the value at the blinking cursor and set the desired time. The timer can be set between 1 and 240 minutes. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left.
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

```
>>Sleep Timer
  015 min.
```

---

### Auto Error Clear (Auto error clear setting)

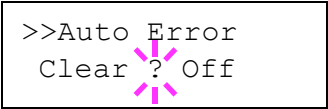
If an error that still allows you to continue printing occurs, the next received data is automatically printed after a set period of time elapses. For example, if the printer is shared over a network as a network printer and one person causes one of the above errors, after the set period of time elapses, the data sent from the next person is printed. The default setting is `Off` (Auto Error Clear disabled).

The auto clear errors are:

- Memory overflow Press GO
- Print overrun Press GO
- KPDL error ## Press GO
- File not found Press GO
- RAM disk error## Press GO
- MemoryCard err## Press GO
- Duplex disabled Press GO
- No multi copies Press GO
- USB memory err## Press GO

For setting the auto error clear recovery time, refer to the next section *Error Clear Timer (Setting the error clear time)*.

- 1 Press  $\triangleright$  while `>Timer >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>>Auto Error Clear` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.



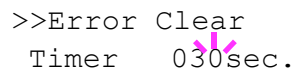
```
>>Auto Error  
Clear ? Off
```

- 4 Select `On` or `Off` using  $\triangle$  or  $\nabla$ .
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

### Error Clear Timer (Setting the error clear time)

If `Auto Error Clear` is set to `On` and a non-fatal error (an error that allows printing to continue) occurs, this setting specifies the time until the error is recovered and printing resumes. The default time is 30 seconds.

- 1 Press  $\triangleright$  while `>Timer >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>>Error Clear Timer` appears.
- 3 Press **[OK]**. A blinking cursor ( `_` ) appears.



```
>>Error Clear  
Timer 030sec.
```

- 4 Press  $\triangle$  or  $\nabla$  to increase or decrease the value at the blinking cursor and set the desired time. The time must be set between 5 and 495 seconds, in 5-second increments. You can use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left.
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

### Auto Panel Reset (Auto panel reset settings)

The Auto Panel Reset function automatically restores the default settings if the panel is not used for a set time. The default setting is `On`.

---

For setting the time until the panel is reset, refer to the next section *Panel Reset Timer (Setting the panel reset timer)*.

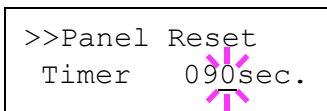


```
>>Auto Panel
Reset ? On
```

- 1 Press  $\triangleright$  while `>Timer >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>>Auto Panel Reset` appears.
- 3 Press **[OK]**. A blinking question mark (?) appears.
- 4 Select `On` or `Off` using  $\triangle$  or  $\nabla$ .
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

### Panel Reset Timer (Setting the panel reset timer)

When Auto Panel Reset is set to `On`, this sets the time until the panel is automatically reset after the user stops using the panel. The default time is 90 seconds.

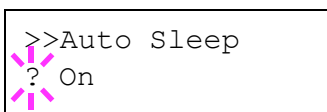


```
>>Panel Reset
Timer 090sec.
```

- 1 Press  $\triangleright$  while `>Timer >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>>Panel Reset Timer` appears.
- 3 Press **[OK]**. The message display shows a blinking cursor (`_`).
- 4 Press  $\triangle$  or  $\nabla$  to increase or decrease the value at the blinking cursor and set the desired time. The time must be set between 005 and 495 seconds, in 5-second increments. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left.
- 5 Press **[OK]**.
- 6 Press **[MENU]**. The display returns to `Ready`.

### Auto Sleep (Setting the sleep timer)

The printer has a sleep timer that is used to conserve power when the printer is not printing, processing, or receiving data. The default setting is `On`.



```
>>Auto Sleep
? On
```

- 1 Press  $\triangleright$  while `>Timer >` is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until `>>Auto Sleep` appears.
- 3 To turn off the sleep timer, press **[OK]**. A blinking question mark (?) appears.
- 4 Select `On` or `Off` using  $\triangle$  or  $\nabla$ .
- 5 Press **[OK]**. The sleep timer is turned off.
- 6 Press **[MENU]**. The display returns to `Ready`.

---

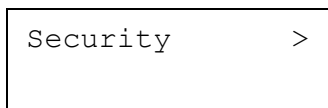
## Security

The security functions can be set up to protect printer operation and the print data.

The options available in Security are as follows:

- ID (Administrator ID input)
- Password (Administrator password input)
- I/F Block (Interface (external device) block setting)
- NetWare (NetWare setting)
- AppleTalk (AppleTalk setting)
- IPP (IPP setting)
- SSL Server (SSL Server setting)
- IPSec (IPSec setting)
- Security Level (Security level setting)

- 1 Press **[MENU]**.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `Security >` appears.



### ID (Administrator ID input)

To use the Security function, you must enter an administrator ID. For information on how to set the administrator ID, refer to *Admin (Administrator settings)* on page 7-63.

- 1 Press  $\triangleright$  while `Security >` is displayed.
- 2 The message display shows `ID` and a blinking cursor (`_`).



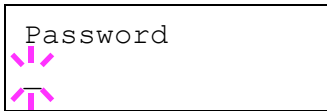
- 3 Press  $\Delta$  or  $\nabla$  to increase or decrease, respectively, the value at the blinking cursor. Enter the specified ID. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left. Enter an ID consisting of between 1 and 16 numbers.
- 4 Press **[OK]**. Proceed to the next step *Password (Administrator Password input)*.



---

## Password (Administrator Password input)

To set up the Security functions, you must enter an administrator ID and administrator password. For information on how to set the administrator password, refer to *Admin (Administrator settings)* on page 7-63.



- 1 When you entered the ID in the previous step (ID (Administrator ID input)), the message display shows `Password` (Administrator password input) and a blinking cursor (`_`).
- 2 Press  $\Delta$  or  $\nabla$  to increase or decrease, respectively, the value at the blinking cursor. Enter the specified password. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left. Enter a password consisting of between 0 (no settings) and 16 numbers.



