PROGRAMMER'S MANUAL

PEPL language for

D4 102

D4 202

D4 302-K

CUSTOM®

Table of Contents

1. INTRODUCTION

This manual describes command syntax of PEPL (Printer E Programming Language). All commands can be sent from PC to your label printer through the USB device, centronics or serial (RS232) ports.

In this section, there are six categories to introduce basic concept of PEPL language.

- Command Conventions
- Basic command syntax
- Coordinate Description
- Fonts
- Barcodes
- Graphics

1.01. Command Conventions

This manual uses the following typographic conventions to describe commands.

Convention	Description
XX$_H$	Present hexadecimal value. For example: 31$_H$ is a hexadecimal value, decimal value is 49.
xx,yy,v1,v2…	Required parameters.
[,v1][,v2][,p3]	Optional parameters.
<ESC>	(1B$_H$) Control code of status polling command.
<CR><LF>	(0D$_H$) (0A$_H$) This is used to end of command line.
↵	Like as <CR><LF>.
“	(22$_H$) Beginning and ending code for data string, name and prompt.
NAME	The name of a form, graphic or soft font.
DATA / DATA1	Data string of text or barcode. The (\ ) character designates that the character following is a literal and will encode into the data field.

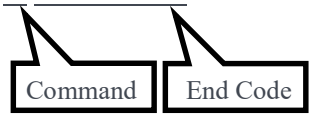
Enter data	Prints data
\”	“
\”EXAMPLE\”	“EXAPMPLE”
\\	\
\\TEST\\	\TEST\

PROMPT	The prompt of variable will be transmitted to the LCD display of printer.

1.02. Basic Command Syntax

This section offers basic command syntax to reference following examples.

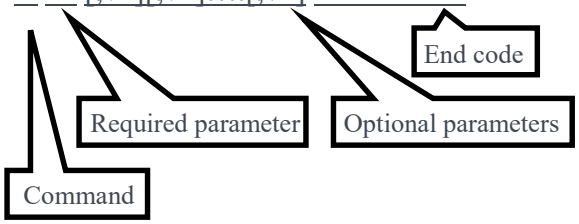
- Command with single alpha character.
  A <CR><LF>



- Command with two alpha characters.
  AB <CR><LF>

- Commands with required parameters.
  A xx,yy,v1,v2….vn <CR><LF>

- Commands with required parameter and optional parameters.
  A v1 [,v2][,v2]….[,vn] <CR><LF>



1.03. Coordinate Description

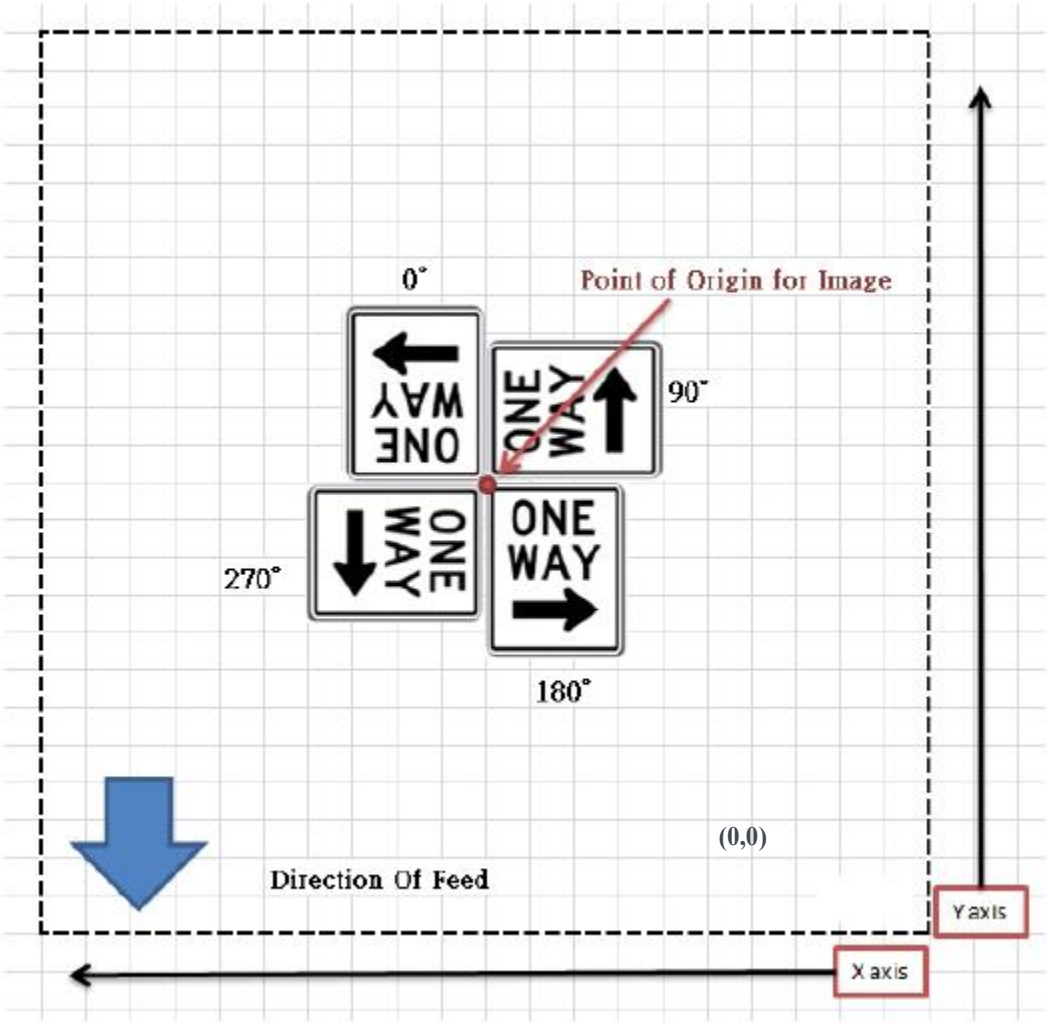


Figure: Coordinate description.

- The point of origin (0, 0) for 0 degree object is the lower left corner and print direction is default (ZT). **See Also** Z Command
- All coordinate value is positive.
- If an object rotates, the point of origin rotates with the object.
- The measurement of coordinate value is in dot.

  Note: 203 DPI: 1mm = 8 dots.

  300 DPI: 1mm = 12 dots.

1.04. Fonts

The printer language has two types of fonts according to their stored media.

- Internal Fonts
  - These internal fonts are always resident in FLASH ROM and can't be deleted.
  - Storage device: FLASH ROM
  - Font Type: There are seven internal fonts in printer's FLASH ROM.
    Font 1 ~ 4 is alpha and numeric characters.
    Font 5 is upper case characters only.
    Font 6 ~ 7 is numeric characters only.

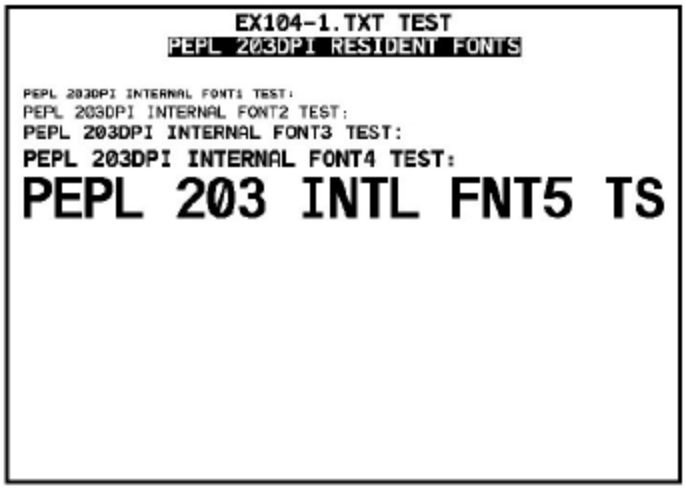


Figure: 203 DPI internal fonts.

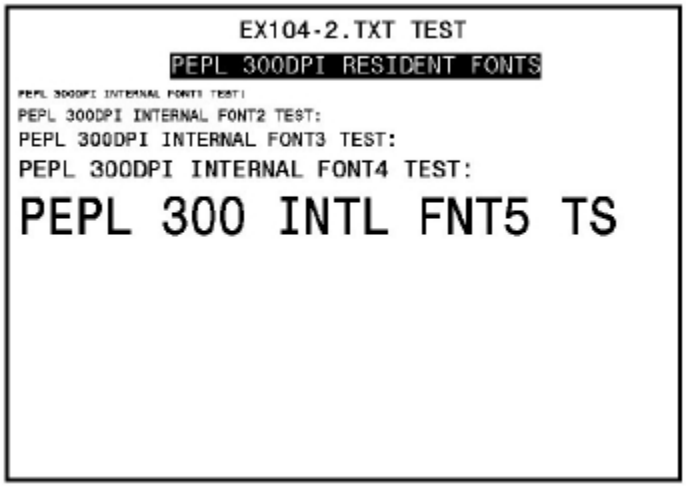


Figure: 300 DPI internal fonts.

- Symbol Set: The printer language supports the Latin based language if symbol set is correct. **See Also** I Command
- Scale / Rotate / Reversed: The internal fonts support text scale, rotate or reversed.

■ Soft Fonts

- The soft fonts can be downloaded from host by utility or application software.
- Storage device: you can select storage device type by command to save soft font. But one soft font just only stored one storage device in printer.
  See Also s Command
  Storage device type: SDRAM, Internal FLASH ROM or SD Card.
- Soft Font number: The soft font ID number may be from a ~ z.
- Scale / Rotate / Reversed: The soft fonts support text scale, rotate or reversed.

1.05. Barcodes

This language supports one-dimensional and two-dimensional barcodes to printer.

- One-dimensional Barcodes

Figure: 1D barcodes.

See Also B Command

- Two-dimensional Barcodes

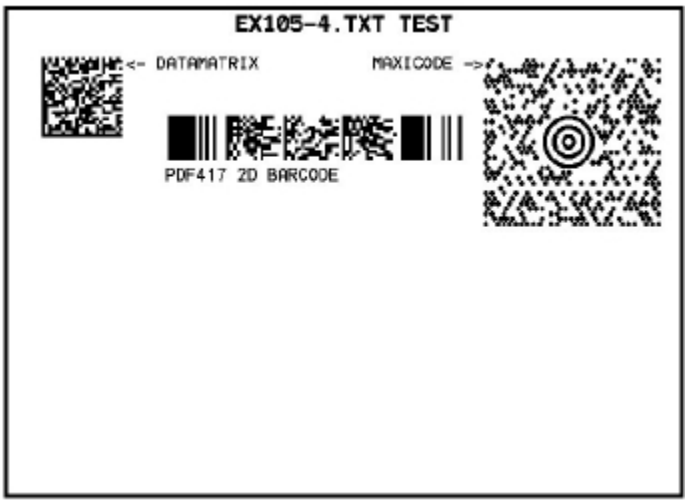


Figure: 2D barcodes.

See Also b Command

1.06. Graphics

This language supports PCX graphics and direct write graphics to printer.

- PCX Graphics

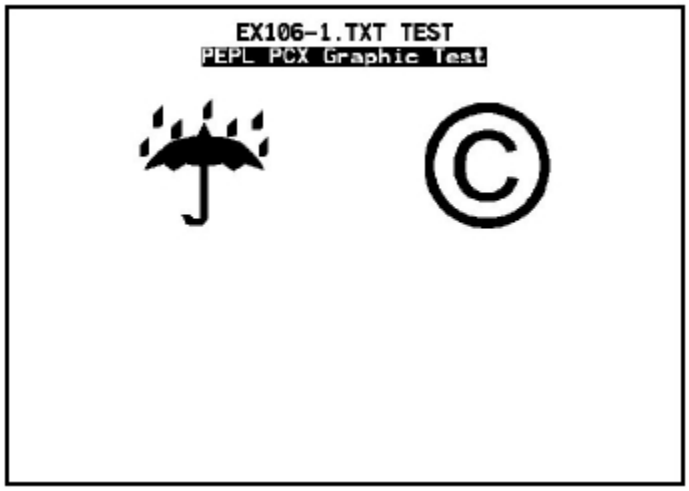


Figure: PCX image.
See Also GM Command

- Direct Write Graphics

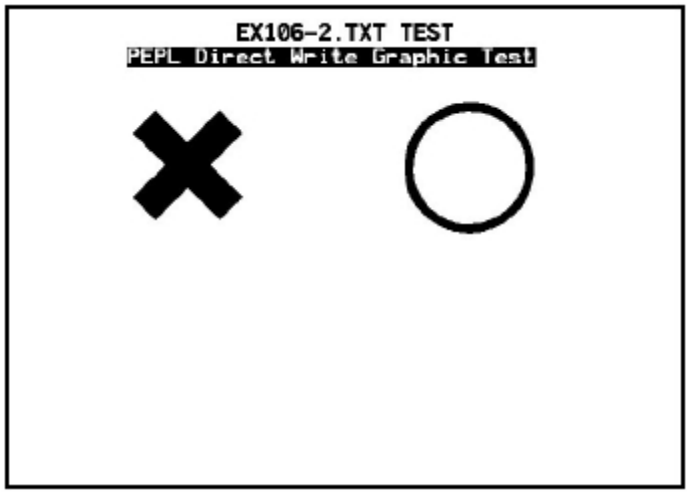


Figure: Direct write image.
See Also GW Command

2. COMMAND REFERENCE

This section contains a complete listing of all PEPL commands, according to functions can be categorized into the following four types.

- Label edit function: Like text, barcode, line/box… etc.
- Setting function: Like date/time… etc.
- Read status function:
- Object download function: Like forms, graphics, soft fonts… etc.

2.01. PEPL Quick Reference

No	Command	Description	Type
1	**A**	Text	Text
2	**AUTOFR**	Auto Form Printing	Form
3	**B**	1D Barcode	Barcode
4	**b**	2D Barcode	Barcode
5	**C**	Counter / Cut Immediate	Form/Set
6	**D**	Darkness	Set
7	**EI**	Print Soft Font Information	Soft Font
8	**EK**	Delete Soft Font	Soft Font
9	**ES**	Store Soft Font	Soft Font
10	**eR**	User Defined Error/Status Character	Status
11	**FE**	End Form Store	Form
12	**FI**	Print Form Information	Form
13	**FK**	Delete Form	Form
14	**FR**	Retrieve Form	Form
15	**FS**	Store Form	Form
16	**fB**	Adjust Back Feed Position	Set
17	**GG**	Print Graphic	Graphic
18	**GI**	Print Graphic Information	Graphic
19	**GK**	Delete Graphic	Graphic
20	**GM**	Store Graphic	Graphic
21	**GW**	Direct Write Graphic	Graphic
22	**I**	Character Set Selection	Text
23	**J**	Set Tear Off	Set
24	**LE**	Line Draw Exclusive OR	Line/Box
25	**LO**	Line Draw Black	Line/Box
26	**LW**	Line Draw White	Line/Box
27	**N**	Clear Image Buffer	Set
28	**O**	Hardware Options	Set
29	**oR**	Character Substitution(Euro)	Text
30	**P**	Print	Set
31	**PA**	Print Automatic	Set
32	**Q**	Set Label Length/Gap	Set
33	**q**	Set Label Width	Set
34	**R**	Set Reference Point	Set
35	**S**	Set Speed	Set
36	**s**	Storage Device	Set

No	Command	Description	Type
37	**TD**	Date Layout	Date/Time
38	**TJ**	Julian day	Date/Time
39	**TS**	Set Real Time Clock	Date/Time
40	**TT**	Time Layout	Date/Time
41	**U**	Print Configuration	Print
42	**UA**	Enable Clear Label Counter Mode	Set
43	**UB**	Reset Label Counter Mode	Set
44	**UE**	Soft Font Information Inquiry	Status
45	**UF**	Form Information Inquiry	Status
46	**UG**	Graphics Information Inquiry	Status
47	**UI**	Host Prompts/Codepage Inquiry	Status
48	**UN**	Disable Error Reporting	Set
49	**US**	Enable Error Reporting	Set
50	**V**	Define Variable	Form
51	**X**	Box Draw	Line/Box
52	**xa**	Label Calibration	Calibration
53	**Y**	Serial Port Setup	Set
54	**Z**	Print Direction	Set
55	**?**	Download Variable	Form
56	**^@**	Reset Printer	Set
57	**^default**	Set Printer to Factory Default	Set
58	**^ee**	Error Report Immediate	Status
59	**;**	Code Comment Line	Remark

2.02. A Command: Print Text

Description

This command is used to print a text string. Text content is included counter, variable, date or time.

