

# Printing System (K)

## INSTRUCTION HANDBOOK <Set-up Edition>

ALWAYS read this Instruction Handbook thoroughly before use. After reading, maintain it in good condition and keep it together with the Instruction Handbook for your copier.



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## About this Instruction Handbook

This Instruction Handbook <Set-up Edition> is meant to be read when the Printer Board is installed in your copier and the copier is to be used mainly as a local printer. It contains explanations on set-up procedures for using the copier as a printer.

As the required set-up and configurations for the printer may differ depending upon the environment in use in the connected computer, please read those sections related to your specific computer environment and perform the appropriate set-up and configuration explained there.

This handbook should also be read and used together with the On-Line Manual that is on the included CD-ROM. That On-Line Manual contains explanations on printing, performing certain settings and configurations, and the procedures required at your computer.

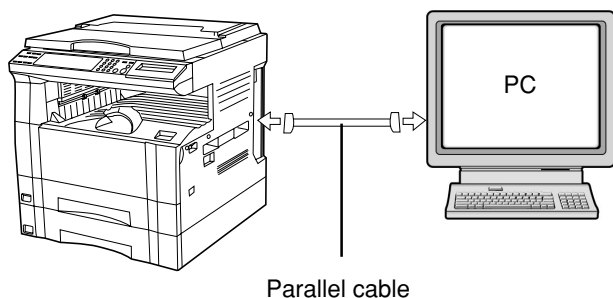
When there is a reference in this Instruction Handbook to a **15 ppm copier**, it refers to those machine with a copy speed of 15 pages/minute (w/ digital indicator display) and when there is a reference to a **20 ppm copier**, it refers to those machine with a copy speed of 20 pages/minute (w/ full message display).

## About the On-Line Manual

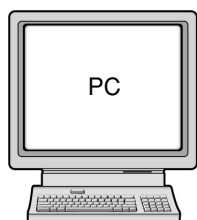
The On-Line Manual for this Instruction Handbook is a PDF (Portable Document Format) file and is located on the CD-ROM that is included with this product. The Adobe Acrobat Reader software is required in order to access the On-Line Manual. The installer for Adobe Acrobat Reader is also included on the CD-ROM so the software can be installed onto your hard disk from there.

## Getting connected

When connecting the printer directly to your computer (with a parallel cable) ...



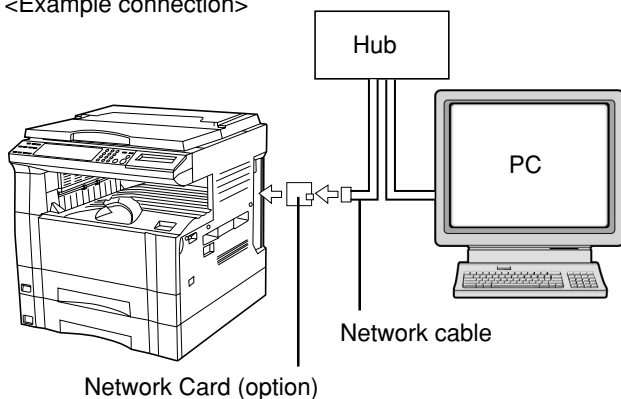
- ① Connecting the printer directly to your computer with a parallel cable ..... **Page 5**



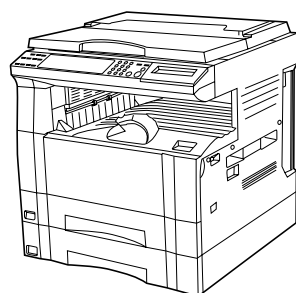
- ② Installing the printer driver into your computer ... Refer to the On-Line Manual

When connecting the printer to a network (the optional Network Card must be installed)...

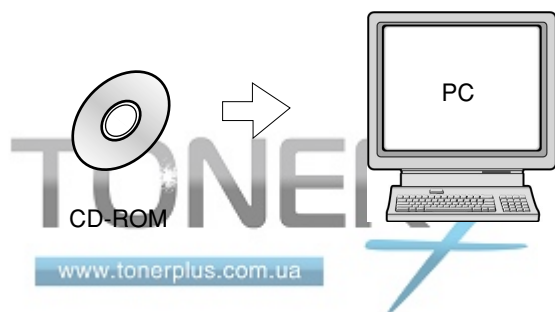
<Example connection>



- ① Connecting a network cable (100Base-TX, 10Base-T, etc.) to the printer ..... **Page 5**



- ② Performing network (TCP/IP) settings at the printer ..... **Page 6**



- ③ Installing the printer driver into your computer ... Refer to the On-Line Manual

