EZPL Programmer's Manual

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Introduction

About EZPL

The EZPL (EZ Programming Language) is a high-level label definition and printer control language.
Features of EZPL are as follows:

1. The data are stored to be processed and will not be printed out until the last printing instruction is received.
2. All the printing contents can be rotated.
3. Images can be downloaded and stored.

There are two ways to send printing commands to the printer. One is sending through the command window of (GoLabel or QLabel), the other is sending through Windows™ HyperTerminal™ via RS-232 port.

The EZPL language consists of three types of commands:

- **Setup commands** – It includes printer control instructions, configuration instructions and image downloading instructions.
- **Control commands** – It includes commands that can control the printer to take action immediately, such as cleaning memory, feeding label.
- **Label Format commands** - Define the format of data that will be presented on the label, such as Line, Rectangle, Barcode, Text and image.

Rules and syntax

EZPL commands include parameter strings associated with them:

1. The syntax of commands contains capital letters as the ID for each function.
2. The lower case letters in command represent parameters.
3. Control and Setup commands use the tilde (~) and caret (^) as prefix.
4. Label Format commands have no prefix.
5. The comma (,) is the delimiter to separate each parameter, and the CR (Carriage Return) signifies the end of every command.

Example: In “~En,name,size “ command, “E” is an identity letter of this image downloading command; “n”, “name” and “size” are three parameters.

Setup Commands

^An - Printing mode

Syntax	**^An**
Effect & Default	Permanent, default = ^AT (TT mode) ; DT2 & DT4 & MX or DT only, default = ^AD
Parameter is not valid	Parameter is not processed.
Parameter	n = D, Direct thermal mode, the ribbon out sensor is disabled. n = T, Thermal transfer mode, the ribbon out sensor is enabled.
Description	1.If you want to change the print mode, you need to send the printing command to the printer for changing print mode setting. There are two ways to send printing commands to the printer. One is sending through the command window of (GoLabel or QLabel), the other is sending through Windows™ HyperTerminal™ via RS-232 port. To send printing command, make sure that the printer is on standby mode (LED light is green) and send below command to change the print mode. 2. Send "^AD" command to printer to change the print mode to Direct Thermal Mode. 3. Send "^AT" command to printer to change the print mode to Thermal Transfer Mode. When printer is on Thermal Transfer Mode, it is necessary to install the ribbon into printer. Otherwise the error message "Print Mode Error" will be triggered and the printer will not be able to print. 4. This command will not be applied on Direct Thermalonly models (EZ-DT-2 /EZ-DT-4). 5. In DT mode, if a ribbon is not installed, detection will not occur. * Note: this command will not be applied on Direct Thermal only models.
Example	^AD ^L ….. E When a ribbon detection anomaly occurs, a red light will illuminate, and the device will emit three consecutive beeps twice. In the case of "Ribbon out," there will not be an immediate warning. The default detection length for 203dpi is 400 dots, and for 300dpi, it is 600 dots, which is approximately equivalent to 5.0cm. To modify the detection length for "Ribbon out," you need to use the command "~~INTERNALCOMMANDS,n," where "n" ranges from 0 to 32767. To check the current ribbon out detection length, you can use the "~~INTERNALCOMMANDC" command to print the checksum test page and review it. If you wish to restore the default value of 400 dots, you need to use the command "~~INTERNALCOMMAND+INIT."

^Bx - Set the backward length

Syntax	**^Bx**
Effect & Default	temporary, no default.
Parameter is not valid	Parameter is not processed.
Parameter	x = 1~1000 (unit: mm)
Description	Set the backward length to move the position of paper. In progress If ~S,CHECK will feedback 00 If ~Z printer would turn on immediately If Dooropen → RED light would up and motor would stop at the same time even after printer cover close.
Example	Result: PC to Printer: ^B1000 Printer to action: Motor would turn backwards 1000mm

^Cx -Number of copies per label

Syntax	^Cx	
Effect & Default	Permanent, default = ^C1	
Parameter is not valid	Parameter is not processed.	
Parameter	x = 1 ~ 32767 (Number of copies) x = ^Vnn (with variable)	
Description	Set the number of copies to print for a label. Match with command ^Px or ~Px ; If you input the command ^C2 ^P3, the printer will print 6 pieces labels. If you input the command ^C3 ~P3, the printer will printer 9 pieces labels.	
Example	Send command : ^C2 ^P3 ^L C0,001,+1,Prompt AE,10,10,1,1,0,0,^C0 E Example 2: ^Flabel1 ^Q40,0,0 ^C^V00 ^PA1 ^L C0,0000001,+1,Counter V00,15,Variable AF,108,140,1,1,0,0,^C0 AE,122,278,1,1,0,0,^V00 E ^Klabel1 00001 3 E	Print result : 001 001 002 002 003 003 00001 00001 00001 Printer will auto print 3 pieces.

^D+dddd.hh - Date calculation function

Syntax	**^D+dddd.hh**	
Effect & Default	temporary, no default.	
Parameter is not valid	Parameter is not processed.	
Parameter	dddd = days in 4 digits. Set how many days to be added to the current date. hh = hours in 2 digits. Set how many hours to be added to the current time.	
Description	This command will set the specified days and hours forward based on the printer's current date then print it.	
Example	In this sample, the printer will print current time and count the date that is 5 days and 12 hours after current time. Send command : ^Q40,0,0 ^W102 ^AT ^L Dy2-me-dd Th:m:s ~D01,01,05,12,00,00 AD,72,96,1,1,0,0,Manufactured Date: ^D ^T AD,72,190,1,1,0,0,Expiration Date: ^D+0005.12 E	Print result : Manufactured Date: 05-JAN-01 12:00 Expire Date: 05-JAN-07

^D±xnnnn -Date calculation function by months or years

Syntax	^D±xnnnn
Effect & Default	temporary, no default.
Parameter is not valid	Parameter is not processed.
Parameter	x = M, adjust by months x = Y, adjust by years nnnn = 4 digits to be added or subtracted to the current date.
Description	This command will adjust the specified years or months based on the printer's current date then print it.

^Dx,[delay],[back delay] - Number of labels per cut

Syntax	**^Dx,[delay],[back delay]**
Effect & Default	Permanent, default = 0 (cutter disable)
Parameter is not valid	Parameter is not processed.
Parameter	x = 0, disable the cutting. x = 1 ~ 32767, number of label per cut. The parameter **[delay]** controls the opening of the cutter. If a guillotine cutter is being used, the recommended parameter value is between 5 and 20. However, if a rotary cutter is being used, the parameter value should be set to 230. The parameter **[back delay]** controls the opening of the cutter in the reverse cutting operation. Typically, the recommended value for this parameter is 5.
Description	The number of labels per cut: If D = 1, during startup, the system will check if the cutter is properly positioned. If it is not in the correct position, the cutter will be reversed until it reaches the correct position. In the event of a cutter jam, an audible alarm will sound, and a red light will illuminate. To resolve the error state, if the feed key is pressed, the cutter will be reversed to the correct position, and a green light will illuminate. Note: When the number of printed labels is less than the number of labels to be cut, it means that the cutting will occur only after all printing is completed.
Example	Send command : ^Q20,0,0 ^P6 ^D2 ^L E Print result : ^P6 = print 6 labels, ^D2 = cut once every 2 labels. It will cut 3 times in this case. Note : The last label will be cut anyway. For example, if send command ^P5 ^D2, it will cut 3 times as well.

Note :

ORC-RZBG118-F:The cutter is designed to cut a paper that its width is 118mm and thickness is up to 200µm in full cut only.

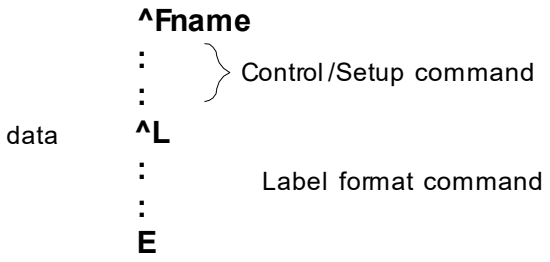
ORC-RZBG118 : The cutter is designed to cut a paper that its width is 118mm and thickness is up to 130µm (120g/㎡) in full or partial cut.

Cutter	^D
Guillotine cutter 4"	5
Rotary cutter 4"	230
Rotary cutter 6"	20
ORC-RZBG118	5
RGG-120	5

^Ex - Stop position setting

Syntax	**^Ex**
Effect & Default	Permanent, default = 0
Parameter is not valid	Parameter is not processed.
Parameter	x = 0~40 (unit: mm) Starting from the year 2016, decimal values are allowed for this parameter. Exceptions: For the DT4L model, the value of "x" can only be set to 30. For the MX series, the allowable range for "x" is from 0 to 10.
Description	Feed the paper to specific stop position.
Example	^E12 ^L ….. E

^Fname - Download label file to printer

Syntax	**^Fname** **data**
Effect & Default	None
Parameter is not valid	Parameter is not processed.
Parameter	name = the name of label format (up to 20 characters) data = the data containing the label formatting command for this stored format If no filename is provided, the system will not process the label format storage. However, if the filename exceeds 20 characters, only the first 20 characters will be captured and stored as the filename in the printer.
Description	Download label file to the memory of printer. After the download is completed, the printer will beep once (refer to page82).  Duplicate name inspection: If you use the same file name, the printer will print “REPEAT FILE NAME”, and the format will not be stored to the memory.
Example	To see ^Kname Example The file name can consist of characters within the range of 0x20 to 0x7E in the ASCII table.

^Gn - Enable/disable See-Through sensor

Syntax	**^Gn**
Effect & Default	Permanent, default = 2 (before using the "~S" command to activate the sensor, the printer will default to the Reflective Sensor mode.)
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, disable see-through sensor n = 1, enable see-through sensor n = 2, Auto-mode
Description	There are two types of sensor in printer: Reflective Sensor and See-through Sensor. Users can set one of them as active sensor. By default, the sensor setting is set on Auto-mode. However, sometimes the sensor may not be able to detect the label gap on special label materials. Then it would be necessary to change the sensor setting to other sensor. For example, when printing on labels with thick liner, colored liner or back graphics, the see-through sensor would need to be enabled since the reflective sensor may not work correctly. To switch between different sensors, please do as follows: 1. Make sure that the printer is on standby mode (LED light is green) and send below command to change the sensor setting. 2. Send "^G0" command to printer to set the Reflective Sensor as active sensor. 3. Send "^G1" command to printer to set the See-through Sensor as active sensor. 4. Send "^G2" command to printer to change the sensor setting to Auto-mode. *For the EZ-1000Plus series, EZ-DT series, EZ-1105 / EZ-1305 and EZPi-1000 series models, if the see-through sensor is enabled, the moveable Label Sensor must be placed in the center of the printer.
Example	The "~S,SENSOR" command should be used in conjunction with the given example for more detailed information.

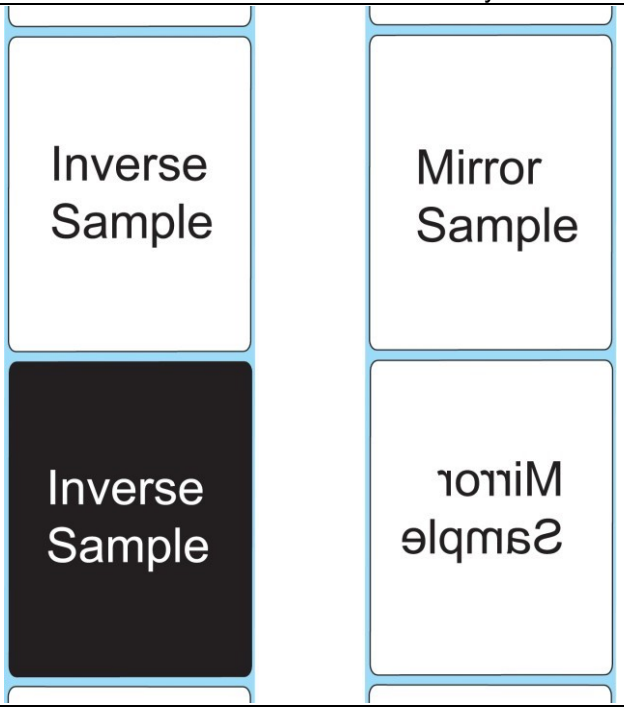
^Hn - Print darkness setting

Syntax	**^Hx**
Effect & Default	Permanent, default = 2 (before using the "~S" command to activate the sensor, the printer will default to the Reflective Sensor mode.)
Parameter is not valid	If the parameter is in English (i.e., not a numerical value), it will not be processed. If the parameter is a numerical value but falls outside the specified range, it will be replaced with the minimum or maximum value allowed within the range.
Parameter	x = 00 ~ 19
Description	Set the darkness of printing. Heating range is as follows: H0 ~ H3 for Fax paper H2 ~ H5 for Wax ribbon +general label H5 ~ H10 general DT media &semi-ribbon + general label H10 ~ H15 special DT media (Tag , or low sensitive DT media) & resin ribbon + special TT media (Tag , Polyester…) H15 ~ H19 other special case (GP media)
Example	^H10 ^L ….. E

^Kname - Recall label format

Syntax	**^Kname**
Parameter	name = the name of recalled label format (up to 20 characters)
Description	Recall a label format stored in printer's memory (refer to page82) **^Kname** : } data : **E** : } Control/Setup command [option] : **~Px**
Example	^Ftest1 E ^Ktest1 E ~Px NOTE 1 : The characters used for file names can be selected from the range of 0x20 to 0x7E

^Lx - The start sign of label format

Syntax	**^Lx**
Parameter	Use ^L to do normal printing; ^LI to do inverse printing; ^LM to do Mirror printing. ^LRn Whole label rotation n=0, 0°printing ; n=1, 90°printing ; n=2, 180°printing ; n=3, 270°printing (the same as ^XSET,ROTATION,n) I, M, R can be used at the same time.
Description	Define the start sign of Label format. Commands to set up the label format should be listed after ^Lx command. When rotates whole label (^Q & ^W will be the reference point), it will only handle 50 mm if set ^W50. This command will not affect by ^R.
Example	

^Mx - Set the forward length

Syntax	**^Mx**
Effect & default	Temporary, none
Parameter	x = 1~1000 (unit: mm)
Description	Set the forward length to move the position of paper. In progress If ~S,CHECK will feedback 00 If ~Z printer would turn on immediately If Dooropen → RED light would up and motor would stop at the same time even after printer cover close.
Example	Result: PC to Printer: ^M100 Printer to action: co-rotating 100mm

^NH,x – Set webpage function ON/OFF

Syntax	^NH,n
Effect & default	permanent, default = 1
Parameter is not valid	Parameter is not processed.
Parameter	x = 0, webpage function OFF x = 1 ,webpage function ON (default)
Description	This command can set webpage function on/off
Example	None

^On - Label Dispenser (peel) / Applicator

Syntax	**^On**
Parameter	n = 0, disable the Label Dispenser and Applicator n = 1, enable the Label Dispenser, disable the Applicator n = 2, enable the applicator, disable the Label Dispenser (applied on EZ-2000Plus / EZ-6000Plus only) (Please check with dealer whether your printer supports this function or not.)
Description	Enable or disable the Label Dispenser / Applicator. When you use this command, it should be matched with ^Ex for setting the stop position. The recommended value for "E" is 7 or 8 mm. (For the Label Dispenser setting, please refer to page78)
Example	^O1 ^L ….. E

^PAx -Auto Print

Syntax	^PAx	
Effect & default	temporary	
Parameter is not valid	Parameter is not processed.	
Parameter	x = 1~30000 (Number of copies , If you input “0”,the command will be ^PA1 .) x =^Vnn (with variable)	
Description	After the recall of label, printer will read variables and Serial Number and then print automatically for the number of copies that has been set.	
Example	Send command : ^Flabel1 ^Q40,0,0 ^PA3 ^L C0,0000001,+1,Counter V00,15,Variable AF,108,140,1,1,0,0,^C0 AE,122,278,1,1,0,0,^V00 E ^Klabel1 00001 Variable E Example2: ^Flabel1 ^Q40,0,0 ^PA^V00 ^L C0,0000001,+1,Counter V00,15,Variable AF,108,140,1,1,0,0,^C0 E ^Klabel1 00001 3 E	Printer result : 00001 Variable 00002 Variable 00003 Variable Printer will auto print 3 pieces. Printer will skip serial number. 00001 00002 00003 Printer will auto print 3 pieces Printer will skip serial number

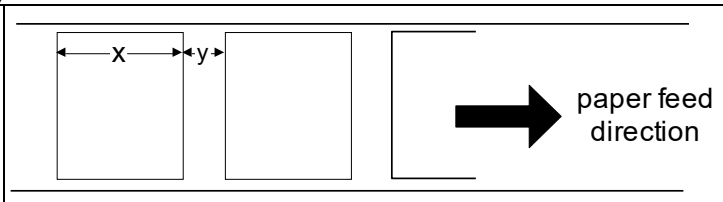
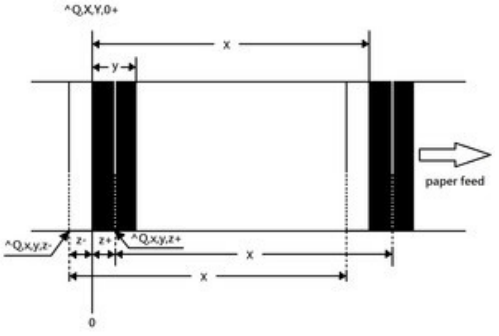
^Px - Number of pages printed

Syntax	**^Px**	
Effect & default	temporary	
Parameter is not valid	Parameter is not processed.	
Parameter	x = 1 ~ 32767(If a value of 0 is entered, it will be treated as "^P1," which means that the default number of labels to be printed is 1.)	
Description	Set the amount of copies for a printing. The Serial Number will be reset for each time the command is implemented.	
Example	Send command : ^Q40,0,0 ^P3 ^L AF,108,140,1,1,0,0,Test E	00001 Variable 00002 Variable 00003 Variable Printer will auto print 3 pieces.

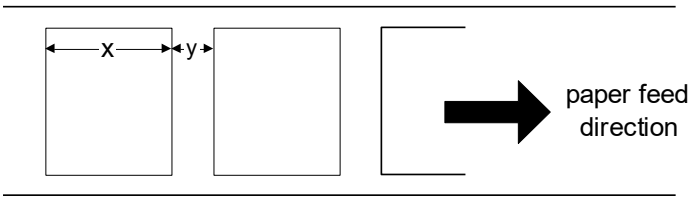
^PI - Continuous printing

Syntax	**^PI**	
Parameter	None	
Description	Printer will print immediately, until the “Cancel” key is pressed or the printer is turned off. It can be paused by pressing “Pause” key otherwise printer would be keep going printing.	
Example	^Flabel2 ^Q40,0,0 ^PI ^L C0,000001,+1,Counter V00,15,Product AF,108,140,1,1,0,0,^C0 AE,122,278,1,1,0,0,^V00 E ^Klabel2 00001 Apple E	. . . 000003 Apple 000002 Apple 000001 Apple

^Qx,y(,z±) - Label length

yntax	**^Qx,y(,z±)**	
Effect & default	Permanent, default = "^Q100,3" for most models. For the MX series, the default value is "^Q100,0".	
Parameter is not valid	If the parameter is in English, it will not be processed. If the parameter is a numerical value and exceeds the specified range, it will be replaced with the minimum or maximum value allowed within the range. Decimal points are allowed for parameters.	
Parameter	Gap label: (See fig. 1) x = Label length (unit: mm) y = Gap length (unit: mm)	
	EX. ^Q25,3 (x=25,y=3) mm	 Figure 1
	Plain paper: x = Label length (unit: mm) y = 0 (constant) z = Feed paper length (unit: mm)	
	Black mark label: x = Label length (unit: mm) y = Black mark width (unit: mm) z = Black line to top of form position. z+: When the position is outside the black mark. z-: When the position is within the black mark.	
	EX. ^Q25,4,3+ (x=25, y=4, z=3+) mm ^Q25,4,3- (x=25, y=4, z=3-) mm	Figure 2 
Description	Set label size (length, gap length, [plain paper feed length])	

^QDx,y(,z±) -Label length (in dots.)

<table>
<tr><td>Syntax</td><td colspan="2">^QDx,y(,z±)</td></tr>
<tr><td>Effect & default</td><td colspan="2">Permanent, default = ^Q800,24</td></tr>
<tr><td>Parameter is not valid</td><td colspan="2">If the parameter is in English, it will not be processed. If the parameter is a numerical value and exceeds the specified range, it will be replaced with the minimum or maximum value allowed within the range. Decimal points are allowed for parameters.</td></tr>
<tr><td rowspan="4">Parameter</td><td colspan="2">Gap label: (See fig. 1)
x = Label length (unit: dot)
y = Gap length (unit: dot)</td></tr>
<tr><td>EX.
^QD200,24
(x=25,y=3) mm</td><td>Figure 1
 
</td></tr>
<tr><td colspan="2">Plain paper:
x = Label length (unit: dot)
y = 0 (constant)
z = Feed paper length (unit: dot)</td></tr>
<tr><td colspan="2">Black mark label:
x = Label length. (unit: dot)
y = Black mark width. (unit: dot)
z = Black line to top of form position. (unit: dot)
Z+: When the position is outside the black mark.
z-: When the position is within the black mark.</td></tr>
<tr><td></td><td>EX.

^Q200,32,24+
(x=25, y=4, z=3+) mm

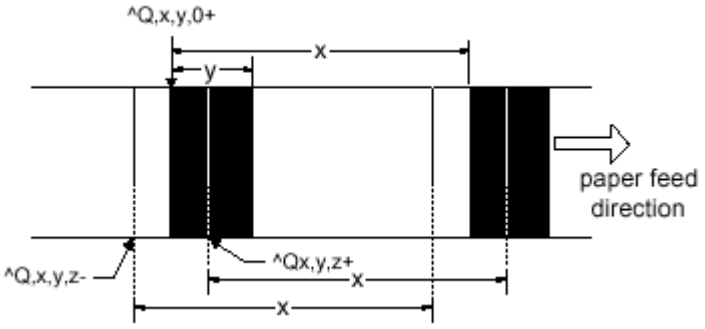
^Q200,32,24-
(x=25, y=4, z=3-) mm</td><td> 

Figure 2</td></tr>
<tr><td>Description</td><td colspan="2">Set label size (length, gap length, [plain paper feed length])</td></tr>
<tr><td>Example</td><td colspan="2">None</td></tr>
</table>

^Rx - Row column adjustment

Syntax	**^Rx**
Effect & default	Permanent, default = 0
Parameter is not valid	Parameter is not processed.
Parameter	X = 0~399 dots. However, it must not exceed the setting value of "^W". For example, if "^W" is set to "W25", the value of "x" should not exceed 100 dots. If the value of "x" exceeds the allowed limit, it will not be processed.
Description	Set left margin Adjust the starting print point of the left margin. It can be used in conjunction with the "^W" command to calculate and set the left margin accurately.
Example	^R08 (move right 1mm) ^L ….. E

. **^Sx - Speed setting**

Syntax	**^Sx**
Effect & default	Permanent, default = ^S4, ^SF4, ^SB4, ^ST3, ^SJ3 (The exact default values as they may differ between different models.)
Parameter is not valid	If the parameter is in English, it will not be processed. If the parameter is a numerical value and exceeds the specified range, it will be replaced with the minimum or maximum value allowed within the range. Decimal points are allowed for parameters.
Parameter	x = 1 to 10 inch/sec (Varies with the initial setting value of each model); n = F , set forward feed speed ; n = B , set backward feed speed n = J , set TopOfForm speed n = T , set RespondSpace speed
Description	Set printing speed S2 = 50.8 mm/s S3 = 76.2 mm/s S4 = 101.6 mm/s S5 = 127.0 mm/s S6 = 152.4 mm/s S7 = 177.8 mm/s In addition , special case S1 = 38.1 mm/s (To base on customer demanded)
Example	^S4 ^L ….. E

^T+hhh.mm - Time calculation function

Syntax	**^T+hhh.mm**	
Parameter	hhh = hours in 3 digits (from 0 to 23 hours). Set how many hours to be added to the current time. mm = minutes in 2 digits. Set how many minutes to be added to the current time.	
Description	This command will set the specified time forward based on the printer's current time then print it.	
Example	This sample printer will print current time and counting after 10 hours and 30 minutes time and print: Send command : ^Q40,0,0 ^W100 ^H10 ^AT ^L ~D04,15,05,12,0,0 AF,600,102,1,1,0,0,^T AF,600,280,1,1,0,0,^T+010.30 AF,58,52,1,1,0,0,Manufactured Time : AF,54,228,1,1,0,0,Expire Time : E	Print result : (Printer's current time) Manufactured Time: 12:00:00 (10 hours and 30 minutes after current time) Expire Time: 22:30:00

^Wx - Label width setting

Syntax	**^Wx**
Effect & default	Permanent, default =102 (for 4" models) ; = 54 (for 2" models) ; = 72 (for 3" models)
Parameter is not	Parameter is not processed.
Parameter	x = label width (unit: mm), the input range is defined by the specification of printer models.
Description	Label width setting
Example	^W100 ^L ….. E

^XGET,CODEPAGE–回傳目前 codepage 設定值

Syntax	^XGET,CODEPAGE
Parameter	None
Description	The "^XGET,CODEPAGE" command is used to retrieve the current codepage setting value of the printer. It returns a code that represents the specific codepage being used. For more detailed information about the codepage and its specific content, please refer to the documentation for the "^XSET,CODEPAGE,n" command.
Example	The testing and transmission process is as follows: PC to Printer: ^XGET,CODEPAGE Printer to PC: 0 0: Indicates the current usage is codepage 850.

^XGET,CONFIG - Return the configure status

Syntax	^XGET,CONFIG
Parameter	None
Description	The printer will return configure status (the content is same as Self Test page) from RS232 or USB and display it on Hyper Terminal. Send the self-test page back from the port it was sent from, whether it was sent from RS-232 or USB. Network Parameters Explanation WLAN ON-LINE[RSSI] RSSI represents the signal strength of the currently connected AP.

RSSI strength	Significance

RSSI>= -60	Good signal strength
-60>RSSI>= -70	Fair signal strength
-70>RSSI>= -80	Poor signal strength
-80< RSSI	Very poor signal strength

Network Status Description	Significance
WLAN CARD UNKNOWN	The printer detected the WLAN card, but failed in handshaking process. Note: For MX series, if the module function is disabled, this message may also appear.
WLAN OFF-LINE	Wi-Fi module has been detected, but it is not connected to the AP.
WLAN ON-LINE	Wi-Fi module has connected to the AP.
LAN ON-LINE	No Wi-Fi module detected, and LAN is detected.
LAN OFF-LINE	Not detecting Wi-Fi module and LAN function is disabled.
Cable Not Plug	No Wi-Fi module or LAN is detected.

Card Status Description:

Name	Significance
KS	KCodes network card
GS	GainSpan network card

Status	Significance
Card Status: HW Unable to detect any card	No card detected Note: If the module function is disabled on MX series, it will also show this message.
Card Status: BT card detected[0x00]	Bluetooth card has been detected and handshake has been successfully (old version circuit).
Card Status: BT card handshakes fail[0x00]	Bluetooth card has been detected, but handshake failed (old circuit).
Card Status: BT card handshaking[0x00]	Bluetooth card has been detected and currently in Handshaking with Bluetooth (old circuit).
Card Status: Wi-Fi card detected[0x00]	Wi-Fi card has been detected and Handshake succeeded (old circuit)
Card Status: Wi-Fi card handshaking[0x00]	Wi-Fi card has been detected and still in Wi-Fi Handshaking (old circuit)
Card Status: BT card detected[0x01]	Bluetooth card has been detected and handshake is successful(new circuit).
Card Status: Wi-Fi card detected[0x01]	Wi-Fi card has been detected and handshake successful (New circuit)
Card Status: Wi-Fi card handshaking[0x01]	Wi-Fi card has been detected and still in Wi-Fi Handshaking (old circuit)
Card Status: BT card handshaking[0x01]	Bluetooth card has been detected and still in the process of Bluetooth handshaking (new circuit).

Example

The test transmission process is as follows :

PC to Printer	^XGET,CONFIG

		Printer to PC	^xget,config RT730W V2.006 USB S/N: 20140310 Serial port: 96,N,8,1 MAC: 00 11 E5 05 5B 1B IP 0.0.0.0 (DHCP) Gateway 192.168.0.254 Sub-Mask 255.255.255.0 Card Status: KS Wi-Fi card detected[0x01] Network: WLAN OFF-LINE PORT State L S E U B 1 1 1 1 1 #################################### 0000 FORM(S) IN MEMORY 0000 GRAPHIC(S) IN MEMORY 000 FONT(S) IN MEMORY 000 ASIAN FONT(S) IN MEMORY 000 DATABASE(S) IN MEMORY 000 TTF(S) IN MEMORY 63980 KB FREE MEMORY ^S4 ^H10 ^R000 ~R200 ~Q+0 ^W68 ^Q66,2 ^E0 Option:^D0 ^O0 ^AT Ref.:2.7 2.8 2.8 [0.1_9] Code Page:850	

^XGET,KEYBOARD–Return the current PS2 Keyboard settings for the applicable region or country via RS-232.

Syntax	^XGET,KEYBOARD
Parameter	None
Description	This command returns the PS2 Keyboard settings of the currently applicable region or country for the printer (only applicable to models with an LCD). This command is only valid for transmission via RS-232 port. The returned value is only a code, and for more information, please refer to the explanation of ^XSET,KEYBOARD,n
Example	The test transmission process is as follows : PC to Printer: ^XGET,KEYBOARD Printer to PC: 0 0: Indicates that the current setting is for a US PS2 keyboard.

^XGET,LANGUAGE–Return the current language option used by the LCD.

