

# Chapter 6

## COMMANDS

### 6.1 COMMANDS SUMMARY

This section describes software commands of EPSON LQ-1050 and IBM XL24 mode. The software commands are classified according to their functions. Variables are not included in this summary. For those codes that contain variables, such as ESC Q n for setting the right margin(in EPSON mode), in EPSON mode see next section.

#### EPSON LQ-1050 Commands

---

##### *Printer Control*

NAME	FUNCTION	PAGE
BEL	Bell	6-9
DC1	Select Printer	6-14
DC3	Deselect Printer	6-15
ESC EM	Select Cut Sheet Feeder	6-18
ESC <	Unidirectional Mode (one line)	6-28
ESC @	Initialize Printer	6-30
ESC U	Turn Unidirectional Mode On/Off	6-42
ESC s	Select Half Speed Mode	6-54

##### *Data Control*

NAME	FUNCTION	PAGE
NUL	Null	6-9
CAN	Cancel Data	6-16
DEL	Delete Character	6-16
ESC #	Cancel MSB Control	6-19
ESC =	Set MSB to 0	6-29
ESC >	Set MSB to 1	6-29

## Chapter 6

---

### *Horizontal Motion*

<b>NAME</b>	<b>FUNCTION</b>	<b>PAGE</b>
BS	Backspace	6-10
HT	Horizontal Tab	6-10
CR	Carriage Return	6-12
ESC \$	Select Absolute Horizontal Tab	6-20
ESC D	Set Horizontal Tabs	6-33
ESC \	Move Relative Position	6-47
ESC e	Set Relative Tabs	6-50
ESC f	Set Print Position	6-51

### *Vertical Motion*

<b>NAME</b>	<b>FUNCTION</b>	<b>PAGE</b>
LF	Line Feed	6-11
VT	Vertical Tab	6-11
FF	Form Feed	6-12
ESC /	Select Vertical Tab Channel	6-23
ESC 0	1/8 Inch Line Spacing	6-23
ESC 1	17/180 Inch Line Spacing	6-24
ESC 2	1/6 Inch Line Spacing	6-24
ESC 3	Graphic Line Spacing	6-25
ESC A	Set Text Line Spacing	6-31
ESC B	Set Vertical Tabs	6-31
ESC J	Perform n/180 Inch Line Feed	6-36
ESC b	Set Vertical Tabs in Channel	6-49

### *Page Format*

<b>NAME</b>	<b>FUNCTION</b>	<b>PAGE</b>
ESC C	Select Page Length in Lines	6-32
ESC C 0	Select Page Length in Inches	6-32
ESC N	Set Automatic Perforation Skip	6-39
ESC O	Cancel Automatic Perforation Skip	6-39
ESC Q	Set Right Margin	6-40
ESC a	Select Justification	6-49
ESC l	Set Left Margin	6-53

*Character Size*

<b>NAME</b>	<b>FUNCTION</b>	<b>PAGE</b>
SO	Double-Wide Printing by line	6-13
SI	Condensed Printing	6-13
DC2	Cancel Condensed Mode	6-14
DC4	Cancel Double-Wide Printing by Line	6-15
ESC SO	Double-Wide Printing by Line	6-17
ESC SI	Condensed Printing	6-17
ESC M	Select Elite Width	6-38
ESC P	Select Pica Width	6-39
ESC W	Turn Double-Wide Mode On/Off	6-43
ESC g	Select 15 Pitch	6-51

*Character Type*

<b>NAME</b>	<b>FUNCTION</b>	<b>PAGE</b>
ESC SP	Select Character Space	6-18
ESC !	Master Select	6-19
ESC -	Select/Cancel Underlining	6-23
ESC 4	Select Italic Mode	6-25
ESC 5	Cancel Italic Mode	6-26
ESC E	Emphasized Printing	6-33
ESC F	Cancel Emphasized Printing	6-34
ESC G	Select Double-Strike Mode	6-34
ESC H	Cancel Double-Strike Mode	6-34
ESC S	Set Sub/Superscript Printing	6-42
ESC T	Cancel Sub/Superscript Printing	6-42
ESC p	Turn Proportional Mode On/Off	6-53
ESC x	Select Letter Quality or Draft	6-55

## Chapter 6

---

### *Character Set*

<b>NAME</b>	<b>FUNCTION</b>	<b>PAGE</b>
ESC %	Select User-defined Characters	6-20
ESC &	Define User-defined Characters	6-21
ESC 6	Select Character Set 2	6-26
ESC 7	Select Character Set 1	6-27
ESC :	Copy ROM Characters into RAM	6-28
ESC R	Select International Character Set	6-41
ESC k	Select Font	6-52
ESC t	Select Graphics or Italics Character Set	6-54

### *Graphics*

<b>NAME</b>	<b>FUNCTION</b>	<b>PAGE</b>
ESC *	Select Graphics Mode	6-22
ESC ?	Reassign Graphics Mode	6-30
ESC K	Normal Density Bit-Image Graphics	6-37
ESC L	Double Density Bit-Image Graphics	6-38
ESC Y	Double Density High Speed Graphics.	6-44
ESC Z	Quadruple Density Bit-Image Graphics	6-44

---

**IBM XL24 Commands**

---

*Printer Control*

<b>NAME</b>	<b>FUNCTION</b>	<b>PAGE</b>
BEL	Bell	6-9
DC1	Select Printer	6-14
DC3	Deselect Printer	6-15
ESC 5	Automatic Line Feed	6-26
ESC Q	Deselect Printer	6-40
ESC U	Turn Unidirectional Mode ON/OFF	6-42
ESC j	Stop Printing	6-52

*Data Control*

<b>NAME</b>	<b>FUNCTION</b>	<b>PAGE</b>
NUL	Null	6-9
CAN	Cancel Data	6-16
SP	Space	6-16

*Horizontal Motion*

<b>NAME</b>	<b>FUNCTION</b>	<b>PAGE</b>
BS	Backspace	6-10
HT	Horizontal Tab	6-10
CR	Carriage Return	6-12
ESC D	Set Horizontal Tabs	6-33
ESC R	Set All Tabs to Power-On Settings	6-41
ESC d	Relative Move in Line Forward	6-50

## Chapter 6

---

### *Vertical Motion*

<b>NAME</b>	<b>FUNCTION</b>	<b>PAGE</b>
LF	Line Feed	6-11
VT	Vertical Tab	6-11
FF	Form Feed	6-12
ESC 0	1/8 Inch Line Spacing	6-23
ESC 1	7/72 Inch Line Spacing	6-24
ESC 2	Start Text Line Spacing	6-24
ESC 3	Graphics Line Spacing - $n/216$ Inch	6-25
ESC 3	Graphics Line Spacing (AGM) - $n/180$ Inch	6-25
ESC A	Set Text Line Spacing - $n/72$ Inch	6-31
ESC A	Set Text Line Spacing (AGM) - $n/60$ Inch	6-31
ESC B	Set Vertical Tabs	6-31
ESC J	Graphics Variable Line Spacing	6-36
ESC J	Graphics Variable Line Spacing (AGM)	6-36
ESC [ \	Set Vertical Units	6-46

### *Page Format*

<b>NAME</b>	<b>FUNCTION</b>	<b>PAGE</b>
ESC 4	Set Top of Form	6-25
ESC C	Set Form Length in Lines	6-32
ESC C 0	Set Form Length in Inches	6-32
ESC N	Set Automatic Perforation Skip	6-39
ESC O	Cancel Automatic Perforation Skip	6-39
ESC X	Set Horizontal Margins	6-43

*Character size*

NAME	FUNCTION	PAGE
SO	Double-Wide Printing by Line	6-13
SI	Condensed Printing	6-13
DC2	Print 10 Characters per Inch	6-14
DC4	Cancel Double-Wide Printing by Line	6-15
ESC :	12 Characters-per-Inch Printing	6-27
ESC W	Continuous Double-Wide Printing	6-43
ESC [ @	Double-High Printing	6-45

*Character Type*

NAME	FUNCTION	PAGE
ESC -	Continuous Underscore	6-23
ESC E	Set Emphasized Printing	6-33
ESC F	Cancel Emphasized Printing	6-34
ESC G	Set Double-Strike Printing	6-34
ESC H	Cancel Double-Strike Printing	6-34
ESC I	Select Print Mode	6-35
ESC P	Proportional Space Mode	6-40
ESC S	Set Subscript or Superscript Printing	6-42
ESC T	Cancel Subscript or Superscript Printing	6-42
ESC _	Continuous Overscore	6-48

*Character Set*

NAME	FUNCTION	PAGE
ESC 6	Select Character Set 2	6-26
ESC 7	Select Character Set 1	6-27
ESC =	Downloading Printer Characters	6-29
ESC \	Print Continuously from All Characters Table	6-47
ESC ^	Print Single Character from the All Characters Table	6-48
ESC k	Select Font	6-52

*Graphics*

<b>NAME</b>	<b>FUNCTION</b>	<b>PAGE</b>
ESC *	Select Graphics Mode (AGM)	6-22
ESC K	Normal Density Bit-Image Graphics	6-37
ESC L	Double Density Bit-Image Graphics	6-38
ESC Y	Double Density High Speed Graphics	6-44
ESC Z	Quadruple Density Bit-Image Graphics	6-44
ESC [ g	High-Resolution Graphics	6-46

## 6.2 CONTROL CODE DESCRIPTION

More detailed information (function, code, BASIC format, and explanation) is given below. Codes are sorted in alphabetical order for convenience of searching.