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# 1. Preparations

## 1-1 Accessories

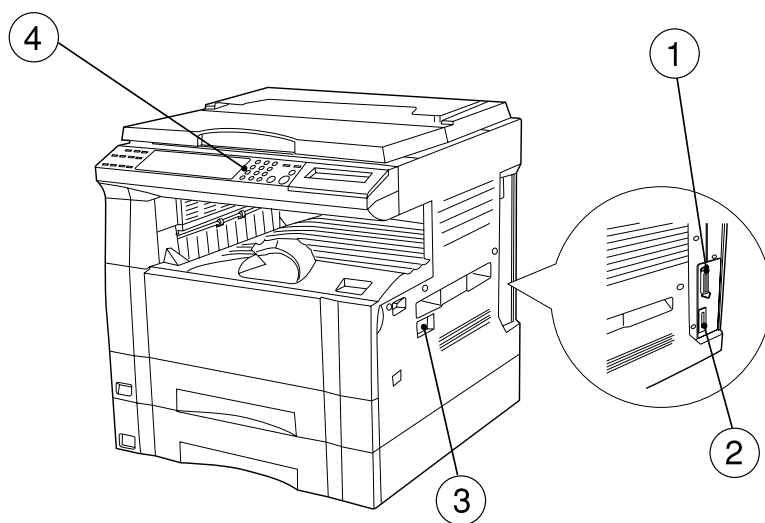
- 1 CD-ROM
- This Instruction Handbook

## 1-2 Required items

- Parallel cable

## 1-3 Name of parts (main body)

- ① Parallel interface connector  
Connect a bi-directional parallel cable here.
- ② Memory Card (CompactFlash) slot  
Insert the optional Memory Card (CompactFlash) here.
- ③ Main switch  
Turn this switch ON ( | ) first, prior to using the printer. Always turn this switch OFF ( O ) when connecting the printer cable, etc.
- ④ Operation panel  
Use when performing settings, etc., at the printer itself.

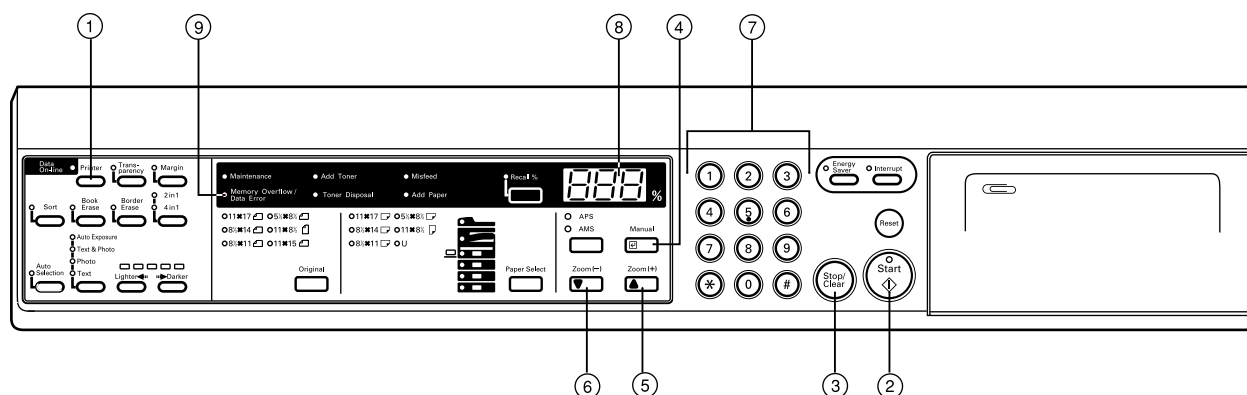


<This illustration above shows the 15 ppm copier complete with the Optional drawer.>

