

P/N. 920-011312-01
Edition 2

AUG.14

EZ-1200/EZ-1300 Programmer's manual



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1. Commands

1-1. EZPL

The EZPL (EZ Programming Language) is high-level label definition and printer control language. The features are:

- u The data fields are stored and processed until the printing instruction is received.
- u All the data can be rotated.
- u Images can be downloaded and stored.

There are three basic types of commands :

Control ◦

Setup ◦

Label format ◦

- u Cause the Printer to take action immediately, such as cleaning memory, feeding label.

Table 1.1 Control Commands		
Description	Command	Page
Date and Time setup	~Dm, d, y, h, l, s	4
Graphic download memory	~Ea, name, length	4
Graphic mode	~G	4
Bit-Mapped font download	~Jn	4
Acknowledge form RS-232	~Kn	5
Clear memory	~MDELx, name	5
Clear Asia font	~MDELA,x	5
Print last label	~Px	5
Row Offset Adjustment	~Q±x	5
Rotate printing	~Rx	5
Printer head testing	~T	5
Print version message	~V	5
Print the available space and data name in the memory	~Xn	6
Reset Printer	~Z	6

- u Contain the printer control instructions, configuration instructions and image downloading instructions.

Table 1.2 Command Setup		
Description	Command	Page
Printing Mode	^Ax	6
Set the backward length	^Bx	6
Number of copies per label	^Cx	6
Number of labels per cut	^Dx	6
Stop position setting	^Ex	6
Download label format	^Fname	7
Setting Print darkness	^Hx	7
Recall label format	^Kname	7
Label format begin sign	^L	7
Set the forward length	^Mx	7
Stripper sensor	^Ox	7
Number of pages printed	^Px	7
Label length	^Qx, y (,z±)	8
Row column adjustment	^Rx	8
Speed setting	^Sx	8
Label width setting	^Wxx	8
Serial port translation setting	^Yp1, p2, p3, p4	8

- u Define field data, such as Line, Rectangle, Barcode, Text and Image.

Table 1.3 Label Formatting Commands		
Description	Command	Page
Text	At, x, y, x_mul, y_mul, gap, rotation, data	9
Barcode	Bt, x, y, narrow, wide, height, rotation, readable, data	9
Serial number setting	Cx, ys±value, prompt	10
Define date layout	Daalbbcc	10
Terminate label formatting mode and print label	E	10
Graphic command	Gwxxx	10
Table	Hx, y, row_count, row_width, line_width	10
Line command	La, x, y, x1, y1	11
Maxicode	Mx, y, sno, nos, mode, ccode, zip, class, rotation, message	11
PDF 417	Px, y, w, h, r, c, ec, len	11
DataMatrix Code	Xp1, p2, p3, data	11
Pattern command	Qx, y, width, height	12
Rectangle	Rx, y, x1, y1, lrw, ubw	12
Define time layout formatting	Thmls	12
Downloading character sets to memory	Vt, x, y, x_mul, y_mul, gap, rotation, data	12
Define variable field	Vxx, length, prompt	12
Graphics	Yx, y, name	13

1-2. Language Description

Rules and syntax

EZPL commands have parameter strings associated with them. The command begins with a letter as ID for each function. The comma (,) is the delimiter to separate each parameter. The “CR” Carriage Return. Control and Setup commands use the tilde (~) and caret (^) prefix. Label formatting commands has no prefix. Example: “~Ea,name,length”, “E” is an image download command, and (a,name,length) are three parameters.

Control commands

1. Date/Time setting

Syntax	~Dm, d, y, h, i, s
Parameter	m = month (01~12) d = date (01~31) y = year (last two digits of year) h = hour (00~23) i = minutes (00~59) s = seconds (00~59)
Description	The printer date and time setting. After setting, the printer will record the value even turn off the printer. If want to add the date/time in the label format, should combine with text command ^T and ^D.

2. Graphic download memory

Syntax	~Ea, name, length
Parameter	a = P or p : PCX file a = B or b : BMP file name : Name of image(up to 20 character) length : Length of image byte
Description	Download monochrome image onto memory. Printer will beep 1 time after completely downloaded. If you use the same file name, the printer will show “REPEAT FILE NAME”, and the download will be not being accepted (refer page 19)

3. Graphic mond

Syntax	~G
Parameter	None
Description	Printer is in the image-receiving mode. Send the command ~G, the Image data is directly set from host to the printing buffer.

4. Bit-Mapped font download

Syntax	~Jn
Parameters	n = character, From a ~ z or A ~ Z; at least up to 26 characters.
Description	The command used for font loading. Printer will beep 1 time after completely downloaded. If use the same file name, the printer will show “E”. The downloaded font are compatible with HP Laser Jet II Plus (PCL-4).
	Download the “HVR00E1A.SFP” text file to memory. Use “A” to do the character code name.
Example	~JA COPY HVR00E1A.SFP PRN/B Define A as HVR00E1A.SFP Send the order with the DOS mode.