**Note** If you enter an incorrect administrator ID or password, the message `ID error` or `Wrong Password` appears and the input screen then reappears. Re-enter the password correctly.

- 3 Press **[OK]**. The Security screen appears.

## Interface Block (Interface (external device) block setting)

You can use this to lock and thereby protect the interface. The options available in Interface Block are as follows:

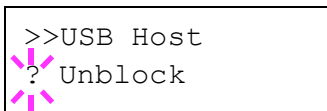
- USB Host (USB memory slot setting)
- USB Device (USB interface setting)



- 1 After entering the administrator ID and password, press  $\Delta$  or  $\nabla$  repeatedly until `>I/F Block >` appears.

### USB Host (USB memory slot setting)

This locks and protects the USB memory slot (USB host). The default setting is `Unblock`.

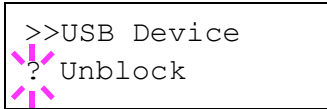


- 1 Press  $\triangleright$  while `>I/F Block >` is displayed. `>>USB Host` appears.
- 2 Press **[OK]**. A blinking question mark (?) appears.
- 3 Select `Block` or `Unblock` using  $\Delta$  or  $\nabla$ .
- 4 Press **[OK]**.
- 5 Press **[MENU]**. The display returns to `Ready`.

---

### USB Device (USB interface setting)

This locks and protects the USB interface. The default setting is Unblock.



- 1 Press **▷** while **>I/F Block >** is displayed. **>>USB Device** appears.
- 2 Press **[OK]**. A blinking question mark (?) appears.
- 3 Select **Block** or **Unblock** using **△** or **▽**.
- 4 Press **[OK]**.
- 5 Press **[MENU]**. The display returns to **Ready**.

---

## NetWare (NetWare setting)

NetWare is a PC-based network operating system specifically for servers.

NetWare is a client-server system that operates by installing the NetWare OS on the server and dedicated client modules (NetWare clients) on the client machines (running MS-DOS, OS/2, Windows, etc.). The basic network layer protocol used is NetWare's own IPX (Internetwork Packet eXchange)/SPX (Sequenced Packet eXchange), but the system also supports TCP/IP.

The feature of the NetWare OS is that it is specifically for servers, unlike general-purpose operating systems such as Windows NT and UNIX. Only the minimum required for server operation can be performed from the NetWare OS console on the server. Server and file management is basically carried out using management tools from the clients. Also, all drivers and protocol stacks are in the form of modules called NetWare Loadable Modules (NLMs), and the ability of NLMs to load and unload flexibly and dynamically is a major advantage of this system.

The default setting is *On*.



**Note** Check with your network administrator when selecting network settings.

```
>NetWare >
```

```
>NetWare >  
? On
```

- 1 After entering the administrator ID and password, press  $\Delta$  or  $\nabla$  repeatedly until `>NetWare >` appears.
- 2 Press **[OK]**. A blinking question mark (?) appears.
- 3 Select *On* or *Off* using  $\Delta$  or  $\nabla$ .
- 4 Press **[OK]**.
- 5 Press **[MENU]**. The display returns to *Ready*.

## Frame Type (Frame type setting)

Sets the NetWare frame type. Frame is a term referring to a set of data that flows through the network. The default setting is *Auto*.

```
>>Frame Type  
? Auto
```

- 1 Press  $\triangleright$  while `>NetWare On >` is displayed. `>>Frame Type` appears.
- 2 Press **[OK]**. A blinking question mark (?) appears.
- 3 Press  $\Delta$  or  $\nabla$  until the desired frame type appears and then press **[OK]**. The message display toggles through the following types:
  - Auto
  - 802.3
  - Ethernet-II
  - 802.2
  - SNAP
- 4 Press **[OK]**.
- 5 Press **[MENU]**. The display returns to *Ready*.

---

## AppleTalk (AppleTalk setting)

AppleTalk is a communications protocol used primarily on Macintosh computers and also refers to the Mac OS network functions.

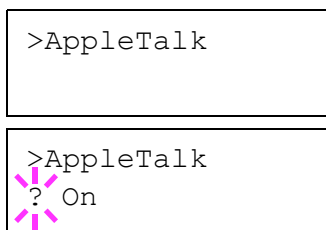
AppleTalk assigns 24-bit network addresses (a 16-bit network section and an 8-bit node address) that are used to identify devices (computers, printers, etc.) on the network.

When the power is turned on, a broadcast signal is sent out onto the network and the addresses and machine names are automatically assigned.

The default setting is *On*.



**Note** Check with your network administrator when selecting network settings.



- 1 After entering the administrator ID and password, press  $\Delta$  or  $\nabla$  repeatedly until *>AppleTalk* appears.
- 2 Press **[OK]**. A blinking question mark (?) appears.
- 3 Select *On* or *Off* using  $\Delta$  or  $\nabla$ .
- 4 Press **[OK]**.
- 5 Press **[MENU]**. The display returns to *Ready*.

## IPP (IPP setting)

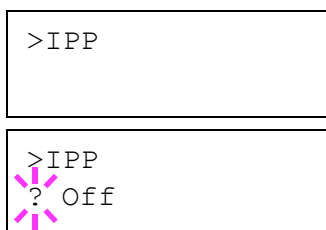
IPP (Internet Printing Protocol) is a standard that uses TCP/IP networks such as the Internet to enable print jobs to be sent between remote computers and printers.

IPP is an extension of the HTTP protocol used to view websites and enables printing to be carried out via routers on printers in remote locations. It also supports the HTTP authentication mechanisms along with SSL server and client authentication as well as encryption.

The default setting is *Off*.



**Note** Check with your network administrator when selecting network settings.



- 1 After entering the administrator ID and password, press  $\Delta$  or  $\nabla$  repeatedly until *>IPP* appears.
- 2 Press **[OK]**. A blinking question mark (?) appears.
- 3 Select *On* or *Off* using  $\Delta$  or  $\nabla$ .
- 4 Press **[OK]**.
- 5 Press **[MENU]**. The display returns to *Ready*.