Syntax

- Axx,yy,v1,v2,v3,v4,v5,”DATA”
- Axx,yy,v1,v2,v3,v4,v5,Vv
- Axx,yy,v1,v2,v3,v4,v5,Cc
- Axx,yy,v1,v2,v3,v4,v5,TD
- Axx,yy,v1,v2,v3,v4,v5,TT
- Axx,yy,v1,v2,v3,v4,v5,TJ
- Axx,yy,v1,v2,v3,v4,v5,”DATA”Vv
- Axx,yy,v1,v2,v3,v4,v5,”DATA”Cc
- Axx,yy,v1,v2,v3,v4,v5,”DATA”TD
- Axx,yy,v1,v2,v3,v4,v5,”DATA”TT
- Axx,yy,v1,v2,v3,v4,v5,”DATA”Vv”DATA1”
- Axx,yy,v1,v2,v3,v4,v5,”DATA”Cc”DATA1”
- Axx,yy,v1,v2,v3,v4,v5,”DATA”TD”DATA1”
- Axx,yy,v1,v2,v3,v4,v5,”DATA”TT”DATA1”

Parameters

- xx: The X-coordinate of text (unit: dots).
- yy: The Y-coordinate of text (unit: dots).
- v1: Rotation of text, value range is 0 ~ 3.

v1	Description
0	0 degrees
1	90 degrees
2	180 degrees
3	270 degrees

- v2: Internal font type selection, value range is 1 ~ 7, a ~ z for soft font only.

v2	Description	
	203 DPI: WxH	300 DPI: WxH
1	8 x 12 dots	12 x 20 dots
2	10 x 16 dots	16 x 28 dots
3	12 x 20 dots	20 x 36 dots
4	14 x 24 dots	24 x 44 dots
5	32 x 48 dots	48 x 80 dots
6	12 x 19 dots (Numeric only)	12 x 18 dots (Numeric only)
7	19 x 26 dots (Numeric only)	21 x 24 dots (Numeric only)
a~z	soft font	

- v3: Horizontal scale of text, scale range is 1 ~ 9.
- v4: Vertical scale of text, scale range is 1 ~ 8.
- v5: Normal/Reverse text, value is N or R only.
  N: Normal text.
  R: Reverse text.
- DATA / DATA1: An ASCII text string.
- Vv: A variable string. **See Also** V Command
- Cc: A counter string. **See Also** C Command
- TD: Current date.
- TT: Current time.
- TJ: Julian day.

Default

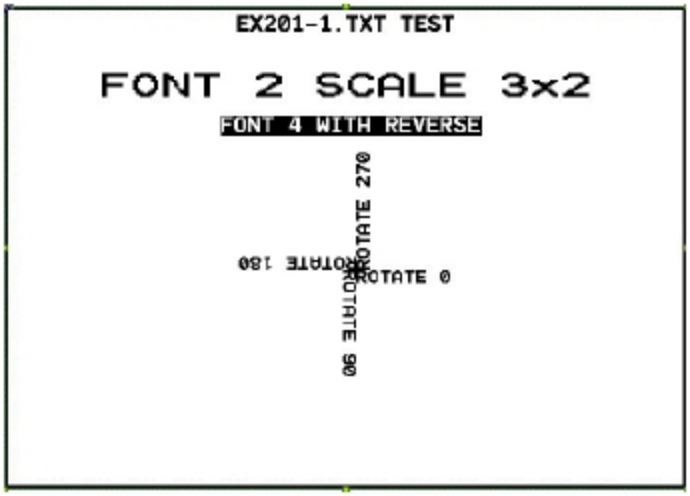
- None

Example

- EX202-1: Prints text string.
  Syntax: Axx,yy,v1,v2,v3,v4,v5,”DATA”.

```
N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX202-1.TXT TEST"
A120,100,0,2,3,2,N,"FONT 2 SCALE 3x2"
A260,150,0,4,1,1,R,"FONT 4 WITH REVERSE"
A420,330,0,3,1,1,N,"ROTATE 0"
A420,330,1,3,1,1,N,"ROTATE 90"
A420,330,2,3,1,1,N,"ROTATE 180"
A420,330,3,3,1,1,N,"ROTATE 270"
P1
```

Output:

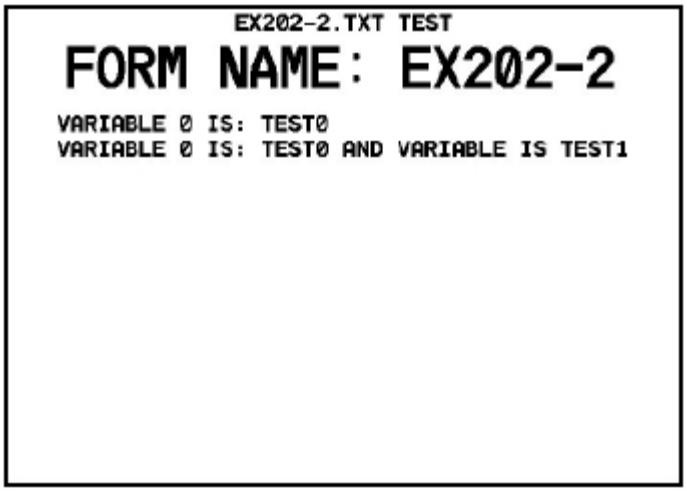


- EX202-2: Download a form to print and text content included variables.
  Syntax: Axx,yy,v1,v2,v3,v4,v5,”DATA”Vv
  Axx,yy,v1,v2,v3,v4,v5,”DATA”Vv”DATA1”Vv
  See Also FS Command, FE Command, FR Command

```
FS"EX202-2"
V00,13,N,"ENTER VA0"
V01,13,N,"ENTER VA1"
N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX202-2.TXT TEST"
A080,070,0,5,1,1,N,"FORM NAME: EX202-2"
A070,150,0,4,1,1,N,"VARIABLE 0 IS:"V0
A070,180,0,4,1,1,N,"VARIABLE 0 IS "V0" AND VARIABLE IS "V1
FE

FR"EX202-2"
?
TEST0
TEST1
P1
```

Output:



- EX202-3: Download a form to printer with text content included counters.

  Syntax: Axx,yy,v1,v2,v3,v4,v5,”DATA”Cc
  Axx,yy,v1,v2,v3,v4,v5,”DATA”Cc”DATA1”

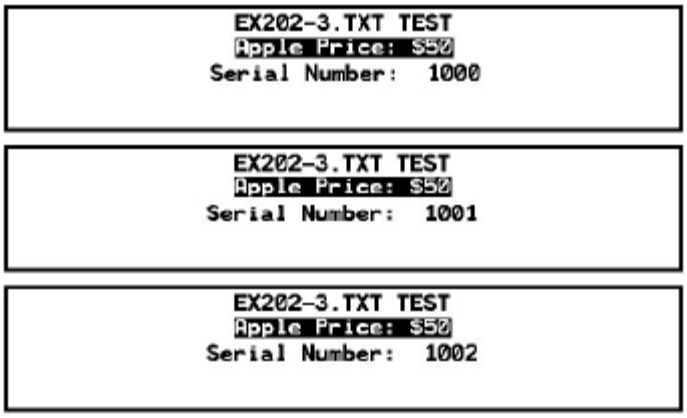
  See Also FS Command, FE Command, FR Command

```
FS"EX202-3"
V0,13,N,"ENTER PRICE:"
C0,4,N,+01,"ENTER NUMBER:"

N
q832
Q0,0
S3
D8
X020,010,4,800,150
A280,030,0,4,1,1,N,"EX202-3.TXT TEST"
A250,060,0,4,1,1,R,"Apple Price: $"V0
A250,090,0,4,1,1,N,"Serial Number: "C0
FE

FR"EX202-3"
?
50
1000
P3
```

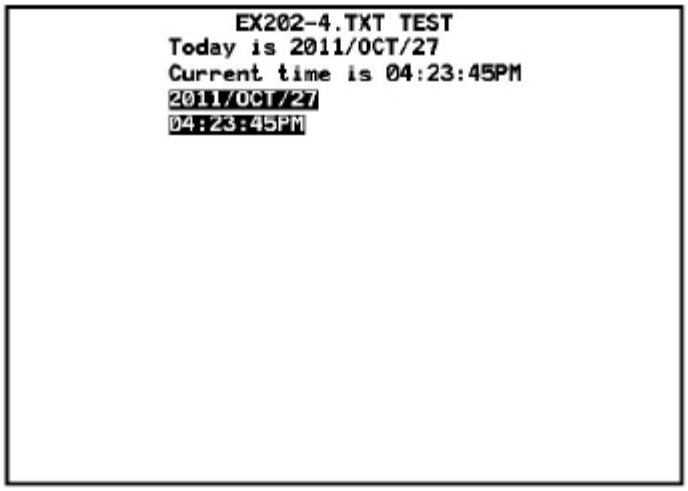
Output:



- EX202-4: Prints text with date & time
  Syntax: Axx,yy,v1,v2,v3,v4,v5,”DATA”TD
  Axx,yy,v1,v2,v3,v4,v5,”DATA”TT
  Axx,yy,v1,v2,v3,v4,v5,TD
  Axx,yy,v1,v2,v3,v4,v5, TT

```
N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX202-4.TXT TEST"
A200,060,0,4,1,1,N,"Today is "TD
A200,090,0,4,1,1,N,"Current time is "TT
A200,120,0,4,1,1,R,TD
A200,150,0,4,1,1,R,TT
P1
```

Output:



2.03. AUTOFR Command: Run the Auto Form

Description

This command is used to run one special form for printer in a standalone mode.
If form name is "AUTOFR" and stored in printer, printer will automatically start this form only.

Syntax

- AUTOFR

Parameters

- None

Default

- None

Example

- EX203-1: Download a form to printer with the name is AUTOFR

See Also FS Command, FE Command, FR Command

```
FK"AUTOFR"
FS"AUTOFR"
N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX203-1.TXT TEST"
A160,060,0,4,1,1,N,"AUTO FORM FOR STAND ALONE TEST"
A110,090,0,4,1,1,N,"Press feed button to print a Label..."
PA1
FE
```

Output:

2.04. B Command: Print 1D Barcodes

Description

The command is used prints a 1D barcode. The barcode content is included counter, variable or date and time.

Syntax

- Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”
- Bxx,yy,v1,v2,v3,v4,v5,v6,Vv
- Bxx,yy,v1,v2,v3,v4,v5,v6,Cc
- Bxx,yy,v1,v2,v3,v4,v5,v6,TD
- Bxx,yy,v1,v2,v3,v4,v5,v6,TT
- Bxx,yy,v1,v2,v3,v4,v5,v6,TJ
- Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”Vv
- Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”Cc
- Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”TD
- Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”TT
- Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”Vv”DATA1”
- Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”Cc”DATA1”
- Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”TD”DATA1”
- Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”TT”DATA1”

Parameters

- xx: The X-coordinate of barcode (unit: dots).
- yy: The Y-coordinate of barcode (unit: dots).
- v1: Rotation of barcode, value range is 0 ~ 3.

v1	Description
0	0 degrees
1	90 degrees
2	180 degrees
3	270 degrees

- v2: 1D barcode type selection.

v2	Barcode Type
0	Code 128 UCC
1	Code 128 Auto
1E	UCC/EAN 128
2	Interleaved 2 of 5
2C	Interleaved 2 of 5 with mod 10 check digit
2D	Interleaved 2 of 5 with human readable
2U	UPC Interleaved 2 of 5
3	Code 39
3C	Code 39 with check digit
9	Code 93

v2	Barcode Type
E80	EAN8
E82	EAN 8 2 digit add on
E85	EAN 8 5 digit add on
E30	EAN 13
E32	EAN 13 2 digit add on
E35	EAN 13 5 digit add on
K	Codabar
UA0	UPC A
UA2	UPC A 2 digit add on
UA5	UPC A 5 digit add on
UE0	UPC E
UE2	UPC E 2 digit add on
UE5	UPC E 5 digit add on

- v3: Narrow bar width of barcode (unit: dots).
- v4: Wide bar width of barcode (unit: dots).
- v5: Height of barcode (unit: dots).
- v6: Human readable/no human readable, value is N or B only.
  N: No human readable text.
  B: Human readable text.
- DATA / DATA1: An ASCII text string.
- Vv: A variable string. **See Also** V Command
- Cc: A counter string. **See Also** C Command
- TD: Current date.
- TT: Current time.
- TJ: Julian day.

Default

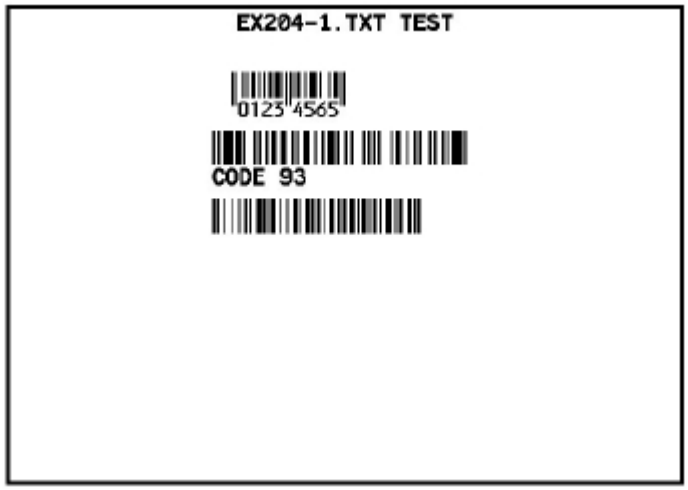
- None

Example

- EX204-1: Prints barcodes.
  Syntax: Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”

```
N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX204-1.TXT TEST"
B250,100,0,E80,2,2,40,B,"01234567"
B250,170,0,9,3,3,40,B,"CODE 93"
B250,250,0,1,2,2,40,N,"CODE 128"
P1
```

Output:



- EX204-2: Download a form to print and barcodes content included variables.

Syntax: Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”Vv
Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”Vv”DATA1”Vv

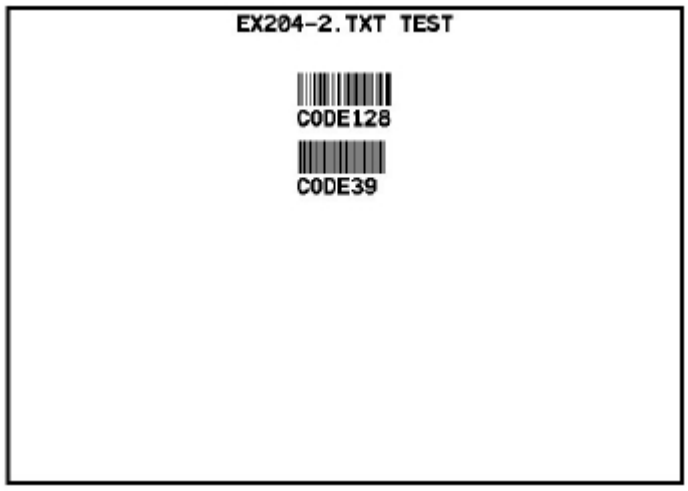
See Also FS Command, FE Command, FR Command

```
FS"EX204-2"
V00,8,N,"ENTER V0"
V01,8,N,"ENTER V1"

N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX204-2.TXT TEST"
B350,100,0,1,1,2,40,B,V0
B350,180,0,9,1,2,40,B,V1
FE

FR"EX204-2"
?
CODE128
CODE39
P1
```

Output:



- EX204-3: Download a form to printer and barcodes content included counters.

