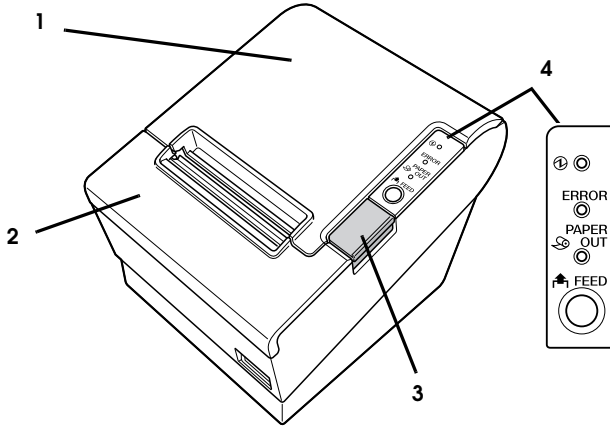


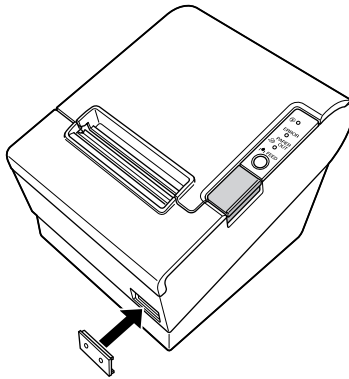
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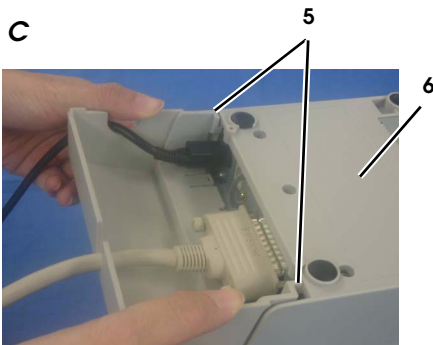
**A**



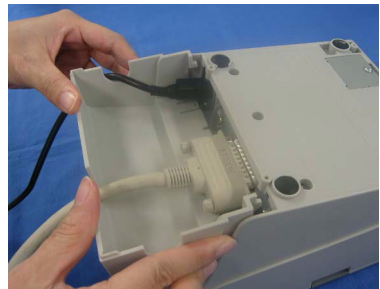
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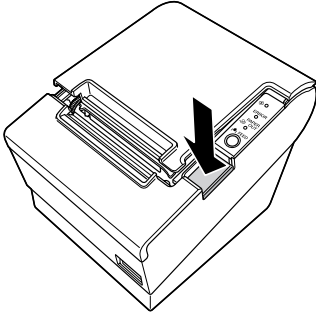
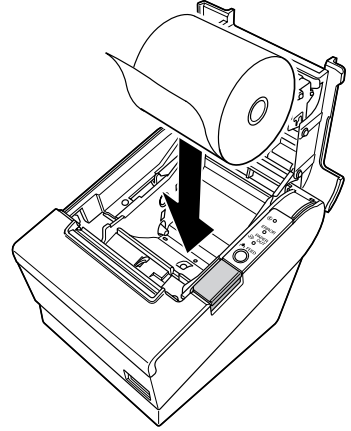
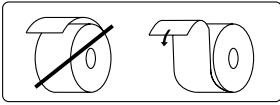
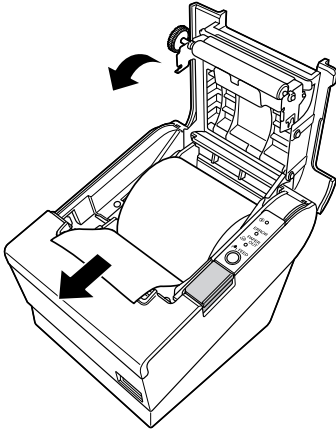
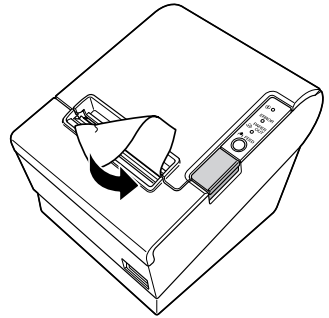
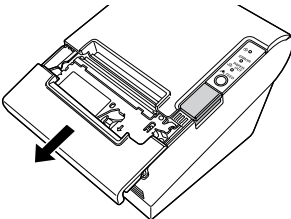
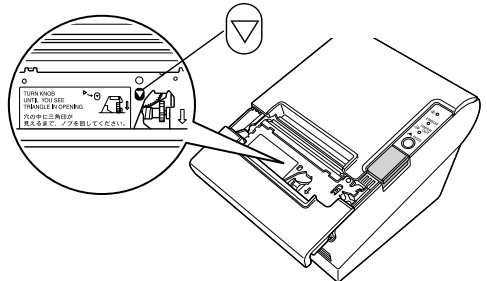