5. Acknowledge from RS-232

Syntax	~Kn
Parameter	n = 0, disable. n = 1, enable. °
Return value	Y
Description	Acknowledge a “Y (0D0A) ” from RS-232 back to host each printing label.

6. Clear memory

Syntax	~MDELx, name
Parameter	x =G, Clear(Graphic) x =F, Clear(Label Format) x =E, Clear (External Font) name: The name of the graphic, form and Bit-Mapped font. 【 Notice 】 If don't send the x and name (only send ~MDEL) , all the contents of memory will be cleared (Excluding Asia font).
Description	Able to delete individual files or erase entire flash memory.
Example	~MDELG, Bus The graphic “Bus” will be deleted.

7. Clear Asia font

Syntax	~MDELA, x
Parameter	x = 1 ~ 4
Description	x is the ID location for Downloading Asia font , clear the ID °
Example	~MDELA,1 Clear the ID 1 Asia font

8. Print Last Label

Syntax	~Px
Parameter	X = 1 ~ 32767
Description	This command will repeatedly print the indicated copies of the last label format. And if the format is with serial no. setting, the No. will continue when new label is setting.

9. Row Offset Adjustment

Syntax	~Q±x
Parameter	x=-36 ~ +36
Description	Adjust the label row offset position

10. Rotate Printing

Syntax	~Rx
Parameter	x = label width; from 1 ~ 104 (mm)
Description	Rotate the label format 180-degrees when printing (refer page 19) . To return to the original print direction, set the x value greater than 104 (x > 104).

11. Printer head testing

Syntax	~T
Parameter	None
Description	Print a pattern for the user to determine if the print head is damaged (refer to page 22) .

12. Print version message

Syntax	~V
Parameter	None
Description	Print firmware version. (refer to P22)

13. Print the available space and data name in the memory

Syntax	~Xn
Parameter	n = 1, print label format names and available space in memory. n = 2, print graphic names and available space in memory. n = 3, print Bit-Mapped font names and available space in memory. n = 4, print the name of the label formats, graphics, fonts, and available space in memory. n = 5, print Asia font names and available space in memory. n = 6, display the total printed length on the LCD
Description	Print the available space in the memory card (unit:bytes)

14. Reset printer

Syntax	~Z
Parameter	None
Description	Reset the printer. LED will flash once.

Setup commands

1. Printing mode

Syntax	^Ax	
Parameter	X = D or T	
Description	x = D , Direct thermal mode x = T , Thermal transfer mode	Direct Thermal mode Thermal Transfer mode, start the Ribbon Out function ◦

2. Set the backward length

Syntax	^Bx
Parameter	x = backward length (mm)
Description	Set the backward length of the paper.

3. Stop position setting

Syntax	^Mx
Parameter	x = forward length (mm)
Description	Set the forward length of the paper.

4. Stop position setting

Syntax	^Ex
Parameter	X = 0 ~ 40 (unit : mm)
Description	Feed paper to desired stop position. When Turn on peel-off function , Setting x =10 is better ◦ Use the label with Gap , Setting x =12 ; With cutter, it depends.

5. Number of copies per label

Syntax	^Cx
Parameter	x = 0 ~ 32767
Description	Number of copies of the same label (refer toP23)

6. Download label format

Syntax	^Fname data
Parameter	Name = name of label format (up to 20 bytes) Data = the data containing the label formatting command for this stored format.
Description	Download label format intomemory. After the download is finished, the printer will beep once. <div style="text-align: center;"> </div> <p>Same name inspection : If you use the same file name, the printer will print "REPEAT FILE NAME", and the download will be not be accepted. (refer to P21)</p>

7. Setting Print darkness

Syntax	^Hx
Parameter	x = 00 ~ 19
Description	Set printing darkness ◦ The value is larger the temeperature is higher.

8. Recal label format

Syntax	^Kname
Parameter	Name =name of recall label format (up to 20 bytes) (Refer to P22)
Description	Recall label format from external format. <div style="text-align: center;"> </div>