Syntax	^XGET,LANGUAGE
Parameter	None
Description	This command returns the current language option used by the LCD of the printer (only applicable to models with an LCD). The returned value is a code, for detailed information please refer to the ^XSET,LANGUAGE,n
Example	The test transmission process is as follows : PC to Printer: ^XGET,LANGUAGE Printer to PC: 0 0: Indicates that the LCD is currently using the English language.

^XGET,PRINTNAME–Return the printer model name

Syntax	^XGET,PRINTNAME
Parameter	None
Description	Return the printer model name
Example	The test transmission process is as follows : PC to Printer: ^XGET,PRINTNAME Printer to PC: ZX1300i

^XGET,PRINTINFO–Returns current printing-related information.

Syntax	^XGET,PRINTINFO
Parameter	None
Description	This command is used to retrieve information related to printing.
Example	The test transmission process is as follows : PC to Printer: ^XGET,PRINTINFO Printer to PC: Cutter Counter: 0 Cutter Counter: Indicates the current total number of cuts made. Label Count: Indicates the current total number of printed labels. Print Length: Indicates the current total print length.

^XGET,RTC–Get Printer setting time– RTC command

Syntax	^XGET,RTC
Parameter	None
Description	Return the current RTC setting value of the printer.
Example	The testing process for transmission is as follows: PC to Printer: ^XGET,RTC Printer to PC: 11091017475 12 11: Represents November. 09: Represents the 9th day. 10: Represents the year 2010. 17: Represents 17 o'clock (5 PM). 47: Represents 47 minutes. 51: Represents 51 seconds. 2: Represents Tuesday.

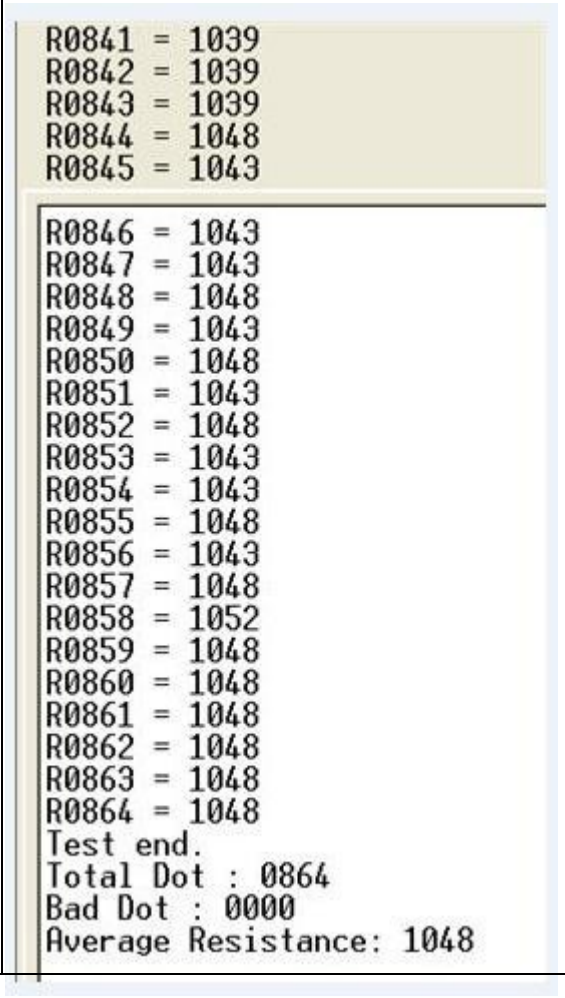
^XGET,SENSORSTATUS–Get Auto sensing Value

Syntax	^XGET,SENSORSTATUS
Parameter	None
Description	Return the value of AUTO SENSING.
Example	The testing process for transmission is as follows: PC to Printer: ^XGET,SENSORSTATUS Printer to PC: ========== Sensor Length(EEPROM)=250 mm(250) Detect Scale(EEPROM)=3 mm(3) Sensor percent(EEPROM)=40(40) PRINT Detect Gap =3 dot ==========

^XGET,TPHDOTSTATE–Get TPH Dot status

Syntax	^XGET,TPHDOTSTATE
Parameter	None
Description	Return the total number of dots, the number of bad dots and average impedance of the print head. I it is a model without ADC (Analog-to-Digital Converter), the average resistance will be indicated as "None". This command has the same functionality as “TPHRESISTANCE2”.
Example	The testing process for transmission is as follows: PC to Printer: ^XGET,TPHDOTSTATE Printer to PC: Test Printer head resistance, Please wait... Test end. Total Dot: 864 Bad Dot: 0 Average Resistance: None

^XGET,TPHRESISTANCE - Dot detect

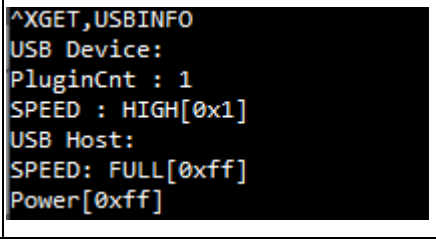
Syntax	**^XGET,TPHRESISTANCE**
Parameter	None
Description	Detect the resistance of each heat dot to check if there is any bad dot on thermal print head.
Example	

^XGET,TPHRESISTANCE2 - Dot detect

Syntax	^XGET,TPHRESISTANCE2
Parameter	None
Description	Return the total number of TPH dots, the number of bad dots, and the average impedance of the print head. If there is no ADC model, Average Resistance = None. This command has the same function as ^XGET, TPHDOTSTATE.
Example	The testing process for transmission is as follows:

PC to Printer	^XGET,TPHRESISTANCE2
Printer to PC	Test Printer head resistance,Please wait... Test end. Total Dot: 864 (Different values may be obtained depending on the dot density of the TPH.) Bad Dot: 0 Average Resistance: None

^XGET,USBINFO – Return USB-related information.

Syntax	^XGET,USBINFO
Parameter	None
Description	Return USB-related information.
Example	

^XGET,AUTOLOAD – Return the value of autoload mode.

Syntax	^XGET,AUTOLOAD
Parameter	None
Description	Return the value of autoload mode.
Example	 Autoload mode: 0 (Disable automatic paper-feeding mode.) Autoload mode: 1 (Enable automatic paper-feeding mode.)

^XSET,ACROSSGAP,n

Syntax	^XSET,ACROSSGAP,n
Effect & default	Permanent , default = 0
Parameter is not valid	Parameter is not processed.
Parameter	None
Description	This command enables the printer to support the function of printing across multiple labels, where any GAP encountered during the printing process will be ignored. If the label size is 100mm but the print layout is 200mm, this command can be used. If this command is not used, the printer will automatically cut off any screen larger than 100mm when encountering a GAP and will not print it. When this function is enabled, if an incorrect label size is encountered (remainder of label length/actuality print length > 8mm), it may trigger an integer multiple page positioning (>4~7mm) and may cause incorrect page jumping. Please use with caution.
Example	If the label size is 102(W) * 100(L) * GAP 3 mm, but the print area is 102(W) * 200(L), the settings should be as follows: ^SET,ACROSSGAP,1 ^Q203,3 (The length of the cross-page printing should include the GAP as well) ^W102 ^L ..... E

^XSET,ACTIVERESPONSE,n - Active response

Syntax	**^XSET,ACTIVERESPONSE,n**
Effect & default	Permanent, default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, do not return the "ERRORxx" message to PC n = 1, return the error message (default). When door open, ribbon out… or other error occur, the printer will return the "ERRORxx" message to PC This command is defined as "actively returning ERROR messages." It is used when the printer encounters an error, and it proactively sends the error message back to the PC via RS-232 or USB (indicating the port used for sending and the port used for returning). Currently, it does not support multiple errors being sent simultaneously at the same time.
Description	Set the Active Response function on/off. The error code includes: 01 – MediaEmpty or Media Jam 02 – MediaEmpty or Media Jam 03 – Ribbon Empty 04 – Print head is up(Open) (This function is limited to models with Door Open Switch Sensor) 05 – Rewinder full 06 – File System Full 07 – File Name Not Found 08 – Duplicate Name 09 – Syntax error 10 – Cutter JAM 11 – Extended Memory Not Found 62 –SYSMSGIDTPHOVERHEAT *Note: before turning on the error code response function, the “Set immediate response” function should be turned on (send “^XSET,IMMEDIATE,1” to printer).
Example	Procedure : PC to Printer: ^XSET,ACTIVERESPONSE,1 Printer action: Door open Printer to PC: ERROR04 ERROR04 is means Door open (This function is limited to models with Door Open Switch Sensor)

^XSET,ACTIVEMESSAGE,n - turn on/off auto print error message function

Syntax	**^XSET,ACTIVEMESSAGE,n**
Effect & default	Permanent, default = 1
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, disable ; = 1, enable this function.
Description	It will print error message while below error occurred: ● File System Full ● File Name Not Found ● Duplicate Name Note 1: When printing, print in the form of continuous paper DT mode, and restore the original setting after printing Note 2: The LCD model will be displayed on the panel and will not be printed out. (except MX30i)

^XSET,AHEATSYSTEM,n – Turn on the 600DPI special printing heating system.

Syntax	^XSET,AHEATSYSTEM,n
Parameter	n: 0 : OFF 1 : ON
Description	Turn on the 600DPI special printing heating system, which is permanently effective. Currently, only ARM9 600DPI supports this feature. The RTC can only be set successfully after 2022 (inclusive). The last configuration status will not be changed when restoring factory settings.

Example	^XSET,AHEATSYSTEM, (Return the configuration status without parameters.) ^XSET,AHEATSYSTEM,0 ^XSET,AHEATSYSTEM,1

^XSET,ALIAS,string - Printer alias name used for the recognition of each network printer

Syntax	**^XSET,ALIAS,string**
Effect & default	Permanent
Parameter	Length<16Byte If does not input “string”, it will response the existing setting in printer.
Description	Setup printer alias name to recognize each printer under network.

^XSET,AUTOTPHTEST,x - AUTO PRINTING SELF TEST PAGE WHEN PRINTER TURNED ON

Syntax	**^XSET,AUTOTPHTEST,x**
Effect & default	Permanent, default = 0
Parameter is not valid	Parameter is not processed.
Parameter	x = 0 disable , = 1 enable this function , = 2 detect print head bad spots when booting up (only for LCD models)
Description	If set to 1, the printer will automatically print a printhead test page every time it starts up. Please refer to the "~T" command for the print style of the test page. If set to 2, the printer will automatically perform a detection of bad dots on the printhead (only supported on LCD models) every time it starts up.

^XSET,BACKFEED,n– Smart backfeed

Syntax	^XSET,BACKFEED,n
Parameter	None
Description	Same as ^XSET,SMARTBACK,n description
Example	None

^XSET,BACKFEEDAFTERCUTTING,n– Pull back ratio after cutting

Syntax	^XSET,BACKFEEDAFTERCUTTING,n
Parameter	Permanent, default = 0
Description	Pull back ratio after cutting, the parameter range is 0~100 example: n = 100 : It means that the post-cut retraction will retract all the stop positions. The retraction will not occur before the next print job. n = 50 : It indicates that the post-cut retraction will retract half of the stop positions. The remaining half will be retracted before the next print job. n = 0 : This setting means that there will be no post-cut retraction. However, before the next print job, all the stop positions will be retracted.
Example	None

^XSET,BARCODEALIGN,n –Barcode alignment effect ON/OFF control

Syntax	^XSET,BARCODEALIGN,n
Parameter	n = 0 disable , = n enable this function
Description	Control barcodes that contain variables with alignment settings to produce alignment effects Note • Works with firmware versionV1.00B (130816-01) and V2.001 (140312-01)or later.
Example	^XSET,BARCODEALIGN,1 ~MDELF,TBARALIGN ^FTBARALIGN ^Q60,0 ^W60 ^H6 ^P1 ^S6 ^AD ^C1 ^R0

	~Q+0 ^O0 ^D0 ^E16 ~R255 ^L Dy2-me-dd Th:m:s V00,8,Prompt,jc50 BA3,34,126,2,6,80,0,1,^V00 E ^KTBARALIGN ABC E ~P1 E ^KTBARALIGN ABCDE E ~P1 E ^XSET,BARCODEALIGN,0

^XSETBAR,ADDWHITE,n –Toggle the rotation by 90 degrees and widen the barcode

Syntax	^XSETBAR,ADDWHITE,n
Effect & default	Permanent, default = 1
Parameter is not valid	Parameter is not processed.
Parameter	x = 0 disable , = 1 enable this function
Description	When this function is turned on, the following barcodes will widen the white part when printing at 90° & 270° to improve the printing quality: Code 39 , I2 of 5 , CODABAR , DUN14 , CHINA POSTAL
Example	None

^XSETBAR,VERSION,xxxxx – EAN128 , CODE128 , UCC128 barcode correction

Syntax	^XSETBAR,VERSION,xxxxx
Effect & default	Permanent, default = GODEX
Parameter is not valid	Parameter is not processed.
Parameter	When xxxxx = GODEX, use the definition of GODEX = ZEBRA, use the definition of ZEBRA
Description	The parameters should be interpreted as follows: For the EAN-128 barcode, it accepts the "&G" (FNC1) character. Other characters or formats not be accepted. For UCC-128 barcodes, if there are remaining digits after the UCC-128 identifier, they should be padded with zeroes. The encoding method and resulting barcode should follow the same conventions as ZEBRA. However, the invoke sign for the UCC-128 barcode should use the Godex symbol ("&") instead of the ZEBRA symbol.
Example	None

^XSET,BEEP,n- Set remind beep on/off

Syntax	^XSET,BEEP,n
Effect & default	Permanent, default = 1
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, remind beep function off n = 1, remind beep function on (default)
Description	This command can set printer remind beep on/off. When download graphic or font, printer will beep once. And use this command can turn off the remind beep function. But it can't set error beep on/off. This command has the same effect as ^XSET,BUZZER,n When the buzzer is turned off, there are three situations in which there are still [warning] Beep sounds: (1) Paper Out (Paper Out) (2) Paper jam or setting error (Ppaer Jam) (3) Ribbon Out (Ribbon Out)
Example	None

^XSET,BUZZER,n - Set remind buzzer on/off

Syntax	**^XSET,BUZZER,n**
Parameter	n = 0, remind buzzer function off n = 1, remind buzzer function on
Description	This command can set printer remind buzzer on/off. When download graphic or font, printer will beep once. And use this command can turn off the remind buzzer function. But it can't set error buzzer on/off. This command has the same effect as ^XSET,BEEP,n When the buzzer is turned off, there are three situations in which there are still [warning] Beep sounds: (1) Paper Out (Paper Out) (2) Paper jam or setting error (Ppaer Jam) (3) Ribbon Out (Ribbon Out)
Example	None

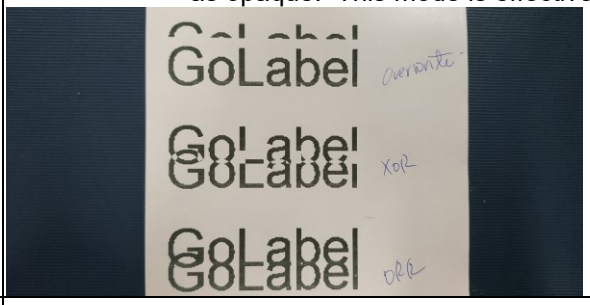
^XSET,CODEPAGE,n - Select Code Page

Syntax	**^XSET,CODEPAGE,n**
Effect & default	Permanent, default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n=0, CODEPAGE 850 n=1, CODEPAGE 852 n=2, CODEPAGE 437 n=3, CODEPAGE 860 n=4, CODEPAGE 863 n=5, CODEPAGE 865 n=6, CODEPAGE 857 n=7, CODEPAGE 861 n=8, CODEPAGE 862 n=9, CODEPAGE 855 n=10, CODEPAGE 866 n=11, CODEPAGE 737 n=12, CODEPAGE 851 n=13, CODEPAGE 869 n=14, WINDOWS 1252 n=15, WINDOWS 1250 n=16, WINDOWS 1251 n=17, WINDOWS 1253 n=18, WINDOWS 1254 n=19, WINDOWS 1255 n=20, WINDOWS 1257
Description	Set the code page.
Example	The testing process for transmission is as follows: PC to Printer ^XSET,CODEPAGE,16 PC to Printer ^XGET,CODEPAGE Printer to PC 16 16 = WINDOWS 1251

^XSET,DBSEARCH,n - Command needs to use with FILEDB,FIND.

Syntax	^XSET,DBSEARCH,[0 or 1]
effect & default	Permanent，Reset the printer does not affect the parameter.
Parameter is not valid	Parameter is not processed.
Parameter	n=0 Disable the search function, complete data needed to be inserted for comparison. n=1 The input is not case-sensitive, list all the data with the same beginning letter. n=2 List all the data and able (LCD or Keyboard) to choose left or right. N=3 There is no search function, and an error message will occur when the database cannot find a match.
Description	Note •(n=3) Works with firmware version V1.130s(220415-01) and V2.110p(220415-01)or later.

^XSET,DRAWMODE,n – only used for graphics (commands have a sequence, please put the graphics commands behind)

Syntax	^XSET,DRAWMODE,n
effect & default	Until the power is turned off，default =0
Parameter is not valid	Parameter is not processed.
Parameter	n=0 ORR n=1 XOR n=2 OVERWRITE OR MODE：The intersecting regions of text strings, images, and bar codes will print, allowing the user to print fields on top of one another XOR MODE：The region where text strings, images or bar codes intersect will not be printed. (An odd number of overlapping objects will print.) OVERWRITE：Interacting text is obliterated by the text formatted last. Each character cell is treated as opaque. This mode is effective only in rotation 1. See Record Structure Types 
Description	

^XSET,DPIEMULATE,n - Converting DPI format.

Syntax	^XSET,DPIEMULATE,n
effect & default	Permanent，Change to the original DPI when the printer is reset.
Parameter is not valid	Parameter is not processed.
Parameter	n = 150, 200, 300, 600 • 600 DPI can emulate 300,200,150 DPI resolutions • 300 DPI can emulate 150 DPI resolution
Description	

^XSET,ERRORPRINT,n - Set Error Reprint

Syntax	**^XSET,ERRORPRINT,n**
Parameter	n = 0 , after ERROR relieved, print the error label again and keeps printing. n = 1 , after ERROR relieved, will not print error label again and keeps printing. n = 2 , after ERROR relieved , cancel print job. n = 3, when an error occurs, the CANCEL JOB will be executed after the error is eliminated and there must be no data received from the PORT for two consecutive seconds.
Description	Setup the process when error occurred. Note • Works with firmware versionV1.00A (130321-01) and V2.001 (140312-01)or later. Note •(n=3) Works with firmware versionV1.00D (141230-01) and V2.001 (140312-01)or later.
Example	None

^XSET,FEEDCUT,n – Set The Automatic Cutting Function After Pressing FEED Button

Syntax	^XSET,FEEDCUT,n
Parameter	n = 1 : when press feed key, printer will feed then cut label (cutter should be enable). When uses continuous paper, the feed distance will be one label. n = 0 : when press feed key, printer will not cut label (cutter function enable). When uses continuous paper, printer will stop feed paper while release feed key
Description	Setup the process when error occurred. Note • Works with firmware versionV1.00A (130321-01) and V2.001 (140312-01)or later.
Example	None

^XSET,FEEDKCM,n – Set Press and hold FEED for CANCEL mode

Syntax	^XSET,FEEDKCM,n
Parameter	n =1: After pressing and holding the FEED button, about 3~6 seconds (1 short beep) only cancels the current job and enters a pause. If it exceeds about 6 seconds (2 short beeps), all received JOBs will be canceled. n =0: After pressing and holding the FEED button, all received JOBs will be canceled for about 3 seconds.
Description	It is recommended to set it to 0 when leaving the factory, and it will not change with the factory reset.
Example	^XSET,FEEDKCM,1

^XSET,FEEDTYPE,n - Setup feed function

Syntax	**^XSET,FEETYPE,n**
Parameter	n=0, Press FEED key. Printer will be printing a blank label in standby mode. n=1, Press FEED key. Printer will be printing a previous one label in standby mode. n=2, Press FEED key. None function in standby mode.
Description	Setup feed function

^XSET,FIRSTPAGEGEARCOMP,n – Set the function of offset correction for the first label

Syntax	^XSET,FIRSTPAGEGEARCOMP,n
Parameter	n=0 ~ 255, (in dots) default = 12
Description	Set the function of offset correction for the first label
Example	None

^XSET,FORMAT,0 – Format Flash file system

Syntax	^XSET,FORMAT,0
Parameter	None
Description	Format flash file system
Example	None

^XSET,GEARCOMP,n–Gear Backlash Compensation

Syntax	^XSET,GEARCOMP,n
Parameter	None
Description	Compensate gear backlash, unit is point
Example	None

^XSET,HEATOFFSET,n–Heating table OFFSET command

Syntax	^XSET,HEATOFFSET,n
Effect & default	Permanent, default = 0
Parameter	n = -5 ~ 5
Description	The command can fine-tune the heat of the heating table to increase (or decrease) 10% ~ 50% from the original heating heat, but the maximum will not exceed H19
Example	None

^XSET,HEATUP,n – Enable heat table H16 ~ H19

Syntax	^XSET,HEATUP,n
Parameter	n = 0 , disable H16 ~ H19 n = 1 , enable H16 ~ H19
Description	At a printing speed of 2 inches per second (IPS), the command has no effect. However, for printing speeds of 3 IPS and above, the H16 to H19 settings become ineffective. By default, the command is set to 0.
Example	None

^XSET,IMMEDIATE,n - Set immediate response on/off

Syntax	**^XSET,IMMEDIATE,n**
Effect & default	Permanent, default = 1
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, set immediate response function off (default) n = 1, set immediate response function on
Description	This command can set printer's immediate response function on/off. To implement commands that related to immediate response, the function should be turned on. The command is the switch for "~S,CHECK" and "~S,STATUS" commands.

^XSET,INVISIBLE,Vxx– Hide specified variables without printing

Syntax	^XSET,INVISIBLE,Vxx	
Parameter	Vxx : xx = 00 ~ 99	
Description	Hide specified variables without printing	
Example	Send command : ~MDELF,T001 ^FT001 ^Q50,0,0 ^W100 ^L V00,10,Prompt V01,10,Prompt V02,10,Prompt ^XSET,INVISIBLE,V02 AH,188,20,1,1,0,0,V1 = ^V00 AH,188,120,1,1,0,0,V2 = ^V01 AH,188,220,1,1,0,0,V1 + V2 = ^V02 E ^KT001 001 002 003 E ~P1	Print result: V1 = 001 V2 = 002 V1 + V2 = (no print)

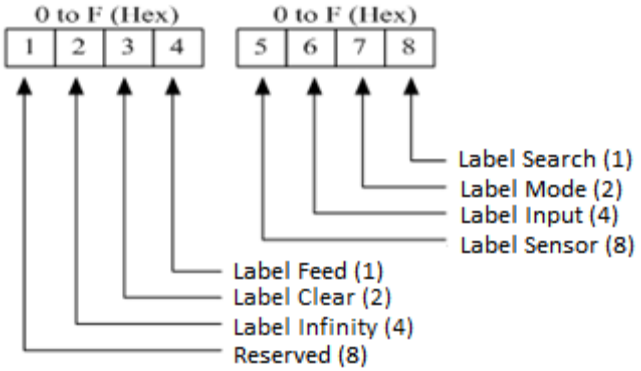
^XSET,KEYBOARD,n -Select different area PS2 Keyboard

Syntax	^XSET,KEYBOARD,n
effect & default	permanent , default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0 - US , 1 - UK , 2 - French , 3 - German , 4 - Spanish , 5 - Italian , 6 – Finnish , 7 - Dutch 8 – Belgian , 9 – Russian, 10 – Norwegian , 11 – Icelandic , 12 – Swedish,13 – Greek, 14– CZECH, 15 – POLISH
Description	Change the area setting of keyboard mode. * Note: this command is only applied on printer models that support keyboard mode.
Example	Examination of Transmitting procedure: PC to Printer ^XSET,KEYBOARD,3 PC to Printer ^XGET,KEYBOARD Printer to PC 3 3 :Support German's PS2keyboard

^XSET,KEYBOARDMODE,n – Detecting the connection status of keyboard (Only supports on LCD models)

Syntax	^XSET,KEYBOARDMODE,n
effect & default	Permanent , default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0 : printer asks in the display 1 : automatically switch to recall Label Format 2 : nothing happens until customer press F1 Key 3 : automatically switch to recall Label Format, ESC can't exit Recall Label mode 4 : printer asks in the display with PASSWORD
Description	Different detection modes when insert the keyboard
Example	None

^XSET,LABELCMD,xx(yy)-Label Command Setting

Syntax	^XSET,LABELCMD,xx(yy)
effect & default	Permanent , default = 0
Parameter is not valid	Parameter is not processed.
Parameter	 Bit 1 = 0, Reserved Bit 1 = 1, Reserved Bit 2 = 0, ^Px is to print according to printing quantity setting Bit 2 = 1, ^Px is to print with unlimited number of sheets Bit 3 = 0, The file name of the call label under LCD is not initially cleared Bit 3 = 1, The file name of the recall label under LCD will be cleared initially Bit 4 = 0, The min. value of feed paper length is 1mm. Bit 4 = 1, The min. value of feed paper length is 0mm. Bit 5 = 0, Sensor won't be changed with label setting change Bit 5 = 1, Sensor changes with label setting change Bit 6 = 0, Recall label file name of LCD doesn't support data input from touch screen Bit 6 = 1, Recall label file name of LCD supports data input from touch screen Bit 7 = 0, When the label content is blank, the printer will execute printing action. Bit 7 = 1, When the label content is black, the printer won't xecute printing action. Bit 8 = 0, Continuation keyword when disable recovery Bit 8 = 1, Clear up keyword when enable recovery yy Bit 8 = 0, When no barcode data is provided for EAN/UPC barcodes, the supplementary lines will not be generated. Bit 8 = 1, when no barcode data is provided, the supplementary lines will still be generated. Bit 7 = 0, Enable the Cutter function will not activate the Applicator mode simultaneously. Bit 7 = 1, Enable the Cutter function will activate the Applicator mode simultaneously.
Description	None
Example	^XSET,LABELCMD,08 (Sensor changes with label setting change) ^XSET,LABELCMD,40 (Px is to print with unlimited number of sheets) ^XSET,LABELCMD,0001 (When configuring the EAN/UPC barcode settings, enabling the option for supplementary lines will ensure that they are generated even when no barcode data is provided.)

^XSET,LABELINPUT,n- Sets the name of recall label file whether it can be input by touch panel on LCD or not.

Syntax	^XSET,LABELINPUT,n
effect & default	Permanent , default = 0
parameter is not valid	Parameter is not processed.
Parameter	n = 0, The file name cannot be input by the touch panel n = 1, The file name can be input by the touch panel n = 2, The file name is in initially empty status
Description	None
Example	None

^XSET,LABELMODE,n- Whether to perform printing when the label is blank

Syntax	^XSET,LABELMODE,n
effect & default	Permanent , default = 0
parameter is not valid	Parameter is not processed.
Parameter	n = 0, Print when the label is blank n = 1, When the label is blank, the printer will not print
Description	None
Example	None

^XSET,LABELSEARCH,n- Keep/ Not Keep Keywords While Recalling The Labels, After Printing

Syntax	^XSET,LABELSEARCH,n
effect & default	permanent , default = 0
parameter is not valid	Parameter is not processed.
Parameter	n = 0, Unable to continue keywords while resuming. n = 1, Enable the elimination of keywords while resuming.
Description	It needs to be used together with ~~INTERNALCOMMANDPROMPT2 to return to the LCD call label directory list
Example	None

^XSET,LANGUAGE,n -LCD language setting

Syntax	^XSET,LANGUAGE,n
effect & default	Permanent , default = 0
parameter is not valid	Parameter is not processed.
Parameter	n = 0-English 4-Italian 8- Polish 1-German 5-Simplified Chinese 9-Russian 2-French 6-Traditonal Chinese 10-Japanese 3-Spanish 7-Turkish 11- Korean
Description	This command can set the language of LCD. * Note: 1.this command is only applied on printer models that support LCD display. 2. 2.4” LCD、3.2” LCD only supply 0~9
Example	The testing process for transmission is as follows: PC to Printer ^XSET,LANGUAGE,3 PC to Printer ^XGET,LANGUAGE Printer to PC 3 3 : Now LCD language = Spanish

^XSET,LCDCOUNTER,n–Select whether to display or not display the remaining number of printed sheets on the LCD when printing

Syntax	^XSET,LCDCOUNTER,n
effect & default	Permanent , default = 1, (MX series models do not support)
parameter is not valid	Parameter is not processed.
Parameter	n = 0 disable , = 1 enable
Description	Choose to display or not display the remaining number of prints on the LCD when printing (LCD model only)
Example	None

^XSET,LCDSHOWSERVICE,0–Set whether to display service messages.

