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<td><strong>Advanced Usage</strong></td>
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<td>Describes how to handle the product.</td>
</tr>
<tr>
<td><strong>Appendix</strong></td>
<td>Describes general specifications and character code tables.</td>
</tr>
</tbody>
</table>
For Safety

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.

- **WARNING**
  - You must follow warnings carefully to avoid serious bodily injury.

- **CAUTION**
  - Provides information that must be observed to prevent damage to the equipment or loss of data.
  - Possibility of sustaining physical injuries.
  - Possibility of causing physical damage.
  - Possibility of causing information loss.

- **CAUTION**
  - Provides information that must be observed to avoid damage to your equipment or a malfunction.

- **NOTE**
  - Provides important information and useful tips.

Warnings

- **WARNING**
  - **Handle the power cable with care.**
  - Improper handling may lead to fire or electric shock.
    - Do not modify or attempt to repair the cable.
    - Do not place any heavy object on top of the cable.
    - Avoid excessive bending, twisting, and pulling.
    - Do not place the cable near heating equipment.
    - Check that the plug is clean before plugging it in.
    - Be sure to push the plug all the way in.
  - **Be sure to use the specified AC adapter (PS-180).**
    - Connection to an improper power source may cause fire or shock.
  - **Do not place multiple loads on the power outlet.**
    - Overloading the outlet may lead to 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 qualified service personnel.
  - **Never disassemble or modify this product.**
    - Tampering with this product may result in injury or 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 power cord immediately and contact qualified service personnel.
  - **Do not use aerosol sprayers containing flammable gas inside or around this product.**
    - Doing so may cause fire.
  - **Do not use this product in locations subject to high humidity or dust levels.**
    - Excessive humidity and dust may cause equipment damage or fire.
### Cautions

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Do not connect cables in ways other than those mentioned in this manual.</strong></td>
</tr>
<tr>
<td>Different connections may cause equipment damage.</td>
</tr>
<tr>
<td><strong>Be sure to set this equipment on a firm, stable, horizontal surface.</strong></td>
</tr>
<tr>
<td>The product may break or cause injury if it falls.</td>
</tr>
<tr>
<td><strong>Do not place heavy objects on top of this product. Never stand or lean on this product.</strong></td>
</tr>
<tr>
<td>Equipment may fall or collapse, causing breakage and possible injury.</td>
</tr>
<tr>
<td><strong>Take care not to injure your fingers on the manual cutter</strong></td>
</tr>
<tr>
<td>✓ When you remove printed paper</td>
</tr>
<tr>
<td>✓ When you perform other operations such as loading/replacing roll paper</td>
</tr>
<tr>
<td><strong>Do not open the roll paper cover without taking the necessary precautions, as this can result in injury from the autocutter fixed blade.</strong></td>
</tr>
<tr>
<td><strong>To ensure safety, unplug this product before leaving it unused for an extended period.</strong></td>
</tr>
<tr>
<td><strong>To avoid risk of electric shock, do not set up this product or handle cables during a thunderstorm.</strong></td>
</tr>
<tr>
<td><strong>Never insert or disconnect the power plug with wet hands.</strong></td>
</tr>
<tr>
<td>Doing so may result in severe shock.</td>
</tr>
<tr>
<td><strong>Never attempt to repair this product yourself.</strong></td>
</tr>
<tr>
<td>Improper repair work can be dangerous.</td>
</tr>
</tbody>
</table>
**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.

**Note about interference**

- This product 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.

- If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna for the radio/TV.
  - Increase the separation between the equipment and the radio/TV.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult your dealer or an experienced radio/TV technician for help.

- Never disassemble or modify this product.

- Seiko Epson Corporation shall not be liable for interference to radio/TV resulting from changes or modifications to this product not expressly approved by Seiko Epson Corporation.

**Open Source Software License**

This product uses open source software in addition to Epson proprietary software.

For information of the open source software used in this product, see the following URL.
http://xxx.xxx.xxx.xxx/licenses.html

For “xxx.xxx.xxx.xxx” in the above URL, input your printer’s IP address.
About this Manual

Aim of the Manual

This manual was created to provide information on development, design, and installation of POS systems and development and design of printer applications for developers.

Manual Content

The manual is made up of the following sections:

Chapter 1  Product Overview
Chapter 2  Setup of the Tablet
Chapter 3  Setup of the Printer
Chapter 4  Using Dedicated Optional Products
Chapter 5  Advanced Usage
Chapter 6  Application Development Information
Chapter 7  Handling
Appendix  Product Specifications
 Specifications of Interface and Connector
 Bluetooth Low Energy Technology Advertising
 Character Code Tables
 Compatibility with USB Type-A
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Product Overview

This chapter describes features of the product.

Features

Tablet can be directly mounted to the printer

- An iPad or Android device can be directly mounted to the printer and used just like a built-in display.
- You can mount a tablet to the printer just by sandwiching the tablet with the upper and lower tablet holders.
- The printer can be placed horizontally, vertically, or hung on a wall.
- Because the printer hardware/mechanism is the same as TM-m30II-H, development environment the same as for TM-m30II-H is provided except for the NFC tag function.

Printing

- High speed receipt printing is possible (250 mm/s maximum).
- By using the included 58-mm width roll paper guides, 58-mm width roll paper can be used.
- Supports a variety of language (ANK (includes Thai language)/Japanese/Simplified Chinese/Traditional Chinese/Korean)
- When the printer is placed vertically, you can print pages upside down to make it easier to read the pages by using the "Batch rotate print (Upside Down)" function.

Handling

- Easy drop-in paper loading.
- You can connect to the printer from an interface, other than the mainly connected interface, and run print operation, when mainly connected interface is not printing.
- The near end detector is installed as standard equipment. (The detection function can be enabled when placing the printer vertically and using 80 mm width roll paper.)
- Ethernet, Bluetooth, and Wi-Fi connection status can be easily checked by viewing respective LED lights.
- A mechanism that holds paper while feeding paper backward enables reduction of top margin of each label during continuous printing.
- Equipped with three USB Type-A ports for connecting the option devices.
- The USB port for connecting a tablet computer; USB-A - Device Charging, can provide up to 2.1A.

Software

- TM-Intelligent function is equipped.
  - Supports Server Direct Print that sends a request for print data from the product to the Web server at regular intervals.
  - Supports status notification function, which enables the printer to send its status to a web server at a regular interval.
- Printing triggered by bar code scan by smart device camera.
- A utility for iOS/Android™ (Epson TM Utility for iOS/Android) for making printer settings is provided.
- Printing of various types of bar codes, GS1-DataBar, and two-dimensional symbols (PDF417, QR code, MaxiCode, Composite Symbology, Aztec Code, DataMatrix) is supported.
- A maintenance counter function is supported.
Environment

- Paper saving function is available.

Others

Optional Wireless LAN cable set, customer display, and external buzzer are available.
Product Configurations

**Accessories**

- 58-mm width roll paper guides
- 80-mm width roll paper (for operation check)
- Power switch cover
- AC adapter (included inside the printer)
- AC cable
- Lock lever cover
- Screw
- Tablet table (large)
- Manuals

**Options**

- Wall hanging bracket set dedicated for TM-m30II-SL (Model: OT-WH30SL)
- Customer display dedicated for TM-m30II-SL (Model: OT-DM30SL)
- Wireless LAN cable set (Model: OT-WL02/OT-WL05/OT-WL06)
- Customer display (Model: DM-D30, DM-D70)
- Optional external buzzer (Model: OT-BZ20)
- Tape for fixing the printer (Model: DF-10)
# Part Names and Functions

## Front

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Upper tablet holder</td>
<td>Holds the upper side of a tablet.</td>
</tr>
<tr>
<td>2</td>
<td>Tablet table (standard)</td>
<td>Place a tablet on this table.</td>
</tr>
<tr>
<td>3</td>
<td>Lower tablet holder</td>
<td>Holds the lower side of a tablet.</td>
</tr>
<tr>
<td>4</td>
<td>Security slot</td>
<td>Use here to attach an anti-theft tool such as a wire. This slot is provided on both sides of the printer.</td>
</tr>
<tr>
<td>5</td>
<td>Lock lever</td>
<td>Operate this lever to secure a tablet.</td>
</tr>
<tr>
<td>6</td>
<td>Screw</td>
<td>The screws are securing the tablet table.</td>
</tr>
<tr>
<td>7</td>
<td>Cover open lever</td>
<td>Operate this lever to open the roll paper cover.</td>
</tr>
<tr>
<td>8</td>
<td>Feed button</td>
<td>Press this button once to feed the roll paper for one line. Hold down this button to continue feeding the roll paper.</td>
</tr>
<tr>
<td>9</td>
<td>Power switch</td>
<td>This switch turns the printer on or off.</td>
</tr>
<tr>
<td>10</td>
<td>Roll paper cover</td>
<td>Open this cover when installing or replacing the roll paper.</td>
</tr>
<tr>
<td>11</td>
<td>Panel LED</td>
<td>For explanation of the LEDs, see &quot;Panel LED&quot; on page 17</td>
</tr>
</tbody>
</table>

*NOTE* When turning off the printer without using the power switch, it is recommended to send a power-off command to the printer. If you use the power-off sequence, the latest maintenance counter values are saved. (Maintenance counter values are usually saved every two minutes.)

For information about ESC/POS commands, see the ESC/POS Command Reference.
## Bottom

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bottom cover</td>
<td>Remove this cover when connecting interface cables to the connectors inside the printer.</td>
</tr>
<tr>
<td>2</td>
<td>Rear cover</td>
<td>Remove this cover when connecting interface cables to the connectors inside the printer.</td>
</tr>
<tr>
<td>3</td>
<td>Side cover</td>
<td>Remove this cover when connecting interface cables to the connectors inside the printer.</td>
</tr>
<tr>
<td>4</td>
<td>Connectors</td>
<td>For connecting various devices to the printer.</td>
</tr>
<tr>
<td>5</td>
<td>DC cable</td>
<td>The AC adapter supplies power to the printer through this cable.</td>
</tr>
<tr>
<td>6</td>
<td>AC adapter</td>
<td>Supplies power to the printer.</td>
</tr>
</tbody>
</table>

### CAUTION

- Be sure to use the specified AC adapter (PS-180) only. Using another AC adapter may result in fire or electric shock.
- Never insert the AC cable plug into a socket that does not meet the input voltage of the AC adapter. Doing so may result in damage to the printer.
- Should a fault ever occur, immediately turn off the power to the printer and unplug the AC cable from the socket.
- Use only the AC cable that came with the printer.
### Panel LED

#### Power LED
- Lights when the power supply is on.
- Off when the power supply is off.
- Flashes during the network to start up, when waiting for power off, or updating firmware.

**CAUTION**

Do not turn on by using the power switch while waiting for the power to turn off (when the Power LED is flashing). Otherwise, it may not startup correctly.

#### Error LED
- Lights or flashes when an error occurs. (For information about the flashing patterns, see "Status and Errors" on page 21.)
- Lights after the power is turned on or after a reset (offline). Automatically goes out after a while to indicate that the printer is ready.
- Off when the printer is in standard mode (online).

#### Paper LED
- Lights when the roll paper is out.
- Flashes to urge user to operate the Feed button.

**NOTE**

This LED also lights when the remaining amount of roll paper becomes low if the roll paper near-end detection function has been enabled. The function can be used when placing the printer vertically and using 80 mm width roll paper.

For more details about the detection setting, see "Software Settings" on page 81.

For more details about the near-end detection, see "Enabling the Roll Paper Near-End Detection" on page 71.

#### Wi-Fi LED
- Lights while the printer is connected to Wi-Fi.
- Off while the printer is not connected to Wi-Fi or while the printer is connected to a wired LAN.
- Flashes while communication is temporarily disabled because an IP address has not been acquired or for other reason.

#### Ethernet LED
- Lights while the printer is connected to Ethernet.
- Off while the printer is not connected to Ethernet or while the printer is connected to Wi-Fi.
- Flashes while communication is temporarily disabled because an IP address has not been acquired or for other reason.

#### Bluetooth LED
- Lights while the printer is connected via Bluetooth.
- Off while the printer is not connected via Bluetooth.
- Flashes while the printer is waiting to be paired with another device.
Connectors

A: Printer models without a microSD card slot
B: Printer models with a microSD card slot

### Connectors

<table>
<thead>
<tr>
<th>No.</th>
<th>Connector</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USB connector (USB-A - Device Charging)</td>
<td>Connects a USB cable of a tablet. Enables communication with the tablet while charging the tablet. No power is supplied to the connected tablet if the printer is turned off.</td>
</tr>
<tr>
<td>2, 3, 4</td>
<td>USB connector (Type-A)</td>
<td>Connects a USB cable of a peripheral device such as an optional Wireless LAN cable set, customer display, or handheld scanner. No power is supplied to the connected device if the printer is turned off.</td>
</tr>
<tr>
<td>5</td>
<td>USB connector (Type-B)</td>
<td>Connects the USB cable for connecting to computers.</td>
</tr>
<tr>
<td>6</td>
<td>Power supply connector</td>
<td>Connects the DC cable for the AC adapter.</td>
</tr>
<tr>
<td>7</td>
<td>Ethernet connector</td>
<td>Connects the 10BASE-T/100BASE-TX LAN cable.</td>
</tr>
<tr>
<td>8</td>
<td>microSD card slot</td>
<td>For a special purpose and cannot be used for daily use. For more details, contact Epson sales partner.</td>
</tr>
<tr>
<td>9</td>
<td>Drawer kick connector</td>
<td>Connects the modular cable for the cash drawer.</td>
</tr>
<tr>
<td>10</td>
<td>Status sheet button</td>
<td>Use this button to print a status sheet on interfaces or initialize the settings on interfaces.</td>
</tr>
</tbody>
</table>
About the USB connector (USB-A - Device Charging, The white USB connector)

- Make sure you use the genuine cable for the tablet, smartphone, or USB device you are using.
- Charging may not be performed depending on the device’s charging specifications.
- To set an optimum current value for charging the connected device, it may take several seconds before charging starts. Charging may stop temporarily immediately after the device is connected.
- If a device connected to the USB connector (USB-A Device Charging) has a rated power that exceeds the rated current of the USB connector, charging the device is stopped. See "Product Specifications" on page 131.
- The device may not be fully charged depending on its settings or usage conditions. For example, when the device is used with the screen brightness set to its maximum, and/or with the sleep function disabled.
- Seiko Epson Corporation assumes no responsibility for economic damages or problems arising from failure of charging the connected device due to a failure or malfunction of the product.
- It may be hard to disconnect some types of USB cable. Do not forcibly pull the cable, or the USB connector and USB cable may be damaged. Contact qualified service personnel if you encounter the trouble.
- To communicate with a tablet computer via Bluetooth while charging the tablet through the USB connector (USB-A - Device Charging) on the printer, set the "Interface selection" setting to "Bluetooth only". For more details, see "Software Settings" on page 81. However, if you do so, the maximum supply current is limited to 0.5 A, which may not be enough for charging some types of tablet. Please use the tablet after testing and evaluating it adequately.
- When connecting an Android device to the USB connector (USB-A - Device Charging) for data communication, make sure that the device satisfies the following requirements. Requirements: The version of Android OS is 10 or later with kernel version 4.9.15 or later However, Epson does not guarantee normal operation of all Android devices even if they satisfy the requirements. Run some tests before actually using the device.
- If the printer is connected to a wired network, an iOS tablet connected to the printer via the USB connector can access the network through the Lightning to USB cable. For more details, see "Network Tethering (iOS device only)" on page 109.
Online and Offline

Online
The printer is online and ready for normal printing unless there is a reason to go offline.

Offline
The printer automatically goes offline under the following conditions:

- While the printer power is turning on/off
- During the setting and check modes operating (except the hexadecimal dumping mode) (See "Setting/Check Modes" on page 95.)
- While roll paper is fed using the Feed button
- When the printer stops printing due to a paper end (when the paper out detector detected the paper out)
- During an operation standby state
- When an error has occurred (See "Status and Errors" on page 21.)
- While the roll paper cover is open
Status and Errors

The status of the printer is indicated by lit and flashing LEDs.

**CAUTION**
You cannot print when an error has occurred.

**NOTE**
You cannot identify the error by the flashing patterns of the LEDs. Develop the application so that users can identify the error description and check the solutions.

### Status Display

<table>
<thead>
<tr>
<th>Power LED</th>
<th>Error LED</th>
<th>Paper LED</th>
<th>Wi-Fi LED</th>
<th>Ethernet LED</th>
<th>Bluetooth LED</th>
<th>Printer Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Online</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>While initializing after turning on the power</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>During a self-test</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>While feeding paper using the Feed button</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Roll paper cover open while not printing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Waiting for the self-test to continue</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Waiting for a Macro execution to run</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Waiting for the roll paper cover to be closed to print a status sheet.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No roll paper</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Remaining amount of roll paper is low*1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Automatically Recoverable Errors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Recoverable Errors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>The connected device can only be charged through the USB port.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Unrecoverable Errors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CAUTION: Turn off the power immediately when an unrecoverable error occurs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>If the same error occurs again even after turning the power back on, contact qualified service personnel.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Updating firmware</td>
</tr>
</tbody>
</table>

*1 Amount

*2 The connected device can only be charged through the USB port.
Chapter 1 Product Overview

*1: To detect this status (remaining amount of roll paper is low), enable the "Roll paper near-end detection" function. The function can be used when placing the printer vertically and using 80 mm width roll paper. For more details about the detection setting, see "Software Settings" on page 81. For more details about near-end detection, see "Enabling the Roll Paper Near-End Detection" on page 71.

*2: The Error LED flashing pattern is: turning on and off alternately at 320 ms intervals for five seconds, then goes off.

*3: The Power LED flashing pattern is: lighting for 320 ms followed by a pause for 320 ms.

*4: The Power LED flashing pattern is: lighting for 160 ms followed by a pause for 2400 ms.

*5: The Power LED flashing pattern is: lighting for 4960 ms followed by a pause for 160 ms.

### Bluetooth Connection Status

<table>
<thead>
<tr>
<th>Power LED</th>
<th>Error LED</th>
<th>Paper LED</th>
<th>Wi-Fi LED</th>
<th>Ethernet LED</th>
<th>Bluetooth LED</th>
<th>Printer Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>O</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Waiting to be paired with a device</td>
</tr>
<tr>
<td>O</td>
<td>O</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Connecting via Bluetooth</td>
</tr>
<tr>
<td>O</td>
<td>O</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Not connected via Bluetooth</td>
</tr>
</tbody>
</table>

* The LED flashing pattern is: lighting for 320 ms followed by a pause for 320 ms.
## Network Connection Status

- **O**: OFF  
- **∅**: ON  
- **∅ Flashing**: Ignore the LED light  

<table>
<thead>
<tr>
<th>Power LED</th>
<th>Error LED</th>
<th>Paper LED</th>
<th>Wi-Fi LED</th>
<th>Ethernet LED</th>
<th>Bluetooth LED</th>
<th>Printer Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Connecting via Wi-Fi</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Wi-Fi (An IP address has not been acquired)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Connecting via Ethernet</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Ethernet (An IP address has not been acquired)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Starting the network firmware</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Not connected to a network</td>
</tr>
</tbody>
</table>

* The LED flashing pattern is: lighting for 320 ms followed by a pause for 320 ms.
There are three possible error types: automatically recoverable errors, recoverable errors, and unrecoverable errors.

### Automatically Recoverable Errors
- **Head temperature error**
  - The printer recovers from the error when the head temperature drops.
- **Cover open error (in the middle of printing)**
  - The printer recovers from the error when the roll paper cover is closed.
- **TM-Intelligent function error**
  - The printer recovers from the error when the printer settings are corrected.

### Recoverable Errors
- **Autocutter error**
  - An error occurs if the cutter is locked due to fallen foreign material or similar cause. Although automatic recovery is performed even if there is only slight locking, if automatic recovery is not performed, remove foreign material and paper jams, and close the roll paper cover to perform recovery.

  **NOTE**
  Instead of closing the roll paper cover, you can make the printer recover from the error using a dedicated command, however, doing so will cause the printer to go offline due to a cover open error.

