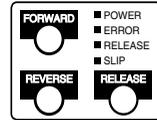
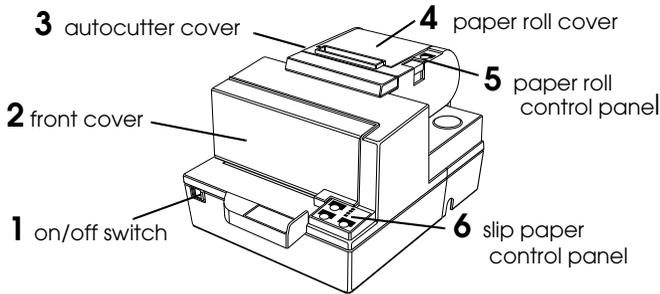


TM-H5000II

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

Printer Parts



DIP Switch Tables

Serial

| SW | Function | ON | OFF |
|-----|---------------------------------|----------|------------|
| 1-1 | Data receive error | Ignored | Prints "?" |
| 1-2 | Receive buffer | 45 bytes | 4 KB |
| 1-3 | Handshaking | XON/XOFF | DTR/DSR |
| 1-4 | Data word length | 7 bits | 8 bits |
| 1-5 | Parity check | | Enabled |
| 1-6 | Parity selection | | Even |
| 1-7 | See "Transmission speed" table. | | |
| 1-8 | | | |

| SW | Function | ON | OFF |
|----------|--|----------------------------|------------------------|
| 2-1 | Handshaking | Buffer full | Offline or buffer full |
| 2-2 | Customer display | Connected | Not connected |
| 2-3, 2-4 | Print density | See "Print density" table. | |
| 2-5, 2-6 | Reserved. Do not change. Fixed to OFF. | | |
| 2-7 | Pin 6 reset | Enabled | Disabled |
| 2-8 | Pin 25 reset | Enabled | Disabled |

Parallel

| SW | Function | ON | OFF |
|-----------|----------------|----------|----------|
| 1-1 | Auto line feed | Enabled | Disabled |
| 1-2 | Receive buffer | 45 bytes | 4 KB |
| 1-3 ~ 1-8 | Undefined | — | — |

| SW | Function | ON | OFF |
|-----------|--|----------------------------|------------------------|
| 2-1 | Handshaking | Buffer full | Offline or buffer full |
| 2-2 | Reserved Do not change. | Fixed to OFF. | |
| 2-3, 2-4 | Print density | See "Print density" table. | |
| 2-5 ~ 2-7 | Reserved. Fixed to OFF. Do not change. | | |
| 2-8 | Pin 31 reset | Fixed to ON. | |

Serial transmission speed

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

Print density

| 2-3 | 2-4 | Density |
|-----|-----|----------------|
| ON | ON | Low power mode |
| OFF | OFF | 1 (normal) |
| ON | OFF | 2 |
| OFF | ON | 3 (dark) |

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EMC and Safety Standards Applied

Product Name: TM-H5000II

Model Name: M128C

IEC 61000-4-5

IEC 61000-4-6

IEC 61000-4-8

IEC 61000-4-11

The following standards are applied only to the printers that are so labeled. (EMC is tested using the EPSON PS-170 power supply.)

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

Directive 90/384/EEC EN 45501

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.

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

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.



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.

Do not use aerosol sprayers containing flammable gas inside or around this product. Doing so may cause fire.

Caution Labels



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.



CAUTION:

The thermal head and print head are hot.

Unpacking

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

- Printer
- Power switch cover
- Ribbon cassette
- Paper roll
- Hexagonal lock screws (2 pcs) (only for the serial interface)

Control Panels

Paper Roll Control Panel

FEED button

Press to feed paper one line; hold down to feed continuously.

POWER LED

Lights when the printer is on.

ERROR LED

Lights to indicate an error.

PAPER OUT LED

Lights when the paper roll is at the end or near the end.

Slip Control Panel

FORWARD button

Press to feed the slip forward one line; hold down to feed it continuously.

REVERSE button

Press to feed the slip backward one line; hold down to reverse feed continuously.

RELEASE button

Press to release slip paper.

POWER LED

Lights when power is on.

