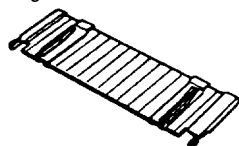
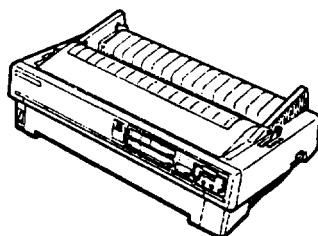


Paper guide



Printer



Power cord



Ribbon cartridge



Printer Specifications

Printing

Printing method: 24-pin impact dot matrix

Printing speed:

Quality	Characters per inch	Characters/second/line
High-speed draft	10	300
Draft	10	275
	12	330
Letter quality	10	92

Printing direction: Bidirectional logic-seeking for text, Unidirectional for graphics. (**Bidirectional** for graphics can be selected with DIP switch 1-5 and the proper software command.)

Line spacing: 1/6 inch, 1/8 inch or programmable in increments of 1/360 inch

Paper-feed speed: Friction: 59.0 ms/line at 1/6-inch line spacing
Tractor: 64.1 ms/line at 1/8-inch line spacing
Continuous feed: 3.6 inches per second

Printable columns:

Character size	Maximum printed characters	
	LO-870	LO-1170
10 cpi	80	136
12 cpi	96	164
15 cpi	120	204
17 cpi (10 cpi condensed)	137	233
20 cpi (12 cpi condensed)	160	272

Buffer: 8 Kbytes or 0 Kbyte (DIP-switch selectable)

Character fonts:

Font	Point Pitch	7pt			
		15cpi	10cpi	12cpi	Proportional
EpsonDraft		a	a	o	
Epson Courier		a	a	a	
Epson Roman		a	a	o	o
Epson Sans Serif		o	a	o	o
Epson Prestige			o	o	
Epson Script			a	a	
EpsonScript C					O
Epson Orator			a		
Epson Orator-S			a		
OCR-E			a		

You can **also** select other font/pitch combinations using ESC/P 2 commands. See the command summary in chapter 8 for details.

Character tables: 96 standard ASCII character
14 international character sets
1 **legal** character set
5 graphics character sets

Paper

Paper size:

Paper	Lo-870	LQ-1170
Single sheet		
width—Top insertion	148 to 257 mm (5.8 to 10.1 inches)	148 to 420 mm (5.8 to 16.5 inches)
width—Frontinsertion	182 to 257 mm (7.2 to 10.1 inches)	182 to 364 mm (7.210 to 14.3 inches)
length	max. 364 mm (14.3 inches)	
multi-part ion length	max. 297 mm (11.7 inches)	max. 364 mm (14.3 inches)
Continuous mow		
width	101 to 254 mm (4 to 10 inches)	101 to 406 mm (4 to 16 inches)
Envelope		
width x length	166 x 92 mm (6.5 x 3.265 inches) No. 6 240 x 104 mm (9.5 x 4.125 inches) No. 10	
Label		
width x length	min. 63.5 x 23.8 mm (2 1/2 x 16 inches)	

LQ-870	LQ-1170	Minimum left and right margins
Paper width	Paper width	
101 to 241 mm (4 to 9.5 inches)	101 to 377.8 mm (4 to 14.575 inches)	13 mm (0.51 inch)
—	381 to 406 mm (15 to 16 inches)	15 mm (0.59 inch)
254 mm (10 inches)	—	26 mm (1.02 inches)

Paper thickness:

Single sheets:
0.065 to 0.14 mm (0.0025 to 0.0055 inch)
Single sheets (multi-part forms-front insertion):
0.12 to 0.32 mm (0.0047 to 0.012 inch)
Continuous paper:
0.065 to 0.14 mm (0.0025 to 0.0055 inch)
Continuous multi-part forms:
0.12 to 0.32 mm (0.0047 to 0.012 inch)
Envelopes:
0.16 to 0.52 mm (0.0063 to 0.0197 inch)
Labels (**including** backing sheet):
0.16 to 0.19 mm (0.0063 to 0.0075 inch)

