

Ficha técnica

Epson

Modelos / familias

EU-M30

Fuente del fabricante

EU-M30 User/Technical Guide

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Las páginas siguientes son un extracto técnico del documento oficial del fabricante.

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1 GENERAL SPECIFICATIONS

1.1 Print Specifications

(1) Print speed

- The maximum is 100 mm/s {3.94"/s} when printing ladder bar codes, 2-dimensional symbols, or multi-tone graphics.
- The print speed changes automatically depending on the voltage applied to the printer and the condition of the head temperature.
- Maximum print speed may not be achieved depending on the data transmission conditions and the combination of commands.
- If the print speed fluctuates or intermittent printing occurs due to the data transmission conditions, printing may be shaded or white lines may occur.

(2) Multi-tone graphics printing and limitations

- Multi-tone graphics printing is possible (up to 16 tones when using our specified paper).
- Multi-tone printing is not supported in Page mode.
- Voids (white spaces) may appear depending on the paper type (uneven application of chromogenic coating).
- It may not be possible to recreate an original image because a certain density level cannot be achieved due to the following causes:
 - Environmental temperature, power supply and voltage
 - Paper type (chromogenic characteristics)
 - Paper variations, such as variations among manufacturing lots
 - Printing pattern (effect of heat accumulation of the print head or of voltage drop/speed change due to high duty)
- For multi-tone printing, the preservative quality of materials printed using multi-tone printing decreases in direct relationship with the lighter the printing. Accordingly, do not use multi-tone printing when preservative quality is required.
- Reading quality of bar codes/2-dimensional symbols in multi-tone graphics printing is not guaranteed.

1.2 Character Specifications

- Can be changed via the software settings.
- For details, see 3.8.3 Software setting mode.

1.3 Autocutter

- The cut paper may be pulled at the cut edge when it is removed, causing reduced printing pitch for the first line of the next receipt.
To prevent dot displacement, after cutting, feed the paper approximately 1 mm {16/406"} or more before the first line of printing. This operation can be enabled by enabling the pre-feed before next print, or by setting the top margin specification via backfeed to 8.5 to 2 mm.
For the setting method, see 3.5.2. Software setting.
- When issuing paper whose vertical length is short, ensure at least 20 mm.

1.4 Paper Sensor

- (1) Function
Detects whether paper is present in the paper path.
- (2) Method
Microswitch

1.5 Roll Paper Supply Device

- Use roll paper that is not deformed, and ensure there is no slack when setting.

- (1) Function
Supplies paper with a width of 80 mm {3.15"} or 58 mm {2.28"}
- (2) Method
Drop-in roll paper

1.6 Paper Specifications

- (1) Paper specifications

Table 1.6.1 Paper Specifications

		Paper width 58 mm	Paper width 80 mm
Paper types		Specified thermal paper	
Form		Roll paper, Chromogenic side: Outside	
Size	Roll paper diameter	83 mm {3.27"} maximum	
	Roll paper core	Outside diameter: 18 + 0.5/-0.1 mm {0.71 + 0.02/-0.004"} Inner diameter: 12 + 0.5/-0.1 mm {0.47 + 0.02/-0.004"} Width: Same as the roll paper width, or smaller than the paper width by 1 mm {0.04"} or less. *Paper must not be pasted to the roll paper core	
	Roll width when taken up	58 + 0.5/-1.0 mm {2.28 + 0.02/-0.04"}	80 + 0.5/-1.0 mm {3.15 + 0.02/-0.04"}
	Paper width	57.5 ± 0.5 mm {2.26 ± 0.02"}	79.5 ± 0.5 mm {3.13 ± 0.02"}
	Paper thickness	Maximum of 80 µm, minimum of 48 µm	

- (2) Specified original paper
Use the following specified original papers to ensure print quality and reliability.

Table 1.6.2 Specified Original Paper

Specified original paper	Manufacturer
TF50KS-EY, TF60KS-E	NIPPON Paper Industries Co., Ltd.
PD160R, PD190R	Oji Imaging Media Co., Ltd.
P220AGB-1	Mitsubishi Paper Mills Limited.
AP45KS-ND, AP50KS-ND	Jujo Thermal Oy
F5047(55), F5047(48)	Mitsubishi HiTec Paper Europe GmbH
KT55FA, KT48FA, KT55PF, KT48PF	Papierfabrik August Koehler SE

- (3) Print density adjustment depending on the specified original paper
- In order to ensure optimal print quality and reliability, we recommend using the print density settings in the table below.
 - The initial setting is 100% print density.
 - The print density can be changed using customized values.
 - When the print density setting is too dark, the print speed tends to drop.
 - When the print density setting is too dark, paper dust sticks to the print head surface, often resulting in faded print.

Table 1.6.3 Specified Original Paper and Recommended Print Density Setting

Specified original paper	Print density	Print speed
TF50KS-EY, TF60KS-E, PD160R, PD190R, P220AGB-1, AP45KS-ND, AP50KS-ND, KT55PF	100%	250 mm/s {9.84"/s}
KT48FA, KT55FA, KT48PF, P5047(55)	110%	250 mm/s {9.84"/s}

- (4) Notes on preprinting
- Preprinted thermal paper may cause faulty printing and decreased print density due to the thermal head sticking to the recording surface. Therefore, it is preferable to avoid using preprinted thermal paper.
 - If using preprinted thermal paper, make sure in advance that the conditions recommended by the original paper manufacturing company (type of ink, print conditions, etc.) are met, and that there is no faulty printing or decreased print density in the actual usage environment.

1.7 Print Area

- (1) When paper width is set to 80 mm {3.15"}
 (a) Maximum print area
 72 ± 0.2 mm { 2.84 ± 0.0079 " } (576 dots)
 (b) Left margin
 Approx. 3.75mm {0.15"} for a paper width of 79.5 ± 0.5 mm { 3.13 ± 0.02 "}
 (c) Right margin
 Approx. 3.75 mm {0.15"} for a paper width of 79.5 ± 0.5 mm { 3.13 ± 0.02 "}
- (2) When paper width is set to 58 mm {2.28"}
 (a) Maximum print area
 52.5 ± 0.2 mm { 2 ± 0.00787 " } (420 dots)
 (b) Left margin
 Approx. 2.5 mm {0.098"} for a paper width of 57.5 ± 0.5 mm { 2.26 ± 0.02 "}
 (c) Right margin
 Approx. 2.5 mm {0.098"} for a paper width of 57.5 ± 0.5 mm { 2.26 ± 0.02 "}

1.8 Printing and Cutting Positions

- (1) Autocut
 • Approx. 9.5 mm {0.37"} from the print position
- (2) Emergency cutting
 • Approx. 19.5 mm {0.77"} from the print position