

TM-P80

User's Manual

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Important Safety Information

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

Key to Symbols

The symbols in this manual are identified by their level of importance, as defined below. Read the following carefully before handling the product.



DANGER:

Dangers must be observed carefully to avoid serious injury or death.



WARNING:

Warnings must be observed carefully to avoid serious bodily injury.



CAUTION:

Cautions must be observed to avoid minor injury to yourself, damage to your equipment, or loss of data.



Note:

Notes have important information and useful tips on the operation of your product.

Safety Precautions



DANGER:

Do not use or charge this product in high temperature places (60°C {140°F} or higher). Furthermore, do not leave or store this product in places that are 60°C {140°F} or higher. Doing so could lead to heat, smoke, ruptures, fire, or leaks. Be sure to use within the limits of the environmental temperature conditions.



WARNINGS:

Do not use this product in a location with volatile substances such as alcohol or paint thinner, or near fire. Doing so may cause electric shock or fire.

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 dedicated AC adapter, Epson PS-11 (M235A/M235B).

Connection to an improper AC adapter 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, do not continue to use it. Continued use may lead to fire. Unplug the equipment immediately and contact your dealer or a Seiko Epson service center for advice.

Do not use this product in an environment where flammable gas or explosive gas may exist. Do not use aerosol sprayers containing flammable gas inside or around this product. Doing so may cause fire.

Do not connect cables in ways other than those mentioned in this manual. Doing so may cause fire. It may also damage other devices.

Do not touch the areas inside the product other than those mentioned in this manual. Doing so may cause electric shock or burns.



CAUTIONS:

Be careful not to drop this product. The product may break or cause injury if it is dropped.

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.

Take care not to injure your fingers on the manual cutter

- *When you remove printed paper*
- *When you perform other operations such as loading/replacing roll paper*

Safety Precautions for Rechargeable Battery Pack

DANGERS:

If any liquid from the battery gets into your eyes, promptly wash it out with clean water for more than 10 minutes and consult your doctor at once. If you do not, the liquid may cause loss of eyesight.

Never disassemble or modify the battery pack. This may cause fire, explosion, leakage, overheating or damage.

Do not expose the battery to fire or heat it. This may cause fire, explosion, leakage, overheating or damage.

WARNINGS:

Keep the battery pack away from fire or flame if it produces a strange odor or leakage. Otherwise fire or explosion may occur.

Should any battery liquid get on skin or clothing, promptly wash it off with clean water. If you do not, the liquid may damage your skin.

Do not expose the battery to water. Do not allow water to contact the terminals. This may cause fire, overheating, or electric shock.

Transportation of the Battery

In transportation of the battery, make sure to follow the latest UN recommendations.

Safety Precautions for Wireless connection

This product is not guaranteed to work with all wireless LAN devices, including ad hoc mode.

WARNINGS:

In airplanes, follow the instructions from the airline. Turn off wireless devices during takeoff and landing according to the in-flight announcement.

Do not use the product near medical equipment or in medical institutions. Radio waves may affect artificial cardiac pacemakers or other medical electrical equipment.

Keep the product 22cm {8.66"} or more away from the location of an artificial cardiac pacemaker. Otherwise, radio waves may affect operation of the pacemaker.

Do not use the product near automatic control equipment such as automatic doors and fire alarms. Doing so may cause malfunction due to radio waves, resulting in an accident.

CAUTION:

Transmission may not be possible in environments which produce radio interference, such as near a microwave oven. In that case, taking measures such as changing the installation location or channel in use, or installing a shielding plate may improve the transmission.

- ❑ Even after data transfer from the host computer is already finished, data may remain in the buffer in the printer. When wireless connection is terminated, data remaining in the buffer may be discarded. Before printing or terminating a wireless connection, make sure that the transmitted data has been printed completely by checking the print job status or by checking another way.
- ❑ For Bluetooth® interface models, when the wireless connection is ended while the printer is offline, reconnection may not be possible. In such case, remove the cause of offline and reconnect it.

- ❑ For Bluetooth® interface models, if you establish a radio connection between the host computer and the printer each time you start printing instead of maintaining the connection, it may take a while between the time you send a print job and the time that the printer actually starts printing. This happens because connecting the host computer and the printer requires some time. The time required for connection depends on the operating environment.

Safety Label

The caution label on the product indicates the following precaution.



CAUTION:

During printing or after printing, the thermal head can be very hot.