### Unrecoverable Errors
- **These include a high voltage error, CPU execution error, and communication unit error.** If the error persists after turning the printer off and then on again, the printer may be defective. Contact qualified service personnel.

  **CAUTION**
  Turn off the power immediately when an unrecoverable error occurs.
NV Memory (Non-Volatile Memory)

The printer's NV memory stores data even after the printer power is turned off. NV memory contains the following memory areas for the user:

- NV graphics memory
- User NV memory
- Memory switches (customized values)
- R/E (Receipt Enhancement)
- Maintenance counter

As a guide, NV memory rewriting should be used 10 times or less a day when you program applications.

NV Graphics Memory

Graphics, such as shop logos to be printed on receipts, can be registered. To register your graphics data, use TM-m30II Utility or ESC/POS commands. You can check registered graphics data using TM-m30II Utility or by printing the data in the NV graphics information print mode.

User NV Memory

You can store and read text data for multiple purposes, such as for storing a note including customizing or maintenance information of the printer.

Memory Switches (customized values)

With the memory switches, which are software switches for the printer, you can configure various settings of the printer. For information about the memory switch, see "Software Settings" on page 81.

R/E (Receipt Enhancement)

You can set the graphics data, such as a shop logo, registered in the NV graphics memory to be printed on the top of each receipt or to be printed on the bottom of each receipt just before the paper is cut. To make the settings, use TM-m30II Utility or ESC/POS commands. You can check the settings using TM-m30II Utility or by printing the settings information in the Receipt enhancement information print mode.
**Maintenance Counter**

With this function, printer information, such as the number of lines printed, the number of autocuts, and printer operation time after the printer starts working, is automatically stored in printer's memory. You can read the counter information to use it for periodical checks or part replacement.

- You can also check the head running length and number of times of autocutting with the self-test (see "Self-test Mode" on page 97).
- The maintenance counter values are automatically saved in the NV memory usually every two minutes (up to four minutes). However, the values are not saved when the printer is in power-saving mode or when it is turned off without the use of the power switch.


**Simple Setup for Wireless LAN**

This printer comes with a mode (SimpleAP) that allows printers to connect with a smart device or a computer without requiring a wireless access point. This allows you to easily setup a wireless LAN for the printer by using a printer settings tool (Epson TM Utility, EpsonNet Config, or EpsonNet Config (Web version)) even without a network environment such as access points.

When the wireless LAN settings of the printer have not been changed from the factory default, and the printer is turned on, the printer automatically enters the Simple AP mode and prints the following information. If you have changed the wireless LAN settings from the factory default, start the printer according to the settings to connect the printer to an access point.

<table>
<thead>
<tr>
<th>SimpleAP Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSID           : EPSON_Printer</td>
</tr>
<tr>
<td>Encryption Type: WPA2-PSK</td>
</tr>
<tr>
<td>Passphrase     : 12345678</td>
</tr>
<tr>
<td>IP Address     : 192.168.192.168</td>
</tr>
</tbody>
</table>
Useful Functions for Smart Devices

You can easily connect this product to the network by using the QR code printed on the status sheet.

**QR Code**

Capture the QR code printed on the status sheet with the camera on your smart device to acquire the printer information (information for specifying the device).

By using the acquired information, the device can specify the printer to send a print job over a network or Bluetooth.

**NOTE**

- Programming using Epson ePOS SDK is required to use these functions. These functions are created by combining QR code capturing operations and the target printer specifications using Printer Easy Select API.
  
  See the "Epson ePOS SDK for Android/iOS User’s Manual" and the Epson ePOS SDK sample program for more details. The sample program also contains a sample implementation method for capturing a QR code.

- You can try a demo of these functions by using Epson TM Utility for iOS/Android.
Printing Using Multiple Interfaces

In models with multiple interfaces, you can use all interfaces without any limitations on which interface is to be used. You can use this function to temporarily connect a smart device to a nearby printer and print.

The printer provides each interface with an independent receive buffer and switches the active interface depending on the priority, while handling data in each receive buffer.

You can set one interface for the main connection. Data received from the main connection interface is handled with the highest priority.

By default, the interface that receives the first data transfer is set as the main connection interface; however, you can select the main connection interface in advance.

When the receive buffer for the active interface becomes empty and a preset time period (one second by default) has passed, switching to another interface is enabled, and an interface that receives print data becomes active.

**CAUTION**

When you do not use the Bluetooth function, set the Bluetooth security level to "Middle" or "High" to prevent unauthorized access to the printer over Bluetooth. You can change the security level by using Epson TM Utility, TM-m30II Utility, or in the Interface Setup mode.

**NOTE**

You can select the main connection interface and set the time to enable interface switching from the software settings. For details on software settings, see "Software Settings" on page 81.
Setup of the Tablet

This chapter describes how to mount your tablet or display to the printer.

Flow of Setup

On the following pages, the tablet/display mounting procedure is provided in the order shown below.

1. Tablets that Can be Mounted to the Printer (page 31)

2. Preparation for Setup (page 35)

3. Mounting the Front Tablet (page 36)

4. Connecting Peripheral Devices (page 41)

5. Connecting the AC Cable (page 42)

6. Attaching the Lock Lever Cover (page 45)

7. Replacing the Tablet Table (page 46)
Tablets that Can be Mounted to the Printer

You can mount your tablet to the printer as if the tablet is a built-in display.
1: Front tablet
2: Rear display (OT-DM30SL)
Chapter 2 Setup of the Tablet

Front Tablet

Mountable Tablet Sizes

The maximum size of tablet that can be mounted to the printer is as shown below.
304 x 216 mm (12.0 x 8.5") (height x width), 9 mm (0.35") (depth)

Make sure that your tablet does not stick out from the tablet table.

Use one of the tablet tables appropriate for the size of your tablet.

<table>
<thead>
<tr>
<th>Tablet table size</th>
<th>Tablet size mountable to the tablet table</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width</td>
</tr>
<tr>
<td>Standard</td>
<td>Approx. 176 mm (6.9&quot;) or less</td>
</tr>
<tr>
<td>Large</td>
<td>Approx. 216 mm (8.5&quot;) or less</td>
</tr>
</tbody>
</table>

For instructions on how to replace the tablet table, see the page below.

☞ "Replacing the Tablet Table” on page 46
## Mountable Tablet Types

The tablets that can be connected to the printer and the available USB connectors are as shown below. To know the location of the USB connectors, see "Connectors" on page 18.

"OK" means that the device can be connected.

"*" means that availability varies by device to device.

"--" means that it is not supported.

<table>
<thead>
<tr>
<th>Type</th>
<th>Product name</th>
<th>USB connector</th>
<th>Tablet table</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>USB-A - Device Charging (up to 2.1 A)</td>
<td>USB-A (up to 0.5 A)</td>
</tr>
<tr>
<td>Apple device</td>
<td>iPad (5th generation) iPad (6th generation) iPad (7th generation)</td>
<td>OK</td>
<td>*&quot;2</td>
</tr>
<tr>
<td></td>
<td>iPad Air 2</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>iPad Pro (3rd generation) iPad Pro (4th generation)</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>iPad mini 4</td>
<td>OK</td>
<td>*&quot;2</td>
</tr>
<tr>
<td>Windows tablet</td>
<td></td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Android device</td>
<td></td>
<td>*&quot;4</td>
<td>*&quot;2</td>
</tr>
</tbody>
</table>

*1 A device equipped with a Lightning connector can be used.
Use a genuine Apple or MFi Certified Lightning to USB Cable. If you use a non-certified (non MFi) Lightning Cable, or use an extension cable, data communication and charging may not be performed normally.

*2 When a tablet computer is connected to the USB-A - Device Charging connector, the Bluetooth function of the printer is disabled. To charge the device keeping it connected via Bluetooth, change the Interface selection setting to "Bluetooth only". For more details, see "Software Settings" on page 81.
However, if you do so, the maximum supply current is limited to 0.5 A, which may not be enough for charging some types of tablet. Please use the tablet after testing and evaluating it adequately.

*3 Depending on the settings or usage conditions of the device, it may not be fully charged. To fully charge the device, darken its screen or take such other measures to reduce power consumption.

*4 When connecting an Android device for data communication, make sure that the device satisfies the following requirements.
Requirements: The version of Android OS is 10 or later with kernel version 4.9.15 or later
However, Epson does not guarantee normal operation of all Android devices even if they satisfy the requirements. Run some tests before actually using the device.

*5 The device must be compatible with an OTG cable and must be capable of acting as a USB host.

*6 For more detailed information about tablets that can be used with the printer, see the link below.
www.epson-biz.com/?content=sht_tmm30ii-sl_tablet

---

**NOTE**

If your tablet is not allowed to connect to the USB connector of the printer, pull out its cable through the cutout of the printer just like the AC cable.
Rear Display

You can mount the optional OT-DM30SL to the printer as a rear display. For instructions on how to mount it, see the page below.

☞ "Mounting OT-DM30SL" on page 72
Preparation for Setup

Make the following preparations to mount a tablet to the printer.

Preparation of Tablet

Prepare a tablet to be used as a front tablet, and a cable to connect the tablet and the printer. The tablet cable can be routed through either left or right side of the printer.

“Tablets that Can be Mounted to the Printer” on page 31

Routing the Cables

The AC cable and interface cables can be pulled out from the left, right, rear, or bottom of the printer. According to the place you install the printer, determine which direction to route the cables.

To pull out the cables from the rear of the printer, cut out one portion of the bottom cover.
Mounting the Front Tablet

Follow the procedure below to mount the front tablet to the printer.

1. Put the printer on a soft cloth or cushioning material.

2. Operate the lock lever to extend the lower tablet holder.

3. Connect the cable to the front tablet.
4 Place the tablet so that its upper edge contacts with the upper tablet holder.

5 Move the lower tablet holder up to sandwich the tablet between the two holders, and then operate the lock lever to secure the tablet.

If the tablet sticks out from the tablet table, replace the tablet table with the large one.

*Replacing the Tablet Table* on page 46
6 Turn over the printer.

7 Remove the bottom cover.
8. Remove the side covers.

9. Remove the rear cover.

10. Pass the cable through the hook on the side.
11 Roll up the cable on the side as shown below to adjust the cable length.

12 Connect the cable to the appropriate USB connector.

NOTE If your tablet is not allowed to connect to the connector of the printer, pull its cable out through the cutout of the printer.
Connecting Peripheral Devices

Connect an interface cable of a peripheral device to the connector inside the printer.

1. Connect an interface cable to the connector inside the printer.
   For information on which connector is which type, see "Connectors" on page 18.
   A: Printer models without a microSD card slot
   B: Printer models with a microSD card slot

2. Pass the interface cable through the hook.
   This step is not necessary when pulling the cable out from the rear or bottom of the printer,
Connecting the AC Cable

Follow the procedure below to connect the AC cable.

1. Connect the AC cable to the AC adapter.

2. Route the AC cable.
The AC cable can be pulled out from the left, right, rear, or bottom of the printer.

   When pulling out from the left side of the printer

   When pulling out from the rear or bottom of the printer

   When pulling out the cable from the bottom, put the AC plug through the cutout of the bottom cover in advance.
3 Attach the rear cover.

4 Attach the side covers.
5. Attach the bottom cover.
   Pull out the AC cable from the left, right, rear, or bottom of the printer.

Now mounting the tablet to the printer is finished.
**Attaching the Lock Lever Cover**

Attach the lock lever cover to the lock lever to prevent unintended operation of the lever. This also helps in preventing the tablet from being stolen.
Replcing the Tablet Table

Depending on the size of your tablet, replace the tablet table. See "Front Tablet" on page 32 for information of mountable tablet sizes.

1. Operate the lock lever to extend the lower tablet holder.

2. Remove the screws by turning them with a coin or similar tool.
3 Replace the tablet table, and then secure the table with the screws.
Setup of the Printer

This chapter describes setup and installation of the product and peripherals.

Flow of Setup

This chapter consists of the following sections along with the setup flow of the product and peripherals.

1. Placing the Printer (page 49)
2. Changing the Paper Width (page 52)
3. Connecting Peripheral Devices (page 53)
4. Connecting the Wireless LAN Unit (page 58)
5. Connecting the Customer Display (page 59)
6. Connecting the Optional External Buzzer (page 60)
7. Connecting the Cash Drawer (page 61)
8. Connecting to the Power Source (page 63)
9. Connecting the Printer to the Host Devices (page 64)
10. Attaching the Power Switch Cover (page 70)
11. Enabling the Roll Paper Near-End Detection (page 71)
Placing the Printer

The printer can be placed either horizontally or vertically.

**CAUTION**

- Do not place the printer in locations subject to high dust levels.
- Do not give a high impact on the printer during operation. Doing so may cause the print failure.
- Be careful not to place cords or foreign substances under the printer.
- When using a cash drawer, secure the printer to prevent it from moving due to vibrations.

Placing the Printer Horizontally

Install the printer on a level and flat surface.
The roll paper is ejected from the top side, and the roll paper cover opens upward.

How to Secure the Printer

If you want to secure the printer to the installation site such as a table, use the optional tape (model number: DF-10).

Follow the procedure below to secure the printer with the tape.

1. **Turn off the printer.**
2. **Disconnect the AC cable from the power outlet.**
3. **Turn over the printer.**
4. **Remove the backing sheet from the tape.**
5 Attach four pieces of the tape to the bottom of the printer, and then remove another backing sheet from each tape.

6 Place the printer on the installation surface, and then hold the printer down to secure it.

**NOTE**
- The tape is hook and loop fastener. To remove the printer from the installation surface disengaging the hook and loop fastener tape, apply a force to peel the printer from the surface. However, if you repeat removing and reattaching the tape multiple times, the tape may become less cohesive. In such case, replace the tape (DF-10) with new ones.
- Since four pieces of the tape need to be attached to the printer, you need two sets of DF-10 at a time.

### Placing the Printer Vertically

There are the following two methods to place the printer vertically.

- Using the optional DF-10 tape, stand the printer on a table.
  
  ❖ "How to Stand the Printer" on page 51

- Using the optional OT-WH30SL hanging bracket set, hang the printer on a wall.
  
  ❖ "OT-WH30SL (Wall Hanging Bracket Set)” on page 78

The roll paper is ejected from the front side, and the roll paper cover opens frontward.
How to Stand the Printer

Follow the procedure below to stand the printer vertically on a table.
Place the printer on a level and flat surface.

| CAUTION | Make sure to secure the printer using the DF-10 tape. If you just place the printer on a table, the printer may fall over when it or mounted tablet is pressed hard. |

1. Turn off the printer.
2. Disconnect the AC cable from the power outlet.
3. Remove the backing sheet from the tape.
4. Attach four pieces of the tape to the bottom of the printer, and then remove another backing sheet from each tape.

5. Place the printer on the installation surface, and then hold the printer down to secure it.

- The tape is hook and loop fastener. To remove the printer from the installation surface disengaging the hook and loop fastener tape, apply a force to peel the printer from the surface. However, if you repeat removing and reattaching the tape multiple times, the tape may become less cohesive. In such case, replace the tape (DF-10) with new ones.
- Since four pieces of the tape need to be attached to the printer, you need two sets of DF-10 at a time.
Changing the Paper Width

You can change the paper width from 80 to 58 mm by installing the included 58-mm width roll paper guides. Follow the steps below to change the paper width.

Once you change the paper width to 58 mm and print on 58-mm width roll paper, you cannot go back to 80 mm width. Because parts of the print head that do not normally touch the paper may be damaged by the platen roller, and the autocutter may wear out.

1 Turn off the printer.

2 Open the roll paper cover.

3 Align the three projections on the roll paper guides with the rectangular holes in the printer, and then push the guides inward.

4 Set the paper width in software setting mode.
   For information about the software setting mode, see "Software Settings" on page 81.
Connecting Peripheral Devices

Connect an interface cable of a peripheral device to the connector inside the printer.

1. Turn off the printer.
2. Disconnect the AC cable from the power outlet.
3. Put the printer on a soft cloth or cushioning material.
4. Turn over the printer.
5 Remove the bottom cover.

6 Remove the side covers.

7 Remove the rear cover.
8 Connect an interface cable to the connector inside the printer.
For information on which connector is which type, see "Connectors" on page 18.
A: Printer models without a microSD card slot
B: Printer models with a microSD card slot

9 Pass the interface cable through the hook.
This step is not necessary when pulling the cable out from the rear or bottom of the printer,
10 Attach the rear cover.

11 Attach the side covers.
12  Attach the bottom cover.
Pull the cable out through the left, right, bottom, or rear of the bottom cover.

13  Connect the interface cable to the device.

14  Connect the AC cable to a power outlet.

WARNING

- Never insert the AC cable plug into a socket that does not meet the input voltage of the AC adapter. Doing so may result in damage to the printer.
- Should a fault ever occur, immediately turn off the power to the printer and unplug the AC cable from the socket.
Connecting the Wireless LAN Unit

The optional Wireless LAN cable set (Model: OT-WL02/OT-WL05/OT-WL06) enables you to use the product with a Wi-Fi connection.

For more information, refer to Technical Reference Guide of the Wireless LAN cable set.

- Be sure to turn off the printer when connecting the Wireless LAN unit.
- Depending on the installation conditions of the printer and the routing for cables connected to it, the status of the radio waves for the Wireless LAN unit may decline. If this does happen, use an extension cable.
**Connecting the Customer Display**

Connect the USB cable of the optional customer display (DM-D30 or DM-D70) to the USB connector of the printer. For more information, refer to the user’s manual for the customer display.

**CAUTION**

Be sure to turn off the printer when connecting the customer display.

**NOTE**

You can mount the dedicated optional customer display (Model: OT-DM30SL) to the printer as a rear display.

☞ "Mounting OT-DM30SL" on page 72
Chapter 3 Setup of the Printer

Connecting the Optional External Buzzer

When the optional external buzzer (model: OT-BZ20) is connected to the drawer kick connector of the printer, you can set the printer so that it beeps when you send commands, when an error occurs, when executed autocutting, and when detected paper end. Settings for sound patterns and frequency depending on the occasions the buzzer beeps are also available.

You need to set with the memory switch (customized values) for buzzer enable/disable setting, sound pattern setting, and frequency setting. For information about the memory switch (customized values), see "Software Settings" on page 81.

CAUTION
- Be sure to turn off the printer before you connect/disconnect the optional external buzzer.
- Do not connect both the optional external buzzer and the cash drawer to the printer at the same time by using a branched connector.

Attachment Position

It is recommended to install the optional external buzzer to the portion shown in light blue below. It is also OK to install the buzzer to the same portion on the other side.

CAUTION
- Do not install the optional external buzzer at the roll paper exit.
- To prevent liquid from entering inside, it is recommended to install the optional external buzzer so that the volume adjustment knob is positioned sideways or downward.
Connecting the Cash Drawer

**CAUTION**
- Do not connect both the optional external buzzer and the cash drawer to the printer at the same time by using a branched connector.
- When the optional external buzzer is enabled with the memory switch (customized values) (see "Software Settings" on page 81), a cash drawer cannot be used. Be sure to disable it when you use a cash drawer.
- Two driver transistors cannot be energized simultaneously.
- Leave intervals longer than 4 times the drawer driving pulse when sending it continuously.

**Required specifications of cash drawers**

Specifications of drawers differ depending on makers or models. When you use a drawer other than specified, make sure its specification meets the following conditions. Otherwise, devices may be damaged.

- The load, such as a drawer kick solenoid, must be connected between pins 4 and 2 or pins 4 and 5 of the drawer kick connector.
- When the drawer open/close signal is used, a switch must be provided between drawer kick connector pins 3 and 6.
- The resistance of the load, such as a drawer kick solenoid, must be 24 \( \Omega \) or more or the input current must be 1A or less.
- Be sure to use the 24V power output on drawer kick connector pin 4 for driving the equipment.

