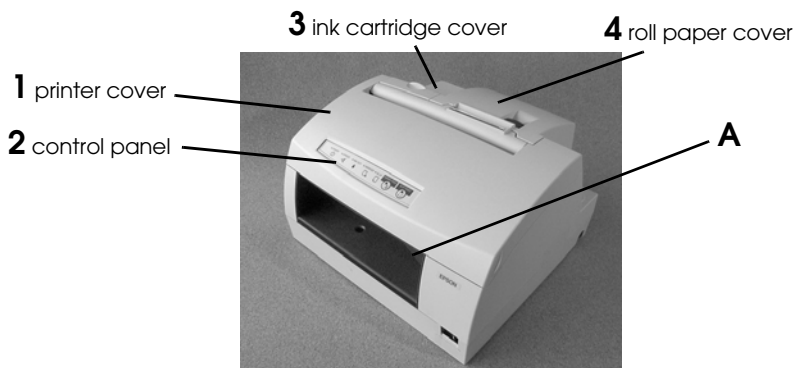


# **TM-J8000**

**User's Manual / Bedienungsanleitung  
Gebruikershandleiding / Manuel d'utilisation  
Manual do utilizador / Manual del usuario  
Manuale dell'utente**

## Printer Parts



## DIP Switch Tables

### Serial interface

SW	Function	ON	OFF
1-1	Data receive error	Ignored	Prints '?'
1-2	Receive buffer capacity	45 bytes	4KB
1-3	Handshaking	XON/XOFF	DTR/DSR
1-4	Data word length	7 bits	8 bits
1-5	Parity check	Enabled	Disabled
1-6	Parity selection	Even	Odd
1-7, 1-8	Transmission speed (see table at right)		

### Transmission speed

Speed	1-7	1-8
2400	ON	ON
4800	OFF	ON
9600	ON	OFF
19200	OFF	OFF

SW	Function	ON	OFF
2-1	Handshaking (BUSY)	Receive buffer full	Offline or receive buffer full
2-2	Customer display connection	Connected	Not connected
2-3	Head rank	Rank B	Rank A
2-4	Power switch setting	Fixing mode	Normal
2-5	IM connection	Connected	Not connected
2-6	Internal use	—	Fixed
2-7	I/F pin 6 reset	Enabled	Disabled
2-8	I/F pin 25 reset	Enabled	Disabled

### Parallel interface

SW	Function	ON	OFF
1-1	Auto line feed	Always enabled	Always disabled
1-2	Receive buffer capacity	45 bytes	4KB
1-3 ~ 1-8	Undefined	—	—
SW	Function	ON	OFF
2-1	Handshaking.	Receive buffer full or reading data	Offline, receive buffer full, or reading data
2-2	Internal use. Do not change.	—	Fixed to OFF.
2-3	Head rank switching.	Rank B	Rank A
2-4	Power switch setting.	Fixing mode	Normal
2-5	IM connection.	Connected	Not connected
2-6	Reserved. Do not change	—	Fixed to OFF.
2-7	Not used for parallel interface.	—	Fixed to OFF.
2-8	I/F pin 31 reset. Do not change.	Fixed to ON.	—

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## **EMC and Safety Standards Applied**

Product Name: TM-J8000

Model Name: M135A

The following standards are applied only to the printers that are so labeled.

Europe:	CE marking Safety: EN 60950
North America:	EMI: FCC/ICES-003 Class A Safety: UL 1950/CSA C22.2 No. 950
Japan:	EMC: VCCI Class A
Oceania:	EMC: AS/NZS 3548 Class B

### **WARNING**

The connection of a non-shielded printer interface cable to this printer will invalidate the EMC standards of this device. You are cautioned that changes or modifications not expressly approved by SEIKO EPSON Corporation could void your authority to operate the equipment.

### **CE Marking**

The printer conforms to the following Directives and Norms:

Directive 89/336/EEC	EN 55022 Class B EN 55024 IEC 61000-4-2 IEC 61000-4-3 IEC 61000-4-4 IEC 61000-4-5 IEC 61000-4-6 IEC 61000-4-11
	EN 61000-3-2 EN 61000-3-3
Directive 90/384/EEC	EN 45501
Directive 73/23/EEC	Safety: EN 60950 Rev.3

### **FCC Compliance Statement For American Users**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

### **FOR CANADIAN USERS**

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

### **A L'INTENTION DES UTILISATEURS CANADIENS**

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

## Safety Precautions

This section presents important information intended to ensure safe and effective use of this product. Please read this section carefully and store it in an accessible location.