Restriction of Use

When this product is used for applications requiring high reliability/safety, such as transportation devices related to aviation, rail, marine, automotive, etc.; disaster prevention devices; various safety devices, etc.; or functional/precision devices, etc.; you should use this product only after giving consideration to including fail-safes and redundancies into your design to maintain safety and total system reliability. Because this product was not intended for use in applications requiring extremely high reliability/safety, such as aerospace equipment, main communication equipment, nuclear power control equipment, or medical equipment related to direct medical care, etc., please make your own judgment on this product's suitability after a full evaluation.

Notes on Use

- ❑ The printer does not operate with only the AC adapter. Always install the enclosed battery OT-BY60II in the printer even when using the AC adapter.
- ❑ Be sure to use the power button to turn the printer on and off.
- ❑ To communicate with a computer via a USB cable, connect the cable before turning on the printer.
- ❑ To use the USB cable, it is recommended to secure it to avoid stress on it.
- ❑ Be sure not to open the roll paper cover when the printer is operating.
- ❑ Protect the printer from impact.
- ❑ Do not apply excessive force to the printer case.
- ❑ Do not place food or beverages such as coffee on the case of the printer.

Notes on Power Supply

Battery Pack

Before using the printer for the first time, charge the battery OT-BY60II. To install and charge the battery, see "Installing and Charging Battery" on page 10. Read also the safety precautions for the rechargeable battery described previously in this manual.



WARNING:

Be sure to use the battery OT-BY60II. Using a battery other than the one specified may cause fire, explosion, leakage, overheating or other damage.



CAUTION:

Dispose of used batteries according to the instructions.

External Power Supply

This product uses a listed power unit marked "Class 2" or "LPS," with the output

voltage of either maximum 1.0 A at DC12 V, or maximum 1.5 A at DC 24 V.

With the optional AC adapter Epson PS-11 [Model: M235A/M235B], the output voltage is maximum 1.5 A at DC 24 V, and the input voltage is AC 100 V to 240 V.

Recycling the Batteries

Contains a lithium-ion battery. Must be recycled or disposed of properly.

 **Note:**

Do not disassemble the battery pack.



For American Users

The lithium-ion battery is recyclable. At the end of its useful life, under various state and local laws, it is illegal to dispose of this battery into your municipal waste stream. Please call 1-800-8-BATTERY for information on how to recycle this battery.

Downloading Drivers, Utilities, and Manuals

Further product information is written in the TM-P80 *Technical Reference Guide*.

The latest versions of 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.epson.com/support/>

For customers in other countries, go to the following web site:

<http://download.epson-biz.com/?service=pos>

Open Source Software License

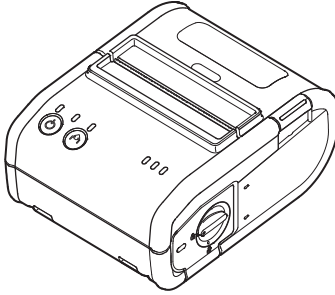
1. This product includes open source software programs listed in Section 4) according to the license terms of each open source software program.
2. We provide the source code of the GPL Programs and LGPL Programs (each is defined in Section 4) to you on a CD-ROM for a charge covering the cost of performing such distribution, such as the cost of media, shipping and handling until five (5) years after the discontinuation of same model of this product. If you desire to receive the source code above, please contact the customer support for your region.
3. The open source software programs are WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. See the license agreements of each open source software program for more details, which are described on "OPEN SOURCE SOFTWARE LICENSE TERMS" in this documentation.
4. The list of open source software programs included with this printer product and the whole license agreements of each license can be found in the following URL.

<http://xxx.xxx.xxx.xxx/licenses.htm>

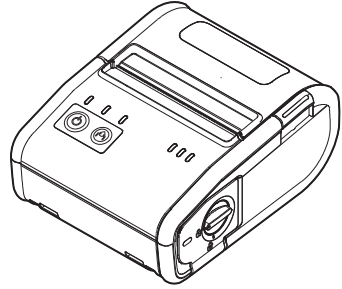
* For the underlined part in the above URL, input each printer's IP address.

Features of Printers

TM-P80 has two models: Autocutter model, Manualcutter model. The features are as following.



