Note: The power cord is attached.

Printer Specifications

Printing

Printing method: 9-pin impact dot matrix

Printing *speed:*

Type of letters	Print speed [cps]		
High-speed draft	380	(320)	[142]
Draft pica	285	[142]	
Draft elite	342	[170]	
Condensed draft pica	243	[122]	
Emphasized draft pica	142	[71]	
NLQ normal pica	57		

Notes:
1) The printing speed for high speed draft is reduced to the value in "( )" with thick paper (over 0.18 mm).
2) The printing speed for high speed draft is reduced to the value of "draft pica" when any graphic character is in the line.
3) The printing speed for draft is reduced to the value in "[ ]" when any italic character is in the line.
4) The speed for high duty printing is reduced to approximately half of each speed, except for the printing speed in "[ ]".

Printing ***direction:*** Bidirectional logic-seeking for text
Unidirectional for graphics

Line spacing: 1/6-inch, 1/8-inch, or programmable in increments of 1/216-inch

Paper-feed speed: Friction: 69 ms/line at 1/6-inch line spacing
Tractor: 77 ms/line at 1/6-inch line spacing
Continuous feed: 3.7 inches per second

Buffer: 24 KB or 0 KB
(Selectable in the default setting mode)

Printable columns:

Character size	Maximum printed characters	
	Standard	Wide
10 cpi	80	136
12 cpi	96	163
17 cpi (10 cpi condensed)	137	233
20 cpi (12 cpi condensed)	160	272

Character fonts: Draft, Epson Roman, or Epson Sans Serif in normal or condensed mode. You can also select other font/pitch combinations using ESC/P commands.

Character tables (ESC/P Mode):

Europe: One italic and 15 graphic character tables

North/South America: One italic and 7 graphic character tables

Other countries: One italic and 5 graphic character tables
13 international character sets

Character tables (IBM Emulation):
2 Character tables
1 Symbol sets

Paper

Single *sheets (top insertion):*

Width 148 to 257 mm (5.8 to 10.1 inches) for standard
148 to 420 mm (5.8 to 16.5 inches) for wide

Length max. 364 mm (14.3 inches)

Thickness 0.065 to 0.14 mm (0.0025 to 0.0055 inches)

Weight 52.3 to 90 g/m^2 (14 to 24 lb)

Single-sheet multi-part forms:

❏ bad single sheet multi-part forms only into the front slot with the optional front sheet guide.

❏ Use carbonless multi-part forms only.

Continuous paper:

Width 101 to 254 mm (4 to 10 inches) for standard
101 to 406 mm (4 to 16 inches) for wide

Copies Four sheets (one original plus up to three copies)

Thickness 0.065 to 0.32 mm (0.0025 to 0.012 inch) for one sheet
0.12 to 0.32 mm (0.0047 to 0.012 inch) total

Weight 52.3 to 82 g/m^2 (14 to 22 lb) for one sheet
40 to 58.2 g/m^2 (12 to 15 lb) per sheet in multi-part forms

❏ Use carbonless multi-part forms only.

Note: You can use recycled paper with this printer. If you notice an increase in ribbon consumtion and paper jamming, use a higher grade of paper.

Labels:

Size	**63. 5 x 23. 8** mm (2.5 x 0.93 inches) **101 x 23. 8** mm (4 x 0.93 inches) 101 x 27 mm (4 x 1.06 inches)
Thickness	**0. 07** to 0.09 mm (0.0028 to 0.0031 inches) for backing sheet **0. 16** to 0.19 mm (0.0063 to 0.0075 inches) total

❏ Use continuous type labels only.

❏ Use labels only under normal temperature and humidity conditions.

Envelopes:

Size	No. **6 - 166 x 92** mm (6.5 x 3.6 inches) No. **10 - 240 x 104** mm (9.5 x 4.1 inches)
Thickness	**0. 16** to 0.52 mm (0.0063 to 0.0197 inches)
Weight	**45** to 90 g/m^2 (12 to 24 lb)

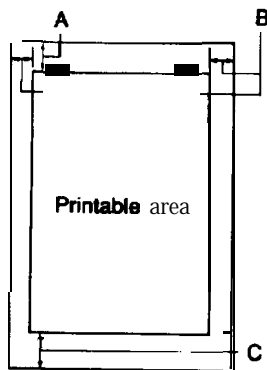❏ Use envelopes only under normal temperature and humidity conditions.