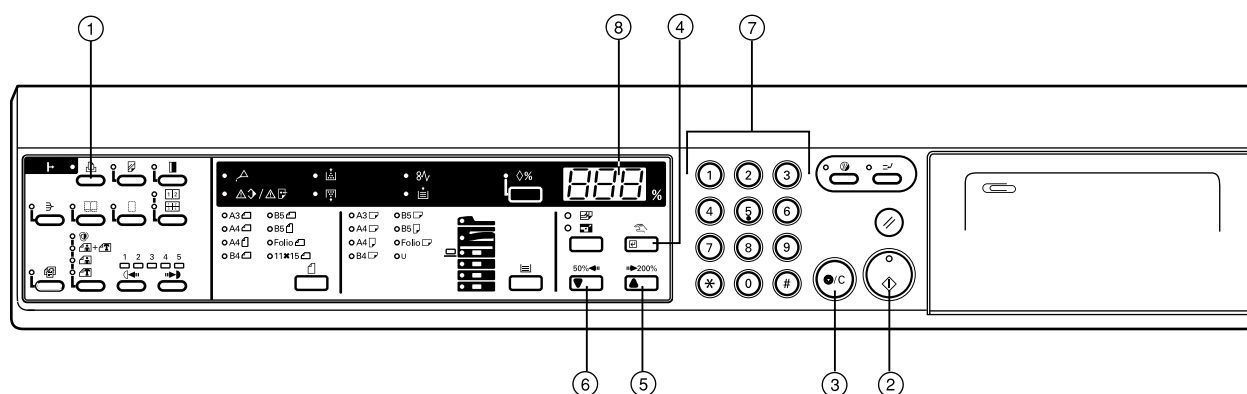


## 1-4 Name of parts (operation panel)

### 15 ppm copier - Inch specifications



### 15 ppm copier - Metric specifications



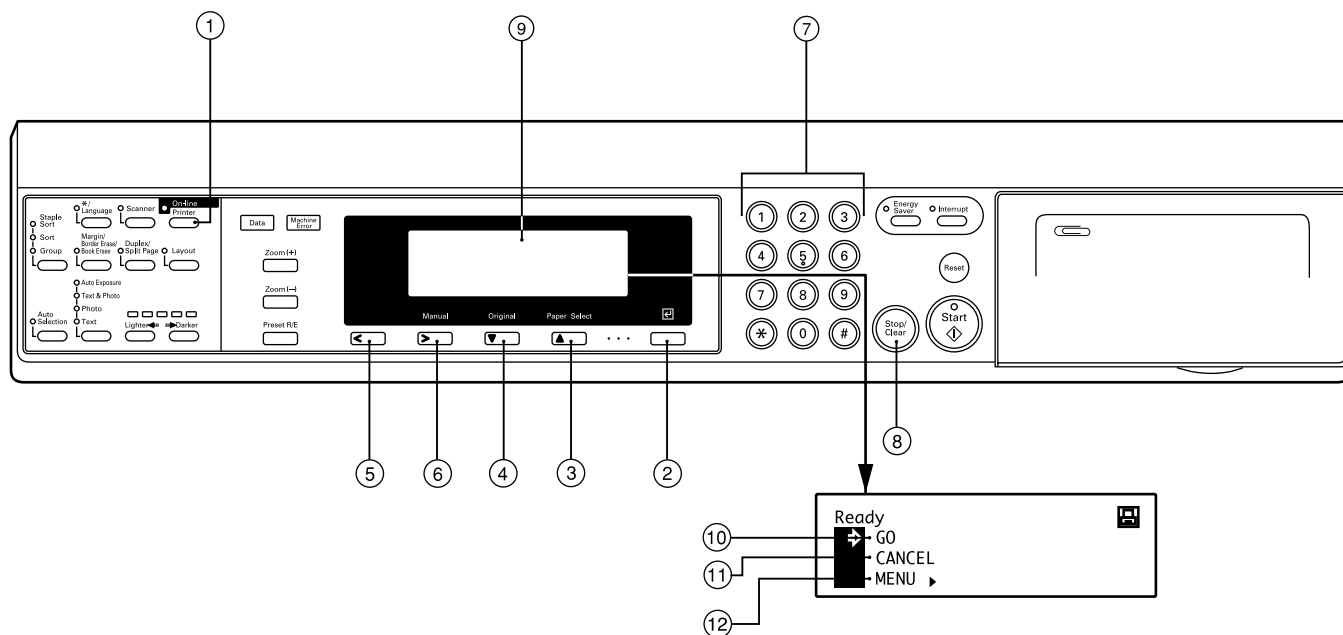
- ① Printer key  
Press this key when you want to switch to the printer mode.
- ② Start [GO] key  
Press this key when you want to restart printing, as well as when you want to initiate the operation for form feed. This key is also used to switch the printer on- and off-line. When the printer is on-line, the Data On-line indicator will be lit.
- ③ Stop/Clear [CANCEL] key  
Press this key when you want to stop printing, when you want to cancel a setting midway through it, or when you want to clear an error message.
- ④ Enter [Manual] key  
Press this key when you want to register a setting.
- ⑤ ▲ [Zoom (+)] key  
Press this key when you want to scroll up among the various functions, settings, etc.
- ⑥ ▼ [Zoom (-)] key  
Press this key when you want to scroll down among the various functions, settings, etc.
- ⑦ Numeric keys  
Press these keys when you want to enter a desired value directly.
- ⑧ Copy quality/magnification display  
Indicates the status of the printer as well as other settings. "P00" will be displayed when the machine is in the printer mode.
- ⑨ Memory Overflow / Data Error indicator  
Flashes when a printing error has occurred. In this case, "Prt" and "E##" will alternately flash as well in the copy quality/magnification display. Press the Printer key and check the cause of the error. For more detailed information, refer to "3-2 When an error code or error messages appears..." on page 10.

- **The copy quality/magnification display in the printer mode**  
To enter the printer mode, press the Printer key. The indications that appear in the copy quality/magnification display when the machine is in the printer mode are explained in the table below.