Autocutter model



Manualcutter model

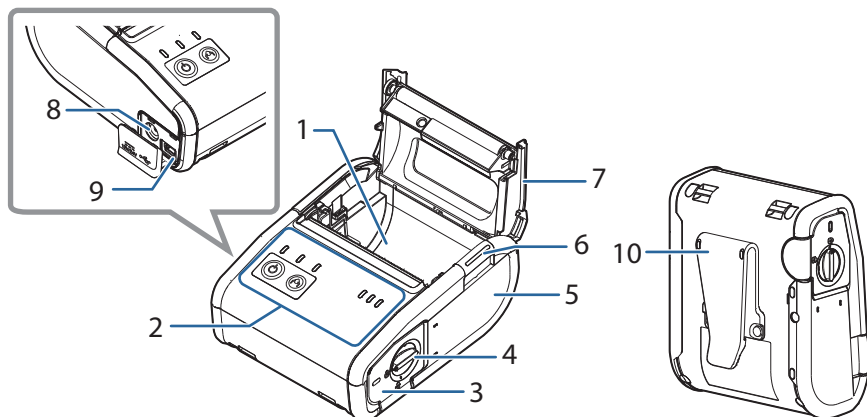
	Autocutter model	Manualcutter model
Autocutter	Yes	No
Paper width (mm)	76* or 80	80

* With the included Paper guide equipped.

This manual covers two models of the TM-P80.

The illustrations of the printer used in this manual are for the manualcutter model, unless otherwise specified.

Part Names



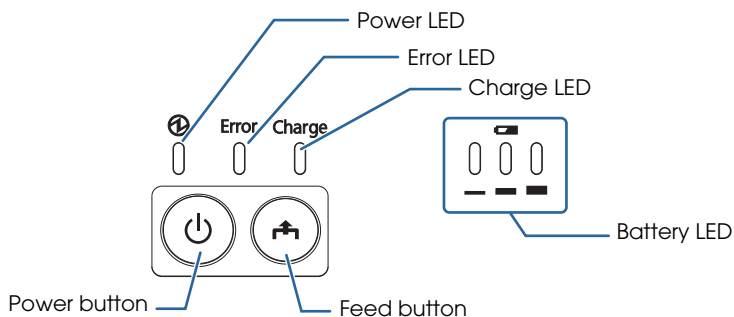
- | | |
|----------------------|---------------------------------|
| 1. Roll paper holder | 6. Open button |
| 2. Control panel | 7. Roll paper cover |
| 3. Battery cover | 8. Connector for the AC adapter |
| 4. Lever | 9. Connector for the USB |
| 5. NFC Tag | 10. Belt clip |

NFC Tag

A mark is printed here to indicate the position of the NFC tag. To establish communication with an NFC device, bring the device close to this mark.

For the functions using the NFC tag, refer to *Technical Reference Guide*.

Control Panel (LEDs and Buttons)



Power LED (Blue)

Power LED	Meanings
On	Power is on.
Off	Power is off.
Flashing	The printer is powering-off and powering-on.

Error LED (Orange)

Printer Condition	Error LED	Meanings
Power On	On	Printer is offline (paper out, power-on initialization, roll paper cover open, the remaining battery charge is at E level).
	Off	Printer is in normal operation.
	Flashing	Printer is in error.

Charge LED (Orange)

Printer Condition	Charge LED	Meanings
Power On and battery installed	On	The battery is being charged.
	Off	The battery is fully charged.
	Flashing	There is abnormality in battery charging.

Battery LED (Blue)

Printer Condition	Battery LED	Error LED	Battery charge status	Meanings
Power On	3 LEDs On	Off	Level H	-
	2 LEDs On	Off	Level M	-
	1 LED On	Off	Level L	You can continue printing, but replacement or charge of the battery is recommended.
	1 LED flashing	Off	Level S	Replace or charge the battery.
	3 LEDs Off	On	Level E	The printer goes offline and printing is no longer possible.

Power button

Press this button to turn the power on or off. To turn the power off, hold the button for more than 2 seconds.

Feed button

Press this button to feed paper.

Belt Clip


You can hang the printer on your belt using the belt clip attached to the back of the printer.

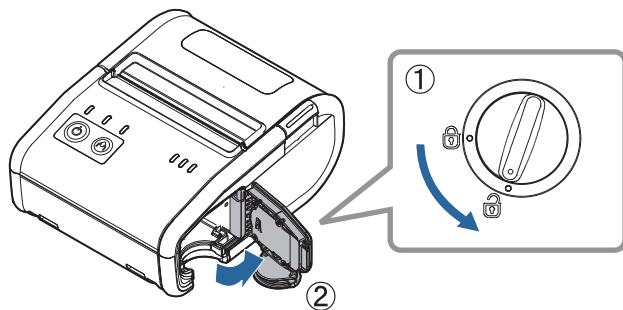
Installing and Charging Battery

Follow the steps below to install and charge the battery.