---

## SSL Server (SSL Server setting)

SSL (Secure Sockets Layer) refers to a protocol used to encrypt information sent and received over a network. SSL can currently be used to encrypt data such as the WWW or FTP files widely used on the Internet so that privacy-related information, credit card numbers, corporate secrets and other confidential information can be sent and received safely.

SSL servers use this protocol to authenticate servers and clients.

The default setting is *Off*.



**Note** Check with your network administrator when selecting network settings.

```
>SSL Server >
```

```
>SSL Server  
? Off
```

- 1 After entering the administrator ID and password, press  $\Delta$  or  $\nabla$  repeatedly until `>SSL Server >` appears.
- 2 Press **[OK]**. A blinking question mark (?) appears.
- 3 Select *On* or *Off* using  $\Delta$  or  $\nabla$ .
- 4 Press **[OK]**.
- 5 Press **[MENU]**. The display returns to *Ready*.

## DES (SSL Server DES setting)

DES (Data Encryption Standard) is a typical symmetric-key cryptographic algorithm that divides data in to 64-bit blocks and then encrypts each block using a 56-bit key.



**Note** Symmetric-key cryptography, because it uses the same key for both encryption and decryption, uses the same key in both directions when encrypted data is exchanged. Accordingly, to prevent the key from being divulged, key transfer and storage must be very strictly managed.

The default setting is *Off*.

```
>>DES  
? Off
```

- 1 Press  $\triangleright$  while `>SSL Server On >` is displayed. `>>DES` appears.
- 2 Press **[OK]**. A blinking question mark (?) appears.
- 3 Select *On* or *Off* using  $\Delta$  or  $\nabla$ .
- 4 Press **[OK]**.
- 5 Press **[MENU]**. The display returns to *Ready*.

---

### 3DES (SSL Server 3DES setting)

3DES (Triple Data Encryption Standard) is a high level of encryption in which DES encryption is repeated threefold.

The default setting is *Off*.

- 1 Press  $\triangleright$  while `>SSL Server On >` is displayed. `>>3DES` appears.
- 2 Press **[OK]**. A blinking question mark (?) appears.



- 3 Select *On* or *Off* using  $\triangle$  or  $\nabla$ .
- 4 Press **[OK]**.
- 5 Press **[MENU]**. The display returns to *Ready*.

### AES (SSL Server AES setting)

AES (Advanced Encryption Standard) was developed to replace DES as the standard encryption as the safety of DES has declined. AES is a block encryption system that uses 128-bit blocks and an SPN structure (a typical structure for repeated encryption) with three selectable key lengths of 128, 192 and 256 bits.

The default setting is *Off*.

- 1 Press  $\triangleright$  while `>SSL Server On >` is displayed. `>>AES` appears.
- 2 Press **[OK]**. A blinking question mark (?) appears.



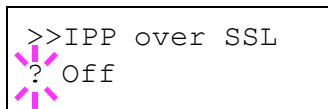
- 3 Select *On* or *Off* using  $\triangle$  or  $\nabla$ .
- 4 Press **[OK]**.
- 5 Press **[MENU]**. The display returns to *Ready*.

### IPP over SSL (SSL Server IPP over SSL setting)

IPP over SSL is an encryption function that uses SSL for communications between users and servers in network printing. To use IPP over SSL, both server and client must support the protocol.

The default setting is *Off*.

- 1 Press  $\triangleright$  while `>SSL Server On >` is displayed. `>>IPP over SSL` appears.
- 2 Press **[OK]**. A blinking question mark (?) appears.



- 3 Select *On* or *Off* using  $\triangle$  or  $\nabla$ .
- 4 Press **[OK]**.
- 5 Press **[MENU]**. The display returns to *Ready*.

### HTTPS (SSL Server HTTPS setting)

HTTPS (HyperText Transfer Protocol Secure) is a protocol that adds SSL data encryption, message authentication and a digital signature function to the HTTP protocol used for data transfer between WWW servers and clients.

S-HTTP is a similar protocol, but HTTPS differs in that it uses SSL.

The default setting is *Off*.



- 1 Press  $\triangleright$  while `>SSL Server On >` is displayed. `>>HTTPS` appears.
- 2 Press **[OK]**. A blinking question mark (?) appears.
- 3 Select *On* or *Off* using  $\triangle$  or  $\nabla$ .
- 4 Press **[OK]**.
- 5 Press **[MENU]**. The display returns to *Ready*.

### IPSec (IPSec setting)

IPSec (IP Security Protocol) is a security protocol adopted as the standard by the IETF for authentication and encryption in the third network layer (IP layer).

It can be used with both IPv4 and IPv6.

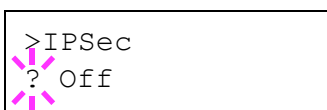


**Note** IPv4 uses 32-bit IP addresses and IPv6 uses 128-bit IP addresses.

The default setting is *Off*.



**Note** Check with your network administrator when selecting network settings.



- 1 After entering the administrator ID and password, press  $\triangle$  or  $\nabla$  repeatedly until `>IPSec` appears.
- 2 Press **[OK]**. A blinking question mark (?) appears.
- 3 Select *On* or *Off* using  $\triangle$  or  $\nabla$ .
- 4 Press **[OK]**.
- 5 Press **[Menu]**. The display returns to *Ready*.

### Security Level (Security level setting)

*Security Level* is primarily a menu used by service representative for maintenance work. There is no need for customers to use this menu.

---

## Admin (Administrator settings)

The administrator setting is a function that identifies the user who can use the printer and can be used to manage users. The administrator is authenticated by the entered administrator ID and password and can then use the printer's security functions.

The options available in Admin are as follows:

- ID (Administrator ID input)
- Password (Administrator password input)
- Change ID (Administrator ID change)
- Change Password (Administrator password change)

- 1 Press **[MENU]**.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `Admin >` appears.



### ID (Administrator ID input)

You can use this to set the administrator ID. The default setting is the numeric part of your printer's model name. The default setting is "1350".

- 1 Press  $\triangleright$  while `Admin >` is displayed.
- 2 The message display shows `ID` and a blinking cursor (`_`).