ERROR LED

Lights to indicate an error.

RELEASE LED

Lights to indicate that you can insert slip paper.

SLIP LED

Lights to indicate that the printer is in slip mode.

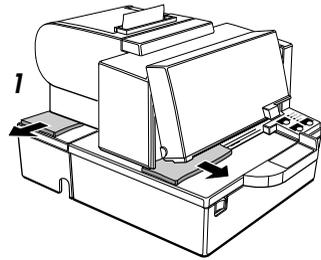
Removing the Dampers

The printer is protected for shipping by two transportation dampers that you must remove before you turn on the printer.

Open the printer by pulling the tab on the front cover, and remove the two dampers shown in illustration 1.

Note:

Reinstall the dampers before shipping.



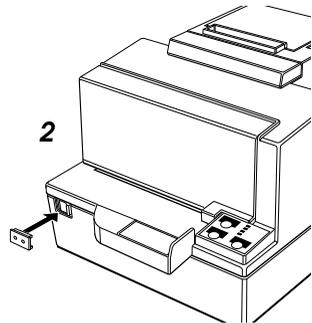
Using the Power Switch Cover



WARNING:

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

The enclosed power switch cover keeps the power switch from being pressed accidentally. To use the cover, install it as shown in illustration 2.



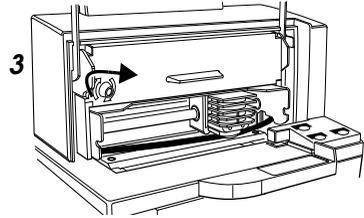
Installing the Ribbon Cassette

Use the EPSON ERC-31 ribbon cassette. The use of any ribbon cassettes other than those approved by EPSON may damage the printer and will void the warranty.

**CAUTION:**

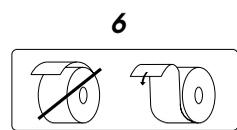
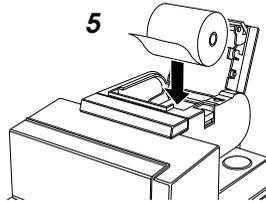
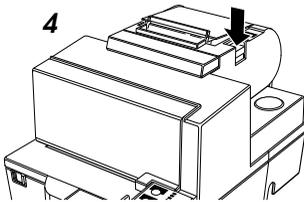
Never turn the ribbon cassette's feed knob in the opposite direction of the arrow marked on the cassette; otherwise the ribbon cassette may be damaged.

1. Turn the printer on, and open the front cover by pulling up the tab on the left side.
2. Be sure the print head is on the right side.
3. If a ribbon is already installed, remove it by grasping the end of the tab and removing it from the printer.
4. Turn the cassette knob on the cartridge in the direction of the arrow 2 or 3 times to remove any slack.
5. Insert the ribbon, and rotate the cassette knob 2 or 3 more times, as shown in illustration 3.
6. Make sure the ribbon has no wrinkles or creases and is installed below the print head as shown on the label inside the printer.



Installing the Paper Roll

1. Press the button, as shown in illustration 4, to open the cover.
2. Insert the paper roll as shown in illustration 5. Make sure that it is inserted correctly as shown in illustration 6.



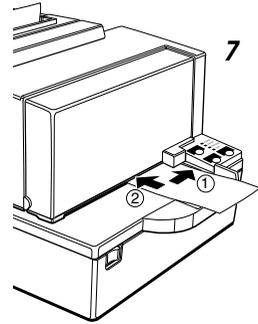
3. Pull out a small amount of paper, close the cover, and tear off the paper.

Inserting Slip Paper

Note:

Do not use wrinkled or curled paper.

1. When the SLIP LED flashes, insert slip paper, using the right edge of the slip paper inlet as a guide (see illustration 7).
2. When you insert the slip into the inlet as far as it will go, the sensor detects the slip, the SLIP LED changes from flashing to on, and the printer draws the paper in and prints it.
3. After printing is complete, the SLIP LED goes off, and you can remove the slip.



Note:

An optional front extension table (WT-5000) is available for users who need it to enable handwriting on paper or other uses.