Roll paper:

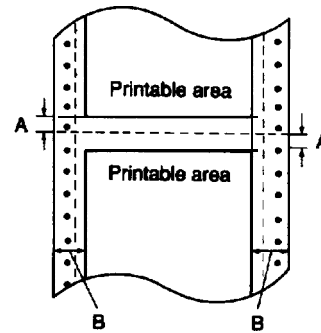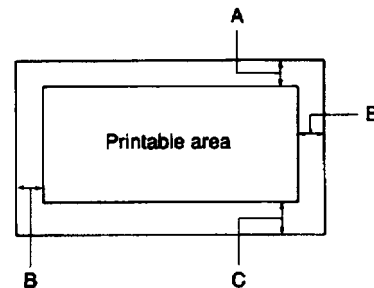|	
Size	216 ± 3 mm (8.5 ± 0.12 inches)
Thickness	**0. 07** to 0.09 mm (0.0028 to 0.0035 inches)
Weight	**52. 3** to 82 g/m^2 (14 to 22 lb)

Printable area:

Single sheets

A The minimum top margin is 8.5 mm (0.33 inches).

8 The minimum left and right margins are 3 mm (0.12 inches). However, the maximum printable width is 203 mm (8 inches) for the standard-width carriage or 345 mm (13.6 inches) for the wide carriage.

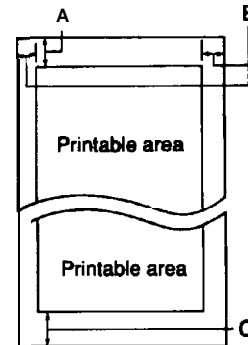C The minimum bottom margin is 13.5 mm (0.53 inches).

Continuous paper

A The minimum top and bottom margins (above and below the perforation) are 9 mm (0.35 inches).

B The minimum left and right margins am 13 mm (0.51 inches). However, the maximum printable width is 203 mm (8 inches) for the standard-wtdth carriage or 345 mm (13.6 inches) for the wide carriage.

Envelopes

A The minimum top margin is 8.5 mm (0.33 inches).

B The minimum left and right margins are 3 mm (0.12 inches).

C The minimum bottom margin is 13.5 mm (0.53 inches).

Roll paper

A The minimum top margin is 8.5 mm (0.33 inches).

B The minimum left and right margins are 3 mm (0.12 inches). However, the maximum printable width is 203 mm (8 inches) for the standard-width carriage.

C The minimum bottom margin is 13.5 mm (0.53 inches).

Mechanical

Paper-feed methods:

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

Ribbon:
Fabric ribbon cartridge
Standard: #8750
Wide: #8755
Life expectancy at 14 dots/character:
3 million characters

MTBF:
Standard: 4000 power-on hours
Wide: 6000 power-on hours

Print head *life:* 100 million characters/wire

Dimensions and weight:

	Standard	Wide
Height	154 mm (6.06 inches)	154 mm (6.06 inches)
Width	460 mm (18.11 inches)	635 mm (25.00 inches)
Depth	380 mm (14.96 inches)	380 mm (14.96 inches)
Weight	approx. 6.8 kg (14.96 lb)	approx. 9.2 kg (20.24 lb)

Electrical

120 **V** model:

Rated voltage: AC 120 **V**

Input voltage range:
AC 103.5 to 132 **V**

Rated current: 1.8 A

Power consumption:
(during self-test printing **in** draft mode at **10 cpi**)
Standard: approx. 45 **W**
Wide: approx. 45 **W**

Rated frequency range:
50 to 60 Hz

Input frequency range:
49.5 to 60.5 Hz

Dielectric strength (between AC line and chassis):
AC **1000V rms 1** minute or AC **1200V rms**
1 second

Environmental

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

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

Safety Approvals

Safety **standards:** **UL1950** with **D3**
CSA22.2 No. 220

R.F.I. FCC part 15 subpart **B** class **B**

Interface Specifications

Your printer is equipped with an **8-bit** parallel interface.