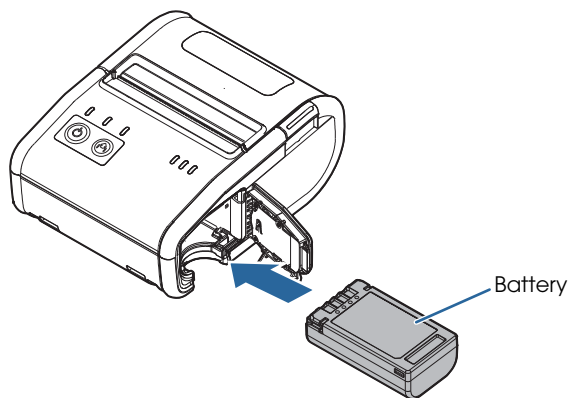
Note:


The battery can be charged only when the temperature is 0 ~ 40°C {32 ~ 104°F}.

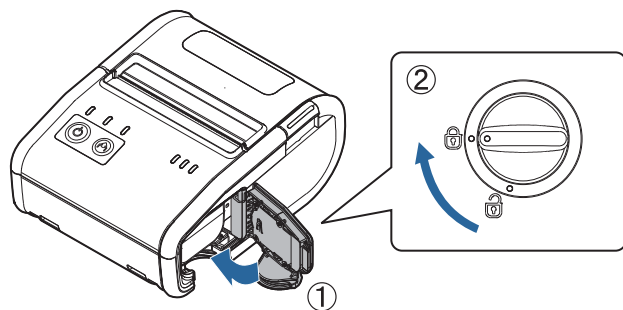
1. Make sure that the printer is turned off.
2. Turn the lever to the  mark, and slide the battery cover to open it.



3. Install the battery.



4. Close the battery cover, and turn the lever to the  mark.



5. Connect the AC adapter to the printer.
Recharging starts.

Notes:

Recharging will take approximately 2.5 hours with the AC adapter or with the optional battery charger OT-CH60II. For detailed information on the battery charger, see its user's manual. The time described above is the time required to charge a battery pack that is fully discharged.

Recharging the battery at 35°C {95°F} or higher activates the internal temperature control of the printer, which may require a longer charging time than the specified one. The Charge LED flashes while the charge is stopped.

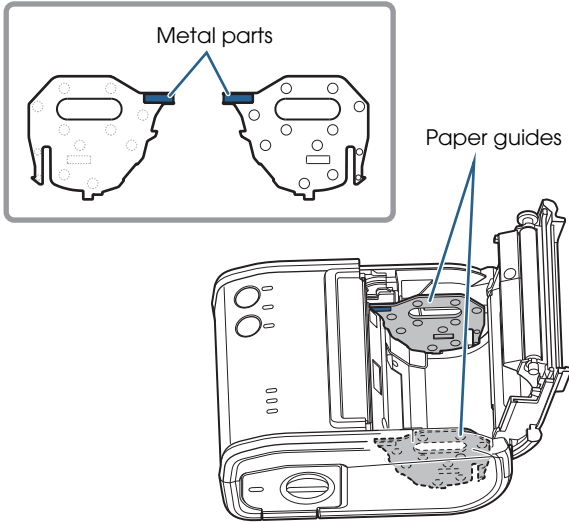
Changing the paper width (for the autocutter model only)

You can attach the supplied paper guides to the roll paper holder and change the roll paper width from 80 mm to 76 mm.

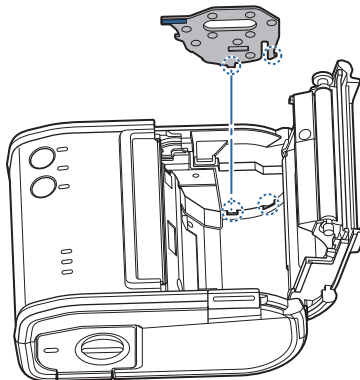
⚠ CAUTION:

After changing the paper width from 80 mm to 76 mm, do not change it back to 80 mm. The autocutter blade may be worn and may not be able to cut cleanly, and so on.