Paper weight: Single sheet (rear insertion):
14 to 24 lb (52.3 to 90 g/m²)
Single sheet (front insertion):
17 to 24 lb (64 to 90 g/m²)
Continuous paper:
14 to 22 lb (52.3 to 82 g/m²)
Multi-part forms (single sheet/continuous paper):
12 to 15 lb x 4 (40 to 58 g/m² x 4)
Envelopes:
12 to 24 lb (45 to 91 g/m²)

Paper quality: Single sheets and continuous paper:
plain paper, carbonless multi-part forms
Envelopes:
bond paper, plain paper, air mail

Number of copies: Single sheet with front insertion and continuous paper:
one original plus up to 3 copies

Electrical

Rated voltage: AC 120 V

Input voltage range: AC 103.5 to 132 V

Rated current: 3.2 A

Power consumption: (during self test printing in draft mode, at 10 cpi)
LQ-870: approx. 58 W
LQ-1170: approx. 58 W

Rated frequency range: 50 to 60 Hz

Input **frequency range:** 49.5 to 60.5 Hz

Insulation resistance: 10 Mohms minimum (at DC 500 V between AC power line and chassis)

Dielectric strength (between AC line and chassis):

120 V model:
AC 1.0 kV (rms), 1 minute
AC 1.2 kV (rms), 1 second

Environmental

Temperature: Operation: 5° to 35°C (41°F to 95°F)
Storage: -30° to 60°C (-22° to 140°F)

Humidity: **Operation:** 10% to 80% RH without condensation
Storage: 5% to 85% RH without condensation

Mechanical

Paper-feed methods: Friction (without or with optional cut-sheet feeder)
Push-tractor (front- or rear-tractor)
Pull-tractor
Push-pull-tractor (optional)

Ribbon: Fabric ribbon cartridge #7753, #7754:
Life expectancy (in LQ, at 48 dots/character):
2 million characters
Film ribbon cartridge #7768, #7770:
Life expectancy (in LQ, at 48 dots/character):
0.2 million characters (#7768)
03 million characters (#7770)

MCBF: For all components (excluding print head):
5 million lines

MTBF: LQ-870: 4000 power on hours (25% duty)
LQ-1170: 6000 power on hours (25% duty)

Print head life: 200 million strokes/wire (for fabric ribbon)
100 million strokes/wire (for film ribbon)

Dimensions and **weight:**

	LQ-870	LQ-1170
Height	171 mm (6.8 in.)	171 mm (6.8 in.)
Width	449 mm (18 in.)	624 mm (25 in.)
Depth	365 mm (14.6 in.)	365 mm (14.6 in.)
Weight	approx 8.9 kg (19.6 lb)	approx. 12.3 kg (27.1 lb)

Setting the DIP Switches

Table 1 DIP Switch 1

SW	Description	ON	OFF
1-1 1-2 1-3 1-4	International character sets/ character tables	See Table 3 and 4 below	
1-5	Print direction for graphics	Unidi.	Bidi.
1-6	High-speed draft	OFF	ON
1-7	Input buffer capacity	Invalid	Valid
1-8	Skip-over-perforation	ON	OFF

Table 2 DIP Switch 2

SW	Description	ON	OFF
2-1 2-2	Page length (for continuous paper)	See Table 5 below	
2-3	Tear off	ON	OFF
2-4	Auto line-feed	ON	OFF

Table 3 International character sets

Country	SW1-1	SW1-2	SW1-3	SW1-4
USA	ON	ON	ON	OFF
France	ON	ON	OFF	OFF
Germany	ON	OFF	ON	OFF
United Kingdom	ON	OFF	OFF	OFF
Denmark 1	OFF	ON	ON	OFF
Sweden	OFF	ON	OFF	OFF
Italy	OFF	OFF	ON	OFF
Spain 1	OFF	OFF	OFF	OFF

Table 4 Character tables

Character table	SW1-1	SW1-2	SW1-3	SW1-4
Italic	Set international character sets according to Table 3 above			OFF
PC 437 (United States)	ON	ON	ON	ON
PC 850 (Multilingual)	ON	ON	OFF	ON
PC 860 (Portugal)	ON	OFF	ON	ON
PC 863 (Canada-French)	ON	OFF	OFF	ON
PC 865 (Norway)	OFF	ON	ON	ON