Syntax	^XSET,LCDSHOWSERVICE,n
effect & default	Permanent , default = 1 (This command is not applicable to models without LCD and MX series models)
parameter is not valid	Parameter is not processed.
Parameter	n = 0 disable , = 1 enable
Description	When an error occurs, display service messages.
Example	None

^XSET,LCDDATETIMEFROMAT,n– Set The Displayed Format Of LCD Date & Time

Syntax	^XSET,LCDDATETIMEFORMAT,n
effect & default	temporary , reset after the computer system activates , default = 0
parameter is not valid	Parameter is not processed.
Parameter	n = 0:YYYY/MM/DD (24-Hour Clock) 1: MM/DD/YYYY(24-Hour Clock) 2: MM/DD/YYYY(12-Hour Clock) 3: DD/MM/YYYY(12-Hour Clock) 4: DD/MM/YYYY(12-Hour Clock)
Description	Set LCD
Example	None

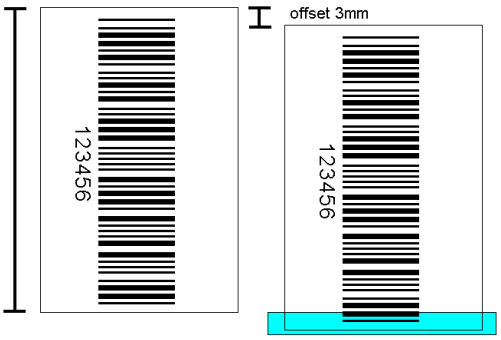
^XSET,LCDVOLUME,n–Set LCD (For 5"LCD) volume

Syntax	^XSET, LCDVOLUME,n
effect & default	permanent, default = 5
parameter is not valid	Parameter is not processed.
Parameter	n = 0~10
Description	Set the LCD volume, the set value is stored on the 5" LCD SD card
Example	None

^XSET,LCDLOCK,n- Set whether to lock the LCD

Syntax	^XSET,LCDLOCK,n
effect & default	permanent , default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, Unlock n = 1, Lock
Description	Currently only suitable for 3.2-inch LCD. (20211230 FW:V2.110e)
Example	None

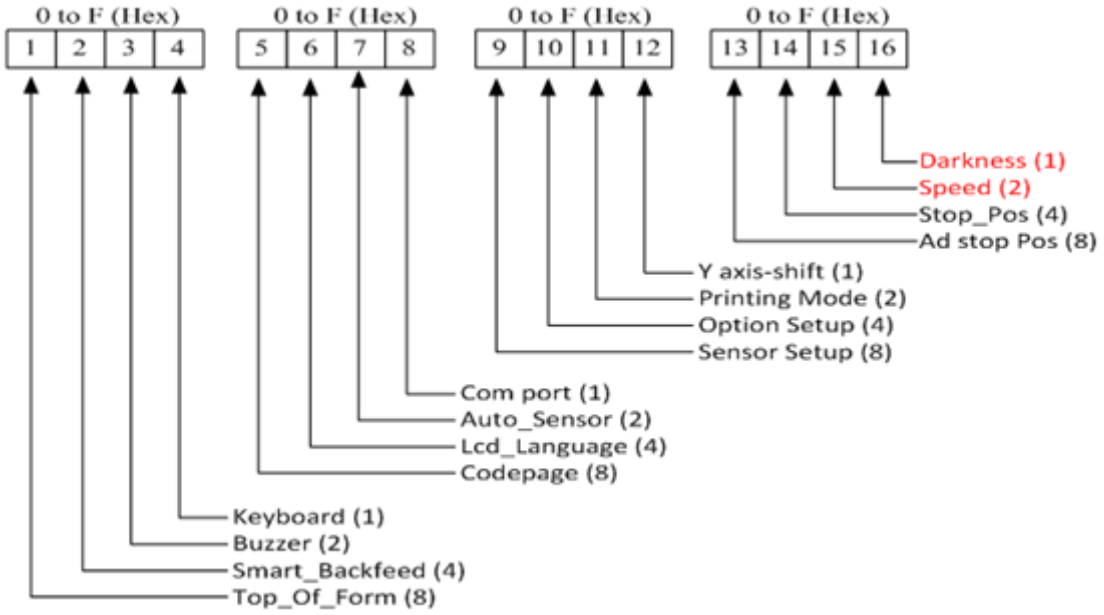
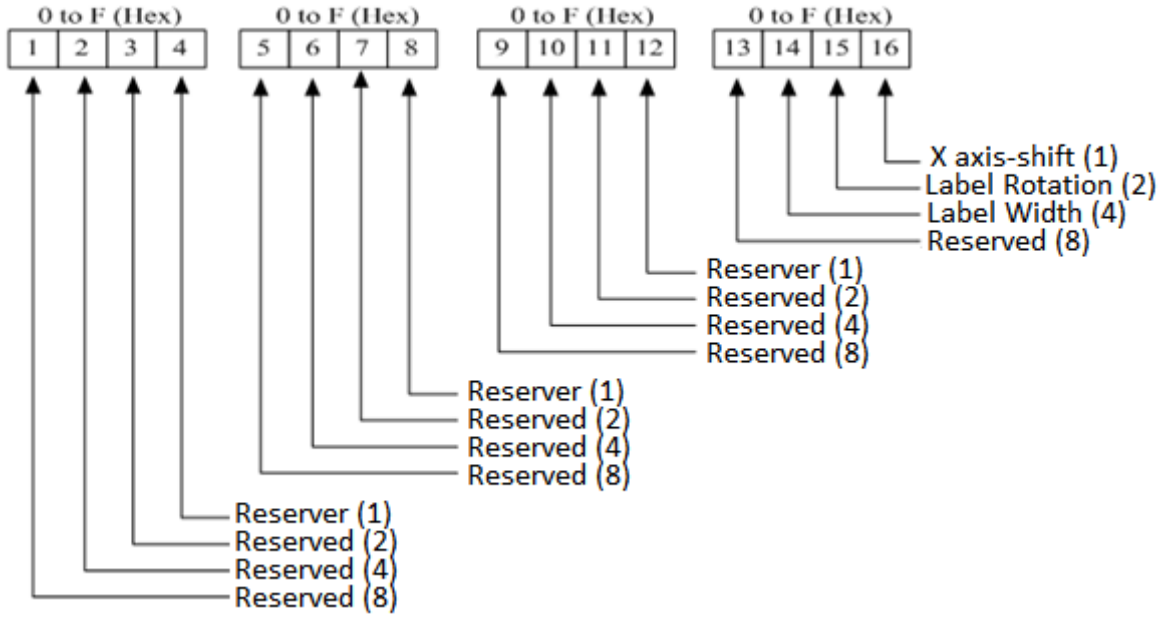
^XSET,LENGTHOFFSET,n–Fine-tune label length design value

Syntax	^XSET,LENGTHOFFSET,n
effect & default	permanent , default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0 ~ 50 (unit : mm)
Description	Fine-tune label length design value (used when the customer sets the wrong label length and does not want to change the design of the label)  Assuming the original label is "^Q50,3", by entering "^XSET,LENGTHOFFSET,3", the label will become "^Q47,3" and the blue part will be unconditionally truncated.
Example	None

^XSET,LINERLESS,n – Linerless Mode Control

Syntax	^XSET,LINERLESS,n
effect & default	permanent , none
Parameter is not valid	Parameter is not processed.
Parameter	0: disable linerless mode 1: enable linerless mode (After cutting, pull back 67%, print and then pull back 33%) 2: enable linerless mode (After cutting, it will not pull back, but it will pull back when printing the next label)
Description	^Z goto default will not restore the factory default settings Note • Works with firmware versionV1.00C (140219-01) and V2.001 (140312-01)or later.
Example	None

^XSET,LOCKCMD,xxxx(yyyy) - Command Lock function, use only hardware modifications set

Syntax	**^XSET,LOCKCMD,xxxx(yyyy)**
effect & default	permanent , default = 0
Parameter is not valid	Parameter is not processed.
Parameter	xxxx  yyyy 
Description	For value protected, user only can use LCD do any value setting.
Example	Lock Buzzer, ^XSET,LOCKCMD,2000 Lock Width, ^XSET,LOCKCMD,00000004

^XSET,MEMORY,n –Extended memory / Flash switch

Syntax	^XSET,MEMORY,n
effect & default	Temporarily, it will be reset when booting: If there is no extended memory, it will use flash after booting. If it detects extended memory, it will use extended memory after booting.
Parameter is not valid	Parameter is not processed.
Parameter	n = Memory being used n = 0, user flash n = 1, use extended memory(only valid in printer with USB HOST) n = 2, Dram memory
Description	None
Example	None

^XSET,NETPASSWORD –READ NET LOGIN IN PASSWORD

Syntax	^XSET,NETPASSWORD
Effect & default	None
Parameter is not valid	Parameter is not processed.
Parameter	None
Description	None
Example	None

^XSET,NETPASSWORD,xxxx,y –Set NET LOGIN IN PASSWORD

Syntax	^XSET,NETPASSWORD,xxxx,y
Effect & default	“1111”, Permanent
Parameter is not valid	Parameter is not processed.
Parameter	xxxx, The parameter is a four-digit number. y = 0, disable net password(webpage & Netsetting) y = 1, enable net password(webpage & Netsetting) Note, parameter y effectives after 2016/11/23
Description	None
Example	^XSET,NETPASSWORD,1111,0 or 

^XSET,NETSPEED–Read the network connection speed

Syntax	^XSET,NETSPEED
Effect & default	None
Parameter is not valid	Parameter is not processed.
Parameter	None
Description	None
Example	None

^XSET,NETSPEED,n –Set the network connection speed.

Syntax	^XSET,NETSPEED,n
Effect & default	Permanent
Parameter is not valid	Parameter is not processed.
Parameter	0 = Connection speed: 10MB. 1 = Connection speed: 100MB 2 = Auto Negociation (default)
Description	None

	Note • Works with firmware versionV1.00A (130321-01) and V2.001 (140312-01)or later.
Example	None

^XSET,NETSOCKETIDLETIME –Read TCP Socket Idle Time Out Interval

Syntax	^XSET,NETSOCKETIDLETIME
Effect & default	Permanent
Parameter is not valid	Parameter is not processed.
Parameter	None
Description	None Note • Works with firmware version V1.00D (141230-01) andV2.003 (140411-01)or later.
Example	None

^XSET,NETSOCKETIDLETIME,n –Set TCP Socket Idle Time Out Interval

Syntax	^XSET,NETSOCKETIDLETIME,n
Effect & default	Permanent
Parameter is not valid	Parameter is not processed.
Parameter	0 = Disable 1~65536 = Socket Idle time out interval (unit:second)
Description	None Note • Works with firmware version V1.00D (141230-01) andV2.003 (140411-01)or later.
Example	None

^XSET,PADLEFT,command string–Customize left button batch command (only for Arm7 models with directional keypad and LCD).

Syntax	^XSET,PADLEFT,n
Effect & default	None, the settings will be permanently effective after configuration.
Parameter is not valid	None
Parameter	Command string
Description	The maximum length of the string is 512 characters. If it exceeds this limit, it will be automatically truncated. If there is a command, it must end with 'E'. When no string is provided, the functionality is turned off. This feature requires 1MB of memory. Note • Works with firmware version V1.00C (140219-01)or later.
Example	Disable function: ^XSET,PADLEFT, Define Function: ^XSET,PADLEFT,~P1 ~P2 E

^XSET,PAGEDELAY,n – Set up printing delay time between pages

Syntax	^XSET,PAGEDELAY,n
Effect & default	Permanent
parameter is not valid	More specified as upper or lower limit
Parameter	n=0 ~ 300000，Unit: mS
Description	Set up printing delay time between pages Note • Works with firmware versionV1.00B (130816-01) and V2.001 (140312-01) or later.
Example	None

^XSET,PAPEROUT,n –Set the paper out detection length

Syntax	^XSET,PAPEROUT,n
Effect & default	default = 0
parameter is not valid	Parameter is not processed.
Parameter	n = 0 ~ 60000 (dot)
Description	Black mark label: Gap = 0 paper out len = 30dot + n (dot) Gap > 0 paper out len = Gap*2.5 + n (dot) Gap label: Gap = 0 paper out len = 30dot + n (dot) Gap > 0 paper out len = Gap*2.5 + n (dot) Continuous form : This command is invalid. paper out len = ((8 or 12)dot/mm+10) * 6
Example	None

^XSET,PASSWORD,n,x - Password for protecting the front panel setting(This command is not supported on MX series models.)

Syntax	^XSET,PASSWORD,n,x	
Effect & default	Permanent	
parameter is not valid	Parameter is not processed.	
Parameter	n = 0, To disable, you need to enter the 'x' parameter (original password) to unlock. n = 1, enable x = 4 digits password (It is recommended to restrict the input format using the manual)	
Description	LCD shows password message before entering Setting Mode when password protect ion is set. * Note: this command is only applied on printer models that support LCD display.	
Example	Enable: ^XSET,PASSWORD,1,1234 Disable ^XSET,PASSWORD,0,1234(original password)	Set password as 1234

^XSET,PAUSEPRINT,n – Set to pause after printing one page

Syntax	^XSET, PAUSEPRINT,n
Effect & default	default = 0
parameter is not valid	Parameter is not processed.
Parameter	n = 0 ~ 1 n = 0, disable n = 1, enable n = 2, Go to pause after print job finish
Description	Go to pause after printing one page, and continue to print next one by pressing feed key.
Example	None

^XSET,PORTACTIVE,l,s,e,u,b– Set the port to enable data reception.

Syntax	^XSET,PORTACTIVE,l,s,e,u,b
Effect	Permanent
Parameter is not valid	Parameter is not processed.
Parameter	L:LPT S:Serial Port E:Ethernet(The printer will restart as long as Ethernet port changes.) U:USB B:Blue Tooth Setting value 0: Disable 1:Enable
Description	Default : ^XSET,PORTACTIVE,1,1,1,1,1
Example	Enable: ^XSET,PORTACTIVE,1,1,1,1,1 Disable Serial Port ^XSET,PORTACTIVE,1,0,1,1,1

^XSET,PROMPTTIME,n–(in the unit of second)

Syntax	^XSET,PROMPTTIME,n	
Effect	Permanent	
Parameter is not valid	Parameter is not processed.	
Parameter	The time will start to count down while inputting the variable in standalone mode. Prints out the current variable after time's up.	
Description	Default : ^XSET,PROMPTTIME,0	
Example	Enable: ^XSET,PROMPTTIME,n Disable : ^XSET,PROMPTTIME,0	

^XSET,PRTPWD,"OldHostID","OldPassword","NewHostID","NewPassword" - Modify the password and host ID of the printer

Syntax	^XSET,PRTPWD,"OldHostID","OldPassword","NewHostID","NewPassword"
Effect	Permanent
Parameter is not valid	Parameter is not processed.
Parameter	OldHostID = 4~10 characters (digits or letters) OldPassword = 4~10 characters (digits or letters) NewHostID = 4~10 characters (digits or letters) NewPassword = 4~10 characters (digits or letters)
Description	Modify the password and host ID of the printer
Example	Example 1: First time to set the password and host ID ^XSET,PRTPWD,,,123abc,printer01 Example 2: Modify the password and host ID ^XSET,PRTPWD, printer01,123abc,printer02,xyz987

Note: Encrypted Host ID or Password shall not be erased by the command “go to default”.

^XSET,REWINDER,n- Rewinder

Syntax	^XSET,REWINDER,n
Effect & default	Permanent , default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, disable the rewinder (default) n = 1, enable the rewinder
Description	Set Rewinder enable/disable.
Example	None

^XSET,REALLENGTHPRINT,n - Adjust label length based on label content

Syntax	**^XSET,REALLENGHTPRINT,n**
Effect & default	Permanent, default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, disable n = 1, enable
Description	Adjust label length based on label content (Only support EZPL(GoDEX mode).GZPL(Zebra mode) in continues label)

^XSET,RECALLCRLF,n - Line feed characters include a character in recall label mode

Syntax	**^XSET,RECALLCRLF,n**
Effect & default	Permanent , EZPL：default = 0GEPL：default = 1
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, disable n = 1, enable
Description	Enable EZPL(GoDEX mode) and GEPL(Eltron mode). Line feed characters include a character in recall label mode.

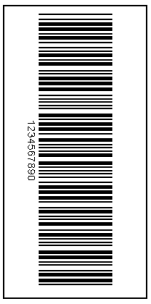
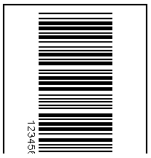
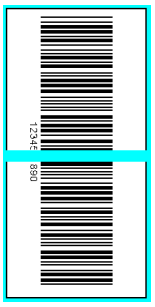
^XSET,RIBBONDIAMETER,n – Set the warning diameter for ribbon nearing depletion.

Syntax	^XSET,RIBBONDIAMETER,n
Effect & default	Permanent, go to default without affecting.
Parameter is not valid	Not processing, only lower limit of 10 is enforced, upper limit is currently not restricted.
Parameter	n = 10~100 unit: mm
Description	When the detected remaining diameter is less than the value specified in this command, it will trigger a nearing depletion indication. Measurement error: +/- 3mm.
Example	None

^XSET,RIBBONNEAREND,0 or 1 – Enable/Disable nearing depletion warning for ribbon.

Syntax	^XSET,RIBBONNEAREND,n
Effect & default	Permanent, The default factory setting is disabled. Go to default does not affect the status.
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, disable n = 1, enable
Description	After enabling this feature, a reboot is required for it to take effect. The warning is not effective when the machine is in thermal mode.
Example	None

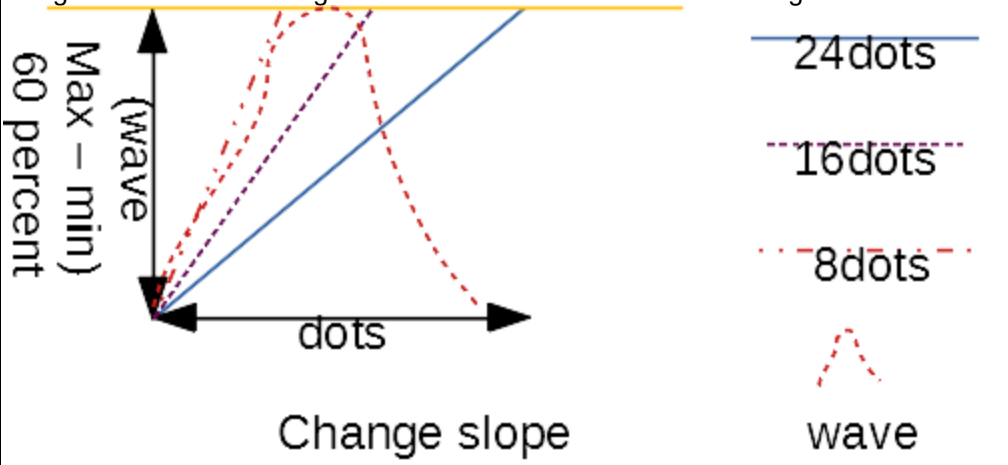
^XSET,ROTATION,n - Rotate whole label

Syntax	**^XSET,ROTATION,n**
Parameter	n = 0 , rotate 0° printing ; n = 1 , rotate 90° printing ; n = 2 , rotate 180° printing ; n = 3 , rotate 270° printing
Description	When perform this command, the length and width of label format will be swapped.
Example	Print labels as below: ^Q50,3 ^W102 ^L Dy2-me-dd Th:m:s R12,8,806,386,5,5 BA,118,74,3,7,200,0,1,43546576876 E  Case 1 : Continues paper, setup ^Q50,0,0 ^W100. Rotate 90°, it becomes ^Q100,0,0 ^W50.  Case 2 : Gap paper (Label: 50(H) * 100(W) * gap 3), setup ^Q50,0,0 ^W100. Rotate 90°, it becomes ^Q100,0,0 ^W50. It will only print out 50mm (H) * 50mm (W)  Case 3 : Gap paper (Label: 50(H) * 100(W) * gap 3) ^Q50,0,0 ^W100. Rotate 90°, it becomes ^Q100,0,0 ^W50 + ^XSET,ACROSS,1 (cross label command). It will print out below labels with 100mm (H) * 50mm (W). 

^XSET,SCANNERMODE,n –Use SCANNER to scan barcode for printing with AUTOFR in conjunction with a label dispenser

Syntax	^XSET,SCANNERMODE,n
Effect & default	Permanent, default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0 will clear the buffer, n = 1 will not clear the buffer.
Description	Use AUTOFR with a label dispenser to scan barcodes for printing with SCANNER.
Example	None

^XSET,SENSING,n - Assign reflect or see-through sensor mode be a detector while using continuous label

Syntax	**^XSET,SENSING,n**
Effect & default	Permanent, default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0 reflect sensor , = 1 see-through sensor , =2 none detected mode
Description	Assign reflect or see-through sensor mode be a detector while using continuous label 
Example	None

^XSET,SHOWCLOCK,n –Choose the message to be displayed on the LCD while in standby (not supported on MX models)

Syntax	^XSET,SHOWCLOCK,n
Effect & default	Permanent, default = No display
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, do not display any additional information. n = 1, display date and time. n = 2, display IP address. n = 3, display total printed count.
Description	Choose the message to be displayed on the LCD while in standby
Example	None

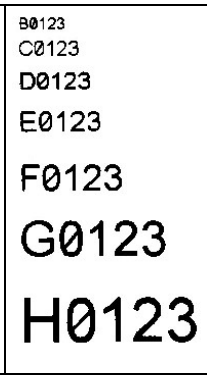
^XSET,SHOWDATETIME,n –Choose to display or not to display time information on the LCD while printing (not supported on MX models)

Syntax	^XSET,SHOWDATETIME,n
Effect & default	Permanent, default = No display
Parameter is not valid	Parameter is not processed.
Parameter	n = 0 disable , = 1 enable
Description	Choose to display or not to display time information on the LCD while printing (limited to LCD models)
Example	None

^XSET,SHUTDOWN,n,[s]–Automatic power-off function

Syntax	^XSET,SHUTDOWN,n,[s]
Effect & default	Permanent, default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0 disable , = 1 enable, s: second
Description	For MX20/30, enable automatic power-off after entering standby mode for s seconds.
Example	None

^XSET,SLASHZERO,n - Slashed zero

Syntax	**^XSET,SLASHZERO,n**	
Effect & default	Permanent, default = 0	
Parameter is not valid	Parameter is not processed.	
Parameter	n = 0, without slash (default) n = 1, with slash	
Description	Set all zero to be printed as slashed zero.	
Example	^XSET,SLASHZERO,1 ^Q60,0,0 ^L AA,81,15,1,1,0,0,A0123 AB,81,41,1,1,0,0,B0123 AC,81,71,1,1,0,0,C0123 AD,81,111,1,1,0,0,D0123 AE,81,160,1,1,0,0,E0123 AF,81,230,1,1,0,0,F0123 AG,81,298,1,1,0,0,G0123 AH,81,396,1,1,0,0,H0123 E	

^XSET,SMARTBACK,n - Smart backfeed

Syntax	**^XSET,SMARTBACK,n**	
Effect & default	Permanent, default = 0	
Parameter is not	Parameter is not processed.	
Parameter	n = 0, OFF n = 1, ON	
Description	This function can reduce the process time when Label Dispenser or Cutter been used. With this command, when the prior label is waiting for cutting or peeling, the partial contents of the next label will be printed. After the label has been cut or peeled, the printer will continue to print the rest contents of the next label.	
Example	(For Label Dispenser) ^XSET,SMARTBACK,1 ^Q100,3 ^E30 ^O1 ^P3 ^L R18,18,750,774,10,10 E	1. Printer will print out first label and part of second label 2. After taking label away, printer continues printing second label and part of third label. 3. After taking label away, printer print out third label.
	(For Cutter) ^XSET,SMARTBACK,1 ^Q100,3 ^E30 ^D1 ^P3 ^L R18,18,750,774,10,10 E	

^XSET,SPEEDDOWN,n – Command used to reduce the overall speed

Syntax	^XSET,SPEEDDOWN,n
Effect & default	Permanent, default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0 No speed reduction N = 0~90
Description	Command used to reduce the overall speed
Example	

^XSET,STANDBY,n – Choose whether to enter power-saving mode.

Syntax	^XSET,STANDBY,n[,s]
Effect & default	Permanent, default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, disable saving mode (default) n = 1, enable saving mode s: seconds (30~3600 sec) (only supported on MX models)
Description	Default: If enable saving mode, when the printer is inactive for approximately 100 seconds or more, the CPU will automatically shut down all communication ports and enter power-saving mode. Pressing the feed key is required to wake up the printer again. MX Series: If enable saving mode, when the printer is inactive for s seconds or more, the CPU will automatically shut down all communication ports and enter power-saving mode. Pressing the feed key is required to wake up the printer again. Note • Works with firmware versionV1.00A (130321-01) and V2.001 (140312-01)or later.
Example	None

^XSET,TEARPAPERTIME,n – Set the waiting time for removing labels

Syntax	^XSET,TEARPAPERTIME,n
Effect & default	Permanent, default = 300
Parameter is not valid	Parameter is not processed.
Parameter	n : 0~32767 unit: 1mS
Description	Set the waiting time for removing labels
Example	^XSET,TEARPAPERTIME,300

^XSET,TEXTBLOCK,x[,y] – TEXT BLOCK Function Control

Syntax	^XSET,TEXTBLOCK,n
Effect & default	permanent default = 0
parameter is not valid	Parameter is not processed.
Parameter	=0 no text block ; =1 enable text block; =2 Line feed along with blank **y=space between lines (in dots)**
Description	Enable this feature, including variable text printing: For variable text without alignment range: Line breaks occur at the set label boundaries. For variable text with alignment range: Line breaks occur within the alignment range. x=2 changes the automatic line breaking condition to occur at whitespace, while still maintaining boundary alignment.
Example	

^XSET,TOF,n – Enable/Disable Top of Form

Syntax	^XSET,TOF,n
Effect & default	Permanent, default = 2
parameter is not valid	Parameter is not processed.
Parameter	Same as ^XSET,TOPOFFORM,n
Description	Same as ^XSET,TOPOFFORM,n
Example	同 ^XSET,TOPOFFORM,n

^XSET,TOPOFFORM,n - Top of Form

Syntax	**^XSET,TOPOFFORM,n**
Parameter	n = 0, disable Top of Form function n = 1, Enable Top of Form function n = 2, it will not perform Top of Form while power on but when error or door open occurred, it will perform Top of Form. When function enabled and power on, printer will back up according to E value. n = 3, disable Top of Form function but will back up according to E value.
Description	Enable/Disable Top of Form function.
Example	When power on printer or relieved from error, 2nd label will be moved to printing line. If press feed key after power on printer or relieved from error, it will not perform Top of Form.

^XSET,TPHLENGTH[,mileage] – Set and return the TPH (Thermal Print Head) mileage

Syntax	^XSET,TPHLENGTH[,mileage]
Effect & default	Permanent
parameter is not valid	Parameter is not processed.
Parameter	Mileage: The desired mileage to be set (m)
Description	Set and return the TPH (Thermal Print Head) mileage.
Example	^XSET,TPHLENGTH Current TPH Length: 00000022 History Counter: 2 1: 00000009 (2011/04/01) 2: 00000001 (2011/04/02) ^XSET,TPHLENGTH,0 ^XSET,TPHLENGTH Current TPH Length: 00000000 History Counter: 3 1: 00000009 (2011/04/01) 2: 00000001 (2011/04/02) 3: 00000022 (2011/04/03)

^XSET,UNICODE,n – How to set text encoding

Syntax	^XSET,UNICODE,n
Parameter	n=0, Default n=2, UTF8
Description	The Character encoding can be set to UTF8
Example	None

^XSET,UNPROMPT,p1 - Automatically acquire variables

Syntax	**^XSET,UNPROMPT,p1**	
Parameter	p1 : the variable code which want to acquire	
Description	Automatically acquire variables. Same as V#SET,UNPROMPT,p1	
Example	Send command : ~MDELF,T001 ^FT001 ^Q50,0,0 ^W100 ^L V00,10,Prompt V01,10,Prompt V02,10,Prompt V#OP+,V02,V00,V01 ^XSET,UNPROMPT,V02 AH,188,20,1,1,0,0,V1 = ^V00 AH,188,120,1,1,0,0,V2 = ^V01 AH,188,220,1,1,0,0,V1 + V2 = ^V02 E ^KT001 001 002 E ~P1	Print result : V1 = 001 V2 = 002 V1+V2 = 3

^XSET,USBPRODUCT,n– set USB PID (The input is in decimal format, but it will be automatically converted to hexadecimal before storing it in the printer.)

Syntax	^XSET,USBPRODUCT,n
Effect & default	Permanent, default = 0xFFFF
parameter is not valid	There is no error prevention.
Parameter	The input data is in hexadecimal format.
Description	Set USB PID (Input data in hexadecimal format). You can use the ~~INTERNALCOMMANDC to print the CHECK SUM information for verification.
Example	The testing process for transmission is as follows: PC to Printer: ^XSET,USBPRODUCT,1234 PC to Printer: ~~INTERNALCOMMANDC Print action: To print the checksum label, please note the following information: PRODUCT ID: 0x4d2 (hexadecimal representation) Convert 1234 to hexadecimal: 0x4d2

^XSET,USBVENDOR,n– set USB VID (The input is in decimal format, but it will be automatically converted to hexadecimal before being stored in the printer)

Syntax	^XSET,USBVERDOR,n
Effect & default	Permanent, default = 0xFFFF
parameter is not valid	There is no error prevention.
Parameter	The input data is in hexadecimal format.
Description	Set USB VID (Input data in hexadecimal format). You can use the ~~INTERNALCOMMANDC to print the CHECK SUM information for verification.
Example	The testing process for transmission is as follows: PC to Printer: ^XSET,USBPRODUCT,5678 PC to Printer: ~~INTERNALCOMMANDC Print action: To print the checksum label, please note the following information: VENDOR ID: 0x162e (hexadecimal representation) Convert 5678 to hexadecimal: 0x162e

^VERIFYHOSTID,"HostID32" -Verify the printer ID

Syntax	^VERIFYHOSTID,"HostID32"
default	N/A
How to handle for Wrong Syntax	No response
Parameter	HostID32 are 32-byte characters. See the detail in chap 錯誤! 找不到參照來源。.
Description	Verify the printer ID
Example	^ VERIFYHOSTID,833500F1A90B4FA0998F0001C4E58023
Response	If Host id is correct, the printer will Acks the command ^VERIFYPRTPWD,“Password32”.