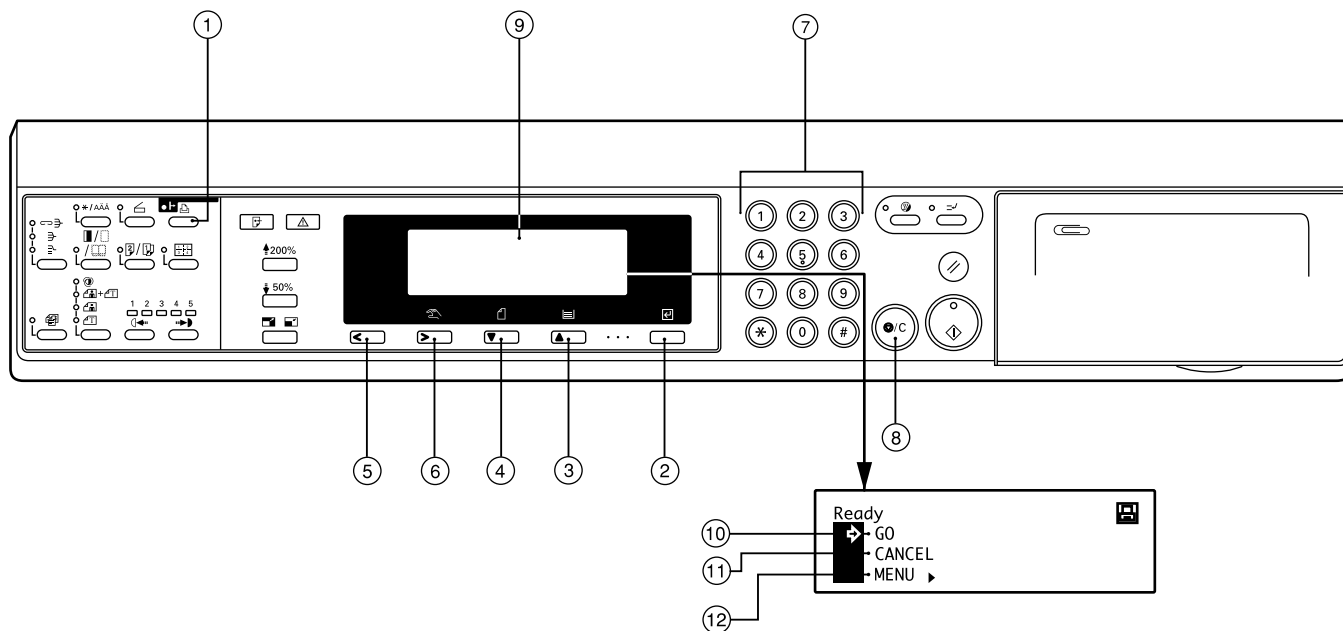
Indication	Meaning
P00	This is the initial display when the machine is in the printer mode.
P##	Indicates the menu number of printer-related settings. The actual menu number of the selected setting will be displayed in place of the ##. For more detailed information, refer to the On-Line Manual.
Prt ↕ E##	"Prt" and "E##" will alternately flash when a printer error occurs. (The corresponding error number will be displayed in place of the ##.) For more detailed information, refer to "3-2 When an error code or error messages appears..." on page 10.
Prt ↕ ##	"Prt" and a 2-digit number will alternately flash to indicate the current status of the printer. The meaning of the flashing numbers is as follows: 01: The printer is in the middle of a self test. This will appear when the main switch is turned ON ( ) as well as when the printer is reset. 02: The printer is in the process of changing settings. Wait until it has completed the operation. 10: The printer is in the middle of processing data. 15: The printer is waiting for data. 20: A form feed time-out has occurred. 25: The printer is in the process of canceling data.

## 1. Preparations

### 20 ppm copier - Inch specifications



### 20 ppm copier - Metric specifications



- ① Printer key  
Press this key when you want to switch to the printer mode.
- ② Enter key  
Press this key when you want to register a setting.
- ③ ▲ (Cursor) key  
Press this key when you want to scroll up among the various functions, settings, etc.
- ④ ▼ (Cursor) key  
Press this key when you want to scroll down among the various functions, settings, etc.
- ⑤ < (Cursor left) key  
Press this key when you want to scroll left during a setting procedure.
- ⑥ > (Cursor right) key  
Press this key when you want to scroll right during a setting procedure.
- ⑦ Numeric keys  
Press these keys when you want to enter a desired value directly.
- ⑧ Stop/Clear key  
Press this key when you want to cancel a setting midway through it.

- ⑨ Message display  
Indicates the status of the printer as well as other settings.

#### ● The message display in the printer mode

To enter the printer mode, press the Printer key. The message display will change to the corresponding display for the printer mode.

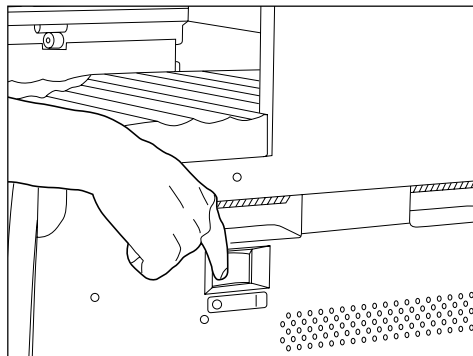
- ⑩ "GO" command  
Select this command when you want to start printing, as well as when you want to initiate the operation for form feed. This key is also used to switch the printer on- and off-line. When the printer is on-line, the Data On-line indicator will be lit.
- ⑪ "CANCEL" command  
Select this command when you want to stop printing or you want to clear an error message.
- ⑫ "MENU" command  
Select this command when you want to change the printer default settings.

## 2. Set-up

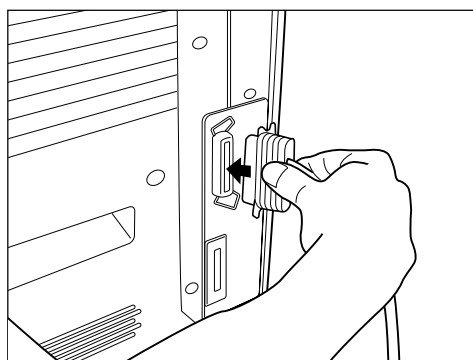
### 2-1 Connecting the printer cable

**CAUTION:** ALWAYS turn the main switch to the printer OFF (O) BEFORE connecting the printer cable.

- 1 Turn the main switch located on the right side of the printer OFF (O) and then turn the power off to your computer as well.