- 3 Press  $\Delta$  or  $\nabla$  to increase or decrease, respectively, the value at the blinking cursor. Enter the specified ID. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left. Enter an ID consisting of between 1 and 16 numbers.
- 4 Press **[OK]**. Proceed to the next step *Password (Administrator Password input)*.

### Password (Administrator Password input)

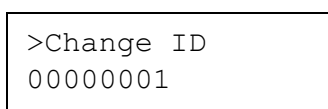
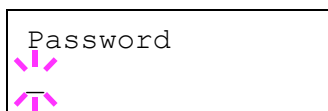
You can use this to set the administrator password. The default setting is the numeric part of your printer's model name. The default setting is "1350".

- 1 When you entered the ID in the previous step (ID (Administrator ID input)), the message display shows `Password` (Administrator password input) and a blinking cursor (`_`).
- 2 Press  $\Delta$  or  $\nabla$  to increase or decrease, respectively, the value at the blinking cursor. Enter the specified password. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left. Enter a password consisting of between 0 and 16 numbers.



**Note** If you enter the incorrect administrator ID or password, the `Wrong ID` or `Wrong Password` message appears and the input screen then reappears. Re-enter the ID or password correctly.

- 3 Once you enter the correct ID and password, the *Admin (change)* screen appears. (E.g.: Where the administrator ID is 00000001)





Each time you press  $\Delta$  or  $\nabla$ , the following settings to be changed appear in succession.

- Change ID
- Change Password



**Note** If a change is required, refer to the procedures in *Change ID (Administrator ID change)* and *Change Password (Administrator Password change)* below.

- 4 Press **[OK]** again. The administrator ID and password are confirmed.
- 5 Press **[MENU]**. The display returns to *Ready*.

## Change ID (Administrator ID change)

You can use this to change the administrator ID.

>Change ID  
001

>Change ID  
|

OK?  
002

- 1 In step 3 in *Password (Administrator Password input)* above, press  $\Delta$  or  $\nabla$  while the *Admin (Change)* screen is displayed until *>Change ID* appears. (E.g.: Where the administrator ID is 001)
- 2 When you press **[OK]**, a blinking cursor (|) appears.
- 3 Press  $\Delta$  or  $\nabla$  to increase or decrease, respectively, the value at the blinking cursor. Enter the ID to be changed. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left. Enter an ID consisting of between 1 and 16 numbers.
- 4 Press **[OK]**. A confirmation screen appears. (E.g.: Where the administrator ID is changed to 002)
- 5 Press **[OK]**. The new administrator ID is confirmed.
- 6 Press **[MENU]**. The display returns to *Ready*.

## Change Password (Administrator Password change)

You can use this to change the administrator password.

>Change Password  
\*\*\*\*\*

>Change Password  
|

OK?  
010

- 1 In step 3 in *Password (Administrator Password input)* above, press  $\Delta$  or  $\nabla$  while the *Admin (Change)* screen is displayed until *>Change Password* appears.
- IMPORTANT** The administrator password is not displayed.
- 2 Press **[OK]**. A blinking cursor (|) appears.
- 3 Press  $\Delta$  or  $\nabla$  to increase or decrease, respectively, the value at the blinking cursor. Enter the password to be changed. Use  $\triangleleft$  and  $\triangleright$  to move the cursor right and left. Enter a password consisting of between 0 and 16 numbers.
- 4 Press **[OK]**. A confirmation screen appears. (E.g.: Where the administrator password is changed to 010)
- 5 Press **[OK]**. The new administrator password is confirmed.
- 6 Press **[MENU]**. The display returns to *Ready*.

---

## Adjust/Maintenance (Adjust/Maintenance selection/setting)

Adjust/Maintenance is used to adjust the print quality and to carry out printer maintenance.

The options available in Adjust/Maintenance are as follows:

- Restart Printer
- Service (for maintenance)

**IMPORTANT** *Service* is primarily a menu used by service representative for maintenance work. There is no need for customers to use this menu.

- 1 Press **[MENU]**.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `Adjust/Maintenance >` appears.

```
Adjust/      >
Maintenance
```

### Restart Printer

The procedure described below resets the printer's temporary conditions, such as the current page orientation, font, etc., set by commands to their default values. Downloaded fonts and macros are deleted from the printer's memory.

- 1 Press  $\triangleright$  while `Adjust/Maintenance >` is displayed.
- 2 Press  $\Delta$  or  $\nabla$  repeatedly until `>Restart Printer` appears.
- 3 Press **[OK]**. A question mark (?) appears.

```
>Restart
Printer ?
```

- 4 Press **[OK]** again. `Self test` appears while the printer is resetting itself, followed by `Ready`.

---

## Service (for maintenance)

The options available in Service are as follows:

- Print Status Page (Printing the service status page)
- Print Network Status Page (Printing the network status page)
- Print Test Page
- Developer (Initializing the developer unit)

**IMPORTANT** Service is primarily a menu used by service representative for maintenance work. There is no need for customers to use this menu.

- 1 Press  $\triangleright$  while Adjust/Maintenance  $>$  is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until  $>$ Service  $>$  appears.

$>$ Service  $>$

### Print Status Page (Printing the service status page)

The service status page contains printer settings information that is more detailed than the standard status page and is therefore mostly for service purposes. However, there is a great deal of information on the service status page that may be useful to you.

- 1 Press  $\triangleright$  while  $>$ Service  $>$  is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until  $>>$ Print Status Page appears.
- 3 Press **[OK]**. A question mark (?) appears.

$>>$ Print  
Status Page ?

- 4 Press **[OK]** again. Processing appears and a service status page is printed out.
- 5 When printing ends, the display returns to Ready.

### Print Network Status Page (Printing the network status page)

The network status page contains detailed information on the network settings. This is primarily used for maintenance by service representative, but it contains information that may also be useful to you.

- 1 Press  $\triangleright$  while  $>$ Service  $>$  is displayed.
- 2 Press  $\triangle$  or  $\nabla$  repeatedly until  $>>$ Print Network Status Page appears.
- 3 Press **[OK]**. A question mark (?) appears.

$>>$ Print Network  
Status Page ?