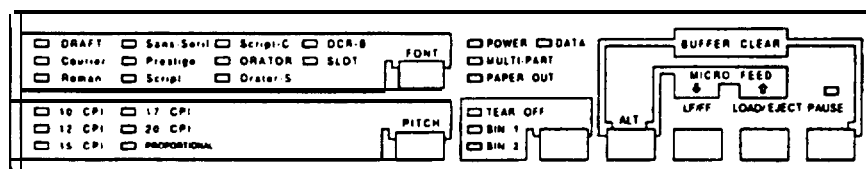
Settings not shown above select PC 437 (United States).

Table 5 Page length for continuous paper

Page length	SW2-1	SW2-2
8.5 inches (216 mm)	OFF	ON
11 inches (279 mm)	OFF	OFF
11.7 inches (296 mm)	ON	ON
12 inches (305 mm)	ON	OFF

The Control Panel

The indicator lights give you the current status of the printer. The buttons let you control many of the printer settings.



Lights

POWER (green)

On when the power switch is on and power is supplied.

DATA (orange)

On when data is present in the printer's memory buffer.

MULTI-PART (green)

On when the paper-thickness lever is set to 2nd position or higher.

PAPER OUT (red)

On when the printer runs out of paper.

PAUSE (orange)

On when you press the PAUSE button. This light stays off unless you press the PAUSE button to prevent printing.

TEAR OFF (orange)

On when you press the TEAR OFF button to feed the paper to the tear-off position.

BIN 1 (green)

On when bin 1 of the optional cut-sheet feeder is selected for paper feeding.

BIN 2 (green)

On when bin 2 of the optional cut-sheet feeder is selected for paper feeding.

Fonts (green)

Show which font is selected.

Pitches (green)

Show which pitch is selected.

Buttons

PAUSE

Press this button to temporarily stop printing. Press this button again to resume printing.

LOAD/EJECT

Press this button to load paper, if it is not loaded, or to eject it if paper is loaded. If the paper-release lever is set to the single-sheet position, paper is ejected forward. If the paper-release lever is set to the front-tractor or rear-tractor position, paper is ejected backward to the standby position.

LF/FF (Line feed/Form feed)

Press this button briefly to feed the paper forward one line. Hold down this button to eject a single sheet of paper or advance continuous paper to the top of the next page.

ALT

Holding down this button while pressing certain other buttons results in the following alternate functions:

BUFFER CLEAR

(ALT + PAUSE) clears the printer's buffer and initializes the printer settings

MICRO FEED:

(ALT + LOAD/EJECT) feeds paper forward in 1/180-inch increments

(ALT + LF/FF) feed paper backward in 1/180-inch increments

TEAR OFF (Bin Select)

This button selects the paper bin when both optional cut-sheet feeders are installed and you are printing on single sheets. When printing on continuous paper, press this button once to feed paper from the loading position to the tear-off position. Press this button again to feed the paper backward to the loading position.

FONT

Press this button to select one of the 10 built-in fonts. If an optional font module has been installed, it can be selected by choosing SLOT.

PITCH

Press this button to select one of the six character pitches (characters per inch).

The control panel also gives you access to two special functions.

Self test:

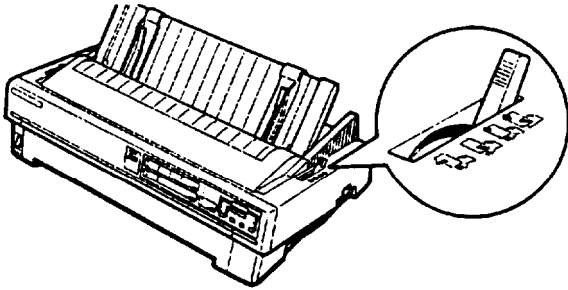
Hold down the LF/FF (LQ mode) or LOAD/EJECT (Draft mode) button while turning on the printer to perform the self test. The self test lets you check that your printer is operating properly and gives you a printout of the current DIP-switch settings.