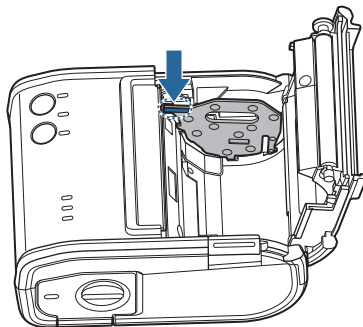
Make sure that you attach two paper guides and that the metal part comes inside (on the side facing the roll paper) when attaching them.



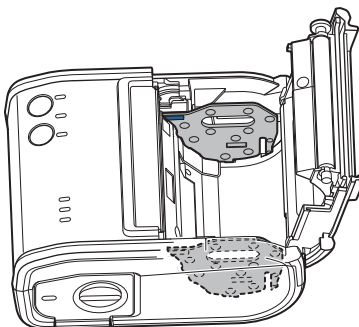
1. Make sure that the printer is turned off.
2. Press the open button to open the roll paper cover.
3. Align the two protruded parts of the paper guides with the angle holes of the printer.



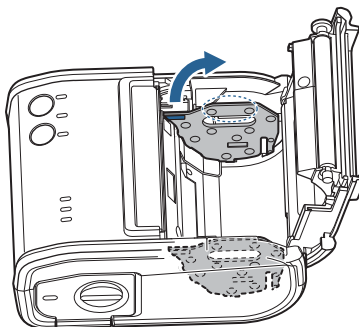
4. Insert one of the paper guide's protruded parts toward the direction shown by the arrow in the illustration firmly until it clicks in place.



5. Attach another paper guide in the same way.



When removing the paper guide, pinch the position shown in the illustration and pull it out toward the direction shown by the arrow.



Installing or Replacing Roll Paper

Follow the steps below to install or replace the roll paper.

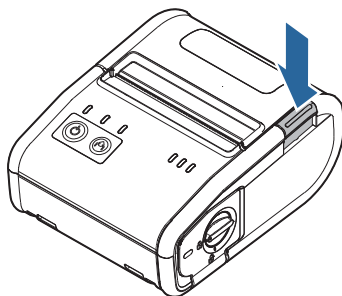
⚠ CAUTION:

Be sure to use roll paper that meets the specifications.

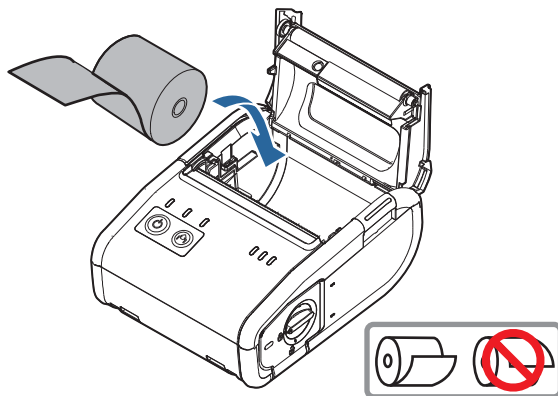
Note:

Do not use the roll paper that have the paper glued to the core.

1. Press the open button to open the roll paper cover.



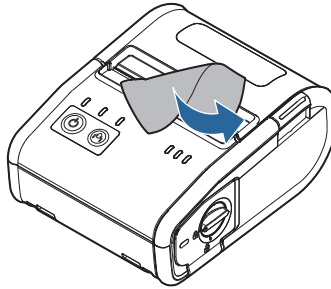
2. Remove the used roll paper core if there is one, and insert the new roll paper.



Note:

Note the direction the paper comes off the roll.

3. Pull out some paper, close the cover, and tear off the paper with the manual cutter.
For the autocutter model, the roll paper is cut automatically if the printer is turned on.



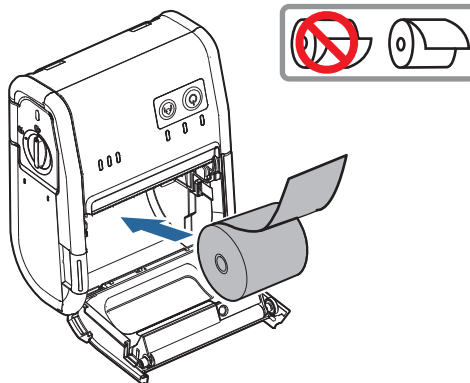
Installing or Replacing Roll Paper Vertically

You can hang the printer vertically on a belt using a belt clip on the back of the printer. When you use the printer vertically, follow the steps below to install the roll paper.

Note:

Be sure that the roll paper holder is on the bottom when you use the printer vertically.