Using the Optional MICR Reader

The optional, factory-installed magnetic ink character recognition (MICR) reader lets the printer read MICR ink on personal checks.



CAUTION:

Do not insert checks with staples in them. Do not insert wrinkled checks.

1. When the SLIP light flashes, insert the check face down, with the MICR characters on the right-hand side.
2. Insert the check straight into the inlet using the right edge of the inlet as a guide, as far as the check will go. See illustration 7.
3. The printer starts drawing the check in. Let go of the check immediately. The SLIP LED goes from flashing to on.
4. When MICR reading is complete, the printer ejects the check and the SLIP LED starts flashing again.
5. Remove the check by pulling it straight out (not at an angle). The SLIP LED goes off.

Cleaning the Paper Roll Print Head

**CAUTION:**

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

Turn off the printer, open the paper roll cover, and clean the thermal elements of the print 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.

Cleaning the Optional MICR Mechanism

Clean the MICR head and MICR roller every 6000 passes or once a month.

Note:

If you encounter frequent MICR reading errors, use one of the following methods.

For the MICR head

Use a moistened cleaning sheet, such as PRESAT brand (KIC) “Check Reader Cleaning Card” or an equivalent commercially available cleaning sheet.

For the MICR feed roller

Use an adhesive cleaning sheet available from EPSON. Contact your dealer.

Cleaning procedure

Use this procedure for both cleaning sheets.

1. Load a paper roll into the printer; then turn off the power.
2. Open the front cover and turn the power back on while holding down the RELEASE button.
3. Press the RELEASE button 7 times.
4. Close the front cover (the SLIP LED flashes).
5. Follow the instructions on the cleaning sheet. You will insert the cleaning sheet the same way you insert a normal check.
6. When the sheet is ejected, remove it from the printer; then turn off the power.

Troubleshooting

No lights on the control panel

Check that power supply cables are plugged into the printer correctly, the power unit, and power outlet.

The **ERROR** light is on, and nothing is printing

If the PAPER OUT LED is on, paper is not inserted or is not inserted correctly.

If the PAPER OUT LED is off, check that the paper roll cover is closed correctly.

The **ERROR** light is flashing, and nothing is printing

Check for a paper jam.

If the printer has been printing for awhile, the print head may be too hot. This corrects itself when the print head cools down.

Turn the printer off, and after 10 seconds, turn it back on.

The autocutter is jammed

1. Pull the cutter cover toward you so that you can rotate the cutter motor knob.
2. Follow the instructions on the label, and rotate the knob until ▼ appears in the window.
3. Close the cutter cover.

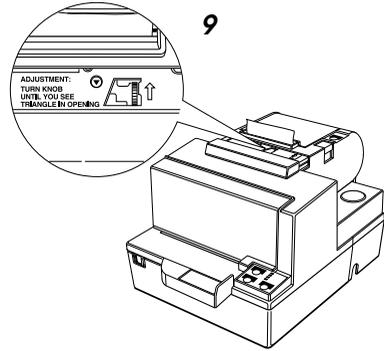
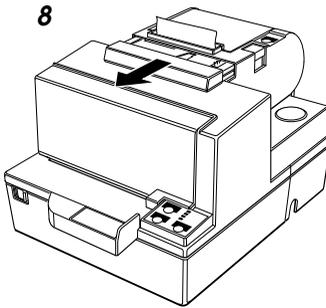
Removing Jammed Paper

**CAUTION:**

Do not touch the print head because it can be very hot after printing. Do not move the slip section print head carriage.

1. Turn the printer off and open the appropriate printer cover (either front or paper roll).
2. If the paper is jammed in the paper roll section, press the cover open button to open the cover. Then remove the jammed paper and put the roll back in the printer and close the cover. If the paper is jammed in the slip section, open the front cover and remove the jammed paper.

3. If paper is caught in the automatic cutter in the receipt section and the paper roll cover cannot be opened, open the cutter cover toward you, as shown in illustration **8**.
4. Rotate the knob until ▼ appears in the window, as shown in illustration **9**. This returns the cutter blade to the normal position. There is a label near the cutter to assist you.
5. Close the cutter cover.
6. Open the paper roll cover and remove the jammed paper.