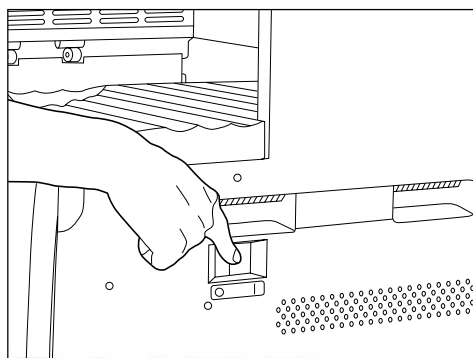


- 2 Connect the printer cable to the parallel interface connector located at the back of the right side of the printer.  
\* If the optional Network Card is installed in the printer, connect the printer cable (100BASE-TX, etc.) and perform the appropriate network settings. Refer to "2-3 Network (TCP/IP) settings" on page 6.



- 3 Connect the other end of the printer cable to the parallel interface connector on your computer.

- 4 Turn the main switch to the printer back ON (I).



### 2-2 Installing the software

Perform the following procedure to install into your computer the printer driver and other software that is appropriate to the operating system in use in that computer. For information on installing the required software, refer to the On-Line Manual that is located on the CD-ROM that is included with this product.

## 2. Set-up

### 2-3 Network (TCP/IP) settings

When the optional Network Card is installed and this machine is to be used as a network printer, it is necessary to set the corresponding IP address for the printer.

\* To perform this setting for the 20 ppm copier, proceed to page 7.

#### Notes

- The IP address that should be registered here will differ depending upon your network environment. Check with your network administrator BEFORE performing this setting.
- If you are using a DHCP server to automatically configure the IP address, this setting will not be necessary because DHCP server configuration is already enabled as the factory default setting.

#### <15 ppm copier>

\* To cancel the setting midway through it, press the Stop/Clear key.

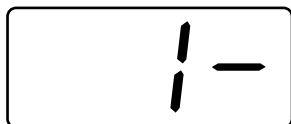
- 1** Press the Printer key. The machine will switch to the printer mode and "P00" will appear in the copy quality/magnification display.



- 2** Use the numeric keys to enter "2" then "3", and then press the Enter key. The display will change to "P23" (the TCP/IP ON/OFF setting).



- 3** Use the ▲ and ▼ keys to select "1" (On) and then press the Enter key. The selected setting will flash twice and will then be registered.



- 4** Use the numeric keys to enter "2" then "4", and then press the Enter key. The display will change to "P24" (the DHCP ON/OFF setting).



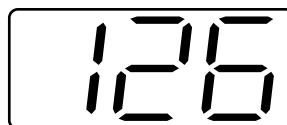
- 5** Use the ▲ and ▼ keys to select "2" (Off) and then press the Enter key. The selected setting will flash twice and will then be registered.



- 6** Use the numeric keys to enter "2" then "5", and then press the Enter key. The display will change to "P25" (the IP address setting).



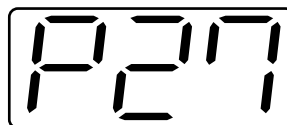
- 7** The numeric keys will be used to enter the 12-digit IP address in blocks of 3 digits each:  
First, enter the appropriate 3 digits for the first block and then press the Enter key. Repeat this same procedure for the 3 remaining blocks of the address (4 blocks in all). Once the Enter key is pressed for the final 3-digit block, the display will flash twice and the IP address will be registered.



- 8** Use the numeric keys to enter "2" then "6", and then press the Enter key. The display will change to "P26" (the Subnet Mask setting). Enter the 12-digit Subnet Mask using the same procedure that you did for entering the IP address.



- 9** Use the numeric keys to enter "2" then "7", and then press the Enter key. The display will change to "P27" (the Gateway address setting). Enter the 12-digit Gateway address using the same procedure that you did for entering the IP address.



- 10** Once you are finished making all of the network settings, press the Printer key. The machine will switch back to the copier mode.

## &lt;20 ppm copier&gt;

\* To cancel the setting midway through it, press the Stop/Clear key.

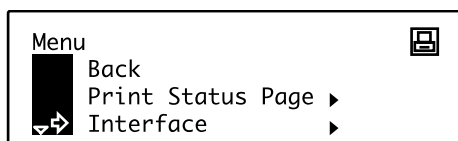
- 1** Press the Printer key. The machine will switch to the printer mode.



- 2** Use the ▲ and ▼ cursor keys to select "MENU" and then press the Enter key.



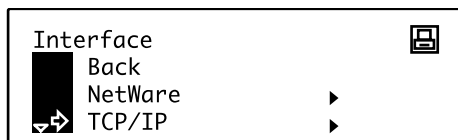
- 3** Use the ▲ and ▼ cursor keys to select "Interface" and then press the Enter key.



- 4** Use the ▲ and ▼ cursor keys to select "Option" and then press the Enter key.