**Drawer Connection Diagram**

![Drawer Connection Diagram](image)

**Adaptable Connector**

RJ12 modular connector
Chapter 3  Setup of the Printer

Pin assignments

<table>
<thead>
<tr>
<th>Pin number</th>
<th>Signal name</th>
<th>Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frame GND</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Drawer kick drive signal 1</td>
<td>Output</td>
</tr>
<tr>
<td>3</td>
<td>Drawer kick open/close signal</td>
<td>Input</td>
</tr>
<tr>
<td>4</td>
<td>+24 V</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Drawer kick drive signal 2</td>
<td>Output</td>
</tr>
<tr>
<td>6</td>
<td>Signal GND</td>
<td>-</td>
</tr>
</tbody>
</table>

Connecting the drawer kick cable

- **Use a shield cable for the drawer kick cable.**
- **When using cash drawer, make sure to use the power supply for printer (connector pins 4).**
- **Do not insert a telephone line into the drawer kick connector.**
  Doing so may damage the telephone line or printer.

Connect the drawer kick cable to the drawer kick connector by pressing firmly until the connector clicks into place.
**Connecting to the Power Source**

- Be sure to use the specified AC adapter (PS-180) only.
- Never insert the AC cable plug into a socket that does not meet the input voltage of the AC adapter.
- Doing so may result in damage to the printer.
- Should a fault ever occur, immediately turn off the power to the printer and unplug the AC cable from the socket.
- Use only the AC cable that came with the printer.

### Connecting the AC cable

1. Make sure the printer is turned off.
2. Insert the AC plug into a socket.
3. Turn on the printer.
Connecting the Printer to the Host Devices

USB Interface

When using USB cable to connect with host device, connect the USB cable to the printer, and after starting the host device, turn the printer on.

**CAUTION**
Do not place any weight or stress on the cable when using. Doing so could damage the cable and connectors.

Ethernet Interface

Use ethernet cable to connect the printer to network via a hub.
Use EpsonNet Config, EpsonNet Config (Web version), or arp/ping commands to set network.
For information on setting up network, see "Network Settings" on page 90.

Wireless LAN Interface (When using OT-WL02/OT-WL05/OT-WL06)

Using Epson TM Utility, you can easily connect the printer to the network from an iOS or Android devices. We also recommend connecting the SimpleAP from a Windows computer, and setting up the Wireless LAN using the network setup tool (EpsonNet Config or EpsonNet Config (Web version)).

**CAUTION**
- When using wireless LAN, make sure you disconnect the LAN cable. If a LAN cable is connected, wireless LAN is disabled.
- When you set up the access point at the same time, set the access point in advance and check that it operates correctly.
- Examine the radio wave situation in the surrounding area before use.
- Avoid using the same channel that is used in the neighboring shops where Wireless LAN is used.
- When using the printer in environments where kitchen microwaves and other devices that may interfere radio waves are installed, observe the following points.
  * Keep the printer away from the devices, such as kitchen microwaves, that may cause radio wave interference.
  * Use channels that are away from the frequency bands that may cause radio wave interference.
  * Place shields between the printer and the devices that may cause radio wave interference.
  * Select either 2.4 GHz or 5 GHz, whichever is free from radio wave interference.
  * In auto channel setting for the access point, do not select a channel in which the devices may cause radio wave interference.
- In the infrastructure mode, W53 and W56 channels are not available to connect to a stealth SSID access point.
Setting up from a Smart Device

Necessary Items
Prepare the following items.
- Device for setting: iOS or Android device
- Utility for setting: Epson TM Utility for iOS/Android

Running Epson TM Utility for iOS/Android

1. **Run the Epson TM Utility for iOS/Android.**

2. **Set from “Wi-Fi Setup Wizard” in the menu.**
   Follow the on-screen instructions to complete the setup.
Setting up from a Windows Computer

Necessary Items
Prepare the following items.

- Computer for setting: Windows 10/8/7
- Computer equipped with a wireless LAN function
- Utility for setting: EpsonNet Config or EpsonNet Config (Web version)

Follow the steps below to connect the printer.

1. **Turn on the printer.**
   After starting the printer, check that the "SimpleAP Start" is printed.
   If it is not printed, enter the Interface Setup mode and restart the printer in the SimpleAP mode. For more details, see "Interface Setup Mode" on page 101.

2. **Activate Windows Wireless Network Connection and select [EPSON_Printer] as the connection device on the screen that appears.**
   If the window to enter a pass phrase appears, enter "12345678".
   Default settings on printer are the following values.

<table>
<thead>
<tr>
<th>Network mode</th>
<th>SimpleAP mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSID</td>
<td>EPSON_Printer</td>
</tr>
<tr>
<td>Pass phrase</td>
<td>12345678</td>
</tr>
<tr>
<td>IP Address</td>
<td>192.168.192.168</td>
</tr>
</tbody>
</table>

3. **When connecting to the printer is complete, setup the Wireless LAN using the network setup tool, EpsonNet Config or EpsonNet Config (Web version).**
   For details about EpsonNet Config, see "Setup using EpsonNet Config" on page 91.
   For details about EpsonNet Config (Web version), see "Setup using EpsonNet Config (Web version)" on page 92.

4. **When setting the Wireless LAN is complete, restart the printer.**
Bluetooth Interface

Pair the printer with your device using the Bluetooth function of the device or using other methods. Pairing the printer is also possible by using EPSON TM Bluetooth® Connector (Windows) or Epson TM Utility (iOS or Android).

### CAUTION
- If the host computer and the printer are not connected on a continuous basis but rather connected every time the printer starts printing, some time may be needed for the printer to actually start printing after the host computer commands printing. This pause is the time required for processing the connection between the host computer and the printer, and it depends on the conditions of the environment where used.
- If data transfer from an application of the host computer has already been completed, data might remain in the Bluetooth module internal buffer. As such data remaining in the buffer might be lost when the connection is cut off, use the status or similar functions to check that transmitted data has been completely printed before cutting off the wireless connection.

### NOTE
- For detailed information about EPSON TM Bluetooth® Connector, see the TM Bluetooth® Connector User's Manual.
- The device name and passkey are editable with the TM-m30II Utility or Epson TM Utility.
- The Bluetooth security level has been set to "Middle" by default. For information on the Bluetooth security settings, see "Software Settings" on page 81.

Setting up from a Smart Device

**Necessary Items**
Prepare the following items.
- Device for setting: iOS or Android device
- Utility for setting: Epson TM Utility for iOS/Android

**Running Epson TM Utility for iOS/Android**

1. Run the Epson TM Utility.

![EPSON](image)

2. Set from “Bluetooth Setup Wizard” in the menu.
Follow the on-screen instructions to complete the setup.
Setting up from a Windows Computer
Follow the procedure below and make the settings.

1. **Have a Bluetooth wireless technology compatible computer ready.**
   Make sure you have installed TM Bluetooth® Connector.

2. **Turn on the printer.**

3. **Start TM Bluetooth® Connector.**

4. **Select [Search all printers around this computer], and then click [Search].**

   ![EPSON TM Bluetooth Connector](image)

   **NOTE**
   If the printer has not detected after clicking the Search button, check the manufacturer of the Bluetooth software.
   1. Open the Control Panel.
   2. In the search box on the Control Panel, enter "Bluetooth", and then click Change Bluetooth settings.
   3. In the Bluetooth Settings dialog box, click the Hardware tab, and then search for the Microsoft Bluetooth Enumerator. If it is not found, the Bluetooth software cannot detect the Epson Bluetooth printer, and you may not be able to connect to the computer.
Select the printer to be paired, and then click [Connect].

If the window to enter a passkey appears, enter a passkey and click [OK].

Select the port to be used from the pull-down list, and then click [OK].

The “Connection complete” window appears. Click [Test Buzzer] or [Test Printing] to check operation.

Click [Back to Main screen] to return to the main window.

Click the “x” button of TM Bluetooth® Connector to exit.

- If “Error” is displayed when you click the [Search] on the TM Bluetooth® Connector, check whether:
  * The Bluetooth adapter is installed to the computer.
  * Bluetooth is ON in the Windows settings.

- If the device is not displayed on the TM Bluetooth® Connector or the TM Bluetooth® Connector Status shows “…” after pairing.
  Check whether:
  * The printer is not turned on.
  Turn on the printer.
  * The printer is 10 m or further away from the computer.
  * Confirm that there is no other wireless device, such as a microwave oven and cordless telephone, that can interfere with the Bluetooth printer.
  * If the printer and the computer are placed in different rooms separated by a wall, move the printer and/or the computer in the same room.
  * The printer may not be detected when the search time is short. Try search again with longer search time.
  * While a computer and printer are communicating, the printer cannot be detected by other computers. Confirm that the printer to be detected is not communicating with any computer.
Attaching the Power Switch Cover

By attaching the power switch cover supplied, you can prevent accidental operations of the power switch. You can press the power switch by inserting a sharp-pointed object in the holes on 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.
**Enabling the Roll Paper Near-End Detection**

When the "Roll paper near-end detection" function is enabled, the printer can detect that remaining amount of roll paper is low. To enable the function, use TM-m30II Utility or Epson TM Utility for iOS/Android.

**CAUTION**

- The function can be used when placing the printer vertically and using 80 mm width roll paper. It cannot be used when placing the printer horizontally or when using 58 mm width roll paper.
- Accurate detection of the roll paper near-end status is impossible because the shape of the core varies from one roll paper to another.

![Near-end detector (when the cover is open)](image)

![Near-end detector (when the cover is closed)](image)
Using Dedicated Optional Products

OT-DM30SL (Customer Display)

OT-DM30SL is a dedicated customer display for this TM-m30II-SL printer. This section describes how to install and use OT-DM30SL.

Mounting OT-DM30SL

Follow the procedure below to mount OT-DM30SL to the printer.

1. Turn off the printer.
2. Disconnect the AC cable from the power outlet.
3. Put the printer on a soft cloth or cushioning material.

NOTE
The display functions of OT-DM30SL are the same as DM-D70. For details about the display functions, see the user's manual for DM-D70.

www.epson-biz.com/?prd=dm-d70&inf=manual
4 Turn over the printer.

5 Remove the bottom cover.

6 Remove the side covers.
7 Remove the rear cover.

8 Attach OT-DM30SL engaging its hook with the hole in the printer, then secure it with the screws.

9 Connect the USB cable to the USB connector, and then store the excess cable into the space inside OT-DM30SL.
10 Attach the side covers.

11 Attach the bottom cover.

Now mounting OT-DM30SL to the printer is finished.
Chapter 4 Using Dedicated Optional Products

Adjusting the Display Brightness

The brightness of the display can be adjusted by pressing the brightness up/down buttons. There are four brightness levels. It is set to the brightest setting by default.

Cleaning the Outer Case

When cleaning the outer surface of the customer display, make sure to turn off the printer in advance, and then wipe dirt off with a dry cloth or a cloth slightly moistened with water.

- Never clean the product with alcohol, benzine, thinner, or other such solvents. Doing so may damage or break the parts made of plastic and rubber.
- Rubbing the LCD screen with too much force using a dry cloth may scratch the surface.

Product Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display size</td>
<td>7 inch (800 x 480 pixels)</td>
</tr>
<tr>
<td>Display type</td>
<td>TFT LCD (16.2 million colors)</td>
</tr>
<tr>
<td>Power supply</td>
<td>USB bus power</td>
</tr>
<tr>
<td>Consumption current</td>
<td>Operating: 0.5 A (max.)</td>
</tr>
<tr>
<td>Temperature / Humidity</td>
<td>Operating: 5 to 45°C (41 to 113°F), 10 to 90%RH, no condensation</td>
</tr>
<tr>
<td></td>
<td>Storage: -10 to 50°C (14 to 122°F), 10 to 90%RH, no condensation</td>
</tr>
<tr>
<td>Altitude</td>
<td>3,000 m or less</td>
</tr>
<tr>
<td>Dimensions</td>
<td>180 x 140 x 105 mm (7.1 x 5.5 x 4.1&quot;) (W x D x H)</td>
</tr>
<tr>
<td>Weight</td>
<td>Approx. 0.58 kg (1.28 lb)</td>
</tr>
</tbody>
</table>

The display functions of OT-DM30SL are the same as DM-D70. For details about the display functions, see the user's manual for DM-D70.

www.epson-biz.com/?prd=dm-d70&inf=manual
WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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.
OT-WH30SL (Wall Hanging Bracket Set)

OT-WH30SL is a dedicated bracket set for hanging this TM-m30II-SL printer on a wall.

Contents of the OT-WH30SL package
1. Wall-mount
2. Bracket
3. Four 3 x 8 screws for attaching the bracket to the printer

Using OT-WH30SL

This section describes how to install and use OT-WH30SL.
Make sure to read the cautions and notes to prevent the printer from falling from the wall.

NOTE
- The package does not include screws for attaching the wall-mount to a wall. Use screws appropriate to the type of the wall.
- Depending on the conditions during storage and shipping, some rust may form around the edges of the wall-mount or bracket. If you find such rust, remove it with sandpaper.

1. Turn off the printer.
2. Disconnect the AC cable from the power outlet.
3 Put the printer on a soft cloth or cushioning material.

4 Turn over the printer.

5 Attach the bracket to the printer using the included four screws.

**CAUTION**

Tighten the screws completely. Otherwise, the screws will get loose and may cause the bracket or the printer to fall resulting in injury or accident.
6 Attach the wall-mount to a wall.

- To fix the printer securely, install the wall-mount on a wall made of wood, concrete, or metal. The thickness of the wall should be 10 mm or more.
- To ensure adequate strength for supporting the printer with the wall-mount, use screws that are appropriate to the type of the wall and have enough thread length. A screw with 4 mm diameter and length of 12 mm or more is recommended.
- Make sure to secure the wall-mount to the wall using the all six screw holes in the wall-mount.
- Ensure sufficient space around the printer before attaching the wall-mount.
- Check that there is enough space for opening the roll paper cover.

7 Slide the bracket into the slots of the wall-mount.

Before mounting the printer, make sure that the wall-mount is securely attached to the wall.
### Advanced Usage

#### Software Settings

With the memory switches and customized values, which are software settings for this printer, you can set the various functions.

For an outline of the functions, see the following section. You can make/change the settings using the methods described in the table below, or using ESC/POS commands.

<table>
<thead>
<tr>
<th>Item/Method</th>
<th>TM Utility for iOS, for Android</th>
<th>TM-m30II Utility for Windows</th>
<th>Software Setting Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receive buffer capacity</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BUSY condition</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Auto line feed</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>USB power-saving function</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Release condition of receive buffer BUSY</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Select paper out detector enabled for paper out signal output</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Error signal settings</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pre-feed before next print</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Roll paper near-end detection</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Network tethering</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>User NV memory capacity</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>NV graphics memory capacity</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Paper width</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Print density</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Print speed</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Thai characters print mode</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Character code table defaults</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>International character defaults</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Interface selection</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Column emulation mode</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Command execution during offline</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Amount of top margin by backfeed</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Interface switch waiting time</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Main connection interface</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Autocutting after closing cover</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Paper reduction</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Font A auto replacement</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
**Chapter 5  Advanced Usage**

<table>
<thead>
<tr>
<th>Item\Method</th>
<th>TM Utility for iOS, for Android</th>
<th>TM-m30II Utility for Windows</th>
<th>Software Setting Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customized Values</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Font B auto replacement</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Font C auto replacement</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Multi-tone print density</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Optional buzzer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Batch rotate print (Upside Down)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Communication condition of USB interface</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Communication condition of Bluetooth interface</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Bluetooth communication interval during power saving mode</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

*1 Available only with TM Utility for iOS.

**NOTE**
- For information about how to use the software setting mode, see "Software Setting Mode" on page 98.
- All the settings are available using the ESC/POS commands.

**Functions**

**Receive buffer capacity**
- 4KB (initial setting)
- 45 bytes

**NOTE**
- The receive buffer capacity for the Bluetooth interface is 64 K bytes.
- The receive buffer capacity of the USB-A Device Charging connector is 8 K bytes.

**BUSY condition**
- Receive buffer full/Offline (initial setting)
- Receive buffer full

**NOTE**
In either case above, the printer enters the BUSY state after power is turned on, and when a self-test is being run.

**Auto line feed**
- Normally disabled (initial setting)
- Normally enabled
USB power-saving function
- Disabled
- Enabled (initial setting)

**NOTE**
The USB power-saving function is valid only when the USB interface communication condition is set to the vendor-defined class and the system configuration is set so that the USB driver can support the USB power-saving function.

Release condition of receive buffer BUSY
- Releases when the remaining receive buffer capacity becomes 256 bytes (initial setting)
- Releases when the remaining receive buffer capacity becomes 138 bytes

**NOTE**
This function is enabled only when Receive buffer capacity is set to 4KB.

Select paper out detector enabled for paper out signal output
- Roll paper out detector (initial settings)
- Disabled

Error signal settings
- Enabled (initial setting)
- Disabled

Pre-feed before next print
- Disabled (initial setting)
- Enabled

**NOTE**
- When using this function, the top margin is approximately 10.5 mm.
- This setting becomes invalid if you change the "Amount of top margin by backfeed" setting from the initial setting (9.5mm (no backfeed)).

Roll paper near-end detection
- Disabled (initial setting)
- Enabled

Network tethering
- Disabled (initial setting)
- Enabled
Paper width

- 80mm (initial setting)
- 58mm

Print density

Selectable from 70% to 120% (5% increment)
Initial setting: 100%
Depending on the paper type, it is recommended to set the print density as shown in the table below for the best print quality.

<table>
<thead>
<tr>
<th>Supported papers</th>
<th>Print density</th>
</tr>
</thead>
<tbody>
<tr>
<td>TF50KS-EY, TF60KS-E, PD160R, PD190R, P220AGB-1, AP45KS-ND, AP50KS-ND, KT55PF</td>
<td>100%</td>
</tr>
<tr>
<td>PS047(48)</td>
<td>105%</td>
</tr>
<tr>
<td>KT48FA, KT55FA, KT48PF, PS047(55)</td>
<td>110%</td>
</tr>
</tbody>
</table>

When the print density level is increased, print speed may be reduced.

Print speed

Selectable from levels 1 to 13 (Slow ~ Fast)
Initial setting: level 13

Depending on print conditions, such as print duty, print head temperature, and data transmission speed, print speed is automatically adjusted, which may cause white lines due to intermittent print (the motor sometimes stops). To avoid this, keep the print speed constant by setting it lower.

Thai characters print mode

- Thai 1 pass (initial settings)
- Thai 3 pass

Character code table defaults

Selectable from 43 pages including user defined page
Initial setting: PC437: USA, Standard Europe

International character defaults

Selectable from 18 sets
Initial setting: USA
**Interface selection**

- *Bluetooth* only
- Standard USB only
- Ethernet/Wi-Fi only
- USB-A - Device Charging only
- Enable all the interfaces (initial setting)
- Enable all the interfaces except for *Bluetooth*

| NOTE | If you want to connect a tablet and the printer via *Bluetooth* while charging the tablet through the USB connector (USB-A - Device Charging), select "Bluetooth only". However, if you do so, the maximum supply current is limited to 0.5 A, which may not be enough for charging some types of tablet. Please use the tablet after testing and evaluating it adequately. |

**Column emulation mode**

- 48/35 characters mode (standard mode) (initial setting)
- 42/32 characters mode

**Command execution during offline**

- Enabled (initial settings)
- Disabled

**Amount of top margin by backfeed**

- 2.0mm
- 9.5mm (no backfeed) (initial settings)

| CAUTION | Disable the automatic top logo setting when enabling backfeed.
- Even if the "backfeed" has been enabled, it is not performed during the self-test.
- If setting a top margin of 5 mm (0.2") or less, confirm that no errors occur in your environment of usage. Usage in a hot and humid environment or usage of paper that curls easily may increase the risk of paper jams.
- When the paper is fed backward, the paper may get wrinkled or smeared due to a slack in the roll. It is recommended to use thermal paper that has high resistance to abrasion.
- Make sure to feed the paper by at least 20 mm before moving the auto cutter. If the paper feed length is not enough, it may cause a paper jam. |

| NOTE | You can specify values in 0.5mm steps if you use TM-m30II Utility or TM Utility for iOS/Android. |

**Interface switch waiting time**

Select from 1 to 10 seconds (in intervals of 1 second)

1 second (initial setting)
Main connection interface

- Auto (interface that receives data first) (initial setting)
- USB
- Bluetooth
- Ethernet/Wi-Fi
- No main connection I/F

**CAUTION**
- When using this printer with multiple interfaces, make sure the interface that is always connected to be set as the main connection.
- When using multiple interfaces, set the receive buffer capacity to 4 KB.
- You cannot use wired LAN and wireless LAN at the same time.
- When you do not use the Bluetooth function, set the Bluetooth security level to "Middle" or "High" to prevent unauthorized access to the printer over Bluetooth. You can change the security level by using Epson TM Utility, TM-m30II Utility, or in the Interface Setup mode.