9. Label format begin sign

Syntax	^L
Parameter	None
Description	Set label begin sign

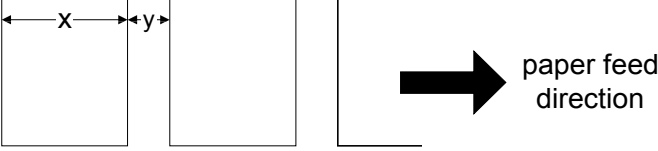
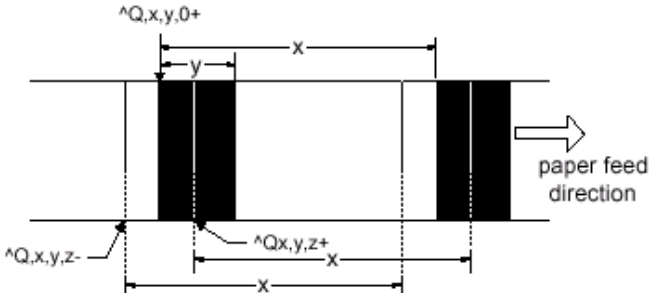
10. Stripper sensor

Syntax	^Ox
Parameter	x = 0 , stripper disable. x = 1 , Stripper enable
Description	Enable or disable the stripper sensor. When you use this command, it should be matched with ^Ex

11. Number of pages printed

Syntax	^Px
Parameter	x = 1 ~ 32767
Description	Set how many labels to print; and it will initiate the program.

12. Label length setting

Syntax	^Qx, y (,z±)	
Parameter	<p>:</p> <p>x = label length (mm)</p> <p>y = Gap length (mm)</p> <p>Plain paper :</p> <p>x = label length (mm)</p> <p>y = 0 (constant)</p> <p>z = feed paper length (mm)</p> <p>Black mark label :</p> <p>x = Label length (mm)</p> <p>y = Black mark width(mm)</p> <p>z = Black line to top of form position.</p> <p>z+ : When the position is outside the black mark.</p> <p>z- : When the position is within the black mark.</p>	
Description	Set label size (length, gap length, [plain paper feed length])	
1. Die Cut label: Command = ^Qx,y Example: ^Q25,3		
2. Black Mark label Command = ^Qx,y,z± Example: ^Q25,4,3+ (x= 25, y= 4, z= 3+)mm ^Q25,4,3- (x= 25, y= 4, z= 3-)mm		

13. Row column adjustment

Syntax	^Rx	
Parameter	x = 0 ~ 399 dots	
Response	None	
Description	Set left margin	

14. Speed setting

Syntax	^Sx	
Parameter	x=2 ~ 6 (inch/second)	
Description	Set printing speed	

15. Label width setting

Syntax	^Wxx	
Parameter	x= label width (mm)	
Description	Setting label width	

16. Serial Port translation setting

Syntax	^Yp1, p2, p3, p4	
Parameter	<p>p1 : Baud Rate (48 or 96 or 19 or 38)</p> <p>p2 : Parity (N, O, E)</p> <p>p3 : Number of data bits (7 or 8)</p> <p>p4 : Number of stop bits (1 or 2)</p>	<p>48=4800bps; 96=9600bps; 19=19200bps; 38=38400bps</p> <p>N=none parity; O=odd parity; E=even parity</p>
Description	Serial Port translation setting.	

Label formatting commands

1. Text command

Syntax	At, x, y, x_mul, y_mul, gap, rotation, data		
Parameter	t : font(A~H for Code page 850 ; font I for ASCII)		
	Font	Points	Font style
	A	6	CG Triumvirate
	B	8	CG Triumvirate
	C	10	CG Triumvirate
	D	12	CG Triumvirate
	E	14	CG Triumvirate
	F	18	CG Triumvirate
	G	24	CG Triumvirate
	H	30	CG Triumvirate
	I	16x26 dots for US ASCII 8 bit	
	t = Z	Asia font; GN font, FN font, Korea, Japanes	
	x : Hori of left-bottom position of text (unit : dot, 1 mm = 8 dots) y : Vert of left-bottom position of text (unit : dot, 1 mm = 8 dots) x_mul : Horizontally magnified up to 8 times as large. y_mul : Vertically magnified up to 8 times as large. gap : Distance of the character (unit : dot, 1 mm = 8 dots) rotation : The rotation of ASCII text (0-3) 0) 0° 1) 90° 2) 180° 3) 270° data : Data String, including the followings.		
	1. Constant 2. Date information (^D) 3. Time information (^T)		4. Serial variable (^Cx) 5. Variable data (^Vxx)