Specifications and pin assignments

The built-in parallel interface has the following characteristics:

Data format: **8-bit** parallel

Synchronization: STROBE pulse

Handshake timing: BUSY and ACKNLG signals

Signal level: TTL-compatible

Connector: 36-pin 57-30360 **Amphenol** connector or equivalent

Interface Cards

You can use optional interface cards to supplement your printer's built-in parallel interface.

The Epson **interfaces** below are compatible with your printer.

Catalog #	Interface
C823051	Serial I/F card
C823071	32KB intelligent serial I/F card
C823101	32KB intelligent parallel I/F card
C823141	Coax interface
C823151	Twinax interface

Option Specifications

Cut-sheet feeders

Dimensions and weight:

	Option No.	Height	Width	Depth	Weight
Standard	C806371 Single-bin	390 mm (15.4 in.)	449 mm (17.7 in.)	446 mm (17.6 in.)	0.55 kg (1.22 lb)
	C806381 High capacity	380 mm (15.0 in.)	449 mm (17.7 in.)	435 mm (17.1 in.)	1.55 kg (3.42 lb)
Wide	C806391 Single-bin	390 mm (15.4 in.)	624 mm (24.6 in.)	446 mm (17.6 in.)	0.75 kg (1.65 lb)
	C806401 High capacity	380 mm (15.0 in.)	624 mm (24.6 in.)	435 mm (17.1 in.)	2.15 kg (4.74 lb)

Dimensions include the printer.

Bin capacity:

Single sheets: **C806371** and **C806391**
Up to 50 sheets of $82\text{-g}/m^2$ (22-lb) paper
C806381 and **C806401**
Up to 150 sheets of $82\text{-g}/m^2$ (22-lb) paper

Envelopes: **C806381** and **C806401**
Up to 25 (plain and bond type)
Up to 30 (air mail)

MCBF: 100,000 cycles

Paper:

		Single sheets	Envelopes
Width	C806371	182 to 216 mm (7.17 to 8.50 in.)	N/A
	C806391	182 to 420 mm (7.17 to 16.54 in.)	N/A
	C806381	182 to 216 mm (7.17 to 8.50 in.)	165 to 241 mm (6.54 to 9.49 in.)
	C806401	182 to 420 mm (7.17 to 16.54 in.)	165 to 241 mm (6.54 to 9.49 in.)
Paper length		210 to 364 mm (8.27 to 14.33 in.)	92 to 104 mm (3.62 to 4.09 in.)
Thickness		0.07 to 0.12 mm (0.0028 to 0.0047 in.)	0.25 to 0.50 mm (0.0098 to 0.0197 in.)
Weight		64 to 91 g/m² (18 to 24 lb)	45 to 91 g/m² (12 to 24 lb)

Paper storage conditions:

Temperature: **18"** to 22°C (64° to 72°F)

Humidity: 40% to 60% RH

Environmental Temperature:

Operation: **5"** to 35°C (41" to 95°F)

Storage: **–30"** to 60°C (-22" to 140°F)

Humidity (without condensation):

Operation: 15% to 80% RH

Storage: **5%** to 85% RH

Note:

❏ *24-lb paper printing is available only at normal operating conditions.*

❏ *Cut-sheet feeder envelope printing is available only with the* **C806381 or C806401** *cut-sheet feeders and only at normal operating conditions.*

Front sheet guide

Dimensions and weight:

Printer	Option No.	Height	Width	Depth	Weight
Standard	C814001	48.5 mm	332 mm	177 mm	280 g
Wide	C814011	48.5 mm	507 mm	177 mm	450 g

Paper:

		Single sheets	Multi-part forms
Width	C814001	148 to 257 mm (5.8 to 10.1 inches)	
	C814011	148 to 364 mm (5.8 lo 14.3 inches)	
Paper length		max. 364 mm (max. 14.3 inches)	
Thickness		0.085 to 0.14 mm (0.0025 to 0.0054 in.)	0.12 to 0.32 mm (0.0047 to 0.0125 in.)
Weight		64 to 90 g/m² (14 to 24 lb)	(40 to 58 g/m²) x 4 [(12 to 15 lb)] x 4

Printable area:

Single sheets: Same as single sheets from the top insertion.
(Multi-part forms)

Note: **Front sheet guide is available only at the normal operating conditions.**

Character Tables

ESC/P mode

This section lists the character tables available in the ESC/P mode.