### **WARNING:**

*Shut down your equipment immediately if it produces smoke, a strange odor, or unusual noise. Continued use may lead to fire or electric shock. Immediately unplug the equipment and contact your dealer or a SEIKO EPSON service center for advice.*

*Never attempt to repair this product yourself. Improper repair work can be dangerous.*

*Never disassemble or modify this product. Tampering with this product may result in injury, fire, or electric shock.*

*Never insert or disconnect the power plug with wet hands. Doing so may result in severe shock.*

*Do not allow foreign matter to fall into the equipment. Penetration by foreign objects may lead to fire or shock.*

*If water or other liquid spills into this equipment, unplug the power cord immediately, and then contact your dealer or a SEIKO EPSON service center for advice. Continued usage may lead to fire or shock.*

*Do not place multiple loads on the power outlet (wall outlet).*

*Overloading the outlet may lead to fire.*

*Always supply power directly from a standard domestic power outlet.*

*Handle the power cord with care. Improper handling may lead to fire or shock.*

*Do not modify or attempt to repair the cord.*

*Do not place any object on top of the cord.*

*Avoid excessive bending, twisting, and pulling.*

*Do not place cord near heating equipment.*

*Check that the plug is clean before plugging it in.*

*Be sure to push the prongs all the way in.*

*If the cord becomes damaged, obtain a replacement from your dealer or a SEIKO EPSON service center.*

*Regularly remove the power plug from the outlet and clean the base of the prongs and between the prongs. If you leave the power plug in the outlet for a long time, dust may collect on the base of the prongs, causing a short and fire.*



### **CAUTION:**

*Do not connect cables in ways other than those mentioned in this manual. Different connections may cause equipment damage and burning.*

*Be sure to set this equipment on a firm, stable, horizontal surface. The product may break or cause injury if it falls.*

*Do not use in locations subject to high humidity or dust levels. Excessive humidity and dust may cause equipment damage, fire, or shock.*

*Do not use the product where inflammable fumes of gasoline, benzene, thinner or other inflammable liquids may be in the air. Doing so may cause an explosion or fire.*

*Do not place heavy objects on top of this product. Never stand or lean on this product. Equipment may fall or collapse, causing breakage and possible injury.*

*To ensure safety, unplug this product before leaving it unused for an extended period.*

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## **Caution Label**



### **WARNING:**

*Do not connect a telephone line to the drawer kick-out connector or the display module connector; otherwise, the printer and the telephone line may be damaged.*

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## **Transportation**

Before you ship the printer to your dealer for repair, be sure to perform the following steps:

1. Turn off the printer power using the front power switch. Be sure the POWER LED goes out; then turn off the rear power switch. This operation caps the ink jet head to keep it from drying out.
2. Remove the ink cartridge and roll paper.
3. Remove the power cord and all the cables from the printer.
4. Be sure to put the printer back in the box that it came in. If you do not have the box, you can buy one from your dealer.

## Unpacking

The following items are included with the standard specification printer. If any item is damaged, contact your dealer.

- Printer
- Paper roll
- Ink cartridge
- Slip label (\*)
- Power switch covers (2)
- Hexagonal lock screws (2) (only for the serial interface)

(\*) *There is a slip label with your printer but it is not attached. The recommended position for the slip label is indicated by **A** in the Printer Parts illustration on the inside front cover.*

## Control Panel

### **PAPER FEED button**

Press to feed receipt paper; hold down to feed continuously.

### **SLIP FEED button**

Press to feed slip paper; hold down to feed continuously.

### **POWER LED**

On when the printer is on. Flashes while capping the head, charging the ink system, cleaning the print head, and initializing. Always wait until the light stops flashing before you start using the printer and before you turn it off.

### **ERROR LED**

When this light is on but not flashing, it means the printer is offline, is out of paper or ink, or does not have an ink cartridge installed (check the INK OUT and PAPER OUT lights), or that the roll paper cover or the printer cover is open. When this light is flashing, there is an error. If you see this light flashing, turn off the printer for a few seconds and then turn it back on. If the light is still flashing, call your supervisor or a service person.

### **PAPER OUT LED**

On when the paper is nearly out or out. Flashes during standby for macro or self-test execution.

### **SLIP LED**

Flashes while waiting for a slip; on steadily when paper is inserted.

### **INK OUT LED**

Flashes when the ink is almost gone, and stays on while the ERROR LED flashes when the ink is completely gone.

## Removing the Packing Materials

Remove the tape and laminated sheet that protect the printer during shipping before turning on the printer.