2. Barcode

Syntax	Bt, x, y, narrow, wide, height, rotation, readable, data			
Parameter	t : bar-code type			
	A	CODE 39	L	UPC E - Add ON 2
	A2	CODE 39 with check digit	M	UPC E - Add ON 5
	B	EAN 8	N	I 2 of 5
	C	EAN 8 - Add ON 2	O	Codabar
	D	EAN 8 - Add ON 5	P	Code 93
	E	EAN 13	Q	Code 128 (auto subset A/B/C)
	F	EAN 13 - Add ON 2	Q2	Code 128 (subset A/B/C)
	G	EAN 13 - Add ON 5	R	UCC 128
	H	UPC A	S	Post NET
	I	UPC A - Add ON 2	T	DUN 14 ONLY 90
	J	UPC A - Add ON 5	U	EAN 128
	K	UPC E	V	RPS 128
	x : Hori. Of left-bottom pos. of barcode (203DPI=8dot/mm ; 300DPI=12dot/mm) y : Vert. Of left-bottom pos. of barcode (203DPI=8dot/mm ; 300DPI=12dot/mm) narrow (x dimension): narrow bar from 1 ~ 10 dots (0.125 ~ 1.25 mm) ** DUN 14 narrow setting from 5 ~ 8 dots ; UPC/EAN narrow setting from 2 ~ 4 dots ** wide : wide bar from 2 ~ 30 dots (0.25 ~ 0.5 mm) ; ***CODE 39, 93, CODABAR & I 2 of 5-- height : height of barcode from 24 ~ 1200 dots. rotation : rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° readable : 0) label of; 1) label on data : bar-code data			
	1. Constant 2. Date (^D) 3. Time (^T)		4. Serial variable (^Cx) 5. Variable data (^Vxx)	

3. Serial Number setting

Syntax	Cx, ys±alue, prompt	
Parameter	x : 0 to 9 (up to 10 group) , maximum combination up to 3 groups y : select the decimal y = 0~9, Decimal y = A, Hexadecimal y = C, 0~9, A~Z s: start value of serial variable (up to 13 digit) ±value : Inc./Dec. value of serial variable (up to 12 digit) prompt : prompt of serial variable , have to combine with KP-180 (up to 20 digit)	
Example	Programmer : C0,000,+1,AA C1,AEE,+1,BB C2,CZYY,+1,CC AC,5,5,1,1,1,0,^C0^C1^C2	Printing result: 000EEZYY 001EFZYZ 002F0ZZ0 003F1ZZ1 004F2ZZ2 :

4. Define date layout

Syntax	Daa bb cc
Parameter	aa = Year y2 : Year with two digits (such as 97) y4 : Year with four digits (such as 1997) bb = Month me : Month in letters (JAN, FEB,) mn : Month in numeric (01, 02,) cc = 2 digits day = Separator, can be any ASCII character between decimal 32 to 63.
Description	Define the date layout for print out (refer page 23)

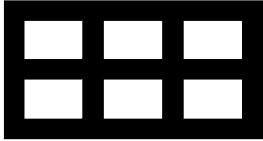
5. Terminate label formatting mode and print label

Syntax	E
Parameter	None
Description	End of formatting command; printer will print label after receiving this command.

6. Graphic command(sub-command of ~G)

Syntax	Gwxxx
Parameter	wxxx... w : byte number of image data (xxx...)
Description	This command is a sub-command of ~G. It is sent by binary data. W is the digits number byte of image data. For example, if the image file is 50 bytes, the command is G2xxx. (2: ASCII is 50 decimal)

7. Table

Syntax	Hx,y,row_count,col_count,row_width,col_width,line_width	
Parameter	x : left-upper Hori .pos. (dots) y : left-upper Vert. Pos. (dots) row_count : numbe of rows col_count : number of columns row_width : row width col_width : column width line_width : line width	
Description	Draw a table in the label.	
Example	H20,20,2,3,30,20,10	

8. Line command

Syntax	La,x, y, x1, y1
Parameter	A= o, overwrite line a = e, exclusive or line x : left-up; per horizontal(Hori.) pos. (dot; 1mm= 8dots) y : left-upper vertical (Vert.) pos. (dots) x1: right-bottom Hori. Pos. (dots) y1: right-bottom Vert. Pos. (dots)
Description	Define a line to render in the label ** The diagonal line draw is not available **

9. Maxicode

Syntax	Mx, y, sno, nos, mode, ccode, zip, class, rotation, message
Parameter	x : Hori. of left-bottom pos. of barcode (unit: dots). y : Vert. of left-bottom pos. of barcode (unit: dots). sno : symbol number, in set of symbols : 1 ~ 8. nos : number of symbols in set of symbols : 1 ~ 8 sets. mode : mode of maxicode 2, 3, 4 or 6. Ccode : 3 digits country code. zip : postal code 9 digits for US style postal code. If there is a 5 digits zip code, 4 zeros must be padded 6 digits alphanumeric zip code for non-US style postal code. class : service class, 3 digits numeric. rotation : rotation of barcode (0 : 0°). message : 1 ~ 84 characters.