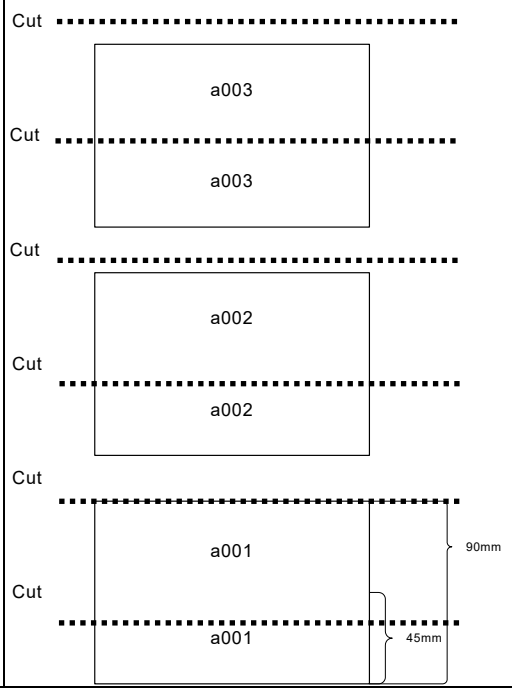
^XSET,WHENTOSENSING,n - Set up autosensing

Syntax	**^XSET,WHENTOSENSING,n**
Parameter	n=0 None function n=1 do the auto sensing when printer turned on n=2 After print mechanism closed do the auto sensing. n=3 The printer automatically performs media sensing during power-on and performs after the print mechanism is closed.
Description	Set up autosensing

^XSETCUT,DOCUTTING,1–Set up cutter to cut once

Syntax	^XSETCUT,DOCUTTING,1
Parameter	None
Description	Set up cutter to cut once no matter the cutter was locked by command
Example	None

^XSETCUT,DOUBLECUT,x[,y] - Double cut

Syntax	**^XSETCUT,DOUBLECUT,x[,y]**	
Effect & default	Temporary	
parameter is not valid	There is no error prevention.	
Parameter	x = 0, disable the doublecut x = offset length (offset length ＜Label length, unit: mm)	
Description	Set the printer to cut twice per label.	
Example	^XSETCUT,DOUBLECUT,45 ^Q90,3 ^E20 ^P3 ^D1 ^L C0,001,+1,A1 AC,350,144,1,1,1,0,a^C0 AC,350,544,1,1,1,0,a^C0 E	Print result : 
Note	This function may decrease the service life of cutter since the adhesive of label will stain the cutter. Hence it is not recommended to use this function.	

^XSETCUT,MODE,n[,m],[p] - Set cutter mode

Syntax	^XSETCUT,MODE,n[,m],[p]
Effect& default	Permanent, default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, Full-cut mode (default) n = 1, Partial-cut mode The "m" can be omitted when not switching between different types of cutters. m = 0, RGG120 / PGXG120 cutter / Rotary cutter m = 1, MK147 (TG-85E-AMD-F718) high-speed cutter (ZX1000i series dedicated 20190125), sample cutter ^D0,280 m = 2, MM03 (TG-85) dotted-line half-cut/full-cut cutter (ZX1000i series dedicated) Updated on 2021-12-07 p=0, After recovering from continuous paper error, the leading edge of the first sheet will not be cut and printing will start immediately (default). p=1, After continuous paper error recovery, the first page sends out the E value length, cuts the leading edge of the paper, pulls back the E value length, and then starts printing. * Note: do not set the cutter mode to Partial-cut mode when cutting with cutter module that doesn't support Partial-cut function.
Description	Set the cutter mode to Full-cut mode or Partial-cut mode
Example	^D1 ^XSETCUT,MODE,0 ^L ….. E

^XSETRTC,ISOWEEKNUM,n - ISO Week

Syntax	**^XSETRTC,ISOWEEKNUM,n**
Parameter	n = 0, disable the ISO Week (default) n = 1, enable the ISO Week
Description	This command can set ISO week of the year to print.
Example	The following figure shows the ISO Week for 1 January 2000 It is week 52 of year 1999, day 6 of the week, and day 1 of year 2000.

1999	1 Mon	2 Tue	3 Wed	4 Thu	5 Fri	6 Sat	7 Sun
W44	305	306	307	308	309	310	311
W45	312	313	314	315	316	317	318
W46	319	320	321	322	323	324	325
W47	326	327	328	329	330	331	332
W48	333	334	335	336	337	338	339
W49	340	341	342	343	344	345	346
W50	347	348	349	350	351	352	353
W51	354	355	356	357	358	359	360
W52	361	362	363	364	365	1	2

2000	1 Mon	2 Tue	3 Wed	4 Thu	5 Fri	6 Sat	7 Sun
W01	3	4	5	6	7	8	9
W02	10	11	12	13	14	15	16
W03	17	18	19	20	21	22	23
W04	24	25	26	27	28	29	30
W05	31	32	33	34	35	36	37
W06	38	39	40	41	42	43	44
W07	45	46	47	48	49	50	51
W08	52	53	54	55	56	57	58
W09	59	60	61	62	63	64	65

Program: with the ISO Week Date function	**Remark**
~D1,1,0, 0,0,0	Set the date and time
^XSETRTC,ISOWEEKNUM,1	
^Q50,0,0	
^L	
Dy4-mn-dd	Define the clock type
AC,58,32,1,1,0,0,Today is ^D	Print the date
Dwy1	
AC,58,132,1,1,0,0,Week of year in one digit: ^D	Print the Week of year in one digit
Dwy2	(Week of year in one digit: 52)
AC,58,194,1,1,0,0,Week of year in two digits: ^D	Print the Week of year in two digits
E	(Week of year in two digits: 52)

Program: without the ISO Week Date function	**Remark**
~D1,1,0, 0,0,0	Set the date and time
^XSETRTC,ISOWEEKNUM,0	
^Q50,0,0	
^L	
Dy4-mn-dd	Define the clock type
AC,58,32,1,1,0,0,NOT ISO week of year (^D)	Print the date
Dwy1	
AC,58,132,1,1,0,0,Week of year in one digit: ^D	Print the Week of year in one digit
Dwy2	(Week of year in one digit: 1)
AC,58,194,1,1,0,0,Week of year in two digits: ^D	Print the Week of year in two digits
E	(Week of year in two digits: 01)

^XSETRTC,LANGUAGE,n - Different language layout

Syntax	**^XSETRTC,LANGUAGE,n**	
Parameter	n = 0-English 1-German 3-Spanish 2-French 4-Italian	
Description	This command can set the language of RTC.	
Example	^XSETRTC,LANGUAGE,0 ^Q50,0,0 ^L AC,58,06,1,1,0,0,English Dw1 AC,58,046,1,1,0,0,Day-of-week 3 letter: ^D Dw2 AC,58,098,1,1,0,0,Day-of-week complete: ^D Dwn AC,58,144,1,1,0,0,Day-of-week number: ^D Dm1 AC,58,188,1,1,0,0,Month of year 3 letter: ^D Dm2 AC,58,240,1,1,0,0,Month of year complete: ^D Dmn AC,58,286,1,1,0,0,Month of year number: ^D E ^XSETRTC,LANGUAGE,1 ^Q50,0,0 ^L AC,58,06,1,1,0,0,German Dw1 AC,58,046,1,1,0,0,Day-of-week 3 letter: ^D Dw2 AC,58,098,1,1,0,0,Day-of-week complete: ^D Dwn AC,58,144,1,1,0,0,Day-of-week number: ^D Dm1 AC,58,188,1,1,0,0,Month of year 3 letter: ^D Dm2 AC,58,240,1,1,0,0,Month of year complete: ^D Dmn AC,58,286,1,1,0,0,Month of year number: ^D E	English Day-of-week 3 letter: Thu Day-of-week complete: Thursday Day-of-week number: 4 Month of year 3 letter: Mar Month of year complete: March Month of year number: 03 German Day-of-week 3 letter: Sam Day-of-week complete: Samstag Day-of-week number: 6 Month of year 3 letter: Nov Month of year complete: November Month of year number: 11

^XSET,AUTOLOAD,n[,m] – Autoload mode

Syntax	^XSET,AUTOLOAD,n[,m]
effect & default	default = 0 (Disable the Autoload mode)
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, Disable the Autoload mode n = 1, Enable the Autoload mode m = the length from TPH to AUTOLOAD Sensor 1 ~ 40 (mm), Without this parameter, it will be set to the FW preset distance
Description	This command is valid for the HD830 model It will only take effect after V2.00a
Example	^XSET,AUTOLOAD,1

^XSET,SELFPAGEADD,n – Self-test page print content

Syntax	^XSET,SELFPAGEADD,n
effect & default	0(No additional printing)
Parameter is not valid	Parameter is not processed.
Parameter	n: Note 0: Disable to print the 1D barcode of IP/Submask/Gateway. 1: Enable to print the 1D barcode of IP/Submask/Gateway.
Description	This command is currently only valid for MX30 series models It will only take effect after V2.MYF
Example	^XSET,SELFPAGEADD,1 ~V 

^Yb,p,d,s - RS232 serial Port communication setting

Syntax	**^Yb,p,d,s**		
Effect& default	Permanent, default = 96 N 8 1		
Parameter is not valid	Parameter is not processed.		
Parameter	b = Baud Rate	48=4800bps	
		96=9600bps	
		19=19200bps	
		38=38400bps	
		57=57600bps	
		11=115200bps	
	p = Parity (N, O, E)	N=none parity	
		O=odd parity	
		E=even parity	
	d = Number of data bits	7	
		8	
	s = Number of stop bits	1	
		2	
Description	Serial Port communication setting		
Example	^Y96,N,8,1		

^Z - Reset to factory default settings

Syntax	**^Z**
Parameter	^Z: default value comes from EEPROM default area.
Description	Reset to factory default. Same as ~~INTERNALCOMMAND+INIT

Control Commands

~B - Display the f/w version message

Syntax	**~B**
Parameters	None
Description	Show the version number of firmware on Hyper Terminal.
Example	The testing process for transmission is as follows: PC to Printer: ~B Printer to PC: EZ1100P G3.007

~BOK - Display the f/w version & date message

Syntax	~BOK
Parameters	None
Description	Show the version number and date of firmware on Hyper Terminal.
Example	The testing process for transmission is as follows: PC to Printer: ~BOK Printer to PC: BOOT :2.004 F/W : ZX1600i V2.R92 (Apr 27 2015 16:47:08-01) First Model : ZX1200i Second Model : ZX1300i Third Model : ZX1600i PrinterName2 : ZX1200i PrinterName3 : ZX1300i PrinterName6 : ZX1600i PCB : 271010 USB NAME: GODEX_ZX1600i Manufacturer : GODEX INTERNATIONAL CO. Save as info : 388/512 Save as byte : 295/512 Save as word : 138/512 Save as other : 248/896 Save as mac : 632/640

~C,p1,p2,p3,p4,p5,p6,p7 – Download Asian Chinese Traditional fonts

Syntax	~C,p1,p2,p3,p4,p5,p6,p7
Parameters	p1 : Download location code/number. p2 : file name p3 : Character width in dots (dots) p4 : Character height in dots (dots) p5 : single byte offset value p6 : File size of the downloaded file p7 : Download file data
Description	**Download Asian Chinese Traditional fonts**
Example	None

~c,p1,p2,p3,p4,p5,p6,p7 – Download Asian Chinese Simplified fonts

Syntax	~c,p1,p2,p3,p4,p5,p6,p7
Parameters	p1 : Download location code/number. p2 : file name p3 : Character width in dots (dots) p4 : Character height in dots (dots) p5 : single byte offset value p6 : File size of the downloaded file p7 : Download file data
Description	Download Asian Chinese Simplified fonts
Example	None

~Dm,d,y,h,i,s - Date/Time setting

<table>
<tr><td>Syntax</td><td colspan="2">~Dm,d,y,h,i,s</td></tr>
<tr><td>Parameter</td><td>m = Month (01 to 12)
d = Date (01 to 31)
y = Year (last two digits of year)</td><td>h = Hour (00 to 23)
i = Minutes (00 to 59)
s = Seconds (00 to 59)</td></tr>
<tr><td>Description</td><td colspan="2">Set real time clock of the printer. For format setting of the date, use the Daa|bb|cc command.</td></tr>
<tr><td>Example</td><td>~D12,22,04,11,11,11
^L Dwn
AD,182,145,1,1,0,0,^D
Dw2
AD,135,186,1,1,0,0,^D
Dw1
AD,168,226,1,1,0,0,^D
Dmn/dd/y2
AD,126,110,1,1,0,0,^D
E</td><td>The following form shows the date for December 2004.
<table>
<tr><td>Sun.</td><td>Mon.</td><td>Tue.</td><td>We.</td><td>Thu.</td><td>Fri.</td><td>Sat.</td></tr>
<tr><td></td><td></td><td></td><td>1</td><td>2</td><td>3</td><td>4</td></tr>
<tr><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td></tr>
<tr><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td></tr>
<tr><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td></tr>
<tr><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td><td></td></tr>
</table>
The print result as below.

12/22/04
3
Wednesday
Wed</td></tr>
</table>

~En,name,size - Download graphic to memory

Syntax	**~En,name,size**
Parameters	n = P or p: PCX file n = B or b: BMP file n = N or n:PNG file name = Name of image (up to 20 character) size = Size of image (bytes), maximum 512K byte.
Description	Download monochrome image onto memory. Printer will beep once after downloaded completed. If the file name of graph is duplicated, the printer will show “REPEAT FILE NAME”, and the download will not be accepted (refer to page81).

~Fn – Control Printer into Keyboard Mode

Syntax	~Fn
Parameters	1: into keyboard mode to select label 0: exit keyboard mode , back to ready
Description	It should be use when you are in the process of keyboard mode.
Example	None

~F,p1,p2,p3,p4,p5,p6,p7 – Download Asian Korean fonts

Syntax	~F,p1,p2,p3,p4,p5,p6,p7
Parameters	p1 : Download location code/number. p2 : file name p3 : Character width in dots (dots) p4 : Character height in dots (dots) p5 : single byte offset value p6 : File size of the downloaded file p7 : Download file data
Description	Download Asian Korean fonts
Example	None

~f,p1,p2,p3,p4,p5,p6,p7 – Download Asian Japanese fonts

Syntax	~f,p1,p2,p3,p4,p5,p6,p7
Parameters	p1 : Download location code/number. p2 : file name p3 : Character width in dots (dots) p4 : Character height in dots (dots) p5 : single byte offset value p6 : File size of the downloaded file p7 : Download file data
Description	Download Asian Japanese fonts
Example	None

~G - Graphic mode

Syntax	**~G**
Parameter	None
Description	Set the printer to image-receiving mode. The image data is sent directly from host to the printing buffer (refer to page80)

~H,TTF,Xname,size<CR>data - Download true type font

Syntax	**~H,TTF,Xname,size<CR>data**
Parameter	X = from A to Z name = font name, accepted values: English alphabet and numbers size = size of font file in bytes data = binary data of TTF font file
Description	Download True Type Font to printer via command set. *Note: This command is designed for advance programmer. For general user, it is recommended to download TTF through (GoLabel or QLabel).

~H,TTF_TABLE,Xname,size<CR>data - Download Unicode Table

Syntax	**~H,TTF_TABLE,Xname,size<CR>data**
Parameter	X = from A to Z name = table name, accepted values: English alphabet and numbers size = size of font in bytes data = binary data of Unicode Table file
Description	Download the Unicode Table for printing True Type Font. *Note: This command is designed for advance programmer. For general user, it is not recommended to use this command.

~Ix,name,length – Download graphics to temporary memory

Syntax	~Ix,name,length
Parameter is not valid	Parameter is not processed.
Parameters	n = P or p: PCX file n = B or b: BMP file name = Name of image (up to 20 character) size = Size of image (bytes), maximum 512K byte.
Description	Download the graphic file to the temporary memory SDRAM (the graphic will disappear after power off and restart). The remaining operation methods are the same as ~E
Example	None

~Jx - Bit-Mapped font download

Syntax	**~Jx**	
Parameters	x = character; From a ~ z or A ~ Z; the amount is up to 26 characters.	
Description	The command used for font loading is usually generated by (GoLabel or QLabel) label creation software. The printer will beep once after downloaded. If you use the same file name, the printer will show “REPEAT FILE NAME”, and the download will not be accepted. The downloaded font is compatible with the HP Laser Jet II Plus (PCL-4).	
Example	Download the “HVR0OE1A.SFP” text file to external memory card. Use “A” to do the character code name.	
	~JA	; Define A as HVR0OE1A.SFP
	COPY HVR0OE1A.SFP PRN/B	; Send the order with the DOS mode

~ Kn -Response from RS-232 or USB or bluetooth port

Syntax	**~Kn**
Effect& default	Permanent, default = 0
Parameter is not valid	Parameter is not processed.
Parameter	n = 0, disable. n = 1, enable. n = 2, respond a “X” before print
Description	To send a "Y" signal back to the host after each printing is done, you need to ensure that the ^XSET,ACTIVERESPONSE,n command is set to enable (n = 1). It is recommended to use a label dispenser to send the response "Y" to the PC via RS-232 or USB immediately after the label is printed, rather than waiting until the label is taken away.

~L,DBASE,x,y - Download dBase III to Printer

Syntax	**~L,DBASE,x,y** data…
Parameter	x = database name y = database size (unit: byte)
Description	This command can download dBase III file to printer.
Example	~L,DBASE,customer,364 …(Data of customer.dbf)

~L,DBASECSV,x,y - Download CSV to Printer

Syntax	**~L,DBASECSV,x,y** data…
Parameter	x = database name y = database size (unit: byte)
Description	This command can download CSV file to printer.
Example	None

~L,SERIAL,name,data - Download serial file to printer

Syntax	**~L,SERIAL,name,data…**
Parameter	name = serial file name data = serial file data
Description	Download serial file to printer.
Example	The testing process for transmission is as follows:

PC to Printer	~L,SERIAL,new,123456
PC to Printer	~MGETS,new
Printer to PC	123456

~MCPY,s:o.x,d:o.x – Copy file

Syntax	~MCPY,s:o.x,d:o.x
Parameter	s = source device of stored object (s = Dor F) d = distination device of stored object o = object name , o also can use * for this command. x = extension , x also can use * for this command.

	= D, database = A, Asia font = C, TTF font = E, Bit-Mapped font = F, label form = G, graphic = S, serial file = T, text = B, Unicode Table
Description	Copy file
Example	~MCPY,F:*.F,D:*.F ~MCPY,D:*.G,F:

~MDEL - Format current memory (not include download font- Asian font & TTF)

Syntax	~MDEL
Parameter	None
Description	Format current memory (not include download font- Asian font & TTF), ~X4 can check status of memory.
Example	None

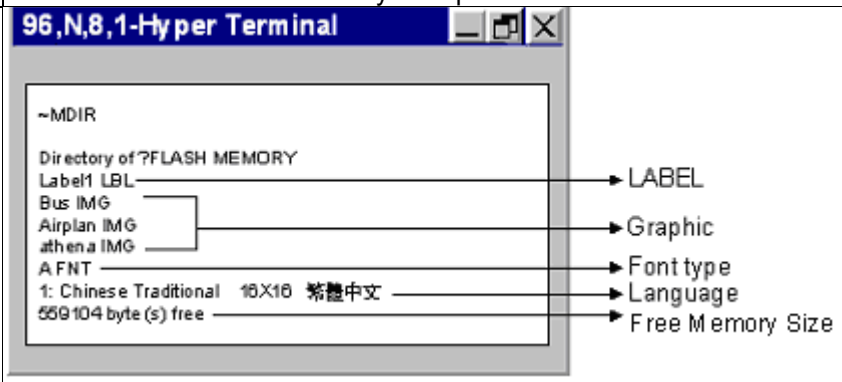
~MDEL* - Format current memory

Syntax	~MDEL*
Parameter	None
Description	Format current memory
Example	None

~MDELn,name - Delete specific file from memory

Syntax	**~MDELn,name**	
Parameter is not valid	Parameter is not processed.	
Parameter	n = D, database A, Asia font C, TTF font E, Bit-Mapped font F, label form G, graphic S, serial file T, text B, Unicode Table Name: The name of the graphic, form, bit-mapped font, or others. If name = *, it can delete all files of the same type. For example, ~MDELG, can delete all graphics. Note: The 'name' of Asian font, TTF font, and Unicode Table is an ID tag. You can use ~X4 to observe the memory usage status.	
Description	Delete specific file from printer's memory	
Example	~MDELD,customer	Delete "customer" database.
	~MDELG,Bus	The graphic "Bus" will be deleted

~MDIR - Get memory state from printer

Syntax	**~MDIR**
Parameter	None
Description	Show the information of memory from printer
Example	

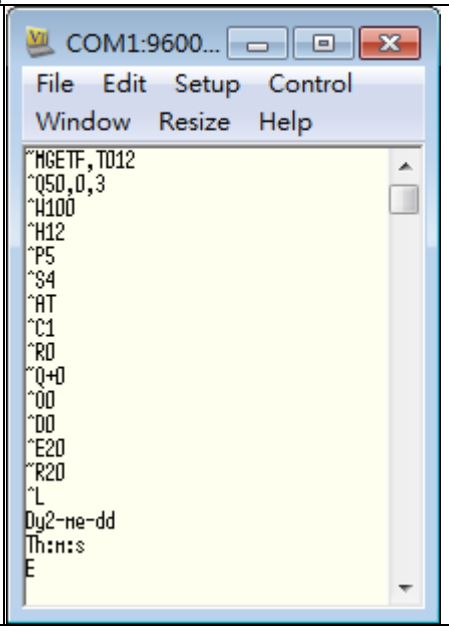
~MCPY,s:o.x,d:o.x–Copy file

Syntax	~MCPY,s:o.x,d:o.x
Parameter	s = Source device of the stored object (s = D for USB (external memory) or F for flash (internal memory)) d = Destination device of the stored object o = Object name. * can be used as a wildcard. x = Extension. * can be used as a wildcard, or it can be one of the following: =D: Database =A: Asian font =C: TTF font =E: Bit-Mapped font =F: Label form =G: Graphic =S: Serial file =T: Text =B: Unicode Table
Description	Copy file
Example	~MCPY,F:*.F,D:*.F ~MCPY,D:*.G,F:

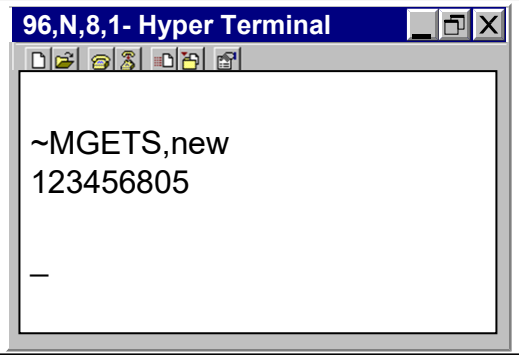
~MMOV,s:o.x,d:o.x–Move file

Syntax	~MMOV,s:o.x,d:o.x
Parameter	s = source device of stored object (s = D (USB 指的是外部記憶體) or F (flash 指的是內部記憶體)) d = distination device of stored object o = object name , o 可使用 * 代替 x = extension , x可使用 * 代替 or = D, database = A, Asia font = C, TTF font = E, Bit-Mapped font = F, label form = G, graphic = S, serial file = T, text = B, Unicode Table
Description	Move file
Example	~MMOV,F:*.F,D:*.F ~MMOV,D:*.G,F:

~MGETF,name -Get Label Format File information

Syntax	~MGETF,name	
Effect & default		
Parameter is not valid	Parameter is not processed.	
Parameter	name = label format file name	
Description	Show the label format file information on Hyper Terminal	
Example	(Get the information of label format file "T012" from printer) ~MGETF,T012	

~MGETS,name - Get Serial File information

Syntax	**~MGETS,name**	
Parameter	name = serial file name	
Description	Show the serial file information on Hyper Terminal	
Example	(Get the information of serial file "new" from printer) ~MGETS,new	

~MSETT,name<CR>nnnnnnnn<data> - Save the .TXT file to printer

Syntax	**~MSETT,name<CR>nnnnnnnn<data>**
Parameter	name = the name of saved nnnnnnnn = data size (8 digits) data = data to be saved
Description	Save the .TXT file to printer.

~MGETT,name<CR> - Read saved file

Syntax	**~MGETT,name<CR>**
Parameter	name = the name of saved
Description	Read the saved file from printer.
Example	The testing process for transmission is as follows: PC to Printer: ~MSETT, text1 00000015Text file test2 PC to Printer: ~MGETT,text1 Printer to PC: Text file test2

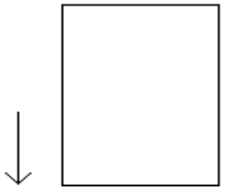
~N,inverse,second,string – Display the desired message on the LCD (only supported on 32-bit LCD models).

Syntax	~N,inverse,second,string
Parameters	inverse = 0 (No inverse highlighting); inverse = 1 (Inverse highlighting enabled). second: 0 to 60 seconds (Delay time for blinking). string: 0 to 32 characters (Only the first 32 characters will be displayed if the string exceeds the limit).
Description	Display the desired message on the LCD.
Example	The testing process for transmission is as follows: PC to Printer: ~N,1,3,ABCDEFGHIJKLMNOPQRSTUVWXYZ123456 Printer action: Display "ABCDEFGHIJKLMNOPQRSTUVWXYZ123456" in inverse highlighting on the last two lines of the LCD. After 3 seconds, revert back to the original display of "Ready to print".

~Px - Print label

Syntax	**~Px**
Effect& default	Temporary, None
Parameter is not valid	Parameter is not processed.
Parameter	x = 1 ~ 32767 (Number of labels to print) (If the number of labels to print is entered as 0, it is treated as =~P1).
Description	This command will repeatedly print the specific copies of label format.
Example	^Kname E ~P3 Print 3 labels.

~Q±x - Row Offset Adjustment

Syntax	**~Q±x**
Effect& default	Permanent, default = 0
Parameter is not valid	If the input is a number, set the upper and lower limits; otherwise, do not process it.
Parameter	X =-100 ~ +100 (unit: dots)
Description	This command is used for setting the start position of label printing. The top edge of label is considered as “0”. The “+n” move the start position downward, and the “–n” move the position upward (it can be set across 2 labels).
Example	~Q+20 ^L ….. E  Add a distance of 20 dots (approximately 2.5mm) in the paper feed direction for the entire label.

~Rx - Rotate printing

Syntax	**~Rx**
Effect& default	Permanent, None
Parameter is not valid	Parameter is not processed.
Parameter	x = label width (unit: mm), the input range is defined by the specification of printer models.
Description	If ~Rx < ^Wx, rotate the label 180 degrees for printing. For example: ^W100, ~R101: Print in the normal orientation. ^W100, ~R99: Rotate 180 degrees for printing.

~S,CHECK - Status immediate response command

<table>
<tr><td>Syntax</td><td>~S,CHECK</td></tr>
<tr><td>Parameter</td><td>None</td></tr>
<tr><td>Description</td><td>The HyperTerminal will show the status of printer in “aa<CR><LF>“ format.
aa = printer status information:
00 – Ready
01 – Media Empty
02 – Media Jam
03 – Ribbon Empty
04 – Printhead Up (Open) (This function is limited to models with Door Open Switch Sensor)
05 – Rewinder Full
06 – File System Full
07 – Filename NotFound
08 – Duplicate Name
09 – Syntax error
10 – Cutter JAM
11 – Extended MenoryNot Found
13 – Waiting Peel
20 – Pause
21 – In Setting Mode
22 – In Keyboard Mode
50 – Printer is Printing
60 – Data in Process
62 –TPH Over Heat

*Note: Before using this command, the “^XSET,IMMEDIATE” (Set immediate response on/off) command should be turned on.</td></tr>
<tr><td>Example</td><td>Procedure:
<table><tr><td>PC to Printer</td><td>^XSET,IMMEDIATE,1</td></tr><tr><td>Printer action</td><td>Door open</td></tr><tr><td>PC to Printer</td><td>~S,CHECK</td></tr><tr><td>Printer to PC</td><td>04</td></tr></table>**04: Door open</td></tr>
</table>

~S,CSENSOR–Empty Calibration

Syntax	~S,CSENSOR
Parameter	None
Description	1. Getthe sensorresponsewhenempty for no paper detect Note. Onlysome modelseffective (Used for factory testing of MX and B-LV4 machines)
Example	None

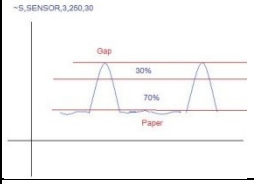
~S,DUMP - Enter into DUMP Mode

Syntax	**~S,DUMP**
Parameter	None
Description	When the printout result doesn't match to the label format setting, it is recommended to go into the Dump Mode to check whether any mistake in data transmission between the printer and the PC. For example, when printer receives 8 commands, yet without processing these commands, only printing out the contents of commands, this will confirm whether the commands were received correctly. To enter the Dump Mode, please do as follows: 2. Make sure that the printer is on standby mode (LED light is green). 3. Send "~S,DUMP" command to the printer. 4. Printer will automatically print "DUMP MODE BEGIN". This indicates the printer is already in Dump Mode. 5. Send other printing commands to the printer, and check if the content matches the sent commands. 6. The print width would be changed when use ^W command in the meantime. To get out from the Dump Mode, please press the FEED key, and then the printer will automatically print out "OUT OF DUMP MODE". This indicates that the printer is back to standby mode. You can also power off the printer to exit from the Dump Mode.