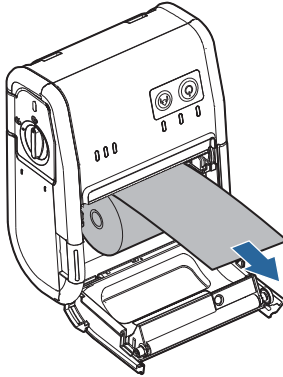
1. Press the open button to open the roll paper cover.
2. Remove the used roll paper core if there is one.
3. Set the new roll paper.



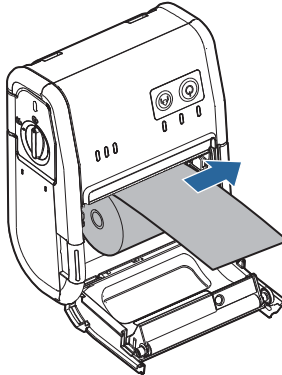
Note:

Note the direction the paper comes off the roll.

4. Pull the leading edge of the roll paper.



5. Align the left edge of the roll paper with the edge of the cover.



6. Close the roll paper cover and tear off the paper with the manual cutter. For the autocutter model, the roll paper is cut automatically if the printer is turned on.

Buzzer

The factory default is set to On (buzzer sounds) to indicate the following:

- Remaining battery charge is not adequate
- Roll paper end
- Error

Troubleshooting

No lights on the control panel

Check that the battery is installed.

Error LED is flashing or on


- ❑ The printer temperature may be too high. The printer resumes printing automatically when the temperature returns to normal.
 - ❑ Make sure that the roll paper cover is properly closed.
 - ❑ Make sure that roll paper is installed.
 - ❑ Check that there is no paper jam inside. If paper is jammed, press the open button to open the roll paper cover, and then remove the jammed paper.
 - ❑ When the printer power is on, if the Error LED is on and the Battery LED is off, the remaining battery charge is not enough for printer operation. Replace or charge the battery.
 - ❑ Turn off the power, wait several seconds, and then turn it on again. If the error remains, contact a qualified service person.
 - ❑ Check the position of the autocutter blade. (For the autocutter model only)
If there are any foreign objects such as clips on the cutter part or if the roll paper is jammed, the autocutter blade may not return to the correct position and may be locked. If this happens, the roll paper cover does not open even if you press the open button. Return the autocutter blade to the correct position. See "Adjusting the autocutter blade (for the autocutter model only)" on page 19.
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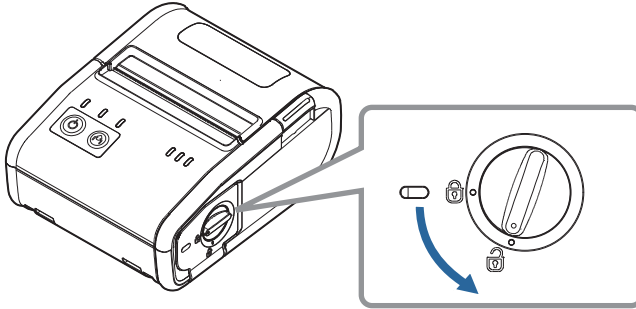
The battery will not charge

- ❑ When the battery is not fully charged even if charged for about 5 hours, the battery is defective.
The battery must be replaced with a new one.
- ❑ Turn on the printer, install the roll paper and close the roll paper cover.
After that if the Error LED is on and the Charge LED is flashing, the battery is defective.
The battery must be replaced with a new one.

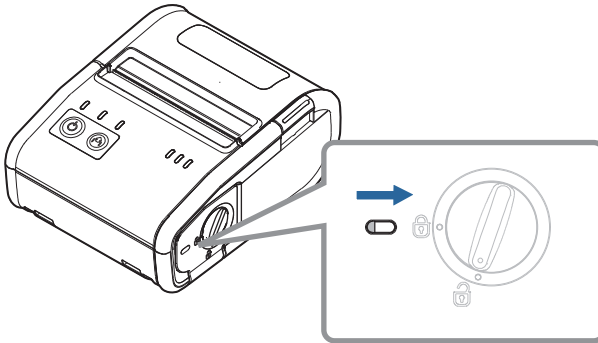
The Battery cover will not open

Follow the steps below when the Battery cover will not open.