**NOTE**
- The displayed items vary depending on the interface configuration.
- For information about the function, see "Printing Using Multiple Interfaces" on page 29.

Autocutting after closing cover

- Cuts (initial setting)
- Does not cut

Paper reduction

**Extra upper space reduction**

- Disabled (initial setting)
- Enabled

**Extra lower space reduction**

- Disabled (initial setting)
- Enabled

**Line space reduction rate**

- Not reduced (initial setting)
- 25%
- 50%
- 75%

**Line feed reduction rate**

- Not reduced (initial setting)
- 25%
- 50%
- 75%
**Character height reduction**
- Not reduced (initial setting)
- 25% reduction of inner spacing
- 50% reduction of inner spacing
- 75% reduction of inner spacing
- 75% reduction of inner spacing and shrinking the character height

**Barcode height reduction rate**
- Not reduced (initial setting)
- 25%
- 50%
- 75%

<table>
<thead>
<tr>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The &quot;75% reduction of inner spacing and shrinking the character height&quot; setting is applied to Font A and Font B characters only. Not applied to the other font characters such as Kanji.</td>
</tr>
<tr>
<td>• No reduction is applied to blank dot lines that exist in a graphic data.</td>
</tr>
<tr>
<td>• Reduced barcodes are not guaranteed to be correctly scanned. Make sure to check whether they are properly read by a barcode reader that is actually used.</td>
</tr>
</tbody>
</table>

**Font A auto replacement**
- Does not replace (initial setting)
- Font B
- Font C

**Font B auto replacement**
- Does not replace (initial setting)
- Font A
- Font C

**Font C auto replacement**
- Does not replace (initial setting)
- Font A
- Font B

**Multi-tone print density**
Selectable from 70% to 100% (5% increment)
Initial setting: 100%
Optional buzzer

<table>
<thead>
<tr>
<th>NOTE</th>
</tr>
</thead>
</table>
| • For information about how to connect the optional external buzzer, see "Connecting the Optional External Buzzer" on page 60.  
• When the optional external buzzer is enabled, a cash drawer cannot be used. Be sure to disable it when you use a cash drawer. |

Enables/disables
- Disabled (initial setting)
- Enabled

Buzzer frequency (Error)
- Does not sound
- Sounds 1 time
- Sounds continuously (initial setting)

Sound pattern (Autocut)
Selectable from Patterns A to E
Initial setting: Pattern A

Buzzer frequency (Autocut)
- Does not sound
- Sounds 1 time (initial setting)

Sound pattern (Pulse 1)
Selectable from Patterns A to E
Initial setting: Pattern A

Buzzer frequency (Pulse 1)
- Does not sound
- Sounds 1 time (initial setting)

Sound pattern (Pulse 2)
Selectable from Patterns A to E
Initial setting: Pattern B

Buzzer frequency (Pulse 2)
- Does not sound
- Sounds 1 time (initial setting)

Batch rotate print (Upside Down)
- Disabled (initial setting)
- Enabled
Communication condition of USB interface

Class
- USB printer class (initial setting)
- USB vendor-defined class

Communication condition of **Bluetooth** interface
- Device name (initial setting: TM-m30II-SL_xxaaaaa)
- Passkey (initial setting: 0000)
- Security (initial setting: Low)
- Auto Re-Connect with iOS device (initial setting: Enabled)

**NOTE**
The device name is initially set to TM-m30II-SL_xxaaaaa.
(xxxxxx refers to the last 6 digits of the serial number labeled on the back of your printer.)

Bluetooth communication interval during power saving mode
- Level 1 (Standard) (Initial setting)
- Level 2 (Short)

**NOTE**
By changing the setting to “Level 2 (Short),” you can shorten the time until printing begins or the time until information is shown on the customer display connected to the printer. However, because the communication frequency increases, the power consumption of the printer and the host also increases. Also, depending on the host, this setting may not be enabled, and the host-specified communication interval may be used.
Network Settings

The following explains the procedure for network settings in order to connect the product to your network.

Setup methods

There are three methods for setup.

Method 1: Setup using EpsonNet Config
This method involves installing the network configuration tool, EpsonNet Config, on your computer for setting.
As it does not require any settings in advance to allow setup, you can easily perform setup using a computer already connected to the network.
Download EpsonNet Config from the Epson website.

Method 2: Setup using EpsonNet Config (Web version)
This method involves opening the Web application equipped in the printer from a Web browser to perform settings.
Because you specify the printer’s IP address to open it, you need to set your computer to the same network segment as the printer.
With EpsonNet Config (Web version), you can set more items than with EpsonNet Config.

Method 3: Setup using arp/ping commands
This method involves setting the printer’s IP address in the setting computer’s arp/ping commands, then using the setting tool to change the other settings.
The setting computer must be in the same segment as the printer. Also, settings can be done only when the printer’s arp+ping IP setting is set to Enable.
Use EpsonNet Config or EpsonNet Config (Web version) for settings other than the IP address.

Flow of Setup

Method 1
- Printing the status sheet (check settings) (See “Printing a Status Sheet” on page 105.)
- Setup using EpsonNet Config
- Use EpsonNet Config (Web version) to perform settings
- Finish

Method 2
- Change network settings on setting computer
- Use EpsonNet Config (Web version) to perform settings
- Finish

Method 3
- Use arp/ping command to set printer IP address
- Use EpsonNet Config to perform other settings
- Use EpsonNet Config (Web version) to perform other settings
- Finish
Setup using EpsonNet Config

Execute EpsonNet Config, select the target printer from the displayed device list, then check and change the settings.

If the printer is still set to factory defaults, the printer’s MAC address is listed up, even if the computer does not have the same network address.

1. Connect the printer to the same network as the computer where you installed EpsonNet Config.

2. Start up EpsonNet Config.
   The tool automatically detects printers connected to the network and displays a list.
   It may take up to a minute for the printer to be displayed in the list.
   If it is not displayed, check that [Filter] is set to "(All)" or "Network-connected devices", then click [Refresh]. Or, select [Tools], then [Option], and check the settings of [Search Parameters].

3. Select the target printer, then click [Configuration].
   If you cannot determine the target printer from the product name or the IP address, use the MAC address. You can check the printer’s MAC address on the status sheet.

4. Change the printer’s settings based on the network setting information you received from the network administrator.
   Select an item from the menu and change the setting.

5. Once you set the necessary items, click [Transmit].
   The changed contents are sent to the printer and the printer settings are changed.

- The initial setting uses an IP address for the printer provided by a DHCP server. Since you cannot complete setup if there are conflicting IP addresses on the network, make sure that there are no other devices on the network that conflict with the IP address provided by the DHCP server. If a DHCP server is not available, a fixed IP address (192.168.192.168) is set approximately one minute after turning on the printer. Also, if the Ethernet cable is not connected, connect the Ethernet cable and then run this process.
- When DHCP is enabled, the provided IP address is printed automatically. However, if the Ethernet cable is not connected, and the Wireless LAN unit is not installed, printing is not performed.

For details about EpsonNet Config, see the manual (operation guide) installed together with the tool or the online help.
Setup using EpsonNet Config (Web version)

Follow the steps below to start up EpsonNet Config (Web version), and check or change the settings.

**CAUTION**
- When setting up using the EpsonNet Config (Web version), you need to set the network settings for the device to the same network segment as the printer you want to connect to.
- The initial setting uses an IP address for the printer provided by a DHCP server. Since you cannot complete setup if there are conflicting IP addresses on the network, make sure that there are no other devices on the network that conflict with the IP address provided by the DHCP server. If a DHCP server is not available, a fixed IP address (192.168.192.168) is set approximately one minute after turning on the printer. Also, if the Ethernet cable is not connected, connect the Ethernet cable and then run this process.
- When DHCP is enabled, the provided IP address is printed automatically. However, if the Ethernet cable is not connected, and the Wireless LAN unit is not installed, printing is not performed.

1. **Connect the setting computer and the printer to the same network.**

2. **Perform network settings on the computer so that it is in the same segment as the printer’s IP address.**
   - Subnet mask: Same subnet mask as the printer
   - IP address: Same segment (same network address) as the printer, different host address

   Check the values set in the printer on the status sheet.

<table>
<thead>
<tr>
<th>E.g.)</th>
<th>Printer</th>
<th>Setting computer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subnet mask</td>
<td>255.255.255.0</td>
<td>255.255.255.0</td>
</tr>
<tr>
<td>IP address</td>
<td>192.168.192.168</td>
<td>192.168.192.2</td>
</tr>
</tbody>
</table>

3. **Start up your Web browser and input the printer’s IP address into the address field.**
   E.g.) http://192.168.192.168

   **NOTE** Under initial settings, when you access EpsonNet Config (Web version) from your browser, an authentication warning message may be displayed.
4 Input your user name and password on the authentication window.
   • The user name is “epson”, and the default password is the serial number of the printer. You can
     find the serial number by running the self-test or on the nameplate attached to the printer.

   • You can change the password in the [Optional] menu, under [Password].

5 Change the settings based on the network setting information you received from the
   network administrator.
   Select an item from [Configuration] menu and change the setting.

6 After changing the necessary parameters, click the [Send] button.
   The changes are sent to the printer.

7 Click the [Reset] button on the Web page displayed after sending.
   The sent contents are enabled.
   Depending on the changes, such as the IP address, the connection with the setting computer may be
   cut and the EpsonNet Config window may not be displayed. To reconnect, you need to set the
   network settings of the setting computer to the same network segment as the printer for which
   settings were changed.

Setup using arp/ping commands

You can change the printer’s IP address by changing the ARP table (table of IP address and MAC addresses)
managed by the OS on the setting computer.

Check that the setting computer is connected to the network in the same segment as the printer, and that the
arp+ping IP setting for the printer is set to Enable. (The factory default is Disable.)
You can check the printer settings on the status sheet.

1 Delete the IP address you want to set to the printer from the ARP table.
   arp -d (IP address)
   E.g.) arp -d 192.168.0.10
2 Add the printer’s MAC address and the IP address you want to set to the ARP table.
   `arp -s (IP address) (MAC address)`
   E.g.) `arp -s 192.168.0.10 00-26-AB-7B-00-00`

3 Execute the ping command and enable settings.
   `ping (IP address you want to set)`
   E.g.) `ping 192.168.0.10`
   When a message like "Reply From 192.168.0.10: Bytes=32 Time < 10ms TTL=255" is displayed, the IP
   address setting is complete.

Use EpsonNet Config or EpsonNet Config (Web version) for settings other than the IP address.

**MAC Address Confirmation**

You can check the printer’s MAC address using the following procedures.
- Printing the status sheet
- A printer self-test (Only supported on Ethernet. For wireless, see the status sheet.)
- Using EpsonNet Config to confirm
- Using a Web browser to confirm (EpsonNet Config (Web version) function)

You can check the MAC address for network tethering using the following method.
- Printing the status sheet (MAC Address2)
Setting/Check Modes

As well as print mode, the following modes are also provided for making various printer settings and checking items.

- Self-test mode
- NV graphics information print mode
- Receipt Enhancement information print mode
- Software settings mode
- Restore default values mode
- Interface setup mode
- Hexadecimal dumping mode

The self-test mode or hexadecimal dumping mode is selected depending on the operation performed when the power is turned on.

NV graphic information print mode, Receipt Enhancement information print mode, Software settings mode, and Restore default settings mode are selected depending on the Feed button operation performed during a self-test.

Close the roll paper cover, and turn on the printer while pressing the Feed button.

Press the Feed button once briefly and then hold it down.

Press the Feed button twice briefly and then hold it down.

Press the Feed button three times briefly and then hold it down.

Press the Feed button four times briefly and then hold it down.

Press the Feed button five times briefly and then hold it down.

Press the Feed button six times briefly and then hold it down.

Press the Feed button seven times briefly and then hold it down.

Open the roll paper cover, and turn on the printer while pressing the Feed button, and then close the roll paper cover.

Hexadecimal dumping
In 1 and 2, the following guidances are printed, the Paper LED flashes, and instructs the user’s operations.

1. Continuing self-test guidance

Select Modes by pressing Feed Button.
Continue SELF-TEST: Less than 1 second
Mode Selection : 1 second or more

2. Mode selection guidance

Mode Selection

Modes
0: Exit and Reboot Printer
1: NV Graphics Information
2: Receipt Enhancement Information
3: Customize Value Settings
4: Restore Default Values
5: Interface Setup
6: TM-Intelligent Information
7: Peripheral Device Information
8 or more: None

Select Modes by executing following procedure.
step 1. Press the Feed button less than 1 second as many times as the selected mode number.
step 2. Press Feed button for 1 second or more.


**Self-test Mode**

You can check the following items using the self-test.

- Product name
- Firmware version
- Product serial number
- Interface type
- Peripheral device information
- Resident fonts
- Maintenance counter information (head running length, number of times of autocutting)

Follow the steps below. You can also run the self-test using the ESC/POS commands.

1. Close the roll paper cover.

2. **While pressing the Feed button, turn on the printer. (Hold down the Feed button until printing starts.)**
   
   After printing the current print status, a Continuing self-test guidance is printed, and the Paper LED flashes.

3. **Briefly press the Feed button (less than one second) to continue the self-test.**
   
   The printer prints a rolling pattern on the roll paper, using the built-in character set. After "*** completed ***" is printed, the printer initializes and switches to standard mode.

**NV Graphics Information Print Mode**

Prints the following NV graphic information registered to the printers.

- Capacity of the NV graphics
- Used capacity of the NV graphics
- Unused capacity of the NV graphics
- Number of NV graphics that are registered
- Key code, number of dots in X direction, number of dots in Y direction to be defined.
- NV graphics data

**NOTE** For details on NV graphics, see "NV Graphics Memory" on page 25.

Follow the steps below.

1. **After running a self test, hold down the Feed button for at least one second, and then select the Mode selection.**
   
   The Mode selection guidance is printed, and the Paper LED flashes.
After briefly (less than one second) pressing the Feed button once, hold it down for at least one second, to print the NV graphics information. After information printing, the Mode selection guidance is printed again.

3 To finish, turn off the power, or select “Exit and Reboot Printer”.

**Receipt Enhancement Information Print Mode**

You can check the following items using the R/E information mode:
- Automatic top logo setting
- Automatic bottom logo setting
- Extended settings for automatic top/bottom logo

Follow the steps below.

1 After running a self test, hold down the Feed button for at least one second, and then select the Mode selection. The Mode selection guidance is printed, and the Paper LED flashes.

2 After briefly (less than one second) pressing the Feed button twice, hold it down for at least one second, to print the R/E information. After information printing, the Mode selection guidance is printed again.

3 To finish, turn off the power, or select “Exit and Reboot Printer”.

**Software Setting Mode**

Set the printer's memory switches and customized values.
- Print Density
- Automatic Paper Reduction
- Enable/Disable Auto Paper Feed&Cut at cover close
- Paper Width
- Thai characters print mode
- Selection of character set
- Embedded Font Replacement
- Communication condition of USB Interface
- Print Speed
- NV Memory Capacity
- Command execution during offline
- Amount of top margin by backfeed
- Buzzer Control
Follow the steps below.

1. **After running a self test, hold down the Feed button for at least one second to enter the Mode selection.**
   The Mode selection guidance is printed, and the Paper LED flashes.

2. **Briefly press the Feed button three times (less than one second), hold it down for at least one second to enter the Software settings mode (Customized value setting).**
   The Software setting mode guidance is printed, and the Paper LED flashes.

   **Customize Value Settings**

   Modes
   0: Exit
   1: Print Current Settings
   2: Print Density
   3: Print Speed
   4: Automatic Paper Reduction
   5: Auto Paper Feed&Cut at cover close
   6: Paper Width
   7: Character/Font Settings
   8: Interface Selection
   9: Interface Settings
   10: Intelligent Settings
   11: Command Execution (Offline)
   13: Other Settings

   Select Modes by executing following procedure.
   step 1. Press the Feed button less than 1 second as many times as the selected mode number.
   step 2. Press Feed button for 1 second or more.
3 **After briefly pressing the Feed button (less than one second) for the number of times shown in the print result, hold down the button for more than one second to select the setting items.**

The setting selected as the setting item, the current settings and initial settings are printed. Depending on the setting item, you may need to continue selecting the setting item before the settings are printed.

For details on setting items, see “Software Settings” on page 81.

4 **Select a setting by briefly pressing the Feed button (less than one second) for the number of times applicable to the setting, and then hold down the button for more than one second to confirm your selection.**

After saving the settings, the Software setting mode guidance is printed, and the Paper LED flashes.

5 **To close Software setting mode, turn off the printer, or select “Exit” to return to Mode selection guidance, and then select “Exit and Reboot Printer”.**

<table>
<thead>
<tr>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To select 0 as the item number, hold down the Feed button until printing starts.</td>
</tr>
<tr>
<td>• If the button is pressed a number of times that is not displayed by the Setup guidance, the operation is invalid and the same guidance is printed.</td>
</tr>
</tbody>
</table>

**Restore Default Values Mode**

In Restore default values mode, following values saved on NV Memory will be set back to initial settings. When any error occurs, you can use to specify the reason.

- Memory switch
- Customized Value
- Communication Condition of USB Interface
- Status
- Character types
- Accessories
- Barcode
- Two-Dimensional Symbol
- Print Position
- Logo Setting
- TM-Intelligent function settings

Follow the steps below.

1 **After running a self test, hold down the Feed button for at least one second to enter the Mode selection.**

The Mode selection guidance is printed, and the Paper LED flashes.
2 Briefly press the Feed button four times (less than one second), hold it down for at least one second to enter the Restore Default Values. The guidance is printed.

3 Briefly press the Feed button once (less than one second), hold it down for at least one second. (Hold down the Feed button until the message of restore completion is printed.)

**Interface Setup Mode**

Use this mode to setup the interface and other settings.

Follow the steps below.

1 **After running a self test, hold down the Feed button for at least one second to enter the Mode selection.**
   The Mode selection guidance is printed, and the Paper LED flashes.

2 Briefly press the Feed button five times (less than one second), hold it down for at least one second to enter the Interface Setup mode.
   The guidance is printed.

3 After briefly pressing the Feed button (less than one second) for the number of times shown in the print result, hold down the button for more than one second to select the setting items.

**Initialize**

Select [Wi-Fi & Ethernet Setup] or [Bluetooth Setup] and select [Initialize] to restore the communication settings to the factory default. The printer is reset and restarted.

**SimpleAP mode (When using the Wireless LAN unit)**

When using the Wireless LAN unit, select [Wi-Fi & Ethernet Setup] and select [SimpleAP] to start in SimpleAP mode (the same as the factory default setting). The printer is reset and restarted, and it begins printing the “SimpleAP Start” information.

Select this to quickly set up a network connection.

For information on the Quick connection function, see “Simple Setup for Wireless LAN” on page 27.
Auto re-connect to iOS device

In Bluetooth model, select [Bluetooth Setup] and then select [Auto Re-Connect iOS], you can select whether to enable or disable auto reconnection to iOS devices.

- For details on the auto re-connect function, see “Auto Reconnect Feature” on page 147.
- You can change the settings with TM-m30II Utility and TM Utility for iOS.

Bluetooth Security Settings

For Bluetooth models, select [Bluetooth Setup], and then select [Security], and you can change the Bluetooth security settings.

- When the security settings are changed from “Middle” or “Low” to “High”, or vice versa, the link key (pairing information) is deleted. If the printer is already paired with a terminal, unpair them and then pair again.

- You can change the settings with TM-m30II Utility and TM Utility for iOS/Android.