~S,OFFSETa,n - Setup position micro adjustment

Syntax	**~S,OFFSETa,n**
Parameter	a=X or Y n=-100 ~ +100
Description	Setup position micro adjustment

~S,SENSOR[,length,gap,percent] - Auto Sensing

<table>
<tr><td>Syntax</td><td>~S,SENSOR[,length,gap,percent]</td></tr>
<tr><td>Effect& default</td><td>Permanent, default = 250.
length: 100 ~ 999 mm, default = 250.
gap: 1 ~ 499 mm, default = 3. (Modified on 20110902)
percent: 1 ~ 98, default = 30. It is calculated from the signal in the gap area. Smaller values increase the likelihood of media jam, while larger values increase the likelihood of media out.</td></tr>
<tr><td>Parameter is not valid</td><td>Parameter is not processed.</td></tr>
<tr><td>Parameter</td><td>x = 0, to sensing default , else = autosensing length
len = sensing label length (250~999)
percent = (1~98) Threshold line position
 
</td></tr>
<tr><td>Description</td><td>Printer can automatically detect the label and store the result of detecting. By doing this, the printer will calibrate the printing position of the label and the user can do printing without setting the label length.
To perform the Auto Sensing, please do as follows:
1. Check if the label is correctly loaded on the printer and make sure the printer is on standby mode (LED light is green).
2. Send "~S,SENSOR" command to the printer. The printer will start to detect the label and record the result.
3. ~S,SENSOR,0 (Set sensing condition to default len=250mm percent=30%)

~S,SENSOR - Perform auto sensing based on current settings.
~S,SENSOR,300,3,30 - Modify the sensing conditions and start sensing. The settings will remain effective after the next reboot.
~S,SENSOR,0 - Restore the parameters to the program's initial values (not factory default).
~S,SENSOR,300,0,30 - The command is ineffective because gap=0.

Continuous paper does not require the use of this command.
Auto-sensing does not guarantee the accuracy of paper length detection.
Regardless of whether the sensing finds the correct paper size, a signal threshold will be generated.

If the user has confirmed the presence of a gap, proper paper formatting can be achieved by using the ^Q command for normal positioning (integrating the concept of ~~INTERNALCOMMANDQ).</td></tr>
<tr><td>Example</td><td>Procedure: : (^G0)
<table><tr><td>PC to Printer</td><td>^G0 (Select See-through sensor.)</td></tr><tr><td>Printer action</td><td>(Single light) Illuminate the red light for autosensing

(Dual lights) Illuminate both red lights for autosensing.

(LCD) Display "Calibration" on the screen.</td></tr><tr><td>Printer to PC</td><td>Afterautosensing is completed, the printer will not provide any data response to the PC.</td></tr></table>
Procedure: : (^G1)
<table><tr><td>PC to Printer</td><td>^G1 (Select reflective sensor)</td></tr><tr><td>Printer action</td><td>(Single light) Illuminate the green light for autosensing.
(Dual lights) Illuminate both</td></tr></table>
Procedure: (^G2)
<table><tr><td>PC to Printer</td><td>^G2 (Select automatic detection.)</td></tr><tr><td>Printer action</td><td>Flash single: Illuminate both red and green lights for autosensing.
(LCD) Display "Calibration" on the screen. Simultaneously activate two sensors for detection and use the maximum voltage difference value to determine which sensor to use as the basis for judgment.</td></tr><tr><td>Printer to PC</td><td>After autosensing is completed, the printer will not provide any data response to the PC.</td></tr></table></td></tr>
</table>

		green lights for autosensing. (LCD) Display "Calibration" on the screen.	
		Printer to PC	After autosensing is completed, the printer will not provide any data response to the PC.

~S,n (n = FEED, PAUSE, CANCEL, BUFCLR) - Analogue press control keys

Syntax	**~S,n**
Effect& default	Temporary, None
Parameter is not valid	Parameter is not processed.
Parameter	n = FEED, same as push Feed key once. (if the media setup is plain paper, ~S,FEED = feed 1mm) n = PAUSE, same as Pause key. On the printers without LCD display, the LED will flash slowly while sending this command. Send ~S,PAUSE or ~S,FEED again, it will come back to standby status. n = CANCEL, same as Cancel key used to clear error status. n = BUFCLR, printer will stop printing immediately and clean printer buffer then stays in standby status. (Serial and Variable will be cleared as well) n = ES[p1]: p1 = A or omitted: auto switch; p1 = G: EZPL; p1 = E: GEPL; p1 = Z: GZPL
Description	Current printer default = ~S,ESA (auto switch). When a printer switch to certain language, it can auto detect and switch again by rebooting printer.
Example	None

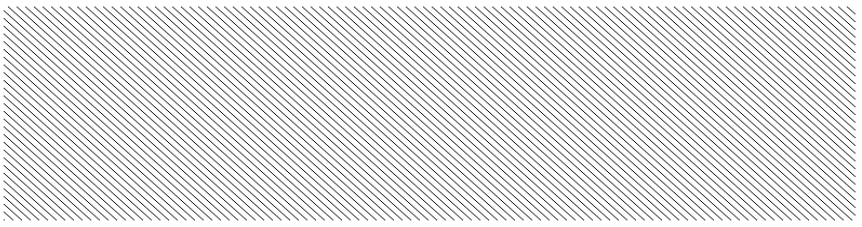
~S, ES[p1] – Change printer command language

Syntax	**~S, ES[p1]**
Parameter	n = p1 ; p1 = A or blank : auto switch ; p1 = G : EZPL ; p1 = E : GEPL ; p1 = Z : GZPL
Description	Current printer default = ~S,ESA (auto switch). When a printer switch to certain language, it can auto detect and switch again by rebooting printer.
Example	None

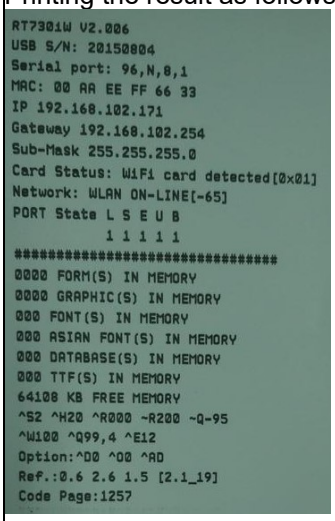
~S,STATUS - Status immediate response command

Syntax	**~S,STATUS**
Parameter	None
Description	Almost same as ~S,CHECK, the only difference is the response format of ~S,STATUS is “aa,nnnnn<CR><LF> aa : please check ~S,CHECK for further explanation nnnnn : remaining number of prints, range from 00000 to 99999
Example	Procedure : PC to Printer: ^XSET,IMMEDIATE,1 Printer action: Door open PC to Printer: ~S,STATUS Printer to PC: 04,00100 **04: Door open , 00100: 100 labels waiting for printing (This function is limited to models with Door Open Switch Sensor)

~T - Print head testing

Syntax	**~T**
Parameter	None
Description	Print a pattern for the user to determine if the print head is damaged. The printing is based on width setting.
Example	Print resolute as below: 

~V - Print Self-Test page

Syntax	**~V**
Parameter	None
Description	Print out the Self-Test page. The printing is based on width setting.
	Printing the result as follows: 

~Xn -Print the available space and file information in the memory

<table>
<tr><td>Syntax</td><td>~Xn</td></tr>
<tr><td>Parameter is not valid</td><td>Parameter is not processed.</td></tr>
<tr><td>Parameter</td><td>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</td></tr>
<tr><td>Description</td><td>Print the available space in the memory (unit: bytes) ; Printing with appropriate adjustment based on the printer's configured width.</td></tr>
<tr><td>Example</td><td>
The test transmission process is as follows
<table>
<tr><td>PC to Printer</td><td>~X1</td></tr>
<tr><td>Printer</td><td>FREE MEMORY SPACE
978336 KB

T001.LBL
1 FORM(S) IN CF CARD</td></tr>
</table>
The test transmission process is as follows
<table>
<tr><td>PC to Printer</td><td>~X2</td></tr>
<tr><td>Printer</td><td>FREE MEMORY SPACE
978336 KB

godex logo.IMG
1 GRAPHIC(S) IN CF CARD</td></tr>
</table>
The test transmission process is as follows
<table>
<tr><td>PC to Printer</td><td>~X3</td></tr>
<tr><td>Printer</td><td>FREE MEMORY SPACE
978336 KB

A.FNT
1 FONT(S) IN CF CARD</td></tr>
</table>
The test transmission process is as follows:
<table>
<tr><td>PC to Printer</td><td>~X4</td></tr>
<tr><td>Printer</td><td>FREE MEMORY SPACE
978336 KB

New.SER
1 SERIAL(S) IN CF CARD

TEST1.DBF
1 DBASE(S) IN CF CARD

1: Chinese Traditional 24x24 繁體中文
1 ASIAN FONT(S) IN CF CARD

A.FNT
1 FONT(S) IN CF CARD

godex logo.IMG
1 GRAPHIC(S) IN CF CARD

T001.LBL
1 FORM(S) IN CF CARD</td></tr>
</table>
The test transmission process is as follows
<table>
<tr><td>PC to Printer</td><td>~X5</td></tr>
<tr><td>Printer</td><td>FREE MEMORY SPACE
978336 KB

1: Chinese Traditional 24x24 繁體中文
1 ASIAN FONT(S) IN CF CARD</td></tr>
</table>
</td></tr>
</table>

~X6–Send back printer printed miles through RS-232

Syntax	~X6
Parameter	None
Description	Send back printer printed miles through RS-232
Example	The test transmission process is as follows PC to Printer: ~X6 Printer to PC: 18118 METER(S); and will beep once

~X7 -Print database information in memory

Syntax	~X7
Parameter	None
Description	Print database information in memory
Example	The test transmission process is as follows PC to Printer: ~X7 Printer: FREE MEMORY SPACE 978336 KB TEST1.DBF 1 DBASE(S) IN CF CARD

~X8 -Print serial file information in memory

Syntax	~X8
Parameter	None
Description	Print serial file name from printer.
Example	The test transmission process is as follows PC to Printer: ~X8 Printer: FREE MEMORY SPACE 978336 KB new.SER 1 SERIAL(S) IN CF CARD

~X9 - Print download TTF information in memory

Syntax	~X9
Parameter	None
Description	Print download TTF file name from printer.
Example	The test transmission process is as follows PC to Printer: ~X9 Printer: FREE MEMORY SPACE: 1597 KB A: CP850_Latin1 TTF_TABLE 001 TTF TABLE(S) IN MEMORY A: Arial (True Type) TTF 001 TTF(S) IN MEMORY

~Z - Reset printer

Syntax	**~Z**
Parameter	None
Description	Reset the printer and the LED will flash once. It only applied when printer is in standby mode.

Label formatting commands

AUTOFR - Automatic form printing

<table>
<tr><td>Syntax</td><td colspan="2">AUTOFR</td></tr>
<tr><td>Parameters</td><td colspan="2">None</td></tr>
<tr><td>Description</td><td colspan="2">When use "^Fname" command to store a label form, set the form name as "AUTOFR" and save into printer's memory. The printer then can print the label in standalone mode when power on next time.</td></tr>
<tr><td>Sample</td><td>^FAUTOFR
^Q20,0,0
^P1
^L V00,6,Prompt
AG,260,32,1,1,0,0,^V00
E
~Z

Printer will reboot after the save the file. Yellow light stands for the printer is standby and waiting for print. Input the variable and prints labels. For instance:

APPLE
3

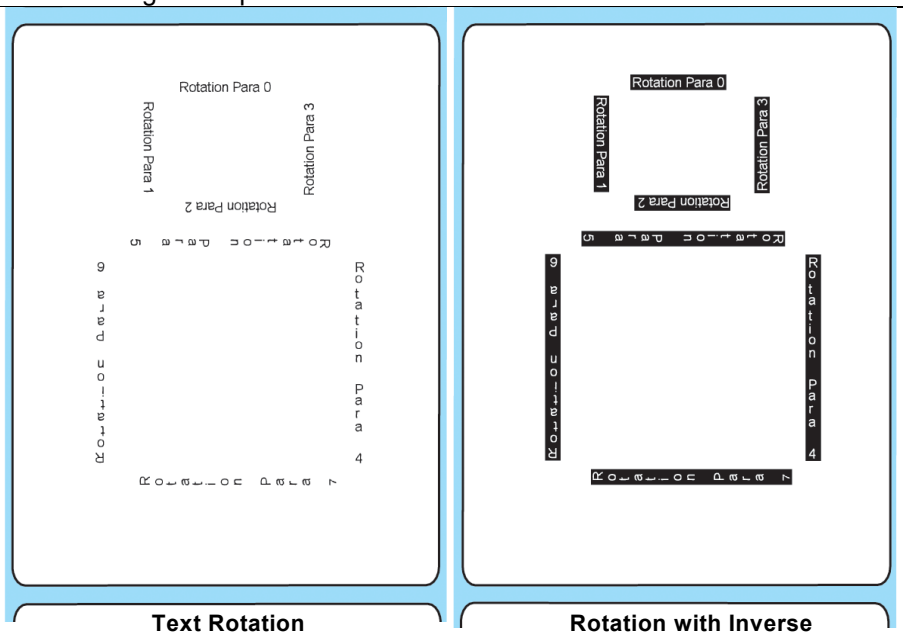
It will print 3 labels with APPLE on it.</td><td>^FAUTOFR
^Q20,0,0
^PA3
^L V00,6,Prompt
AG,260,32,1,1,0,0,^V00
E
~Z

Printer will reboot after the save the file. Yellow light stands for the printer is standby and waiting for print. Input the variable and prints labels. For instance:

APPLE

It will print 3 labels with APPLE on it.</td></tr>
<tr><td></td><td colspan="2">NOTE1 : Uses 0x13 to logout AUTOFR status. ~MDELF,AUTOFR to delete the saved file.
NOTE2 : If command included ^PAx, it would print label quantities according to “x”. No need to input print quantity.
NOTE3 : If push feed key while printer requests input variable, it equals to press “Enter” key which means input blank.</td></tr>
</table>

At,x,y,x_mul,y_mul,gap,rotationInverse,data – Text

<table>
<tr><td>Syntax</td><td colspan="4">At,x,y,x_mul,y_mul,gap,rotationInverse,data</td></tr>
<tr><td>Parameter is not valid</td><td colspan="4">Parameter is not processed.</td></tr>
<tr><td>Parameter</td><td colspan="4">t = Font type, see table below.
<table>
<tr><th>Font</th><th>Points</th><th>Font style</th></tr>
<tr><td>A</td><td>6</td><td>Bitmap font, Code page 850</td></tr>
<tr><td>B</td><td>8</td><td>Bitmap font, Code page 850</td></tr>
<tr><td>C</td><td>10</td><td>Bitmap font, Code page 850</td></tr>
<tr><td>D</td><td>12</td><td>Bitmap font, Code page 850</td></tr>
<tr><td>E</td><td>14</td><td>Bitmap font, Code page 850</td></tr>
<tr><td>F</td><td>18</td><td>Bitmap font, Code page 850</td></tr>
<tr><td>G</td><td>24</td><td>Bitmap font, Code page 850</td></tr>
<tr><td>H</td><td>30</td><td>Bitmap font, Code page 850</td></tr>
<tr><td>I</td><td colspan="2">16x26 dots for US ASCII 8 bit</td></tr>
<tr><td>K</td><td colspan="2">OCR-B font</td></tr>
<tr><td>L</td><td colspan="2">OCR-A font</td></tr>
<tr><td>Zn, n = 1 ~ 9</td><td colspan="2">Asia font from 1 to 4</td></tr>
</table>
x = Hori of top-left position of text (unit: dot, 1mm = 8 dots in 203dpi printer; 1mm=12 dots in 300dpi printer)
y = Vert of top-left position of text (unit: dot, 1mm = 8 dots in 203dpi printer; 1mm=12 dots in 300dpi printer)
x_mu = 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, 1mm = 8 dots in 203dpi printer; 1mm=12 dots in 300dpi printer)
rotationInverse = The rotation of ASCII text from 0 to 3, the Asian text rotation form 0 to 7
0→ 0° 1→ 90° 2→ 180° 3→ 270°
4→ 0° 5→ 90° 6→ 180° 7→ 270°
(0~3→rotated for all characters; 4~7→rotated individually for each character)
In addition, if the rotation parameter is followed with “I”, the text will be printed in inverse font.
To use UNICODE please setup as below:
E → UTF8 L → UTF16 LO H → UTF16 HI (UTF16 characters should be end up with 4 0x00)
Data = data string, it includes Constant, Date information (^D), Time information (^T), Serial variable (^Cx) and Variable data (^Vxx).</td></tr>
<tr><td>Description</td><td colspan="4">Prints an ASCII or ASIA text string. The ASCII text oriented form left to right, the Asian text from left to right or top to bottom.</td></tr>
<tr><td>Sample</td><td colspan="4"> 
</td></tr>
</table>

AT,x,y,w,h,g,s,d,m,data - Print built-in true type font

Syntax	**AT,x,y,w,h,g,s,d,m,data**
Parameter	x = Hori of left-top position of text (unit: dot, 1 mm = 8 dots or 12 dots) y = Vert of left-top position of text (unit: dot, 1 mm = 8 dots or 12 dots) w = The width of font (8~2000 dot) h = The height of font (8~2000 dot) g = Space between characters (0~200 dot) s = Font setting. It consists of 2 parts, one is rotation setting and the other is font style setting. The rotation setting is from 0 to 3: 0 → 0° 1 → 90° 2 → 180° 3 → 270° The font style setting is optional setting. It includes 3 types, can be set with none, one, two or three together: B → Bold T → Italic U → Underline To use UNICODE please setup as below: E → UTF8 L → UTF16 LO H → UTF16 HI (UTF16 characters should be end up with 4 0x00) d = DType, 0 → ASCII m = m = 0 → width/height AspectRatio mode m = 1 → Average width mode (refer to Further Information) data = Data to be printed *Portions of this software are copyright 2000-Feb-08 The FreeType Project (www.freetype.org).
Description	Print built-in True Type Font (TTF).
Further Information	In width/height AspectRatio mode (m = 0): When the width (w) and the height (h) of TTF are equal, the printing result of TTF will be exactly the same with Windows font. There is a formula to calculate the Windows font size from TTF size: TTFheightsize = WindowsFontsize*dpi/72 For example, if user want to print Windows font 72pt on 203dpi printer, then the TTFheightsize = 72*203/72 = 203. And the TTFwidthsize should be equal to TTFheightsize, which is 203. As a result, when the width and height of TTF both are 203, the printout will be the same with Windows font 72pt.
	In Average width mode (m = 1): The height in dot is calculated the same as width/height AspectRatio mode, but the width is the average width in dots. If width=0, a 1:1 aspect ratio font is rendered.
Sample	AT,48,92,90,90,0,0,0,0,01234ABCDE → 
	AT,50,324,90,90,0,0BTU,0,0,01234ABCDE → 

【*Note*】

For conversion: 1mm = 8 dots when printing with 203dpi printer; 1mm = 12 dots when printing with 300dpi printer.

ATt,x,y,w,h,g,s,d,m,data - Print downloaded true type font

Syntax	**ATt,x,y,w,h,g,s,d,m,data**
Parameter	t = TTF type, accepted values: from A to Z **d=1, Type A~E** ^XSET,TEXTBLOCK,n x = Hori of left-top position of text (unit: dot, 1 mm = 8 dots or 12 dots) y = Vert of left-top position of text (unit: dot, 1 mm = 8 dots or 12 dots) w = The width of font (8~2000 dot) h = The height of font (8~2000 dot) g = Space between characters (0~200 dot) s = Font setting. It consists of 2 parts, one is rotation setting and the other is font style setting. The rotation setting is from 0 to 3: 0 → 0° 1 → 90° 2 → 180° 3 → 270° The font style setting is optional setting. It includes 3 types, can be set with none, one, two or three together: B → Bold T → Italic U → Underline To use UNICODE please setup as below: E → UTF8 L → UTF16 LO H → UTF16 HI (UTF16 characters should be end up with 4 0x00) d = DType → 0: ASCII A~Z: Unicode table 1: Transform Text into Image by GoAPP m = 0 → width/height AspectRatio mode m = 1 → Average width mode (refer to Further Information) data = Data to be printed
Description	Print downloaded True Type Font.
Further Information	In width/height AspectRatio mode (m = 0): When the width (w) and the height (h) of TTF are equal, the printing result of TTF will be exactly the same with Windows font. There is a formula to calculate the Windows font size from TTF size: TTFheightsize = WindowsFontsize*dpi/72 For example, if user want to print Windows font 72pt on 203dpi printer, then the TTFheightsize = 72*203/72 = 203. And the TTFwidthsize should be equal to TTFheightsize, which is 203. As a result, when the width and height of TTF both are 203, the printout will be the same with Windows font 72pt.
	In Average width mode (m = 1): The height in dot is calculated the same as width/height AspectRatio mode, but the width is the average width in dots. If width=0, a 1:1 aspect ratio font is rendered.

Bt,x,y,narrow,wide,height,rotation,readable,data – Barcode

Syntax	Bt,x,y,narrow,wide,height,rotation,readable,data
Parameter is not valid	Parameter is not processed.

Parameter

type	Barcode	type	Barcode
A	Code 39 Full ASCII	Q	Code 128 (auto)
A2	Code 39 Full ASCII w check	Q2	Code 128 (subset A/B/C)
A3	Code 39 STD	QI	ISBT (Note1)
A4	Code 39 STD w check	R	UCC 128
A5	Code 39 STD w check & *	S	Post NET
A6	Code 39 STD w *	S1	Planet 11 & 13 digit (Note 1)
A7	Logmars (Note 1)	S2	Japanese Postnet (Note 1)
A8	Code 32	T	ITF14 (DUN14)
B	EAN 8	T2	ITF14 with Manual Settings
C	EAN 8 - Add ON 2	U	EAN 128
D	EAN 8 - Add ON 5	V	RPS 128
E	EAN 13	W	~~China Postal Code~~
F	EAN 13 – Add ON 2	X	HIBC (Code 39)
G	EAN 13 – Add ON 5	X1	HIBC (Code 128)
H	UPC A	Y	MSI 1 MOD 10
I	UPC A - Add ON 2	Y2	MSI 2 MOD 10
J	UPC A - Add ON 5	Y3	MSI 1 MOD 11 & 10
K	UPC E	Y4	MSI no digit check
L	UPC E - Add ON 2	Z	I 2 of 5 with Shipping Bearer Bars
M	UPC E - Add ON 5	1	UCC/EAN-128 K-MART
N	I 2 of 5	2	UCC/EAN-128 RANDOM
N2	I 2 of 5 with check digit	3	Telepen
N3	I 2 of 5 with not readable check digit (Note 1)	4	FIM
N4	Standard 2 of 5 (Note 1)	7	Plessey (Note 1)
N5	Industrial 2 of 5 (Note 1)	001	German Post Code
N6	Matrix 2 of 5 (Note 2)	002	Pharmacode
O	Codabar	003	KIX Code
P	Code 93	004	RM4SCC
E2	SAN4(Note 3)		

x = Hori. of top-left position of barcode (unit: dot, 1 mm = 8 dots or 12 dots)
y = Vert. of top-left position of barcode (unit: dot, 1 mm = 8 dots or 12 dots)
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 = Barcode height in dots (24 ~ 1200 dots)
rotation = rotation of barcode (0 ~ 3)
0) 0° 1) 90° 2) 180° 3) 270°
readable =

0 – human readable off	3 – below barcode, centered	6 – above right
1 – below barcode, left	4 – above barcode, centered	7 – below distributed
2 – above barcode, left	5 – below right	8 – above distributed

data = barcode data, it includes Constant, Date information (^D), Time information (^T), Serial variable (^Cx) and Variable data (^Vxx).

Description	To print different barcode, please refer to examples. (Note 1) Works with firmware versionV1.00D and V2.005 or later

	(Note 2) Works with firmware versionV1.00G and V2.00A or later (Note 3) Works with firmware versionV1.130n and V2.110m or later
Example	Please refer to Appendix1 to see all 1D and 2D barcodes sample and commands.

Bt,x,y,narrow,wide,height,rotation[Gaaa],readable,data – EAN/UPC Barcode with Guard Bars Setting

Syntax	Bt,x,y,narrow,wide,height,rotation[Gaa],readable,data
Parameter	t = Barcode Type (B ~ M) aaa = Guard Bars (000 ~ 999)
Description	Works with firmware version V1.00H and V2.00A or later
Example	BH,0,0,3,8,80,0G000,1,12345678901

Bt,x,y,narrow,wide,height,rotation[Babbcc],readable,data - ITF14 with Manual Settings

Syntax	BT,x,y,narrow,wide,height,rotation[Babbcc],readable,data
Parameter	t = Barcode Type (T, T2) T – Wide and Height Settings are invalid T2 – Wide and Height Settings are valid a = Bearer Bars Type (0, 1, 2) 0 – None , 1 – Top/Bottom, 2 – Rectangle bb = Thickness (1 ~ 15) (Multiples of Narrow) cc = Quiet Zone (9 ~ 15) (Multiples of Narrow)
Description	Works with firmware version V1.00G and V2.00A or later (Bearer Bars Setting) Works with firmware version V1.101 and V2.101 or later (Wide and Height Settings)
Example	BT2,0,0,3,8,80,0B20510,1,1234567890123

Bt,x,y,narrow,wide,height,rotation[Ca],readable,data – Code39 with Check Digit Setting

Syntax	Bt,x,y,narrow,wide,height,rotation[Ca],readable,data
Parameter	t = Barcode Type (A, A2, A3, A4, A5, A6) a = Check Digit Type (0 ~ 4) 0 – None 1 – MOD 43 2 – UCC MOD 10 3 – MSI MOD 10 4 – UNISON MOD 10
Description	Works with firmware version V1.100r (200824-01) and V2.100r (200928-01) or later.
Example	BA2,0,0,3,8,80,0C2,1,1234

Bt,x,y,narrow,wide,height,rotation[Raaabbb],readable,data – ISBT with Readable Size Setting

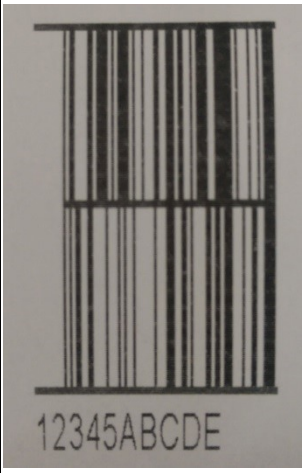
Syntax	Bt,x,y,narrow,wide,height,rotation[Raaabbb],readable,data
Parameter	t = Barcode Type (QI) aaa = The width of font bbb = The height of font
Description	Works with firmware version V1.130n and V2.110m or later.
Example	BQI,0,0,3,8,80,0R068056,1,=W000007123456

B050,x, y, narrow, wide, height, rotation, readable, c,data–Code11

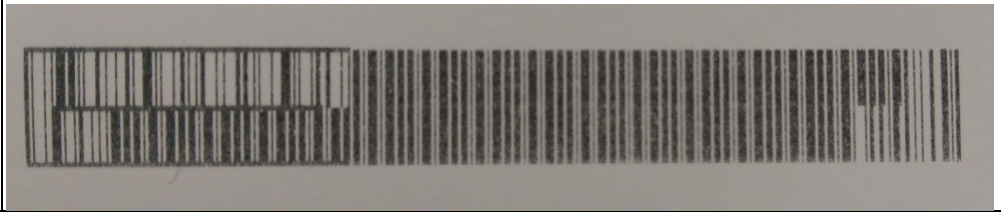
Syntax	B050,x, y, narrow, wide, height, rotation, readable, c,data
Parameter is not valid	Parameter is not processed.
Parameter	x = Hori. of top-left position of barcode (unit: dot, 1 mm = 8 dots or 12 dots) y = Vert. of top-left position of barcode (unit: dot, 1 mm = 8 dots or 12 dots) narrow (x dimension) = narrow bar from 1 ~ 10 dots(0.125 ~ 1.25 mm) wide = wide bar from 2 ~ 30 dots(0.25 ~ 0.5 mm) height = Barcode height in dots (24 ~ 1200 dots) rotation = rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° readable = 0 – human readable off 1 – below barcode, left 2 – above barcode, left 3 – below barcode, centered 4 – above barcode, centered 5 – below right 6 – above right c = check digit 1 - 1 digit 2 - 2 digits data = barcode data, it includes Constant, Date information (^D), Time information (^T), Serial variable (^Cx) and Variable data (^Vxx).
Description	Works with firmware versionV1.00Dand V2.005or later
Example	^Q50,0,0 ^W102 ^H8 ^P1 ^S3 ^AD ^C1 ^R0 ~Q+0 ^O0 ^D0 ^E27 ~R200 ^XSET,ROTATION,0 ^L Dy2-me-dd Th:m:s B050,54,50,2,6,80,0,1,1,123456 E

B051,x, y, narrow, wide, height, rotation, readable, h ,m,data - Code49

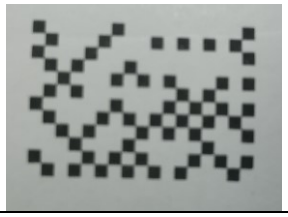
Syntax	B051,x, y, narrow, wide, height, rotation, readable, h,m,data
Parameter is not valid	Parameter is not processed.
Parameter	x = Hori. of top-left position of barcode (unit: dot, 1 mm = 8 dots or 12 dots) y = Vert. of top-left position of barcode (unit: dot, 1 mm = 8 dots or 12 dots) narrow (x dimension) = narrow bar from 1 ~ 10 dots(0.125 ~ 1.25 mm) wide = wide bar from 2 ~ 30 dots(0.25 ~ 0.5 mm) height = Barcode height in dots (24 ~ 1200 dots) rotation = rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° readable = 0 – human readable off 1 – below barcode, left 2 – above barcode, left 3 – below barcode, centered 4 – above barcode, centered 5 – below right 6 – above right h =This number multiplied by the module equals the height ofthe individual rows in dots. 1 is not a recommended value. m = starting mode 0 - Regular Alphanumeric Mode 1 - Multiple Read Alphanumeric 2 - Regular Numeric Mode 3 - Group Alphanumeric Mode 4 - Regular Alphanumeric Shift 1 5 - Regular Alphanumeric Shift 2 A -Automatic Mode. data = barcode data, it includes Constant, Date information (^D), Time information (^T), Serial variable (^Cx) and Variable data (^Vxx).
Description	Works with firmware versionV1.00Dand V2.005or later
Example	^Q50,0,0 ^W102 ^H8 ^P1 ^S4 ^AD ^C1 ^R0 ~Q+0 ^O0 ^D0 ^E18 ~R200 ^XSET,ROTATION,0 ^L Dy2-me-dd Th:m:s B051,100,24,3,8,80,0,1,30,0,12345ABCDE E



B052,x, y, narrow, wide, height, rotation, readable,c,r,m, data- Codablock

Syntax	B052, y, narrow, wide, height, rotation, readable, c,r,m,data
Parameter is not valid	Parameter is not processed.
Parameter	x = Hori. of top-left position of barcode (unit: dot, 1 mm = 8 dots or 12 dots) y = Vert. of top-left position of barcode (unit: dot, 1 mm = 8 dots or 12 dots) narrow (x dimension) = narrow bar from 1 ~ 10 dots(0.125 ~ 1.25 mm) wide = wide bar from 2 ~ 30 dots(0.25 ~ 0.5 mm) height = Barcode height in dots (24 ~ 1200 dots) rotation = rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° readable = 0 – human readable off c = number of characters per row (data columns) This is used to encode a CODABLOCK symbol. It gives the you control over the width of the symbol. r = number of rows to encode for CODABLOCK A: 1 to 22 for CODABLOCK E and F: 2 to 4 m = mode (only support CODABLOCK F) CODABLOCK A uses the Code 39 character set. CODABLOCK F uses the Code 128 character set. CODABLOCK E uses the Code 128 character set and automatically adds FNC1. data = barcode data, it includes Constant, Date information (^D), Time information (^T), Serial variable (^Cx) and Variable data (^Vxx).
Description	Works with firmware versionV1.00Dand V2.005or later
Example	^Q50,0,0 ^W102 ^H10 ^P1 ^S4 ^AD ^C1 ^R0 ~Q+0 ^O0 ^D0 ^E29 ~R200 ^XSET,ROTATION,0 ^L Dy2-me-dd Th:m:s B052,28,12,2,2,10,0,1,30,2,F,Codablock Barcode test E 

B053, x,y,mul,len,roatae<CR>data - DotCode

Syntax	B053, x,y,mul,len,roatae<CR> data
Parameter is not valid	Parameter is not processed.
Parameter	x = Hori. of top-left position of barcode (unit: dot, 1 mm = 8 dots or 12 dots) y = Vert. of top-left position of barcode (unit: dot, 1 mm = 8 dots or 12 dots) mul = multiple len = number of encoded data bytes. roatae =rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° **data = bar code data.**
Description	Works with firmware versionV1.Y64 and V2.Y3Z or later
Example	^Q50,0,0 ^W102 ^H10 ^P1 ^S4 ^AD ^C1 ^R0 ~Q+0 ^O0 ^D0 ^E29 ~R200 ^XSET,ROTATION,0 ^L Dy2-me-dd Th:m:s B053,40,40,10,5,0 12345 E 

B5n,x,y,narrow,segment,height,rotation,readable,data - lay out GS1 Databar

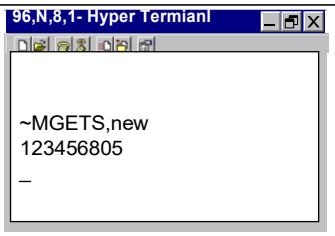
Syntax	**Bt,x,y,narrow,wide,height,rotation,readable,data**			
Parameter	n = The type of GS1 Databar, see table below.			
	"n"	GS1 Databar type	"n"	GS1 Databar type
	0	GS1 Databar Omnidirectional	4	GS1 Databar Limited
	1	GS1 Databar Truncated	5	GS1 Databar Expanded
	2	GS1 Databar Stacked	6	GS1 Databar Expanded Stacked
	3	GS1 Databar Stacked Omnidir.		
	x = Hori. of top-left position of barcode (unit: dot, 1 mm = 8 dots or 12 dots) y = Vert. of top-left position of barcode (unit: dot, 1 mm = 8 dots or 12 dots) narrow (x dimension) = narrow bar from 1 ~ 10 dots(0.125 ~ 1.25 mm) Segment = the width setting of data segment from 2 ~ 22, only applied on "GS1 Data bar Expanded Stacked". When the data length exceeds the segment setting, the barcode will add more line automatically to contain all data. The maximum number of barcode lines is 11. Height = not available yet, please always enter "0". rotation = rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° readable = set to show human readable text 0 – human readable off; 1 – below barcode, left Data = barcode data, it includes Constant, Date information (^D), Time information (^T), Serial variable (^Cx) and Variable data (^Vxx).			