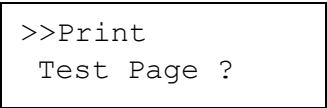
- 4 Press **[OK]** again. Processing appears and a network status page is printed out.
- 5 When printing ends, the display returns to Ready.

### Print Test Page

The test page is printed to check the effectiveness of printer adjustments. This is primarily used for maintenance by service representative, but it contains information that may also be useful to you.

- 1 Press  $\triangleright$  while  $>$ Service  $>$  is displayed.

---



>>Print  
Test Page ?

- 2 Press  $\Delta$  or  $\nabla$  repeatedly until >>Print Test Page appears.
- 3 Press **[OK]**. A question mark (?) appears.
- 4 Press **[OK]** again. Processing appears and a test page is printed out.
- 5 When printing ends, the display returns to Ready.

#### **Developer (Initializing the developer unit)**

The replaced developer can be automatically fill up the toner using this menu when a toner container is installed and the printer is turned on. This is primarily used for maintenance by service representative.



# 8 Option

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This chapter explains the options for this printer.

<b>General Information</b>	<b>8-2</b>
<b>Expansion Memory Modules</b>	<b>8-3</b>
<b>Paper Feeder (PF-100)</b>	<b>8-5</b>
<b>CompactFlash (CF) Card</b>	<b>8-6</b>
<b>USB Flash Memory</b>	<b>8-6</b>

---

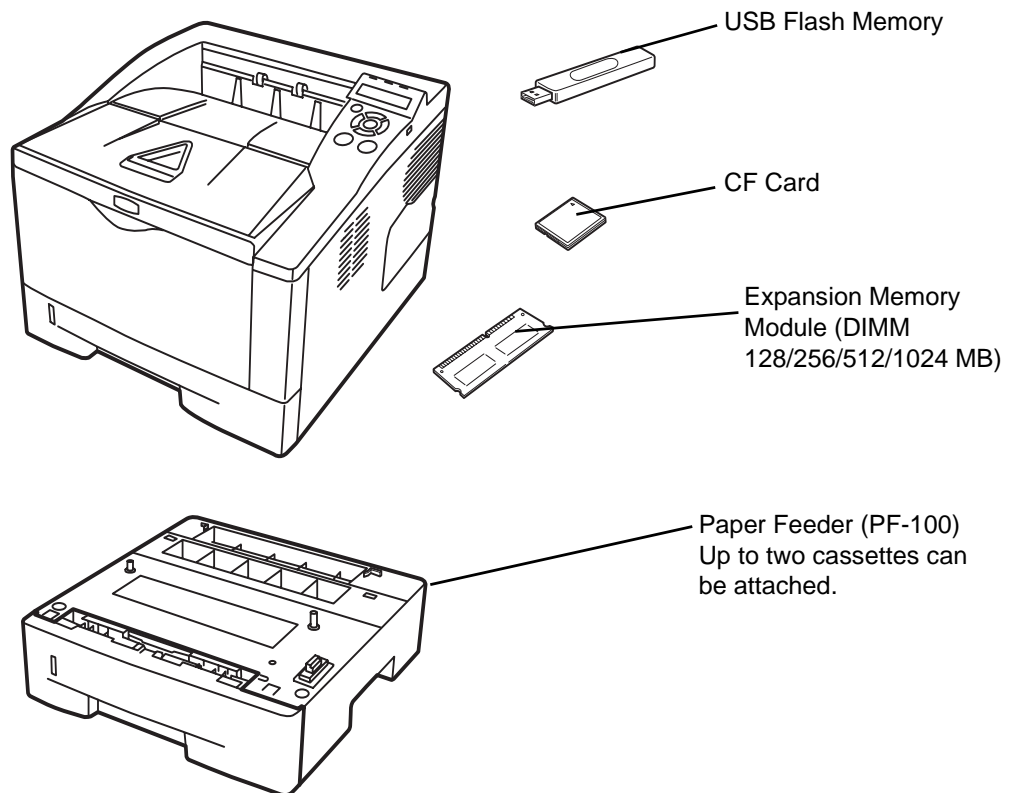
## General Information

The printers have the following options available to satisfy your printing requirements.



**Note** Install the memory module before installing the optional paper feeder (PF-100).

For instructions on installing individual options, refer to the documentation included with the option. Some options are explained in the following sections.



---

## Expansion Memory Modules

To expand the printer memory for more complex print jobs and faster print speed, you can plug in optional memory module (dual in line memory module) in the memory slot provided on the printer main controller board. You can select additional memory module from 128, 256, 512, or 1024 MB. The maximum memory size is 1152 MB.



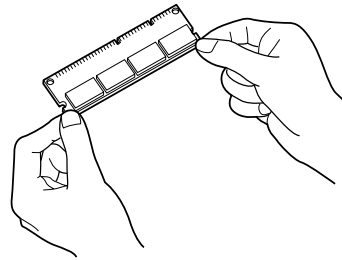
**Note** The expansion memory should only be installed by your service technician. We shall not be liable for any damages caused by improper installation of expansion memory.

## Precautions for Handling the Printer's Main Controller Board and Memory Module

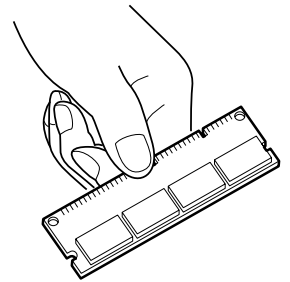
To protect electronic parts, discharge static electricity from your body by touching a water pipe (faucet) or other large metal object before handling the memory module. Or, wear an antistatic wrist strap, if possible, when you install the memory module.

Always hold the main controller board or a memory module by its edges as shown below to avoid damaging electronic parts.