<table>
<thead>
<tr>
<th>Security</th>
<th>Pairing Mode</th>
<th>Pairing Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Pairing is always possible</td>
<td>Just Works</td>
</tr>
<tr>
<td>Middle (initial setting)</td>
<td>Pairing is possible for one minute after turning the printer on or after printing the status sheet</td>
<td>Just Works</td>
</tr>
<tr>
<td>High</td>
<td>Pairing is possible for one minute after printing the status sheet</td>
<td>Numeric Comparison/Passkey Entry</td>
</tr>
</tbody>
</table>

Pairing method when the security is set to Middle/High (from the printer)

When the security is set to Middle/High and the printer is ready to be paired, perform the following procedure.

1 Load paper in the printer, and then turn it on.

- Make sure no errors have occurred and that the printer is not off-line.
- You cannot pair the printer while the network is starting up immediately after the power is turned on.

2 Open the roll paper cover, hold down the FEED button (two seconds), and then close the roll paper cover.

3 A status sheet is printed, and the Bluetooth LED flashes a pattern indicating that pairing is now possible.

- Pairing is possible for one minute after printing the status sheet.
- You can enable pairing also by printing the status sheet by pressing the status sheet button.
Pairing method when the security is set to High (from the host)
When the security is set to High and the printer is ready to be paired, perform the following procedure.

1. **Search for the printer on the Bluetooth settings screen on the host device.**
2. **Select the printer you want to pair with.**
   The printer prints the Passkey.
3. **Check that the printed Passkey and the Passkey displayed on the host device match, and then select “Pairing” on the host device.**

### TM-Intelligent Settings Information Print Mode

This function allows you to print TM-Intelligent setting information currently registered in the printer.

Follow the steps below.

1. **After running a self-test, hold down the Feed button for at least one second to enter the Mode selection.**
   The Mode selection guidance is printed, and the Paper LED flashes.
2. **Briefly press the Feed button six times (less than one second), hold it down for at least one second to print the TM-Intelligent setting information.**
   After information printing, the Mode selection guidance is printed again.
3. **To finish, turn off the power, or select “Exit and Reboot Printer”.**

### Peripheral Device Information Print Mode

This function allows you to print information for the device currently connected to the printer.

- Customer display information
- Wi-Fi adapter information
- Bluetooth adapter information
- Handheld scanner information

Follow the steps below.

1. **After running a self-test, hold down the Feed button for at least one second to enter the Mode selection.**
   The Mode selection guidance is printed, and the Paper LED flashes.
2 Briefly press the Feed button seven times (less than one second), hold it down for at least one second to print the Peripheral Device Information. After information printing, the Mode selection guidance is printed again.

3 To finish, turn off the power, or select “Exit and Reboot Printer”.

**Hexadecimal Dumping Mode**

In hexadecimal dumping mode, data from the host device is printed in hexadecimal numbers and characters. By comparing the print outs and the program, you can check whether or not data is being sent to the printer correctly.

Follow the steps below. Entering the hexadecimal dumping mode is also possible using the ESC/POS commands.

1 **Open the roll paper cover.**

2 **While pressing the Feed button, turn on the printer. (Hold down the Feed button until the Error LED turns on.)**

3 **Close the roll paper cover.**

    From this point, all data received by the printer is printed in the corresponding hexadecimal numbers and ASCII characters.

**Example of printing in hexadecimal dumping mode:**

```
1B 21 00 1B 26 02 40 40 1B 69 .! .& . @ . i
1B 25 01 1B 63 34 00 1B 30 31 :% .. c 4 .. 0 1
41 42 43 44 45 46 47 48 49 4A 4B 4C 4D 4E 4F 4G 4H 4I 3
*** completed ***
```

4 **To close hexadecimal dumping mode, turn off the printer after printing is complete, or press the Feed button for three times.**
Printing a Status Sheet

Follow the steps below to check the interface settings.

**NOTE** You cannot print after turning on the power while the Power LED is flashing.

Using the Feed button

1. Check that the printer is on.
2. Open the roll paper cover.
3. Hold down the Feed button for at least one second.
4. Close the roll paper cover.
   The status sheet is printed. After printing, the printer returns to the standard mode.

Using the Status Sheet Button

If you have removed the bottom cover of the printer, you can use the status sheet button.

1. Check that the printer is turned on.
   Make sure the roll paper cover is closed.
2. Hold down the status sheet button for at least three seconds.
   The status sheet is printed. After printing, the printer returns to the standard mode.

**NOTE**
- After the status sheet is printed, only the print settings of the mainly connected interface are retained. For the mainly connected interface, see "Printing Using Multiple Interfaces" on page 29.
- Ethernet and Wi-Fi status sheets are not printed while the printing communication protocol is being established. They will be printed after the connection is cut off (including being cut due to a time out).
- The Bluetooth status sheet is not printed if status sheet printing is performed under the following conditions.
  * Bluetooth is connected when the Bluetooth security is set to "Medium" or "High"
  * An error occurs when the Bluetooth security is set to "Medium" or "High"
  * Time between when a pairing request is received and Passkey printing starts when the Bluetooth security is set to "High"
- "(none)" is printed for the "Connected Peripheral" if no peripherals are connected to the USB downstream port connector.
### Wi-Fi & Ethernet Interface

**Wi-Fi Status**
- **MAC Address**: Unmounted
- **SSID**: EPSON_Printer
- **Network Mode**: Infrastructure
- **Comm Standard**: 802.11b/g/n
- **Encryption Type**: WPA2-PSK
- **Link Status**: Unknown
- **Channel**: Unknown
- **Transmission**: Unknown
- **Access Point**: Unknown
- **Signal Level**: Unknown

**Ethernet Status**
- **MAC Address**: XX-XX-XX-XX-XX-XX
- **Physical Layer**: Auto-negotiation
- **Link Status**: Disconnect

**Network**
- **Soft Version**: 01.00(1930.20.00)

**TCP/IP Status**
- **Acquiring**: Auto
- **IP Address**: (NONE)
- **Subnet Mask**: (NONE)
- **Default Gateway**: (NONE)

**Service Status**
- **Time Server**: (off)
- **Server Direct Print**: (off)
- **Status Notification**: (off)

**Other Status**
- **Date/Time**: 2020/01/01 00:00:00
- **Wi-Fi Device ID**: Unknown
- **Wi-Fi Region ID**: 1

---

### Bluetooth Interface

**Bluetooth Status**
- **BD_ADDR**: XX:XX:XX:XX:XX:XX
- **Passkey**: XX
- **Device Name**: TM-m30II-SL_XXXXXX
- **Module Info**: BT401-XXXXXX
- **Mode**: Auto re-connect enable
- **Security**: Low

**Ethernet**
- **MAC Address**: XX-XX-XX-XX-XX-XX

---

**Other Status**
- **Date/Time**: 2020/01/01 00:00:00
- **Wi-Fi Device ID**: Unknown
- **Wi-Fi Region ID**: 1
Resetting the Interface Settings

Follow the steps below to restore the network settings to the factory default.

**Resetting using the Interface Setup Mode**

For information about the Interface Setup mode, see the link below.
"Interface Setup Mode” on page 101

**Resetting using the Status Sheet Button**

If you have removed the bottom cover of the printer, you can use the status sheet button.

1. **Turn off the printer and close the roll paper cover.**

2. **Hold down the status sheet button while turning on the printer.**
   A message is printed indicating that resetting is being performed, and the printer restarts.
**TM-Intelligent Function**

This product supports the TM-Intelligent function and provides the following functions.

- Server direct print
- Status Notification

You can set each function in the Setup Utilities. For details on the setting method for Epson TM-m30II Utility for Windows, see the TM-m30II Utility User’s Manual.

You can also download a dedicated manual and sample programs from our homepage.

---

**Server direct print**

The server direct function allows this product to acquire print data from a Web server and then print. By including print data in a response to request from this product, the Web server application can print to this product or a TM printer on the network.

The features are as follows.

- You can acquire print data from three different URLs.
- Print data is available in ePOS-Print XML format.
- You can use this product to print to TM printers on a network.

Regarding details on server direct printing, see the Server Direct Printing User’s Manual.

---

**Status Notification**

Status Notification is used to periodically notify the TM printers with SDP support status to the Web server. The Web server automatically responds with an empty response.

Operating the printer management application created by the user with the Web server enables grasp of the status of the printers installed in a shop from a remote place.

For more details about the Status Notification, refer to the "Server Direct Print User’s Manual".
Network Tethering (iOS device only)

A tablet POS system is a POS system that uses a tablet computer in which the POS application is installed. If the tablet communicates via Wi-Fi, the communication may become unstable depending on the radio wave condition in the shop or store and it may cause the POS system to malfunction. The network tethering provides network function to an iOS device that is connected to the printer using a Lightning to USB cable. This enables stable and reliable operation of the POS system. In addition, the iOS device can be charged at the same time.

Enable the network tethering of the printer to use the function.

- If the network tethering is enabled and an iOS device is connected to the USB-A Device Charging connector (white connector) on the printer that is connected to a wired network, the iOS device can communicate over the wired network using the tethering function instead of Wi-Fi communication.
- The speed of the wired network communication using the network tethering is about 1.5 Mbps. Depending on the environment, the speed may slower than Wi-Fi communication.

For Wi-Fi Communication (Not using the Network tethering)

For Wired LAN Communication (Using the Network tethering)
Tablet Devices Supported by the Network Tethering

Operation of this function has been checked with iOS devices running iOS 10.1 or later.

Firmware Versions that Supports the Network Tethering

3.03A ESC/POS or later, or 3.03B ESC/POS or later

<table>
<thead>
<tr>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>• See &quot;Self-test Mode&quot; on page 97 to check the firmware version of the printer.</td>
</tr>
<tr>
<td>• See &quot;Utilities&quot; on page 118 to update the firmware.</td>
</tr>
</tbody>
</table>

Enabling the Tethering Function

Enable the tethering function of the printer using Epson TM Utility for iOS, TM-m30II Utility, or in the software settings mode.

Enabling by Using Epson TM Utility

Select [Change Printer Settings] - [Network tethering] in that order to enable (or disable) the tethering function.

NOTE

See "Download" on page 119 for information on how to get Epson TM Utility.
Enabling by Using TM-m30II Utility
Select [Detailed Settings] - [Interface] - [Network tethering] in that order, and then enable (or disable) it. For more details, see TM-m30II Utility User’s Manual.

Enabling in the Software Settings Mode
See “Software Settings” on page 81.

Connection Procedure
Follow the procedure below to connect a tablet using the tethering function.

1 Connect the printer to a wired network.
2 Turn on the printer, and then wait until the Ethernet LED stops flashing and stays on.
3 On the iOS device, tap [Settings] - [Wi-Fi], and disable Wi-Fi.
4 Connect the iOS device to the printer using a Lightning to USB cable. Make sure to connect the cable to the USB-A Device Charging connector (white connector).

5 On the iOS device, tap [Settings] - [Ethernet], and then check that an IP address has been set.

- If [Ethernet] does not appear in [Settings] of the iOS device, the tethering function of the printer might have been disabled. See "Enabling the Tethering Function" on page 110 to enable the tethering.
- If a DHCP server is not used in the network, set the IP address and subnet mask manually.
- To print from the iOS device, select one of the interfaces; USB or network, in the application.
Application Development Information

This chapter describes how to control the printer and gives information useful for printer application development.

Controlling the Printer

The printer supports the following command systems:

- ePOS-Print XML
- ESC/POS

Users can control the printer by using the aforementioned commands, or the following development kits or drivers.

- Epson ePOS SDK
- OPOS ADK
- OPOS ADK for .NET
- JavaPOS ADK
- EPSON Advanced Printer Driver (APD)
- EPSON TM Virtual Port Driver
- Mac Printer Driver
- Epson TM/BA Series Thermal Printer Driver

ePOS-Print XML

ePOS-Print XML is the Epson original control command system for POS printers defined in XML. With ePOS-Print XML commands, you can print in environments where http communication is available and from OS applications. For detailed information about ePOS-Print XML, see the ePOS-Print XML User’s Manual.

ESC/POS

ESC/POS is the Epson original printer command system for POS printers and customer display. With ESC/POS commands, you can directly control all the printer functions, but detailed knowledge of printer specifications or combination of commands is required, compared to using drivers and applications.

For detailed information about ESC/POS commands, see the ESC/POS Command Reference that can be accessed from the following URL.

www.epson-biz.com/pos/reference/
**Controlling the Cash Drawer**

A pulse output is sent to drawer kick connector pin 2 or pin 5, and you can open the drawer. You can also check the open/close status of the drawer by checking the signal level of the drawer kick connector pin 3. These controls are executed by a driver or by commands.

**ESC/POS Commands**

Prepare the output command for the specified pulse and the status transmission command. For details, see the ESC/POS Command Reference.

**For Windows Printer Drivers (APD)**

You can set the drawer to open when printing is started. For details, see the manual for drivers. For details on control, see the manual for Status API of the driver.

**OPOS (OCX Driver)**

Register a cash drawer using the SetupPOS Utility, and control using the OpenDrawer method or the DirectIO function. For details, see the "EPSON OPOS ADK MANUAL APPLICATION DEVELOPMENT GUIDE Cash Drawer" and the "UnifiedPOS Specification".

**OPOS for .NET**

Register a cash drawer using the SetupPOS Utility, and control using the OpenDrawer method or the DirectIO function. For details, see the "EPSON OPOS ADK for .NET MANUAL Application Development Guide Cash Drawer (EPSON Standard)" and the "UnifiedPOS Specification".

**Epson ePOS SDK**

The output command for the drawer kick pulse and the status transmission command are provided in each SDK library. For details, see the user’s manuals provided with each SDK.

**NOTE**

- Whether or not pin 2 or pin 5 operates the drawer kick connector depends on the connected cash drawer.
- You can acquire documents regarding the UnifiedPOS from the following link.
  
  https://www.omg.org/retail/unified-pos.htm
Controlling the Optional External Buzzer

You can set the optional external buzzer to buzz when an error occurs and when an automatic cut off occurs. By using the driver or the command, you can specify when to sound the buzzer. In addition, the beep pattern and how many times to sound the buzzer can be changed.

**ESC/POS Command**

Use the buzzer control command or the output command for the specified pulse. For details, see the ESC/POS Command Reference.

**For Windows Printer Drivers (APD)**

Use the DirectIO function or the API for opening the drawer. For details, see the manual for Status API of the drivers.

**OPOS (OCX Driver)**

Register a POS printer using the SetupPOS Utility and control using the DirectIO function. For details, see the "EPSON OPOS ADK MANUAL APPLICATION DEVELOPMENT GUIDE POSPrinter (TM Series)".

**OPOS for .NET**

Register a POS printer using the SetupPOS Utility and control using the DirectIO function. For details, see the "EPSON OPOS ADK for .NET MANUAL Application Development Guide POSPrinter."

**Epson ePOS SDK**

The command for the buzzer function is provided in each SDK library. For details, see the user’s manuals provided with each SDK.

For details on setting the optional external buzzer, see "Connecting the Optional External Buzzer" on page 60.
## Software

The following software is provided for application development.

### Development Kit

<table>
<thead>
<tr>
<th>Software</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epson ePOS SDK</td>
<td>This is a developer kit to control applications, native applications for smart devices, and printers. This includes libraries, manuals, and sample programs.</td>
</tr>
<tr>
<td>for Android</td>
<td></td>
</tr>
<tr>
<td>for iOS</td>
<td></td>
</tr>
<tr>
<td>for JavaScript</td>
<td></td>
</tr>
<tr>
<td>EPSON OPOS ADK</td>
<td>This OCX driver can control POS peripherals using OLE technology.</td>
</tr>
<tr>
<td>EPSON OPOS ADK for .NET</td>
<td>The OPOS ADK for .NET is a POS industry standard printer driver compatible with Microsoft POS for .NET. It allows you to develop applications that are compatible with the UPOS (Unified POS) specification. When developing applications, use a separate development environment such as Microsoft Visual Studio .NET.</td>
</tr>
<tr>
<td>EPSON JavaPOS ADK</td>
<td>JavaPOS is the standard specification which defines an architecture and device interface (API) to access various POS devices from a Java based system. Using JavaPOS standard API allows control with Java based applications of functions inherent to each device. A flexible design with Java language and JavaPOS enables many different types of computer systems, such as stand alone or network configuration, to use a same application. You can use JavaPOS to build applications and drivers independently of platforms. This allows flexible configurations using thin clients to meet the system requirements.</td>
</tr>
<tr>
<td>Epson TM Print Assistant</td>
<td>A native application that relays print data between an application and the TM printer. Epson TM Print Assistant allows you to develop a system that enables printing from a Web application or a URL-scheme capable application such as FileMaker, on a smart device connected to the TM printer.</td>
</tr>
<tr>
<td>for Android</td>
<td></td>
</tr>
<tr>
<td>for iOS</td>
<td></td>
</tr>
</tbody>
</table>

*1: OLE technology developed by Microsoft divides software into part blocks. The OPOS driver is presupposed to be used with a development environment, such as Visual Basic, unlike ordinary Windows printer drivers. It is not a driver to be used for printing from commercial applications. You can acquire documents regarding the UnifiedPOS from the following link. https://www.omg.org/retail/unified-pos.htm
<table>
<thead>
<tr>
<th>Software</th>
<th>Description</th>
<th>Operating environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSON Advanced Printer Driver (APD)</td>
<td>In addition to ordinary Windows printer driver functions, this driver has controls specific to POS. The Status API (Epson original DLL) that monitors printer status and sends ESC/POS commands is also attached to this driver.</td>
<td>Windows</td>
</tr>
<tr>
<td>EPSON TM Virtual Port Driver</td>
<td>This is a serial/parallel-USB/LAN conversion driver to make an Epson TM/BA/EU printer connected via USB or LAN accessible from a POS application through a virtual serial or parallel port. It allows you to directly control devices connected via USB or LAN with ESC/POS commands without making changes in the POS application that controls devices connected via a serial or parallel interface.</td>
<td>Windows</td>
</tr>
<tr>
<td>Mac Printer Driver</td>
<td>Mac printer driver allows you to control the printer using Common UNIX Printing System (CUPS) on Mac OS X. This is a full raster printer driver. It is able to print images, text, and vector graphics etc., that an application displays. With this driver many printer controls are possible, such as paper cut timing control, cash drawer control, printing speed control, blank line skip, and upside-down printing. It also provides API and dialogues for print setting, sample applications, and logo setting utility.</td>
<td>Mac OS X</td>
</tr>
<tr>
<td>Epson TM/BA Series Thermal Printer Driver</td>
<td>This driver allows you to control the printer using Common UNIX Printing System (CUPS) on GNU/Linux. This is a full raster printer driver. It is able to print images, text, and vector graphics etc., that an application displays. With this driver many printer control are possible, such as paper cut timing control, cash drawer control, printing speed control, blank line skip, and upside-down printing.</td>
<td>GNU/Linux</td>
</tr>
</tbody>
</table>
# Utilities

<table>
<thead>
<tr>
<th>Software</th>
<th>Description</th>
<th>Operating environment</th>
</tr>
</thead>
</table>
| Epson TM Utility    | A utility that is available on the App Store or Google Play. Use this to perform wireless connection setup and change settings on the printer from iOS and Android devices. In addition, the utility has the following functions.  
- Sample receipt printing  
- Printer status display  
- Quick pairing by NFC/QR code  
- Firmware update                                                                                                                     | iOS, Android           |
| TM-m30II Utility    | A utility for checking and changing various printer settings. Use this utility to:  
- Check the current settings  
- Test operation  
- Store logos  
- Set paper saving  
- Set printing control  
- Set communication interfaces  
- Configure the network settings  
- Configure the TM-Intelligent function settings  
- Save/restore settings                                                                                                                 | Windows                |
| EpsonNet Config     | A network setting tool for Epson network products.                                                                                                                                                          | Windows, Mac           |
| TM Bluetooth® Connector | Pairs the Bluetooth printer with your device, and sets the Bluetooth port to be used by the printer driver and/or an application. Using this software makes it easy to pare the printer because the software searches for and displays only Epson Bluetooth printers, and allows you to search the printer by its product name. | Windows                |
| Deployment Tool     | Use to make network and printer settings simultaneously. Allows you to make settings efficiently at the time of introducing TM printers for the first time, or when configuring multiple TM printers at the same time.                           | Windows                |
| Monitoring Tool     | Use to check a list of status for the Epson printers connected to the network. You can also update certificates for multiple printers used for WPA-Enterprise in a batch.                                          | Windows                |
| TM-m30II Firmware Updater | Use this tool to update the printer's firmware. An executable file and the firmware are packaged together.                                                                                                 | Windows                |

# Others

<table>
<thead>
<tr>
<th>Manual</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ePOS-Print XML User’s Manual</td>
<td>Describes ePOS-Print XML statements. This manual comes with sample programs.</td>
</tr>
<tr>
<td>ePOS-Device XML User’s Manual</td>
<td>Describes ePOS-Device XML statements. This manual comes with sample programs.</td>
</tr>
</tbody>
</table>
You can obtain software and manuals from one of the following URLs.
For customers in North America, go to the following web site:

www.epson.com/support/

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

www.epson-biz.com/
Application Development and Distribution for iOS

If your application enables communication with the printer using Bluetooth or a Lightning-USB cable, Epson must submit the application to Apple before you submit it to the App Store. Please apply for each application you want to submit to the App Store from the URL below.

www.epson-biz.com/ais/E/

Notes on Printing Barcodes and Two-Dimensional Symbols

- Ensure adequate space around the code; “quiet zone” that is required for the code.
- To print PDF417 (two-dimensional symbol), the following settings are recommended.
  - Module height: 3 to 5 times the module width
  - Vertical size of the symbol: approximately 5 mm (0.20”) or more
- The recognition rate of ladder bar codes and two-dimensional symbols may vary depending on widths of the modules, print density, environmental temperature, type of paper, and characteristics of the reader. Make sure to check the recognition rate beforehand to determine the settings and use conditions so that the restrictions of the reader are satisfied.
- Reading quality of multi-gradation bar codes and two-dimensional symbols is not guaranteed.
- When printing a ladder barcode or two-dimensional symbol that is created as a graphics data, set the print speed to level 5.
Handling

This chapter describes basic handling of the printer.