TM-H5000II specifications

| | | | |
|--------------------------------------|--|---|---------------------|
| Printing method | Slip — Serial impact dot matrix, 9-pin vertical line Receipt — Thermal line printing | | |
| Printing direction | Slip — Bidirectional, minimum distance printing Receipt — Unidirectional with friction feed | | |
| Characters per line (default) | Slip — 9 × 9 font: 66; 7 × 9 font: 88 Receipt — Font A: 42; Font B: 56 | | |
| Character structure | Slip — 9 × 9, 3-dot spacing (half dots); 7 × 9, 2-dot spacing (half dots) Receipt — Font A = 12 × 24, 2-dot spacing; Font B = 9 × 17, 2-dot spacing | | |
| Character size | Slip: 9 × 9 font: 1.6 × 3.1 mm {0.06 × 0.12"}, 7 × 9 font: 1.3 × 3.1 mm {0.05 × 0.12"} Receipt: 12 × 24 font: 1.41 × 3.39 mm {0.06 × 0.13"}, 9 × 17 font: 0.99 × 2.40 mm {0.04 × 0.09"} | | |
| Number of characters | Slip — Alphanumeric characters: 95; International characters: 32 Extended graphics: 128 × 10 (with one space page) Receipt — Alphanumeric characters: 95; International characters: 37 Extended graphics: 128 × 8 (with one space page) | | |
| Print speed | Slip — 9 × 9 = 233 characters/second; 7 × 9 = 311 characters/second Receipt — High-speed = 120 mm/second {4.72"/second} max. 38 lines/second at 3.18 mm {1/8"} feed 28.4 lines/second at 4.23 {1/6"} feed Low-power = 70 mm/second {2.76"/second} 16.5 lines/second at 4.23 {1.6"} feed Ladder bar code = 42 mm/second {1.7"/second} | | |
| Paper feed speed | Receipt — Approx. 120 mm/sec. {4.72"/sec.} continuous feeding | | |
| Line spacing (default) | 4.23 mm {1/6"} | | |
| Paper specifications | Slip — Normal, carbon-copy, and pressure-sensitive 70 × 70 mm to 210 × 297 mm {2.76" × 2.76" to 8.27 × 11.69"} Receipt — 79.5 ± 0.5 mm {3.13 ± 0.02"} | | |
| Thermal paper type | Specified: Nakagawa Seisakujo. NTP080-80 (Original: Nippon Paper Industries Co., Ltd., TF50KS-E) | | |
| MICR | Magnetic bias. Recognition rate = 98% at 25°C {77°F} | | |
| Number of copies | Original + 4 copies at 20 to 45°C {68 to 113°F} Original + 1 to 3 copies at 5 to 45°C {41 to 113°F} | | |
| Ribbon cassette | ERC-31 | | |
| Interface (compatible) | RS-232 serial or IEEE 1284 parallel, RS-485 (dealer option) | | |
| Receive buffer | 45 bytes or 4K bytes | | |
| DKD function | 2 drives | | |
| Power supply | + 24 VDC ± 10% | | |
| Current consumption (at 24V) | Slip operating: | Mean: Approx. 1.9 A | Peak: Approx. 8 A |
| | Receipt operating: | Mean: Approx. 1.7 A | Peak: Approx. 7.7 A |
| | Low-power mode: | Mean: Approx. 1.2 A | Peak: Approx. 6.6 A |
| | Standby: | Approx. 0.3 A | |
| Reliability | Slip MTBF: | 180,000 hours | |
| | Receipt MTBF: | 360,000 hours | |
| | Slip MCBF: | 29,000,000 lines | |
| | Receipt MCBF: | 52,000,000 lines | |
| Temperature | Operating: | 5 to 45°C {41 to 113°F} | |
| | Storage: | -10 to 50°C {14 to 122°F}, except paper | |
| Humidity | Operating: | 10 to 90% RH | |
| | Storage: | 10 to 90% RH, except paper | |
| Overall dimensions | 201 × 252 × 331 mm {7.91 × 9.92 × 13.03"} (H × W × D) | | |
| Weight (mass) | Approximately 6.5 kg {14.3 lb} | | |