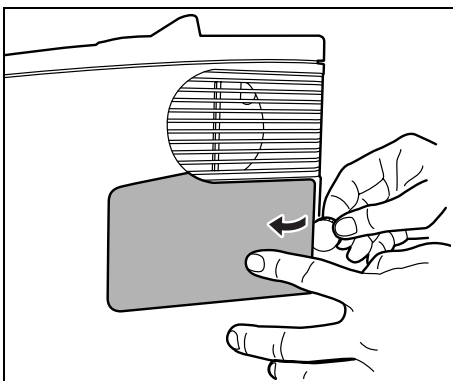
Correct



Incorrect

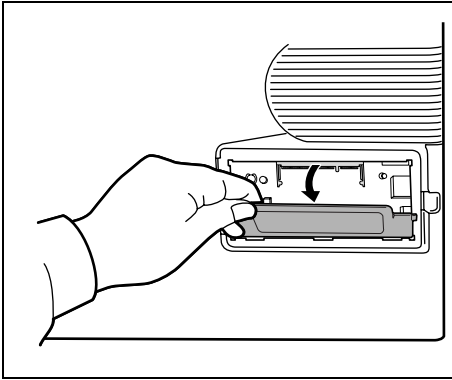


## Installing the Memory Module

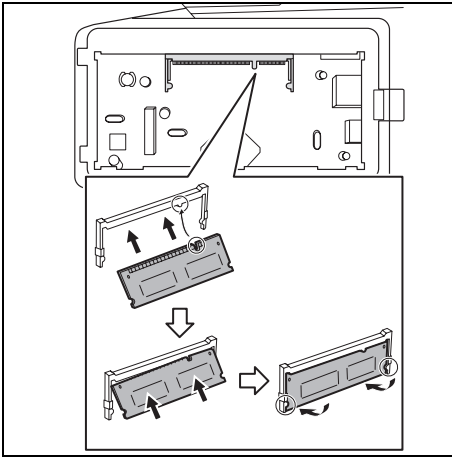


- 1 Turn off the printer and disconnect the power cord and printer cable.
- 2 Remove the right cover with a piece of metal similar to coin.





- 3 Remove the fixing tape in case of the first installation. Then, remove the memory slot cover as shown in the figure.



- 4 Remove the memory module from its package.
- 5 Aligning the cutouts of the memory module with the matching keys of the socket, carefully plug the memory module into the memory socket until it clicks in place. Then, push down the memory module to secure.



**CAUTION** Before inserting a memory module in the printer, make sure that the printer is switched off.

- 6 Push down the memory module to secure.
- 7 Reinstall the memory slot cover and the right cover.

## Removing a Memory Module

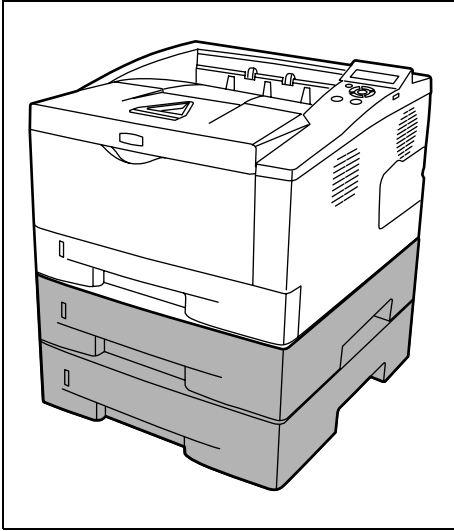
To remove a memory module, remove the right cover and the memory slot cover from the printer. Then, carefully push out the two socket clamps. Ease the memory module out of the socket to remove.

## Verifying the expanded memory

To verify that the memory module is working properly, test it by printing a status page.

---

## Paper Feeder (PF-100)



The PF-100 allows you to add two more paper cassette to the bottom of the printer for continuous feeding of a large volume of paper. Each paper cassette can hold up to approximately 250 sheets of ISO A4, ISO A5, JIS B5, Letter, or Legal size (80g/m<sup>2</sup>) paper. This feeder is attached at the bottom of the printer as shown on the left.



**CAUTION** Before attaching the PF-100 to the printer, make sure that the printer is switched off.

---

## CompactFlash (CF) Card

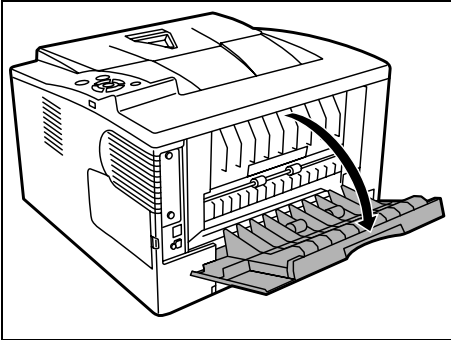
The printer is equipped with a slot for a CF card with the maximum size of 256MB. A CF card is useful for storing fonts, macros, and overlays.

- 1 Turn off the printer and disconnect the power cord and printer cable.

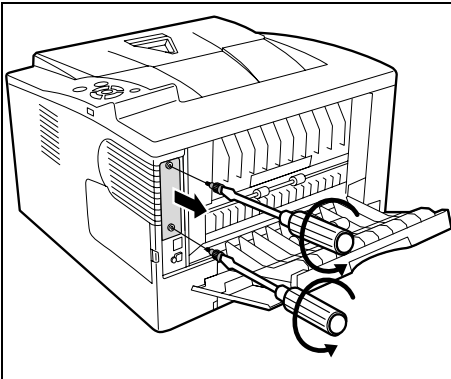


**CAUTION** Before inserting a CF card in the printer, make sure that the printer is switched off.

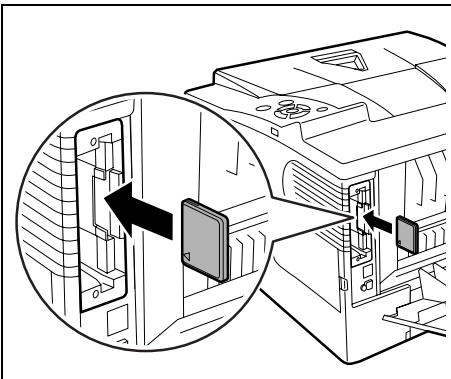
- 2 Open the rear cover.



- 3 Remove the screws and the optional interface slot cover.



- 4 Insert the CF Card.



- 5 Secure the optional interface slot cover with the screws removed in step 3.

- 6 Connect the power cord and printer cable and turn on the printer.

## USB Flash Memory

See your dealer for purchasing information of this optional device that are best suited for use with this printer.