  Syntax: Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”Cc
  Bxx,yy,v1,v2,v3,v4,v5,v6,”DATA”Cc”DATA1”Cc

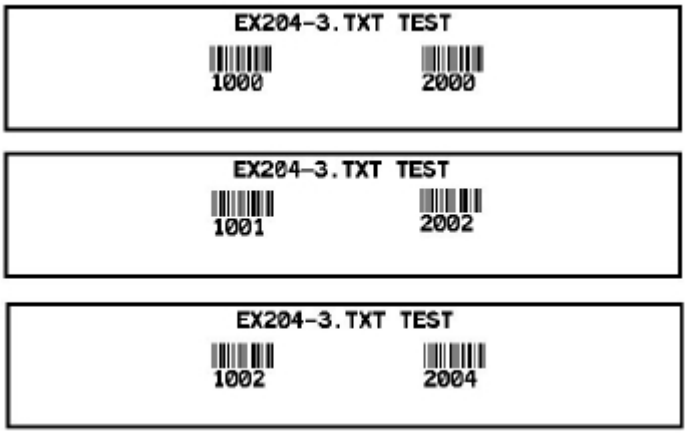
  See Also FS Command, FE Command, FR Command

```
FK"EX204-3"
FS"EX204-3"
C00,4,N,+1,"ENTER C0:"
C01,4,N,+2,"ENTER C1:"

N
q832
Q0,0
S3
D8
X020,010,4,800,150
A280,030,0,4,1,1,N,"EX204-3.TXT TEST"
B250,070,0,2,2,4,30,B,C0
B500,070,0,2,2,4,30,B,C1
FE

FR"EX204-3"
?
1000
2000
P3
```

Output:



- EX204-4: Prints barcodes with date & time
  Syntax: Bxx,yy,v1,v2,v3,v4,v5,v6,TD
  Bxx,yy,v1,v2,v3,v4,v5,v6,TT

```
N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX204-4.TXT TEST"
B280,100,0,1,2,4,60,B,TD
B280,200,0,1,2,4,60,B,TT
P1
```

Output:

2.05. b Command: Print 2D Barcodes

■ PDF417

Description

This command is used to print one PDF417 2D barcode. If v1 of parameter is fixed P.

Syntax

- bxx,yy,v1,v2,v3[,v4][,v5][,v6][,v7][,v8][,v9][,v10][,v11][,v12][,v13]"DATA"

Parameters

- xx: The X-coordinate of PDF417 (unit: dots).
- yy: The Y-coordinate of PDF417 (unit: dots).
- v1: The value is fixed P for PDF417.
- v2: Maximum print width of PDF417 (unit: dots).
- v3: Maximum print height of PDF417 (unit: dots).
- v4: Data compression, value is c0 or c1 only.
  - c0: Data compression.
  - c1: No data compression.
- V5: Error correction level, value is s1 ~ s8 only.
- v6: Module width, value is x2 ~ x9 (unit: dots).
- v7: Module height, value is y4 ~ y99 (unit: dots).
- v8: Maximum row count, value is r1 ~ r255.
- v9: Maximum column count, value is l1 ~ l255.
- v10: Truncated flag, value is t0 or t1 only.
  - t0: not truncated.
  - t1: truncated.
- v11: Rotation of PDF417, value is o0 ~ o3.
  - o0: 0 degrees.
  - o1: 90 degrees.
  - o2: 180 degrees.
  - o3: 270 degrees.
- v12: Human readable, format is pxxx,yyy,mmm.
  - p: This is fixed value for human readable identifier.
  - xxx: The X-coordinate of human readable (unit: dots).
  - yyy: The Y-coordinate of human readable (unit: dots).
  - mmm: Maximum characters per line.
- v13: PDF417 origin point, value is f0 or f1 only.
  - f0: Upper left corner of DF417. only.
  - f1: Center of PDF417.
- DATA: An ASCII text string.

Default

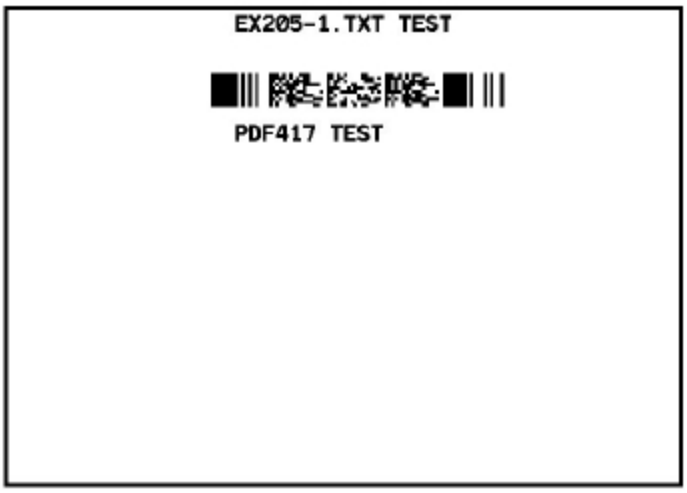
- v4: default is c0.
- v10: default is t0.
- v11: default is o0.
- v13: default is f1.

Example

- EX205-1: Prints a PDF417 2D barcode.

```
N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX205-1.TXT TEST"
b250,100,P,812,609,x4,y4,s0,o0,r90,l1,f0,p280,160,20,"PDF417 TEST"
P1
```

Output:



■ Maxi Code

Description

This command is used to print one maxi code 2D barcode. If v1 of parameter is fixed M.

Syntax

- bxx,yy,v1,”v2,v3,v4,DATA”

Parameters

- xx: The X-coordinate of maxi code (unit: dots).
- yy: The Y-coordinate of maxi code (unit: dots).
- v1: The value is fixed M for maxi code.
- v2: Class code, value is 3 digits fixed.
- v3: Country code, value is 3 digits fixed.
- v4: Postal code, value is 4 or 5 digits for USA and 6 digits for other countries.
- DATA: An ASCII text string. Up to 84 characters.

Default

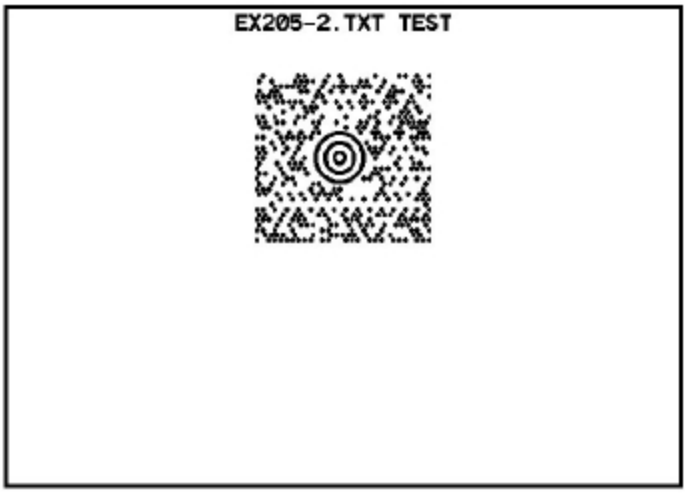
- None

Example

- EX205-2: Prints a maxi-code 2D barcode.

```
N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX205-2.TXT TEST"
b300,100,M,"300,840,93065,1692,This is MaxiCode,but not MaxiCode formatted data"
P1
```

Output:



Data Matrix

Description

This command is used to print one data matrix 2D barcode. If v1 of parameter is fixed D.

Syntax

- bxx,yy,v1,[v2],[v3],[v4],[v5],”DATA”

Parameters

- xx: The X-coordinate of data matrix (unit: dots).
- yy: The Y-coordinate of data matrix (unit: dots).
- v1: The value is fixed D for data matrix.
- v2: Number of rows to encode, value is r1 ~ r255.
- v3: Number of columns to encode, value is c1 ~ c255.
- v4: Sets the minimum square data, value is h1 ~ h40.
- v5: Selects an inverse image of the data matrix, value is v only.
- DATA: An ASCII text string.

Default

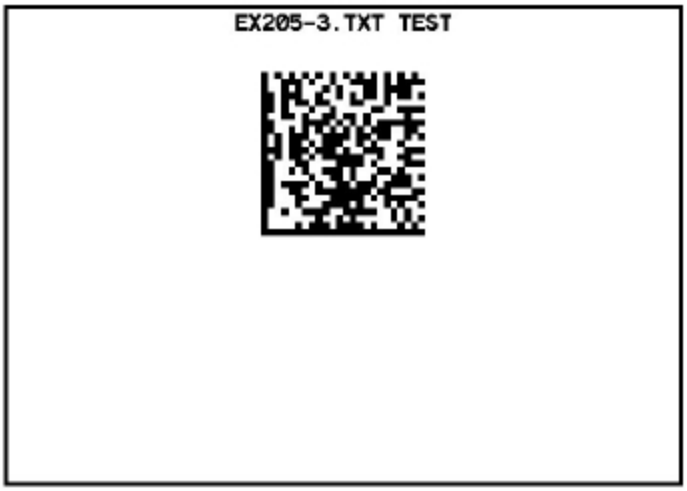
- v4: default is h5.

Example

- EX205-3: Prints a data matrix 2D barcode.

```
N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX205-3.TXT TEST"
b310,100,D,c24,r24,h8,"DataMatrix Barcode Test"
P1
```

Output:



■ QR Code

Description

This command is used to print one QR Code 2D barcode. If v1 of parameter is fixed Q.

Syntax

- bxx,yy,v1,[v2],[v3],[v4],[v5],[v6],"DATA"

Parameters

- xx: The X-coordinate of QR Code (unit: dots).
- yy: The Y-coordinate of QR Code (unit: dots).
- v1: The value is fixed Q for QR Code.
- v2: Code Model

v2	Description
m1	Model 1
m2	Model 2

- v3: Scale Factor, value is s1 ~ s99.
- v4: Error Correction

v4	Description
eL	Lower error correction, most data
eM	Default
eQ	Optimized for error correction over data
eH	Highest error correction, least data

- v5: Data Input Mode

v5	Description
iA	Automatic Data Select
iM	Initialized the manual data mode and the data type is set by the first character in the fixed data field ("DATA").

- v6: Append Symbol

The Append Symbol parameter option allows the programmerto join data from 2 to 16 QR code symbols.

v6	Description
Dc	Symbol Number, value is 01 ~ 16.
Dd	Divisions, value is 01 ~ 16.
Dp	Parity, value is 00 ~ FF Hex.

- DATA: An ASCII text string.

Data sent to the printer is converted to one of four formatsdepending upon the value set byparameter v5, Data InputMode select. By default, the printer will automatically selectthe datamode for the entire fixed data string. The printer willcheck and change the data encodingmethod to achieve thehighest data compression.

The backslash (\) character designates the following characteris a literal and will encode into the data field. Refer to thefollowing examples:

To Print	Enter into data field
"	\"
”Company”	\”Company\”
\	\\
\code\	\\code\\
ø	\↵

Default

- v2: default is m2.
- v3: default is s3.
- v4: default is eM.
- v5: default is iA.

Example

- EX205-4: Prints a QR Code 2D barcode.

```
N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX205-4.TXT TEST"
b310,100,Q,m2,s3,eL,iM,"QR Code Barcode Test"
P1
```

Output:

2.06. C Command: Counter for Form / Cut Immediate

■ Counter

Description

This command defines counter variable for form.

Syntax

- Cv1,v2,v3,v4,"PROMPT"

Parameters

- v1: Counter ID number, value is 0 ~ 255.
- v2: Maximum value of counter, counter digits range is : 1 ~ 29.
- v3: Justification in counter line, value is N,C,L,R only.
  N: No justification.
  C: Center justification.
  L: Left justification.
  R: Right justification.
- v4: Step value, there should be a + or – sign before the step value.
- PROMPT: An ASCII text string that will be sent to LCD of printer or host, prompt maximum characters is 15.

Default

- None

Example

- EX206-1: Download a form to print with counter variable.

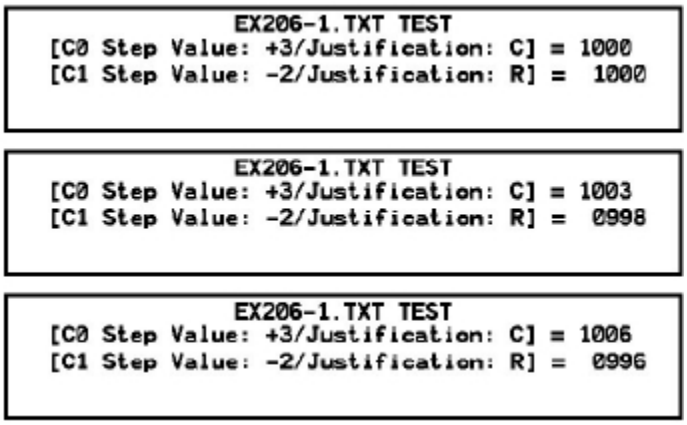
See Also FS Command, FE Command, FR Command

```
FS"EX206-1"
C00,6,C,+3,"ENTER C0 VAL"
C01,6,R,-2,"ENTER C1 VAL"

N
q832
Q0,0
X020,010,4,800,150
A280,030,0,4,1,1,N,"EX206-1.TXT TEST"
A060,060,0,4,1,1,N,"[C0 Step Value: +3/Justification: C] ="C00
A060,090,0,4,1,1,N,"[C1 Step Value: -2/Justification: R] ="C01
FE

FR"EX206-1"
?
1000
1000
P3
```

Output:



■ Cut Immediate

Description

Send this command to printer will cut immediate.

Syntax

- C: Forward cut immediate.
- Cr: Reverse cut immediate.

Parameters

- None

Default

- None

Example

- EX206-2: Forward cut immediate test.
  C↲

- EX206-3: Reverse cut immediate test.
  Cr↲

2.07. D Command: Darkness

Description

Use the command to set print darkness.

Syntax

- Dv1

Parameters

- v1: Printing darkness, value is 0 ~ 15.

Default

- v1: 8

Example

- EX207-1: Set darkness of printer to 9

```
N
q832
Q600,24
S3
D9
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX207-1.TXT TEST"
A180,080,0,4,1,1,N,"The darkness of printer is 9 "
P1
```

2.08. EI Command: Print Soft Font Information

Description

Use this command to print a list of all soft fonts in printer.

Syntax

- EI

Parameters

- None

Default

- None

Example

- EX208-1: Print out soft font information when No soft fonts in printer.

  EI↵

  Output:

  ```
  Soft font information:
  No soft font stored.
  ```

- EX208-2: Print out soft font information when soft font number is 2 in printer.

  EI↵

  Output:

  ```
  Soft font information:
  a
  b
  ```

2.09. EK Command: Delete Soft Font

Description

The command is used to delete soft fonts in printer.

Syntax

- EK”NAME”
- EK”*”

Parameters

- NAME: Soft font name, Fixed character range: a ~ z.
- *: All soft fonts will be deleted from memory.

Default

- None

Example

- EX209-1: Delete soft font “a”.

  EK”a”

- EX209-2: Delete all soft fonts in printer.

  EK”*”

2.10. ES Command: Store Soft Font

Description

Use the command to download and store soft fonts in printer.

Syntax

ES"NAME"v1,v2,v3fc1fn1fw1"FONT_IMG1"fc2fn2fw2"FONT_IMG2"
…….fcnfnnfwn"FONT_IMGn"

Parameters

- "NAME": One letter soft font name.
- v1: Number of characters of soft font. Character range is 0x0 ~ 0xFF hexadecimal.
- v2: Character rotation, value is 0x0 ~ 0x1 hexadecimal only.
  0: 0 and 180 degrees.
  1: 90 and 270 degrees.
- v3: Soft font height, range is 0x0 ~ 0xFF hexadecimal. (unit: dots)
- fc1, fc2, …fcn: The character code of soft font, range is 0x0 ~ 0xFF hexadecimal.
- fn1,fn2, …fnn: Spacing to next character code of soft font, range is 0x0 ~ 0xFF hexadecimal.
- fw1, fw2, …fwn: Character's width. (unit: byte dots)
- FONT_IMG1, FONT_IMG2, … FONT_IMGn: Soft Font bitmap image.
- The soft font format:

Parameter		Example	Description
NAME		a	The soft font name is 'a'.
v1		0x19	This soft font has 25 characters.
v2		0x0	Character rotation: 0/180 degrees.
v3		0x19	Height of all characters is 25 dots.
1stchar	fc1	0x20	1stcharacter code: 0x20
	fn1	0x6	1stcharacter to next character space: 6 dots
	fw1	0x1	1stcharacter width: 1 byte dots
	IMG1		1stcharacter bitmap image.
2ndchar	fc2	0x22	2ndcharacter code: 0x22
	fn2	0x9	1stcharacter to next character space: 9 dots
	fw2	0x2	2ndcharacter width: 2 byte dots
	IMG2		2ndcharacter bitmap image.
….	…	…	….
n char	fcn	0xA2	Last character code: 0xA2
	fnn	0xA	Last character to next character space: 10 dots
	fwn	0x2	Last character width: 2 byte dots
	IMGn		Last character bitmap image.