---

### NUL Null

---

<b>Function</b>	Null
<b>Code</b>	Hex. : 00 Dec. : 0
<b>BASIC Format</b>	Hex. : CHR\$(&H00); Dec. : CHR\$(0);
<b>Explanation</b>	Ends the following escape control codes of ESC B (vertical tab setting) and ESC D (horizontal tab setting). It is also used to fill space and time.

---

### BEL Bell

---

<b>Function</b>	Bell
<b>Code</b>	Hex. : 07 Dec. : 7
<b>BASIC Format</b>	Hex. : CHR\$(&H07); Dec. : CHR\$(7);
<b>Explanation</b>	Sounds the printer buzzer for about 1 second.

---

---

**BS**

---

---

**Backspace**

---

---

**Function**

Backspace

**Code**Hex. : 08  
Dec. : 8**BASIC Format**Hex. : CHR\$(&H08);  
Dec. : CHR\$(8);**Explanation**

Moves the printhead to the left one character width which is currently effective. If the printhead is at column 1, this code is ignored. It can be used to overstrike characters.

- LQ1050: This code should not be used with "ESC a 2" or "ESC a 3".

---

---

**HT**

---

---

**Horizontal Tab**

---

---

**Function**

Horizontal Tab

**Code**Hex. : 09  
Dec. : 9**BASIC Format**Hex. : CHR\$(&H09);  
Dec. : CHR\$(9);**Explanation**

Moves the printhead to the next horizontal tab stop. If there is no tab stop to the right, it is ignored. The tab stop after power on is every 8th position, namely 9, 17, 25, ..., etc. Set Tab stops with ESC D.

---



---

**LF**

**Line Feed**

---

**Function**

Line Feed

**Code**

Hex. : 0A  
Dec. : 10

**BASIC Format**

Hex. : CHR\$(&H0A);  
Dec. : CHR\$(10);

**Explanation**

Advances the paper one line. If less than one line is left to the bottom, the paper is advanced to the next top of form.

An automatic CR occurs when the item LF is LF+CR on menu.

---



---

**VT**

**Vertical Tab**

---

**Function**

Vertical Tab

**Code**

Hex. : 0B  
Dec. : 11

**BASIC Format**

Hex. : CHR\$(&H0B);  
Dec. : CHR\$(11);

**Explanation**

Advances the paper to the next vertical tab stop. If the next vertical tab stop is greater than the form length or no vertical tab stop is set, the paper is advanced just one line.

The item LF is LF+CR on menu. The printer does an automatic carriage return.

- LQ1050: The next tab stop is set in the channel selected by "ESC /". If no channel has been selected, channel 0 is used. If no vertical tabs have been selected, the paper advances one line.

---

---

**FF**

---

---

**Form Feed**

---

---

**Function** Form Feed**Code** Hex. : 0C  
Dec. : 12**BASIC Format** Hex. : CHR\$(&H0C);  
Dec. : CHR\$(12);**Explanation** Advances the paper to the next top of form and moves the printhead to column 1. The page length can be changed with "ESC C".

The paper's position under the printhead is set as the top-of-form position when the power is turned on, the printer is reset by "ESC @", or the page length is changed with "ESC C *n*" or "ESC C 0 *n*".

---

---

**CR**

---

---

**Carriage Return**

---

---

**Function** Carriage Return**Code** Hex. : 0D  
Dec. : 13**BASIC Format** Hex. : CHR\$(&H0D);  
Dec. : CHR\$(13);**Explanation** Automatic LF is done if the AUTO FEED XT signal on Centronics parallel interface is held LOW or the item CR on menu is LF+CR.

- LQ1050: Returns the print position to the left margin without advancing the paper.
- XL24: Causes the data that follows to print at the left side. No line feed is done unless the automatic line feed switch is on, or the computer sends an ESC 5 (automatic line feed) is sent to the printer.

---

---

**SO**

---

---

**Double-Wide Printing by line**

---

---

**Function** Double-Wide Printing by Line**Code** Hex. : 0E  
Dec. : 14**BASIC Format** Hex. : CHR\$(&H0E);  
Dec. : CHR\$(14);**Explanation** Starts double-wide printing. Characters are printed twice as wide as the current character spacing in double-wide printing. It is cancelled by CR, Cancel, LF, FF, VT, ESC W, or DC4. ESC [ @ (double high printing) also resets it.

---

---

**SI**

---

---

**Condensed Printing**

---

---

**Function** Condensed Printing**Code** Hex. : 0F  
Dec. : 15**BASIC Format** Hex. : CHR\$(&H0F);  
Dec. : CHR\$(15);**Explanation** Starts condensed printing.

- LQ1050: Characters of 60% of their normal width is printed. For example, the condensed 10 pitch is 17 CPI.
- XL24: Condensed printing has character spacing of 17.16 CPI. It is cancelled by DC2 and 10 CPI is resumed.

---

---

**DC1**

---

---

**Select Printer**

---

---

**Function** Select Printer**Code** Hex. : 11  
Dec. : 17**BASIC Format** Hex. : CHR\$(&H11);  
Dec. : CHR\$(17);**Explanation** Enables the printer to accept input data from the computer. If the printer is off line, this code is ignored.

---

---

**DC2**

---

---

**Cancel Condensed Mode**

---

---

**Function**

- LQ1050: Cancel Condensed Mode
- XL24: Print 10 Characters per Inch

**Code** Hex. : 12  
Dec. : 18**BASIC Format** Hex. : CHR\$(&H12);  
Dec. : CHR\$(18);**Explanation**

- LQ1050: Cancels condensed printing set by SI, ESC SI.
- XL24: Cancels condensed mode and sets the character spacing to 10 CPI. Double-wide printing is not cancelled by this code.

## DC3

## Deselect Printer

**Function**

Deselect Printer

**Code**

Hex. : 13  
Dec. : 19

**BASIC Format**

Hex. : CHR\$(&H13);  
Dec. : CHR\$(19);

**Explanation**

Puts the printer into the deselected state.

- LQ1050: The printer cannot be reselected with the ON LINE button. This command is effective when  $\overline{\text{SLCT IN}}$  of interface card is LOW, or  $\overline{\text{SLCT IN}}$  on menu is enabled.
- XL24: On the serial interface, the printer sends this code to indicate that its buffers are full.

## DC4

## Cancel Double-Wide Printing by Line

**Function**

Cancel Double-Wide Printing by Line

**Code**

Hex. : 14  
Dec. : 20

**BASIC Format**

Hex. : CHR\$(&H14);  
Dec. : CHR\$(20);

**Explanation**

Ends double-wide printing by line that was started by "SO" (also "ESC SO" in LQ1050 mode) and sets the printer to the previous character spacing.

- LQ1050: This code does not cancel double-wide printing set by "ESC W", or "ESC !".

---

---

**CAN**

---

Cancel Data

---

**Function**

Cancel Data

**Code**Hex. : 18  
Dec. : 24**BASIC Format**Hex. : CHR\$(&H18);  
Dec. : CHR\$(24);**Explanation**

Clears all data stored in the preceding print buffer but does not change the current print position. The control codes are not affected.

---

---

---

**SP**

---

Space (XL24)

---

**Function**

Space

**Code**Hex. : 20  
Dec. : 32**BASIC Format**Hex. : CHR\$(&H20);  
Dec. : CHR\$(32);**Explanation**

Moves the printhead one character space to the right.

---

---

---

**DEL**

---

Delete Character (LQ1050)

---

**Function**

Delete Character

**Code**Hex. : 7F  
Dec. : 127**BASIC Format**Hex. : CHR\$(&H7F);  
Dec. : CHR\$(127);**Explanation**

Removes the last text character in the print buffer. If the last character is a control code, it is not removed.

---

**ESC SO**

**Condensed Printing (LQ1050)**

<b>Function</b>	Select Condensed Mode
<b>Code</b>	Hex. : 1B 0E Dec. : 27 14
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H0E); Dec. : CHR\$(27);CHR\$(14);
<b>Explanation</b>	Same as "SO".

**ESC SI**

**Condensed Printing (LQ1050)**

<b>Function</b>	Select Condensed Mode
<b>Code</b>	Hex. : 1B 0F Dec. : 27 15
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H0F); Dec. : CHR\$(27);CHR\$(15);
<b>Explanation</b>	Same as "SI".

ESC EM *n*

## Select Cut Sheet Feeder (LQ1050)

**Function** Select Cut Sheet Feeder Mode (T.B.A.)

**Code** Hex. : 1B 19 *n*  
Dec. : 27 25 *n*

**BASIC Format** Hex. : CHR\$(&H1B);CHR\$(&H19);CHR\$(*n*);  
Dec. : CHR\$(27);CHR\$(25);CHR\$(*n*);

**Explanation** Turns on or off the cut sheet feeder mode in the following way:

<i>n</i>	Function
0	Turn off the cut sheet feeder mode
1	Selects bin 1
2	Selects bin 2
4	Turn on the cut sheet feeder mode
R	Ejects a cut sheet paper

Unsupported value of *n* is ignored.