1. Make sure that the printer is turned off.
2. Turn the lever to the  mark.



3. Move the notch in the direction of the arrow by using a tool such as a ballpoint pen.



The Roll paper cover will not open (Autocutter model only)

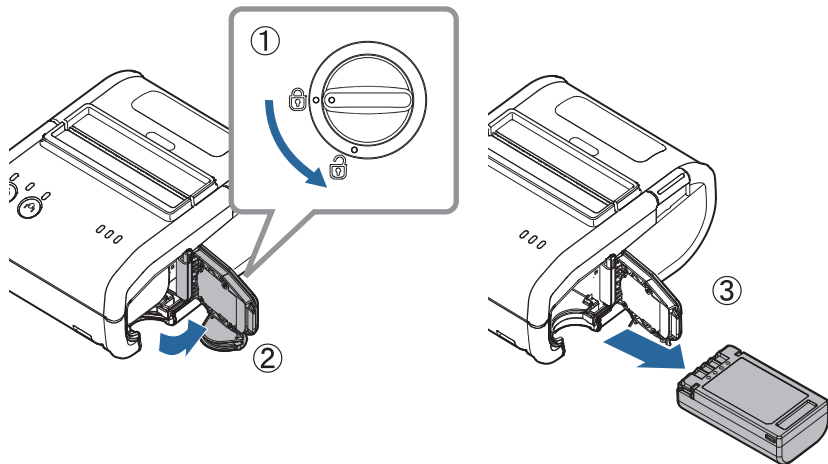
If there are any foreign objects such as clips on the cutter part or if the roll paper is jammed, the autocutter blade may not return to the correct position and may be locked. If this happens, the roll paper cover does not open even if you press the open button. Return the autocutter blade to the correct position.

See "Adjusting the autocutter blade (for the autocutter model only)" on page 19.

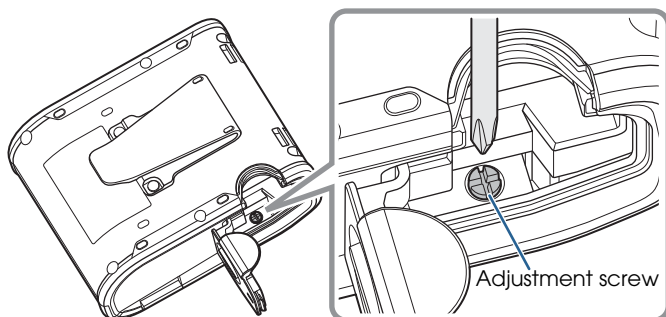
Adjusting the autocutter blade (for the autocutter model only)

If the autocutter blade is locked, follow the procedure below and return it to the correct position.

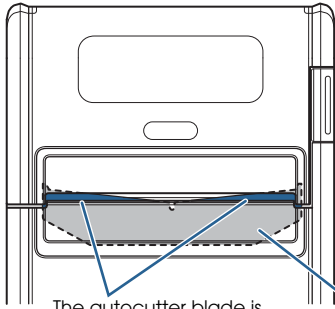
1. Make sure that the printer is turned off.
2. Open the battery cover and remove the battery.



3. Turn the adjustment screw with a cross-shaped screwdriver and so on, and adjust the autocutter blade so that you cannot see it from the paper ejection part.

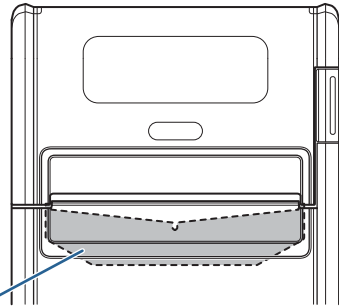


Before adjustment
When the autocutter blade is locked



The autocutter blade is visible from the paper eject slot.

After adjustment
When the autocutter blade is returned to the correct position



Autocutter blade

Once the autocutter blade returns to the correct position, you can press the open button and open the roll paper cover.

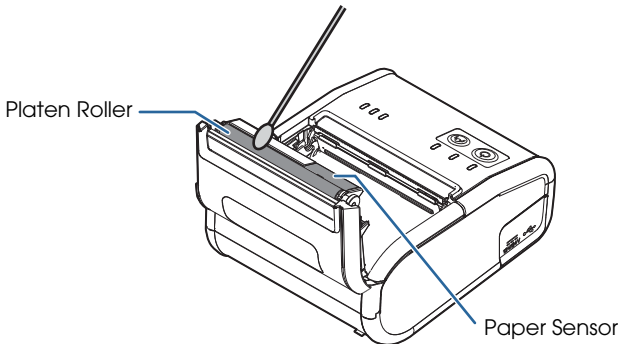
Cleaning the Platen Roller/Paper Sensor

⚠ CAUTION:

Do not use an alcohol-based solvent. Use of an alcohol-based solvent might cause the adhesive agent to partially dissolve making its removal even more difficult.