Default

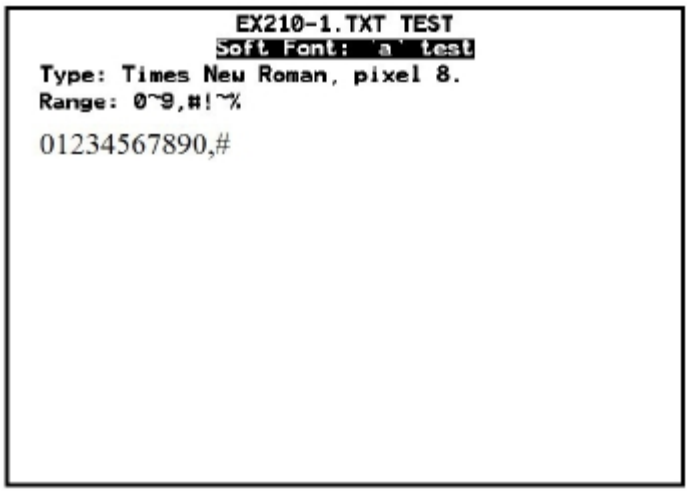
- None

Example

- EX210-1: Store soft font “a”.

ES”a” 0x19 0x00 0x00 0x19 0x20 0x06 0x01 0x00 ……
A280,030,0,4,1,1,N,"EX210-1.TXT TEST"
A255,060,0,4,1,1,R,"Soft Font: 'a' test"
A120,090,0,4,1,1,N,"Type: Times New Roman, pixel 8."
A120,120,0,4,1,1,N,"Range: 0~9,#!~%"
A120,160,0,a,1,1,N,"01234567890,#!~%”
P1

Output:



2.11. eR Command: User Defined Error / Status Character

Description

This command is used to define error/status head character via the RS232.

Syntax

- eRv1,v2

Parameters

- v1: Error/status head character defined, Range is 0~255 (0x0~0xFF hexadecimal).
- v2: The value is 2 fixed.

Default

- None

Example

- EX211-1: Define error/status head character.

  eR#,2

  ^ee

  Response: from RS232 response.

  #00

2.12. FE Command: End Form Store

Description

This command is used to end a form store sequence.

Syntax

- FE

Parameters

- None

Default

- None

Example

- EX212-1: Download and store a form to printer.

```
FK"EX212-1"
FS"EX212-1"

N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX212-1.TXT TEST"
A280,060,0,4,1,1,N,"FE COMMAND TEST"
FE

FR"EX212-1"
?
P1
```

2.13. FI Command: Print Form Information

Description

Use this command to print form information.

Syntax

- FI

Parameters

- None

Default

- None

Example

- EX213-1: Print out form information when no form in printer.

  FI

  Output:

  ```
  Form information:
  No form stored.
  ```

- EX213-2: Print out form information when form number is 3 in printer.

  FI

  Output:

  ```
  Form information:
  EX204-2
  EX204-3
  EX206-1
  ```

2.14. FK Command: Delete Form

Description

The command is used to delete form in printer.

Syntax

- FK”NAME”
- FK”*”

Parameters

- NAME: Form name.
- *: All forms will be deleted in printer.

Default

- None

Example

- EX214-1: Delete form name “EX214-1”.

  FK”EX214-1”

- EX214-2: Delete all forms in printer.

  FK”*”

2.15. FR Command: Run a Form

Description

Use the command to retrieve a form in printer.

Syntax

- FR”NAME”

Parameters

- NAME: This is the form name used when the form was stored.

Default

- None

Example

- EX215-1: Run a form the name is “EX215-1”.

```
N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX215-1.TXT TEST"
A280,060,0,4,1,1,N,"FR COMMAND TEST"
FE

FR"EX215-1"
?
P1
```

2.16. FS Command: Store Form

Description

This command is begins a form from store sequence.

Syntax

- FS”NAME”

Parameters

- NANE: This is the form name that will be used when retrieving the stored form.

Default

- None

Example

- EX216-1: Download and store a form test.

```
FK"EX216-1"
FS"EX216-1"

N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX216-1.TXT TEST"
A280,060,0,4,1,1,N,"FS COMMAND TEST"
FE
FI
```

2.17. fB Command: Adjust Back Feed Position

Description

This command is used to adjust back feed position for tear-off, peel, cut print mode.

Syntax

- fB[±]v1

Parameters

- ±: + is present positive value. – is present negative value.
- v1: Fine tune the label position for tear-off, peel, cut print mode. (unit: dots, printer range: -120 ~ +120 dots)

Default

- v1: Default value is 0.

Example

- EX217-1: Reduce 8 dots position for tear-off mode.

  JF
  fB-8

- EX217-2: More feed 16 dots position for tear-off mode.

  JF
  fB+16

- EX217-3: More feed 24 dots position for tear-off mode.

  JF
  fB24

2.18. GG Command: Print Graphics

Description

Use this command to print a PCX (format) graphic that has been previously stored in printer.

Syntax

- GGxx,yy,”NAME”

Parameters

- xx: The X-coordinate of graphic (unit: dots).
- yy: The Y-coordinate of graphic (unit: dots).
- NAME: Graphic name.

Default

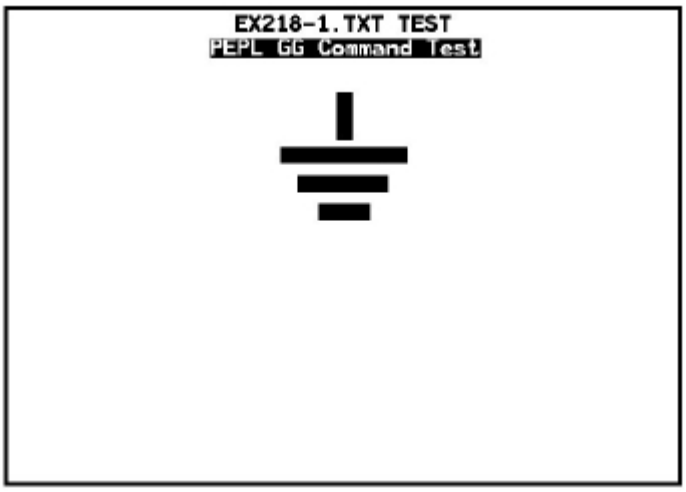
- None

Example

- EX218-1: Print out a graphic image.

```
GM”EX218-1”
.....
N
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX218-1.TXT TEST"
A250,060,0,4,1,1,R,"PEPL GG Command Test"
GG326,113,"EX218-1"
P1
```

Output:



2.19. GI Command: Print Graphic Information

Description

This command is used to print graphic information in printer.

Syntax

- GI

Parameters

- None

Default

- None

Example

- EX219-1: Prints graphic information when no graphic in printer.

  GI

  Output:

```
Graphics information:
No graphics stored.
```

- EX219-2: Prints graphic information when graphic number is 1 in printer.

  GI

  Output:

```
Graphics information:
EX218-1
```

2.20. GK Command: Delete Graphics

Description

Use this command to delete graphic in printer.

Syntax

- GK”NAME”
- GK”*”

Parameters

- NAME: Graphic name.
- *: Delete all graphics in printer.

Default

- None

Example

- EX220-1: Delete a graphic the name is “EX220-1”

  GK”EX220-1”

- EX220-2: Delete all graphics in printer.

  GK”*”

2.21. GM Command: Store Graphics

Description

Use this command can store a PCX graphics files in printer.

Syntax

- GM”NAME”v1”DATA”

Parameters

- NAME: Assign to graphic name is used to store or print graphic in printer.
- v1: This is the graphic size (unit: bytes).
- DATA: Graphic data in PCX format file.

Default

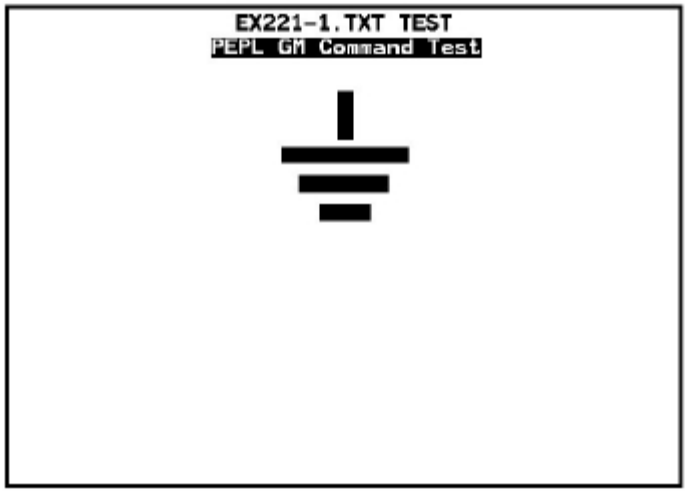
- None

Example

- EX221-1: Store PCX Graphic.

```
GM”EX221-1”1061“PCX format graphic……”
N
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX221-1.TXT TEST"
A250,060,0,4,1,1,R,"PEPL GM Command Test"
GG326,113,"EX221-1"
P1
```

Output:



2.22. GW Command: Direct Graphic Write

Description

The command is used to load binary graphic data directly into the printer for immediate printing.

Syntax

- GWxx,yy,v1,v2,DATA

Parameters

- xx: The X-coordinate of graphic (unit: dots).
- yy: The Y-coordinate of graphic (unit: dots).
- v1: Width of graphic (unit: bytes).
- v2: Length of graphic (unit: dots).
- DATA: Raw binary image data without graphic file formatting.
  Binary data: 1 for Blank dot.
  0 for Black dot.

Default

- None

Example

- EX222-1: Print immediate graphics.

```
N
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX222-1.TXT TEST"
A250,060,0,4,1,1,R,"PEPL GW Command Test"
GW300,113,25,177 "Raw binary image…."
P1
```

Output

2.23. I Command: Select Characters Set

Description

Use this command to select the appropriate character set for print correct text.

Syntax

- Iv1,v2

Parameters

- v1: Number of data bits, Value is 7 or 8 only.
  7: 7 bit data.
  8: 8 bit data.
- v2: Code page and language set.

v1	7 bit data	v1	8 bit data	
v2	Description	v2	Code page	Description
0	USA	0	DOS 437	English (US)
1	British	1	DOS 850	Latin I
2	German	2	DOS 852	Latin II(Cyrillic/Slavic)
3	French	3	DOS 860	Portuguese
4	Danish	4	DOS 863	French Canadian
5	Italian	5	DOS 865	Nordic
6	Spanish	6	DOS 857	Turkish
7	Swedish	7	DOS 861	Icelandic
8	Swiss	8	DOS 862	Hebrew
		9	DOS 855	Cyrillic
		10	DOS 866	Cyrillic CIS1
		11	DOS 737	Greek
		12	DOS 851	Greek I
		13	DOS 869	Greek II
		A	Windows 1252	Latin I
		B	Windows 1250	Latin II
		C	Windows 1251	Cyrillic
		D	Windows 1253	Greek
		E	Windows 1254	Turkish
		F	Windows 1255	Hebrew

Default

- I0,0

Example

- EX223-1: Set 7 bit data, German symbol set test.

  I7,2

2.24. J Command: Tear Off

Description

This command is used to enable/disable tear off function of printer.

Syntax

- Jv1

Parameters

- v1: Enable/disable tears off function, value is B or F only.
  F: Enable tear off.
  B: Disable tear off.

Default

- v1: B

Example

- EX224-1: Enable tear off function test.

  JF

- EX224-2: Disable tear off function test.

  JB

2.25. LE Command: Line Draw Exclusive OR

Description

This command is used to draw a line by an "exclusive OR" operation.

Syntax

- LExx,yy,v1,v2

Parameters

- xx: The X-coordinate of line (unit: dots).
- yy: The Y-coordinate of line (unit: dots).
- v1: Horizontal length of line (unit: dots).
- v2: Vertical length of line (unit: dots).

Default

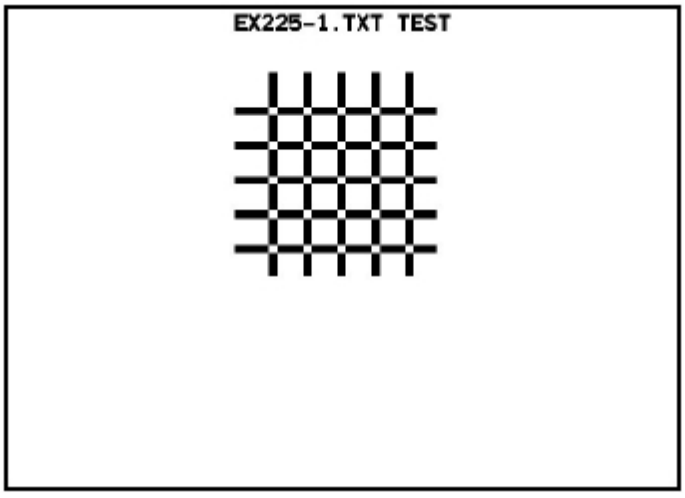
- None

Example

- EX225-1: Prints lines with exclusive OR each other test.

```
N
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX225-1.TXT TEST"
LE320,100,10,240
LE360,100,10,240
LE400,100,10,240
LE440,100,10,240
LE480,100,10,240
LE280,140,240,10
LE280,180,240,10
LE280,220,240,10
LE280,260,240,10
LE280,300,240,10
P1
```

Output



2.26. LO Command: Line Draw Black

Description

This command is used to draw a line by an "OR" operation.

Syntax

- LOxx,yy,v1,v2

Parameters

- xx: The X-coordinate of line (unit: dots).
- yy: The Y-coordinate of line (unit: dots).
- v1: Horizontal length of line (unit: dots).
- v2: Vertical length of line (unit: dots).

Default

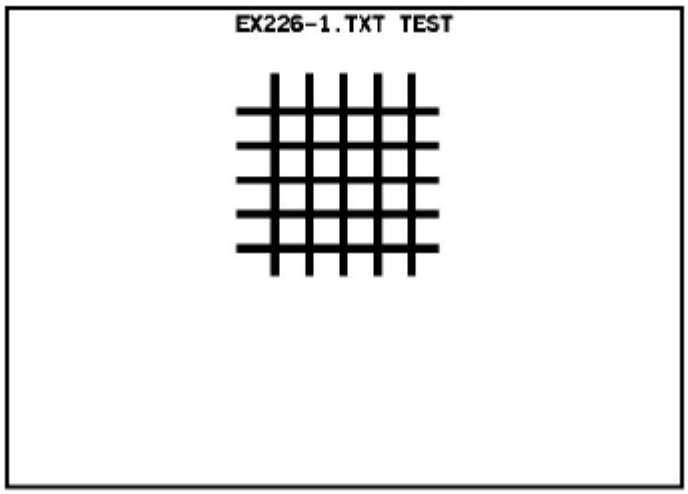
- None

Example

- EX226-1: Prints lines with OR each other test.

```
N
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX226-1.TXT TEST"
LO320,100,10,240
LO360,100,10,240
LO400,100,10,240
LO440,100,10,240
LO480,100,10,240
LO280,140,240,10
LO280,180,240,10
LO280,220,240,10
LO280,260,240,10
LO280,300,240,10
P1
```

Output



2.27. LW Command: Line Draw White

Description

Use this command to draw white lines, it will erase previous image.

Syntax

- LWxx,yy,v1,v2

Parameters

- xx: The X-coordinate of line (unit: dots).
- yy: The Y-coordinate of line (unit: dots).
- v1: Horizontal length of line (unit: dots).
- v2: Vertical length of line (unit: dots).

Default

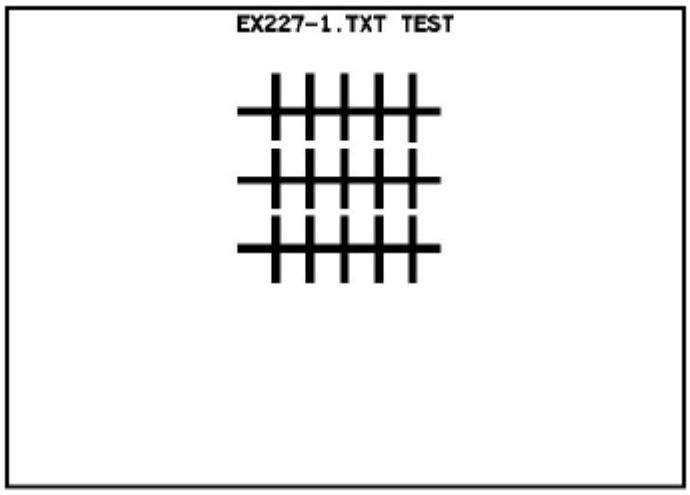
- None

Example

- EX227-1:

```
N
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX227-1.TXT TEST"
LO320,100,10,240
LO360,100,10,240
LO400,100,10,240
LO440,100,10,240
LO480,100,10,240
LO280,140,240,10
LW280,180,240,10
LO280,220,240,10
LW280,260,240,10
LO280,300,240,10
P1
```

Output:



2.28. N Command: Clear Image Buffer

Description

Use this command to clear image buffer before printing.