ESC SP(Space) *n*

## Select Character Space (LQ1050)

**Function** Set Intercharacter Space

**Code** Hex. : 1B 20 *n*  
Dec. : 27 32 *n*

**BASIC Format** Hex. : CHR\$(&H1B);CHR\$(&H20);CHR\$(*n*);  
Dec. : CHR\$(27);CHR\$(32);CHR\$(*n*);

**Explanation** Sets the amount of space added to the right of each character, in addition to the space already allowed in the design of the character. *n* gives the space in unit of dots which is 1/120 inch in draft and 1/180 inch in LQ and proportional mode. Double-wide doubles the unit of space. *n* is a one-byte value from 0 to 127.

## ESC ! *n*

## Master Select (LQ1050)

**Function**

Master Select

**Code**

Hex. : 1B 21 *n*  
 Dec. : 27 33 *n*

**BASIC Format**

Hex. : CHR\$(&H1B);CHR\$(&H21);CHR\$(*n*);  
 Dec. : CHR\$(27);CHR\$(33);CHR\$(*n*);

**Explanation**

Selects any valid combination of the following modes. The resultant *n* is the summation of all the selected modes. For example, *n* = 193 specifies underlined, italic, 12 pitch character.

Hex.	Dec.	Feature
00	0	10 pitch
01	1	12 pitch
02	2	Proportional
04	4	Condensed
08	8	Emphasized
10	16	Double-strike
20	32	Double-wide
40	64	Italic
80	128	Underline

## ESC #

## Cancel MSB Control (LQ1050)

**Function**

Cancel MSB Control Sequence

**Code**

Hex. : 1B 23  
 Dec. : 27 35

**BASIC Format**

Hex. : CHR\$(&H1B);CHR\$(&H23);  
 Dec. : CHR\$(27);CHR\$(35);

**Explanation**

Cancels the MSB control set by "ESC =" or "ESC >".

ESC \$  $n_1 n_2$ 

## Select Absolute Horizontal Tab (LQ1050)

<b>Function</b>	Set Absolute Print Position
<b>Code</b>	Hex. : 1B 24 $n_1 n_2$ Dec. : 27 36 $n_1 n_2$
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H24);CHR\$( $n_1$ );CHR\$( $n_2$ ); Dec. : CHR\$(27);CHR\$(36);CHR\$( $n_1$ );CHR\$( $n_2$ );
<b>Explanation</b>	<p>Specifies the distance from the left margin that subsequent characters are to be printed. The distance is calculated using the following formula:</p> $\text{distance} = n_1 + (n_2 \times 256).$ <p>The base unit of the distance is 1/60 inch. If the distance gives a position beyond the right margin, this code is ignored and the current setting remains effective.</p>

ESC %  $m$ 

## Select User-defined Characters (LQ1050)

<b>Function</b>	Select Character Generator
<b>Code</b>	Hex. : 1B 25 $m$ Dec. : 27 37 $m$
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H25);CHR\$( $m$ ); Dec. : CHR\$(27);CHR\$(37);CHR\$( $m$ );
<b>Explanation</b>	<p><math>m = 0</math> : ROM Character generator  <math>m = 1</math> : RAM Character generator          (ESC &amp; is required to define the character set)</p>

Sets the character generator to either ROM or RAM for printing. The printer has two character generators: a ROM character generator that has predefined characters and a RAM character generator whose contents can be defined or modified by the user.



You should select the "PCG buffer" item for "DOWN LOAD BUFFER" menu in the menu mode to use the RAM character generator.

**ESC & 0  $n_1 n_2 d_0 d_1 d_2 data$  Define User-defined Characters (LQ1050)**

**Function**

Define User-defined Characters

**Code**

Hex. : 1B 26 00  $n_1 n_2 d_0 d_1 d_2 data$   
 Dec. : 27 38 0  $n_1 n_2 d_0 d_1 d_2 data$

**BASIC Format**

Hex. : CHR\$(&H1B);CHR\$(&H26);CHR\$(0);CHR\$( $n_1$ );CHR\$( $n_2$ );  
 CHR\$( $d_0$ );CHR\$( $d_1$ );CHR\$( $d_2$ );CHR\$( $data$ );  
 Dec. : CHR\$(27);CHR\$(38);CHR\$(0);CHR\$( $n_1$ );CHR\$( $n_2$ );CHR\$( $d_0$ );  
 CHR\$( $d_1$ );CHR\$( $d_2$ );CHR\$( $data$ );

**Explanation**

Defines new characters. The user-defined characters are stored in the RAM character generator.

$n_1$  and  $n_2$

Specify the first and last character codes to be defined. To define only one character, set  $n_1$  and  $n_2$  to be same.  $n_1$  and  $n_2$  is a one-byte value from 32 to 127. For example, to define A through Z,  $n_1$  would be 65 and  $n_2$  would be 90.

$d_0$ ,  $d_1$  and  $d_2$

Specify the width of the character and the space around it.  $d_0$  specifies the left space and  $d_2$  specifies the right space.  $d_1$  specifies the character width. The base units of  $d_0$ ,  $d_1$  and  $d_2$  are all columns with the current pitch. The following table summarizes the maximum values for the character width and spaces.

Pitch	$d_1$	$d_0 + d_1 + d_2$
Draft	9	12
LQ 12 CPI	23	30
LQ 10 CPI	29	36
Proportional	37	42

$data$

Defines the dot patterns for each character. Each column of the character consists of 24 bits that are printed by the 24 pins and represented by 3 bytes of data. Since the data has three bytes per column, there should be  $d_1 \times 3$  bytes of data for a character with  $d_1$  columns. The dots within each byte have values of 1, 2, 4, 8, 16, 32, 64, 128 starting from the top to the bottom. The data numbers are calculated by adding the values of the dots which are to be printed.

**ESC \*  $m n_1 n_2$  data****Select Graphics Mode****Function**

Select Graphics Mode

**Code**Hex. : 1B 2A  $m n_1 n_2$  dataDec. : 27 42  $m n_1 n_2$  data**BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H2A);CHR\$( $m$ );CHR\$( $n_1$ );  
CHR\$( $n_2$ );CHR\$(data);Dec. : CHR\$(27);CHR\$(42);CHR\$( $m$ );CHR\$( $n_1$ );CHR\$( $n_2$ );CHR\$(data);**Explanation**

Prints bit-image data in one of 11 modes.

 $m$ Specifies the print mode as follows.  $m$  is a one-byte value.

Mode	Hor. Density	Pins	Comment
0	60	8	Same as ESC K
1	120	8	Same as ESC L
2	120	8	Same as ESC Y
3	240	8	Same as ESC Z
4	80	8	CRT I
6	90	8	CRT II
32	60	24	High resolution for ESC K
33	120	24	High resolution for ESC L
38	90	24	CRT III
39	180	24	High resolution triple density
40	360	24	High resolution hex density

 $n_1$  and  $n_2$ 

Give the number of slices of graphic data, where  $n_1$  is the low byte and  $n_2$  is the high byte. In 8 pin mode, one slice equals one byte of data and in 24 pin mode, one slice equals three bytes of data.

 $data$ 

The data is organized by bytes. For 8 pin modes, it is mapped to the pins identically to ESC K. For 24 pin modes, the data has three bytes per slice, with the MSB of the first byte mapping to the top pin and the LSB of the third byte mapping to the bottom pin.



1. Data greater than the count is treated as text or control codes and data greater than the right margin is ignored.
2. In modes 2, 3, 40, horizontally adjacent dots cannot be printed.

ESC - *n*

## Select/Cancel Underlining

<b>Function</b>	Continuous Underscore
<b>Code</b>	Hex. : 1B 2D <i>n</i> Dec. : 27 45 <i>n</i>
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H2D);CHR\$( <i>n</i> ); Dec. : CHR\$(27);CHR\$(45);CHR\$( <i>n</i> );
<b>Explanation</b>	When <i>n</i> = 1, underscoring begins. All characters that follow including spaces are overscored. However, character positions skipped by HT are not underlined. When <i>n</i> = 0, underscoring stops.

ESC / *c*

## Select Vertical Tab Channel (LQ1050)

<b>Function</b>	Select Vertical Tab Channel
<b>Code</b>	Hex. : 1B 2F <i>c</i> Dec. : 27 47 <i>c</i>
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H2F);CHR\$( <i>c</i> ); Dec. : CHR\$(27);CHR\$(47);CHR\$( <i>c</i> );
<b>Explanation</b>	Selects the vertical tab channel. <i>c</i> is a one-byte value from 0 to 7. All subsequent VTs use the channel selected by this command.



You can define 8 different vertical tab stop patterns in 8 channels.

## ESC 0

## 1/8 Inch Line Spacing

<b>Function</b>	1/8 Inch Line Spacing
<b>Code</b>	Hex. : 1B 30 Dec. : 27 48
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H30); Dec. : CHR\$(27);CHR\$(48);
<b>Explanation</b>	Sets the line spacing to 8 LPI. The power on default value is 6 LPI.