10. PDF 417

Syntax	Px,y,w,h,r,c,ec,len Data
Parameters	x : Hori. of left-bottom pos. of barcode (unit : dots) y : Vert. of left-bottom pos. of barcode (unit : dots) w : Width (x dimension) of the narrowest element (bar or space) in the barcode. h : Height (y dimension) of each barcode row in the symbol. r : number of barcode rows, from 3 to 90. If you key in 0, printer will count all the rows. c : number of barcode columns, from 1 ~ 30. If you key in 0, printer will count the all columns. ec : error correction level: 0 ~ 8. len :number of encoded data bytes, including carriage returns ↵ and line feed. Data : data to be encoded(the length of the data is equal to len)

11. DataMatrix Code

Syntax	Xp1, p2, p3, data
Parameters	p1 : Hori. of left-bottom pos. of barcode (unit : dots). p2 : Vert. of left-bottom pos. of barcode (unit: dots). p3 : Engrge the DataMatrix Code 8 times (horiqontally and vertically). data : bar-code data (up to 500 characters).

12. Pattern command

Syntax	Qx, y, width, height Data...	
Parameters	x = Hori. of left-bottom pos. (unit : dots). y = Vert. of left-bottom pos. (unit : dots). width = width of graphic (unit : byte) height = height of graphic (unit : dots) (data length = width x height)	
Description		<p>Data send out 1 2 3 477 78 79 80</p> <p>width = 4 ; height = 20 (data length : 4x20 = 80)</p>

13. Rectangle

Syntax	Rx, y, x1,y1, lrw, ubw	
Parameter	x : left-upper Hori .pos. (dots) y : left-upper Vert. Pos. (dots) x1 : right-bottom Hori. Pos. (dots) y1 : right-bottom Vert. Pos. (dots) lrw : thickness of left, right border (dots) ubw : thickness of upper bottom border (dots)	
Description	Draw a rectangle in the label	

14. Define time layout formatting

Syntax	Th m s
Parameter	h = Hour format (2 digits, 00 ~ 23) m = Minute format (2 digits, 00 ~ 59) s = Second format (2 digits, 00 ~ 59) = Separator (It can be any separator between dec. 32 to 63 of ASCII).
Description	Define the time layout for internal real-time clock

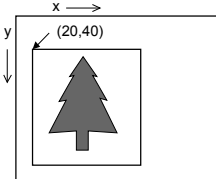
15. Downloading character sets to memory

Syntax	Vt, x, y, x_mul, y_mul, gap, rotation, data	
Parameter	t: arbitrary name of font; from a ~ z (or A ~ Z)	
Description	Download Bit-Mapped font to memory. All the parameters are the same as the text command	
Example	VA,5,10,1,1,1,0,data	The arbitrary name of font "A"















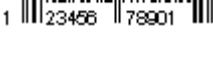
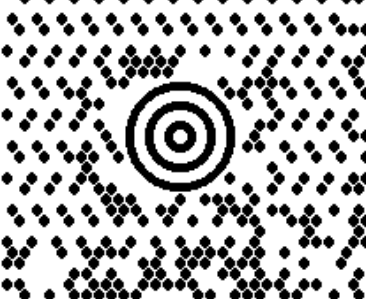







16. Define variable field

Syntax	Vxx, length, prompt
Parameters	xx = from 00 ~ 29 length = number of characters (up to 98characters). prompt = prompt of variable (maximum up to 20 characters,sould be used with KP-180)
Description	The usage term for the variables is that the label formats must be saved onto the printer or the KP -180 keyboard. Variable entries can be inserted via KP-180, also through command "^Kname" to replace user defined variable field setting.

17. Graphics

Syntax	Yx, y, name	
Parameter	x : Hori. Pos. of left-upper of graphics (dots) y : Vert. Pos. of left-upper of graphics (dots) name : Name of graphics download	
Description	This command is print a graphic that has been previously stored in printer memory (refer page)	
	<p>Example:</p> <p>A graphic in printer named "Graphic1", command Y20,40,Graphic1 ↵ will put this graphic into label at position (20,40).</p>	

1-3. BARCODE

BARCODE TYPE	EXAMPLE	BARCODE TYPE	EXAMPLE
Code 39		UPC E Add on 2	
EAN 8		UPC E Add on 5	
EAN 8 Add on 2		I 2 of 5	
EAN 8 Add on 5		CODABAR	
EAN 13		Code 93	
EAN 13 Add on 2		Code 128	
EAN 13 Add on 5		EAN 128	
UPC A		MAXICODE	
UPC A Add on 2		PDF 417	
UPC A Add on 5		UPC E	
DataMatrix Code		UCC128	
Post ENT			

1-4. EXAMPLE

To create a label, it must be an order command combination.

Control command And Setup up command	
^L	^L is precedent for the beginning of label format
Label format command	} Label format command must be included between the ^L and E command
E	

** Control or setup commands to be used in the label command area will be ineffective.

Example:

The following program example is printing a label with EAN8. Program is a text file. No matter what language you use in programming, simply send out the text file of the contents and you can control what the EZ-Series prints.

Save the following contents (command file named: EX1.TXT).