Turning the Power On/Off

Use the Power switch to turn the printer on or off.
Installing or Replacing the Roll Paper

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

Make sure you use a specified roll paper type.

When the Printer is Placed Horizontally

1. Open the roll paper cover.

2. Remove the used roll paper core if any.

3. Install the roll paper in the correct direction.
   Make sure that the roll paper is not slack. If the roll paper is slack, take up the slack before installing it.
4 Pull out some paper, and close the roll paper cover.
When the printer power is on, the roll paper is automatically cut.
When the Printer is Placed Vertically

1. Open the roll paper cover.

2. Remove the used roll paper core if any.

3. Install the roll paper in the correct direction. Make sure that the roll paper is not slack. If the roll paper is slack, take up the slack before installing it.
Chapter 7 Handling

4 Pull out some paper, and close the roll paper cover. When the printer power is on, the roll paper is automatically cut.

- Before installing the roll paper, take up any slack in the roll paper by pulling its leading edge. If you install a slack roll paper, a paper jam or print quality problems may occur.

- Before installing the roll paper, make sure that the roll paper is not deformed. Using a deformed roll paper will cause the printer to malfunction.
How to Hold the Printer

When moving the printer, hold the printer itself.
If you hold the front tablet or the rear display to move the printer, an excessive force is applied and the printer may get damaged and may drop being separated from the tablet.

Preparing for Transport

When you need to transport the printer for maintenance or repair, make sure to do the followings.
• Dismount the front tablet and the rear display.
• Remove roll paper.
• Pack the printer placing it horizontally and keeping it upright.
Removing Jammed Paper

Follow the steps below if the roll paper is jammed.

1. Turn off the printer
2. Open the roll paper cover.
3. Remove the jammed paper.
4. Close the covers.

CAUTION

Do not touch the thermal head and its surroundings. After printing, the thermal head and its surroundings can be very hot.

CAUTION

When a paper jam occurs, never pull out the paper forcibly.
Roll Paper Cover does not Open

If a foreign substance has entered the autocutter or the roll paper jams, the autocutter blade cannot return to the correct position and it locks in place. In this situation, the roll paper cover does not open even if you pull the cover open lever. In this case, restart the printer.
Cleaning the Printer

Cleaning the Printer Case

Be sure to turn off the printer, and wipe the dirt off the printer case with a dry cloth or a damp cloth.

- **Never clean the product with alcohol, benzine, thinner, or other such solvents.**
  Doing so may damage or break the parts made of plastic and rubber.
- **For instructions on how to clean the tablet or the display mounted to the printer, refer to the manual of the device.**

Cleaning the Thermal Head and the Platen Roller

Epson recommends cleaning the thermal head to maintain receipt print quality. We recommend cleaning periodically (about once every 3 months). To clean the thermal head, use a cotton swab moistened with an alcohol solvent (ethanol or isopropyl alcohol).

Depending on the roll paper used, paper dust may stick to the platen roller and the paper may not be fed correctly. To remove the paper dust, clean the platen roller with a cotton swab moistened with water. Turn on the product power only after the water has completely dried.

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

1. Turn off the printer.
2 Disconnect the AC cable from the power outlet.
3 Open the roll paper cover.

4 Clean the thermal head with a cotton swab moistened with an alcohol solvent (ethanol or isopropyl alcohol), and clean the platen roller with a cotton swab moistened with water.

5 Connect the AC cable to a power outlet.
## Product Specifications

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Printing method</strong></td>
<td>Thermal line printing</td>
</tr>
<tr>
<td><strong>Printing direction</strong></td>
<td>Two directional with friction feed</td>
</tr>
<tr>
<td><strong>Paper feed speed</strong></td>
<td>200 mm/s (5.9”/s) (continuous paper feeding with the Feed button)</td>
</tr>
<tr>
<td><strong>Cutting method</strong></td>
<td>Partial cut (cutting with one point in center left uncut)</td>
</tr>
<tr>
<td><strong>Interface</strong></td>
<td>Bluetooth [Bluetooth 3.0 (EDR supported)]</td>
</tr>
<tr>
<td></td>
<td>Ethernet [10BASE-T/100BASE-TX]</td>
</tr>
<tr>
<td></td>
<td>USB Type-B [USB 2.0, Full-speed (12 Mbps)]</td>
</tr>
<tr>
<td></td>
<td>USB Type-A [USB 2.0, Full-speed (12 Mbps)]</td>
</tr>
<tr>
<td><strong>Buffers</strong></td>
<td>Receive buffer</td>
</tr>
<tr>
<td></td>
<td>4 KB/45 bytes</td>
</tr>
<tr>
<td></td>
<td>64 KB for Bluetooth interface</td>
</tr>
<tr>
<td></td>
<td>8 KB for USB-A Device Charging interface</td>
</tr>
<tr>
<td></td>
<td>Downloaded buffer</td>
</tr>
<tr>
<td></td>
<td>(user-defined characters and user-defined images)</td>
</tr>
<tr>
<td></td>
<td>12 KB</td>
</tr>
<tr>
<td><strong>NV graphics memory</strong></td>
<td>384 KB</td>
</tr>
<tr>
<td><strong>Barcode/ two-dimensional symbol printing</strong></td>
<td>UPC-A, UPC-E, JAN8 / EAN 8, JAN13 / EAN13, Code39, Code93, Code128, ITF, CODABAR(NW-7), GS1-128, GS1 DataBar, Code128 auto, PDF417, QR code, Maxi Code, Data Matrix, Aztec Code, Two-dimensional GS1 DataBar, Composite Symbology</td>
</tr>
<tr>
<td><strong>Cash drawer function</strong></td>
<td>2 drives</td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td>PS-180</td>
</tr>
<tr>
<td><strong>AC power consumption</strong></td>
<td>32.8 W (AC 115 V/60 Hz)</td>
</tr>
<tr>
<td>(100 to 230V/50 to 60 Hz)</td>
<td>1.6 W (AC 115 V/60 Hz)</td>
</tr>
<tr>
<td><strong>Operating voltage</strong></td>
<td>DC 24V ± 7%</td>
</tr>
<tr>
<td><strong>USB connector for charging</strong></td>
<td>Rated current: 2.1A</td>
</tr>
<tr>
<td>(USB-A - Device Charging, white connector)</td>
<td>Rated voltage: 5.1V</td>
</tr>
<tr>
<td><strong>Life</strong></td>
<td>17 million lines (printing + paper feeding)</td>
</tr>
<tr>
<td></td>
<td>Thermal head 150 km</td>
</tr>
<tr>
<td></td>
<td>Autocutter 2.2 million cuts</td>
</tr>
<tr>
<td><strong>MTBF</strong></td>
<td>360,000 hours</td>
</tr>
<tr>
<td><strong>MCBF</strong></td>
<td>65 million lines</td>
</tr>
</tbody>
</table>
Appendix

*1: Reference data: When using AC adapter (AC Adapter, C1 or PS-180 depending on the model).
*2: According to our operation conditions. It may differ depending on the usage conditions and product model.
*3: Indicates the mean time between failures during the random failure period.
*4: Indicates the overall mean time between failures, including wear-out and random failures, before the life is reached.
*5: Indicates the overall mean cycles between failures, including wear-out and chance failures, before the life is reached.

Printing Specifications

<table>
<thead>
<tr>
<th></th>
<th>Paper width 58 mm</th>
<th>Paper width 80 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Temperature/Humidity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating: 5 to 45°C (41 to 113°F), 10 to 90% RH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage: -20 to 60°C (-4 to 140°F), 10 to 90% RH</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Overall dimensions (W × D × H)</strong></td>
<td>289 x 322 x 166 mm (11.4 x 12.7 x 6.5&quot;)</td>
<td></td>
</tr>
<tr>
<td><strong>Weight (mass)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approx. 3.5 kg (7.7 lb) (including the AC adapter, excluding paper)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Printing Specifications**

<table>
<thead>
<tr>
<th></th>
<th>Paper width 58 mm</th>
<th>Paper width 80 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Printing method</strong></td>
<td>Thermal line printing</td>
<td></td>
</tr>
<tr>
<td><strong>Dot density</strong></td>
<td>203 x 203 dpi</td>
<td></td>
</tr>
<tr>
<td><strong>Printing width</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48/35 characters mode</td>
<td>52.5 ± 0.2 mm (2.07 ± 0.01&quot;), 420 dots</td>
<td></td>
</tr>
<tr>
<td>42/32 characters mode</td>
<td>52.5 ± 0.2 mm (2.07 ± 0.01&quot;), 420 dots</td>
<td></td>
</tr>
<tr>
<td></td>
<td>68.3 ± 0.2 mm (2.69 ± 0.01&quot;), 546 dots</td>
<td></td>
</tr>
<tr>
<td><strong>The number of characters</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48/35 characters mode</td>
<td>Font A (12 × 24) 35</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Font B (10 × 24) 42 (^1)</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Font C (9 × 17) 46</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Special Font A 35</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Special Font B 46</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Kanji Font A (24 × 24) 17 (^1)</td>
<td>24</td>
</tr>
<tr>
<td>42/32 characters mode</td>
<td>Font A (12 × 24) 32</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Font B (10 × 24) 42</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Font C (9 × 17) 46</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Special Font A 35</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Special Font B 46</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Kanji Font A (24 × 24) 16</td>
<td>21</td>
</tr>
</tbody>
</table>
Appendix

Line spacing | 3.75 mm (1/5")
(initial setting, programmable by command)

Maximum print speed*2 | 250 mm/s (9.84"/s)*3

Multi-tone graphics printing | Up to 16 shades of gray
(when printed on Epson specified paper)

- The print speed changes automatically depending on the applied voltage and head temperature.
- If the data transmission speed is slower than the maximum print speed, the print speed may fluctuate and the print result may become shaded and/or dot displacement in paper feeding may occur. Furthermore, if the data transmission speed is much slower than the maximum print speed, intermittent printing will occur.

dpi: dots per inch
*1: Initial setting
*2: When the printer prints with the standard print density level at 25°C (77°F) and 24V.
*3: The maximum is 100 mm/s (3.94"/s) when printing ladder barcodes, 2-dimensional symbols, or multi-tone graphics.
## Character Specifications

<table>
<thead>
<tr>
<th>Character set</th>
<th>ANK</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>95 alphanumeric characters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>128 extended graphics characters x 43 pages (includes user-defined pages)</td>
</tr>
<tr>
<td>Japanese</td>
<td></td>
<td>6,879 characters of JIS X0208-1990, 845 special characters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11,233 characters of JIS X0213:2004, One special character</td>
</tr>
<tr>
<td>Simplified Chinese</td>
<td></td>
<td>28,553 characters of GB18030-2000</td>
</tr>
<tr>
<td>Traditional Chinese</td>
<td></td>
<td>13,502 characters of Big5</td>
</tr>
<tr>
<td>Korean</td>
<td></td>
<td>8,224 characters of KSC5601</td>
</tr>
<tr>
<td>Character code*1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simplified Chinese</td>
<td></td>
<td>GB18030-2000</td>
</tr>
<tr>
<td>Traditional Chinese</td>
<td></td>
<td>Big5</td>
</tr>
<tr>
<td>Korean</td>
<td></td>
<td>KSC5601</td>
</tr>
<tr>
<td>Unicode*2</td>
<td></td>
<td>UTF-8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The number of dots per character</th>
<th>48/35 characters mode</th>
<th>42/32 characters mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Font A</td>
<td>12 × 24 (includes 2-dot horizontal spacing)</td>
<td>13 × 24 (includes 3-dot horizontal spacing)</td>
</tr>
<tr>
<td>Font B</td>
<td>10 × 24 (includes 1-dot horizontal spacing)</td>
<td>10 × 24 (includes 1-dot horizontal spacing)</td>
</tr>
<tr>
<td>Font C</td>
<td>9 × 17 (includes 2-dot horizontal spacing)</td>
<td>9 × 17 (includes 2-dot horizontal spacing)</td>
</tr>
<tr>
<td>Special Font A</td>
<td>12 × 24 (includes 2-dot horizontal spacing)</td>
<td>12 × 24 (includes 2-dot horizontal spacing)</td>
</tr>
<tr>
<td>Special Font B</td>
<td>9 × 24 (includes 2-dot horizontal spacing)</td>
<td>9 × 24 (includes 2-dot horizontal spacing)</td>
</tr>
<tr>
<td>Kanji Font A</td>
<td>24 × 24</td>
<td>26 × 24 (includes 2-dot horizontal spacing)</td>
</tr>
<tr>
<td>Kanji Font B</td>
<td>Japanese: 20 × 24</td>
<td>Japanese: 20 × 24</td>
</tr>
<tr>
<td></td>
<td>Korean: 16 × 16</td>
<td>Korean: 16 × 16</td>
</tr>
<tr>
<td>Kanji Font B</td>
<td>Japanese: 20 × 24</td>
<td>Japanese: 20 × 24</td>
</tr>
<tr>
<td></td>
<td>Korean: 16 × 16</td>
<td>Korean: 16 × 16</td>
</tr>
<tr>
<td>Character size&lt;sup&gt;3&lt;/sup&gt;</td>
<td>Font A</td>
<td>Font B</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Standard/Double height/Double width/Double height and width</td>
<td>1.25 × 3.00 mm/1.25 × 6.00 mm/2.50 × 3.00 mm/2.50 × 6.00 mm</td>
<td>1.13 × 3.00 mm/1.13 × 6.00 mm/2.26 × 3.00 mm/2.26 × 6.00 mm</td>
</tr>
</tbody>
</table>

*1: Installed character codes vary by printer model.
*2: Only the character sets installed on the printer can be printed.
*3: Space between characters is not included. Characters can be scaled up to 64 times as large as the standard size.

**NOTE**

By specifying UTF-8 character encoding, all the installed character sets can be printed. For more details on printing Unicode characters, see "FS (C" of the ESC/POS command reference, or manual of the software you use. (See "Application Development Information" on page 113)
## Paper Specifications

<table>
<thead>
<tr>
<th></th>
<th>Paper width 58 mm</th>
<th>Paper width 80 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Paper types</strong></td>
<td>Specified thermal paper</td>
<td></td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Roll paper</td>
<td></td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roll paper diameter</td>
<td>83 mm (3.27&quot;) maximum</td>
<td></td>
</tr>
<tr>
<td>Roll paper core</td>
<td>Outside: 18 mm (0.71&quot;)</td>
<td></td>
</tr>
<tr>
<td>Roll width when taken up</td>
<td>58 ± 0.5/-1.0 mm (2.28 ± 0.02/-0.04&quot;)</td>
<td>80 ± 0.5/-1.0 mm (2.26 ± 0.02&quot;)</td>
</tr>
<tr>
<td>Paper width</td>
<td>57.5 ± 0.5 mm (2.26 ± 0.02&quot;)</td>
<td>79.5 ± 0.5 mm</td>
</tr>
<tr>
<td>Paper thickness</td>
<td>Maximum of 80 μm, minimum of 48 μm</td>
<td></td>
</tr>
<tr>
<td><strong>Specified original paper type</strong></td>
<td>TF50KS-EY, TF60KS-E</td>
<td>NIPPON Paper Industries Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>AP45KS-ND, AP50KS-ND</td>
<td>Jujo Thermal Oy</td>
</tr>
<tr>
<td></td>
<td>FS0417(55), FS0417(48)</td>
<td>Mitsubishi HiTec</td>
</tr>
<tr>
<td></td>
<td>KT55FA, KT48FA, KT55PF, KT48PF</td>
<td>Koehler Paper Group</td>
</tr>
</tbody>
</table>

### CAUTION
- Paper must not be pasted to the roll paper core.
- To keep the print quality, it is recommended to change the print densities for each roll paper. See "Software Settings" on page 81.
- Use of thermal paper with a pre-printed recording surface should be avoided. Using it can cause the thermal head to stick to the thermal paper surface during printing, and cause printing failure and other problems. The pre-printing also can result in reduced print density. Using thermal paper with a pre-printed recording surface, pre-printing should be done in accordance with the conditions (ink type, printing and other conditions) recommended by the paper manufacturer, and the thermal paper should be checked to ensure that there is no faulty printing, loss of print density, or other problems.
Printable Area

For paper width 80 mm

The maximum printable area of paper with a width of 79.5 ± 0.5 mm (3.13 ± 0.02") is 72 ± 0.2 mm (576 dots), and the approximate space is 3.75 mm on both sides.

For paper width 58 mm

The maximum printable area of paper with a width of 57.5 ± 0.5 mm is 52.5 ± 0.2 mm (420 dots), and the approximate space is 2.5 mm on both sides.
Printing and Cutting Positions

The values above may vary slightly as a result of paper slack or variations in the paper. Take this into account when setting the cutting position of the autocutter.

When removing cut paper, the remaining roll paper is pulled at the uncut section and the pitch of the next print may be reduced. When printing after cutting paper for prints with no pitch reduction, feed the paper about 1 mm (16/406 inches) before printing. When the Pre-feed before next print function is enabled, this operation is performed automatically. See “Software Settings” on page 81 for more details.

Electrical Characteristics

<table>
<thead>
<tr>
<th>Operating voltage</th>
<th>DC 24V ± 7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current consumption (24V, 25°C, standard print density)</td>
<td>Standby Mean: 0.1 A</td>
</tr>
<tr>
<td></td>
<td>Operating Mean: 1.8 A*</td>
</tr>
<tr>
<td></td>
<td>*: When charging at 2.1A</td>
</tr>
<tr>
<td></td>
<td>Note: When print ratio is approximately 18%</td>
</tr>
<tr>
<td></td>
<td>• Continuous printing for 50 lines (repeating 20H-7FH)</td>
</tr>
<tr>
<td></td>
<td>* Font A, 35 columns, ASCII character</td>
</tr>
<tr>
<td></td>
<td>• 5 lines feeding</td>
</tr>
<tr>
<td></td>
<td>• Autocutting</td>
</tr>
</tbody>
</table>
## Environmental Conditions

<table>
<thead>
<tr>
<th>Temperature/Humidity</th>
<th>Operating</th>
<th>5 to 45°C (41 to 113°F), 10 to 90% RH (See the operating temperature and humidity range below.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td>-20 to 60°C (-4 to 140°F), 10 to 90% RH (except for paper)</td>
<td></td>
</tr>
</tbody>
</table>

### Vibration resistance

When packed
- Frequency: 5 to 55 Hz
- Acceleration: Approximately 19.6 m/s² (2G)
- Sweep: 10 minutes (half cycle)
- Time: 1 hour
- Orientation: x, y, and z
- Must not be any problems with the visible or operational problems to the exterior of or inside the machine after being subject to vibration.