Syntax

- N

Parameters

- None

Default

- None

Example

- EX228-1: Clear the image buffer.

  N↵

2.29. O Command: Set Options

Description

Use this command to set select various printer options.

Syntax

- O[C[P1], CbP2, D, P, L]

Parameters

- C[P1]: Enable cutter
  P1: Sets the number of labels to print prior to cut.
  Range value is 1 ~ 255.
- CbP2: Enable batch print and cut function.
  P2: Set the number of labels for batch print and cut.
  Range value is 1 ~ 255.
- D: Direct thermal enabled. The ribbon sensor detect will be disabled.
- P: Peeler function enabled.
- L: On demand mode enabled. The printer will print the next label when feed button is pressed, otherwise printer will wait.

Default

- O

Example

- EX229-1: Disable all options.

  O↵

- EX229-2: Cutter enabled only.

  OC↵

- EX229-3: Direct thermal, on demand enabled.

  OD,L↵

2.30. oR Command: Enable Euro Mark or Normal Zero Character

Description

Euro mark and normal zero functions setting.

Syntax

- oR[v1,v2]

Parameters

- P1: Enable euro mark or normal zero functions, value is E,0 only.
  - E: Enables euro mark function.
    *. If the v2 parameter is not provided. The code page value of euro character is fixed to 213 decimal (0xD5 hexadecimal).
    *. v2: Change code page value of euro character.
    Range is 0 ~ 255 decimal.
  - 0: Enables normal zero function.

Default

- oR (No euro mark of character, slash zero character)

Example

- EX230-1: Code page value of euro mark is 57 decimal (0x39hexadecimal) and normal zero character.

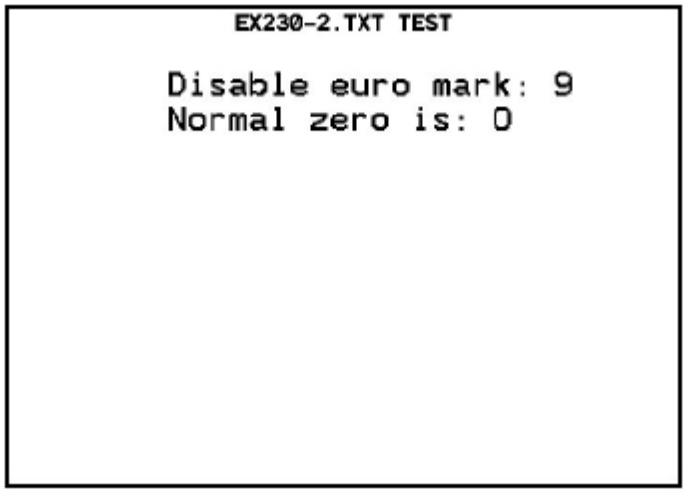
```
N
q832
Q600,24
S3
D8
oRE,57
oR0
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX230-1.TXT TEST"
A200,100,0,2,2,2,N,"Enable euro mark: 9"
A200,140,0,2,2,2,N,"Normal zero is: 0"
P1
```

Output:

- EX230-2: Disable euro mark and normal zero character.

```
N
q832
Q600,24
S3
D8
oR
oR0
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX230-2.TXT TEST"
A200,100,0,2,2,2,N,"Disable euro mark: 9"
A200,140,0,2,2,2,N,"Normal zero is: 0"
P1
```

Output:



- EX230-3: Disable euro mark and slash zero character.

```
N
q832
Q600,24
S3
D8
oR
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX230-3.TXT TEST"
A200,100,0,2,2,2,N,"Disable euro mark: 9"
A200,140,0,2,2,2,N,"Slash zero is: 0"
P1
```

Output:

2.31. P Command: Print

Description

This command is used to print the labels.

Syntax

- Pv1[,v2]

Parameters

- v1: Number of label sets, range is 1 ~ 99999.
- v2: Number of copies of each label, range is 1 ~ 99999.

Default

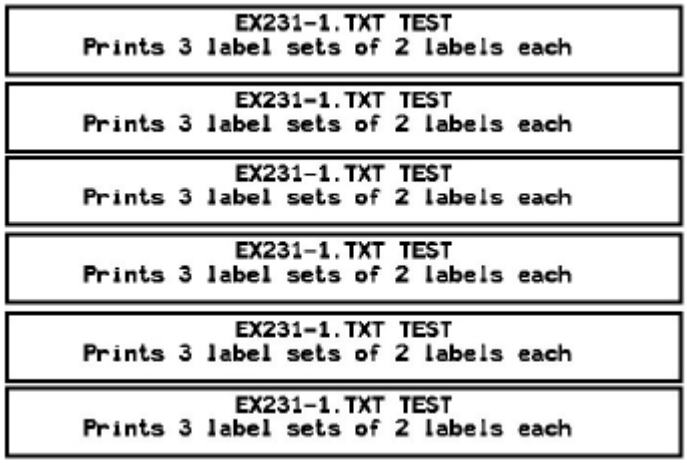
- None

Example

- EX231-1: Print 6 pcs label test.

```
N
q832
Q0,0
S3
D8
X020,010,3,800,85
A280,030,0,4,1,1,N,"EX231-1.TXT TEST"
A100,060,0,4,1,1,N,"Prints 3 label sets of 2 labels each"
P3,2
```

Output:



2.32. PA Command: Print Auto Form

Description

This command is used for form application. It prints the form, as all variable data have been input.

Syntax

- PAv1[,v2]

Parameters

- v1: Number of label sets, range is 1 ~ 99999.
- v2: Number of copies of the same label, range is 1 ~ 99999.

Default

- None

Example

- EX232-1:

```
FK"EX232-1"
FS"EX232-1"

N
q832
Q600,24
S3
D8
Q0,0
X020,010,4,800,280
A280,030,0,4,1,1,N,"EX232-1.TXT TEST"
A280,060,0,4,1,1,R,"PA command test"
A120,090,0,4,1,1,N,"Prints 2 label sets of one labels each"
PA2,1
FE

FR"EX232-1"
?
```

2.33. Q Command: Set Label Gap and Length

Description

Use this command to set length of the label and gap length of the label, or black line length for gap of the label is black line.

Syntax

- Qv1,v2[±v4]
- Qv1,Bv3[±v4]

Parameters

- v1: Label length (unit: dots). 203DPI printer range is: 32 ~ 30000(0.16 ~ 150 inches / 4 ~ 3750 mm)
- v2: Gap length (unit: dots). 203DPI printer range is: 16 ~ 240 (0.08 ~ 1.2 inches / 2 ~ 30 mm)
- Bv3: Black line length (unit: dots).
  B is fixed character for black line of label.
  v3: Black line length (unit: dots). 203DPI printer range is: 16 ~ 240 (0.08 ~ 1.2 inches / 2 ~ 30 mm)
- ±v4: Offset length of gap or black line (unit: dots). 203DPI printer range is: 0 ~ 80 (0 ~ 0.4 inches / 0 ~ 10 mm)

Default

- 203DPI printer: Q600,24
- 300DPI printer: Q900,36

Example

- EX233-1:

```
N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX233-1.TXT TEST"
A265,060,0,4,1,1,N,"Q command: Q600,24"
P1
```

- EX233-2:

```
N
q832
Q600,24+8
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX233-2.TXT TEST"
A255,060,0,4,1,1,N,"Q command: Q600,24+8"
P1
```

- EX233-3:

```
N
q832
Q600,24-8
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX233-3.TXT TEST"
A255,060,0,4,1,1,N,"Q command: Q600,24-8"
P1
```

- EX233-4:

```
N
q832
Q600,B24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX233-4.TXT TEST"
A260,060,0,4,1,1,N,"Q command: Q600,B24"
P1
```

2.34. q Command: Set Label Width

Description

Use this command to set the width of the printable area of the label.

Syntax

- qv1

Parameters

- v1: The width of the label (unit: dots).
  203DPI printer: range is 120 ~ 832. (0.6 ~ 4.1 inches / 15 ~ 104 mm)
  300DPI printer: range is 180 ~ 1248. (0.6 ~ 4.1 inches / 15 ~ 104 mm)

Default

- 203DPI printer: q832
- 300DPI printer: q1248

Example

- EX234-1: Set width of label is 600 dots.

```
N
q600
Q600,24
S3
D8
X020,010,4,560,590
A160,030,0,4,1,1,N,"EX234-1.TXT TEST"
A100,060,0,4,1,1,N,"Label width is 600 dots"
P1
```

2.35. R Command: Set Reference Point

Description

Use this command to move the reference point for the X and the Y axes. All coordinates will follow reference point offset.

Syntax

- Rv1,v2

Parameters

- P1: Horizontal margin measured (unit: dots).
- P2: Vertical margin measured (unit: dots).

Default

- R0,0

Example

- EX235-1: X move 40 dots offset, Y move 80 dots offset test.

```
N
q832
Q600,24
S3
D8
R40,80
X010,010,4,700,500
A260,030,0,4,1,1,N,"EX235-1 TEST"
A220,060,0,4,1,1,N,"R command: R40,80"
P1
```

2.36. S Command: Set Speed

Description

This command is used to select the print speed.

Syntax

- Sv1

Parameters

- v1: Select print speed, 203DPI range is 1 ~ 4, 300DPI range is 1 ~ 3.
  - 1: Speed is 1 IPS (25.4 mm/s).
  - 2: Speed is 2 IPS (50.8 mm/s).
  - 3: Speed is 3 IPS (76.2 mm/s).
  - 4: Speed is 4 IPS (101.6 mm/s).

Default

- 203DPI: S3
- 300DPI: S2

Example

- EX236-1: Print speed is 4 IPS test.

```
N
q832
Q600,24
R0,0
S4
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX236-1 TEST"
A240,060,0,4,1,1,N,"S command: S4(4IPS)"
P1
```

2.37. s Command: Select Storage Device

Description

This command is used to select storage device of printer, when forms, graphics, soft fonts want to store in printer.

Syntax

- sv1

Parameters

- v1: Select storage device. Value is R, F, D only.
  R: SDRAM.
  F: Internal FLASH ROM.
  D: SD card.

Default

- sR

Example

- EX237-1: Download a form to internal FLASH ROM of printer test.

```
sF
FK"EX237-1"
FS"EX237-1"

N
q832
Q600,24
R0,0
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX237-1.TXT TEST"
A200,060,0,4,1,1,N,"Download a form to FLASH ROM"
FE

FR"EX237-1"
?
P1
```

2.38. TD Command: Date Format Layout

Description

Use this command to define the date format for label with date.

Syntax

- TDv1[s1v2][s2v3]
  *.Note: The parameters v1,v2,v3 can be alternative position each other.

Parameters

- v1: Layout of year, value is y2, y4 only.
  y2: Year displayed as 2 digits.
  y4: Year displayed as 4 digits.
- v2: Layout of month, value is me and mn only.
  me: Month displayed as 3 letters
  mn: Month displayed as 2 digits.
- P3: Layout of day, value is dd only, day displayed as 2 digits.
- s1 / s2: Separate character.

Default

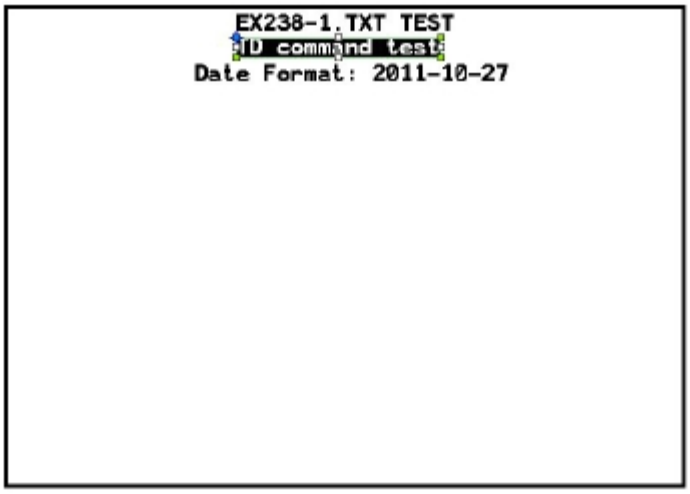
- TDy2/mn/dd

Example

- EX238-1: Date format: test.

```
N
TDy4-mn-dd
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX238-1.TXT TEST"
A280,060,0,4,1,1,R,"TD command test"
A230,090,0,4,1,1,N,"Date Format: "TD
P1
```

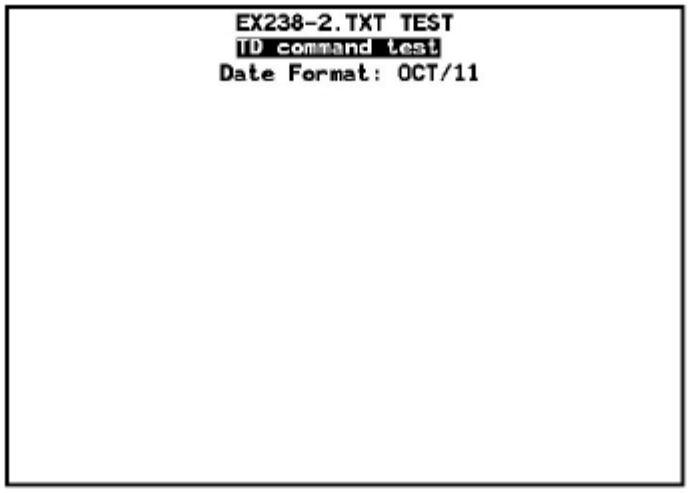
Output (圖有框線)



- EX238-2: Date format: test.

```
N
q832
Q600,24
S3
D8
TDme/y2
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX238-2.TXT TEST"
A280,060,0,4,1,1,R,"TD command test"
A260,090,0,4,1,1,N,"Date Format: "TD
P1
```

Output



2.39. TJ Command: Julian Day Format Layout

Description

Use this command to define the Julian day format layout.

Syntax

- TJv1

Parameters

- v1: Julian day fill 0 or not, value is 0 or 1 only.
  0: Not fill 0.
  1: Fill 0.

Default

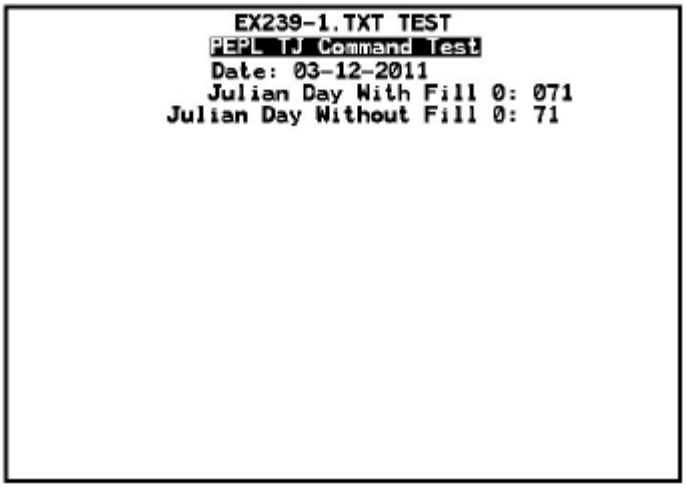
- TJ0

Example

- EX239-1: Julian day format layout test.

```
N
A280,030,0,4,1,1,N,"EX239-1.TXT TEST"
A250,060,0,4,1,1,N,"PEPL TJ Command Test"
A200,090,0,4,1,1,N,"     Date:"TD
TJ1
A200,120,0,4,1,1,N,"     Julian Day With Fill 0:"TJ
TJ0
A200,150,0,4,1,1,N,"Julian Day Without Fill 0:"TJ
P1
```

Output



2.40. TS Command: Set Real Time Clock

Description

This command is used to set date and time of printer's real time clock (RTC).