---

---

## ESC 1

17/180 Inch Line Spacing (LQ1050)  
7/72 Inch Line Spacing (XL24)

---

---

### Function

- LQ1050: 17/180 Inch Line Spacing
- XL24: 7/72 Inch Line Spacing

### Code

Hex. : 1B 31  
Dec. : 27 49

### BASIC Format

Hex. : CHR\$(&H1B);CHR\$(&H31);  
Dec. : CHR\$(27);CHR\$(49);

### Explanation

Sets the line spacing to 7/72(XL24) or 17/180(LQ1050) inches per line. The power on default value is 6 LPI.

---

---

## ESC 2

1/6 Inch Line Spacing (LQ1050)  
Start Text Line Spacing (XL24)

---

---

### Function

- LQ1050: Set Line Spacing to 1/6 inch.
- XL24: Execute Text Line Spacing

### Code

Hex. : 1B 32  
Dec. : 27 50

### BASIC Format

Hex. : CHR\$(&H1B);CHR\$(&H32);  
Dec. : CHR\$(27);CHR\$(50);

### Explanation

- LQ1050: Sets the line spacing to 1/6 inch. This is the power on default value.
- XL24: Sets the line spacing to the value set by "ESC A n". The power on default value is 6 LPI.

**ESC 3 *n***

**Graphics Line Spacing**

<b>Function</b>	Graphics Line Spacing
<b>Code</b>	Hex. : 1B 33 <i>n</i> Dec. : 27 51 <i>n</i>
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H33);CHR\$( <i>n</i> ); Dec. : CHR\$(27);CHR\$(51);CHR\$( <i>n</i> );
<b>Explanation</b>	<ul style="list-style-type: none"> <li>• LQ1050: Sets the line spacing to <i>n</i>/180 inches. <i>n</i> is a one-byte value from 0 to 255.</li> <li>• XL24: Sets <i>n</i>/216 inches or <i>n</i>/180 inches graphic line spacing. The base unit can be changed by "ESC [ \". For example, when the base unit is 1/216 inches, "ESC 3 10" sets a line spacing of 10/216 inches. The value of multiples of 3 is recommended for exact advancement. <i>n</i> is a one-byte value from 0 to 255.</li> <li>• AGM: Same as LQ1050.</li> </ul>

**ESC 4**

**Select Italic Mode (LQ1050)  
Set Top of Form (XL24)**

<b>Function</b>	<ul style="list-style-type: none"> <li>• LQ1050: Select Italic Mode</li> <li>• XL24 Set Top of Form</li> </ul>
<b>Code</b>	Hex. : 1B 34 Dec. : 27 52
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H34); Dec. : CHR\$(27);CHR\$(52);
<b>Explanation</b>	<ul style="list-style-type: none"> <li>• LQ1050: Causes subsequent characters to be printed in italic mode. The character graphics is not italicized.</li> <li>• XL24: Sets the current paper position as the top of form. If the printer is in the cut sheet feeder mode, this code loads the next paper.</li> </ul>

## ESC 5

## Cancel Italic Mode (LQ1050)

<b>Function</b>	Cancel Italic Mode
<b>Code</b>	Hex. : 1B 35 Dec. : 27 53
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H35); Dec. : CHR\$(27);CHR\$(53);
<b>Explanation</b>	Cancels the italic mode selected by "ESC 4".

ESC 5 *n*

## Automatic Line Feed (XL24)

<b>Function</b>	Automatic Line Feed
<b>Code</b>	Hex. : 1B 35 <i>n</i> Dec. : 27 53 <i>n</i>
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H35);CHR\$( <i>n</i> ); Dec. : CHR\$(27);CHR\$(53);CHR\$( <i>n</i> );
<b>Explanation</b>	When <i>n</i> = 1, automatic line feeding starts. With automatic line feeding on, the printer advances the paper one line each time it receives CR. When <i>n</i> = 0, automatic line feeding stops.

## ESC 6

## Select Character Set 2

<b>Function</b>	Select Character Set 2
<b>Code</b>	Hex. : 1B 36 Dec. : 27 54
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H36); Dec. : CHR\$(27);CHR\$(54);
<b>Explanation</b>	<ul style="list-style-type: none"> <li>• LQ1050: When the IBM graphic character table is selected, this code permits the codes from 128 to 159 to be printed as graphic characters not control codes.</li> <li>• XL24: Selects character set 2 which contains non-English characters and symbols.</li> </ul>

## ESC 7

### Select Character Set 1

**Function**

- LQ1050: Enable Upper Control Codes
- XL24: Select Character Set 1

**Code**

Hex. : 1B 37  
 Dec. : 27 55

**BASIC Format**

Hex. : CHR\$(&H1B);CHR\$(&H37);  
 Dec. : CHR\$(27);CHR\$(55);

**Explanation**

- LQ1050: When the graphic character table is selected, this code causes codes from 128 to 159 to be treated as control codes.
- XL24: Selects character set 1 which contains character and symbols commonly used in the English language.

## ESC :

### 12 CPI Printing (XL24)

**Function**

12 Characters-per-Inch Printing

**Code**

Hex. : 1B 3A  
 Dec. : 27 58

**BASIC Format**

Hex. : CHR\$(&H1B);CHR\$(&H3A);  
 Dec. : CHR\$(27);CHR\$(58);

**Explanation**

Sets 12 CPI character spacing. The power on default value is 10 CPI and "DC2" also resets character spacing to the default value.

**ESC : 0 n 0****Copy ROM Characters into RAM (LQ1050)**

<b>Function</b>	Copy ROM Characters into RAM
<b>Code</b>	Hex. : 1B 3A 00 n 00 Dec. : 27 58 0 n 0
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H3A);CHR\$(00);CHR\$(n); CHR\$(00); Dec. : CHR\$(27);CHR\$(58);CHR\$(0);CHR\$(n);CHR\$(0);
<b>Explanation</b>	Copies the characters in the ROM into RAM so that specific characters can be redefined. When $n = 0$ , the selected font family is Roman, and when $n = 1$ , it is Sans-Serif.



This code will cancel any user-defined characters you have created. You must send this code to the printer before you define characters.

**ESC <****Unidirectional Mode (LQ1050)**

<b>Function</b>	Selects Unidirectional printing by line
<b>Code</b>	Hex. : 1B 3C Dec. : 27 60
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H3C); Dec. : CHR\$(27);CHR\$(60);
<b>Explanation</b>	Selects one-direction printing by line. This code is cancelled by a CR. Upon receiving this code, the printhead moves to column 1 and printing takes place from left to right. Normally printing is done bidirectionally.

**ESC =**Set MSB to 0 (LQ1050)  
Downloading Printer Characters (XL24)**Function**

- LQ1050: Set MSB to 0
- XL24: Downloading Printer Characters (T.B.A.)

**Code**

Hex. : 1B 3D  
Dec. : 27 61

**BASIC Format**

Hex. : CHR\$(&H1B);CHR\$(&H3D);  
Dec. : CHR\$(27);CHR\$(61);

**Explanation**

- LQ1050: Sets the MSB of all subsequent data to 0. This code can be used to suppress the unwanted MSB of 1. However this code has no effect on codes received during bit image graphic printing.
- XL24: Starts character font image downloading.

**ESC >**

Set MSB to 1(LQ1050)

**Function**

Set MSB to 1

**Code**

Hex. : 1B 3E  
Dec. : 27 62

**BASIC Format**

Hex. : CHR\$(&H1B);CHR\$(&H3E);  
Dec. : CHR\$(27);CHR\$(62);

**Explanation**

Sets the MSB of all subsequent data to 1. However this code has no effect on codes received during bit image graphic printing. All control codes will become ineffective if this code is sent to the printer after selecting the graphic character set by "ESC 6".

ESC ? *n m*

## Reassign Graphics Mode (LQ1050)

<b>Function</b>	Reassign Graphics Mode
<b>Code</b>	Hex. : 1B 3F <i>n m</i> Dec. : 27 63 <i>n m</i>
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H3F);CHR\$( <i>n</i> );CHR\$( <i>m</i> ); Dec. : CHR\$(27);CHR\$(63);CHR\$( <i>n</i> );CHR\$( <i>m</i> );
<b>Explanation</b>	<p><i>n</i> : 4B<sub>H</sub>, 4C<sub>H</sub>, 59<sub>H</sub>, 5A<sub>H</sub> ("K", "L", "Y", "Z")</p> <p>Reassign one of "ESC K", "ESC L", "ESC Y", "ESC Z" graphic mode to a mode <i>m</i> (<math>0 \leq m \leq 40</math>) in "ESC * <i>m</i>". For example, "ESC ? K 1" reassigns "ESC K" to mode 1 (8 pin, 120 DPI), and subsequent "ESC K" command refers this mode.</p>



The power on default value for "ESC K, L, Y, Z" is *m* = 0, 1, 2, 3 respectively.

## ESC @

## Initialize Printer (LQ1050)

<b>Function</b>	Initialize Printer
<b>Code</b>	Hex. : 1B 40 Dec. : 27 64
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H40); Dec. : CHR\$(27);CHR\$(64);
<b>Explanation</b>	Resets the printer to the power on state. All the data in the print buffer is cleared.