# 9 Computer Interface

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This chapter contains explanations on the following topics:

<b>General Information</b>	<b>9-2</b>
<b>USB Interface</b>	<b>9-2</b>
<b>Network Interface</b>	<b>9-3</b>

---

## General Information

This chapter explains the connector specifications of USB and network interfaces.

## USB Interface

This printer supports the Hi-Speed USB. USB (Universal Serial Bus) interface specifications are as follows.

### Specifications

#### Basic specification

Complies with the Universal Serial Bus Specification Revision 2.0.

#### Connectors

Printer: B-type receptacle (female) with upstream port

Cable: B-type plug (male)

#### Cable

Use a shielded cable that complies with USB 2.0 (Hi-Speed USB) and not longer than 5 meters (16 feet).

#### Transfer Mode

High speed (480 Mbps maximum)

Full-Speed (12 Mbps maximum)

#### Power Control

Self-power device

## Interface Signals

### USB Connector Pin Assignment

Pin	Signal	Description
1	Vbus	Power supply (+5 V)
2	D-	Data transmission
3	D+	Data transmission
4	GND	Signal ground
Shell	—	Shield

---

## Network Interface

### Features

#### Automatic IP address resolution

This feature is compatible with the DHCP/DHCPv6 protocol and allows the printer to automatically receive IP addresses from the DHCP/DHCPv6 server.

#### Management using Web browsers

HTTP pages are incorporated in to the interface, so that a web browser can be used to monitor and change a range of settings. The settings can be password-protected.

#### Support for a range of protocols

The SMTP, POP3, SSL, SNMP, IPv6 and NetBIOS over TCP/IP protocols are supported for easier printer management and more robust security.

#### Support for IEEE 802.1x

The interface supports EAP-TLS and PEAP authentication.

#### Supports IPv6

Supports IPv6, which is based on IPv4 with improvements, such as increased manageable address space, additional security functions and priority based data transmission.

#### Supports IPSec

Supports IPSec, the security protocol that authenticates and encrypts in the network layer (IP layer).

### Specifications

#### Connector

10 Base-T/100 Base-TX

#### Operating Systems

Windows 2000/XP/Vista/Server2003, MacOS 10.x

#### Network protocols

- IPv6: HTTP, LPD, FTP, IPP, RawPort, ICMPv6, LLTD, SNTP, DHCPv6, SMTP, POP3, DNS, SNMPv1/v2c/v3, WSD
- IPv4: HTTP, HTTPS, LPD, FTP, IPP, RawPort, ICMP, DHCP, SMTP, POP3, SNTP, DNS, WINS, NetBIOS over TCP/IP, SNMPv1/v2c/v3, Apple Bonjour Compatible, IPPS, LLTD, WSD
- Etc.: IPX/SPX, NetWare (NDS/Bindery), AppleTalk, NetBEUI

#### Security Protocols

SSL/TLS (HTTPS, IPPS), SNMPv3, EAP-TLS, PEAP, AH, ESP

#### Operation Environment

10 to 35 °C (50 to 95 °F), 20-80% RH (condensation-free)

---

### **EMI Countermeasures**

VCCI Class B, FCC Class B (U.S.), CE (Europe)

**IMPORTANT** When IPv6 functions are used, the devices used on the network (routers, PCs, etc) must support IPv6.

# 10 Appendix

---

This section lists the following information of this printer.

<b>Specifications</b>	<b>10-2</b>
<b>Environmental Standard Requirements</b>	<b>10-4</b>



## Specifications



**Note** These specifications are subject to change without notice.

Item		Description
Type		Desktop
Printing Method		Electrophotography, laser scan
Paper Weight	Cassette	60 to 120 g/m <sup>2</sup> (Duplex: 60 to 105 g/m <sup>2</sup> )
	MP Tray	60 to 220 g/m <sup>2</sup>
Paper Type	Cassette	Plain, Preprinted, Bond, Recycled, Rough, Letterhead, Color (Colour), Prepunched, High Quality, Custom 1 to 8
	MP Tray	Plain, Transparency, Preprinted, Labels, Bond, Recycled, Rough, Vellum, Letterhead, Color (Colour), Prepunched, Envelope, Cardstock, Thick paper, High Quality, Custom 1 to 8
Paper Size	Cassette	A4, JIS B5, A5, Folio, Legal, Letter, Oficio II, Statement, Executive, A6, B6, ISO B5, Envelope C5, 16K, Custom (105 × 148 to 216 × 356mm (4-1/8 × 5-13/16 to 8-1/2 × 14 inches))
	Paper Feeder	A4, JIS B5, A5, Folio, Legal, Letter, Oficio II, Executive, B6, ISO B5, Envelope C5, 16K, Custom (148 × 210 to 216 × 356mm (5-13/16 × 8-5/16 to 8-1/2 × 14 inches))
	MP Tray	A4, JIS B5, A5, Folio, Legal, Letter, Oficio II, Statement, Executive, A6, B6, ISO B5, Envelope C5, Envelope #10, Envelope #9, Envelope #6-3/4, Envelope Monarch, Envelope DL, Hagaki, Ofuku Hagaki, 16K, Yokei 2, Yokei 4, Custom (70 × 148 to 216 × 356mm (2-13/16 × 5-13/16 to 8-1/2 × 14 inches))
Magnification ratio		25 to 400 %, 1 % increments
Printing Speed	Simplex	A4/Letter: 30 ppm/32 ppm
		A5: 17 ppm
	Duplex	A4/Letter: 17 ppm
First Print Time (A4, feed from Cassette)		6 seconds or less
Warm-up Time (22°C/71.6°F, 60 %RH)	Power on	20 seconds or less (120 V AC), 19 seconds or less (220 to 240 V AC)
	Sleep	15 seconds or less (120 V AC), 14 seconds or less (220 to 240 V AC)
Paper Capacity	Cassette (1 to 3)	250 sheets (80 g/m <sup>2</sup> , 11 × 8 1/2"/A4 or smaller)
	MP Tray	50 sheets (80 g/m <sup>2</sup> , 11 × 8 1/2"/A4 or smaller)
Output Tray Capacity	Simplex	250 sheets (80 g/m <sup>2</sup> )
	Duplex	200 sheets (80 g/m <sup>2</sup> )
Continuous printing		1 to 999 sheets
Resolution		Fine 1200 mode, Fast 1200 mode, 600 dpi, 300 dpi
Operating Environment	Temperature	10 to 32.5°C/50 to 90.5°F
	Humidity	15 to 80 %
	Altitude	2,500 m/8,202 ft maximum
	Brightness	1,500 lux maximum
Controller		PowerPC 440F5/500 MHz