1. First, pull the tape off the top of the printer cover, and open the printer cover by pulling it forward slightly and lifting by the front. Then remove the rest of the tape.
2. Remove the laminated sheet, and close the cover.

## Using the Power Switches and Switch Covers

The TM-J8000 has one power switch in back and one in front. Both switches must be on for the printer to function. Most users leave the rear switch on and turn the printer on and off with the front switch.

### Note:

*If you use both switches, turn on the rear one first, then the front one. Turn off the front switch first, and after the POWER light goes off, turn off the rear one.*

*Turning off the printer with the front switch allows the printer to cap the head so that ink will not dry in the nozzles. Do not turn off the back switch without turning off the front switch first. The POWER light flashes while the heads are being capped and then goes off.*



### WARNING:

*If an accident occurs with either power switch cover attached, unplug the power cord immediately. Continued use may cause fire or shock.*

There are two power switch covers — one for the front switch and one for the rear switch. Illustrations **1** and **2** show where to install the switch covers. You can use either or both of the enclosed power switch covers to make sure that the power switch is not accidentally pressed. If you need to turn the front switch on or off with the cover attached, you can insert a thin tool into one of the holes in the cover to operate the switch. Notice that the rear cover uses the screw from the connector panel to fasten it in place.



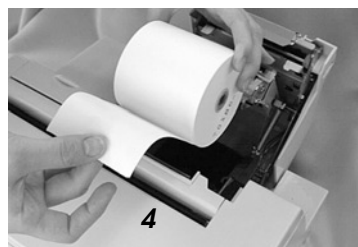
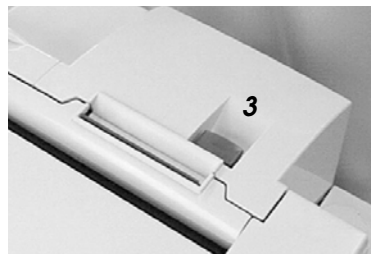
## Installing Roll Paper



### CAUTION:

Read the caution label on the printer, and be careful not to touch the autocutter blade when you open the roll paper cover.

1. When the printer is not receiving data, open the roll paper cover by pulling the paper cover release lever (shown in illustration 3) forward and then pushing the cover back.
2. Remove the used paper core, if there is one.
3. Insert paper as shown in illustration 4. Be sure to note the correct direction that paper should come off the roll.



4. Pull out a small amount of paper, close the cover, and tear off the extra paper by pulling it toward the front of the printer. See illustration 5.



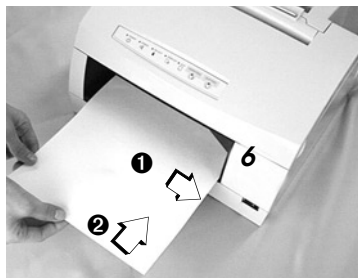
## Inserting Slip Paper

### Note:

Be sure the paper is flat, without curls, folds, or wrinkles.

To prevent jams, roll paper must be installed when printing on slip paper.

When you insert slip paper, be sure that the right side of the paper is against the right side of the paper guide, as shown in illustration 6.





## Installing or Replacing the Ink Cartridge



### CAUTION:

Use of any ink cartridges other than those approved by EPSON may damage the printer and will void the warranty.

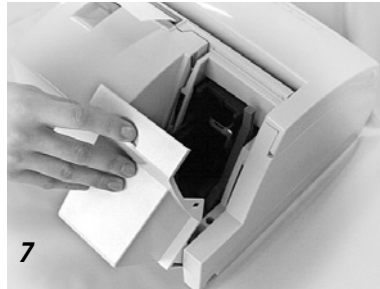
Follow the laws or regulations of your country or community to dispose of used ink cartridges.

Be sure to take the following into account to prolong the ink life.

- ❑ Do not turn off the power immediately after printing (wait for more than 10 seconds before turning off the power).
- ❑ Do not remove the ink cartridge except when it needs to be replaced.
- ❑ Do not turn the power on and off frequently.
- ❑ Do not do unnecessary manual cleaning.

Before you ship the printer, be sure to remove the ink cartridge.

1. Turn on the power.
2. Open the ink cartridge cover, using the tab, as shown in illustration 7.
3. For help with installation, read the label inside the ink cartridge compartment.
4. Pull back the ink cartridge lever as shown in illustration 8, and remove any used cartridge, if there is one.



### CAUTION:

Read the caution label. Do not put your fingers inside the ink cartridge compartment, or you may be injured.