ESC A  $n$ 

## Set Text Line Spacing

<b>Function</b>	Set Text Line Spacing
<b>Code</b>	Hex. : 1B 41 $n$ Dec. : 27 65 $n$
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H41);CHR\$( $n$ ); Dec. : CHR\$(27);CHR\$(65);CHR\$( $n$ );
<b>Explanation</b>	<ul style="list-style-type: none"> <li>• LQ1050: Sets the line spacing in increments of <math>n/60</math> inch. <math>n</math> is a one-byte value from 0 to 85.</li> <li>• XL24: Sets the line spacing in increments of <math>1/72</math> inch. For example, "ESC A 6" sets <math>6/72</math> inch line spacing. However this code by itself does not change the amount by which the paper advances when the printer receives "LF". In order for the new line spacing to become effective, the printer must subsequently receive "ESC 2".</li> <li>• AGM Sets text line spacing in increments of <math>n/60</math> inch(0.4233 mm). The default is <math>1/6</math> inch.</li> </ul>

ESC B  $n_1 n_2 \dots 0$ 

## Set Vertical Tabs

<b>Function</b>	Set Vertical Tabs
<b>Code</b>	Hex. : 1B 42 $n_1 n_2 \dots 00$ Dec. : 27 66 $n_1 n_2 \dots 0$
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H42);CHR\$( $n_1$ );CHR\$( $n_2$ ); ... ; CHR\$(00); Dec. : CHR\$(27);CHR\$(66);CHR\$( $n_1$ );CHR\$( $n_2$ ); ... ;CHR\$(0);
<b>Explanation</b>	<p>Sets vertical tab stops at the positions specified by <math>n</math>'s. The last null code terminates the position list. Each <math>n</math> must be a one-byte value less than 256. ESC B cancels any previous vertical tabs, so "ESC B 0" clears all vertical tab stops.</p> <ul style="list-style-type: none"> <li>• LQ1050: 16 tab stops can be specified at most. All settings are stored in current selected channel. If channel is not selected by VFU channel select command then default channel is 0. Positions of tab stops are stored in memory as absolute distances from the top of the form. These distances are obtained by multiplying the current line pitch by the specified line number. Therefore these positions do not shift if the line pitch is changed.</li> </ul>

- XL24: The maximum number of vertical tab stops that can be specified is 64. Positions of tab stops are set in memory as line numbers. Therefore, once tab stops have been set their positions shift if the line pitch is changed.

---

## ESC C *n*

### Set Form Length in Lines

---

**Function**

Set Form Length in Lines

**Code**

Hex. : 1B 43 *n*  
 Dec. : 27 67 *n*

**BASIC Format**

Hex. : CHR\$(&H1B);CHR\$(&H43);CHR\$(*n*);  
 Dec. : CHR\$(27);CHR\$(67);CHR\$(*n*);

**Explanation**

Sets the form length to *n*-lines, i.e *n* times line pitch.

*n* is a one-byte value from 1 to 127. The top of form position is set to the current line.

If the cut-sheet feeder is installed, the next paper is loaded.

---

## ESC C 0 *n*

### Set Form Length in Inches

---

**Function**

Set Form Length in Inches

**Code**

Hex. : 1B 43 00 *n*  
 Dec. : 27 67 0 *n*

**BASIC Format**

Hex. : CHR\$(&H1B);CHR\$(&H43);CHR\$(00);CHR\$(*n*);  
 Dec. : CHR\$(27);CHR\$(67);CHR\$(0);CHR\$(*n*);

**Explanation**

Sets the form length to *n*-inches. This code sets top of form at the current position.

*n* is a one-byte value from 1 to 22.

If the cut-sheet feeder is installed, the next paper is loaded.

---



---

**ESC D  $n_1 n_2 \dots 0$** 
**Set Horizontal Tabs**

<b>Function</b>	Set Horizontal Tabs
<b>Code</b>	Hex. : 1B 44 $n_1 n_2 \dots 00$ Dec. : 27 68 $n_1 n_2 \dots 0$
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H44);CHR\$( $n_1$ );CHR\$( $n_2$ );...; CHR\$(00); Dec. : CHR\$(27);CHR\$(68);CHR\$( $n_1$ );CHR\$( $n_2$ );...;CHR\$(0);
<b>Explanation</b>	<p>Sets horizontal tab stops at the positions specified by <math>n_i</math>'s. The last null code terminates the position list. Each <math>n</math> is the column number and must be a one-byte value less than 256(65 for XL24). ESC D cancels any previous vertical tabs, so "ESC D 0" clears all horizontal tab stops.</p> <ul style="list-style-type: none"> <li>• LQ1050: Up to 32 horizontal tab stops can be set. Positions of tab stops are stored in memory as absolute distances from the left edge of the page. These distances are obtained by multiplying the current character width by the specified line number. Therefore the tab settings do not change even if the character pitch is changed. 10 pitch is used for proportional printing.</li> <li>• XL24: The maximum number of horizontal tab stops that can be specified is 28. Positions of tab stops are set in memory as character counters. Therefore these positions shift if the character width is changed. Each <math>n</math> must be a one byte decimal value less than 65.</li> </ul>



When you power on or initialize the printer, the printer has horizontal tab stops at every 8th column, starting column 9.

---



---

**ESC E**
**Set Emphasized Printing**

<b>Function</b>	Set Emphasized Printing
<b>Code</b>	Hex. : 1B 45 Dec. : 27 69
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H45); Dec. : CHR\$(27);CHR\$(69);
<b>Explanation</b>	Starts emphasized printing where the printhead strikes each dot twice to produce a darker, bolder character.

---

---

**ESC F****Cancel Emphasized Printing**

---

---

<b>Function</b>	Cancel Emphasized Printing
<b>Code</b>	Hex. : 1B 46 Dec. : 27 70
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H46); Dec. : CHR\$(27);CHR\$(70);
<b>Explanation</b>	Ends emphasized printing started by ESC E.

---

---

**ESC G****Select Double-Strike Printing**

---

---

<b>Function</b>	Start Double-Strike Printing
<b>Code</b>	Hex. : 1B 47 Dec. : 27 71
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H47); Dec. : CHR\$(27);CHR\$(71);
<b>Explanation</b>	Starts double-strike printing. In the double-strike printing mode, characters are printed twice with a one-dot vertical shift.

---

---

**ESC H****Cancel Double-Strike Printing**

---

---

<b>Function</b>	Stop Double-Strike Printing
<b>Code</b>	Hex. : 1B 48 Dec. : 27 72
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H48); Dec. : CHR\$(27);CHR\$(72);
<b>Explanation</b>	Cancels double-strike printing started by ESC G.

**ESC I n**

**Select Print Mode (XL24)**

**Function**

Select Print Mode

**Code**

Hex. : 1B 49 *n*  
Dec. : 27 73 *n*

**BASIC Format**

Hex. : CHR\$(&H1B);CHR\$(&H49);CHR\$(*n*);  
Dec. : CHR\$(27);CHR\$(73);CHR\$(*n*);

**Explanation**

Selects the normal font or the download font according to the following list.

Hex.	Dec.	Function
00	0	Normal(draft) 10 CPI sans-serif (default)
08	8	Normal(draft) 12 CPI (from 10 CPI draft)
10	16	Normal(draft) 17 CPI (from 17 CPI draft)
02	2	Letter quality 10 CPI courier
0A	10	Letter quality 12 CPI Helvetica elite
12	18	Letter quality 17 CPI courier
03	3	Letter quality proportional
04	4	Downloaded 10 CPI draft
0C	12	Downloaded 12 CPI draft (from downloaded 10 CPI draft)
14	20	17 CPI draft (from downloaded 10 CPI draft)
06	6	Letter quality downloaded 10 CPI
0E	14	Letter quality downloaded 12 CPI
16	22	Letter quality 17 CPI (from downloaded 10 CPI LQ)
07	7	Letter quality downloaded proportional



If non-existent font or value not listed above is selected , this code is ignored.

ESC J *n*

## Perform Graphics Variable Line Spacing

**Function**

Perform Graphics Variable Line Spacing

**Code**Hex. : 1B 4A *n*  
Dec. : 27 74 *n***BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H4A);CHR\$(*n*);  
Dec. : CHR\$(27);CHR\$(74);CHR\$(*n*);**Explanation**

- LQ1050: Prints any data in the print buffer and advances the paper *n*/180 inches. *n* is a one-byte value from 0 to 255. This code does not affect subsequent line spacing and does not move the printhead to column 1.
- XL24: Prints any data in the print buffer and advances the paper in 1/216 inches increment. The base unit can be changed by "ESC [ \". For example, when the base unit is 1/216 inches, "ESC J 10" gives a line spacing of 10/216 inches. However value of multiples of 3 is recommended for exact advancement. *n* is a one-byte value from 0 to 255. Use the following list as a guideline.

Line Spacing	<i>n</i>
8-dot	24
10.0 mm	85
8 LPI	27
6 LPI	36



The graphics line spacing value is not stored, so "ESC J *n*" must be sent to the printer each time.

- AGM: In AGM mode, this code advances the paper in 1/180 inch increments.

If you want to make the printing start position to the beginning of line automatically after the command ESC J *n*, select Feed+CR for the item ESC J in menu list.