When paper dust accumulates on the platen rollers or the paper sensor, follow the steps below to clean them. To maintain good functional capabilities, clean them regularly (every 6 months).

1. Turn off the printer, open the roll paper cover.
2. Clean the platen roller and the paper sensor with a cotton swab lightly moistened with water.



3. Close the roll paper cover after the water has dried.

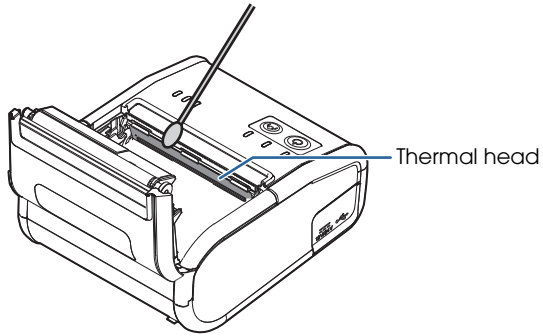
Cleaning the Thermal Head

⚠ 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.

Do not use water. Use an alcohol-based solvent only.

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



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

TM-P80 Specifications

Item		Autocutter model	Manualcutter model	
Print method		Thermal line printing		
Print density		203 dpi × 203 dpi (dpi: dots per 25.4 mm (dots per inch))		
Printing width (default)		72 mm {2.83"}, 576 dot positions		
Paper	Roll paper width	79.5 ± 0.5 mm {3.12 ± 0.02"} 76.2 ± 0.5 mm {3.00 ± 0.02"} (With the included Paper guide equipped.)	79.5 ± 0.5 mm {3.12 ± 0.02"} 76.2 ± 0.5 mm {3.00 ± 0.02"} (With the included Paper guide equipped.)	
		External diameter Max. 51 mm {2.00"} Roll paper core external diameter 18 mm {0.71"} or more		
	Specified thermal paper		NIPPON Paper Industries Co., Ltd.: TF50KS-EY/TF60KS-E Oji Holdings Corporation: PD150R/PD160R/PD190R Mitsubishi Paper Mills Ltd.: P220AGB-1 Kanzaki Specialty Papers (USA): P30023/P31023/P35024 Koehler: KT55F20/KT48F20 Jujo ThermalOy: AF50KS-E Mitsubishi HiTec: F5041 (48)/F5041 (55)	
	Interface		Wi-Fi® model (Model: M316A/M316C) IEEE802.11a/b/g/n mini-USB 2.0 Full speed, Type B Bluetooth® model (Model: M316B/M316D) Bluetooth 3.0 (EDR supported) mini-USB 2.0 Full speed, Type B	
Specified battery*1		Rated voltage: DC 7.2 V Capacity: Typ.1950 mAh, Min.1850 mAh		
Supply voltage		Input voltage: Either max. 1.0 A at DC12 V, or max. 1.5 A at DC 24V (When using the optional AC adapter Epson PS-11 (Model: M235A/M235B)) Output voltage: 1.5 A at DC 24V, Input voltage: AC 100V to 240 V		
Temperature /humidity	During battery charge	0 ~ 40°C {32 ~ 104°F}, 10 ~ 90% RH		
	During operation	Battery only: 0 ~ 45°C {32 ~ 113°F}, 10 ~ 90% RH Battery and power unit: 0 ~ 40°C {32 ~ 104°F}, 10 ~ 90% RH		
	During storage	High temperature and humidity: 45°C {113°F}, 90%RH for 120 hours High temperature: 70°C {158°F} for 120 hours Low temperature: -25°C {-13°F} for 120 hours		
Overall dimensions (W × D × H)		110 × 140 × 69 mm {4.3 × 5.5 × 2.7"} (Belt clip excluded)	110 × 140 × 64 mm {4.3 × 5.5 × 2.5"} 2.7"} (Belt clip excluded)	
Weight (Mass)	Wi-Fi® model	Approx. 640 g {1.41 lb} *2	Approx. 506 g {1.11 lb} *3	
	Bluetooth® model	Approx. 630 g {1.39 lb} *2	Approx. 500 g {1.10 lb} *3	

*1: Lithium-ion battery; Product name: OT-BY60II, Trade name: Seiko Epson Corporation
For the battery specifications, see its User's Manual.

*2: Battery included; belt clip and roll paper excluded

*3: Battery and belt clip included; roll paper excluded