### Shock resistance

When packed
- Packing: Epson standard package specifications
- Height: 60 cm (23.62”)
- Orientation: 1 corner, 3 edges, and 6 surfaces
- Must not be any problems with the visible or operational problems to the exterior of or inside the machine after being subject to being dropped.

When unpacked
- Height: 5 cm (1.97”)
- Orientation: Lift one edge and release it (for all 4 edges)
- Must not be any problems with the visible or operational problems to the exterior of or inside the machine after being subject to being dropped when not operating.

### Acoustic noise (operating)

Approximately 55 dB (bystander position)

**Note:**
- The values above are measured in the Epson evaluation condition.
- Acoustic noise differs depending on the paper used, printing contents, and the setting values, such as print speed or print density.

### Altitude

3,000 m or less
External Dimensions

Dimensions with the Standard Tablet Table

- With the roll paper cover closed

- With the roll paper cover opened

[Unit:mm]
Dimensions with the OT-DM30SL installed

Dimensions with the Large Tablet Table

[Unit:mm]
## Specifications of Interface and Connector

### USB Interface

#### USB interface connector
USB type-B connector

#### USB transmission specifications

##### USB function

<table>
<thead>
<tr>
<th>Overall specifications</th>
<th>According to USB 2.0 specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission speed</td>
<td>USB Full-Speed (12 Mbps)</td>
</tr>
<tr>
<td>Transmission method</td>
<td>USB bulk transmission method</td>
</tr>
<tr>
<td>Power supply specifications</td>
<td>USB self power supply function</td>
</tr>
<tr>
<td>Current consumed by USB bus</td>
<td>2 mA</td>
</tr>
<tr>
<td>USB packet size (with full-speed connection)</td>
<td></td>
</tr>
<tr>
<td>USB bulk OUT (TM)</td>
<td>64 bytes</td>
</tr>
<tr>
<td>USB bulk IN (TM)</td>
<td>64 bytes</td>
</tr>
</tbody>
</table>

| USB device class | Both USB vendor-defined class and USB printer class are supported. |

---

**NOTE**  
To set the USB device class, see "Software Settings" on page 81.

#### USB descriptor

<table>
<thead>
<tr>
<th>String Descriptor</th>
<th>USB vendor-defined class</th>
<th>USB printer class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor ID</td>
<td>04B8h</td>
<td>04B8h</td>
</tr>
<tr>
<td>Product ID</td>
<td>0202h</td>
<td>0E2Ah</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>EPSON</td>
<td>EPSON</td>
</tr>
<tr>
<td>Product</td>
<td>TM-m30II-SL</td>
<td>TM-m30II-SL</td>
</tr>
<tr>
<td>Serial number</td>
<td>Character string based on the product serial number</td>
<td>Character string based on the product serial number</td>
</tr>
</tbody>
</table>
Network Interface

For both Ethernet interface and Wi-Fi interface

Support protocols

<table>
<thead>
<tr>
<th>Protocols</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP, ARP, ICMP, UDP, TCP</td>
<td>Basic communication protocols</td>
</tr>
<tr>
<td>LP, LPR, TCP Socket Port</td>
<td>Printing protocols</td>
</tr>
<tr>
<td>HTTP/HTTPS</td>
<td>Used in ePOS-Print and EpsonNet Config (Web version)</td>
</tr>
<tr>
<td>SNMP, ENPC</td>
<td>Used in setting and monitoring</td>
</tr>
<tr>
<td>DHCP, APIPA</td>
<td>Used in automatic setting for the IP address and so on</td>
</tr>
</tbody>
</table>

Network parameters

<table>
<thead>
<tr>
<th>Item</th>
<th>Initial settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP address acquisition</td>
<td>Automatic</td>
</tr>
<tr>
<td>APIPA</td>
<td>Disabled</td>
</tr>
<tr>
<td>arp/ping</td>
<td>Disabled</td>
</tr>
<tr>
<td>Socket Timeout</td>
<td>90 seconds</td>
</tr>
<tr>
<td>Community name 1 (Read Only)</td>
<td>Fixed at &quot;public&quot;</td>
</tr>
<tr>
<td>Community name 2 (Read/Write)</td>
<td>Unavailable</td>
</tr>
<tr>
<td>SNMP IP Trap 1</td>
<td>Disabled</td>
</tr>
<tr>
<td>SNMP IP Trap 2</td>
<td>Disabled</td>
</tr>
<tr>
<td>Communication mode</td>
<td>Auto negotiation</td>
</tr>
</tbody>
</table>

Printing communication protocol

- LP, LPR: Transfers printing data
- TCP Socket Port: Transfers printing data and printer status via bidirectional direct socket communication.

**LP, LPR**

- Max. simultaneous connections: 6
- Number of connections for which printing is available: 1 (occupied until the connection is released.)
- Time out: 90 seconds (changeable)
- Job cancel: Not available
- Banner printing: Not available
Socket communication

- Port type: TCP communication port for direct printing
- Port number: 9100
- Port communication direction: bidirectional
- Max. simultaneous connections: 6
- Number of connections for which printing is available: 1 (occupied until the connection is released.)
- Time out: 90 seconds (changeable)

For Ethernet interface

Communication specifications

10BASE-T/100BASE-TX

For Wi-Fi Interface (When using OT-WL02/OT-WL05/OT-WL06)

<table>
<thead>
<tr>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Countries where Wi-Fi can be used are limited. Since notes are provided for each country, check the sheet supplied with the product.</td>
</tr>
<tr>
<td>• When using wireless LAN, make sure you disconnect the LAN cable. If a LAN cable is connected, wireless LAN is disabled.</td>
</tr>
</tbody>
</table>

Specification

- IEEE802.11b/g/n (2.4 GHz band) or IEEE802.11a/b/g/n/ac (2.4 GHz or 5 GHz band) compliant Wi-Fi communication compatible.
- Support the IP address automatic acquisition function (DHCP, APIPA).
- Infrastructure mode and 802.11 Ad-hoc mode* are supported.
  * OT-WL06 does not support Ad-hoc mode.

Communication Standard

When using OT-WL02:

- IEEE802.11b (2.4 GHz)
- IEEE802.11g (2.4 GHz)
- IEEE802.11n (2.4 GHz)

When using OT-WL05:

- IEEE802.11b (2.4 GHz)
- IEEE802.11g (2.4 GHz)
- IEEE802.11n (2.4 GHz)
- IEEE802.11a (5 GHz)
- IEEE802.11n (5 GHz)
When using OT-WL06:
- IEEE802.11b (2.4 GHz)
- IEEE802.11g (2.4 GHz)
- IEEE802.11n (2.4 GHz)
- IEEE802.11a (5 GHz)
- IEEE802.11n (5 GHz)
- IEEE802.11ac (5 GHz)

**Security**
Security can be selected from among the following:
- WEP*
- WPA-PSK(AES)
- WPA2-Personal
- WPA2-Enterprise

* OT-WL06 does not support WEP.

**Initial settings**
These settings apply when the printer is initialized in the Interface Setup mode.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Setting value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication standard</td>
<td>802.11b/g/n</td>
</tr>
<tr>
<td>Network mode</td>
<td>Infrastructure mode</td>
</tr>
<tr>
<td>SSID</td>
<td>EPSON_Printer</td>
</tr>
<tr>
<td>Encryption type</td>
<td>WPA2-Personal</td>
</tr>
<tr>
<td>Passphrase</td>
<td>EpsonNet</td>
</tr>
<tr>
<td>IP Address</td>
<td>Automatically acquired by DHCP</td>
</tr>
</tbody>
</table>

* You can connect to a WPA2-PSK (AES) access point using the settings above.

**Settings in SimpleAP mode (Factory default settings)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Setting value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSID</td>
<td>EPSON_Printer</td>
</tr>
<tr>
<td>Passphrase</td>
<td>12345678</td>
</tr>
<tr>
<td>IP Address</td>
<td>192.168.192.168</td>
</tr>
<tr>
<td>Subnet mask</td>
<td>255.255.255.0</td>
</tr>
</tbody>
</table>

* In SimpleAP mode, DHCP Server is working and assign IP address to host automatically.
Notes on Using the Wireless LAN unit

• Keep the printer away from the devices, such as kitchen microwaves, that may cause radio wave interference.
• Use channels that are away from the frequency bands that may cause radio wave interference.
• Place shields between the printer and the devices that may cause radio wave interference.
• Select either 2.4 GHz or 5 GHz, whichever is free from radio wave interference.
• In auto channel setting for the access point, do not select a channel in which the printer may cause radio wave interference.

Notes on Wi-Fi connection

Because not all the combinations of the printer and Wireless LAN units have been checked for operation, the operation of the printer in combination with all the Wireless LAN units is not guaranteed. Especially in the ad-hoc mode, the printer may not operate normally, depending on the combination of the device to connect with. Be sure to carry out evaluation of the operation before use.

Notes on use

• When you initialize or change the printer settings, the printer is reset to reflect the settings. It may take about 1 minute depending on the network settings or environment. Also, your application may indicate power off during the time waiting for reset. In that case, wait for about 1 minute, and then reconnect to the printer.
• Where Wi-Fi communication is in heavy traffic, your application may falsely recognize that the communication is disconnected and indicate power off due to response delay. In that case, disable Power Save to improve the trouble.
Bluetooth Interface

CAUTION Countries where Bluetooth can be used are limited. Since notes are provided for each country, check the sheet supplied with the product.

Specification
- Bluetooth 3.0 (EDR supported)
- Bluetooth Power Class 2
- Built-in antenna
- Pass key setting is possible
- Device name setting is possible
- Pairing information of up to 8 devices can be registered

Initial Settings

<table>
<thead>
<tr>
<th>Setting Contents</th>
<th>Setting Items</th>
<th>Initial Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bluetooth communication settings</td>
<td>Bluetooth passkey &quot;0000&quot;</td>
<td></td>
</tr>
<tr>
<td><strong>Bluetooth device name</strong></td>
<td>&quot;TM-m30II-SL_xxxxxx&quot;</td>
<td>(Where xxxxxx is the last six digits in the serial number)</td>
</tr>
<tr>
<td>Bundle Seed ID</td>
<td>&quot;TXAEAVSRN4&quot;</td>
<td></td>
</tr>
<tr>
<td>Enable/Disable auto reconnect to iOS device</td>
<td>&quot;1&quot; (Enable)</td>
<td></td>
</tr>
<tr>
<td>Bluetooth Security</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Bluetooth communication interval during power saving mode</td>
<td>Level 1 (Standard)</td>
<td></td>
</tr>
</tbody>
</table>

Auto Reconnect Feature
The auto reconnect feature allows the printer to automatically restore a connection in the following situations if the Bluetooth connection to the iOS device is lost.
- When the printer is turned on
- When the signal is dropped and then restored
The following shows the printer operations and connection methods when the auto reconnect feature is enabled or disabled.
In the following situations, even if the feature is enabled, the same operations are performed as when it is disabled.

- When pairing is canceled from the connected iOS device.
- When the last Bluetooth device connected was not an iOS device.
- When wireless communication settings are initialized from the printer.

* Disable this feature when using the printer from devices that are not running iOS. Otherwise, it may take some time to connect.

### Table: Auto Reconnect Feature

<table>
<thead>
<tr>
<th>Feature</th>
<th>Enabled</th>
<th>Disabled</th>
</tr>
</thead>
</table>
| Printer operations when Bluetooth is disconnected | Perform the following reconnection sequence.  
[Reconnection sequence]  
1. The printer tries to connect to the iOS device to which it was last connected.  
2. When step 1 fails, the printer waits for connections from other devices.  
3. If connection is not established in step 2, the printer tries again to connect to the iOS device to which it last connected.  
Steps 1 and 2 are repeated until a connection is established. | Wait for a connection from the Bluetooth device. |
| Reconnecting to iOS device      | Reconnect automatically.                                                 | Make settings on the Bluetooth settings screen on the iOS device.         |
| Switch to connection from other device | Method 1:  
After disabling the Bluetooth feature of the connected iOS device, make connection settings on the Bluetooth device that you want to connect.  
(When the auto reconnect feature is enabled, it may take some time to connect.) | Method 2:  
After disconnecting from the connected iOS device using applications with the TM Utility or Epson ePOS SDK disconnection feature, make settings on the Bluetooth device you want to connect. |
Notes on use

Time required until printing starts
If the host computer and the printer are not connected on a continuous basis but rather connected every time the printer starts printing, some time may be needed for the printer to actually start printing after the host computer commands printing. This pause is the time required for processing the connection between the host computer and the printer.

After opening the port, leave an interval of 300 msec or more before sending data to the port.

Timing to shut the connection off
If a connection between the host computer and the printer is shut off while the printer is offline, it may not be re-established. In this case, first clear the printer offline causes, and then try to re-establish the connection.

Multi-tone printing
When performing multi-tone printing over Bluetooth, the print speed may fluctuate or intermittent printing may occur due to data transfer conditions, also the print shade may change or white lines may occur.

Interference from Wi-Fi
2.4 GHz Wi-Fi may interfere with Bluetooth communication. Using the optional Wireless LAN cable set with 2.4 GHz may disrupt Bluetooth communication or printing. 5 GHz Wi-Fi is recommended when using Wi-Fi with Bluetooth.

Notes when communicating with Android devices
- The printer cannot connect to Android 2.3 and 2.3.2.
- When communicating with Android 2.3.3 or later versions, communicate through an insecure connection.
- When connecting an Android device to the USB connector (USB-A – Device Charging) for data communication, make sure that the device satisfies the following requirements.
  Requirements: The version of Android OS is 10 or later with kernel version 4.9.15 or later
  However, Epson does not guarantee normal operation of all Android devices even if they satisfy the requirements. Run some tests before actually using the device.

Notes when communicating with iOS devices
Print data deletion and Bluetooth disconnections occur

Situation
Depending on the specifications of the iOS device, print data sent to the printer may be deleted. When this occurs, the Bluetooth connection between the printer and the iOS device is disconnected.

Conditions
This occurs when the printer is not ready to print, and 64 KB or more of print data is sent to the printer.

<Status in which the printer cannot print>
- When the roll paper cover is open
- When the paper is out
**Solution**

Do not send data to the printer if the printer is not ready to print.

For developers using the SDK from Epson, see the User's Manual - Chapter 3 Programming Guide - "Printing After Checking the Printer Status".

Since Bluetooth is disconnected when this occurs, if the auto reconnect feature is not enabled, you need to reconnect from the Bluetooth settings screen on the iOS device.

When using the SDK from Epson, this connection process is not necessary.

**The iOS application cannot receive the data sent from the printer**

**Situation**

Although the printer sends data to the iOS device and the data is received by the iOS device, depending on the combination of the iOS version and the iOS device, the iOS application may not be able to receive the data.

**Conditions**

This may occur in combinations of the following conditions.

- iOS version: 7.1, 7.1.1
- iOS device: iPhone 5s, iPhone 5c, iPhone 5, iPad Air, iPad mini 3, iPad (4th generation), iPad mini, iPod touch (5th generation), iPhone 4s, iPhone 4, iPad (3rd generation), iPad 2
- Application processing: If the Bluetooth port is closed and then reopened while the application is running.

**Solution**

The solution differs depending on the iOS device being used. See the following table.

<table>
<thead>
<tr>
<th>iOS Device</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPhone 4s</td>
<td>This situation can be avoided by using the Epson ePOS SDK for iOS.</td>
</tr>
<tr>
<td>iPhone 4</td>
<td></td>
</tr>
<tr>
<td>iPad (3rd generation)</td>
<td></td>
</tr>
<tr>
<td>iPad 2</td>
<td></td>
</tr>
</tbody>
</table>
**Bluetooth Low Energy Technology Advertising**

**Introduction**

When you connect the BT820 from Laird Connectivity to the USB A connector on the TM-m30II-SL and turn it on, the Bluetooth low energy technology Advertising Packet is transmitted. By default, the TM-m30II-SL transmits the packet according to the iBeacon Format from Apple. You can also change the data that is transmitted by following the steps in "Changing the Bluetooth Low Energy Technology Advertising Packet" on page 152.

**Glossary:**

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bluetooth Low Energy Technology Advertising</td>
<td>The name of this function.</td>
</tr>
<tr>
<td>Bluetooth Low Energy Technology Advertising Packet</td>
<td>The data sent by this function from the printer.</td>
</tr>
<tr>
<td>Bluetooth adapter</td>
<td>The BT820 from Laird Connectivity. A USB dongle to connect to the USB Type A connector.</td>
</tr>
<tr>
<td>iBeacon</td>
<td>The format stipulated by Apple for Bluetooth low energy technology Advertising Packets. When using the default settings for the TM-m30II-SL (Bluetooth adapter installed in the printer and the printer is on), the Bluetooth low energy technology Advertising Packet is transmitted in iBeacon format.</td>
</tr>
</tbody>
</table>

**Dongle specifications**

Manufacturer: Laird Tech
Model name: BT-820

For setting methods and settings, see the TM-m30II Utility User’s Manual.

**Procedure**

When you install the Bluetooth adapter, the printer is restarted and then the adapter is enabled.
When you uninstall the Bluetooth adapter, the printer is restarted and then the adapter is disabled.
The USB-A – Device Charging port is disabled.
If the printer is capable of Bluetooth communication, the Bluetooth function is disabled.
Bluetooth Low Energy Technology Advertising Packet Format

In the TM-m30II-SL, the iBeacon format is used by default for the Bluetooth low energy technology Advertising Packet.

The UUID for the TM-m30II-SL is "fac1ba2f-61a2-4d83-9a8c-60087c232569".

The user can edit the following specifications in the iBeacon format: UUID, Major number, Minor number, and Measured Power.

Table 1 iBeacon Packet Format

<table>
<thead>
<tr>
<th>Content</th>
<th>Data Length</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of this data</td>
<td>1 byte</td>
<td>02h</td>
<td></td>
</tr>
<tr>
<td>AD type</td>
<td>1 byte</td>
<td>01h</td>
<td>Adtype: flags</td>
</tr>
<tr>
<td>Flags</td>
<td>1 byte</td>
<td>06h</td>
<td>Fixed value (06h)</td>
</tr>
<tr>
<td>Length of this data</td>
<td>1 byte</td>
<td>1Ah</td>
<td>Fixed value (1Ah)</td>
</tr>
<tr>
<td>AD type</td>
<td>1 byte</td>
<td>FFh</td>
<td>Adtype: Company identifier</td>
</tr>
<tr>
<td>Company Identifier code</td>
<td>2 bytes</td>
<td>004Ch</td>
<td>Apple's manufacture ID</td>
</tr>
<tr>
<td>iBeacon type</td>
<td>1 byte</td>
<td>02h</td>
<td>Incomplete List of 16-bit service UUIDs</td>
</tr>
<tr>
<td>iBeacon length</td>
<td>1 byte</td>
<td>15h</td>
<td>15h=21=16+2+2+1</td>
</tr>
<tr>
<td>UUID</td>
<td>16 bytes</td>
<td>-</td>
<td>Default UUID = fac1ba2f-61a2-4d83-9a8c-60087c232569</td>
</tr>
<tr>
<td>Major Number</td>
<td>2 bytes</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Minor Number</td>
<td>2 bytes</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Measured Power</td>
<td>1 byte</td>
<td>BDh</td>
<td>BDh: -67dB</td>
</tr>
</tbody>
</table>

Changing the Bluetooth Low Energy Technology Advertising Packet

The TM-m30II-SL can acquire a configuration script from the printer.

You can also change settings by transmitting the configuration script to the printer.

The configuration script only supports UTF-8 encoding.

The iBeacon Format is defined in the configuration script by default for the TM-m30II-SL.

You can change this Packet Format to support Eddystone-UID or Eddystone-URL.

However, the TM-m30II-SL only supports single Advertising Data Packets.

You can change the settings using either of the following two methods.