Program command	Description
^Q25,3	Setting up the height 25mm, gap 3mm
^W32	Setting up the width 32mm
^H10	Setting up the darkness 10
^S6	Setting up the speed 6 inches per second
^P1	Setting up the number of printing 1
^E10	Setting up the paper advance length to 10 mm from the print head after printing. The label will move back 10 mm when the next label is printed.
^C1	Setting up the number of copies (start value is 1)
^O0	Setting up the auto stripper function to be turned OFF
^R0	Setting up the left margin 0 dot
^D0	Turning the cutting function off
^L	The label content of start symbol
BB,42,39,2,5,100,0,1,1234567	Select EAN8 label, data content is 1234567(See Charapter 2 section 2)
E	Label content of stop symbol

The label can be created by the following MS-DOS command:

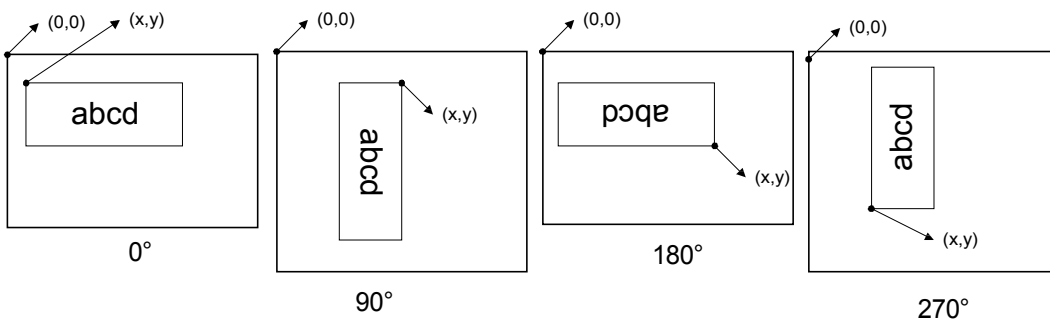
```
C:\>COPY EX1.TXT PRN␣
```

To send the label to serial port by the following MS-DOS command:

```
C:\>MODE COM1 96,N,8,1
```

```
C:\>TYPE EX1.TXT >> COM1
```

Setting the x and y values:



TEXT

1. TEXT/DATE/TIME

EXAMPLE	RESULT
^Q50,0,2 ^W50 ^S6 ^H10 ^R10 ~D8,27,00,8,39,36 ^L AC,10,10,1,1,1,0,EZ-4206 PRINTER AC,10,50,1,1,1,0,^D AC,10,100,1,1,1,0,^T E	EZ-4206 PRINTER AUG/27/00 08:39:36

The data output is a default setting and user can change it with ~D command.

The time output format is a default setting and user can change it with T command

2. Serial No.

Example 1	Printing Result	Example 2	Result
^Q10,0,0 ^W30 ^S6 ^H10 ^P10 ^L C0,0000,+2,A1 AB,10,10,1,1,2,0,^C0 E	0000 0002 0004 0006 0008 0010 0012 0014 0016 0018	~P10 ; If you want to continue printing 10 moreserial numbers starting from 0018,enter command ~P10.	0018 0020 0022 0024 0026 0028 0030 0032 0034 0036

Example 3	Result	Example 4	Result
^Q10,0,0 ^W30 ^S6 ^H10 ^P4 ^C2 ^L C0,0000,+2,A1 AB,10,10,1,1,2,0,^C0 E	0000 0000 0002 0002 0004 0004 0006 0006	^Q10,0,0 ^W30 ^S6 ^H10 ^P8 ^L C0,000,+2,A1 AB,10,10,1,1,2,0,abc^C0def E	abc0000def abc0002def abc0004def abc0006def abc0008def abc0010def abc0012def abc0014def

Adjusting the character spacing

Example	Result
^Q30,0,0 ^W50 ^S6 ^H10 ^L AC,10,10,1,1,10,0,EZ-4206 PRINTER AC,10,100,1,1,1,0,EZ-4206 PRINTER E	EZ-4206 PRINTER EZ-4206 PRINTER

Rotation

Example	Result
^Q50,0,0 ^W50 ^S6 ^H10 ^L AC,100,30,1,1,1,0,ROTATION 0 AC,40,20,1,1,1,1,ROTATION 90 AC,260,150,1,1,1,2,ROTATION 180 AC,290,220,1,1,1,3,ROTATION 270 E	ROTATION 0 ROTATION 180 ROTATION 90 ROTATION 270
^L AZ,100,12,1,1,0,4,中文 AZ,220,50,1,1,0,5,中文 AZ,75,83,1,1,0,6,中文 AZ,121,144,1,1,0,7,中文 E	中文 中文 中文 中文