Syntax

- TSv1,v2,v3,v4,v5,v6

Parameters

- v1: Set month, range is 01 ~ 12.
- v2: Set day, range is 01 ~ 31.
- v3: Set last two digits of year, range is 00 ~ 99
  If v3 is 91 ~ 99 that mean is 1991 ~ 1999.
  If v3 is 00 ~ 90 that mean is 2000 ~ 2090.
- v4: Set hour, range is 00 ~ 23.
- v5: Set minutes, range is 00 ~ 59.
- v6: Set seconds, range is 00 ~ 59.

Default

- None

Example

- EX240-1: Set date and time to 2012/12/31 23:59:59

  TS12,31,12,23,59,59

2.41. TT Command: Time Format Layout

Description

Use this command to define the time format for label with time.

Syntax

- TTv1[s1v2][s2v3][+]
  *.Note: The parameters v1,v2,v3 can be alternative position each other.

Parameters

- v1: Value is h only, hours displayed as 2 digits.
- v2: Value is m only, Minutes displayed as 2 digits.
- v3: Value is s only, Seconds displayed as 2 digits.
- s1 / s2: Separate character.
- +: Enable 12 hour clock format.

Default

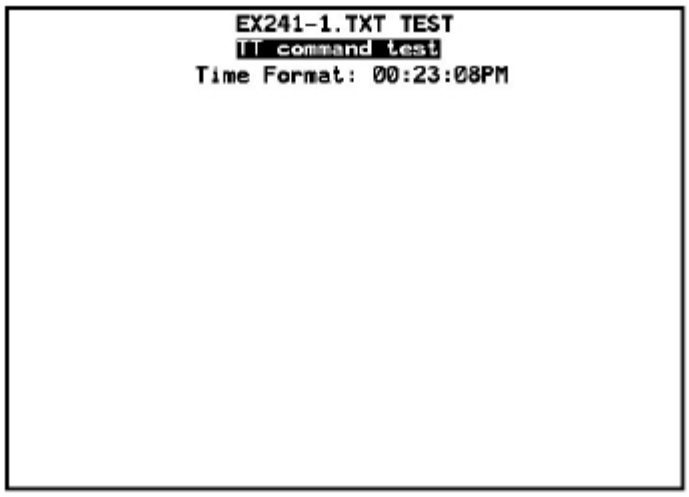
- TTh:m:s

Example

- EX241-1: Time format test.

```
N
q832
Q600,24
S3
D8
TTh:m:s+
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX241-1.TXT TEST"
A280,060,0,4,1,1,R,"TT command test"
A230,090,0,4,1,1,N,"Time Format: "TT
P1
```

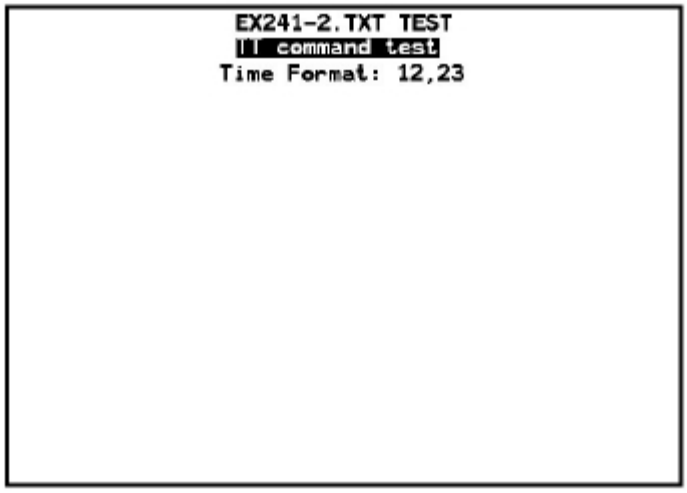
Output



- EX241-2: Time format test.

```
N
q832
Q600,24
S3
D8
TTh,m
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX241-2.TXT TEST"
A280,060,0,4,1,1,R,"TT command test"
A260,060,0,4,1,1,N,"Time Format: "TT
P1
```

Output



2.42. U Command: Print Configuration

Description

This command is used to print the current printer configuration.

Syntax

- U

Parameters

- None

Default

- None

Example

- EX242-1: Printer configuration test.

  U↵

2.43. UA Command: Enable Error Re-Printing

Description

The command is used to enable error re-printing function. When error (like media out or ribbon out) is resolved, the printer will re-print previous label.

Syntax

- UA

Parameters

- None

Default

- UA

Example

- EX243-1: Enable error re-printing function.

  UA↵

2.44. UB Command: Disable Error Re-Printing

Description

The command is used to disable error re-printing function. When error (like media out or ribbon out) is resolved, the printer will not re-print previous label.

Syntax

- UB

Parameters

- None

Default

- UA

Example

- EX244-1: Disable error re-printing function.

  UB↵

2.45. UE Command: Get Soft Font Information from RS232

Description

Send this command to print through RS232, the printer will respond soft fonts information to host.

Syntax

- UE

Parameters

- None

Default

- None

Example

- EX245-1: Get soft fonts information by RS232.

  UE↵

  Response: Through RS232 to host

  Case1: The number of soft fonts: 0

  Case2: The number of soft fonts: 5

  Name: a
  Name: b
  Name: c
  Name: d
  Name: e

2.46. UF Command: Get Form Information from RS232

Description

Send this command to printer through RS232, the printer will respond forms information to host.

Syntax

- UF

Parameters

- None

Default

- None

Example

- EX246-1: Get forms information by RS232.

  UF↵

  Response: Through RS232 to host

  Case1: The number of forms: 0

  Case2: The number of forms: 2
  Name: FORM1
  Name: FORM2

2.47. UG Command: Get Graphics Information from RS232

Description

Send this command to printer through RS232 only, the printer will respond current graphics information to the host.

Syntax

- UG

Parameters

- None

Default

- None

Example

- EX247-1: Get graphics information by RS232.

  UG↵

  Response: Through RS232 to host

  Case1: The number of images: 0

  Case2: The number of images: 3
  Name: GM01
  Name: GM02
  Name: GM03

2.48. UI Command: Get Code Page Form RS232

Description

Send this command to printer, the printer will respond current codepage of font information through RS232.

Response status syntax: UIv1,v2

v1: Number of data bits

v2: Code page.

Syntax

- UI

Parameters

- None

Default

- None

Example

- EX248-1: Read current codepage of font test through RS232.

  UI↵

  Response: (from RS232)

  UI8,437

2.49. UN Command: Disable Printer's Status

Description

Cancel US command. Printer will not respond any printer status after sending this command to printer.

Syntax

- UN

Parameters

- None

Default

- UN: Disable error reporting.

Example

- EX249-1: Disable error reporting.

  UN↲

2.50. US Command: Enable Printer's Status

Description

Use this command to enable the printer's status.

Syntax

- US

Parameters

- None

Default

- UN: Disable error reporting.

Example

- EX250-1: Enable error reporting test.

  US↵

2.51. V Command: Define Variable

Description

Use this command to define variable data for form.

Syntax

- Vv1,v2,v3,”PROMPT”

Parameters

- v1: Variable ID number, ID number range is 0 ~ 255
- v2: Maximum value of counter, counter digits range is : 1 ~ 29.
- v3: Justification of variable string. Values is N,C,L,R only.
  - N: No justification.
  - C: Center justification.
  - L: Left justification.
  - R: Right justification.
- PROMPT: An ASCII text string that will be sent to LCD of printer or host, ???
  prompt maximum characters is 15.

Default

- None

Example

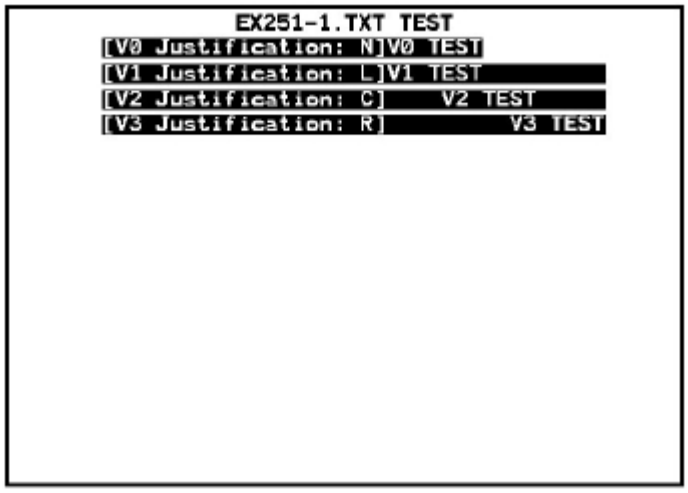
- EX251-1: Download a form to printer with variables.

```
FS"EX251-1"
V00,16,N,"ENTER V0"
V01,16,L,"ENTER V1"
V02,16,C,"ENTER V2"
V03,16,R,"ENTER V3"

N
q832
Q600,24
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX251-1.TXT TEST"
A120,060,0,4,1,1,R,"[V0 Justification: N]"V0
A120,090,0,4,1,1,R,"[V1 Justification: L]"V1
A120,120,0,4,1,1,R,"[V2 Justification: C]"V2
A120,150,0,4,1,1,R,"[V3 Justification: R]"V3
FE

FR"EX251-1"
?
V0 TEST
V1 TEST
V2 TEST
V3 TEST
P1
```

Output:


EX251-1.TXT TEST
[V0 Justification: N]V0 TEST
[V1 Justification: L]V1 TEST
[V2 Justification: C] V2 TEST
[V3 Justification: R] V3 TEST

2.52. X Command: Draw Box

Description

Use this command to draw box line.

Syntax

- Xv1,v2,v3,v4,v5

Parameters

- P1: The X-coordinate of start position (unit: dots).
- P2: The Y-coordinate of start position (unit: dots).
- P3: Line thickness (unit: dots).
- P4: The X-coordinate of end position (unit: dots).
- P5: The Y-coordinate of end position (unit: dots).

Default

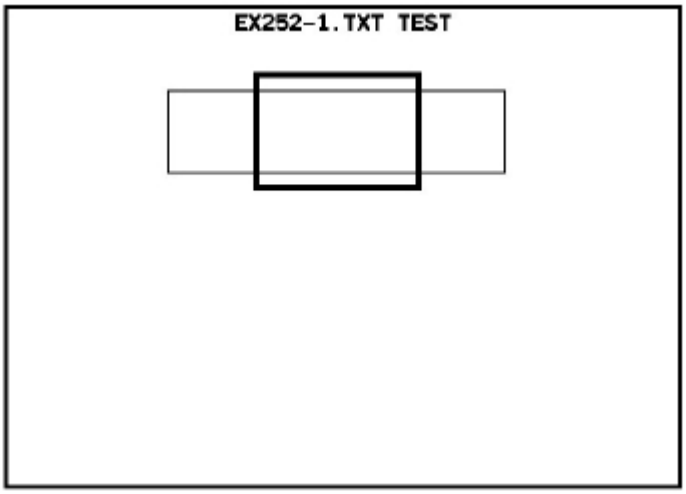
- None

Example

- EX252-1: Draw a box line test.

```
N
q832
Q600,24
S3
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX252-1.TXT TEST"
X200,120,3,600,220
X300,100,6,500,240
P1
```

Output:



2.53. xa Command: Label Calibration

Description

This command is used to make printer detect label and gap length. This calibrating value will be saved automatically in printer, the value will be erased by reset command. **See Also** ^@ Command

Syntax

- xa

Parameters

- None

Default

- None

Example

- EX253-1: Label calibration test.

  xa↵

2.54. Y Command: RS232 Set Up

Description

Use this command to set the parameters of RS232 serial port.

Syntax

- Yv1,v2,v3,v4

Parameters

- v1: Baud rate of RS232

v1 Value	Description
115	115200 bps
57	57600 bps
38	38400 bps
19	19200 bps
96	9600 bps
48	4800 bps
24	2400 bps
12	1200 bps

- v2: Parity of RS232, value is O, E or N only.
  O: Odd parity.
  E: Even parity.
  N: None parity.
- v3: Data bit of RS232, value is 7 or 8 only.
  7: 7 data bits.
  8: 8 data bits.
- v4: Stop bit of RS232, value is 1 or 2 only.
  1: 1 stop bits.
  2: 2 stop bits.

Default

- Y96,N,8,1

Example

- EX254-1: baud rate115200, even parity, 7 data bits, 1 stop bit test.

  Y115,E,7,1

2.55. Z Command: Print Direction

Description

Use this command to set the print direction.

Syntax

- Zv1

Parameters

- v1: Print direction, values is B or T.
  T: Printing from top of image.
  B: Printing from bottom of image.

Default

- ZT

Example

- EX255-1: Printing from top of image test.

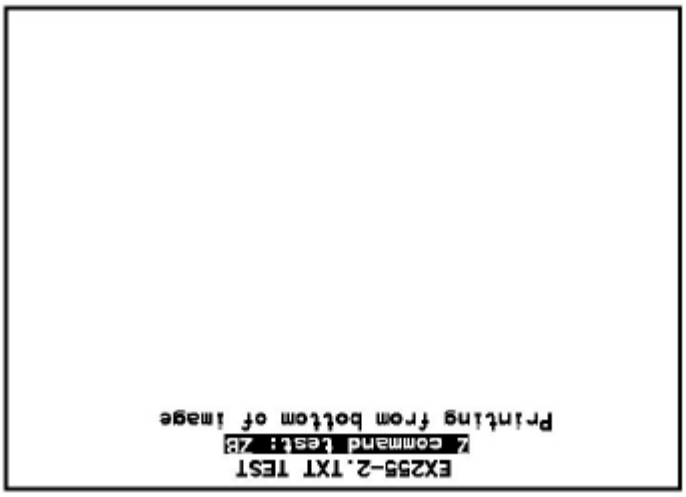
```
N
q832
Q600,24
S3
D8
ZT
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX255-1.TXT TEST"
A260,060,0,4,1,1,R,"Z command test: ZT"
A200,090,0,4,1,1,N,"Printing from top of image"
P1
```

OUTPUT:

- EX255-2: Printing from bottom of image test.

```
N
q832
Q600,24
S3
D8
ZB
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX255-2.TXT TEST"
A260,060,0,4,1,1,R,"Z command test: ZB"
A170,090,0,4,1,1,N,"Printing from bottom of image"
P1
```

OUTPUT:



2.56. ? Command: Download Variables

Description

This command is used to process form with counters or variables. When run the form which includes input counters or variables, this command has to be sent to printer

Syntax

- ?

Parameters

- None

Default

- None

Example

- EX256-1: Download a form to print for download variables test.

```
FS"EX256-1"
V00,16,N,"ENTER V0"
N
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX256-1.TXT TEST"
A280,060,0,4,1,1,R,"? command test:"
A180,090,0,4,1,1,N,"The variable 0 is: "V0
FE

FR"EX256-1"
?
Hi! Hello
P1
```

OUTPUT:

2.57. ^@ Command: Reset Printer

Description

This command is used to reset printer. If objects are (like form, graphic or soft Font) stored in SDRAM, these objects will be cleared.

Syntax

- ^@

Parameters

- None

Default

- None

Example

- EX257-1:

  ^@↵

2.58. ^default Command: Set Factory Default

Description

Set printer to factory defaults.

Command	Description	Default
D	Darkness	8
fB	Adjust back-feed position	0
I	Character set	8 bit data / Code page 437
JB	Tear-off	Disable
O	Transfer mode	Thermal transfer
O	Print mode	Normal
O	Euro mark / slash zero	Euro mark disabled Slash zero
Q	Label length	203DPI: 600 / 24 dots 300DPI: 900 / 36 dots
q	Print width	203DPI: 832 dots 300DPI: 1248 dots
R	Reference point	(X,Y): 0,0
S	Speed	203DPI: 3 IPS 300DPI: 2 IPS
s	Storage device	SDRAM
TD	Data recall & format layout	mn-dd-y4
TJ	Julian day format layout	Not fill 0
TT	Time recall & format layout	h:m:s
UN	Disable error reporting	Disable
Y	Baud rate	9600,n,8,1
Z	Print direction	ZT

Syntax

- ^default

Parameters

- None

Default

- None

Example

- EX258-1:

  ^default↵

2.59. ^ee Command: Response Error Report

Description

This command is used to respond error report immediately from RS232 serial port.

Once this command is sent to printer, the printer will respond following message to host to let user know printer status.

Error report format:

Code	Error / status description
00	No error.
01	Syntax error.
04	Insufficient memory.
07	Label or ribbon empty.
08	Duplicate name: form, graphic, soft font.
09	Name not found: form, graphic, soft font.
10	Not in data entry mode.
11	Cover open.
12	Pause mode or paused in peel mode.
13	TPH too hot
50	Printer Busy
81	Cutter Jam
200	Peeler not installed

Syntax

- ^ee

Parameters

- None

Default

- None

Example

- EX259-1:

  ^ee↵

2.60. ; Command: Comment For Remark

Description

This command is for remark comment line.