BE2,x,y,narrow,wide,height,rotation,readable,data – SAN4

Syntax	BE2,x,y,narrow,wide,height,rotation,readable,data
Parameter	The difference with the EAN-13 barcode lies in the calculation of the 7th digit based on digits 8-12. You can refer to www.san.gs1-germany.de for more information on this calculation.
Description	Works with firmware versionV1.130n and V2.110m or later
Example	BE2,34,38,3,8,80,0,1,233071400239

C#x,y,±value,z - Print count with serial file

<table>
<tr><td>Syntax</td><td colspan="2">C#x,y,±value,z</td></tr>
<tr><td>Parameter</td><td colspan="2">x = counter index
y = serial file name
±value = ±value of serial variable (up to 12-digit)
z =’0’~’9’ or ‘B’ for decimal, ‘A’ for hexadecimal, ‘C’ for 0~9,A~Z</td></tr>
<tr><td>Description</td><td colspan="2">Set print count with serial file by this command.</td></tr>
<tr><td rowspan="3">Example</td><td>~L,SERIAL,new,123456795</td><td>Download the new file to printer first</td></tr>
<tr><td>Turn printer off
Turn printer on.
Print again.

^Q60,0,0
^P5
^L
C#0,new,+1,0
AG,50,137,1,1,0,0,^C0
E</td><td>Print Result:
123456800
123456801
123456802
123456803
123456804</td></tr>
<tr><td>Key in ~MGETS, new in HyperTerminal</td><td> 
</td></tr>
</table>

C#SET,UNPROMPT,x - Disable serial prompt

Syntax	C#SET,UNPROMPT,x	
Parameters	x : The serial number code you want to get automatically	
Description	To get serial number code automatically, the function is same as command, ^XSET,UNPROMPT,p1	
Example	Send command : ~MDELF,T001 ^FT001 ^Q50,0,0 ^W50 ^L C0,001,+1,Prompt C1,001,+1,Prompt C2,008,+1,Prompt C#SET,UNPROMPT,C2 AF,88,20,1,1,0,0,C0 = ^C0 AF,88,120,1,1,0,0,C1 = ^C1 AF,88,220,1,1,0,0,C2 = ^C2 E ^KT001 001 002 E ~P2	Print result : C0 = 001 C1 = 002 C2 = 008 C0 = 002 C1 = 003 C2 = 009

Cx,ys,±value,prompt - Serial number setting

Syntax	**Cx,ys,±value,prompt**[,lowerLimit,upperLimit]	
Parameter	x = 0 to 9(up to10group), maximum combination up to 10 groups. y = select the decimal y → 0~9, set serial number as Decimal numbers, the value of "y" is included in "s" (start value of serial variable) as first digit. y → A, set serial number as Hexadecimal numbers, the value of "y" (e,g, A) is not included in "s" (start value of serial variable). y → C, set serial number as Base 36 numbers, the value of "y" (e,g, C) is not included in "s" (start value of serial variable). s = start value of serial variable (up to 29-digit). You can use the leading spaces to replace the leading zeros. ±value = ±value of serial variable (up to 28-digit) Prompt = prompt of serial variable (up to 20 characters), only applied on models with LCD or EZ-Viewer. Lower Limit = lower limit of serial number counter. Upper Limit = upper limit of serial number counter (Note: For the new model "x," it supports two-digit serial numbers. Please refer to Example2 for the method or instructions on how to implement this.)	
Description	To set the serial number, if the input data length exceeds the set data length, the firmware (F/W) will only take the specified number of digits from the beginning. For example, if the serial number is set to have a length of 3 digits and the input data is "12345," the printing will start from "123" and continue with "124," "125," and so on, taking only the first 3 digits. Lower and Upper limits can be omitted if not needed. However, if they are used, the number of digits specified should match the length of the serial number.	
Example	^Q50,0,0 ^W100 ^H10 ^P3 ^L Dy2-me-dd Th:m:s C0,000,+1,Prompt C1, 1,+1,Prompt C2,AEE,+1,Prompt1 C3,CZYY,+1,Prompt2 AC,80,10,1,1,0,0,decimal with leading zeros: ^C0 AC,80, 80,1,1,0,0,decimal with leading spaces: ^C1 AC,80,160,1,1,0,0,hexadecimal: ^C2 AC,80,240,1,1,0,0, 0~9 A~Z: ^C3 E	Print result : decimal with leading zeros: 002 decimal with leading spaces: 3 hexadecimal: F0 0~9 A~Z: ZZ0 decimal with leading zeros: 001 decimal with leading spaces: 2 hexadecimal: EF 0~9 A~Z: ZYZ decimal with leading zeros: 000 decimal with leading spaces: 1 hexadecimal: EE 0~9 A~Z: ZYY
Example2	Send command : ^Q50,0,0 ^W100 ^H10 ^P3 ^L Dy2-me-dd Th:m:s C00,000,+1,Prompt C01, 1,+1,Prompt C02,AEE,+1,Prompt1 C03,CZYY,+1,Prompt2 AC,80,10,1,1,0,0,decimal with leading zeros: ^C00 AC,80, 80,1,1,0,0,decimal with leading spaces: ^C01 AC,80,160,1,1,0,0,hexadecimal: ^C02 AC,80,240,1,1,0,0, 0~9 A~Z: ^C03 E	**At this time, you must use 2 digits to define the serial number** **C#SET,UNPROMPT,x - Disable serial prompt**

Daa|bb|cc - Define date layout

Syntax	**Daa|bb|cc**		
Parameter is not valid	Parameter is not processed.		
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 = day of 2 digits | = Partition, can be any ASCII character from decimal 32 to 63. Djj1: Julian calendar format(YYDD) Djj2: Julian calendar format(YDDD) Dwy1: week of year format(W) Dwy2: week of year format(WW) Dwn: day-of-week as number value [0~6] Dwm: Dwm represents the numerical representation of the days of the week, ranging from 1 to 7. In this representation, Sunday is considered the seventh day. Dw1: day-of-week as 3 letter abbreviation Dw2: day-of-week as complete Dmn: month of the year as number value Dm1: month of the year as 3 letter abbreviation Dm2: month of the year as a complete name		
Description	Define the date layout for print out		
Example	^Q100,0,0 ^W100 ^L Dy2-me-dd AD,36,40,1,1,0,0,^D Djj1 AD,36,80,1,1,0,0,^D Dwy1 AD,36,120,1,1,0,0,^D Dw1 AD,36,160,1,1,0,0,^D Dm1 AD,36,200,1,1,0,0,^D Dy4/mn/dd AD,36,280,1,1,0,0,^D Djj2 AD,36,320,1,1,0,0,^D Dwy2 AD,36,360,1,1,0,0,^D Dw2 AD,36,400,1,1,0,0,^D Dm2 AD,36,440,1,1,0,0,^D Dwn AD,36,530,1,1,0,0,^D AC,228,82,1,1,0,0,julian date format AC,228,124,1,1,0,0,week of year format AC,228,166,1,1,0,0,day-of-week as 3 letter abbreviation AC,228,210,1,1,0,0,month of the year as 3 letter abbreviation AC,228,318,1,1,0,0,julian date format AC,228,360,1,1,0,0,week of year format AC,228,402,1,1,0,0,day-of-week as complete AC,228,446,1,1,0,0,month of the year as a complete name AC,228,532,1,1,0,0,day-of-week as number value AC,228,40,1,1,0,0,Date layout AC,228,274,1,1,0,0,Date layout E	05-APR-15 5105 15 Fri Apr 2005/04/15 05105 15 Friday April 5	Date layout Julian date format Week of year format Day of week as 3 letter abbreviation Month of the year as 3 letter abbreviation Date layout Julian date format Week of year format Day-of-week as complete Month of the year as a complete name Day of week as number value

E - Terminate label formatting mode and print label

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

FILEDB,OPEN,name - Open database

Syntax	**FILEDB,OPEN,name**
Parameter is not valid	Parameter is not processed.
Parameter	name = the name of the database
Description	Open a database for printing.
Example	FILEDB,OPEN,customer

FILEDB,MOVE,n - Move data record

Syntax	**FILEDB,MOVE,n**	
Parameter is not valid	Parameter is not processed.	
Parameter	n = number n = FIRST, the first record n = LAST, the last record n = NEXT, the next record n = PRIOR, the prior record	
Description	Use variable or counter to select a specific record from the database.	
Example	FILEDB,MOVE,3 FILEDB,MOVE,FIRST FILEDB,MOVE,NEXT	Move to third record Move to first record Move to next record

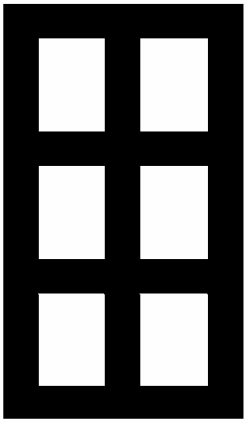
FILEDB,FIND,x,y - Searching from database

Syntax	**FILEDB,FIND,x,y**	
Parameter is not valid	Parameter is not processed.	
Parameter	x =Column name in database file y =Keyword for searching	
Description	Select a specific record form database and print it.	
Example	Download database “customer” : ^Q60,0,0 ^P1 ^L FILEDB,OPEN,customer V00,10,Prompt0 V#LINKDB,PHONE,V00 FILEDB,FIND,NAME,Mary AC,79,120,1,1,0,0, Marry’s phone: ^V00 E	Find Mary’s data and print it.

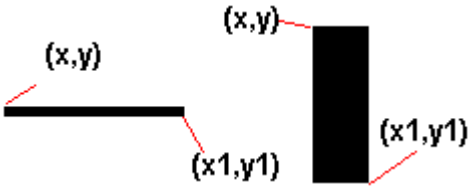
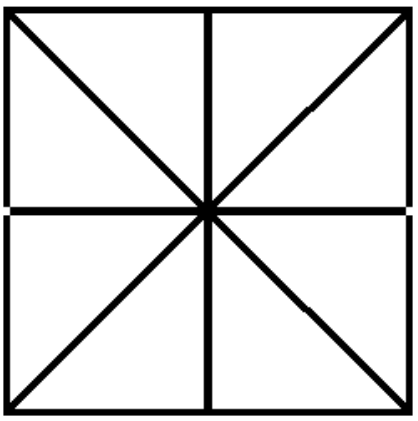
Gwxxx - Graphic command

Syntax	**Gwxxx**
Parameter is not valid	Parameter is not processed.
Parameter	w = byte number of image data xxx...: image data
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)
範例	^Q35,0,10 ^W70 ^H10 ^S4 ^R0 ~G G<€ @ G<@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@ G<@ G<@ G<@ G< @ G<@ G<@ E ~G = start Graphical receive mode

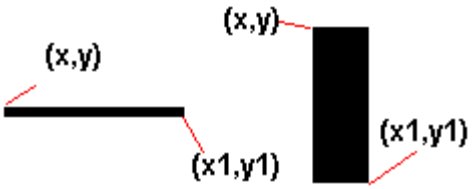
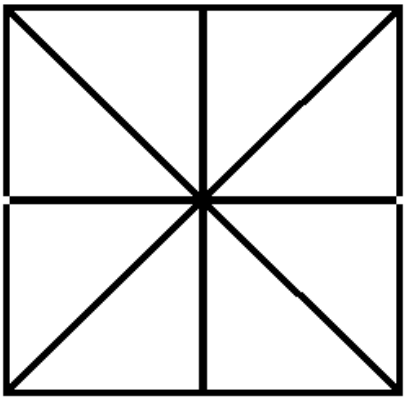
Hx,y,col_count,row_count,col_width,row_width,line_width – Table command drawing

Syntax	**Hx,y,col_count,row_count,col_width,row_width,line_width**	
Parameter is not valid	Parameter is not processed.	
Parameter	x = left-upper Hori .pos. (unit: dots) y = left-upper Vert. Pos. (unit: dots) col_count = number of columns row_count = number of rows col_width = column width row_width = row width line_width = line width	
Description	Draw a table in the label.	
Example	^Q50,0,3 ^W171 ^H10 ^P1 ^S4 ^AT ^C1 ^R0 ~Q+0 ^O0 ^D0 ^E14 ~R200 ^L Dy2-me-dd Th:m:s H20,20,2,3,20,30,10 E	

La,x,y,x1,y1 - Line command drawing

Syntax	**La,x,y,x1,y1**	
Parameter	a = o, overwrite the line on the bottom a = e, exclusive the line on the bottom x = left-up; per horizontal(Hori.) pos. (unit: dots; 1mm= 8 dots or 12 dots) y = left-upper vertical (Vert.) pos. (unit: dots; 1mm= 8 dots or 12 dots) x1 = right-bottom Hori. Pos. (unit: dots) y1 = right-bottom Vert. Pos. (unit: dots)	
Description	Define a line to render in the label *Note: The diagonal line draw is not available.	
Example	^Q50,0,0 ^W50 ^H15 ^P1 ^S2 ^L Dy2-me-dd Th:m:s R08,08,252,252,4,4 Lo,128,010,132,250 Le,008,128,252,132 Ls,008,010,4,248,250 Ls,248,010,4,008,250 E	Result 

Ls,x,y,n,x1,y1 - Line draw diagonal command

Syntax	Ls,x,y,n,x1,y1	
Parameter is not valid	Parameter is not processed.	
Parameter	x = left-up; per horizontal(Hori.) pos. (unit: dots; 1mm= 8 dots or 12 dots) y = left-upper vertical (Vert.) pos. (unit: dots; 1mm= 8 dots or 12 dots) n = Line Width (dots) x1 = right-bottom Hori. Pos. (unit: dots) y1 = right-bottom Vert. Pos. (unit: dots)	
Description	Define a line to render in the label	
Example	Send command : ^Q50,0,0 ^W50 ^H15 ^P1 ^S2 ^L Dy2-me-dd Th:m:s R08,08,252,252,4,4 Lo,128,010,132,250 Le,008,128,252,132 Ls,008,010,4,248,250 Ls,248,010,4,008,250 E	Print result : 

Mx,y,sno,nos,mode,ccode,zip,class,rotation,message - Print Maxicode

Syntax	**Mx,y,sno,nos,mode,ccode,zip,class,rotation,message**
Parameter is not valid	Parameter is not processed.
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 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° message = 1 ~ 84 characters.
Description	Print a 2 dimensional Maxicode
Example	Please refer to Appendix1 to see all 1D and 2D barcodes sample and commands.

Px,y,w,h,r,c,ec,len,rotation - Print PDF 417

Syntax	**Px,y,w,h,r,c,ec,len,rotation** Data
Parameter is not valid	Parameter is not processed.
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. rotation = rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° Data = data to be encoded (the length of the data must be equal to the set value of "len"; up to 1024 characters)
Description	Print a 2D PDF417 code, manually set the width, and the actual printed height = width x specified height.
Example	^Q50,0,0 ^W70 ^H15 ^P1 ^S2 ^AD ^C1 ^R0 ~Q+0 ^O0 ^D0 ^E12 ~R200 ^L Dy2-me-dd Th:m:s P9,40,3,3,3,1,3,22 0123456789 0123456789 E
	

PAx,y,w,h,r,c,ec,len,rotation - Print PDF 417

Syntax	PAx,y,w,h,r,c,ec,len,rotation Data
Parameter is not valid	Parameter is not processed.
Parameter	This command is equivalent to the "Px,y,w,h,r,c,ec,len,rotation Data" command.
Description	This command is compatible with Px,y,w,h,r,c,ec,len,rotation Data Same, please refer to the example of Px,y,w,h,r,c,ec,len,rotation
Example	None

PBx,y,w,h,r,c,ec,len,rotation - Print PDF 417

Syntax	PBx,y,w,h,r,c,ec,len,rotation Data	
Parameter is not valid	Parameter is not processed.	
Parameter	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. (h = actual print height, no need to multiply by 'w') 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. l en = number of encoded data bytes, including carriage returns ↵ and line feed. rotation = rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° Data = data to be encoded (the length of the data must be equal to the set value of "len"; up to 1024 characters)	
Description	Printing PDF417 with manual height and width settings.	
Example	^Q50,0,0 ^W70 ^H15 ^P1 ^S2 ^AD ^C1 ^R0 ~Q+0 ^O0 ^D0 ^E12 ~R200 ^L Dy2-me-dd Th:m:s PB9,40,3,9,3,1,3,22 0123456789 0123456789 E	

PCx,y,w,h,r,c,ec,max_len,rotation - PDF 417 with variable length data

Syntax	**PCx, y, w, h, r, c, ec, max_len,rotation** &*Data&*	
Parameter	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. max_len = max of number encoded data bytes, including carriage returns ↵ and line feed. rotation = rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° Data = data to be encoded. The content of data must be enclosed with "&*" sign on the beginning and the end.	
Description	To adjust the PDF 417 data length by this command	
Example	^Q50,0,0 ^W70 ^H15 ^P1 ^S2 ^AD ^C1 ^R0 ~Q+0 ^O0 ^D0 ^E12 ~R200 ^L Dy2-me-dd Th:m:s P9,40,3,9,3,1,3,26 &*0123456789 0123456789&* E	

PDx,y,w,h,r,c,ec,max_len,rotation - PDF 417 with variable length data

Syntax	PDx,y,w,h,r,c,ec,max_len,rotation &*Data&*	
Parameter is not valid.	Parameter is not processed.	
Parameter	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. (The height decision here is the result of w * h; If w = 3 h = 3 then the actual height is 3 * 3 = 9 If w = 4 h = 5 then the actual height is 4 * 5 = 20 etc.,) 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. max_len = max of number encoded data bytes, including carriage returns ↵ and line feed. rotation = rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° Data = data to be encoded. The content of data must be enclosed with "&*" sign on the beginning and the end.	
Description	Print PDF417 width manually set, the actual print height = width x set height, the length of the data is marked with "&*" as the beginning and end of the data.	
Example	^Q50,0,0 ^W70 ^H15 ^P1 ^S2 ^AD ^C1 ^R0 ~Q+0 ^O0 ^D0 ^E12 ~R200 ^L Dy2-me-dd Th:m:s P9,40,3,3,3,1,3,26 &*0123456789 0123456789&* E	

PHx,y,w,h,r,c,ec,len,rotation,p1,p2 -Print Macro PDF 417

Syntax	PHx,y,w,h,r,c,ec,len,rotation,p1,p2 Data
Parameter is not valid	Parameter is not processed.
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. rotation = rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° p1 = Horizontal offset position (X) in dots of the next Macro PDF bar code symbol. p2 = Vertical offset position (Y) in dots of the next Macro PDF bar code symbol. Data = data to be encoded (the length of the data must be equal to the set value of "len"; up to 1024 characters)
Description	Print a 2D Macro PDF417 code
Example	None

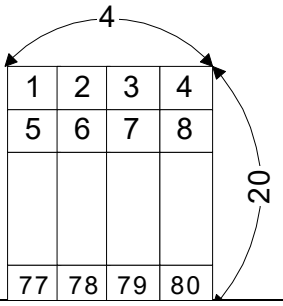
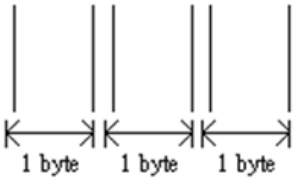
PMx,y,w,h,mode,length,rotation – Micro PDF 417

Syntax	**PMx,y,w,h,mode,length,rotation** Data
Parameter	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. 0~50 unit : dots h = Height (y dimension) of each barcode row in the symbol. 0~50 unit : dots mode = 0 ~ 33. length = number of encoded data bytes, including carriage returns ↵ and line feed. 0~400 rotation = rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° Data = data to be encoded (the length of the data must be equal to the set value of "len"; up to 1024 characters)
Description	Print a 2D Micro PDF417 code
Example	PM100,100,6,8,3,10,3 1234567890

Table 9 • MicroPDF417 Mode

Mode (M)	Number of Data Columns	Number of Data Rows	% of Cws for EC	Max Alpha Characters	Max Digits
0	1	11	64	6	8
1	1	14	50	12	17
2	1	17	41	18	26
3	1	20	40	22	32
4	1	24	33	30	44
5	1	28	29	38	55
6	2	8	50	14	20
7	2	11	41	24	35
8	2	14	32	36	52
9	2	17	29	46	67
10	2	20	28	56	82
11	2	23	28	64	93
12	2	26	29	72	105
13	3	6	67	10	14
14	3	8	58	18	26
15	3	10	53	26	38
16	3	12	50	34	49
17	3	15	47	46	67
18	3	20	43	66	96
19	3	26	41	90	132
20	3	32	40	114	167
21	3	38	39	138	202
22	3	44	38	162	237
23	4	6	50	22	32
24	4	8	44	34	49
25	4	10	40	46	67
26	4	12	38	58	85
27	4	15	35	76	111
28	4	20	33	106	155
29	4	26	31	142	208
30	4	32	30	178	261
31	4	38	29	214	313
32	4	44	28	250	366
33	4	4	50	14	20

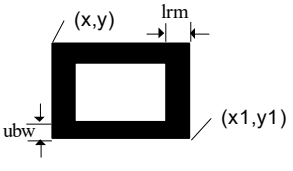
Qx,y,width,height - Pattern command

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		Data send out 1 2 3 4 .....77 78 79 80 width = 4 ; height = 20 (data length: 4x20 = 80) (refer to Pattern command setting)
	Send command : ^Q20,0,0 ^W40 ^S2 ^H15 ^L Q40,10,3,8 AAAAAAAAAAAAAAAAAAAAAAAA E A : 01000001 (Binary)	Print result : 

QAx,y,width,height<CR>data - Pattern command with compressed data

Syntax	QAx,y,width,height<CR> data
Parameter is not valid	Parameter is not processed.
Description	**Can handle images that have been compressed with Zlib.**
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)

Rx,y,x1,y1,lrw,ubw – Rectangle drawing

Syntax	**Rx,y,x1,y1,lrw,ubw**	
Parameter is not valid	Parameter is not processed.	
Parameter	x = left-upper Hori .pos. (unit: dots) y = left-upper Vert. Pos. (unit: dots) x1 = right-bottom Hori. Pos. (unit: dots) y1 = right-bottom Vert. Pos. (unit: dots) lrw = thickness of left, right border(unit: dots) ubw = thickness of upper bottom border (unit:dots)	
Description	Draw a rectangle in the label	
Example	Send command : ^Q50,0,0 ^W70 ^L R10,10,210,210,8,8 E	Print result: 

Th|m|s – 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) | = Partition (It can be any separator between dec. 32 to 63 of ASCII). [+] : Add in the rear, it will show 12 hours + AM or PM	
Description	Define the time layout for internal real-time clock	
Example	Send command : ^Q50,0,0 ^W100 ~D11,23,10,05,14,59 ^L Dy4-me-dd Th:m:s AE,100,30,1,1,0,0,SET DAY : dy4 - me - dd AE,100,80,1,1,0,0, ^D AE,100,230,1,1,0,0,SET TIME : Th:m :s AE,100,280,1,1,0,0, ^T E	Print result : SET DAY : dy4 – me – dd 2010 – NOV – 23 SET TIME : Th : m : s 05 : 14 : 59

V#ADD,name,size,prompt - Store variable with a name

Syntax	**V#ADD,name,size,prompt**	
Parameters	name = descriptive name size = number of character prompt = prompt of variable	
Description	The name of the variable can be defined by user.	
Example	~MDELF,aaa ^Faaa ^Q50,0,3 ^AD ^L V#ADD,weight,10,Weight V#ADD,date,15,Date AE,7,46,1,1,0,0,Weight is ^(weight) AE,7,86,1,1,0,0,Date is ^(date) E ^Kaaa 16 kg 11/26/2004 E ~P1	Weight is 16 kg Date is 11/26/2004

V#ADDCHKSUM,x - Add modulus 10 check code

Syntax	**V#ADDCHKSUM,x**	
Parameter is not valid	Parameter is not processed.	
Parameters	x = variable	
Description	Add the modulus 10 check code to x	
Example	Add modulus 10 check code to V00 ~MDELF,test ^Ftest ^Q60,0,0 ^L V00,16,Prompt V#ADDCHKSUM,V00 AE,47,57,1,1,0,0,Date:^V00 E ^Ktest 111222334 E ~P1	 Print result Enter Variable value 111222333 Print result 1112223349

V#ADDCHKSUM43,x - Add modulus 43 check code

Syntax	V#ADDCHKSUM43,x	
Parameter is not valid	Parameter is not processed.	
Parameters	x = variable	
Description	Add the modulus 43 check code to x	
Example	Add modulus 43 check code to V00 ~MDELF,test ^Ftest ^Q60,0,0 ^L V00,16,Prompt V#ADDCHKSUM43,V00 AE,47,57,1,1,0,0,Date:^V00 E ^Ktest 111222334 E ~P1	 Print result Enter Variable value 111222333 Print result 111222334J

V#DEFAULT,Vxx,nn

Syntax	V#DEFAULT,Vxx,nn	
Parameter is not valid	Parameter is not processed.	
Parameters	x = variable; nn = initial value of the variable	
Description	Assign an initial value to the variable.	
Example	Send command : ^L V00,3,V00 V01,3,V01 V#DEFAULT,V00,11 V#DEFAULT,V01,22 AH,132,38,1,1,0,0,V00 = ^V00 AH,126,142,1,1,0,0,V01 = ^V01 E	 Print result V00 = 11 V01 = 22

V#LINKDB,x,y - Like a Variable name for dBase data

Syntax	**V#LINKDB,x,y**
Parameter is not valid	Parameter is not processed.
Parameter	x = Column name of database y = Variable
Description	Set a Variable name for dBase data. Before using this command, a dBase data should opened first, and then can link dBase data to print designate data out. The number of links is limited to 10.

