LP 800 (260-2890) IBM Control Codes Faxback Doc. # 4121

This printer has three emulation modes:

* HP LaserJet III
* Epson FX-850
* IBM Proprinter XL24e

The LP 800 has different responses to software codes from the computer--one set for each emulation. The response patterns, or modes, have many similarities, but each has its own unique features.

IBM PROPRINTER XL24e Control Codes:

Printer Operation/Data Control Sequences:

DEC.	HEX.	MNEMONIC	FUNCTION
13	0D	CR	Carriage return
17 by	11	DC1	Selects printer after deselection ESC Q
24	18	CAN	Cancels--clear internal buffer
27 25 n	1B 19 n	ESC EM n	Selects paper feed source. n=1 selects cassette tray n=2 selects 2nd bin sheet feeder
27 28 n	1B 1C n	ESC FS n	Selects emulation n=0 Function Reset n=1 HP Emulation n=3 EPSON Emulation n=4 IBM Emulation n=5 HPGL Emulation n=6 PDL Emulation
27 81 36	1B 51 24	ESC Q $	Deselects printer
27 85	1B 55	ESC U	Unidirectional printing ignored by this printer.
27 91 75 c 0 i p1 p2	1B 5B 4B c 00 i p1 p2	ESC [K c NUL i p1 p2	Sets initial condition c:defines the number of bytes to follow i:defines type of initialization i=0 or 1: resets to current menu settings i=4 or 5: resets to factory default i=254: resets to current factory settings, and also stores p1 or p2 settings into the menu memory.

p1 bit	1 (on)	2 (off)
7	Ignore this byte	Process this byte
6	Reserved	
5	Buzzer on	Buzzer off
4	Auto CR On	Auto CR Off

3	Auto LF On	Auto LF Off
2	Skip perf. off	1" Skip perf.
1	Slashed zero	Non-slashed zero
0	Character Set 2	Character Set 1

p2 bit	1 (on)	0 (off)
7	Ignore this byte	Process this byte
6	Multilingual	USA
5-0	Reserved	

27 106	1B 6A	ESC j	Stops printing-print out information in the buffer and set the printer off line.
27 111 n	1B 6F n	ESC o n	Sets orientation n=0 sets portrait; n=1 sets landscape

Vertical Motion Control Sequences:

DEC.	HEX.	MNEMONIC	FUNCTION
10	0A	LF	Line Feed
11	0B	VT	Vertical Tab
12	0C	FF	Form Feed
27 48	1B 30	ESC 0	Sets 1/8" line feed
27 49	1B 31	ESC 1	Sets 7/72" line feed
27 50	1B 32	ESC 2	Starts line spacing set by ESC A
27 51 n	1B 33 n	ESC 3 n	Sets line feed pitch to n/216" in standard mode, n/180 in AGM mode 0<n<255
27 52	1B 34	ESC 4	Sets current position as top of form
27 53	1B 35 n	ESC 5 n	Sets automatic line feed n=1: Carriage return and line feed n=0: Carriage return only
27 65	1B 41 n	ESC A n	Stores line-feed pitch to n/72" in standard mode, or n/60" in AGM mode when ESC 2 is input 1<n<85
27 66 n1... nk 0	1B 42 n1... nk 00	ESC B n1... nk NUL	Sets vertical tabs 1<k<64, 1<n<65
27 67 n	1B 43 n	ESC C n	Sets form length in lines--max. 255 lines or 14 inches (portrait)/8.5" (landscape)
27 67 0 n	1B 43 00 n	ESC C NUL n	Sets form length in inches--max. 14" (portrait)/8.5" (landscape)
27 74 n	1B 4A n	ESC J n	Do n/216" line feed in standard mode, n/180" in AGM mode 0<n<255
27 78 n	1B 4E n	ESC N n	Sets skip perforation of n lines
27 79	1B 4F	ESC O	Cancels skip perforation
27 82	1B 52	ESC R	Sets all tabs to power-on settings
27 91 92 4 0 0 0 n	1B 5B 5C 04 00 00 00 n	ESC [\ 4 NUL NUL	Sets base line-feed pitch to 1/n". n must be either 180 or 216.

NUL NUL n

Horizontal Motion Control Sequences:

DEC.	HEX.	MNEMONIC	FUNCTION
8	08	BS	Backspace
9	09	H	Horizontal tab
27 68 n1... nk 0	1B 44 n1 nk 00	ESC D n1... nk NUL	Sets horizontal tabs 1<k<32
27 82	1B 52	ESC R	Sets all tabs to power-on settings
27 88 n1 n2	1B 58 n1 n2	ESC X n1 n2	Sets left and right margins based on the current font pitch. n1 specifies left margin n2 specifies right margin. 1<n1<n2<maximum character column.
27 100 n1 n2	1B 64 n1 n2	ESC d n1 n2	Relative dot positioning-move the print-start position to the right of the current printing position for (n1+(n2x256"))/120"

Printing Style Control Sequences:

DEC.	HEX.	MNEMONIC	FUNCTION
14	OE	SO	Selects double-width printing-prints for one line only.
15	OF	SI	Selects condensed printing--17.1 CPI
18	12	DC2	Selects standard 10 CPI printing
20	14	DC4	Cancels single-line double-width printing set by SO
27 58	1B 3A	ESC :	Selects compressed printing--12 CPI
27 80 n	1B 50 n	ESC P n	Selects or deselect proportional characters n=1 ON; n=0 OFF
27 87 n	1B 57 n	ESC W n	Continuous double-width printing n=1 selects continuous double-width printing. n=0 cancels continuous double-width printing.
27 91 64 4 0 0 0 n1 n2	1B 5B 40 04 00 00 00 n1 n2	ESC [@ 4 NUL NUL NUL n1 n2	Double-Height Printing n1=1 Single height 2 Double Height n1=16 Single line spacing, 32 Double line spacing n2=1 Single width 2 Double width

Note: The font downloading control code sequence (ESC =) is ignored by this printer.

Print Enhancement Control Sequences:

DEC.	HEX.	MNEMONIC	FUNCTION
27 45 n	1B 2D n	ESC - n	Underlining n=1 Starts underline n=0 ends underline

27 69	1B 45	ESC E	Sets emphasized printing
27 70	1B 46	ESC F	Cancels emphasized printing
27 71	1B 47	ESC G	Sets double-strike printing
27 72	1B 48	ESC H	Stops double-strike printing
27 83 n	1B 53 n	ESC S n	Sets superscript/subscript n=0 selects superscript printing n=1 selects subscript printing
27 84	1B 54	ESC T	End superscript and subscript printing
27 95 n	1B 5F n	ESC _ n	Overscoring n=1 selects continuous overscoring n=0 cancels continuous overscoring

Character Table Control Sequences:

DEC.	HEX.	MNEMONIC	FUNCTION
27 54	1B 36	ESC 6	Selects IBM Character Set 2
27 55	1B 37	ESC 7	Selects IBM Character Set 1
27 92 n1 n2	1B 5C n1 n2	ESC \ n1 n2	Prints continuously the next (n1+(n1x256)) characters from the All Characters set
27 94 n	1B 5E n	ESC ^ n	Print a character from the All Characters set n defines the ASCII code of the character to print.
27 91 84 4 0 0 0 n1 n2	1B 58 54 04 00 00 00 n1 n2	ESC [T 4 NUL NUL NUL n1 n2	Selects either code page USA or Multi-lingual. Send 1 as n1 and 181 as n2 to select code page 437 (USA) Send 3 as n1 and 82 as n2 to select code page 850 (multilingual)

Graphic Image Printing Control Sequences:

DEC.	HEX.	MNEMONIC	FUNCTION
27 42 m n1 n2 d1...dK	1B 2A m n1 n2 d1...dk	ESC * m n1 n2 d1...dk	Selects various bit image graphic mode (AGM) m=0:60-dpi/8-pin m=1:120-dpi/8-pin m=2:120-dpi/8-pin m=3:240-dpi/8-pin m=4:80-dpi/8-pin m=6:90-dpi/8-pin m=32:60-dpi/24-pin m=33:120-dpi/24-pin m=38:90-dpi/24-pin m=39:180-dpi/24-pin m=40:360-dpi/24-pin k=n1 (LSB)+(256 x n2 (MSB))
27 75 n1 n2 d1...dk	1B 4B n1 n2 d1...dk	ESC K n1 n2 d1...dk	Normal-density 8-pin bit image mode 60-dpi k=n1 (LSB)+(256 x n2 (MSB))
27 76 n1 n2 d1...dk	1B 4C n1 n2 d1...dk	ESC L n1 n2 d1...dk	Double-density 8-pin bit image mode 120-dpi k= (n1+(256 x n2))
27 89 n1 n2 d1...dk	1B 59 n1 n2 d1...dk	ESC Y n1 n2 d1...dk	Double-density 8-pin bit image mode 120 dpi (horizontally aligned dots

			can not be printed) k=(n1+(256 x n2))
27 90 n1 n2 d1...dk	1B 5A n1 n2 d1...dk	ESC Z n1 n2 d1...dk	Quadruple-density 8-pin bit image mode. 240-dpi k=(n1+(256 x n2))
27 91 103 n1 n2 m d1 ...dk	1B 5B 67 n1 n2 m d1 ...dk	ESC [g n1 n2 m d1 ...dk	Selects various bit image graphic mode. m=0: 60-dpi/8-pin (Same as ESC K) m=1: 120-dpi/8-pin (Same as ESC L) m=2: 120-dpi/8-pin (Same as ESC Y) m=3: 240-dpi/8-pin (Same as ESC Z) m=8: 60-dpi/24-pin m=9: 120-dpi/24-pin m=11: 180-dpi/24-pin m=12: 360-dpi/24-pin

(dtc-08/06/93)
(smm 08/24/93)
(smc-09/14/93)