You can select these character tables with the default-setting mode or by using a software command.

All tables except the italic character table are the same as PC437 table for hex codes 00 through 7F, so only the PC437 and italic tables are shown completely. The rest of the tables show only the characters for hex code-s 80 through FF.

PC437 (USA, Standard Europe)

International character sets

The table below shows the international character sets you can select with the default-setting mode and the ESC R software command. For example, when you select "Italic-France" in the default-setting mode, the characters in the "France" row on the table below are used in the italic character table.

The following eight international character sets can be selected with the default-setting mode and with the ESC R command.

Country	ASCII code hex											
	23	24	40	5B	5C	5D	5E	60	7B	7C	7D	7E
0 U.S.A.	#	$	@	[	\	]	^	`	{	¦	}	~
1 France	#	$	à	°	ç	§	^	`	é	ù	è	¨
2 Germany	#	$	§	Ä	Ö	Ü	^	`	ä	ö	ü	ß
3 U.K.	£	$	@	[	\	]	^	`	{	¦	}	~
4 Denmark	#	$	@	Æ	Ø	Å	^	`	æ	ø	å	~
5 Sweden	#	¤	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü
6 Italy	#	$	@	°	\	é	^	ù	à	ò	è	ì
7 Spain	₧	$	@	¡	Ñ	¿	^	`	¨	ñ	}	~

The following five additional sets are available only with the ESC R software command.

Country	ASCII code hex											
	23	24	40	50	5C	5D	5E	60	7B	7C	7D	7E
8 Japan	#	$	@	[	¥	]	^	`	{	¦	}	~
9 Norway	#	¤	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
10 Denmark II	#	$	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
11 Spain II	#	$	á	¡	Ñ	¿	é	`	í	ñ	ó	ú
12 Latin America	#	$	á	¡	Ñ	¿	é	ü	í	ñ	ó	ú

IBM emulation mode

This section lists the character tables available in the IBM emulation mode. The IBM emulation mode can be selected with the default-setting mode.

These character tables can be selected with the default setting mode, or by using the ESC 6 (table 2) or ESC 7 (table 1) software command.

The **PC865** tables are the same as the PC437 tables for hex codes 00 through 7F, so only the PC437 tables are shown completely. The PC865 tables show only the characters of hex codes 80 through FF.

PC437 (table 1)

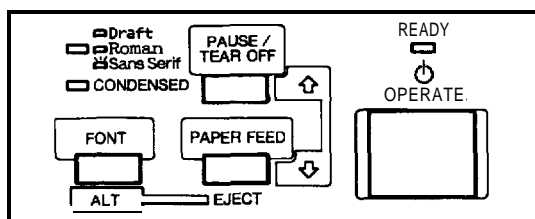### PC437 (table 2)

PC865 (table 1)

PC865 (table 2)

Symbol set

Characters defined in the following symbol set can be printed using the ESC \ (characters) or ESC ^ (one character) software command.

CODE	0	1	7
0			►
1	☻		◄
2	●		↕
3	♥		‼
4	♦		¶
5	♣		§
6	♠		▬
7	·		↨
8	■		↑
9	○		↓
A	■		→
B	♪		←
C	♀		∟
D	♪		▲
E	♫		▲
F	☼		△

Control Panel

The control panel has four buttons and three lights for simple control of basic printer operations.

Lights

READY (green)
On when the OPERATE button is on and power is supplied. This light blinks when the printer is paused, in tear-off mode, out of paper, or the print head is overheated.

FONT (green)
Shows which font is selected. This light is off for draft, on for NLQ Roman, and blinks for NLQ Sans Serif font.

CONDENSED (green)
On for condensed printing and off for normal printing.

Buttons

OPERATE
Turns the printer on or off. The printer is off when the button is out and on when the button is in.

PAUSE/TEAR OFF
Press this button to stop printing temporarily. Press it again to resume printing.

When you have finished printing on continuous paper, press this button once to advance paper to the tear-off position. Press it again to feed the paper backward to the loading position.

PAPER FEED
Press this button briefly to advance paper line by line. Hold it down to advance continuous paper to the next top-of-form (TOF) position.