5. Take the new cartridge out of its box and wrapping, and insert it label-side up, as shown in illustration 9. The diagonal corner on one end of the cartridge keeps you from inserting it incorrectly.
6. Move the lever back toward the front of the printer, and close the cover. Your cartridge is installed.



**Note:**

*For the first cartridge installed in the printer (or the first cartridge installed after servicing), it takes about two minutes to charge the ink into the printer system. The POWER light flashes during this operation. The printer is ready to use as soon as charging is complete (when the POWER light stops flashing and stays on). After the first cartridge, the printer takes only about 30 seconds to charge the ink from a new cartridge into the printer system. The POWER light also flashes during this operation.*

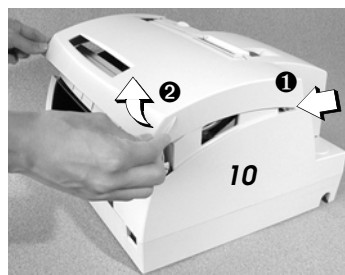
## Opening the Printer Cover



**CAUTION:**

*There are sharp edges inside the printer mechanism. Be careful not to touch them.*

When you open the printer cover, pull it toward you a little, as shown in illustration 10, and lift it up.



## Troubleshooting

### The printer does not print.

Check control panel LEDs. (If POWER is flashing, the printer is not ready.) Check that both printer power switches are turned on. Check whether the power supply cable is correctly plugged into the printer and to the power outlet (or the IM, if you are using the power cable from the IM). If there is still a problem, contact a qualified servicer.

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**ERROR light is on or flashing.**

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If paper is jammed, remove it as described below. Check that covers are closed. Check the INK OUT and PAPER OUT lights and replace consumables, if necessary. If these measures do not correct the problem, turn the printer off, wait a few seconds, and turn it back on. If there is still a problem, contact a qualified servicer.

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**Printing is poor.**

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Ink nozzles may be obstructed. Clean the printer as described under "Cleaning the Print Head," below. If there is still a problem, contact a qualified servicer.

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**Removing Jammed Paper**

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**CAUTION:**

*Do not turn on the printer when removing jams.*

*To prevent jams, roll paper must be installed when printing on slip paper.*

1. For a roll paper jam, open the roll paper cover and remove the jammed paper.
2. For a slip paper jam, open the printer cover, pull the jammed slip paper upward slowly to remove it, and then close the printer cover, and turn the printer back on.

---

**Cleaning the Print Head**

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If print quality is poor, the ink nozzles may be obstructed. Follow the steps below to clean the print head.

1. Make sure the printer is turned on.
2. Open the printer cover.
3. Press the CLEANING button and close the cover. The printer begins the self-cleaning process, which takes less than a minute. The POWER LED flashes during cleaning.
4. When cleaning is done (POWER light is on), print or run a self-test to check the print quality. To do a self test on roll paper, hold the PAPER FEED button while turning on the front switch. You can continue the self test by pressing the button. To do a self test on slip paper, use the SLIP FEED button.
5. If print quality has not improved, repeat the steps above.