V#OPx,p1,p2,p3 - Variable calculation

Syntax	**V#OPx,p1,p2,p3**	
Parameter is not valid	Parameter is not processed.	
Parameters	x = +, -, *, /, % ; p1,p2,p3= variable x = +, p1=p2+p3 x = -, p1=p2-p3 x = *, p1=p2*p3 x = /, p1=p2/p3 x = %, p1=p2%p3	
Description	This command can calculate variables. *Note: the calculation result will be rounded off to integer value.	
Example	Send command : ~MDELF,001 ^F001 ^Q65,0,0 ^W100 ^L Dy2-me-dd Th:m:s V00,10,V00 V01,10,V01 V02,10,V02 V03,10,V03 V04,10,V04 V05,10,V05 V06,10,V06 V#OP+,V02,V00,V01 V#OP-,V03,V00,V01 V#OP*,V04,V00,V01 V#OP/,V05,V00,V01 V#OP%,V06,V00,V01 V#SET,UNPROMPT,V02 V#SET,UNPROMPT,V03 V#SET,UNPROMPT,V04 V#SET,UNPROMPT,V05 V#SET,UNPROMPT,V06 AE,040,30,1,1,0,0,TEST Variable calculation AF,080,110,1,1,0,0,^V00 + ^V01 = ^V02 AF,080,190,1,1,0,0,^V00 - ^V01 = ^V03 AF,080,280,1,1,0,0,^V00 X ^V01 = ^V04 AF,080,360,1,1,0,0,^V00 / ^V01 = ^V05 AF,080,440,1,1,0,0,^V00 % ^V01 = ^V06 E ^K001 144 12 E ~P1	Print result : TEST Variable calculation 144 + 12 = 156 144 – 12 = 132 144 x 12 = 1728 144 / 12 = 12 144 % 12 = 0

V#RENAME,name,x - Variable rename

Syntax	**V#RENAME,name,x**	
Parameter is not valid	Parameter is not processed.	
Parameters	name = new name of the variable (max 8 characters) x = variable	
Description	Rename the variable.	
Example	~MDELF,aaa ^Faaa ^Q50,0,3 ^AD ^L V00,10,Prompt V01,10,Prompt V#RENAME,weight,V00 V#RENAME,date,V01 AE,7,46,1,1,0,0,Weight is ^(weight) AE,7,86,1,1,0,0,Date is ^(date) E ^Kaaa 16 kg 11/20/2004 E ~P1	Print result: Weight is 16 kg Date is 11/20/2004

V#SETZERO,Vxx – Add zero before the variable number

Syntax	V#SETZERO,Vxx
Parameter is not valid	Parameter is not processed.
Parameters	Vxx : xx = 00 ~ 99 As variable definition
Description	Add zero before the variable number
Example	None

V#SET,INVISIBLE,Vxx – Hide the specified variable without printing

Syntax	V#SET,INVISIBLE,Vxx
Parameter is not valid	Parameter is not processed.
Parameters	Vxx : xx = 00 ~ 99 As variable definition
Description	Hide the specified variable without printing , Please refer to ^XSET,INVISIBLE,Vxx
Example	None

V#SET,FLOATFORMAT,X,Y,Vxx - handle the number of decimals

Syntax	**V#SET,FLOATFORMAT,X,Y,Vxx**	
Parameter is not valid	Parameter is not processed.	
Parameters	X : numbers after decimal point (0 ~ 4) Y = N : Rounded ; U : Round up ; = D : Round down xx = 00 ~ 99 same as parameter definition.	
Description	Use V#OPx,p1,p2,p3 and this command to perform floating point operation	
Example	Send command : ~MDELF,001 ^F001 ^Q65,0,0 ^W100 ^L Dy2-me-dd Th:m:s V00,20,V00 V01,20,V01 V02,20,V02 V03,20,V03 V04,20,V04 V05,20,V05 V06,20,V06 V#OP+,V02,V00,V01 V#OP-,V03,V00,V01 V#OP*,V04,V00,V01 V#OP/,V05,V00,V01 V#OP%,V06,V00,V01 V#SET,FLOATFORMAT,3,N,V02 V#SET,FLOATFORMAT,3,N,V03 V#SET,FLOATFORMAT,4,U,V04 V#SET,FLOATFORMAT,5,D,V05 V#SET,FLOATFORMAT,3,N,V06 V#SET,UNPROMPT,V02 V#SET,UNPROMPT,V03 V#SET,UNPROMPT,V04 V#SET,UNPROMPT,V05 V#SET,UNPROMPT,V06 AE,040,30,1,1,0,0,TEST Variable calculation AF,080,110,1,1,0,0,^V00 + ^V01 = ^V02 AF,080,190,1,1,0,0,^V00 - ^V01 = ^V03 AF,080,280,1,1,0,0,^V00 X ^V01 = ^V04 AF,080,360,1,1,0,0,^V00 / ^V01 = ^V05 AF,080,440,1,1,0,0,^V00 % ^V01 = ^V06 E ^K001 144.14 13.088 E ~P1	Print result : TEST Variable calculation 144.14 + 13.088 = 157.228 144.14 – 13.088 = 131.052 144.14 x 13.088 = 1886.5044 144.14 / 13.088 = 11.01314 144.14 % 13.088 = 1

V#SET,PROMPTONCE,Vx –only prompt the variable once while printing

Syntax	**V#SET,PROMPTONCE,Vx**
Parameter is not valid	Parameter is not processed.
Parameters	Vx = number of Variable
Description	Printer will be asked for the variable only once when repeat print the same label format. x = variable
Example	V#SET,PROMPTONCE,V00

V#SET,THOUFORMAT,V00ab[c]

Syntax	**V#SET,THOUFORMAT,V00ab[c]**	
Parameter is not valid	Parameter is not processed.	
Parameters	a = the symbol will be displayed at Thousand point b = the symbol will be displayed at Decimal point c = the symbol will be displayed at End of number	
Description	The symbol will be displayed at Thousand point, Decimal point and End of number	
Example	Send command : ^Q50,0,0 ~MDELF,TEST ^FTEST ^L V0 0,1 0,V 00 V01,10,V01 V02,10,V02 V#SET,UNPROMPT,V02 V#SET,FLOATFORMAT,2,0,V02 V#SET,THOUFORM AT,V02,,, V#OP+,V02,V00,V01 R22,14,774,378,10,10 AH,100,050,1,1,0,0,V00 = ^V00 AH,100,150,1,1,0,0,V01 = ^V01 AH,100,250,1,1,0,0,V02 = ^V02 E ^KTEST 1411.12 1333.23 ~P1 E	Print result : V00 = 1411.12 V01 = 1333.23 V02 = 2,744,35,

V#SET,UNPROMPT,x - Disable variable prompt

Syntax	**V#SET,UNPROMPT,x**	
Parameters	x = variable	
Description	This command can set the variable without prompt.	
Example	Send command : ~MDELF,T001 ^FT001 ^Q50,0,0 ^W100 ^L V00,10,Prompt V01,10,Prompt V02,10,Prompt V#OP+,V02,V00,V01 V#SET,UNPROMPT,V02 AH,188,20,1,1,0,0,V1 = ^V00 AH,188,120,1,1,0,0,V2 = ^V01 AH,188,220,1,1,0,0,V1 + V2 = ^V02 E ^KT001 001 002 E ~P1	Print result : V1 = 001 V2 = 002 V1+V2 = 3

V#STRCPY,x,y - Copy all of variable data

Syntax	**V#STRCPY,x,y**	
Parameter is not valid	Parameter is not processed.	
Parameters	x = target variable y = source variable	
Description	Copy all data of y to x	
Example	Send command : ~MDELF,T001 ^FT001 ^Q50,0,0 ^W100 ^L V00,6,Prompt V01,6,Prompt V#STRCPY,V00,V01 AH,216,50,1,1,0,0,^V00 AH,216,148,1,1,0,0,^V01 E ^KT001 APPLE ORANGE E ~P1	Print result : ORANGE ORANGE

V#STRCUT,x,y,left,right -Discard part of Variable data

Syntax	V#STRCUT,x,y,left,right
Parameter is not valid	Parameter is not processed.
Parameters	x = target variable y = source variable left = the number of left characters right = the number of right characters
Description	Discard the number of left and right characters
Example	V#STRCUT,V01,V00,2,3

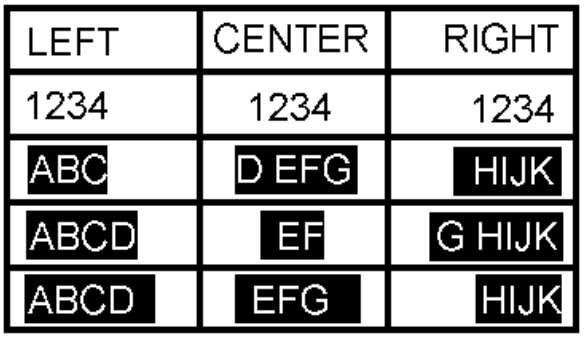
V#STRSUB,x,y,first,length - Copy part of Variable value

Syntax	**V#STRSUB,x,y,first,length**	
Parameter is	Parameter is not processed.	
Parameters	x = target variable y = source variable first = the position of first character length = the number of characters	
Description	Copy part of y value to x	
Example	Copy year, month and day values respectively from a whole date variable. ~MDELF,test ^Ftest ^Q60,0,0 ^L V00,16,PromptV0 V01,16,PromptV1 V02,16,PromptV2 V03,16,PromptV2 V#STRSUB,V01,V00,5,2 V#STRSUB,V02,V00,8,2 V#STRSUB,V03,V00,0,4 V#SET,UNPROMPT,V01 V#SET,UNPROMPT,V02 V#SET,UNPROMPT,V03 AE,47,57,1,1,0,0,Date:^V00 AE,38,115,1,1,0,0,Month:^V01 AE,38,155,1,1,0,0,Day:^V02 AE,38,205,1,1,0,0,Year:^V03 E ^Ktest 2005/01/31 E ~P1	Print result: Date:2005/01/31 Month:01 Day:31 Year:2005

Vt,x,y,x_mul,y_mul,gap,rotationInverse,data - Print with downloaded character sets

Syntax	**Vt,x,y,x_mul,y_mul,gap,rotationInverse,data**	
Parameter is not valid	Parameter is not processed.	
Parameter	t = the font name; from A to Z x = Horizontal position of the top-left position of the text (unit: dots, 1mm = 8 dots in a 203dpi printer; 1mm = 12 dots in a 300dpi printer) y = Vertical position of the top-left position of the text (unit: dots, 1mm = 8 dots in a 203dpi printer; 1mm = 12 dots in a 300dpi printer) x_mul = Horizontal magnification up to 8 times y_mul = Vertical magnification up to 8 times gap = Character spacing (unit: dots, 1mm = 8 dots in a 203dpi printer; 1mm = 12 dots in a 300dpi printer) rotationInverse = Rotation of ASCII text from 0 to 3 or Asian text from 0 to 7 0 -> 0°, 1 -> 90°, 2 -> 180°, 3 -> 270° 4 -> 0°, 5 -> 90°, 6 -> 180°, 7 -> 270° (0-3: rotated for all characters, 4-7: rotated individually for each character) If the rotation parameter is followed by "I", the text will be printed in inverse font. To use UNICODE, use the following syntax: E -> UTF8, L -> UTF16 LO, H -> UTF16 HI If using UTF16 characters, append four 0x00 as the ending delimiter. data = Data string (up to 239 characters).	
Description	Download Bit-Mapped font to memory. All parameters are all the same with text command	
Example	VA,5,10,1,1,1,0,data	The name of font “A”

Vxx,length,prompt[,jnl] [,hml] [,sab] - Store variable

Syntax	**Vxx,length,prompt**
Parameter is not valid	Parameter is not processed.
Parameter	xx = a code name of the variable, from 00 ~ 99 length = number of characters (up to 98 characters). prompt = prompt of variable (maximum up to 20 characters) j = Justification option n = l(for left), c(for center), r(for right) h = Justification option for Height m = p(for top), c(for center), b(for bottom) l = the length of entire string in millimeters (100mm for 4" printer ; 50mm for 2" printer) s = intercept option ; a = n , b = the length of intercept string a = p , b = the ending string of data
Description	Define variables for further use. If the input data characters more than the setup data length, firmware would only take the setup date length. For example, length = 3 , input date = apple . Printer will only print "app" (the first 3 words)
Example	Send command : ~MDELF,T002A ^FT002A ^Q100,0,0 ^S2 ^H10 ^W100 ^L V00,10,V00,jl20 V01,10,V01,jc20 V02,10,V02,jr20 V03,10,V03 V04,10,V04 V05,10,V05 V06,10,V06,jl20,sn3 V07,10,V07,jc20,sn6 V08,10,V08,jr20,sp V09,10,V09,jl20,sn4 V10,10,V10,jc20,sn4 V11,10,V11,jr20,sp V12,10,V12,jl20,sn5 V13,10,V13,jc20,sn6 V14,10,V14,jr20,sp H048,000,3,5,216,80,4 AF,080,20,1,1,0,0,^V03 AF,280,20,1,1,0,0,^V04 AF,520,20,1,1,0,0,^V05 AF,080,100,1,1,0,0,^V00 AF,300,100,1,1,0,0,^V01 AF,520,100,1,1,0,0,^V02 AF,080,180,1,1,0,0I,^V06 AF,300,180,1,1,0,0I,^V07 AF,520,180,1,1,0,0I,^V08 AF,080,260,1,1,0,0I,^V09 AF,300,260,1,1,0,0I,^V10 AF,520,260,1,1,0,0I,^V11 AF,080,340,1,1,0,0I,^V12 AF,300,340,1,1,0,0I,^V13 AF,520,340,1,1,0,0I,^V14	Print result : 

	E ^KT002A 1234 1234 1234 LEFT CENTER RIGHT ABCD EFG HIJK ABCD EFG HIJK ABCD EFG HIJK E ~P1	

Wx,y,mode,type,ec[v],mask,mul,len,roatae<CR>data - Arrange QR code and Micro QR Code

Syntax	**Wx,y,mode,type,ec[v],mask,mul,len,roatae<CR>** **data**	
Parameters	x = Hori. of left-bottom pos. of barcode (unit: dots) y = Vert. of left-bottom pos. of barcode (unit: dots) mode = input mode (1 ~ 5) 1 → Numerical data mode 2 → Alpha numerical data mode 3 → 8-bit data mode* 4 → Kanji data mode 5 → Mixing mode (not available in Micro QR Code) type = barcode type (1 ~ 2) 1 → Model1 (original) 2 → Model2 (enhanced) 3 → Micro QR code ec = error correction level (L、M、Q、H) L → Low M → Medium Q → Medium high H → High (not available in Micro QR Code) v = version (0~40) 0 -> size adjustment automatically mask = masking factor (0 ~ 7 or 8 for auto). When printing with Micro QR code, it must be set to "0". mul = multiple (1 ~ 40) len = number of encoded data bytes, including carriage returns ↵ and line feed. roatae =rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° data = bar code data. *Note: if input mode is set to 8-bit data mode, the first four digits of bar code data must	
Description	Arrange QR-code by setting.	
Example	Q50,0,0 ^L W10,10,2,1,L,8,10,36,0 0123456789ABCDEFGHIJKLMNOPQRSTUV WXYZ E	Data mode: 2 Model type: 1 Error level: L Masking factor: 8 Multiple:10 Data length: 36 

XRBx,y,enlarge,rotation,length<CR>data - Print DataMatrix Code

Syntax	XRBx,y,enlarge,rotation,length<CR> data
Parameter is not valid	Parameter is not processed.
Parameters	x = Horizontal start position of barcode (unit: dots). y = Vertical start position of barcode (unit: dots). enlarge = Enlarge the DataMatrix Code 1~40 times (horizontally and vertically). rotation = rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° length = data length (unit: bytes). data = bar code data.
Description	Print DataMatrix code.
Example	Please refer to Appendix1 to see all 1D and 2D barcodes sample and commands.

XRBx,y,enlarge,rotationR,length<CR>data -Print Rectangular DataMatrix Code

Syntax	XRBx,y,enlarge,rotationR,length<CR> data
Parameter is not valid	Parameter is not processed.
Parameters	x = Horizontal start position of barcode (unit: dots). y = Vertical start position of barcode (unit: dots). enlarge = Enlarge the DataMatrix Code 1~40 times (horizontally and vertically). rotationR = rotation of barcode (0R ~ 3R) 0R) 0° 1R) 90° 2R) 180° 3R) 270° length = data length (unit: bytes). data = bar code data.
Description	Print rectangular DataMatrix code.
Example	Please refer to Appendix1 to see all 1D and 2D barcodes sample and commands.

XRBx,y,enlarge,rotationR,length<CR>data - Print Rectangular DataMatrix Code

Syntax	**XRBx,y,enlarge,rotationR,length<CR>** **data**
Parameters	x = Horizontal start position of barcode (unit: dots). y = Vertical start position of barcode (unit: dots). enlarge = Enlarge the DataMatrix Code 1~40 times (horizontally and vertically). rotationR = rotation of barcode (0R ~ 3R) 0R) 0 1R) 90 2R) 180 3R) 270 length = data length (unit: bytes). data = bar code data.
Description	Print rectangular DataMatrix code.
Example	Please refer to Appendix1 to see all 1D and 2D barcodes sample and commands.

XRBx,y,enlarge,rotation[Saaabbb],length<CR>data - Print DataMatrix Code with Size Setting

Syntax	**XRBx,y,enlarge,rotation[Saaabbb],length<CR>** **data**
Parameter is not valid	Parameter is not processed.
Parameters	x = Horizontal start position of barcode (unit: dots). y = Vertical start position of barcode (unit: dots). enlarge = Enlarge the DataMatrix Code 1~40 times (horizontally and vertically). rotation = rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° aaa = rows to encode bbb = columns to encode length = data length (unit: bytes). data = bar code data.
Description	Works with firmware version V1.00H and V2.00A or later
Example	Please refer to Appendix1 to see all 1D and 2D barcodes sample and commands.

Yx,y,name -Graphics

Syntax	Yx,y,name
Parameter is not valid	Parameter is not processed.
Parameter	x = Hori. Pos. of left-upper of graphics (unit: dots) y = Vert. Pos. of left-upper of graphics (unit: dots) name = Name of graphics download
Description	This command is for printing a graphic that has been previously stored in printer memory
Example:	A graphic in printer named “Godex LOGO” Send command : ^L Y10,10,Godex LOGO E Print result : (Print at the position 10,10)  This command can also accept variable input names to achieve the purpose of changing images ^FT001 ^L Y10,10,^V00 E ^KT001 Godex LOGO E ~P1 It can achieve the same printing effect as mentioned above.

Zx,y,a,b,c,d,e,n<CR>data – Print Aztec Bar Code

Syntax	Zx,y,a,b,c,d,e,n<CR>data
Parameter	x = Hori. of left-bottom pos. of barcode (unit: dots). y = Vert. of left-bottom pos. of barcode (unit: dots). a = rotation of barcode (0 ~ 3) 0) 0° 1) 90° 2) 180° 3) 270° b = Magnification factor (1 to 10) 1 on 150 dpi printers 2 on 200 dpi printers 3 on 300 dpi printers 6 on 600 dpi printers c = extended channel interpretation code indicator Y = if data contains ECICs N = if data does not contains ECICs d = error control and symbol size/type indicator. If the input data is not numeric, the beginning will be 000. 0 = default error correction level 01 to 99 = error correction percentage (minimum) 101 to 104 = 1 to 4 – layer compact symbol 201 to 232 = 1 to 32 – layer full - range symbol 300 = a simple Aztec “Rune” e = menu symbol indicator Accepted Values Y = if this symbol is to be a menu (bar code reader initialization) symbol N = if it is not a menu symbol n = data length : maximum = 2000 data = bar code data

Description	Print a 2D Aztec
Example	Please refer to Appendix1 to see all 1D and 2D barcodes sample and commands.

LAN Set Commands

^NA,function[,p1] – setup SMTP

<table>
<tr><td>Syntax</td><td>^NA,function[,p1]</td></tr>
<tr><td>Parameter</td><td>Function = ENABLE: without “p1”, it wills response SMTP enables or disables status.
With “p1”. P1 = 0 disable SMTP , = 1 enable SMTP

USER : without “p1”, it will response USER string (login SMTP server account)
with “p1” = setup USER string
Ex. ^NA,USER,godex

PASS : without “p1”, it will response PASSWORD
with “p1” = setup PASSWORD 4 digits (login SMTP server password)
Ex. ^NA,PASS,0000

IP : without “p1”, it will response SMTP IP address
with “p1” = setup SMTP IP address
Ex. ^NA,IP,192.168.0.1

SUBJECT : without “p1”, it will response e-mail subject
with “p1” = setup e-mail subject
Ex. ^NA,SUBJECT,error message

FROM : without “p1”, it will response e-mail sender address
with “p1” = setup e-mail sender address
Ex. ^NA,FROM,godex@godexintl.com

TO : without “p1”, it will response e-mail receiver address
with “p1” = setup e-mail receiver address
Ex. ^NA,TO,godex@godexintl.com</td></tr>
<tr><td>Description</td><td>Refer to above Parameter explanation.</td></tr>
<tr><td>Example</td><td>Procedure :
<table><tr><td>PC to Printer</td><td>^NA,USER</td></tr><tr><td>Printer to PC</td><td>godex</td></tr><tr><td>PC to Printer</td><td>^NA,SUBJECT</td></tr><tr><td>Printer to PC</td><td>errormessage</td></tr></table></td></tr>
</table>

^NL[,TrapIP,Community] – setup SNMP

<table>
<tr><td>Syntax</td><td>^NL,TrapIP,Community</td></tr>
<tr><td>Parameter</td><td>Without “TrapIP,Community”, it will response SNMP setting
With “TrapIP,Community” = setup SNMP</td></tr>
<tr><td>Description</td><td>Setup SNMP or check SNMP setting</td></tr>
<tr><td>Example</td><td>Procedure :
<table><tr><td>PC to Printer</td><td>^NL</td></tr><tr><td>Printer to PC</td><td>192.168.0.1,public</td></tr></table></td></tr>
</table>

^NL,ENABLE,n –enable or disable SNMP

<table>
<tr><td>Syntax</td><td>^NL,ENABLE,n</td></tr>
<tr><td>Parameter</td><td>= 0 disable ; = 1 enable this function</td></tr>
<tr><td>Description</td><td>Without “n”, it will response the status of SNMP (enable or disable)
With “n” = setup SNMP enable or disable</td></tr>
<tr><td>Example</td><td>None</td></tr>
</table>

^NR[,p[,ei[,sw]]] –setup LAN response

<table>
<tr><td>Syntax</td><td>^NR[,p[,ei[,sw]]]</td></tr>
<tr><td>Parameter</td><td>p : 0 = adjust SMTP response setting ; 1 = adjust SNMP response setting.
ei : 0 – 11
0 = ERROR01 : PAPER_OUT_ID
1 = ERROR02：PAPER_JAM_ID
2 = ERROR03：RIBBON_OUT_ID
3 = ERROR04：DOOR_OPEN_ID (This function is limited to models with Door Open Switch Sensor)
4 = ERROR05：STRIPPER_ERROR_ID
5 = ERROR06：MEMORY_FULL_ID
6 = ERROR07：FILENAME_NO_FOUND_ID
7 = ERROR08：FILENAME_REPEAT_ID
8 = ERROR09：SYNTAX_ERROR_ID
9 = ERROR10：DATA_LENGTH_ERROR_ID
sw : 0 = disable ; 1 = enable “ei” response function
If doesn’t input parameter or input inappropriate parameter, it will only response current</td></tr>
<tr><td>Description</td><td>Refer to above Parameter explanation</td></tr>
<tr><td>Example</td><td>Procedure :
<table>
<tr><td>PC to Printer</td><td>^NR</td></tr>
<tr><td>Printer to PC</td><td>SMTP : 1,1,1,1,1,1,1,1,1,1,0
SNMP : 1,1,1,1,1,1,1,1,1,1,1</td></tr>
<tr><td>PC to Printer</td><td>^NR,0</td></tr>
<tr><td>Printer to PC</td><td>SMTP : 1,1,1,1,1,1,1,1,1,1,0</td></tr>
<tr><td>PC to Printer</td><td>^NR,0,11</td></tr>
<tr><td>Printer to PC</td><td>0</td></tr>
</table></td></tr>
</table>

^NMACADDR[,addr] –setup or get MAC address information

Syntax	^NMACADDR[,addr]
Parameter	addr = MAC address
Description	Without “addr”, it will response MAC address With “addr” = setup MAC address
Example	^NMACADDR,001D9A000C16

^NS[a,b,c,d,e,f,g,h,I] –Set and request for NET connection parameters

<table>
<tr><td>Syntax</td><td>^NSa,b,c,d,e,f,g,h,i</td></tr>
<tr><td>Parameter</td><td>a: D(DHCP) or P(PERMANENT)
b: IP adress
c: subnet mask adress
d: gateway
e: reserved
f: reserved
g: reserved
h: reserved
i: port number</td></tr>
<tr><td>Description</td><td>Without parameter, it will response current network setting
With parameter = setup network</td></tr>
<tr><td>Example</td><td>Procedure:
<table>
<tr><td>PC to Printer</td><td>^NS</td></tr>
<tr><td>Printer to PC</td><td>D,192.168.0.1,255.255.255.0,192.168.0.1,,,,,9100</td></tr>
</table></td></tr>
</table>

^XSETNETTCP1323 – TCP 1323 protocol set

Syntax	^XSETNETTCP1323,a
Parameter	a: 0->disable 1->set TCP 1323 always use SACK (Selective ACK) protocol 2.-> set TCP 1323 always use Window Scale protocol 3-> set TCP 1323 always use Time Stamp protocol Otherwise: used by negotiation result
Description	If no parameters are passed, it means the command will return the current settings.
Example	Procedure: PC to Printer: ^XSETNETTCP1323 Printer to PC: 0

^NETDEBUG,a – Enable debug mode for network packet capture.

Syntax	^NETDEBUG,a
Parameter is not valid	Parameter is not processed.
Parameter	a = 0~3
Parameter	The location where network packets are stored. value: 0 – End the packet capture and save the data to a U-Disk. 1 – Start the packet capture and save the data to a Ram-Disk. 2 – End the packet capture and transmit the data back via RS232 3 – End the packet capture and transmit the data back via USB.
Description	When this command is issued, the printer will automatically restart. The command will take effect after the printer is restarted.
Example	^NETDEBUG,1

^XSET,DNS,ENABLE,a – Enable/Disable network DNS functionality.

Syntax	^XSET,DNS,ENABLE
Parameter is not valid	Parameter is not processed.
Parameter	a = 0~1
Parameter	a: value: 0 – Disable network DNS registration functionality. 1 – Enable network DNS registration functionality. Read back parameters. ^XSET,DNS,ENABLE 1
Description	After issuing this command, the network needs to be restarted for it to take effect.
Example	^XSET,DNS,ENABLE,1

Bluetooth Set Commands (7)

^NW,BINFO– Detect Bluetooth MAC Address

Syntax	^NW,BINFO
effect & default	
Parameter is not valid	
Parameter	
Description	Applicable models: all printers To detect Bluetooth MAC address
Example	Communication process as follows PC to Printer: ^NW,BINFO Printer to PC: 001D9A000C16

^NW,BVERSION –Detect Bluetooth module firmware version

Syntax	^NW,BVERSION
effect & default	
Parameter is not valid	
Parameter	
Description	To detect Bluetooth module firmware version
Example	If the Bluetooth module is not existing or damaged, it will send N.A ^NW,BVERSION BT : N.A If the Bluetooth module is existing and not MX series printer, it will send current firmware version. ^NW,BVERSION BT : GoDEX Ver20140905 If the Bluetooth module is existing and with MX series printer, it will send current firmware version. ^nw,bversion BT : 25123715 Note • Works with firmware version V1.00B (130816-01) and V2.001 (140312-01)or later.

^NW,BNICKNAME,a –Change Bluetooth module printer model name

Syntax	^NW,BNICKNAME,a
effect & default	
Parameter is not valid	Parameter is not processed.
Parameter	a is the model name user wants to change to. The max. length of the name is 19 bytes.
Description	Change Bluetooth module printer model name(This command is valid when BT module is installed). When setting completed, the printer will beep once.
Example	・To send command, ^NW,BNICKNAME,AB123 The printer model name that BT module transmits will become AB123. ・For example, you set the printer model name to RT823i and you can send commend, ^NW,BNICKNAME to check the setting is successful as below. Read back parameter:  ・To delete the new model name, please send command, ^NW,BNICKNAME, (Please leave a space after"',") When reboot the printer, it will go back to default model name. Note 1• Works with firmware version V2.00b (190814) or later ^NW,BNICKNAME,BT_PRINTER Read back parameters  Note 1• Works with firmware version V2.00b (190814) or later. Note 2•If the parameter a is a blank "", it means that the Nickname parameter is cleared.

^NW,BPINCODE,a – Change Bluetooth module pairing password

Syntax	^NW,BPINCODE,a
effect & default	
Parameter is not valid	Parameter is not processed.
Parameter	a is the pincode you want to set and the length is 4 bytes.
Description	To change Bluetooth module pairing password(this command is valid when Bluetooth module installed) It will beep once after setting successfully.
Example	^NW,BPINCODE,1234 Read back parameters  Note 1• Works with firmware version V2.00b (190814) or later. Note 2•If parameter, a is a space " " , it means pin code goes back to 0000.

^NW,BSSP,a – Enable / disable Bluetooth module pairing password input function

Syntax	^NW,BSSP,a
effect & default	
Parameter is not valid	Parameter is not processed.
Parameter	A is to enable or disable Bluetooth pairing password input function 0->Enable Bluetooth pairing password input function 1->Disable Bluetooth pairing password input function
Description	
Example	^NW,BPINCODE,1 Command to read parameters  Note 1• Works with firmware version V2.00b (190814) or later.