- 5** Use the ▲ and ▼ cursor keys to select "TCP/IP" and then press the Enter key.



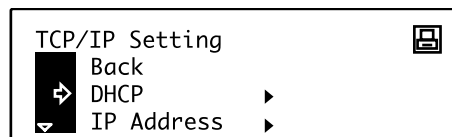
- 6** Use the ▲ and ▼ cursor keys to select "On" and then press the Enter key.



- 7** Use the ▲ and ▼ cursor keys to select "Change #" and then press the Enter key.



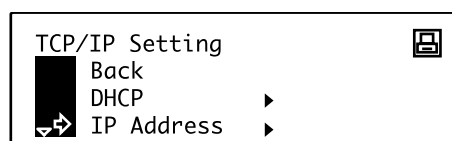
- 8** Use the ▲ and ▼ cursor keys to select "DHCP" and then press the Enter key.



- 9** Use the ▲ and ▼ cursor keys to select "Off" and then press the Enter key.

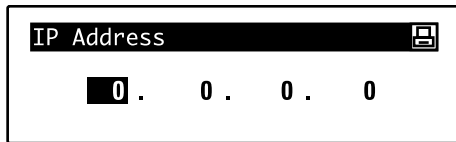


- 10** Use the ▲ and ▼ cursor keys to select "IP Address" and then press the Enter key.

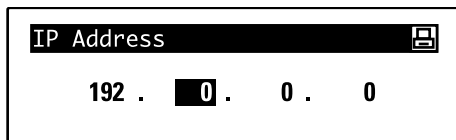


## 2. Set-up

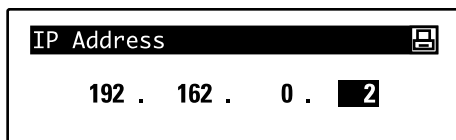
- 11** The numeric keys will be used to enter the IP address:  
First, enter the first 3 digits of the IP address.  
\* The numbers you enter will be input into the currently highlighted area of the display.



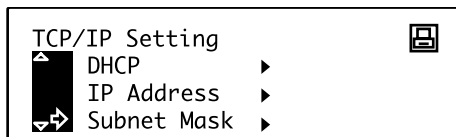
- 12** Press the > cursor key and then enter the next 3 digits of the IP address into the next highlighted block.



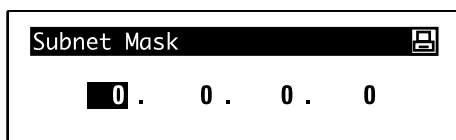
- 13** Continue the same procedure for the other 2 blocks and, once the IP address has been entered, press the Enter key.



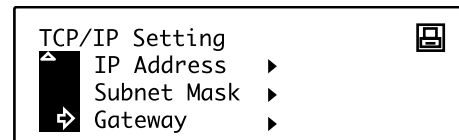
- 14** Use the ▲ and ▼ cursor keys to select "Subnet Mask" and then press the Enter key.



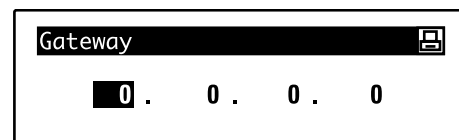
- 15** Repeat steps 11 - 13 in order to enter the Subnet Mask using the same procedure that you did for entering the IP address.



- 16** Use the ▲ and ▼ cursor keys to select "Gateway" and then press the Enter key.



- 17** Repeat steps 11 - 13 in order to enter the Gateway address using the same procedure that you did for entering the IP address.



- 18** Once you are finished making all of the network settings, press the Printer key. The machine will switch back to the copier mode.

# 3. Troubleshooting

## 3-1 Canceling printing

Perform the following procedure when you want to stop printing or you want to clear data.

### IMPORTANT!

- By performing this operation you will be canceling ALL print jobs that are currently waiting in the printer's memory to be printed.
- Always cancel the print job at your computer first. If the print job is not canceled in your computer, the data will be sent once again to the printer.

#### <15 ppm copier>

- 1 Press the Printer key. The machine will switch to the printer mode.



- 2 Press the Stop/Clear key. Printing will be canceled.

#### <20 ppm copier>

- 1 Press the Printer key. The machine will switch to the printer mode.



- 2 Use the ▲ and ▼ cursor keys to select "CANCEL".

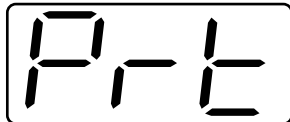


- 3 Press the Enter key. Printing will be canceled.

### 3. Troubleshooting

#### 3-2 When an error code or error messages appears...

If an error code or message appears on the operation panel, first check the following tables for cause of the trouble and then perform the corresponding procedure. For more detailed information, refer to the Instruction Handbook for your copier as well as the Instruction Handbook for any optional equipment that is installed in your machine.



Error Indications in the 15 ppm copier

If "Prt" is displayed and the Memory Overflow / Data Error indicator flashes while the machine is in the copier mode, an error has occurred with the printer functions of this machine. Press the Printer key and check the cause of the error. Refer to the following tables for the corresponding error code and appropriate correction procedure.