- Changing settings using the Epson TM-m30II Utility for Windows (see the TM-m30II Utility User’s Manual for details)
- Changing settings using an HTTP Request

The method of changing settings via an HTTP Request is explained below.
Digest authentication
You need Digest authentication to communicate with the printer.
The default ID and Password are ID: epson, Pass: serial number and are the same as the administrator for
Network settings.

Escape processing for configuration scripts
When reading/writing a configuration script for a printer, the strings (content of the configuration script) being
transmitted and received uses the following escape processing. However, escape is not performed for uXXXX
(hexadecimal strings) such as Japanese.

Table 2 Escape Processing

<table>
<thead>
<tr>
<th>Escape</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;</td>
<td>quotation mark</td>
</tr>
<tr>
<td>\</td>
<td>reverse solidus</td>
</tr>
<tr>
<td>\b</td>
<td>backspace</td>
</tr>
<tr>
<td>\f</td>
<td>form feed</td>
</tr>
<tr>
<td>\n</td>
<td>line feed</td>
</tr>
<tr>
<td>\r</td>
<td>carriage return</td>
</tr>
<tr>
<td>\t</td>
<td>tab</td>
</tr>
<tr>
<td>\u002F</td>
<td>solidus</td>
</tr>
<tr>
<td>\u003C</td>
<td>&lt;</td>
</tr>
<tr>
<td>\u003E</td>
<td>&gt;</td>
</tr>
<tr>
<td>\u002B</td>
<td>+</td>
</tr>
</tbody>
</table>

Acquiring the configuration script from the printer using an HTTP request
A response for the json format is acquired using the GET method for the HTTP request.

Request

Table 3 Request Header

Request header: Content-Type: text/plain; charset=utf-8
http://(printer IP address)/webconfig/beacon.cgi?Type=(one of the following Table 4 Types)

Table 4 Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(none)</td>
<td>If a Type is left out, the same operation is performed as when current is specified.</td>
</tr>
<tr>
<td>current</td>
<td>Specifies the currently enabled configuration script.</td>
</tr>
<tr>
<td>volatile</td>
<td>Specifies the configuration script stored in RAM.</td>
</tr>
<tr>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>static</td>
<td>Specifies the configuration script stored in ROM.</td>
</tr>
<tr>
<td>default</td>
<td>Specifies the default configuration script.</td>
</tr>
<tr>
<td>status</td>
<td>Acquires information for the Bluetooth adapter.</td>
</tr>
</tbody>
</table>

**Response**

**Table 5 Response Header**

- Content-Type: application/json; charset=utf-8
- Access-Control-Allow-Origin: *
- Access-Control-Allow-Methods: POST, GET, OPTIONS, HEADER
- Access-Control-Allow-Headers: Content-Type, Content-Length, Authorization
- X-Content-Type-Options: nosniff
- X-XSS-protection: 1; mode=block
- X-Frame-Options: deny
- Content-Security-Policy: default-src 'none'
- WWW-Authenticate: Digest realm="<IPaddr>" , nonce="xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx" , qop="auth"

**Table 6 Response**

<table>
<thead>
<tr>
<th>Function</th>
<th>GET Parameter</th>
<th>Results</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquires the configuration script currently enabled</td>
<td>Type=current Or no Type is set</td>
<td>Acquisition successful</td>
<td>200 OK</td>
</tr>
<tr>
<td>Acquires the configuration script on the RAM</td>
<td>Type=volatile</td>
<td>Acquisition successful</td>
<td>200 OK</td>
</tr>
<tr>
<td>Acquires the configuration script on the ROM</td>
<td>Type=static</td>
<td>Acquisition successful</td>
<td>200 OK</td>
</tr>
<tr>
<td>Acquires the Default configuration script</td>
<td>Type=default</td>
<td>Acquisition successful</td>
<td>200 OK</td>
</tr>
<tr>
<td>Acquires information from the Bluetooth adapter</td>
<td>Type=status</td>
<td>Acquisition successful</td>
<td>200 OK</td>
</tr>
<tr>
<td>Others</td>
<td>Type = Other than the above or A parameter except for Type exists</td>
<td>Type is invalid</td>
<td>400 Bad Request</td>
</tr>
</tbody>
</table>
### Table 7 GET Response Body

<table>
<thead>
<tr>
<th>Response Status</th>
<th>Response Body</th>
</tr>
</thead>
</table>
| 200 OK          | `{  
|                | "message": "Success"  
|                | "detail": null  
|                | "description": <Encoded string for the configuration script>  
| }              |
| 404 Not Found   | `{  
|                | "message": "Requested file not found"  
|                | "detail": null  
|                | "description": null  
| }              |
| 400 Bad Request | `{  
|                | "message": "Invalid Parameter"  
|                | "detail": null  
|                | "description": null  
| }              |

### Table 8 GET Response Body (Type=status)

<table>
<thead>
<tr>
<th>Response Status</th>
<th>Response Body</th>
</tr>
</thead>
</table>
| 200 OK          | `{  
| The HCI Version for the Bluetooth adapter is 6 or higher  
| Link            | `{  
|                | "message": "Success",  
|                | "detail": null,  
|                | "description": {  
|                | "VendorID": "0a12",  
|                | "ProductID": "0001",  
|                | "ProductName": "CSR8510 A10",  
|                | "Bluetooth LE": "Support"  
|                | }  
| }              |
| 200 OK          | `{  
| The HCI Version for the Bluetooth adapter is 5 or lower  
|                | `{  
|                | "message": "Success",  
|                | "detail": null,  
|                | "description": {  
|                | "VendorID": "0a12",  
|                | "ProductID": "0001",  
|                | "ProductName": "(no name)",  
|                | "Bluetooth LE": "Not support"  
|                | }  
| }              |
| 404 Not Found   | `{  
| Adapter not connected  | "message": "Beacon dongle not connected",  
|                | "detail": null,  
|                | "description": null  
| }              |
Writing the configuration script to the printer

You can save a configuration script to the printer using the HTTP POST method.
You can save the configuration script to volatile or non-volatile memory.
When changing using a low frequency less than once an hour, you can save to non-volatile memory; however, when changing at a higher frequency, you need to save to volatile memory.
When the change is successful, the advertising data is changed.

Request

| Content-Type: text/json; charset=utf-8 |
| http://(printer IP address)/webconfig/beacon.cgi |

See the POST parameters in Table 10 Response for the parameters.

Response

Table 9 Response Header

| Content-Type: application/json; charset=utf-8 |
| Access-Control-Allow-Origin: * |
| Access-Control-Allow-Methods: POST, GET, OPTIONS, HEADER |
| Access-Control-Allow-Headers: Content-Type, Content-Length, Authorization |
| X-Content-Type-Options: nosniff |
| X-XSS-protection: 1; mode=block |
| X-Frame-Options: deny |
| Content-Security-Policy: default-src ‘none’ |
| X-RateLimit-Limit: 1 (when type=static only) |
| X-RateLimit-Remaining: 1 or 0 (when type=static only) |
| X-RateLimit-Reset: 1390941626 (when type=static only) |
| WWW-Authenticate: Digest realm="<IPaddr", nonce="xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx", qop="auth" |

Table 10 Response

<table>
<thead>
<tr>
<th>Function</th>
<th>POST Parameters</th>
<th>Results</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updating the configuration script in volatile memory</td>
<td>{ “type”: “volatile”, “description”: “&lt;The string for the configuration script that performed escape processing&gt;” }</td>
<td>Update successful</td>
<td>200 OK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Update failed</td>
<td>413 Request Entity Too Large</td>
</tr>
<tr>
<td></td>
<td></td>
<td>When the parameter is too long</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Update failed</td>
<td>500 Internal Server Error</td>
</tr>
<tr>
<td></td>
<td></td>
<td>When an error occurs when applying a new configuration script</td>
<td></td>
</tr>
<tr>
<td>Deletes the configuration script from volatile memory</td>
<td>{ “type”: “volatile”, “description”: “delete” }</td>
<td>Deleting successful</td>
<td>200 OK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deleting failed</td>
<td>500 Internal Server Error</td>
</tr>
<tr>
<td>Function</td>
<td>POST Parameters</td>
<td>Results</td>
<td>Response</td>
</tr>
<tr>
<td>----------</td>
<td>----------------</td>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td>Updates the configuration script in non-volatile memory</td>
<td><code>{ &quot;type&quot;: &quot;static&quot;, &quot;description&quot;: &quot;&lt;The string for the configuration script that performed escape processing&gt;&quot; }</code></td>
<td>Update successful</td>
<td>200 OK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Update failed</td>
<td>413 Request Entity Too Large</td>
</tr>
<tr>
<td></td>
<td></td>
<td>When the parameter is too long</td>
<td>It has following header: X-RateLimit-Limit: 1 X-RateLimit-Remaining: 0 X-RateLimit-Reset: xx</td>
</tr>
<tr>
<td></td>
<td></td>
<td>When an error occurs when applying a new configuration script</td>
<td>500 Internal Server Error</td>
</tr>
<tr>
<td></td>
<td></td>
<td>When the gap between updating is more than once an hour</td>
<td>429 Too Many Requests</td>
</tr>
<tr>
<td>Deletes the configuration script from non-volatile memory</td>
<td><code>{ &quot;type&quot;: &quot;static&quot;, &quot;description&quot;: &quot;delete&quot; }</code></td>
<td>Deleting successful</td>
<td>200 OK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deleting failed</td>
<td>500 Internal Server Error</td>
</tr>
<tr>
<td>Others</td>
<td>• No parameters • Invalid parameters • Error in escape processing</td>
<td>Update failed</td>
<td>400 Bad Request</td>
</tr>
</tbody>
</table>
### Table 11 POST Response Body

<table>
<thead>
<tr>
<th>Response Status</th>
<th>Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 OK</td>
<td>{</td>
</tr>
<tr>
<td></td>
<td>&quot;message&quot;: &quot;Success&quot;,</td>
</tr>
<tr>
<td></td>
<td>&quot;detail&quot;: null,</td>
</tr>
<tr>
<td></td>
<td>&quot;description&quot;: &quot;The string for the configuration script that performed escape processing&quot;</td>
</tr>
<tr>
<td></td>
<td>}</td>
</tr>
<tr>
<td>400 Bad Request</td>
<td>{</td>
</tr>
<tr>
<td></td>
<td>&quot;message&quot;: &quot;Invalid Parameter&quot;,</td>
</tr>
<tr>
<td></td>
<td>&quot;detail&quot;: &quot;****&quot;,        (see Table 12)</td>
</tr>
<tr>
<td></td>
<td>&quot;description&quot;: null</td>
</tr>
<tr>
<td></td>
<td>}</td>
</tr>
<tr>
<td>413 Request Entity Too Large</td>
<td>{</td>
</tr>
<tr>
<td></td>
<td>&quot;message&quot;: &quot;Request Entity Too Large&quot;,</td>
</tr>
<tr>
<td></td>
<td>&quot;detail&quot;: null,</td>
</tr>
<tr>
<td></td>
<td>&quot;description&quot;: null</td>
</tr>
<tr>
<td></td>
<td>}</td>
</tr>
<tr>
<td>429 Too Many Requests</td>
<td>{</td>
</tr>
<tr>
<td></td>
<td>&quot;message&quot;: &quot;You sent too many requests in a given amount of time&quot;,</td>
</tr>
<tr>
<td></td>
<td>&quot;detail&quot;: null,</td>
</tr>
<tr>
<td></td>
<td>&quot;description&quot;: null</td>
</tr>
<tr>
<td></td>
<td>}</td>
</tr>
<tr>
<td>500 Internal Server Error</td>
<td>{</td>
</tr>
<tr>
<td></td>
<td>&quot;message&quot;: &quot;Failed to update settings&quot;,</td>
</tr>
<tr>
<td></td>
<td>&quot;detail&quot;: &quot;****&quot;,        (see Table 13)</td>
</tr>
<tr>
<td></td>
<td>&quot;description&quot;: null</td>
</tr>
<tr>
<td></td>
<td>}</td>
</tr>
</tbody>
</table>

### Table 12 400 Bad Request Details

<table>
<thead>
<tr>
<th>Case</th>
<th>Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>The correct escape processing is not performed at the point escape processing is needed</td>
<td>{</td>
</tr>
<tr>
<td></td>
<td>&quot;message&quot;: &quot;Invalid Parameter&quot;,</td>
</tr>
<tr>
<td></td>
<td>&quot;detail&quot;: &quot;Special characters must be escaped&quot;,</td>
</tr>
<tr>
<td></td>
<td>&quot;description&quot;: null</td>
</tr>
<tr>
<td></td>
<td>}</td>
</tr>
<tr>
<td>An undefined Type parameter has been specified</td>
<td>{</td>
</tr>
<tr>
<td></td>
<td>&quot;message&quot;: &quot;Invalid Parameter&quot;,</td>
</tr>
<tr>
<td></td>
<td>&quot;detail&quot;: &quot;A parameter 'type' is invalid&quot;,</td>
</tr>
<tr>
<td></td>
<td>&quot;description&quot;: null</td>
</tr>
<tr>
<td></td>
<td>}</td>
</tr>
</tbody>
</table>
Editing the Configuration Script

In the configuration script, the settings for the module for Bluetooth in Linux can be written in the same way as for the Bluez hcitool, and you can customize the settings.

Make sure you include the following descriptors in the configuration script.

- Advertising stop
- Device address specifications
- Advertising parameter specifications
- Advertising start
- Advertising data specifications
Starting and stopping Bluetooth low energy technology Advertising

Format: cmd 0x08 0x000A n
Function: Starting and stopping transmission of the Advertising packet.

<table>
<thead>
<tr>
<th>Parameter n</th>
<th>Length</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>2 characters</td>
<td>Advertising stop</td>
</tr>
<tr>
<td>01</td>
<td>2 characters</td>
<td>Advertising start</td>
</tr>
</tbody>
</table>

NOTE: When specifying a start point, make sure you start Advertising using this command before “Bluetooth low energy technology Advertising Packet specifications” on page 161.

Device address specifications

Format: cmd 0x08 0x0005 n6 n5 n4 n3 n2 n1
Function: Specify a BD Address. Specify a value in Little Endian.

NOTE: As a Random Static Address is used in TM-m30II-SL, bit7 and bit6 for n1 need to be set to 1.

Bluetooth low energy technology Advertising parameter specifications

Format: cmd 0x08 0x0006 aL aH bL bH c d e f1 f2 f3 f4 f5 f6 g h
Function: Sets a variety of parameters for the Advertising packet.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Length</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min advertising Interval</td>
<td>2 bytes</td>
<td>aL: a0  aH: 00</td>
<td>00a0h * 0.625 = 100ms Period 00a0h is the minimum that can be specified.</td>
</tr>
<tr>
<td>Max advertising Interval</td>
<td>2 bytes</td>
<td>bL: a0  bH: 00</td>
<td>00a0h * 0.625 = 100ms Period 00a0h is the minimum that can be specified.</td>
</tr>
<tr>
<td>Advertising type</td>
<td>1 bytes</td>
<td>c: 03</td>
<td>03h: ADD_NONCONN_IND</td>
</tr>
<tr>
<td>Own address type</td>
<td>1 bytes</td>
<td>d: 01</td>
<td>01h: random device address</td>
</tr>
<tr>
<td>Peer address type</td>
<td>1 bytes</td>
<td>e: 00</td>
<td>00h: public device address</td>
</tr>
<tr>
<td>Peer address</td>
<td>6 bytes</td>
<td>f1-f6: 00</td>
<td>No use</td>
</tr>
<tr>
<td>Advertising channel map</td>
<td>1 bytes</td>
<td>g: 07</td>
<td>07h: All channel enabled</td>
</tr>
<tr>
<td>Advertising filter policy</td>
<td>1 bytes</td>
<td>h: 02</td>
<td>02h: Process scan requests from all devices and only connection requests from devices that are in the White List.</td>
</tr>
</tbody>
</table>

See the Bluetooth specifications for details.
**Bluetooth low energy technology Advertising Packet specifications**

Format: cmd 0x08 0x0008 d1 d2 … d32

Function: Sets the Data for the *Bluetooth* low energy technology Advertising packet.

Specify all from d1 to d32. If these are not necessary, specify 00 for each one.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Length</th>
<th>Default (iBeacon)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising data length</td>
<td>1 byte</td>
<td>d1: 1e</td>
<td>1eh: 30bytes</td>
</tr>
<tr>
<td>Advertising Data</td>
<td>31 bytes</td>
<td>d2: 02, d3: 01, d4: 06, d5: 1a, d6: FF, d7: 4c, d8: 00, d9: 02, d10: 15</td>
<td>02h: Length</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d11-d26: fa c1 ba 2f 61 a2 4d 83 9a 8c 60 08 7c 23 25 69</td>
<td>TM UUID</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d27: 00, d28: Model No.</td>
<td>Major number</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d29: 00, d30: IP address 4th byte</td>
<td>Minor number</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d31: BD</td>
<td>BD: -67dB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d32: 00</td>
<td>00h: Fixed value</td>
</tr>
</tbody>
</table>

You can also specify a direct value.
### Keywords

You can specify the following keywords when describing the script.

<table>
<thead>
<tr>
<th>Reserve String</th>
<th>Length</th>
<th>Content</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>$SERIAL_ADDR</td>
<td>6 bytes</td>
<td>Address that uses 1 for the MSB2bit in the last 6 digits of the printer’s serial number.</td>
<td>When the Serial No. is ABCD123456, the Address uses 1 for the MSB2bits for the leading 1 byte in the last 6 digits. F1:32:33:34:35:36 is generated and replaced with a string using 36 35 34 33 32 F1 sorted in Little endian.</td>
</tr>
<tr>
<td>$RANDOM_ADDR</td>
<td>6 bytes</td>
<td>Address in which the printer generates a random 6 byte number, and 1 is for the MSB2bit of the leading 1 byte.</td>
<td>Generates a random 6 byte number in the printer and replaces it with a string that sorts the Address using 1 for the MSB2bits for the leading 1byte in Little endian.</td>
</tr>
<tr>
<td>$IPn</td>
<td>1 byte</td>
<td>Value for #n in the printer’s IP address.</td>
<td>When the IP address is 192.168.192.168, it is replaced with the following string.</td>
</tr>
<tr>
<td>$MODEL_NO</td>
<td>1 byte</td>
<td>ID value assigned to the printer model.</td>
<td>20h is used for the TM-m30II-SL. 00: no use 01: reserve 02: TM-T88VI 03: TM-T88VI-iHUB 10: TM-H6000V 20: TM-m30II-H/TM-m30II-NT/TM-m30II-S/TM-m30II-SL</td>
</tr>
<tr>
<td>$MACn</td>
<td>1 byte</td>
<td>Value for #n in the MAC address.</td>
<td>Available range: $MAC1,$MAC2, $MAC3, $MAC4, $MAC5, $MAC6</td>
</tr>
</tbody>
</table>
Character Code Tables

Refer to the following URL regarding the character code table.

🔗 www.epson-biz.com/pos/reference/charcode/
## Compatibility with USB Type-A

Devices can be connected to the USB Type-A connector of the TM-m30II-SL in the following ways.

<table>
<thead>
<tr>
<th>TM-m30II-SL</th>
<th>Direct connection</th>
<th>Secondary connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Wireless LAN unit of OT-WLxx</td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td>Extension cable of OT-WLxx</td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td>Barcode scanner</td>
<td></td>
</tr>
<tr>
<td>(d)</td>
<td>DM-D30/DM-D70/OT-DM30SL</td>
<td></td>
</tr>
<tr>
<td>(e)</td>
<td>DM-D30</td>
<td></td>
</tr>
<tr>
<td>(f)</td>
<td>Optional extension cable OT-UL30</td>
<td>DM-D30/DM-D70</td>
</tr>
</tbody>
</table>

**NOTE**

- Any USB conversion connectors and USB extension cables other than those above cannot be used.
- Barcode scanners with USB-HID interface or with CDC-ACM interface can be used.
- To use a barcode scanner, set the scanner suffix (delimiter) to CR (carriage return code). Data cannot be obtained using any other settings.
- Epson ePOS SDK version 2.9.0 or later supports barcode scanner control.