**C**



**D**



**E****F****G****H****I****J****K**

# DIP Switch Tables

## Serial Interface (DIP switch 1)

SW	Function	ON	OFF
1-1	Data receive error	Ignored	Prints "?"
1-2	Receive buffer capacity	45 bytes	4K bytes
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	Transmission speed (See table below.)		
1-8			

### Transmission speed

Transmission speed (bps)-bits per second	1-7	1-8
38400 *1	ON	ON
4800	OFF	ON
9600	ON	OFF
19200	OFF	OFF

## Serial Interface (DIP switch 2)

SW	Function	ON	OFF
2-1	Handshaking (BUSY condition)	Receive buffer full	Offline or Receive buffer full
2-2	Do not change		
2-3	Print density/	See Table A	
2-4	Low power		
2-5	Release condition of receive buffer BUSY (If receive buffer capacity set to 4 KB.)	Releases BUSY when remaining receive buffer capacity reaches 138 bytes.	Releases BUSY when remaining receive buffer capacity reaches 256 bytes.
2-6	Do not change		
2-7	I/F pin 6 reset	Enabled	Disabled
2-8	I/F pin 25 reset	Enabled	Disabled

\*1. Only when DIP Switches 1-7 and 1-8 are on, the transmission speed can be selected from one of seven speeds: 2400, 4800, 9600, 19200, 38400, 57600, and 15200 bps. The default is 38400.

## Parallel Interface (DIP switch 1)

SW	Function	ON	OFF
1-1	Auto line feed	Always enabled	Always disabled
1-2	Receive buffer capacity	45 bytes	4K bytes
1-3	Select paper sensors to output paper-end signals (default value of ESC C 3)	Disabled	Roll Paper end sensor enabled, Roll Paper near-end sensor enabled
1-4	Error signal output	Disabled	Enabled
1-5-1-8	Undefined		

## Parallel Interface (DIP switch 2)

SW	Function	ON	OFF
2-1	Handshaking (BUSY condition)	Receive buffer full	Offline or Receive buffer full
2-2	Do not change		
2-3	Print density/	See Table A	
2-4	Low power		
2-5	Release condition of receive buffer BUSY (If receive buffer capacity set to 4 KB.)	Releases BUSY when remaining receive buffer capacity reaches 138 bytes.	Releases BUSY when remaining receive buffer capacity reaches 256 bytes.
2-6	Do not change		
2-7			
2-8	I/F pin 31 reset (Do not change)		

### Table A

Print density/low power	SW 2-3	SW 2-4
- Low power consumption mode	ON	ON
Print density "Normal"	OFF	OFF
Print density "Medium"	ON	OFF
Print density "Dark"	OFF	ON