Error code (15 ppm copier)	Display message (20 ppm copier)	Procedure
E01	—	A paper jam has occurred. Remove the jammed paper.
E02	—	The drawer has run out of paper or a paper jam has occurred. Add paper or remove the jammed paper, as appropriate.
E03	Set drawer.  CLOSE PAPER DRAWER.	One or both drawers are not set properly in the printer. Insert both drawers securely.
E04	—	The size of paper selected for printing does not match the size of paper in the drawer. Replace the paper in the drawer with that of the correct size. * If you want to force-print onto the current size of paper, press the Start key. If you want to switch to and print from a different drawer, press the Paper Select key until the desired drawer is selected. If you want to cancel the printing operation completely, press the Stop/Clear key.
—	Add paper in drawer. XX size (XXX)  ADD PAPER IN DRAWER. XX SIZE (XXX)	The size or type of paper selected for printing does not match the size or type of paper in the drawer. Replace the paper in the drawer with that of the correct type. * If you want to force-print onto the current size or type of paper, first press the Printer key to switch to the printer mode. Next, the "GO" command. If you want to switch to and print from a different cassette, press the Paper Select key until the desired cassette is selected and then press the Enter key. If you want to cancel the printing operation completely, first press the Printer key to switch to the printer mode. Next, select the "CANCEL" command and then press the Enter key.
E05	Place paper in drawer.  PLACE PAPER IN PAPER DRAWER.	The drawer has run out of paper. Add paper.
E06	—	One of the covers is open. Close the covers securely.
—	Out of staples. Add staples.  STAPLER EMPTY. ADD STAPLES.	The finisher (option) has run out of staples. Refer to the Instruction Handbook for the finisher and replenish the staples.
—	Cannot staple different size	Stapling was not possible because there are different sizes of paper stacked together. Remove all paper from the finisher.
—	Cannot staple.  CANNOT STAPLE.	The amount of paper stacked in the finisher has exceeded the acceptable capacity.



Error code (15 ppm copier)	Display message (20 ppm copier)	Procedure
—	No duplex from bypass	Duplex printing is not possible using the Multi-Bypass. Select the drawer for paper feed. * If you want to print out on only one side of the paper, first press the Printer key to switch to the printer mode. Next, select the "GO" command and then press the Enter key. If you want to switch to and print from a cassette, press the Paper Select key until the desired cassette is selected and then press the Enter key.
—	Not from bypass to finisher	The finisher cannot be used when paper is fed from the Multi-Bypass. * If you want to have the paper ejected into the Inner tray, first press the Printer key to switch to the printer mode. Next, select the "GO" command and then press the Enter key. If you want to switch to and print from a cassette, press the Paper Select key until the desired cassette is selected and then press the Enter key.
E23	Paper capacity exceeded. Remove paper from Job sep.  PAPER CAPACITY EXCEEDED. REMOVE PAPER FROM JOB SEP.	The amount of paper stacked in the optional Job Separator has exceeded the acceptable capacity. Remove all paper from the Job Separator.
E30	—	Trouble has occurred within the printer. Contact your service representative or an authorized service center.
E40	This code is not in use. Job is cancelled.	The department code you entered does not match the registered one. Check the department code that is registered in the printer driver.
—	Exceeded print quantity limit.  Exceeded pre-registered printing quantity.	The amount of printing accomplished has exceeded the acceptable capacity as set under copy management. In order to print further, change the copy management setting in the printer.
E60	RAM disk error Press GO	<15 ppm copier> A read- or write-error has occurred on the RAM disk. Press the Start key. ----- <20 ppm copier> A read- or write-error has occurred on the RAM disk. First press the Printer key to switch to the printer mode. Next, select the "GO" command and then press the Enter key.
E70	MemoryCard err Press GO	<15 ppm copier> A read- or write-error has occurred in the Memory Card (CompactFlash). Press the Start key. ----- <20 ppm copier> A read- or write-error has occurred in the Memory Card (CompactFlash). First press the Printer key to switch to the printer mode. Next, select the "GO" command and then press the Enter key.
E71	Memory Card err Insert again	The Memory Card (CompactFlash) was removed during operation under the menu for printer-related settings. Reinsert the Memory Card.
E72	Insert the same memory card	The Memory Card (CompactFlash) could not be detected during an operation in which the printer was reading data from that card. Reinsert the Memory Card.
E73	Format error Memory card	Initialization of the Memory Card (CompactFlash) currently inserted is necessary.