Item		Description
Supported OS		Windows 2000 Service Pack 2 or later, Windows Server 2003, Windows XP, Windows Vista, Mac OS X 10.x
Interface		Hi-Speed USB: 1 Network: 1 (10BASE-T/100BASE-TX) KUIO-W slot: 1
PDL		PRESCRIBE
Emulation		PCL 6, KPDL, KPDL (AUTO), Line Printer, IBM Proprinter, DIABLO 630, EPSON LQ-850
Memory	Standard	128 MB
	Maximum	1152 MB
Dimension (W x D x H)		375 x 393 x 267 mm 14 3/4 x 15 1/2 x 10 1/2"
Weight (without toner container)		12 kg/26.5 lb
Power Requirements		120 V AC, 60 Hz, 7.5 A/220 to 240 V AC, 50/60 Hz, 3.9 A
Power Consumption	Maximum	910 W (U.S.A./Canada), 967 W (European countries)
	During printing	532 W (U.S.A./Canada), 484 W (European countries)
	During standby	11 W (U.S.A./Canada), 12 W (European countries) when EcoFuser is On.
		67 W (U.S.A./Canada), 75 W (European countries) when EcoFuser is Off.
	Sleep mode	6.9 W (U.S.A./Canada), 7.1 W (European countries)
Power off	0 W	
Options		Expanded memory, Paper Feeder (250-sheet x 2)

---

## Environmental Standard Requirements

This machine conforms to the following environmental standard requirements.

- Time for switching to Sleep mode (default): 15 minutes
- Duplex Printing: Standard Equipment
- Durable paper for feeding: Paper made of 100 % recycled paper



**Note** Contact your dealer or service representative for recommended paper types.

# Glossary

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## **Additional memory**

An additional memory (optional) is used for increasing the memory capacity of this machine. For DIMM that can be used in this machine, contact your service technician.

## **AppleTalk**

AppleTalk offers file sharing and printer sharing and it also enables you to utilize application software that is on another computer on the same AppleTalk network.

## **Default Gateway**

This indicates the device, such as a computer or router, that serves as the entrance/exit (gateway) for accessing computers outside of the network that you are on. When no specific gateway is designated for a destination IP address, data is sent to the host that is designated as the Default Gateway.

## **DHCP (Dynamic Host Configuration Protocol)**

This is a protocol that automatically resolves the IP address, Subnet Mask and Gateway address on a TCP/IP network. Use of DHCP minimizes the load of network administration, especially on network environments with a large number of client computers where it is not specifically necessary to assign a separate IP address to each client, including printers.

## **dpi (dots per inch)**

This indicates the number of dots printed per inch (25.4 mm) as a unit for expressing resolution.

## **EcoPrint**

This is a printing mode that reduces toner consumption. Pages printed in the EcoPrint mode are lighter than pages printed in the normal mode.

## **Emulation**

This refers to emulation of other manufacturers' printers. The printer emulates operation of the following printers: PCL 6, KPDL, KPDL (AUTO), Line Printer, IBM Proprinter, DIABLO 630 and EPSON LQ-850.

## **Form Feed Timeout**

While data is being sent to a printer, some pauses may occur. At this time, the printer waits for the next data without making a page break. Form feed timeout is a function to wait only a preset amount of time before it executes an automatic page break. After the waiting period begins, once the designated amount of time is exceeded, the printer will automatically process the currently received data and print it out. If the machine has received no print data for the last page, the printer ends processing of that job without outputting paper.

---

## **IP Address (Internet Protocol Address)**

The Internet Protocol address is a unique number that represents a specific computer in a network. The format of an IP Address is four numbers separated by dots, e.g. 192.168.110.171. Each number should be a decimal between 0 and 255.

## **KPDL**

KPDL is Kyocera's implementation of the PostScript page description language Level3.

## **MP Tray**

This tray is used instead of the cassette when printing on envelopes, postcards, transparency sheets, and labels.

## **NetBEUI (NetBIOS Extended User Interface)**

An enhanced version of the NetBIOS protocol, it enables the utilization of more advanced functions on small-scale networks than do other protocols such as TCP/IP, etc.

## **Outline font**

With outline fonts, character outlines are represented with numerical expressions and fonts can be enlarged or reduced in different ways by changing the numeric values of those expressions. Printing remains clear even if you enlarge fonts, since the characters are defined with outlines represented with numerical expressions. You can specify the font size in steps of 0.25 points up to 999.75 points.

## **PostScript**

This is a page description language developed by Adobe Systems, Inc. It enables flexible font functions and highly-functional graphics, allowing higher quality printing.

## **PPM (prints per minute)**

This indicates the number of printouts made in one minute.

## **Printer driver**

The printer driver makes it possible for you to print data created using application software. The printer driver for the printer is contained on the CD-ROM supplied with the printer. Install the printer driver on the computer connected to the printer.

## **Sleep mode**

This mode is provided to save power. It is activated when the machine is not used for a preset period of time. In this mode, power is reduced to the minimum. The default setting can be changed.

## **Status page**

This lists machine conditions, such as the machine's memory, the total number of prints and paper source settings. You can print the status page from the operation panel.

---

### **Subnet Mask**

This is a 32-bit numerical value that defines which bits of the IP address specify the network address and which specify the host address.

### **TCP/IP (Transmission Control Protocol/Internet Protocol)**

TCP/IP is a suite of protocols designed to define the way computers and other devices communicate with each other over a network.

### **USB (Universal Serial Bus)**

An interface standard for low to middle speed serial interfaces. This printer supports Hi-Speed USB. The maximum transfer rate is 480 Mbps and the maximum cable length is 5 meters (16 feet).



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