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# Programmers Guide

## Genicom Quick Reference

GENICOM Printer 3840

For Printer PP 40x / PP 80x

# GENICOM Printer 3840 Quick Reference

## Acknowledgement

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## GENICOM Printer 3840 Quick Reference

This appendix contains basic information on the EPSON LQ 2550 and ESC/P2 Printer Emulation commands supported in those Printer types:



This appendix contains basic information on the GENICOM emulation commands supported in the printer. The GEN emulation is subset - compatible to the GENICOM Printer 3840.

Characters used in control functions appear in mono spaced type. Table 1 explains some of the conventions used.

A pair of numbers separated by a slash ( / ) character indicates Column/Row notation. This notation refers to the location of a character in a standard code table, such as ASCII. (example: 1/B = 1B is the hex-code for Escape)

Spaces appear between characters in sequence for clarity; they are not part of the format.

At the end of this chapter you will find a listing of the HP emulation commands classified by Hex Code and a Hex - Decimal conversion table.

### Table 1 Conventions

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ESC    Escape (1/B), introduces an escape sequence

*P<sub>n</sub>*      Numeric parameter, or number of units that specify a distance or quantity pertaining to the escape sequence, control function or control string. Accepted values are 0...9999, may be preceded by + or -. If the parameter is in normal notation like "200" the programming in hex- code is according to an ASCII table. ("200" = 32,30,30 in hex). If the parameter must be programmed in hex-code, the notation is with a slash. (1/A = 1A in hex-code)

*Par*      To specify different parameters in an ESC sequence. Accepted values are numbers 0...9 and ASCII characters.

*SP*      Is standing for Space (hex 20)

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**Table 2: Control Codes**

Escape Sequence	Mnemonic	Function
0/0	NUL	Nul
0/8	BS	Backspace
0/9	HT	Horizontal Tab
0/A	LF	Line Feed
0/B	VT	Vertical Tab
0/C	FF	Form Feed
0/D	CR	Carriage Return
1/1	DC1	XON
1/3	DC3	XOFF
1/B	ESC	Escape
2/0	SP	Space
7/F	DEL	Delete

**Table 3: Special Code Sequences**

Escape Sequence	Mnemonic	Function
ESC c		Reset to Initial State
ESC ] .... ESC \		Display Message (ignored)
ESC [ 0 ; 1 SP ~		Select Emulation GENICOM ANSI (ignored)
ESC [ 2 q		Graphic Resolution ( ignored )
ESC [ P1 p		Select Paper Path P1 = 10 : Tractor Lower P1 = 12 : Tractor Upper
ESC [ P1 ; P2 SP {		Move to Top Of Form and CUT Command P1 = 1 : P2 = 1 : If the vertical position is not at top-of-form, then a form feed is executed. The paper is advanced to the cut position and cut. The horizontal position following a cut is the left margin position.

**Table 4: Vertical Form Handling**

Escape Sequence	Mnemonic	Function
ESC [ P1 d	VPA	Vertical Position Absolute  Moves the current print position to P1 decipoints from top of the form.  P1 = increments in decipoints (1/720" )
ESC [ P1 ; P2 f		Vertical and Horizontal Absolute Position  Moves the current print position to P1 decipoints from the top of form and P2 decipoints from the left margin. Max vertical position is 22 inch.
ESC [ P1 ; P2 ; P3 r		Forms Set Up Sets top of form and sets form length, as well as top and bottom margins, in decipoints.  P1 = form length in decipoints (1/720")  P2 = top margin in decipoints (1/720")  P3 = bottom margin in decipoints (1/720")
ESC J		Set Vertical Tab At Current Position
ESC [ P1 g		Clear Tabs  P = 0 : clear horizontal tab at current position P = 1 : clear vertical tab at current position P = 3 : clear all horizontal tabs P = 4 : clear all vertical tabs

**Table 5: Horizontal Form Handling**

Escape Sequence	Mnemonic	Function
ESC [ p1 ; p2 SP G		Set Line / Character Spacing  Sets the vertical and horizontal pitch in decipoints. P1 = line spacing P2 = character spacing  Unspecified parameters remain at their current values.
ESC H		Set Horizontal Tab At Current Position

**Table 6: Font Selection, National Version and Code Table Handling**

Escape Sequence	Mnemonic	Function
ESC [ P1 x		<p>Select National Character Sets</p> <p>P1 = 1 : National Char. Set GERMAN</p> <p>P1 = 8591 : ISO 8859-1</p>
ESC [ P1 ; P2 SP B	GSM	<p>Graphic Size Modification</p> <p>P1 : height P2 : width Range: 100, 200 .. 800 The argument units of the parameters P1 and P2 are percentages of the vertical and horizontal dimensions of the current font.</p>
ESC K	PLD	Subscript Printing
ESC L	PLU	Superscript Printing
ESC [ P1 ; Pn.. m	SGR	<p>Select Graphics Rendition</p> <p>P = 0 : reset renditions (default)</p> <p>P = 1 : bold</p> <p>P = 3 : italics</p> <p>P = 4 : underline</p> <p>P = 9 : crossed out or strike through</p> <p>P = 10 : italic OFF (GOTHIC DP)</p> <p>P = 20 . double width</p> <p>P = 21 : double underline</p> <p>P = 22 : cancel bold</p> <p>P = 23 : cancel italics</p> <p>P = 24 : cancel underline</p> <p>P = 29 : cancel crossed out</p> <p>P = 53 : over- lined</p> <p>P = 55 : cancel overlined</p>