## ESC K $n_1 n_2 v_1 \dots v_n$

## Normal Density Bit-Image Graphics

### Function

Normal Density Bit-Image Graphics

### Code

Hex. : 1B 4B  $n_1 n_2 v_1 \dots v_n$

Dec. : 27 75  $n_1 n_2 v_1 \dots v_n$

### BASIC Format

Hex. : CHR\$( &H1B ); CHR\$( &H4B ); CHR\$(  $n_1$  ); CHR\$(  $n_2$  );  
CHR\$(  $v_1$  ); ...; CHR\$(  $v_n$  );

Dec. : CHR\$( 27 ); CHR\$( 75 ); CHR\$(  $n_1$  ); CHR\$(  $n_2$  ); CHR\$(  $v_1$  ); ...;  
CHR\$(  $v_n$  );

### Explanation

Sends bit image data which is 60 DPI horizontally and 72 DPI vertically. You can print 480 dots on 8 inch line and 816 dots on 13.6 inch line.  $n_1$  and  $n_2$  specify the total number of bytes of bit image data according to the following formula.

$$\text{total number of byte} = n_1 + (n_2 \times 256)$$

The eight bits of data  $v_i$ ,  $0 \leq v_i \leq 255$ , are mapped onto the 20 printhead pins in the following way.

Bit	Value	Pins	Remarks
7	128	1,2	If dots 7 and 6 are printed, pin 3 is used.
6	64	4,5	
5	32	6,7	If dots 5 and 4 are printed, pin 8 is used.
4	16	9,10	
3	8	11,12	If dots 3 and 2 are printed, pin 13 is used.
2	4	14,15	
1	2	16,17	If dots 1 and 0 are printed, pin 18 is used.
0	1	19,20	

For example, if  $v_i$  is 198(binary 11000110), pins 1, 2, 3, 4, 5, 14, 15, 16, and 17 prints.



All data that goes beyond the current margin is discarded.

---



---

**ESC L  $n_1 n_2 v_1 \dots v_n$** 
**Double Density Bit-Image Graphics**

<b>Function</b>	Double Density Bit-Image Graphics
<b>Code</b>	Hex. : 1B 4C $n_1 n_2 v_1 \dots v_n$ Dec. : 27 76 $n_1 n_2 v_1 \dots v_n$
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H4C);CHR\$( $n_1$ );CHR\$( $n_2$ ); CHR\$( $v_1$ ); ... CHR\$( $v_n$ ); Dec. : CHR\$(27);CHR\$(76);CHR\$( $n_1$ );CHR\$( $n_2$ ); CHR\$( $v_1$ ); ... CHR\$( $v_n$ );
<b>Explanation</b>	Sends bit-image data which is 120 DPI horizontally and 72 DPI vertically. You can print 960 dots on 8 inch line and 1632 dots on 13.6 inch line. The bit-image is printed at half the speed of normal density bit-image graphics. This code can print horizontally adjacent dots. The meanings of $n_1$ , $n_2$ , $v_i$ are same as "ESC K".

---



---

**ESC M**
**Select Elite Width (LQ1050)**

<b>Function</b>	Select 12 Pitch
<b>Code</b>	Hex. : 1B 4D Dec. : 27 77
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H4D); Dec. : CHR\$(27);CHR\$(77);
<b>Explanation</b>	Selects character spacing of 12 CPI.

**ESC N *n*****Set Automatic Perforation Skip**

**Function** Set Automatic Perforation Skip

**Code** Hex. : 1B 4E *n*  
Dec. : 27 78 *n*

**BASIC Format** Hex. : CHR\$(&H1B);CHR\$(&H4E);CHR\$(*n*);  
Dec. : CHR\$(27);CHR\$(78);CHR\$(*n*);

**Explanation** Specifies the number of lines that are skipped at the end of each page. This is for perforation skip between pages of continuous paper. Automatic perforation skip is cancelled by "ESC O" and "ESC C".

- LQ1050: *n* is a one-byte value from 1 to 127.  
Not affected by changing line feed pitch.
- XL24: *n* is a one-byte value from 0 to 255.

**ESC O****Cancel Automatic Perforation Skip**

**Function** Cancel Automatic Perforation Skip

**Code** Hex. : 1B 4F  
Dec. : 27 79

**BASIC Format** Hex. : CHR\$(&H1B);CHR\$(&H4F);  
Dec. : CHR\$(27);CHR\$(79);

**Explanation** Cancels an automatic perforation skip set by "ESC N".

**ESC P****Select Pica Width (LQ 1050)**

**Function** Select 10 Pitch

**Code** Hex. : 1B 50  
Dec. : 27 80

**BASIC Format** Hex. : CHR\$(&H1B);CHR\$(&H50);  
Dec. : CHR\$(27);CHR\$(80);

**Explanation** Selects character spacing of 10 CPI, and cancels 12 CPI(elite) or 15 CPI.

ESC P *n*

## Proportional Space Mode (XL24)

**Function**

Proportional Space Mode

**Code**Hex. : 1B 50 *n*Dec. : 27 80 *n***BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H50);CHR\$(*n*);Dec. : CHR\$(27);CHR\$(80);CHR\$(*n*);**Explanation**

Controls proportional spacing which provides additional amount of white space around each character. When  $n = 1$ , proportional spacing is started, and when  $n = 0$ , it is stopped.

ESC Q *n*Set Right Margin (LQ1050)  
Deselect Printer (XL24)**Function**

- LQ1050: Set Right Margin

- XL24: Deselect Printer

**Code**Hex. : 1B 51 *n*Dec. : 27 81 *n***BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H51);CHR\$(*n*);Dec. : CHR\$(27);CHR\$(81);CHR\$(*n*);**Explanation**

- LQ1050: Sets the right margin.  $n$  gives the margin width in columns of the current pitch. In the proportional mode, the current pitch is 10. This code clears all tab stop settings and characters in the print buffer. The right margin is stored in memory as an absolute distance from the home position. Therefore once the right margin has been set, it does not shift if the character pitch is changed. The range of  $n$  is 1 to 255
- XL24: Tells the printer not to accept data from the computer. This code is for diagnostic purposes. Resetting the printer or "DC1" cancels this code.

## ESC R

### Set All Tabs to Power-On Settings (XL24)

**Function** Set All Tabs to Power-On settings

**Code** Hex. : 1B 52  
Dec. : 27 82

**BASIC Format** Hex. : CHR\$(&H1B);CHR\$(&H52);  
Dec. : CHR\$(27);CHR\$(82);

**Explanation** Sets the horizontal tab stops at every 8th columns, starting at column 9. This code clears all vertical tab stops.

## ESC R *n*

### Select International Character Set (LQ1050)

**Function** Select International Character Set

**Code** Hex. : 1B 52 *n*  
Dec. : 27 82 *n*

**BASIC Format** Hex. : CHR\$(&H1B);CHR\$(&H52);CHR\$(*n*);  
Dec. : CHR\$(27);CHR\$(82);CHR\$(*n*);

**Explanation** Selects a character set in the following way(Refer to A.2 EPSON International Character Table):

<i>n</i>	Country	<i>n</i>	Country
0	USA	7	Spain I
1	France	8	Japan
2	Germany	9	Norway
3	U.K	10	Denmark II
4	Denmark I	11	Spain II
5	Sweden	12	Latin America
6	Italy		

ESC S *n*

## Set Sub/Superscript Printing

<b>Function</b>	Set Subscript or Superscript Printing
<b>Code</b>	Hex. : 1B 53 <i>n</i> Dec. : 27 83 <i>n</i>
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H53);CHR\$( <i>n</i> ); Dec. : CHR\$(27);CHR\$(83);CHR\$( <i>n</i> );
<b>Explanation</b>	When <i>n</i> = 1, the subscript printing is started, and when <i>n</i> = 0, the superscript printing is started. Subscript or superscript printing is cancelled by "ESC T".

## ESC T

## Cancel Sub/Superscript Printing

<b>Function</b>	Cancel Subscript or Superscript Printing
<b>Code</b>	Hex. : 1B 54 Dec. : 27 84
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H54); Dec. : CHR\$(27);CHR\$(84);
<b>Explanation</b>	Ends subscript or superscript printing that was started by "ESC S". If the printer is not in subscript or superscript mode, this code is ignored.

ESC U *n*

## Turn Unidirectional Mode On/Off

<b>Function</b>	Set Print Direction
<b>Code</b>	Hex. : 1B 55 <i>n</i> Dec. : 27 85 <i>n</i>
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H55);CHR\$( <i>n</i> ); Dec. : CHR\$(27);CHR\$(85);CHR\$( <i>n</i> );
<b>Explanation</b>	When <i>n</i> = 1, left-to-right one direction printing is set. Normal two direction printing is resumed by "ESC U 0".



Using one direction printing, you can get the more accurate positioning at the expense of being slow.

**ESC W *n*****Turn Double-Wide Mode On/Off****Function**

Continuous Double-Wide Printing

**Code**Hex. : 1B 57 *n*Dec. : 27 87 *n***BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H57);CHR\$(*n*);Dec. : CHR\$(27);CHR\$(87);CHR\$(*n*);**Explanation**

When *n* = 1, the double-wide printing is set. "ESC W 0" ends the double-wide printing.