Syntax

- ;

Parameters

- None

Default

- None

Example

- EX259-1:

```
N
q832
Q600,24
S3
; Printer's speed is 3 IPS.
D8
X020,010,4,800,570
A280,030,0,4,1,1,N,"EX260-1.TXT TEST"
A240,060,0,4,1,1,N,"Comment For Remark"  ; This is font 4 sample.
P1
```

3. APPENDIX A: PSPL COMMANDS

Description

The PSPL (Printer System Programming Language) is additional command for special functions in printer.

Syntax

- ESC SYS MSG END.
- ESC SYS MSG SZ DATA END

Parameters

- ESC: Fixed character for head command, length is fixed 1 byte.
  Character is fixed ($1B_H$).
- SYS: Fixed string for head command, length is fixed 3 bytes.
  The string is fixed (53_H) (59_H) (53_H).
- MSG: Message code, length is fixed 2 bytes, this is hexadecimal value.
  0xxx: Setting only.
  1xxx: Read only by RS232.
  2xxx: Read only by USB.
  3xxx: Read only by Ethernet.
- END: Command ending, length is fixed 2 bytes. The string is fixed ($0D_H$) ($0A_H$)
- SZ: Set data size, length is fixed 4 bytes, hexadecimal value.
- DATA: According by commands limited.

3.01. PSPL Quick Reference

No	Message Code	Description	Type
1	0018	Set/cancel password	Set
2	0020	Set buzzer level	Set
3	0021	Set print method	Set
4	0022	Set gap sensor type	Set
5	0023	Set error reprint	Set
6	0024	Set cancel mode	Set
7	0048	Set TPH Y offset	Set
8	0049	Set back Y offset	Set
9	0053	Set heat fine tune offset	Set
10	0059	Clear storage device	Set
11	0060	Set speed fine tune offset	Set
12	0061	Set label out detect length	Set
13	0062	Set language for LCD display	Set
14	0067	Ethernet command mode entry	Set
15	0068	Ethernet command mode exit	Set
16	0069	Ethernet DHCP enabled	Set
17	0070	Ethernet static IP setting	Set
18	0071	Disable auto sense function	Set
19	1020/2020/3020	Read buzzer level	Read
20	1021/2021/3021	Read print method	Read
21	1022/2022/3022	Read gap sensor type	Read
22	1023/2023/3023	Read error reprint	Read
23	1024/2024/3024	Read cancel mode	Read
24	1025/2025/3025	Read forms information	Read
25	1026/2026/3026	Read images information	Read
26	1027/2027/3027	Read soft fonts information	Read
27	1030/2030/3030	Read status	Read
28	1031/2031/3031	Read media type	Read
29	1032/2032/3032	Read gap height	Read
30	1033/2033/3033	Read gap offset	Read
31	1034/2034/3034	Read label width	Read
32	1035/2035/3035	Read label height	Read
33	1036/2036/3036	Read vertical offset	Read
34	1037/2037/3037	Read horizontal offset	Read
35	1038/2038/3038	Read print direction	Read
36	1039/2039/3039	Read speed	Read
37	1040/2040/3040	Read darkness	Read

No	Message Code	Description	Type
38	1041/2041/3041	Read RS232 set	Read
39	1042/2042/3042	Read option mode	Read
40	1044/2044/3044	Read date	Read
41	1045/2045/3045	Read time	Read
42	1048/2048/3048	Read TPH Y offset	Read
43	1049/2049/3049	Read back Y offset	Read
44	1053/2053/3053	Read heat fine tune offset	Read
45	1059/2059/3059	Read storage device type	Read
46	1060/2060/3060	Read speed fine tune offset	Read
47	1061/2061/3061	Read label out length	Read
48	1062/2062/3062	Read language for LCD display	Read
49	1067/2067	Read Ethernet command mode status	Read
50	1068/2068	Read Ethernet configure mode status	Read
51	1071/2071/3071	Read auto sense status	Read
52	00AA	Bluetooth	Read/Set

3.02. PSPL 0018: Set / Cancel Password.

Code	Description	Data size	Unit	Parameter	Default
0018	Set/cancel password	4	None	Set Password range: 0001~9999 Cancel password: 0000	0000

Example

- EX0018-1: Set password to 0420.
  <ESC>SYS 00$_H$ 18$_H$ 00$_H$ 00$_H$ 00$_H$ 04$_H$ 0420<CR><LF>
- EX0018-2: Cancel password.
  <ESC>SYS 00$_H$ 18$_H$ 00$_H$ 00$_H$ 00$_H$ 04$_H$ 0000<CR><LF>

3.03. PSPL 0020: Set Buzzer Level

Code	Description	Data size	Unit	Parameter	Default
0020	Set buzzer level	1	None	0~3	1

Example

- EX0020-1: Set buzzer level to 2.
  <ESC>SYS 00$_H$ 20$_H$ 00$_H$ 00$_H$ 00$_H$ 01$_H$ 2<CR><LF>

3.04. PSPL 0021: Set Print Method

Code	Description	Data size	Unit	Parameter	Default
0021	Set print method	1	None	0: By command (Note) 1: Direct thermal always 2: Thermal transfer always	0

Note: The "By Command" means to follow O command setting.

Example

- EX0021-1: Set print method to direct thermal always.
  <ESC>SYS 00$_H$ 21$_H$ 00$_H$ 00$_H$ 00$_H$ 01$_H$ 1<CR><LF>

3.05. PSPL 0022: Set Gap Sensor Type

Code	Description	Data size	Unit	Parameter	Default
0022	Set gap sensor type	1	None	0: By command (Note) 1: See-through sensor always 2: Reflective sensor always	0

Note: Select sensor type according to label type.
Gap/notch: see-through sensor.
Black mark: reflective sensor.

Example

- EX0022-1: Set gap sensor type to reflective sensor always.
  <ESC>SYS 00_H 22_H 00_H 00_H 00_H 01_H 2<CR><LF>

3.06. PSPL 0023: Set Error RePrint

Code	Description	Data size	Unit	Parameter	Default
0023	Printing after error occurs, re-print or not.	1	None	0: No reprint 1: Reprint	1

Example

- EX0023-1: Set no reprint function.
  <ESC>SYS 00_H 23_H 00_H 00_H 00_H 01_H 0<CR><LF>

3.07. PSPL 0024: Set Cancel Mode

Code	Description	Data size	Unit	Parameter	Default
0024	Cancel button pressed process.	1	None	0: Wait page complete 1: Stop immediate	0

Example

- EX0024-1: Set stop immediate for cancel mode.
  <ESC>SYS 00_H 24_H 00_H 00_H 00_H 01_H 1<CR><LF>

3.08. PSPL 0048: Set TPH Y Coordinate Offset

Code	Description	Data size	Unit	Parameter	Default
0048	Adjust TPH Y coordinate offset	4	dots	-720 ~ +120	0

Example

- EX0048-1: Set TPH Y offset to add +16 dots.
  <ESC>SYS 00_H 48_H 00_H 00_H 00_H 04_H +016<CR><LF>

3.09. PSPL 0049: Set Back Y Coordinate Offset

Code	Description	Data size	Unit	Parameter	Default
0049	Adjust back Y coordinate offset. This function for tear-off, cut, peel mode only.	4	dots	-120 ~ +120	0

Example

- EX0049-1: Set back Y offset to reduce -8 dots.
  <ESC>SYS 00_H 49_H 00_H 00_H 00_H 04_H -008<CR><LF>

3.10. PSPL 0053: Darkness Fine Tune

Code	Description	Data size	Unit	Parameter	Default
0053	This function can fine tune darkness	3	None	-20 ~ +20	0

Example

- EX0053-1: Set darkness fine tune to +10
  <ESC>SYS 00_H 53_H 00_H 00_H 00_H 03_H +10<CR><LF>

3.11. PSPL 0059: Clear Storage Device

Code	Description	Data size	Unit	Parameter	Default
0059	Clear storage device	1	None	0: SDRAM 1: SD Card (Note) 2: Internal FLASH ROM	None

Note: Clear all forms, images and soft fonts in SD card.

Example

- EX0059-1: Clear Internal FLASH ROM objects.
  <ESC>SYS 00_H 59_H 00_H 00_H 00_H 01_H 2<CR><LF>

3.12. PSPL 0060: Speed Fine Tune

Code	Description	Data size	Unit	Parameter	Default
0060	The function can fine tune speed	2	0.1 IPS	-9 ~ +9	0

Example

- EX0060-1: Set speed fine tune to add 0.2 IPS.???
  <ESC>SYS 00_H 60_H 00_H 00_H 00_H 02_H +2<CR><LF>

3.13. PSPL 0061: Set Label Out Detect Distance

Code	Description	Data size	Unit	Parameter	Default
0061	Adjust label out detect distance	4	dots	120 ~ 1200	120

Example

- EX0061-1: Modify label out detect distance to 180 dots.
  <ESC>SYS 00_H 61_H 00_H 00_H 00_H 04_H 0180<CR><LF>

3.14. PSPL 0062: Set Language for LCD Display

Code	Description	Data size	Unit	Parameter	Default
0062	Set language for LCD display.	2	None	0: English 2: German 5: Portuguese 6: Traditional Chinese 7: Simplify Chinese 8: Japanese 9: Thai 10: Turkish	0

Example

- EX0062-1: Set LCD language to Traditional Chinese.
  <ESC>SYS 00_H 62_H 00_H 00_H 00_H 02_H 06<CR><LF>

3.15. PSPL 0067: Ethernet Command Mode Entry

Code	Description	Data size	Unit	Parameter	Default
0067	Ethernet command mode entry.	Null	None		None

Example

- EX0067-1: Enter Ethernet command mode.
  <ESC>SYS 00_H 67_H <CR><LF>

3.16. PSPL 0068: Ethernet Command Mode Exit

Code	Description	Data size	Unit	Parameter	Default
0068	Ethernet command mode exit (Need wait about 5 sec after exit)	Null	None		None

Example

- EX0068-1: Exit Ethernet command mode.
  <ESC>SYS 00H 68H <CR><LF>

3.17. PSPL 0069: Ethernet DHCP Setting

Code	Description	Data size	Unit	Parameter	Default
0069	Set DHCP function of Ethernet. (Need wait about 6 sec after enabled)	Null	Null		None

Example

- EX0069-1: DHCP enabled after entering Ethernet command mode.
  <ESC>SYS 00H 69H <CR><LF>

3.18. PSPL 0070: Ethernet Static IP Setting

Code	Description	Data size	Unit	Parameter	Default
0070	Set static IP function of Ethernet.	48	None	IIII.NNNN.GGGG I (IP ADDRESS): 3 digits fixed N(NET MASK): 3 digits fixed G(GET WAY): 3 digits fixed	None

Example

- EX0070-1: Set static IP after entering Ethernet command mode.
  <ESC>SYS 00H 70H 00H 00H 00H 30H
  196.168.011.005.
  255.255.255.000.
  192.168.011.001<CR><LF>

3.19. PSPL 0071: Disable Auto sense Function

Code	Description	Data size	Unit	Parameter	Default
0071	Disable auto sense for label gap detect function when first label feed or printed after cover closed.	1	None	0: Enable auto sense. 1: Disable auto sense.	0

Example

- EX0071-1: Disable auto sense function.
  <ESC>SYS 00H 71H 00H 00H 00H 01H 1<CR><LF>

3.20. PSPL 1020/2020/3020: Read Buzzer Level

Code	Description	Data size	Unit	Response	Default
1020 2020 3030	Read buzzer level	Null	None	0~3	1

Example

- EX1020-1: Read buzzer level from RS232.
  <ESC>SYS 10H 20H<CR><LF>

  Response: The buzzer level is 1.
  <ESC>SYS 1

3.21. PSPL 1021/2021/3021: Read Print Method

Code	Description	Data size	Unit	Response	Default
1021 2021 3031	Read print method	Null	None	0: By command 1: Direct thermal always 2: Thermal transfer always	0

Example

- EX2021-1: Read print method from USB device.
  <ESC>SYS 20H 21H<CR><LF>

  Response: The print method is to follow O command setting.
  <ESC>SYS 0

3.22. PSPL 1022/2022/3022: Read Gap Sensor Type

Code	Description	Data size	Unit	Response	Default
1022 2022 3032	Read gap sensor type	Null	None	0: By command 1: See-through sensor always 2: Reflective sensor always	0

Example

- EX1022-1: Read gap sensor from RS232
  <ESC>SYS 10H 22H <CR><LF>

  Response: The gap sensor type is reflective sensor always.
  <ESC>SYS 2

3.23. PSPL 1023/2023/3023: Read Error RePrint

Code	Description	Data size	Unit	Response	Default
1023 2023 3033	Read error reprint status	Null	None	0: No reprint 1: Reprint	1

Example

- EX3023-1: Read error reprint status from Ethernet.
  <ESC>SYS 30H 33H <CR><LF>

  Response: The printer will re-print after error is resolved.
  <ESC>SYS 1

3.24. PSPL 1024/2024/3024: Read Cancel Mode

Code	Description	Data size	Unit	Response	Default
1024 2024 3034	Read cancel mode status	Null	None	0: Wait page complete 1: Stop immediate	0

Example

- EX1024-1: Read cancel mode status from RS232.
  <ESC>SYS 10H 24H <CR><LF>

  Response: The printing will stop immediately when cancel button is pressed.
  <ESC>SYS 1

3.25. PSPL 1025/2025/3025: Read Forms Information

Code	Description	Data size	Unit	Response	Default
1025 2025 3035	Read forms information	Null	None		None

Example

- EX2025-1: Read forms information from USB device.
  <ESC>SYS 20H 25H <CR><LF>

  Response: The printer has 3 forms.
  <ESC>SYS The number of forms: 3
  Name:EX237-1
  Name:EX251-1
  Name:EX256-1

3.26. PSPL 1026/2026/3026: Read Images Information

Code	Description	Data size	Unit	Response	Default
1026 2026 3036	Read images information	Null	Null		None

Example

- EX3026-1: Read images information from Ethernet.
  <ESC>SYS 30H 26H <CR><LF>

  Response: The printer hasn't any storedmage.
  <ESC>SYS The number of images: 0

3.27. PSPL 1027/2027/3027: Read Soft Fonts Information

Code	Description	Data size	Unit	Response	Default
1027 2027 3037	Read soft fonts information	Null	None		None

Example

- EX1027-1: Read soft fonts information from RS232.
  <ESC>SYS 10H 27H <CR><LF>

  Response: The printer hasn't any storedsoft fonts.
  <ESC>SYS The number of soft fonts: 0

3.28. PSPL 1030/2030/3030: Read Printer Status

Code	Description	Data size	Unit	Response	Default
1030 2030 3030	Read printer status	Null	None	AAAA,BBBB AAAA: Printer status 00000001: Printing 00000002: Feeding 00000004: Pausing 00000008: Peeling 00000010: On demand 00000020: Print update BBBB: Printer Error 00000001: Label gap out 00000002: Label out 00000004: Ribbon out 00000008: Cover open(ready) 00000010: Cover open(print) 01000000: TPH fail	None

Example

- EX1030-1: Read printer status from RS232.
  <ESC>SYS 10H 30H<CR><LF>

  Response: Printer error message is Cover open inReady mode.
  <ESC>SYS 00000000,00000008

3.29. PSPL 1031/2031/3031: Read Media Type

Code	Description	Data size	Unit	Response	Default
1031 2031 3031	Read media type	Null	None	0: Label with gap 1: Label with black mark 2: Continue label	0

Note: If you want to set media type, please refer to Q Command

Example

- EX1031-1: Read media type from RS232.
  <ESC>SYS 10H 31H<CR><LF>

  Response: The media type is label with gap.
  <ESC>SYS 0

3.30. PSPL 1032/2032/3032: Read Height of Label Gap

Code	Description	Data size	Unit	Response	Default
1032 2032 3032	Read height of label gap	Null	dots		None

Note: **See Also** Q Command

Example

- EX1032-1: Read height of label gap from RS232.
  <ESC>SYS 10H 32H <CR><LF>

  Response: The height of label gap is 24 dots.
  <ESC>SYS 24

3.31. PSPL 1033/2033/3033: Read Offset of Label Gap

Code	Description	Data size	Unit	Response	Default
1033 2033 3033	Read offset of label gap	Null	dots		None