# Specifications

<b>Printing method</b>	Thermal line printing
<b>Dot density</b>	180 dpi × 180 dpi (dots per 25.4 mm {1"})
<b>Printing direction</b>	Unidirectional with friction feed
<b>Printing width</b>	80 mm paper width model: 72 mm {2.83"}, 512 dot positions
<b>Characters per line (default)</b>	80 mm paper width model: Font A: 42; Font B: 56
<b>Character spacing (default)</b>	Font A: 0.28 mm {.01"} (2 dots); Font B: 0.28 mm {.01"} (2 dots)
<b>Character size</b>	Standard/Double-height/Double-width/Double-width and Double-height Font A: 1.41 × 3.39 mm/1.41 × 6.77 mm/2.82 × 3.39 mm/2.82 × 6.77 mm Font B: 0.99 × 2.40 mm/0.99 × 4.80 mm/1.98 × 2.40 mm/1.98 × 4.80 mm
<b>Number of characters</b>	Alphanumeric characters: 95; International characters: 37 Extended graphics: 128 × 11 pages (including user-defined page)
<b>Printing speed</b>	High-speed mode: 200 mm/s {7.9"/s} max.; 47.2 lps (4.23 mm {1/6"} feed) Ladder bar code and 2D code: 100mm/s {2.4"/s} Low-power consumption mode: 150 mm/s {5.9"/s} max.; 35.5 lps (4.23 mm feed {1/6"}) Bit image, Ladder bar code, 2D code and Page mode: 60mm/s {2.4"/s} The above speed values are approximate. The values are when the printer prints with density "Normal" at 24 V and 25°C {77°F} Speed is adjusted automatically depending on the voltage applied and head temperature.
<b>Paper feed speed</b>	Approx. 200 mm/s {approx. 7.9"/s} continuous paper feed
<b>Line spacing (default)</b>	4.23 mm {1/6"}
<b>Character structure</b>	Font A: 12 × 24; Font B: 9 × 17 (including 2-dot horizontal spacing) Font A is the default.
<b>Roll Paper (single-ply)</b>	Size: 80 mm paper width model: 79.5 mm ± 0.5 mm {3.13" ± 0.02"}, Maximum outside diameter: 83 mm {3.26"} Roll Paper spool diameter: Inside: 12 mm {0.47"}; Outside: 18 mm {0.71"} 
<b>Thermal paper type</b>	Specified: NTP080-80
<b>Interface (compatible)</b>	Serial (RS232/RS485)/Parallel (IEEE1284)/Ethernet (10/100Base-T)/ USB (Full speed)
<b>Receive buffer</b>	4KB/45 bytes
<b>Cash drawer function</b>	2 drives
<b>Supply voltage</b>	DC + 24 V ± 7%
<b>Current consumption</b>	High-speed mode: Mean: Approx. 1.8A Low-power consumption mode: Mean: Approx. 1.1A
<b>Temperature</b>	Operating: 5 to 45°C {41 to 113°F} Storage: -10 to 50°C {14 to 122°F}, except for paper
<b>Humidity</b>	Operating: 10 to 90% RH Storage: 10 to 90% RH, except for paper
<b>Overall dimensions</b>	148 × 145 × 195 mm {5.83 × 5.71 × 7.68"} (H × W × D)
<b>Weight (mass)</b>	Approx. 1.8 kg {3.96 lb}

lps: lines per second

dpi: dots per 25.4 mm (dots per inch)



# TM-T88IV

## User's Manual

### DIP Switch Tables and Specifications

The DIP switch tables and technical specifications are at the beginning of this manual.

### Illustrations

All of the illustrations are at the beginning of this manual. They are identified by letters (A, B, C . . .). Some of the illustrations have numbers in them. See the list below for the meaning of the numbers.

#### Illustration A:

##### *Printer Parts*

1. Printer cover
2. Cutter cover
3. Cover open button
4. Control panel

#### Illustration C:

5. Hook
6. Bottom of the printer

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## ***EMC and Safety Standards Applied***

Product Name: TM-T88IV

Model Name: M129H

The following standards are applied only to the printers that are so labeled. (EMC is tested using the Epson power supplies.)

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 CISPR22 Class B
China:	EMC: GB9254
	GB17625.1
	Safety: GB4943
Taiwan:	EMC: CNS13438
	Safety: CNS14336

### **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

### ***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.

---

## ***Precautions When Installing the Power Supply Box***

A description of EMI standards is on the bottom of the printer. When the optional power supply box (OT-BX88) is installed, it is hard to check it. In such case, uninstall the power supply box if necessary.



---

## 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. 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 or fire.*

*Be sure to use the specified power source. Connection to an improper power source may cause fire.*

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

*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.*

*If you open the DIP switch cover, be sure to close the cover and tighten the screw after adjusting the DIP switch. Using this product with the cover open may cause fire or electric shock.*

### **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 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.*

*When using compressed air products; such as air dusters, for cleaning during repair and maintenance, the use of such products containing flammable gas is prohibited.*

---

## Caution Labels

### **CAUTION:**

*The thermal head is hot.*

### **CAUTION:**

*Touching the manual cutter may cause injury.*

---

## Unpacking

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

- Printer
- Roll Paper
- Power switch cover
- Connector cover \*
- AC adapter \*

\* May not be included with your printer.

---

## Important Installation Notes

- For a serial interface, use a null modem cable.
- For a parallel interface, use an IEEE 1284 cable.
- For a USB interface, install the driver before connecting the printer.

---

## Downloading Drivers, Utilities, and Manuals

Drivers, utilities, and manuals can be downloaded from one of the following URLs.