## TM-J8000 specifications

<b>Print method</b>	Serial ink jet matrix method																																																
<b>Dot density</b>	360 × 360 dpi (dpi: dots per 25.4 mm (dots per inch))																																																
<b>Print direction</b>	Bidirectional with logic seeking																																																
<b>Paper feed method</b>	Friction feed																																																
<b>Head control</b>	Fine and economy																																																
<b>Print fonts</b>	Font A (default)/font B/extended font A: 22 × 48/18 × 36/36 × 48, including spacing on the right																																																
<b>Columns</b>	Receipt	Font A/font B/extended font A: 42/51/25																																															
	Slip	Font A/font B/extended font A: 38-130/46-158/23-79																																															
<b>Character size</b>	1.48 × 3.32/1.20 × 2.47/2.47 × 3.32 mm (0.058 × 0.131"/0.047 × 0.097"/0.097 × 0.131") (W × H)																																																
<b>Character sets</b>	95 alphanumeric, 32 international characters 128 × 9 pages extended graphic characters, 16 extended font A characters																																																
<b>Ink cartridge specification</b>	SJI1 (black ink)																																																
<b>Print speed</b>	<p>Receipt</p> <table border="1"> <thead> <tr> <th>Head control method</th> <th>Font A 20 cpl</th> <th>Font B 25 cpl</th> <th>Extended Font A 12 cpl</th> <th>Font A 42 cpl</th> <th>Font B 51 cpl</th> <th>Extended Font A 25 cpl</th> </tr> </thead> <tbody> <tr> <td>Fine</td> <td>11.8 lps</td> <td>16.9 lps</td> <td>11.8 lps</td> <td>9.0 lps</td> <td>13.1 lps</td> <td>9.0 lps</td> </tr> <tr> <td>Economy</td> <td>12.6 lps</td> <td>18.1 lps</td> <td>—</td> <td>10.1 lps</td> <td>14.7 lps</td> <td>—</td> </tr> </tbody> </table> <p>Slip</p> <table border="1"> <thead> <tr> <th>Head control method</th> <th>Font A 65 cpl</th> <th>Font B 80 cpl</th> <th>Extended Font A 40 cpl</th> <th>Font A 130 cpl</th> <th>Font B 158 cpl</th> <th>Extended Font A 79 cpl</th> </tr> </thead> <tbody> <tr> <td>Fine</td> <td>6.8 lps</td> <td>10.0 lps</td> <td>6.8 lps</td> <td>4.2 lps</td> <td>6.2 lps</td> <td>4.2 lps</td> </tr> <tr> <td>Economy</td> <td>7.8 lps</td> <td>11.3 lps</td> <td>—</td> <td>4.9 lps</td> <td>7.3</td> <td>—</td> </tr> </tbody> </table> <p>lps: lines per second; cpl: characters per line</p>							Head control method	Font A 20 cpl	Font B 25 cpl	Extended Font A 12 cpl	Font A 42 cpl	Font B 51 cpl	Extended Font A 25 cpl	Fine	11.8 lps	16.9 lps	11.8 lps	9.0 lps	13.1 lps	9.0 lps	Economy	12.6 lps	18.1 lps	—	10.1 lps	14.7 lps	—	Head control method	Font A 65 cpl	Font B 80 cpl	Extended Font A 40 cpl	Font A 130 cpl	Font B 158 cpl	Extended Font A 79 cpl	Fine	6.8 lps	10.0 lps	6.8 lps	4.2 lps	6.2 lps	4.2 lps	Economy	7.8 lps	11.3 lps	—	4.9 lps	7.3	—
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Economy	7.8 lps	11.3 lps	—	4.9 lps	7.3	—																																											
<b>Paper feed speed</b>	Receipt or slip — 35.3 ms/line using a 4.23 mm {1/6"} line pitch 120 mm/s {approximately 4.7"/s} (28.3 lines/second) when continuous paper feed																																																
<b>Line spacing</b>	4.23 mm {1/6"}; programmable by control command, default																																																
<b>Paper roll (single-ply)</b>	Width: 76 mm ± 0.5 mm (2.99" ± 0.02") Maximum outside diameter: 83 mm (3.27") or less Paper roll spool inside diameter: 10 mm {0.39"} or more Paper must not be pasted to the spool.																																																
<b>Slip paper</b>	68 – 215.9 mm × 68 – 297 mm {2.7 – 8.5 × 2.7 – 11.7"} (W × L). Normal, single-ply only.																																																
<b>Total slip thickness</b>	0.09 to 0.15 mm {0.0035 to 0.0059"}																																																
<b>DKD function</b>	2 drives																																																
<b>DM connection</b>	Display connection available only for a serial interface model printer																																																
<b>Interfaces</b>	RS-232, RS-485, or IEEE 1284																																																
<b>Buffer size</b>	Receive Macro	45 bytes or 4KB, set with DIP switch		User-defined	receipt: 12KB; slip: 5KB		2KB																																										
<b>Supply voltage</b>	AC85 V – 264.5 V (only for single phase); built-in universal power supply																																																
<b>Current consumption</b>	25 W (operating)																																																
<b>Reliability</b>	Receipt mechanism: 10 million lines		Slip mechanism: 5 million lines		Print head: 800 million dots/nozzle		Autocutter: 2 million cuts MTBF: 180,000 hours MCBF: 29 million lines																																										
<b>Temperature and humidity</b>	Printing: 10° to 35°C (50° to 95°F), 20 - 80% RH (non-condensing) Standby: 5° to 40°C (41° to 104°F), 20 - 80% RH (non-condensing) Storage: -20° to 60°C (-4° to 140°F), 5 - 85% RH (packed without ink) -20° to 40°C (-4° to 104°F), 20 - 85% RH (packed with ink)																																																
<b>Dimensions</b>	200 × 325 × 300 mm {7.9 × 12.8 × 11.8"} (H × W × D)																																																
<b>Weight (mass)</b>	9 kg {19.8 lb}																																																