**ESC X *n m*****Set Horizontal Margins (XL24)****Function**

Set Horizontal Margins

**Code**Hex. : 1B 58 *n m*Dec. : 27 88 *n m***BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H58);CHR\$(*n*);CHR\$(*m*);Dec. : CHR\$(27);CHR\$(88);CHR\$(*n*);CHR\$(*m*);**Explanation**

Specifies left and right margins. *n* is the left margin and *m* is the right margin and they are stored in absolute displacements from the left edge of the paper. The units of *n* and *m* are the character width at the current pitch. When *n* or *m* is 0, the current margins are used. *n* and *m* are one-byte value from 0 to 255.

If the values of *n* & *m* are greater than 8 inch(Pinovia 2430) or 13.6 inch (Pinovia 2440) then this command is ignored.

ESC Y  $n_1 n_2 v_1 \dots v_n$ 

## Double Density High Speed Graphics

**Function**

Double Density High Speed Graphics

**Code**Hex. : 1B 59  $n_1 n_2 v_1 \dots v_n$ Dec. : 27 89  $n_1 n_2 v_1 \dots v_n$ **BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H59);CHR\$( $n_1$ );CHR\$( $n_2$ );CHR\$( $v_1$ );...;CHR\$( $v_n$ );Dec. : CHR\$(27);CHR\$(89);CHR\$( $n_1$ );CHR\$( $n_2$ );CHR\$( $v_1$ );...;CHR\$( $v_n$ );**Explanation**

Sends bit-image data which is 120 DPI horizontally and 72 DPI vertically. You can print 960 dots on 8.0 inch line and 1632 dots on 13.6 inch line. This code prints graphic image at normal speed but you can not print horizontally adjacent dots using this code. The meanings of  $n_1$ ,  $n_2$ ,  $v_i$  are the same as "ESC K".

ESC Z  $n_1 n_2 v_1 \dots v_n$ 

## Quadruple Density Bit-Image Graphics

**Function**

Quadruple Density Bit-Image Graphics

**Code**Hex. : 1B 5A  $n_1 n_2 v_1 \dots v_n$ Dec. : 27 90  $n_1 n_2 v_1 \dots v_n$ **BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H5A);CHR\$( $n_1$ );CHR\$( $n_2$ );CHR\$( $v_1$ );...;CHR\$( $v_n$ );Dec. : CHR\$(27);CHR\$(90);CHR\$( $n_1$ );CHR\$( $n_2$ );CHR\$( $v_1$ );...;CHR\$( $v_n$ );**Explanation**

Sends bit-image data which is 240 DPI horizontally and 72 DPI vertically. You can print 1920 dots on 8.0 inch line and 3264 dots on 13.6 inch line. This code prints graphic image at half speed and you can not print horizontally adjacent dots using this code. The meanings of  $n_1$ ,  $n_2$ ,  $v_i$  are the same as "ESC K".

**ESC [ @  $n_1 n_2 m_1 m_2 m_3 m_4$**

**Double-High Printing (XL24)**

**Function** Double-High Printing

**Code**  
 Hex. : 1B 5B 40  $n_1 n_2 m_1 m_2 m_3 m_4$   
 Dec. : 27 91 64  $n_1 n_2 m_1 m_2 m_3 m_4$

**BASIC Format**  
 Hex. : CHR\$(&H1B);CHR\$(&H5B);CHR\$(&H40);CHR\$( $n_1$ );  
 CHR\$( $n_2$ );CHR\$( $m_1$ );CHR\$( $m_2$ );CHR\$( $m_3$ );CHR\$( $m_4$ );  
 Dec. : CHR\$(27);CHR\$(91);CHR\$(64);CHR\$( $n_1$ );CHR\$( $n_2$ );  
 CHR\$( $m_1$ );CHR\$( $m_2$ );CHR\$( $m_3$ );CHR\$( $m_4$ );

**Explanation** Prints subsequent text as double-wide, double-high, or both, and sets double line spacing or single line spacing.  $n_1$  and  $n_2$  specify the number of mode bytes contained. Normally,  $n_1$  is 4 and  $n_2$  is 0.  $m_1$  and  $m_2$  are always NULL characters(Hex. 00). The high half byte of  $m_3$  determines the line spacing and the low half byte determines the character height in the following way.

Hex.	Dec.	Function
00	0	No change
01	1	Line feeds unchanged, single-high character
02	2	Line feeds unchanged, double-high character
10	16	Single line feeds, character height unchanged
11	17	Single line feeds, single-high character
12	18	Single line feeds, double-high character
20	32	Double line feeds, character height unchanged
21	33	Double line feeds, single-high character
22	34	Double line feeds, double-high character

$m_4$  determines the character width in the following way.

Hex.	Dec.	Function
00	0	No change
01	1	Single-wide character
02	2	Double-wide character

## ESC [ \

## Set Vertical Units (XL24)

<b>Function</b>	Set Vertical Units
<b>Code</b>	Hex. : 1B 5B 5C 04 00 00 00 <i>n m</i> Dec. : 27 91 92 4 0 0 0 <i>n m</i>
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H5B);CHR\$(&H5C);CHR\$(4); CHR\$(0);CHR\$(0);CHR\$(0);CHR\$( <i>n</i> );CHR\$( <i>m</i> ); Dec. : CHR\$(27);CHR\$(91);CHR\$(92);CHR\$(4);CHR\$(0); CHR\$(0);CHR\$(0);CHR\$( <i>n</i> );CHR\$( <i>m</i> );
<b>Explanation</b>	Changes the base units for the graphics line spacing commands, "ESC J" and "ESC 3". The default is 1/216 inch, with <i>n</i> = 216(Hex. D8) and <i>m</i> = 0(Hex. 00). The only supported alternative is 1/180 inch, with <i>n</i> = 180 (Hex. B4) and <i>m</i> = 0(Hex. 00). Any unsupported value is ignored.

ESC [ g *n<sub>1</sub> n<sub>2</sub> m data*

## High-Resolution Graphics (XL24)

<b>Function</b>	High-Resolution Graphics
<b>Code</b>	Hex. : 1B 5B 67 <i>n<sub>1</sub> n<sub>2</sub> m data</i> Dec. : 27 91 103 <i>n<sub>1</sub> n<sub>2</sub> m data</i>
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H5B);CHR\$(&H67); CHR\$( <i>n<sub>1</sub></i> );CHR\$( <i>n<sub>2</sub></i> );CHR\$( <i>m</i> );CHR\$( <i>data</i> ); Dec. : CHR\$(27);CHR\$(91);CHR\$(103); CHR\$( <i>n<sub>1</sub></i> );CHR\$( <i>n<sub>2</sub></i> );CHR\$( <i>m</i> );CHR\$( <i>data</i> );
<b>Explanation</b>	Sends data for bit-image graphics. This code allows selection of eight modes for both 8 pin and 24 pin graphics.  <i>n<sub>1</sub></i> and <i>n<sub>2</sub></i> Give the number of bytes of graphic data plus one, where <i>n<sub>1</sub></i> is the low byte and <i>n<sub>2</sub></i> is the high byte.  <i>m</i> Selects the graphics mode in the following way. <i>m</i> is a one-byte value.

Mode	Hor. Density	Pins	Comment
0	60	8	Same as ESC K
1	120	8	Same as ESC L
2	120	8	Same as ESC Y
3	240	8	Same as ESC Z
8	60	24	High resolution for ESC K
9	120	24	High resolution for ESC L
11	180	24	
12	360	24	

*data*

The data is organized by bytes. For 8 pin modes, it is mapped to the pins identically to ESC K. For 24 pin modes, the data has three bytes per slice, with the MSB of the first byte mapping to the top pin and the LSB of the third byte mapping to the bottom pin.



Modes 2, 3 and 12 use consecutive dot elimination. No two horizontally adjacent dots can be printed.

ESC \  $n_1 n_2$

Move Relative Position (LQ1050)  
Print Continuously from All Characters Table (XL24)

**Function**

- LQ1050: Set Relative Position
- XL24: Print Continuously from All Characters Table

**Code**

Hex. : 1B 5C  $n_1 n_2$   
Dec. : 27 92  $n_1 n_2$

**BASIC Format**

Hex. : CHR\$(&H1B);CHR\$(&H5C);CHR\$( $n_1$ );CHR\$( $n_2$ );  
Dec. : CHR\$(27);CHR\$(92);CHR\$( $n_1$ );CHR\$( $n_2$ );

**Explanation**

- LQ1050: Determines the position at which subsequent data will be printed. The position is relative to the current position and the displacement is calculated using the following formula:

$$\text{Right displacement} = n_1 + (n_2 \times 256)$$

$$\text{Left displacement} = 65536 - [n_1 + (n_2 \times 256)].$$

The base unit of the displacement is 1/120 inch in draft, and 1/180 inch in LQ or proportional mode.

## Chapter 6

---

- XL24: Prints the next  $n_1 + n_2 \times 256$  characters from the All Characters Table. Using this code, you can print codes that the printer normally recognizes as control codes. Refer to A.5 IBM All Character Set Table.

---

### ESC ^

### Print Single Character from the All Characters Table (XL24)

---

**Function**

Print Single Character from the All Characters Table

**Code**

Hex. : 1B 5E  
Dec. : 27 94

**BASIC Format**

Hex. : CHR\$(&H1B);CHR\$(&H5E);  
Dec. : CHR\$(27);CHR\$(94);

**Explanation**

Prints the next one character from the All Characters Table(Refer to A. 5). Using this code you can print codes that the printer normally recognizes as control codes. To print more than one character from the All Characters Table, use "ESC\".