When the printer is out of paper, press this button to load continuous paper from the paper-park position or a single sheet from the optional cut-sheet feeder.

FONT
Press this button to select a font (draft, Epson Roman, or Epson Sans Serif). This button also selects the normal or condensed mode for these fonts.

ALT
The FONT button also functions as the **ALT** button. Hold it down while pressing another button for the following functions:

❏ Eject (Hold down **ALT** and press **PAPER FEED.**)

If the paper-release lever is in **the** single-sheet position, paper is ejected. If the paper-release lever is in the **front-** or rear-tractor position, paper moves back to the paper-park position.

❏ Entering the Micro-feed mode (Hold down **ALT** and press **PAUSE/TEAR OFF** when paper is already loaded in the printer.)

Micro feed allows you to move the paper forward or backward in **2/216-inch** increments to adjust the loading and tear-off positions.

❏ Bin select (Hold down **ALT** and press **PAUSE/TEAR OFF when the** printer is out of paper.)

When you use the optional double-bin cut-sheet feeder, you can select the bin before loading paper.

Other control-panel features

Default setting mode:

Self test:	Hold down **the PAPER FEED** button while you turn on the printer to perform the self test. The self test lets you see that your printer is operating properly and provides a printout of the current default settings.
Data dump:	Hold down **the PAUSE** button while you **turn** on the printer to enter the data dump **mode.** This mode allows advanced users to find the cause of communication problems between the printer and the computer.

Default-Setting Mode

Default-setting listing

Your printer has internal settings that control such functions as emulation, character pitch, and page length. These settings are called default settings because they take effect each time you turn on the printer.

For most users, the factory settings are best, but you **can change these settings** if necessary.

This section lists the settings, describes them, and then tells how to change them. If you see something in the list that you need to change, notice which group (1, 2, or 3) it is in and check the description for further information, then see the section on changing the settings for the group it is in.

Group 1 Features	Settings
Printer mods	EPSON ESC/P or IBM emulation
Character pitch	10 cpi or 12 cpi
Page length	11 in., 12 in., 6.5 in., or 70/6 in. (A4)
Skip-over-perforation	No skip or skip 1 inch
Shape of Zero	Unslashed 0 or slashed Ø
Tear off	Valid or invalid
Auto line feed	Depends on interface or valid
Group 2 Features	**Settings**
Character table	ESC/P: Italic U.S.A.. Italic France, Italic Germany, Italic U.K.., Italic Denmark, Italic Sweden, Italic Italy, Italic Spain, PC437, PC850, PC860, PC863, PC865, BRASCII, Abicomp IBM: PC437 (table 1), PC437 (table 2). PC665 (table 1), PCS65 (table 2)
Group 3 Features	Settings
Input buffer	Valid or Invalid
Draft print speed	High or Normal
Auto carriage return	Valid or Invalid

Note:

❏ *You can check the character tables available with your printer by printing the quick reference in the Group 2 default-setting mode.*

❏ *Most application program control the printer features listed here. If you can use your application program to control the printer, you may never need to use the defulf-setting mode. In fact, you may find that your program settings override your printer default settings.*

Default setting descriptions

Printer mode

When you select ESC/P, the printer operates in the Epson ESC/P mode. When you select IBM, the printer emulates an IBM printer.

Character pitch

You can set the character pitch to 10 cpi or 12 cpi.

Page length

You can set the page length to 8.5, 11, 12, or 70/6 (A4) inches.

Skip-over-perforation

When you turn on this feature, the printer provides a l-inch margin between the last line printed on **one** page and the first line printed on the next page. Because most application programs set their own top and bottom margins, you should use this feature only if your program does not provide them.

Shape of Zero

The printer prints the zero character with a slash (Ø) when the setting is on, or no slash (0) when the setting is off. This allows you to easily distinguish between an uppercase "0" character and a zero.

Tear off

When you use continuous paper with the front or rear push tractor, you can use the tear-off feature.

When the auto tear off is valid, the printer automatically performs the tear-off feature. The printer automatically feeds the paper perforation to the tear-off position at the edge of the printer cover after you complete a print job. You can then easily tear off the printed page. When the printer again receives data, it automatically feeds the paper backward to the top-of-form position and starts printing.