For customers in North America, go to the following web site:  
<http://www.epsonexpert.com/> and follow the on-screen instructions.

For customers in other countries, go to the following web site:  
<http://www.epson-pos.com/>

Select the product name from the "Select any product" pulldown menu.

---

## Installing the Printer Horizontally or Vertically

You can install the printer horizontally on a flat surface (with the paper exit on top) or vertically (with the paper exit at the front) by hanging it on a wall, using the optional WH-10 hanging bracket set.

### **WARNING:**

*When hanging the printer on the wall with the hanging bracket set, be sure to attach a connector cover to the printer.*

---

## Control Panel

### **FEED button**

This button feeds paper.

### **(Power) LED**

This LED is on when the printer is on.

### **ERROR LED**

This indicates an error.

### **PAPER OUT LED**

On indicates a paper near end or out. Flashing indicates standby.

---

## Using the Power Switch Cover

 **WARNING:**

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

The enclosed power switch cover ensures that the power switch is not pressed accidentally. To use this cover, install it as shown in illustration **B**.

---

## Attaching and Removing the Connector Cover

These instructions apply if a connector cover is packed with your printer to protect your cables. To attach it, follow the steps below:

1. First, connect all the cables. The connector cover has three possible cable exits: on the right, left, and back.
2. Position the two hooks on the connector cover so that they hook the printer case, as shown in illustration **C**.
3. Push the connector cover down to click onto the printer case.

To remove the connector cover, turn the printer over, and push the connector cover down while pushing both sides of the connector cover inward to detach the hooks from the printer case. See illustration **D**.

---

## Installing Roll Paper

1. Press the button to open the cover. See illustration **E**.
2. Remove the used roll paper core, and insert the roll paper. See illustration **F**.
3. The correct direction of the paper is shown in illustration **G**.
4. Pull out some paper, as shown in illustration **H**. Close the cover, and tear off the paper, as shown in illustration **I**.

---

## Troubleshooting

---

### No lights on the control panel

---

Check the power supply cable connections and the power outlet.

---

### ERROR LED on (not flashing) with no printing

---

If PAPER OUT is **on**, the roll paper is not installed or is near the end.

If PAPER OUT is **off**, the printer cover is not closed properly.

---

### ERROR LED flashing with no printing (and no paper jam)

---

Printing stops if the head overheats and resumes automatically when it cools.

If overheating is not the cause, turn the printer off, and after 10 seconds, back on.

---

## Removing Jammed Paper

  **CAUTION:**

Do not touch the thermal head because it can be very hot after printing.

1. Turn the printer off and press the cover open button.
2. Remove jammed paper, reinstall the roll, and close the cover.
3. If paper is caught in the cutter and you cannot open the printer cover, open the cutter cover as shown in illustration **J**.

4. Turn the knob until you see a triangle in the opening. This returns the cutter blade to the normal position. There is a label near the cutter to assist you. See illustration **K**.
5. Close the cutter cover.
6. Open the printer cover and remove the jammed paper.

---

## ***Cleaning the Thermal Head***

  **CAUTION:**

*After printing, the thermal head can be very hot. Be careful not to touch it and to let it cool before you clean it. Do not damage the thermal head by touching it with your fingers or any hard object.*

Turn off the printer, open the printer cover, and clean the thermal elements of the thermal head with a cotton swab moistened with an alcohol solvent (ethanol, methanol, or IPA).

Epson recommends cleaning the thermal head periodically (generally every 3 months) to maintain receipt print quality.

# WEEE (Waste Electrical and Electronic Equipment) Directive

This information only applies to customers in the European Union, according to Directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 27 January 2003 on waste electrical and electronic equipment (WEEE) and legislation transposing and implementing it into the various national legal systems.

For other countries, please contact your local government to investigate the possibility of recycling your product.



## English

The crossed out wheeled bin label that can be found on your product indicates that this product should not be disposed of via the normal household waste stream. To prevent possible harm to the environment or human health please separate this product from other waste streams to ensure that it can be recycled in an environmentally sound manner. For more details on available collection facilities please contact your local government office or the retailer where you purchased this product.