---

### ESC \_ n

### Continuous Overscore (XL24)

---

**Function**

Continuous Overscore

**Code**

Hex. : 1B 5F n  
Dec. : 27 95 n

**BASIC Format**

Hex. : CHR\$(&H1B);CHR\$(&H5F);CHR\$(n);  
Dec. : CHR\$(27);CHR\$(95);CHR\$(n);

**Explanation**

When  $n = 1$ , overscoring begins. All characters that follow including spaces are overscored. Spaces by HT are not overscored.

When  $n = 0$ , overscoring stops.

**ESC a n**

Select Justification (LQ1050)

**Function** Select Justification

**Code** Hex. : 1B 61 *n*  
Dec. : 27 97 *n*

**BASIC Format** Hex. : CHR\$( &H1B ); CHR\$( &H61 ); CHR\$( *n* );  
Dec. : CHR\$( 27 ); CHR\$( 97 ); CHR\$( *n* );

**Explanation** Selects justification in the following way:

<i>n</i>	Justification
0	Left justification
1	Center justification
2	Right justification
3	Full justification

Default selection is 0. Full justification is performed when the print buffer becomes full. HT, BS, and spacing commands can not be used in full justification. There must not be CR in full justification.

**ESC b c n<sub>1</sub> n<sub>2</sub> ... 0**

Set Vertical Tabs in Channel (LQ1050)

**Function** Set Vertical Tabs in Channel

**Code** Hex. : 1B 64 *c n<sub>1</sub> n<sub>2</sub> ... 00*  
Dec. : 27 100 *c n<sub>1</sub> n<sub>2</sub> ... 0*

**BASIC Format** Hex. : CHR\$( &H1B ); CHR\$( &H64 );  
CHR\$( *c* ); CHR\$( *n<sub>1</sub>* ); CHR\$( *n<sub>2</sub>* ); ... ; CHR\$( 00 );  
Dec. : CHR\$( 27 ); CHR\$( 100 );  
CHR\$( *c* ); CHR\$( *n<sub>1</sub>* ); CHR\$( *n<sub>2</sub>* ); ... ; CHR\$( 0 );

**Explanation** Same as "ESC B", except that *c* determines a channel for the vertical tabs. *c* is a one-byte value from 0 to 7. "ESC b c 0" clears all tab stops in channel *c*.

ESC d  $n_1 n_2$ 

## Relative Move in Line Forward (XL24)

<b>Function</b>	Relative Move in Line Forward( $n/120$ inch)
<b>Code</b>	Hex. : 1B 64 $n_1 n_2$ Dec. : 27 100 $n_1 n_2$
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H64);CHR\$( $n_1$ );CHR\$( $n_2$ ); Dec. : CHR\$(27);CHR\$(100);CHR\$( $n_1$ );CHR\$( $n_2$ );
<b>Explanation</b>	Moves the printhead to the right by the distance specified by $n_1, n_2$ . Any value that causes the printhead to move to the right of the current margin cancels this command. If overscoring and/or underscoring is turned on, the space of the move is overscored and/or underscored. The distance is calculated using the following formula:  distance = $(n_1 + n_2 \times 256) / 120$ inches.

ESC e  $m n$ 

## Set Relative Tabs (LQ1050)

<b>Function</b>	Set Relative Tabs
<b>Code</b>	Hex. : 1B 64 $m n$ Dec. : 27 101 $m n$
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H64);CHR\$( $m$ );CHR\$( $n$ ); Dec. : CHR\$(27);CHR\$(101);CHR\$( $m$ );CHR\$( $n$ );
<b>Explanation</b>	When $m = 0$ , sets horizontal tabs with an interval of $n$ columns. This tab settings are not affected by changes in character pitch.  When $m = 1$ , sets vertical tabs with an interval of $n$ lines. This tab settings are not affected by changes in line spacing. The value of $n$ is 0 to 127.

**ESC f m n****Set Print Position (LQ1050)****Function**

Set Print Position

**Code**Hex. : 1B 66 *m n*Dec. : 27 102 *m n***BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H66);CHR\$(*m*);CHR\$(*n*);Dec. : CHR\$(27);CHR\$(102);CHR\$(*m*);CHR\$(*n*);**Explanation**

When *m* = 0, the printer moves the printhead any number of columns to the right from current position. *n* specifies the number of columns to move ranging from 0 to 127. The result is same as printing *n* spaces with the current character pitch.

When *m* = 1, the printer advances the paper any number of lines. *n* specifies the number of lines to move ranging from 0 to 127. The result is same as performing *n* LF's with the current line spacing.

**ESC g****Select 15 Pitch (LQ1050)****Function**

Select 15 Pitch

**Code**

Hex. : 1B 67

Dec. : 27 103

**BASIC Format**

Hex. : CHR\$(&amp;H1B);CHR\$(&amp;H67);

Dec. : CHR\$(27);CHR\$(103);

**Explanation**

Selects character spacing of 15 CPI. This mode cannot be combined with condensed mode.

**ESC j****Stop Printing (XL24)****Function**

Stop Printing

**Code**Hex. :- 1B 6A  
Dec. : 27 106**BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H6A);  
Dec. : CHR\$(27);CHR\$(106);**Explanation**

Stops the printer. The printer goes off line and a BUSY signal is sent to the computer. Data in the buffer is printed before the printer stops.

**ESC k n****Select Font****Function**

Select Typestyle Family

**Code**Hex. : 1B 6B *n*  
Dec. : 27 107 *n***BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H6B);CHR\$(*n*);  
Dec. : CHR\$(27);CHR\$(107);CHR\$(*n*);**Explanation**

Selects one of the LQ typestyles in the following way:

<i>n</i>	Typestyle
0	Roman
1	Sans-Serif
2	Courier
3	H-Gothic
4	T.B.D (Option)
5	T.B.D (Option)
6	T.B.D (Option)
7	T.B.D (Option)

**ESC | *n*****Set Left Margin (LQ1050)****Function**

Set Left Margin

**Code**Hex. : 1B 6C *n*Dec. : 27 108 *n***BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H6C);CHR\$(*n*);Dec. : CHR\$(27);CHR\$(108);CHR\$(*n*);**Explanation**

Sets the left margin. *n* gives the margin measured in columns of the current pitch. In the proportional mode, the current pitch is 10. This code clears all tab stop settings and characters in the print buffer. The margin is stored in memory as an absolute distance from the home position. Therefore once the left margin has been set, it does not shift the character pitch is changed.

**ESC p *n*****Turn Proportional Mode On/Off (LQ1050)****Function**

Control Proportional Mode

**Code**Hex. : 1B 70 *n*Dec. : 27 112 *n***BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H70);CHR\$(*n*);Dec. : CHR\$(27);CHR\$(112);CHR\$(*n*);**Explanation**

When *n* = 1, the proportional mode is turned on, and when *n* = 0, it is turned off. In the proportional mode, each character receives variable space according to their width. For example 'W' has more space than 'i'.

**ESC s n****Select Half Speed Mode (LQ1050)**

<b>Function</b>	Control Half-Speed Print Mode
<b>Code</b>	Hex. : 1B 73 <i>n</i> Dec. : 27 115 <i>n</i>
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H73);CHR\$( <i>n</i> ); Dec. : CHR\$(27);CHR\$(115);CHR\$( <i>n</i> );
<b>Explanation</b>	When <i>n</i> = 1, this code sets the half-speed print mode to reduce the noise generated by the printer.  When <i>n</i> = 0, the half-speed print mode is turned off.  Half speed is effective in Draft mode.

**ESC t n****Select Graphics or Italics Character Set (LQ1050)**

<b>Function</b>	Select Character Set
<b>Code</b>	Hex. : 1B 74 <i>n</i> Dec. : 27 116 <i>n</i>
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H74);CHR\$( <i>n</i> ); Dec. : CHR\$(27);CHR\$(116);CHR\$( <i>n</i> );
<b>Explanation</b>	When <i>n</i> = 0, a character between 80H and FFH in the EPSON Italic Character Set is printed.  When <i>n</i> = 1, a character between 80H and FFH in the IBM Graphic Character Set is printed.

**ESC x n****Select Letter Quality or Draft (LQ1050)**

<b>Function</b>	Select LQ or Draft
<b>Code</b>	Hex. : 1B 78 <i>n</i> Dec. : 27 120 <i>n</i>
<b>BASIC Format</b>	Hex. : CHR\$(&H1B);CHR\$(&H78);CHR\$( <i>n</i> ); Dec. : CHR\$(27);CHR\$(120);CHR\$( <i>n</i> );
<b>Explanation</b>	When <i>n</i> = 0, the draft mode is selected, and when <i>n</i> = 1, the letter quality (LQ) mode is selected.

---

---

**ESC x n****Select Letter Quality or Draft (LQ1050)**

---

---

**Function**

Select LQ or Draft

**Code**Hex. : 1B 78 *n*Dec. : 27 120 *n***BASIC Format**Hex. : CHR\$(&H1B);CHR\$(&H78);CHR\$(*n*);Dec. : CHR\$(27);CHR\$(120);CHR\$(*n*);**Explanation**

When  $n = 0$ , the draft mode is selected, and when  $n = 1$ , the letter quality (LQ) mode is selected.