Note: **See Also** Q Command

Example

- EX1033-1: Read offset of label gap from RS232.
  <ESC>SYS 10H 33H <CR><LF>

  Response: The offset of label gap is -4 dots.
  <ESC>SYS -4

3.32. PSPL 1034/2034/3034: Read Label Width

Code	Description	Data size	Unit	Response	Default
1034 2034 3034	Read label width	Null	dots		None

Note: **See Also** q Command

Example

- EX1034-1: Read label width from RS232.
  <ESC>SYS 10H 34H <CR><LF>

  Response: The label width is 832 dots
  <ESC>SYS 832

3.33. PSPL 1035/2035/3035: Read Label Height

Code	Description	Data size	Unit	Response	Default
1035 2035 3035	Read label height	Null	dots		None

Note: **See Also** Q Command

Example

- EX1035-1: Read label height from RS232.
  <ESC>SYS 10H 35H <CR><LF>

  Response: The label height is 600 dots.
  <ESC>SYS 600

3.34. PSPL 1036/2036/3036: Read Vertical Offset

Code	Description	Data size	Unit	Response	Default
1036 2036 3036	Read vertical offset	Null	dots	0 ~ 30000	0

Note: **See Also** R Command

Example

- EX1036-1: Read vertical offset from RS232.
  <ESC>SYS 10H 36H <CR><LF>

  Response: The vertical offset is 0 dots.
  <ESC>SYS 0

3.35. PSPL 1037/2037/3037: Read Horizontal Offset

Code	Description	Data size	Unit	Response	Default
1037 2037 3037	Read horizontal offset	Null	dots	203DPI: 0 ~ 832 300DPI: 0 ~ 1248	0

Note: **See Also** R Command

Example

- EX1037-1: Read horizontal offset from RS232.
  <ESC>SYS 10H 37H <CR><LF>

  Response: The horizontal offset is 8 dots.
  <ESC>SYS 8

3.36. PSPL 1038/2038/3038: Read Print Direction

Code	Description	Data size	Unit	Response	Default
1038 2038 3038	Read print direction	Null	None	0: Printing from top of image 1: Printing from bottom of image	0

Note: **See Also** Z Command

Example

- EX1038-1: Read print direction from RS232.
  <ESC>SYS 10H 38H <CR><LF>

  Response: The direction is printing from bottom of images.
  <ESC>SYS 1

3.37. PSPL 1039/2039/3039: Read Speed

Code	Description	Data size	Unit	Response	Default
1039 2039 3038	Read speed	Null	IPS	1~4	203DPI: 3 300DPI: 2

Note**See Also** S Command

Example

- EX1039-1: Read speed from RS232.
  <ESC>SYS 10H 39H <CR><LF>

  Response: The printer speed is 3 IPS.
  <ESC>SYS 3

3.38. PSPL 1040/2040/3040: Read Darkness

Code	Description	Data size	Unit	Response	Default
1040 2040 3040	Read darkness	Null	Null	0 ~ 15	8

Note:. **See Also** D Command

Example

- EX1040-1: Read darkness from RS232.
  <ESC>SYS 10H 40H <CR><LF>

  Response: The darkness is 8.
  <ESC>SYS 8

3.39. PSPL 1041/2041/3041: Read RS232 Set

Code	Description	Data size	Unit	Response	Default
1041 2041 3041	Read RS232 set	Null	None	A,B,C,D A (Baud Rate): 1200,2400,4800 9600,19200,38400 57600,115200 B (Parity): N(None),O(Odd),E(Even) C (Data Bits): 7 / 8 D (Stop Bit): 1 / 2	9600,N,8,1

Note: **See Also** Y Command

Example

- EX1041-1: Read RS232 set from RS232.
  <ESC>SYS 10H 41H<CR><LF>

  Response: The RS232 setting is baud rate 9600bps, None parity, 8 data bits, 1
  stop bit.
  <ESC>SYS 9600,N,8,1

3.40. PSPL 1042/2042/3042: Read Option Mode

Code	Description	Data size	Unit	Response	Default
1042 2042 3042	Read option mode	Null	None	0x0: Normal 0x1: Cut 0x2: Peel 0x4: On demand 0x8: Tear off	0x0

Note:, **See Also** O Command, J Command

Example

- EX1042-1: Read option mode from RS232.
  <ESC>SYS 10H 42H<CR><LF>

  Response: The option mode is tear-off.
  <ESC>SYS 8

3.41. PSPL 1044/2044/3044: Read Date

Code	Description	Data size	Unit	Response	Default
1044 2044 3044	Read date	Null	YY/MM/DD	YY(Year): 0 ~ 99 MM(Month): 0 ~ 12 DD(Day): 0 ~ 31	None

Note: **See Also** TS Command

Example

- EX1044-1: Read date from RS232.
  <ESC>SYS 10H 44H <CR><LF>

  Response: The date is 11/10/26.
  <ESC>SYS 11/10/26

3.42. PSPL 1045/2045/3045: Read Time

Code	Description	Data size	Unit	Response	Default
1045 2045 3045	Read time	Null	HH:MM:SS	HH(Hour): 0 ~ 23 MM(Minute): 0 ~ 59 DD(Sec): 0 ~ 59	None

Note: **See Also** TT Command

Example

- EX1045-1: Read time from RS232.
  <ESC>SYS 10H 45H <CR><LF>

  Response: The time is 13:56:20.
  <ESC>SYS 13:56:20

3.43. PSPL 1048/2048/3048: Read TPH Y Coordinate Offset

Code	Description	Data size	Unit	Response	Default
1048 2048 3048	Read TPH Y coordinate offset	Null	dots	-720 ~ +120	0

Example

- EX1048-1: Read TPH Y coordinate offset from RS232.
  <ESC>SYS 10H 48H <CR><LF>

  Response: The TPH Y coordinate offset is -16 dots.
  <ESC>SYS -16

3.44. PSPL 1049/2049/3049: Read Back Y Coordinate Offset

Code	Description	Data size	Unit	Response	Default
1049 2049 3049	Read back Y coordinate offset	Null	dots	-120 ~ +120	0

Example

- EX1049-1: Read back Y coordinate offset from RS232.
  <ESC>SYS 10H 49H<CR><LF>

  Response: The back Y coordinate offset is 8 dots.
  <ESC>SYS 8

3.45. PSPL 1053/2053/3053: Read Darkness Fine Tune

Code	Description	Data size	Unit	Response	Default
1053 2053 3053	Read darkness fine tune	Null	None	-20 ~ +20	0

Example

- EX1053-1: Read darkness fine tune from RS232.
  <ESC>SYS 10H 53H<CR><LF>

  Response: The darkness fine tune is -5.
  <ESC>SYS -5

3.46. PSPL 1059/2059/3059: Read Storage Device Type

Code	Description	Data size	Unit	Response	Default
1059 2059 3059	Read storage device type	Null	None	0: SDRAM 1: SD Card 2: Internal FLASH ROM	0

Note: **See Also** s Command

Example

- EX1059-1: Read storage device type from RS232.
  <ESC>SYS 10H 59H<CR><LF>

  Response: The storage device is SDRAM.
  <ESC>SYS 0

3.47. PSPL 1060/2060/3060: Read Speed Fine Tune Offset

Code	Description	Data size	Unit	Response	Default
1060 2060 3060	Read speed fine tune	Null	0.1IPS	-9 ~ +9	0

Example

- EX1060-1: Read speed fine tune from RS232.
  <ESC>SYS 10H 60H<CR><LF>

  Response: The speed adds 0.5 IPS.
  <ESC>SYS 5

3.48. PSPL 1061/2061/3061: Read Label Out Detect Distance

Code	Description	Data size	Unit	Response	Default
1061 2061 3061	Read label out detect distance	Null	dots	120 ~ 1200	120

Example

- EX1061-1: Read label out detect distance from RS232.
  <ESC>SYS 10H 61H<CR><LF>

  Response: The label out detect distance is 180 dots.
  <ESC>SYS 180

3.49. PSPL 1062/2062/3062: Read Language for LCD Display

Code	Description	Data size	Unit	Response	Default
1062 2062 3062	Read language for LCD display.	Null	None	0: English 2: German 5: Portuguese 6: Traditional Chinese 7: Simplify Chinese 8: Japanese 9: Thai 10: Turkish	0

Example

- EX1062-1: Read LCD language from RS232.
  <ESC>SYS 10H 62H<CR><LF>

  Response: The LCD language is Japanese.
  <ESC>SYS 8

3.50. PSPL 1067/2067: Read Ethernet Mode Status

Code	Description	Data size	Unit	Response	Default
1067 2067	Read Ethernet mode status	Null	None	0: Ethernet normal mode. 1: Ethernet command mode.	0

Example

- EX1067-1: Read Ethernet mode status from RS232.
  <ESC>SYS 10H 67H<CR><LF>

  Response: The Ethernet mode is normal mode.
  <ESC>SYS 0

3.51. PSPL 1068/2068: Read Ethernet Configure Information

Code	Description	Data size	Unit	Response	Default
1068 2068	Read Ethernet configure information	Null	None	Configure Method: DHCP/STATIC IP IP ADDRESS: NET MASK: GETWAY: MAC ADDRESS:	None

Example

- EX1068-1: Read Ethernet configure information from RS232.
  <ESC>SYS 10H 68H<CR><LF>

  Response: The Ethernet configure information is DHCP,
  IP Address: 192.168.0.14,
  NET Mask: 255.255.255.0,
  Get way: 192.168.0.1,
  MAC Address: 0090E8:238ADAYS0.

  <ESC>SYS DHCP
  192.168.0.14
  255.255.255.0
  192.168.0.1
  0090E8:238ADAYS0

3.52. PSPL 1071/2071/3071: Read Disable Auto Sense Status

Code	Description	Data size	Unit	Response	Default
1071 2071 3071	Read disable auto sense status	Null	None	0: Enable auto sense. 1: Disable auto sense.	0

Example

- EX1071-1: Read disable auto sense status from RS232.
  <ESC>SYS 10H 71H <CR><LF>

  Response: This is Enable auto sense function.
  <ESC>SYS 0

3.53. PSPL 00AA /10AA/20AA: Bluetooth

Code	Description	Data size	Unit	Parameter	Response	Default
00AA	Connect/Disconnect with bluetooth	Null	None	0: Enable bluetooth 1: Disable bluetooth	None	0
	Set Bluetooth status			4: Set Bluetooth name 6: Set Bluetooth Mac	None	
10AA	Read Bluetooth status by RS232	Null	None	2: Read Bluetooth version 5: Read Bluetooth name 7: Read Bluetooth Mac	Bluetooth version Bluetooth name Bluetooth Mac	
20AA	Read Bluetooth status by USB	Null	None	2: Read Bluetooth version 5: Read Bluetooth name 7: Read Bluetooth Mac	Bluetooth version Bluetooth name Bluetooth Mac	

Example

- EX00AA-1: Disconnect with Bluetooth.
  <ESC>SYS 00H AAH 00H 00H 00H 02H 30H 31H <CR><LF>

Example

- EX00AA-2: Set bluetooth Mac
  <ESC>SYS 00H AAH 00H 00H 00H 09H 30H 36H 2CH 31H 31H 32H 32H 33H 33H 34H 34H 35H 30H 30H 32H <CR><LF>

Example

- EX00AA-3: Read bluetooth Mac by RS232
  <ESC>SYS 10H AAH 00H 00H 00H 02H 30H 37H <CR><LF>

  Response: This is bluetooth Mac
  <ESC>SYS 11:22:33:44:50:02

4. APPENDIX B: ETHERNET SETTING PROCEDURE

This section offers Ethernet setting and reading information procedure by command
from printer to Ethernet module:

1. Enter Command Mode: Send PSPL 0067 command to printer.
2. Read Ethernet Mode Status:
   2.1 Send PSPL 1067 command or PSPL 2067 command to printer.
   2.2 Check Ethernet mode status:
   If response is 0, please wait and check again.
   If response is 1, enter command mode.
3. After Entering command mode, you can select read configure information, set DHCP or static IP three functions for Ethernet:
   3.1 Read Configure Information: You can get IP Address, NET Mask, Get way or MAC Address information from Ethernet module.
   3.2 Set DHCP function: Enable DHCP mode function of Ethernet. (Enable time: about 6 sec)
   3.3 Set static IP function: Enable static IP mode function of Ethernet. (Enable time: about 6 sec)
4. Exit command Mode: Send PSPL 0062 command to exit command mode. (Save/restart time: about 5 sec)

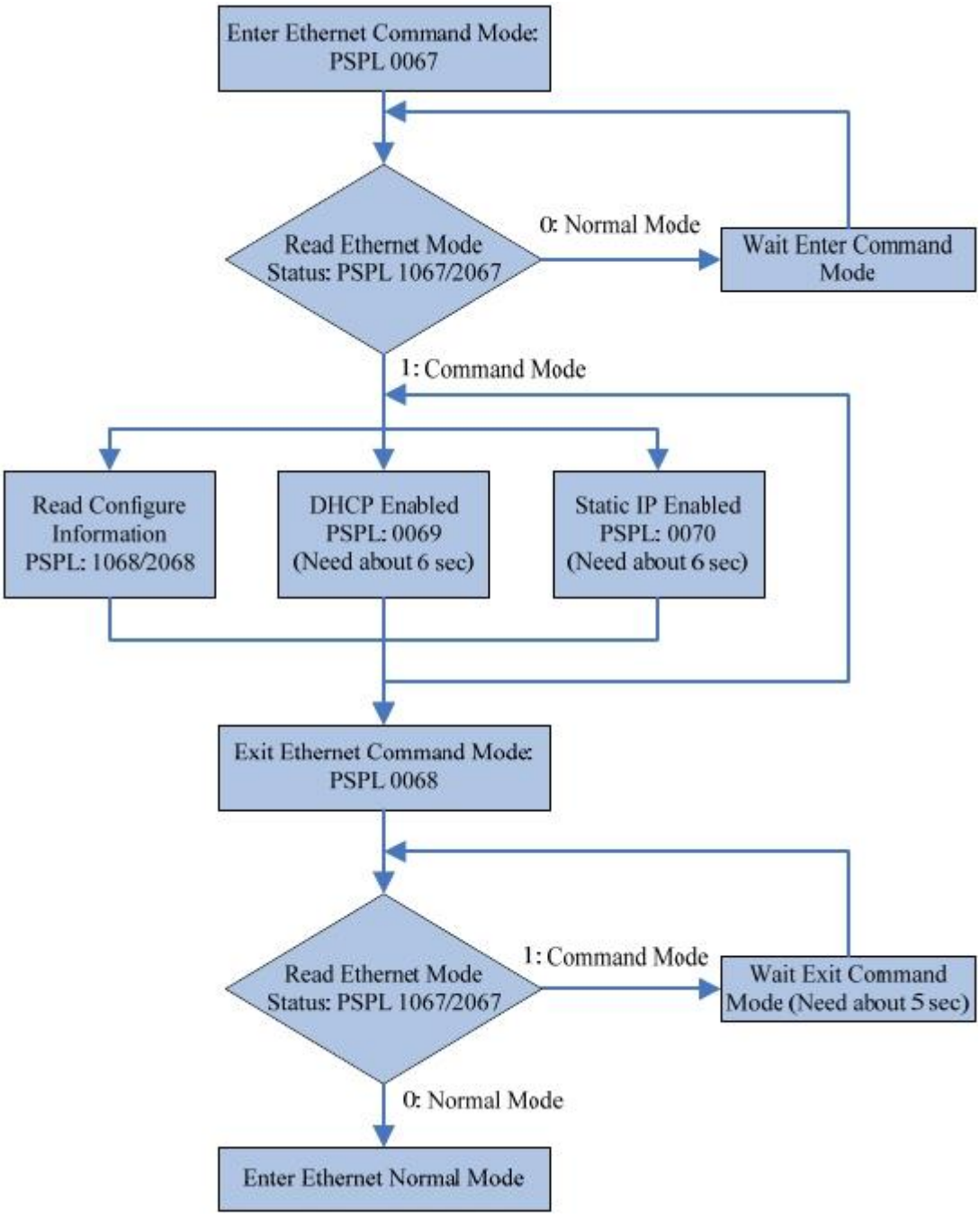


Figure: Set Ethernet procedure.

Code : 0577200M000058 Rev. 1.00

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