**Table 7: Large Character Printing**

Escape Sequence	Mnemonic	Function
ESC [ 1		Non- rotatable Oversized Character Print
ESC [ 0		Exit Rotatable Oversized Character Print
ESC [ P1 ; P2 SP B	GSM	Graphic Size Modification  P1 : height  P2 : width  Range: 100, 200 .. 800 The argument units of the parameters P1 and P2 are percentages of the vertical and horizontal dimensions of the current font.

**Table 8: GEN Barcode Printing**

Escape Sequence	Mnemonic	Function
ESC [ P1 ; P2 ; P3 ; ... ; P12 }		Barcode Type Selection P1 = 0: Interleaved 2 of 5 (default) P1 = 16: Code 128 (A, B, and C) P2 = : Height (P2 x 1/12 inch) P3 = 0: Human Readable Enable OFF P4 = : Narrow Bar Width (1/120 inch) hor. P5 = : Wide Bar Width (1/120 inch) hor. P6 = : Narrow Space Width (1/120 inch) hor. P7 = : Wide Space Width (1/120 inch) hor. P8 = : Intercharacter Gap (1/120 inch) hor. P9 = 0: No Rotation (fixed) P10 = 0: Horiz. Resolution 60 dpi (ignored) 1: Horiz. Resolution 120 dpi (ignored) P11 = 0: Check Character Enable (OFF.) P12 = 0: Human Readable Font (OFF)
ESC [ P1 t		Set Special Mode (Barcode ON/OFF)  P1 = 0: barcode mode off P1 = 3: barcode mode on

GENICOM Printer 3840 **Quick Reference**

Hex Code	Format	Page
0/0	Nul	2
0/8	Backspace	2
0/9	Horizontal Tab	2
0/A	Line Feed	2
0/B	Vertical Tab	2
0/C	Form Feed	2
0/D	Carriage Return	2
1/1	XON	2
1/3	XOFF	2
1/B	Escape	2
2/0	Space	2
7/F	Delete	2
ESC c	Reset to Initial State	3
ESC ] .... ESC \	Display Message (ignored)	3
ESC [ 0 ; 1 SP ~	Select Emulation GENICOM ANSI (ignored)	3
ESC [ 2 q	Graphic Resolution ( ignored )	3
ESC [ P1 p	Select Paper Path	3
ESC [ P1 ; P2 SP {	Move to Top Of Form and CUT Command	3
ESC [ P1 d	Vertical Position Absolute	4
ESC [ P1 ; P2 f	Vertical and Horizontal Absolute Position	4
ESC [ P1 ; P2 ; P3 r	Forms Set Up	4
ESC J	Set Vertical Tab At Current Position	4
ESC [ P1 g	Clear Tabs	4
ESC [ p1 ; p2 SP G	Set Line / Character Spacing	5
ESC H	Set Horizontal Tab At Current Position	5
ESC [ P1 x	Select National Character Sets	6
ESC [ P1 ; P2 SP B	Graphic Size Modification	6
ESC K	Subscript Printing	6
ESC L	Superscript Printing	6
ESC [ 1	Non- rotatable Oversized Character Print	7
ESC [ 0	Exit Rotatable Oversized Character Print	7
ESC [ P1 ; P2 SP B	Graphic Size Modification	7
ESC [ P1 ; P2 ; P3 ; ... ; P12 }	Barcode Type Selection	8
ESC [ P1 t	Set Special Mode (Barcode ON/OFF)	8

### Hex - Decimal Conversion Table

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
1	1	17	33	49	65	81	97	113	129	145	161	177	193	209	225	241
2	2	18	34	50	66	82	98	114	130	146	162	178	194	210	226	242
3	3	19	35	51	67	83	99	115	131	147	163	179	195	211	227	243
4	4	20	36	52	68	84	100	116	132	148	164	180	196	212	228	244
5	5	21	37	53	69	85	101	117	133	149	165	181	197	213	229	245
6	6	22	38	54	70	86	102	118	134	150	166	182	198	214	230	246
7	7	23	39	55	71	87	103	119	135	151	167	183	199	215	231	247
8	8	24	40	56	72	88	104	120	136	152	168	184	200	216	232	248
9	9	25	41	57	73	89	105	121	137	153	169	185	201	217	233	249
A	10	26	42	58	74	90	106	122	138	154	170	186	202	218	234	250
B	11	27	43	59	75	91	107	123	139	155	171	187	203	219	235	251
C	12	28	44	60	76	92	108	124	140	156	172	188	204	220	236	252
D	13	29	45	61	77	93	109	125	141	157	173	189	205	221	237	253
E	14	30	46	62	78	94	110	126	142	158	174	190	206	222	238	254
F	15	31	47	63	79	95	111	127	143	159	175	191	207	223	239	255