RTC Setting

Example	Result
^Q20,2 ^S6 ^W50 ^H10 ^P1 ~D6,26,00,9,47,00 ^L DY4-ME-DD Th:m:s AC,10,30,1,1,0,0,^D AC,10,70,1,1,0,0,^T E	2000-JUN-26 09:47:00 If the setting result can't be printed out, please send this command. Date Setting Time Setting

Modification of Date and Specification Setting

Example	Result
Dy4-me-dd	2000-MAY-29
Dy4/mn/dd	2000/05/29
Dmn dd y4	05 29 2000
Dy4	2000
Dme	MAY
Ddd	29
Dy4,me	2000-MAY
Dme-dd	MAY-29

Barcode

Example	Result
^H9 ^S6 ^Q30,0,2 ^W60 ^L BG,20,100,3,3,100,0,1,12345678901234567 E	

Barcode Rotation

Example	Result
^H9 ^W25 ^S6 ^Q30,0,2 ^L BE,100,20,2,4,80,1,1,123456789012 E	

Barcode with serial number

Example	Result
^H10 ^S6 ^Q20,0,2 ^W50 ^P10 ^L C0,000,-1,A3 BE,40,20,3,3,100,0,1,111111^C0111 E	

Line Printing

Example	Description	Result
^H10 ^S6 ^Q50,2 ^W60 ^L AB,50,60,1,1,1,1,PRINTER Le,10,10,60,200 AC,120,155,1,1,1,0,PRINTER Le,100,10,400,200 E	Darkness= 6 Speed = 6 inch/second Label height = 50mm, Gap= 2 mm Label width = 60mm (x,y)=(10,10), (x1,y1)=(60,200) (x,y)=(100,10), (x1,y1)=(400,200)	


Rectangle printing

Example	Description	Result
^H10 ^S6 ^Q25,2 ^W32 ^L R20,20,120,120,8,8 E	Darkness = 4 Speed = 2 inch/second Label height = 25mm, Gap = 2 mm Label width = 32mm (x,y) = (20,20), (x1,y1) = (120,120) lrw = 8 dots, ubw = 8 dots	


Maxicode

Example	Result
^Q30,0,0 ^W70 ^S6 ^H10 ^L M30,20,1,1,2,840,068107317,8,0,123456 E	

PDF417

Example	Result
^Q50,0,3 ^W90 ^S6 ^H10 ^L P30,20,3,3,3,3,1,100 123456789 123456789 123456789 123456789 123456789 123456789 123456789 123456789 123456789 123456789 E	


DataMatrix Code

Example	Result
^Q50,0,3 ^W90 ^S6 ^H10 ^L X30,20,5,1234567890 E	



Stripper Setting

Example	Result
^Q50,2 ^W50 ^S2 ^O1 ^E10 ^P1 ^H10 ^L AD,20,20,1,1,3,0,Stripper Function E	Label height =50mm, Gap =2mm Label width=50mm Speed 2 inch/second Stripper enable Set stop position to 10 mm Printing one label Darkness 10 Label format begin sign Label format end and begin print

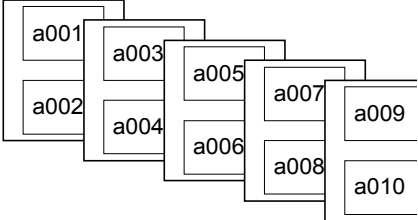
Download Graphic to printer's memory

Example	Description	Result
~Ep,chipmunk,2484 Copy chipmunk.pcx prn/b.␣	Download the Graphic to memory, file size:2484 bytes Send command In DOS mode	
^Q25,2 ^W50 ^S6 ^H10 ^L AB,50,10,1,1,1,0,EXTERNAL Y30,80, chipmunk E	Assign the location of Graphic	

Rotate label format for printing

Example	Description	Result
^Q30,2 ^W50 ^S6 ^H10 ~R50 ^L AC,20,10,1,1,1,0,ROTATE BB,20,45,2,5,50,0,1,1234567 E	Label size: 30mm(h); 2mm gap Label size: 50mm(w) Rotate the label format 180° for printing	
~R105 ^L AC,20,10,1,1,1,0,ROTATE BB,20,45,2,5,50,0,1,1234567 E	Disable the rotate function	




Cutter Setting

Example	Description	Result
^Q15,0,0 ^W25 ^S6 ^H10 ^P10 ^C1 ^D2 ^L R10,10,170,100,2,2 C0,001,+1,A1 AE,50,30,1,1,1,0,a^C0 E	Plain paper length 15mm, width:25mm Speed 6 inch/second Darkness = 10 Print 10 labels 2 pcs/cut	