## Deutsch

Der Aufkleber mit durchgekreuzter Mülltonne an diesem Produkt weist darauf hin, dass dieses Produkt nicht im normalen Hausmüll entsorgt werden darf. Zur Vermeidung einer möglichen Beeinträchtigung der Umwelt oder der menschlichen Gesundheit und um zu gewährleisten, dass es in einer umweltverträglichen Weise recycelt wird, darf dieses Produkt nicht in den Hausmüll gegeben werden. Informationen zu Entsorgungseinrichtungen erhalten Sie bei der zuständigen Behörde oder dem Geschäft, in dem Sie dieses Produkt erworben haben.

## Français

L'étiquette apposée sur ce produit et représentant une poubelle barrée indique que le produit ne peut être mis au rebut avec les déchets domestiques normaux. Afin d'éviter d'éventuels dommages au niveau de l'environnement ou sur la santé, veuillez séparer ce produit des autres déchets de manière à garantir qu'il soit recyclé de manière sûre au niveau environnemental. Pour plus de détails sur les sites de collecte existants, veuillez contacter l'administration locale ou le détaillant auprès duquel vous avez acheté ce produit.

## Italiano

L'etichetta con il contenitore barrato applicata sull'imballo indica che il prodotto non deve essere smaltito tramite la procedura normale di smaltimento dei rifiuti domestici. Per evitare eventuali danni all'ambiente e alla salute umana, separare questo prodotto da altri rifiuti domestici in modo che possa essere riciclato in base alle procedure di rispetto dell'ambiente. Per maggiori dettagli sulle strutture di raccolta disponibili, contattare l'ufficio competente del proprio comune o il rivenditore del prodotto.

## Español

La etiqueta de un contenedor tachado que hallará en su producto indica que este producto no se puede tirar con la basura doméstica normal. Para impedir posibles daños medioambientales o para la salud, separe este producto de otros canales de desecho para garantizar que se recicle de una forma segura para el medio ambiente. Para más información sobre las instalaciones de recolección disponibles, dirijase a las autoridades locales o al punto de venta donde adquirió este producto.

## Português

A etiqueta com o símbolo de um contentor de lixo traçado com uma cruz que aparece no produto indica que este produto não deve ser deixado fora juntamente com o lixo doméstico. Para evitar possíveis danos no ambiente ou na saúde pública, por favor separe este produto de outros lixos; desta forma, terá a certeza de que pode ser reciclado através de métodos não prejudiciais ao ambiente. Para obter mais informações sobre os locais de recolha de lixo disponíveis, contacte a sua junta de freguesia, câmara municipal ou local onde comprou este produto.

## Nederlands

Op uw product is een label van een rolcontainer met een kruis erdoor aangebracht. Dit label wil zeggen dat dit product niet bij het normale huishoudelijk afval mag worden ingezameld. Om eventuele schade aan het milieu of de gezondheid van de mens te voorkomen moet dit product gescheiden van al het ander afval worden ingezameld, zodat het op een verantwoorde wijze kan worden verwerkt. Voor meer informatie over uw lokale afvalinzameling wendt u zich tot uw gemeente of de leverancier bij wie u dit product hebt gekocht.

## Dansk

Etiketten med et kryds over skraldespanden på hjul, der sidder på produktet, angiver, at dette produkt ikke må bortskaffes sammen med almindeligt husholdningsaffald. For at beskytte miljøet og helbred skal dette produkt bortskaffes separat, så det kan genbruges på en måde, der er god for miljøet. Kontakt de lokale myndigheder eller den forhandler, hos hvem du har købt produktet, vedrørende steder, hvor du kan aflevere produktet.

## Suomi

Laitte on merkitty jäteastia-symbolilla, jonka yli on vedetty rasti. Tämä tarkoittaa, ettei laitetta saa hävittää normaalin talousjätteen mukana. Älä hävitä laitetta normaalin jätteen seassa vaan varmista, että laite kierrätetään ympäristöystävällisellä tavalla, jottei ympäristölle tai ihmisille aiheudu vahinkoa. Lisätietoja kierrätyksestä ja keräyspisteistä saa ottamalla yhteyttä paikallisiin viranomaisiin tai jälleenmyyjään, joita laite ostettiin.

## Svenska

Symbolen med en överkorsad soptunna innebär att denna produkt inte får kastas i vanligt hushållsavfall. För att skydda miljön ska denna produkt inte kastas tillsammans med vanligt hushållsavfall utan lämnas för återvinning på tillbörligt sätt. För mer information om uppsamlingsplatser kontakta din lokala myndighet eller den återförsäljare där du har köpt produkten.

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