When the auto tear off is invalid, you must perform the tear-off function manually by pressing the **TEAR OFF** button.

Auto line feed

When the auto line feed feature is valid, each carriage return (CR) code is always accompanied by a line feed (LF) code. If your text lines overprint each other, set auto line feed to valid. If your text lines are mistakenly double spaced, set auto line feed to Depends on interface.

Character table

Character tables contain the characters and symbols used in different languages. Your printer includes a wide variety of character tables. You can check the character tables available with your printer by printing the quick reference in the Group 2 default setting mode.

Input buffer

The input buffer stores data sent from your computer. The input buffer can store up to 24 KB of data, so you can free your computer for other tasks in a shorter time while the printer prints. When the buffer is off, the buffer can store no data, so the computer must wait for the printer to print each character before sending the next.

Draft print speed

When you select high-speed draft, the printer can print up to 380 cps (characters per second) at 10 cpi in draft mode. If you select normal speed draft, you can print up to 285 cps at 10 cpi in draft mode.

Auto carriage return

When the auto carriage return is valid, each line feed (LF) code or ESC J (n/216-inch line feed) code is always accompanied by a carriage return (CR) code. The printer always moves the next print position to the left margin when it receives the LF or ESC J code. When this feature is invalid, you must send the CR code after the line feed code to move the print position to the left margin. This feature is available in IBM emulation mode only.

Changing Group 1 default settings

1. Make sure the printer is turned off.

2. Turn on the printer while you hold down the FONT button. This enters the Group 1 default setting mode. The printer beeps several times.

3. Load single-sheet or continuous paper. The printer then automatically loads the paper and prints a quick reference.

Group 1 default settings

FONT light	COND. light	Feature	Settings	READY light
OFF	ON	Printer mode	Epson ESC/P	OFF
			IBM emulation	ON
OFF	BLINK	Character pitch	10 cpi	OFF
			12 cpi	ON
ON	OFF	Page length	11 inches	OFF
			12 inches	ON
			8.5 inches	BLINK
			70/6 inches (A4)	FAST BLINK
ON	BLINK	Skip-over-perforation	No skip	OFF
			Skip 1 inch	ON
BLINK	OFF	Shape of Zero	0	OFF
			Ø (with slash)	ON
BLINK	ON	Tear off	Valid	OFF
			Invalid	ON
BLINK	BLINK	Auto line feed	Depends on interface	OFF
			Valid	ON

4. The FONT and CONDENSED lights show which feature you have button as many times as necessary until the FONT and CONDENSED lights match your selection.

   For example, if you want to change the character spacing, press the FONT button until the FONT light is off and the CONDENSED light is blinking.

5. Next, press the PAUSE button to change the setting. The READY light shows your selection.

   For example, if you want to change to 12 cpi, press the PAUSE button once to turn the READY light on.

6. If necessary, repeat this process for any other Group 1 features you want to change.

7. Exit the Group 1 default-setting mode at any time by turning off the printer. Any changes you have made remain in effect until you change them again.

Note: If you want to check the new default settings, enter the default-setting mode again and print the quick reference. After that, turn off the printer to exit the default-setting mode.

Changing Group 2 default settings

1. Make sure the printer is turned off.

2. Turn on the printer while you hold down the FONT and PAUSE buttons. This enters the Group 2 default-setting mode. The printer beeps several times.

3. Load single-sheet or continuous paper. The printer then automatically loads the paper and prints a quick reference according to the emulation setting in Group 1.

ESC/P mode character table

FONT light	COND. light	READY light	ESC/P mode Character tables
OFF	OFF	ON	Italic U.S.A.
OFF	OFF	BLINK	Italic France
OFF	ON	OFF	Italic Germany
OFF	ON	ON	Italic U.K.
OFF	ON	BLINK	Italic Denmark
OFF	BLINK	OFF	Italic Sweden
OFF	BLINK	ON	Italic Italy
OFF	BLINK	BLINK	Italic Spain
ON	OFF	OFF	PC437 (USA, standard Europe)
ON	OFF	ON	PC850 (Multilingual)
ON	OFF	BLINK	PC860 (Portuguese)
ON	ON	OFF	PC863 (Canadian-French)
ON	ON	ON	PC865 (Norwegian)
ON	ON	BLINK	BRASCII (Brazilian Portuguese)
ON	BLINK	OFF	Abicomp (Brazilian Portuguese)

IBM mode character table

FONT light	COND. light	READY light	IBM mode Character tables
OFF	OFF	ON	PC437 (table 1)
OFF	OFF	BLINK	PC437 (table 2)
OFF	ON	OFF	PC865 (table 1)
OFF	ON	ON	PC865 (table 2)

4. Press the FONT button to select the character table. The FONT, CONDENSED and READY lights turn on, off, or blink to show your selection.