Download label and variable settings

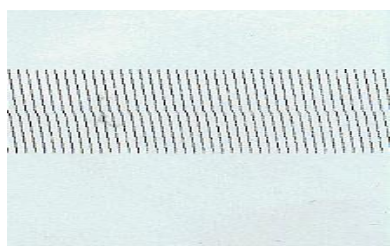
Example	Description
^Ftest ^Q50,0,15 ^W70 ^H10 ^S6 ^E12 ^L C0,0000,+1,serial no. V00,10,name V01,8,barcode V02,6,price AE,108,306,1,1,1,0,\$^V02 AC,39,27,1,1,1,0,S/N.^C0 AD,108,78,1,1,1,0,^V00 BA,108,135,2,5,100,0,1,^V01 E	Download label to memory card and the label name is "test" Setting serial number is C0 Setting three variables V00, V01, V02

Recall label format from memory

Example 1	Description	Result
^Ktest 0000 book 12345678 200.00 E ~P1	Recall label format without changing the label format C0 = 0000 V00 = book V01 = 12345678 V02 = 200.00	S/N.0000 book  * 12345678 * \$200.00
Example 2	Description	Result
^Ktest 1111 pencil 12345678 100.00 E ^Q35,0,0 ^S6 ^H10 ~P2	recall label format and change label format C0 = 1111 V00 = pencil V01 = 12345678 V02 = 100.00 Changing the size Changing speed 6"/sec Changing darkness to 10 Printing the last label twice	S/N.1111 Pencil  * 12345678 * \$100.00 S/N.1112 pencil  * 12345678 * \$100.00

Each time you change variable data or label format, repeat to send command from ^Kname to ~Px.

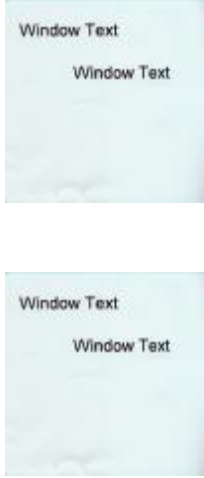
Print head text & Version list

Example 1	Description	Result
~T	Print out a sample test to check if the print head is damaged or not.	


Firmware version

Example 1	Description	Result
~V	Print out the f/w version of printer.	### EZ1300 ### ### VER. H1.000e ###

Copy setting

Example	Description	Result
^Q100,3 ^W102 ^E13 ^H15 ^P1 ^S2 ^C2 ^R0 ~Q+5 ^O0 ^D0 ~R200 ^L Dy2-me-dd Th:m:s E	Label height 100mm, Gap 3mm Label width 102mm Stop position 12mm Darkness15 Print out one label Speed 2 inch/second Copy 2 pcs Position value not assigned The start of the upper margin +5 Stripper off Cutter off The begin and end symbols for label contents. Date/tTime setting End symbol	

Printer Date/Time setting

Example 1	Description	Result
~D6,16,03,13,52,17 ^Q100,3 ^W102 ^E12 ^H18 ^P1 ^S2 ^C1 ^R0 ~Q+0 ^O0 ^D0 ~R200 ^L Dy4-me-dd Th:m:s AF,254,100,1,1,0,0,^D AF,254,176,1,1,0,0,^T E	Setting month/Date/Year/Hour/Minute/Second Label height 100mm, Gap 3mm Label width 102mm Stop position setting 13mm Darkness 18 Print out one label Speed 2inch/second Copy one Position value not assigned. The start of upper margin 0 Stripper on Cutter unable The begin and end symbols for label contents Date coordinates To,e cprdomates End symbol	

Appendix

A. Barcode Details

1. Code 128

BQ2, X, Y, NARROW, WIDE, HEIGHT, ROTATION, READABLE, DATA

Subset A: Included the standard uppercase alphanumeric keyboard characters, control and special characters. To select Code 128 Subset A, place A before the data to be encoded.

Subset B: Included the standard uppercase, lowercase alphanumeric keyboard characters and special characters. To select Code 128 Subset B, place B before the data to be encoded.

Subset C: Used for double density encoding of numeric data (the set of 100 digit pairs from 00 through 99)
To select Code 128 Subset C, place C before the data to be encoded.

Example:

BQ2,8,8,2,5,40,0,0,AAPPLE	Sbuset A
BQ2,8,8,2,5,40,0,0,BAPPLE	Subset B
BQ2,8,8,2,5,40,0,0,C1234	Subset C
BQ2,8,8,2,5,40,0,0,Btest&D1234&FTEST	Subset A/B/C . the sequence is B, C,A.

The following is the compare chart.

ASCII	2 Character	Code A	Code B	Code C
96	&A	FNC3	FNC3	-NA-
97	&B	FNC3	FNC2	-NA-
98	&C	SHIFT	SHIFT	-NA-
99	&D	Code C	Code C	-NA-
100	&E	Code B	FNC	Code B
101	&F	FNC4	Code A	Code A
102	&G	FNC1	FNC1	FNC1