### 3. Troubleshooting

Error code (15 ppm copier)	Display message (20 ppm copier)	Procedure
E80	Print overrun	<p>&lt;15 ppm copier&gt; A data overrun error has occurred due to insufficient memory.</p> <ul style="list-style-type: none"> <li>• If you want to force-continue the print job, press the Start key. If you want to cancel the printing operation completely, press the Stop/Clear key.</li> <li>• If "Auto Continue" (menu: P74) is turned "On" (setting: 1), the printing operation will be restarted automatically after the amount of time specified there.</li> <li>• Once this error message is displayed, "Page Protect" (menu: P42) will be turned "On" (setting: 1) automatically.</li> </ul> <hr/> <p>&lt;20 ppm copier&gt; A data overrun error has occurred due to insufficient memory.</p> <ul style="list-style-type: none"> <li>• If you want to force-continue the print job, first press the Printer key to switch to the printer mode. Next, select the "GO" command and then press the Enter key. If you want to cancel the printing operation completely, first press the Printer key to switch to the printer mode. Next, select the "CANCEL" command and then press the Enter key.</li> <li>• If "Auto Continue" is turned "On", the printing operation will be restarted automatically after the amount of time specified there.</li> <li>• Once this error message is displayed, "Page Protect" will be turned "On" automatically.</li> </ul>
E82	Memory overflow	<p>&lt;15 ppm copier&gt; The current print job could not be completed due to insufficient memory in the printer.</p> <ul style="list-style-type: none"> <li>• If you are using a RAM disk, reduce the size of the RAM disk. If this error occurs often, it is recommended that you install additional memory into the printer. For more detailed information on adding memory, contact your service representative or an authorized service center.</li> <li>• If you want to force-continue the print job, press the Start key. The data that has already been processed will be printed out and the remaining portion of the print job will be printed onto the following page.</li> <li>• If "Auto Continue" (menu: P74) is turned "On" (setting: 1), the printing operation will be restarted automatically after the amount of time specified there.</li> </ul> <hr/> <p>&lt;20 ppm copier&gt; The current print job could not be completed due to insufficient memory in the printer.</p> <ul style="list-style-type: none"> <li>• If you are using a RAM disk, reduce the size of the RAM disk. If this error occurs often, it is recommended that you install additional memory into the printer. For more detailed information on adding memory, contact your service representative or an authorized service center.</li> <li>• If you want to force-continue the print job, first press the Printer key to switch to the printer mode. Next, select the "GO" command and then press the Enter key. The data that has already been processed will be printed out and the remaining portion of the print job will be printed onto the following page.</li> <li>• If "Auto Continue" is turned "On", the printing operation will be restarted automatically after the amount of time specified there.</li> </ul>
E83	Interface occupied	The selected interface is currently in use. Wait for a while and then attempt the operation again.
EF1	checksum error	An error has been detected during operation. Turn the main switch to the printer OFF (O) and then back ON (I) again. If the same error message remains, contact your service representative or an authorized service center.

Error code (15 ppm copier)	Display message (20 ppm copier)	Procedure
EF2	RAM error	An error has been detected during operation. Turn the main switch to the printer OFF (O) and then back ON ( I ) again. If the same error message remains, contact your service representative or an authorized service center.

### 3. Troubleshooting

#### 3-3 Basic troubleshooting chart

If you experience trouble while you are using this machine as a printer, refer to the table below to perform minor adjustments. If trouble persists, contact your service representative or an authorized service center.

\* For information in regard to general mechanical trouble with the machine, refer to the Instruction Handbook for your copier.

Problem	Check point	Procedure	Reference page
Nothing is printed out	Is the power cord loose?	Connect the power cord securely to a power source.	—
	Is the power ON (   ) to the printer?	Turn the main switch to the printer ON (   ).	5
	Is the printer cable appropriate and is it connected properly?	Be sure to use a compliant printer cable and make sure it is connected properly.	5
	Did you connect the printer cable AFTER you turned the power to the printer ON?	Connect the printer cable BEFORE you turn the power to the printer ON.	—
	Is the printer off-line? (Is the Data On-line indicator out?)	<p>Perform the appropriate procedure to light the Data On-line indicator and put the printer on-line.</p> <p>&lt;15 ppm copier&gt;</p> <p>① Press the Printer key. The machine will switch to the printer mode.</p> <p>② Press the Start key.</p> <p>③ The Data On-line indicator will light.</p> <p>-----</p> <p>&lt;20 ppm copier&gt;</p> <p>① Press the Printer key. The machine will switch to the printer mode.</p> <p>② Select the "GO" command and then press the Enter key.</p> <p>③ The Data On-line indicator will light.</p>	3, 4
Text is not printed correctly	Is the printer cable appropriate and is it connected properly?	Be sure to use a compliant printer cable and make sure it is connected properly.	5
Print out is not correct	Is the setting configuration in your computer correct?	Confirm the settings in the printer driver as well as in the software application in use.	—

## 4. Specifications

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CPU .....	PowerPC 405 (200MHz)
Printing Speed .....	15 ppm copier: WITHOUT Memory Board installed - 15 pages/min (A4 [8 1/2" x 11"]) WITH Memory Board installed - 18 pages/min (A4 [8 1/2" x 11"]) 20 ppm copier: 20 pages/min (A4 [8 1/2" x 11"])
Printing Resolution .....	With smoothing OFF: 600 dpi x 600 dpi With smoothing ON: interpolated 2400 dpi x 600 dpi
Maximum Printing Size .....	A3 (11" x 17")
RAM Memory Capacity .....	Installed: 8 MB Maximum: 136 MB (with an additional 128 MB of optional memory installed)
Interface .....	One parallel interface (IEEE 1284 compliant)
Installed Fonts .....	80

\* Specifications are subject to change without notice.





**QUALITY  
CERTIFICATE**

This machine has passed  
all quality controls and  
final inspection.