Data dump:

Hold down both the LF/FF button and LOAD/EJECT button while turning on the printer to enter data-dump mode. The data-dump mode allows advanced users to find the cause of communication problems between the printer and the computer.

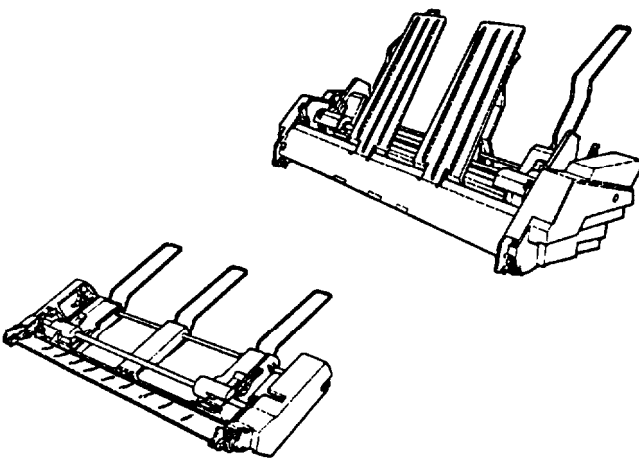
Paper Handling

Setting the paper-release lever



- 
 - **Single-sheet position**
For all single sheets, whether loaded from front, top, or either of the optional cut-sheet feeders.
- 
 - **Front push-tractor position**
For continuous paper when the tractor unit is installed in the front.
- 
 - **Rear push-tractor position**
For continuous paper when the tractor unit is installed in the rear.
- 
 - **Pull-tractor position**
For continuous paper when the tractor unit is installed on the top. In this case, you can load paper from either the front, rear, or bottom.

The Cut-Sheet Feeder



Two cut-sheet feeders are available for use **with** your printer:

Printer	Single-bin	High-capacity
LQ-870	C806371	C806381
LQ-1170	C806391	C806401

The **single-bin** cut-sheet feeder holds up to 50 single **sheets** of paper. When the simple cut-sheet feeder is installed alone, you can still manually **insert single** sheets using **the** paper guide.

The high-capacity cut-sheet feeder holds **up** to 150 sheets of paper. You **can** also load up to 25 envelopes automatically **with this** cut-sheet feeder.

The two cut-sheet feeders **can** be combined to form a double-bin cut-sheet feeder.

Application Software

Most application programs let you specify **the** type of printer you use so that the program can take full advantage of **the** printer's features. Many of these programs provide an installation or setup section **that** presents a list of printers.

Choosing from a menu

Because Epson printers share a great many commands, you can use an application program even if it does not list your printer on its printer selection menu. If your printer is not listed, **choose** from **the** following list (the printers are listed in **the** order of preference):

LQ-850/1050
LQ-510/550/1010
LQ-200
LQ-500
LQ-860+/1060+
LQ-2550
LQ-2500
LQ-800/1000
LQ-1500

If none of these printers is listed, select **the** first one available from **the** following list: LQ, **EX, FX, LX, RX, MS**, Epson printer, Standard printer, Draft printer.

Installation/Support Tips

software

The type of printer installed on your system must be identified for each software package. This is usually done through a setup menu. If this printer is not Listed in your program, see Choosing from a menu, above, for the next-best model selection.

DIP Switch Settings

The default settings will usually work for most applications, but they should be checked before using the printer. This will avoid unexpected results.

Cut-Sheet Feeder/Single-Sheet Operation

The **page length** will have to be adjusted (shortened) to 61 lines per page if your software does not properly support cut-sheet paper. There will be lines from the first page printed at the top of **the second** page if the page length is not set correctly.

Information Reference List

Engineering Change Notices

None.

Product Support Bulletins

None.

Technical Information Bulletins

None.

Related Documentation

TM-LQ8/1170 LQ-870/1170 Service Manual

PL-LQ8/1170 LQ-870/1170 Parts List

4000377 CO1-01 LQ-870/1170 User's Guide