   For example, if you select PC437 (USA, standard Europe), the FONT light is on, the CONDENSED light is off, and the READY light is off.

5. After you have made your selection, exit the Group 2 default-setting mode by turning off the printer.

Note: If you want to check the new default settings, enter the default-setting mode again and print the quick reference. After that, turn off the printer to exit the default-setting mode.

Changing Group 3 default settings

Group 3 default settings differ from 1 and 2. You determine the setting by the number of beeps you hear instead of checking the panel lights. Also, the printer does not print a list of Group 3 default settings. To change Group 3 default settings follow the steps below.

1. Make sure the printer is **turned** off.

2. Hold down the **PAUSE** and **PAPER FEED** buttons while you **turn** on the printer. You then enter the Group 3 **default-setting** mode.

3. Press the **FONT, PAUSE, or PAPER FEED** button if you want to change the current setting. The printer beeps once or twice to indicate your setting.

Button	Feature	Settings	Beeps
PAUSE	Input buffer	Valid	Twice
		Invalid	Once
PAPER FEED	Draft print speed	High	Twice
		Normal	Once
FONT	Auto carriage return	Valid	Twice
		Invalid	Once

For example if you press the **PAUSE** button, the input buffer becomes invalid and the printer beeps once.

Note:

❑ *If you* don't *press any button* within *a few seconds after entering this mode, the printer beeps five times and automatically* exits *the Group 3 default-setting mode, leaving the settings unchanged.*

❑ *Once you change a feature's* setting, *you cannot change it again without first exiting and re-entering Group 3 default-setting mode.*

4. After you make your changes, wait until the **READY** light comes on. This shows that the printer has automatically exited the setting mode and you can begin printing.

Character Fonts

Your printer has two draft fonts (normal and high-speed) and two Near Letter Quality (NLQ) fonts (Epson Roman and Epson Sans Serif). You can select these through application software and the control panel.

Use the default-setting mode (explained earlier) to choose between normal and high-speed draft.

From the control panel you can select normal or condensed versions of all the fonts. Condensed characters are 60 percent as wide as normal characters.

Use the **FONT** button and the **FONT** and **CONDENSED** lights to select the font you want. Each time you press the **FONT** button, the selection changes and the **FONT** and **CONDENSED** lights come on, go off, or blink to indicate the current selection (▬ on   ▭ off   ▬ blinking).

Font	FONT Light	CONDENSED Light
Draft	▭	▭
Draft Condensed	▭	▬
Roman	▬	▭
Roman Condensed	▬	▬
Sans Serif	▬	▭
Sans Serif Condensed	▬	▬

▬ on   ▭ off   ▬ blinking

Note: The settings you select from the control panel remain in effect even after you turn off the printer.

because some application programs control character fonts and because program commands often override panel settings, use your application program's print options instead of the control panel to select character fonts if possible.

Here are sample characters for each font.

Normal Draft

    !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJK
    OPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz

Normal Draft condensed

    !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN
    OPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}

High-Speed Draft

    !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJK
    OPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz

Epson Roman

    !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJK
    OPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz

Epson Roman condensed

    !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN
    OPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}

Epson San Serif

    !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJK
    OPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz

Epson San Serif condensed

    !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN
    OPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}

Data Dump Mode

In data dump mode, the printer produces a printout of all the codes it receives. To use data dump mode, follow these steps:

1. Make sure the printer is **turned** off.

2. Hold down the **PAUSE** button while you **turn** on the printer.

3. Load the paper.

4. Next, run an application program or a program you have written in any programming language. Your printer prints all the codes it receives in hexadecimal format and text, as shown below.

```
Data Dump Mode
0000  1B 40 41 42 43 44 45 46 47 48 49 4A 4B 4C 4D 4E   .@ABCDEFGHIJKLMN
0001  4F 50 51 52 53 54 55 56 57 58 59 5A 5B 5C 5D 5E   OPQRSTUVWXYZ[\]
0002  5F 60 61 62 63 64 65 66 67 68 69 6A 6B 6C 6D 6E   _`abcdefghijklmn
0003  6F 70 71 72 73 74 75 76 77 78 79 7A 7B 7C 7D 7E   opqrstuvwxyz{|}~
```

5. To **turn** off data dump mode, press the **PAUSE** button to stop printing and then **turn** off the printer.

By reading the characters printed in the text field on the right side of the printout or the printout of hex codes, you can check which codes are being sent to the printer.

In the text field, **characters** appear as their true **ASCII** characters if they are printable. **Nonprintable** codes, such as control codes, are represented by dots.

Application Software

Most application programs allow you to 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

To take full advantage of your printer's features, choose your printer when you set up your program. If your printer is not listed, choose from the following list (the printers are listed in the order of preference):

FX-870 FX-1170
FX-850 FX-1050
EX-800 EX-1000
FX-86e FX-286e
FX-80+ FX-l00+
FX-80 FX-100
Epson printer
9-pin printer

If you plan to use the IBM printer emulation mode, choose IBM Proprinter (X for narrow carriage or XL for wide carriage), IBM Graphics printer, or IBM printer, in that order of preference.

To use all the features of your printer, it is best to choose a program that lists one of the FX printers on its menu. If your program does not list one of these printers, contact the software manufacturer to see if an update is available.
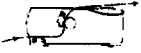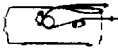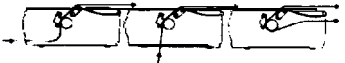
Using Continuous Paper

You can load continuous paper through the front, rear, or bottom paper slots, depending upon the position of the tractor unit and the placement of your paper supply.

Your printer can handle continuous paper up to 254 mm (10.0 inches) wide on the standard-width carriage and up to 406 mm (16.0 inches) wide on the wide carriage.

To print on continuous paper, you can install the tractor unit in one of the following positions: front, rear, or pull. Be sure you set the paper-release lever correctly before you print.

Tractor position and available paper paths

Below are the possible ways of feeding continuous paper. Always set the paper-release lever to the position indicated for the paper-feed method you want to use.

Tractor **position**	Paper-release lever **position**	Paper **paths**
Front push-tractor		
Rear push-tractor		
Pull-tractor		

Single-sheet position
For all single sheets, whether loaded from **the** top or **either** of the optional cut-sheet feeders; also for loading single sheets from the front with the optional **front** sheet **guide**.

Front push-tractor position
For continuous paper with the tractor unit installed in the front.

Rear push-tractor position
For **continuous** paper with the tractor unit installed in the rear.

Pull-tractor position
For continuous paper with the tractor unit installed on the **top**. In this **case,** you can load paper from the front, rear, or bottom.
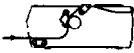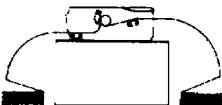
Additional Tractor Unit

You can improve the performance of continuous paper handling by using two tractor units at the same time. An additional tractor unit is available as an option. This is especially useful for continuous preprinted forms, multi-part forms, and labels. Using two tractor units at once is also recommended for the highest quality graphics.

Also, if you install the tractor units in the front and rear push-tractor positions, you can load two types of continuous paper at the same time and switch between them by moving the paper-release lever.

Tractor positions and paper paths

below are the various ways of feeding continuous paper with two tractor units.

Tractor positions	Position of the paper-release lever	Paper path
Pull + front push	Front push-tractor	
Pull + rear push	Rear push-tractor	
Front push + rear push	Front push-tractor or Rear push-tractor	

Information Reference List

Engineering Change Notices

None

Product Support Bulletins

None

Technical Support Bulletins

None

Related Documentation

TM-FX8/1170	FX-870/1170 Service Manual
PL-FX870	FX-870 Parts/Price List
PL-FX1170	FX-1170 Parts/Price List
SPKFX8/1170	FX-870/1170 Self Paced Kit
4001255	FX-870/1170 User's Guide