^NW,BBAUD,N –Change Bluetooth module communication baud rate

Syntax	^NW,BBAUD,N
effect & default	Default:115200
Parameter is not valid	Parameter is not processed.
Parameter	N=92, change Bluetooth module baud rate to 921600
Description	Arm 9 printer and Bluetooth module communication baud rate is 921600 so need to change module baud rate through this command. When the change successfully, it will beep once. Applicable models: ZX1000/RT860i/RT700i/RT700iW Note 1• Works with firmware version V1.00C (140219-01) and V2.001 (140312-01)or later. Note 2 • This command is invalid when the Bluetooth module installed Note 3 • MX series don't support this command.
Example	None

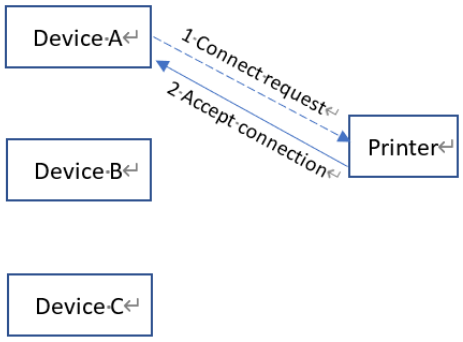
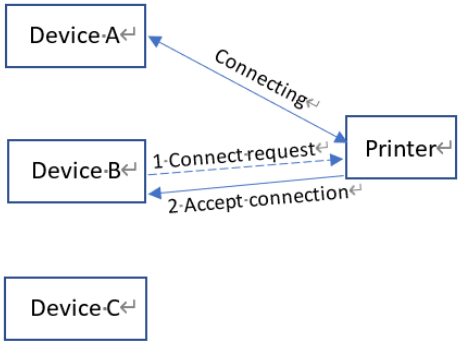
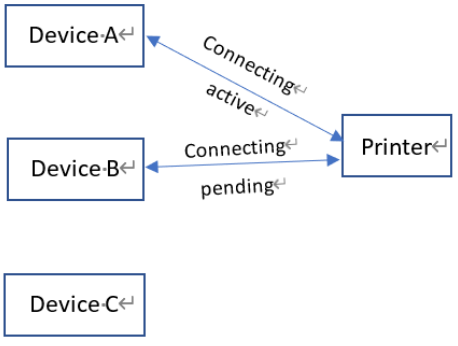
^NW,BAUTOCONNECT,aaaaaaaaaaaa,b,c –Turn on/off the Bluetooth automatic connection device function

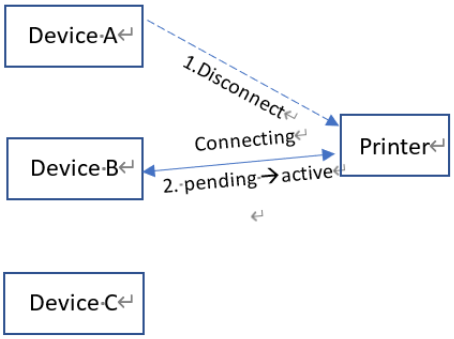
Syntax	^NW,BAUTOCONNECT,aaaaaaaaaaaa,b,c
effect & default	
Parameter is not valid	Parameter is not processed.
Parameter	aaaaaaaaaaaa: 12-digit hexadecimal MAC address of the paired device b: Profile of the device to be paired 0→HID Device 1→SPP Device C: Turn on/off the automatic device connection function 0→ Turn off automatic pairing and connection 1→ Turn on automatic pairing and connection
Description	When this mode is turned on, the printer will try to connect to the Bluetooth device of the MAC specified by the user every 20 seconds The printer's buzzer will beep once after the connection is successful If the profile of the specified connected device is HID, you may have to enter the printer PIN code on the HID device and then press Enter to pair EX: If you want Bluetooth to automatically connect to the HID Device whose MAC is DC2C26DC31AC, the command settings are as follows： ● ^NW,BAUTOCONNECT,DC2C26DC31AC,0,1 ● Command to read parameters: ^NW,BAUTOCONNECT ^NW,BAUTOCONNECT BT Auto Connect mode [Disable] BT Auto Connect Profile [HID] BT Auto Connect Mac [DC:2C:26:DC:31:AC] Note 1• Works with firmware version V2.100w (Dec 29 2020 11:44:18-01) or later
Example	None

^NW,BCARDTYPE,a – Change the Bluetooth detection mode.

Syntax	^NW,BCARDTYPE,a
effect & default	255
Parameter is not valid	Parameter is not processed.
Parameter	a: Desired detection mode 0 -> Do not detect Bluetooth cards 1 -> Use SD slot detection method (for older version RT700i) 2 -> Use cable detection method (for newer version RT860i) 3 -> Use mx 20i detection method 4 -> Use mx 30i detection method 5 -> Use cable detection method (for newer version EZ6250i, card detect pin should be forcibly grounded) 255 -> Use default detection mode based on firmware version
Description	After reconfiguring the Bluetooth detection mode, the printer will perform a new detection of Bluetooth devices. ● Command to read parameters: **^NW,BCARDTYPE** ^NW,BCARDTYPE Bluetooth type is [cable type] Note 1• Works with firmware version V2.101f (2020-03-24) or later
Example	None

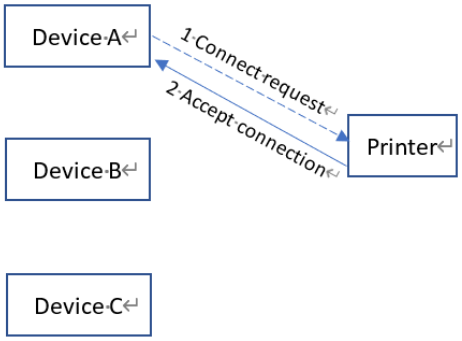
^NTCPCONNECTMODE,a – Change the queuing mechanism for multiple device connections to the printer's TCP socket

Syntax	^NTCPCONNECTMODE,a
effect & default	255
Parameter is not valid	Parameter is not processed.
Parameter	a: Desired TCP socket queuing mechanism 0/255 -> Default mode 1 -> When a new device connects, the previously connected devices will be disconnected
Description	Mode 0: Step 1.  Step 2.  Step 3.  Step 4

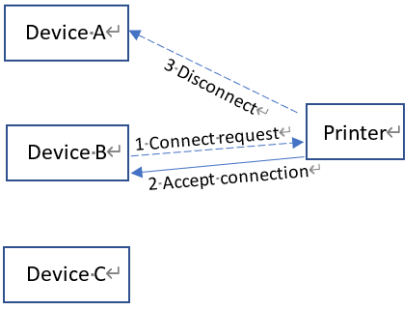


Mode 1:

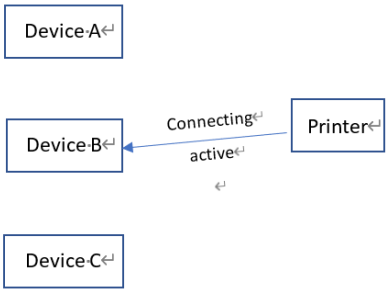
Step 1.



Step 2.



Step 3.



Example	None

Wi-Fi Set Commands (5)

^NW,WVERSION – Detect WiFi moduel firmware version

Syntax	^NW,WVERSION
effect & default	
Parameter is not valid	
Parameter	
Description	To detect printer WiFi moduel firmware version
Example	If WiFi module is not existing or damaged, it will send N.A ^nw,wversion Wi-Fi Version : N.A If WiFi module is existing and not MX series model and it will send current firmware version. ^nw,wversion Wi-Fi Version : V0.44G Note • Works with firmware version V2.006 or later.

^NW,WSETAPSEARCH–Enable WiFi searching nearby AP status function

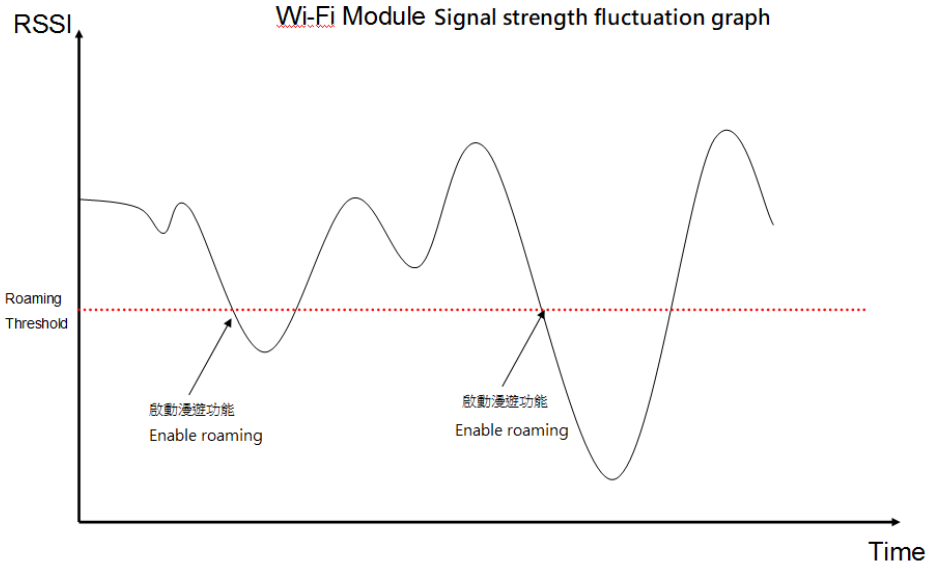
Syntax	^NW,WSETAPSEARCH
effect & default	
Parameter is not valid	
Parameter	
Description	To enable WiFi search nearby AP function. When searching completed, the printer will beep once.(This function is available when the WiFi module installed.) The searching result can be printed through sending ~X10 command
Example	Note • Works with firmware version V2.006 or later.

^NW,WSETDV–Go back to WiFi default

<table>
<tr><td>Syntax</td><td>^NW,WSETDV</td></tr>
<tr><td>effect & default</td><td>Hereunder shows Kcodes default parameters

<table>
<tr><th colspan="2">WLAN parameter</th></tr>
<tr><td>SSID</td><td>TOSHIBATEC</td></tr>
<tr><td>Roaming Threshold</td><td>-80</td></tr>
<tr><td>Connection Mode</td><td>Infrastructure</td></tr>
<tr><td>Module Active</td><td>1 : (Enable)</td></tr>
</table>
<table>
<tr><th colspan="2">WPA parameter</th></tr>
<tr><td>Pre Shared Key</td><td>(Null(0x00))</td></tr>
<tr><td>PSK Encryption Method</td><td>0 : TKIP</td></tr>
</table>
<table>
<tr><th colspan="2">Encryption parameter</th></tr>
<tr><td>Security</td><td>0 : None</td></tr>
<tr><td>WEP Authentication</td><td>0 : Open System</td></tr>
<tr><td>WEP Default Key</td><td>1</td></tr>
<tr><td>WEP Key #1</td><td>(Null(0x00))</td></tr>
<tr><td>WEP Key #2</td><td>(Null(0x00))</td></tr>
<tr><td>WEP Key #3</td><td>(Null(0x00))</td></tr>
<tr><td>WEP Key #4</td><td>(Null(0x00))</td></tr>
</table>
<table>
<tr><th colspan="2">Roaming parameter</th></tr>
<tr><td>Priority AP</td><td>1 : Priority AP OFF</td></tr>
<tr><td>MAC Address 1</td><td>(Null(0x00))</td></tr>
<tr><td>MAC Address 2</td><td>(Null(0x00))</td></tr>
<tr><td>MAC Address 3</td><td>(Null(0x00))</td></tr>
<tr><td>MAC Address 4</td><td>(Null(0x00))</td></tr>
<tr><td>MAC Address 5</td><td>(Null(0x00))</td></tr>
</table></td></tr>
<tr><td>Parameter is not valid</td><td></td></tr>
<tr><td>Parameter</td><td></td></tr>
<tr><td>Description</td><td>Go back to WiFi module default, then the printer will reboot
(This function is available when the WiFi module installed)</td></tr>
<tr><td>Example</td><td>Note 1• Works with firmware version V2.006 or later.
Note 2•MX series doesn’t support this command.</td></tr>
</table>

^NW,WSETRT–Set WiFi Roaming threshold

Syntax	^NW,WSETRT,a
effect & default	Default:-70
Parameter is not valid	Parameter is not processed.
Parameter	a:0~-99
Description	To set WiFi module roaming threshold When the RSSI of WiFi module is lower than roaming threshold, it will start roaming function. 
Example	^NW,WSETRT,-70 Note • Works with firmware version V2.006 or later.

^NW,WGETRT–Get WiFi Roaming threshold

Syntax	^NW,WGETRT
effect & default	
Parameter is not valid	
Parameter	
Description	To get WiFi roaming threshold value
Example	Note • Works with firmware version V2.006 or later.

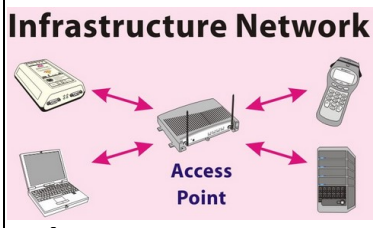
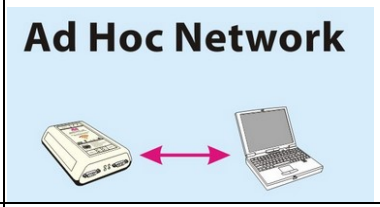
^NW,WSETROAMING,n,sec– Set Mobile printer WiFi roaming function and time

Syntax	^NW,WSETROAMING,n,sec
effect & default	Default: n = 1(enable roaming function) sec = 30(second)
Parameter is not valid	
Parameter	n:0~1 0→ disable roaming function 1→ enable roaming function Sec:30~255(second) Note. Sec:10~255 after 2016/11/24 Note • Works with Mobile series
Description	Setting the WiFi Roaming time and function of mobile printer.
Example	^NW,WSETROAMING,1,30

^NW,WSETTYPE– Set WiFi module operation mode

Syntax	^NW,WSETTYPE,a
effect & default	Default:0
Parameter is not valid	Parameter is not processed.
Parameter	a:0~1 0→INFRA Mode 1→Ad Hoc Mode
Description	To set WiFi module operation mode
Example	^NW,WSETTYPE,0 Note 1• Works with firmware version V2.006 or later.

^NW,WGETTYPE– Get WiFi module operation mode

Syntax	^NW,WGETTYPE
effect & default	
Parameter is not valid	
Parameter	0→INFRA Mode  1→Ad Hoc Mode 
Description	To get WiFi module operation mode
Example	^NW,WGETTYPE 1 Note 1• Works with firmware version V2.006 or later.

^NW,WSETMAE– Enable or disable WiFi module

Syntax	^NW,WSETMAE,a
effect & default	Default:1
Parameter is not valid	Parameter is not processed.
Parameter	a:0~1 0→Disable Wi-Fi Module Function 1→Enable Wi-Fi module Function
Description	To enable or disable WiFi module
Example	^NW,WSETMAE,1 Note • Works with firmware version V2.006 or later.

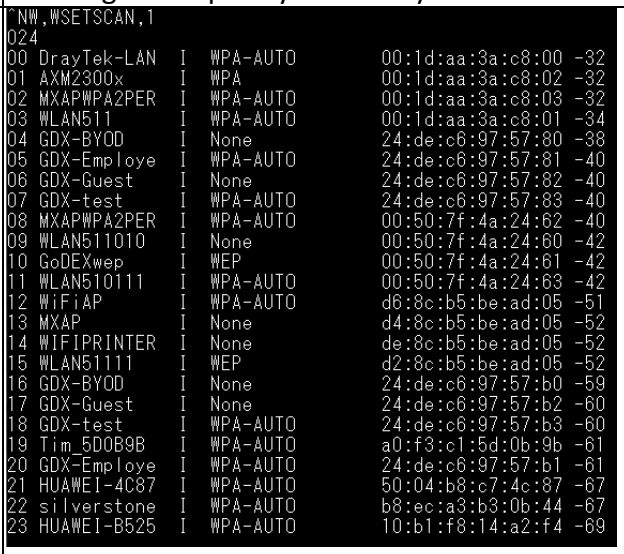
^NW,WGETMAE– Check WiFi module statu

Syntax	^NW,WGETMAE
effect & default	
Parameter is not valid	
Parameter	
Description	To get WiFi module status
Example	^NW,WGETMAE 1 0→Disable Wi-Fi Module Function 1→Enable Wi-Fi module Function Note • Works with firmware version V2.006 or later.

^NW,WSETSCAN–Execute WiFi to search nearby AP function

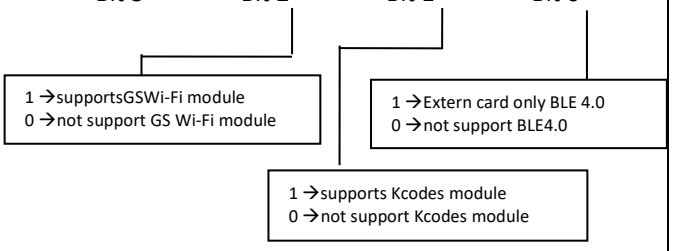
Syntax	^NW,WSETSCAN,a
effect & default	
Parameter is not valid	Parameter is not processed.
Parameter	a:0~1 0→Only search AP and not output any information 1→Output related AP information after scanning
Description	Enable WiFi to search nearby AP function and send back related AP info After searching completed, it will beep once.
Example	^NW,WSETSCAN,1 024 00 WLAN511010 I None 00:50:7f:4a:24:60 -38 01 23123132 I None 00:50:7f:4a:24:61 -38 02 MXAPWPA2PER I WPA-AUTO 00:50:7f:4a:24:62 -38 03 WLAN510111 I WPA-AUTO 00:50:7f:4a:24:63 -38 04 GDX-BYOD I None 24:de:c6:97:57:80 -40 05 GDX-Employe I WPA-AUTO 24:de:c6:97:57:81 -40 06 GDX-Guest I None 24:de:c6:97:57:82 -40 07 AXM2300x I WPA 00:1d:aa:3a:c8:02 -40 08 MXAPWPA2PER I WPA-AUTO 00:1d:aa:3a:c8:03 -40 09 DrayTek-LAN I WPA-AUTO 00:1d:aa:3a:c8:00 -40 10 GDX-test I WPA-AUTO 24:de:c6:97:57:83 -42 11 WLAN511 I WPA-AUTO 00:1d:aa:3a:c8:01 -42 12 WLAN51111 I WEP d2:8c:b5:be:ad:05 -49 13 WIFIPRINTER I None de:8c:b5:be:ad:05 -52 14 MXAP I None d4:8c:b5:be:ad:05 -52 15 WiFiAP I WPA-AUTO d6:8c:b5:be:ad:05 -52 16 GDX-Guest I None 24:de:c6:97:57:b2 -56 17 GDX-test I WPA-AUTO 24:de:c6:97:57:b3 -58 18 Tim_5D0B9B I WPA-AUTO a0:f3:c1:5d:0b:9b -60 19 HUAWEI-B525 I WPA-AUTO 10:b1:f8:14:a2:f4 -65 20 EBCE66BF-PE I WPA-AUTO 64:eb:8c:ce:66:bf -65 21 silverstone I WPA-AUTO b8:ec:a3:b3:0b:44 -67 22 HUAWEI-4C87 I WPA-AUTO 50:04:b8:c7:4c:87 -69 23 GDX-Employe I WPA-AUTO 24:de:c6:97:57:b1 -75 Note • Works with firmware version V2.00a or later.

^NW,WSETJBSS–Connect to specify search number AP

Syntax	^NW,WSETJBSS,a,b,c,d
effect & default	
Parameter is not valid	Parameter is not processed.
Parameter	a:scan ap index b:wep/wpa key c:wep key index(range:1~4) d:wep auth mode(range:0~1) 0: open system 1: share key
Description	Please send command, ^NW,WSETSCAN,1 before executing this command ・The length limitation for parameter b is as follows. The length of wep key is 5/10/13/26 bytes The length of wpa key is 8~64 bytes
Example	 ^NW,WSETSCAN,1 024 00 DrayTek-LAN I WPA-AUTO 00:1d:aa:3a:c8:00 -32 01 AXM2300x I WPA 00:1d:aa:3a:c8:02 -32 02 MXAPWPA2PER I WPA-AUTO 00:1d:aa:3a:c8:03 -32 03 WLAN511 I WPA-AUTO 00:1d:aa:3a:c8:01 -34 04 GDX-BYOD I None 24:de:c6:97:57:80 -38 05 GDX-Employe I WPA-AUTO 24:de:c6:97:57:81 -40 06 GDX-Guest I None 24:de:c6:97:57:82 -40 07 GDX-test I WPA-AUTO 24:de:c6:97:57:83 -40 08 MXAPWPA2PER I WPA-AUTO 00:50:7f:4a:24:62 -40 09 WLAN511010 I None 00:50:7f:4a:24:60 -42 10 GoDEXwep I WEP 00:50:7f:4a:24:61 -42 11 WLAN510111 I WPA-AUTO 00:50:7f:4a:24:63 -42 12 WiFiAP I WPA-AUTO d6:8c:b5:be:ad:05 -51 13 MXAP I None d4:8c:b5:be:ad:05 -52 14 WIFIPRINTER I None de:8c:b5:be:ad:05 -52 15 WLAN51111 I WEP d2:8c:b5:be:ad:05 -52 16 GDX-BYOD I None 24:de:c6:97:57:b0 -59 17 GDX-Guest I None 24:de:c6:97:57:b2 -60 18 GDX-test I WPA-AUTO 24:de:c6:97:57:b3 -60 19 Tim_5D0B9B I WPA-AUTO a0:f3:c1:5d:0b:9b -61 20 GDX-Employe I WPA-AUTO 24:de:c6:97:57:b1 -61 21 HUAWEI-4C87 I WPA-AUTO 50:04:b8:c7:4c:87 -67 22 silverstone I WPA-AUTO b8:ec:a3:b3:0b:44 -67 23 HUAWEI-B525 I WPA-AUTO 10:b1:f8:14:a2:f4 -69 If you want to connect to an AP (**code 13**-MXAP) whose encryption method is None, please send following command. •^NW,WSETJBSS,13 If you want to connect to an AP (**code 11**-WLAN510111) whose encryption method is WPA, please send following command. •^NW,WSETJBSS,11,godexabc123 If you want to connect to an AP(**code 15**-WLAN51111) whose encryption method is WEP, please send following command. •^NW,WSETJBSS,15,8888888888,2,0 Note • Works with firmware version V2.00a or later.

External Card Set Commands (1)

^XSET,EXTERNCARDMODE,n –Set external card mode

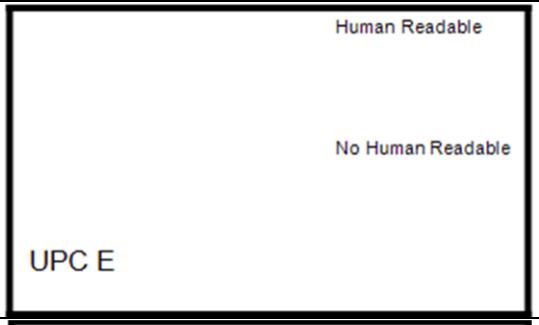
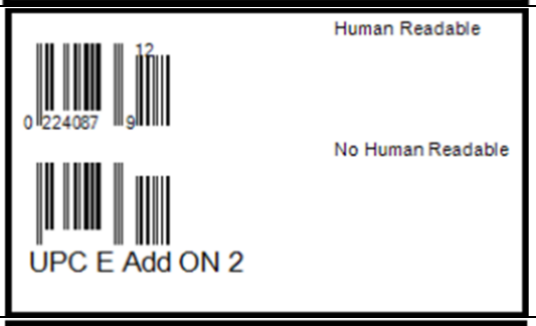
Syntax	^XSET,EXTERNCARDMODE,n
effect & default	
Parameter is not valid	
Parameter	The meaning of each bit under parameter n is as follows Bit 7 Bit 6 Bit 5 Bit 4 Bit 3 Bit 2 Bit 1 Bit 0  255→default card detection mode
Description	To set external card mode
Example	^XSET,EXTERNCARDMODE,253 (it means power on, it won't detect Kcodes module.) ^XSET,EXTERNCARDMODE,1 (it means power on, it will execute BLE4.0.)

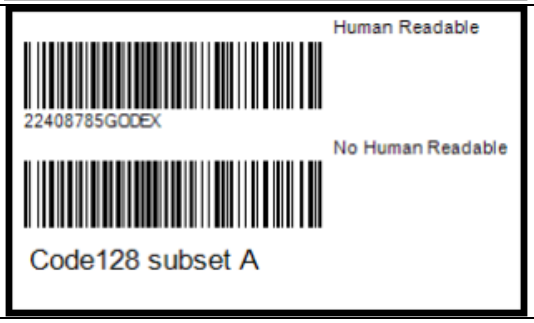
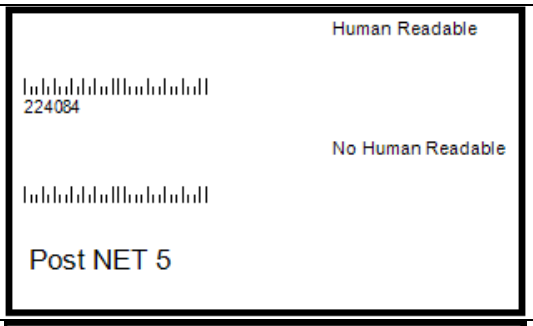
Appendix

I. Barcode Samples

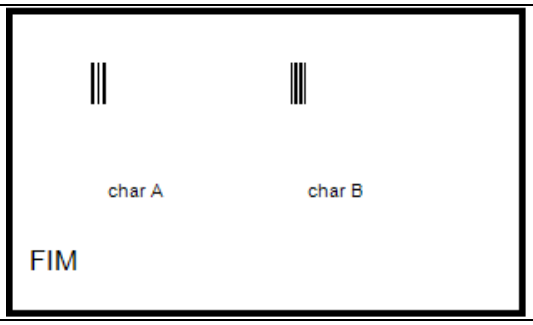
Barcode Type	Barcode Sample	Sample Commands
Code 39		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BA,30,57,2,6,80,0,1,22-.$ /+%40 BA,30,200,2,5,80,0,0,22-.$ /+%40 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,Code39 E
Code 39 with check digit		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BA2,30,57,2,6,80,0,1,22-.$ /+%40 BA2,30,200,2,5,80,0,0,22-.$ /+%40 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,Code39 with check E
EAN 8		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BB,30,57,2,5,80,0,1,22408785 BB,30,200,2,5,80,0,0,22408785 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,EAN8 E
EAN 8 - Add ON 2		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BC,30,57,2,5,80,0,1,2240878412 BC,30,200,2,5,80,0,0,2240878412 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,EAN8 Add ON 2 E
EAN 8 - Add ON 5		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BD,30,57,2,5,80,0,1,2240878512345 BD,30,200,2,5,80,0,0,2240878512345 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,EAN8 Add ON 5 E

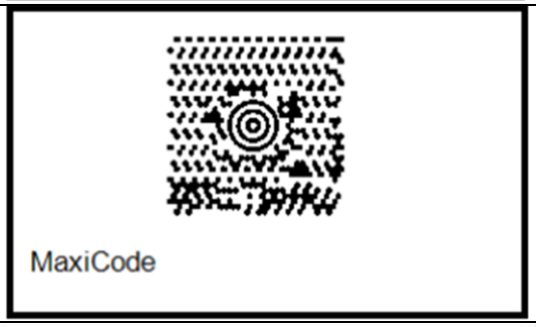
EAN 13		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BE,30,57,2,5,80,0,1,2240878500518 BE,30,200,2,5,80,0,0,2240878500518 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,EAN13 E
EAN 13 - Add ON 2		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BF,30,57,2,5,80,0,1,224087850051812 BF,30,200,2,5,80,0,0,224087850051812 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,EAN13 Add ON 2 E
EAN 13 - Add ON 5		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BG,30,57,2,5,80,0,1,224087850051812345 BG,30,200,2,5,80,0,0,2240878500518123 45 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,EAN13 Add ON 5 E
UPC A		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BH,30,57,2,5,80,0,1,224087855173 BH,30,200,2,5,80,0,0,224087855173 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,UPC A E
UPC A - Add ON 2		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BI,30,57,2,5,80,0,1,22408785517312 BI,30,200,2,5,80,0,0,22408785517312 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,UPC A Add ON 2 E
UPC A - Add ON 5		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BJ,30,57,2,5,80,0,1,22408785517312345 BJ,30,200,2,5,80,0,0,22408785517312345 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,UPC A Add ON 5 E

UPC E		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BK,30,57,2,5,80,0,1,2240879 BK,30,200,2,5,80,0,0,2240879 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,UPC E E
UPC E - Add ON 2		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BL,30,57,2,5,80,0,1,224087912 BL,30,200,2,5,80,0,0,224087912 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,UPC E Add ON 2 E
UPC E - Add ON 5		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BM,30,57,2,5,80,0,1,224087912345 BM,30,200,2,5,80,0,0,224087912345 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,UPC E Add ON 5 E
I 2 of 5		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BN,30,57,2,5,80,0,1,22408785 BN,30,200,2,5,80,0,0,22408785 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,I 2 of 5 E
Codabar		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BO,30,57,2,5,80,0,1,A22408785D BO,30,200,2,5,80,0,0,A22408785D AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,Codabar E
Code 93		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BP,30,57,2,5,80,0,1,22408785Godex BP,30,200,2,5,80,0,0,22408785Godex AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,Code93 E

Code 128 (auto subset A/B/C)		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BQ,30,57,2,5,80,0,1,22408785Godex BQ,30,200,2,5,80,0,0,22408785Godex AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,Code128 auto E
Code 128 (subset A/B/C)		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BQ2,30,57,2,5,80,0,1,A22408785GODEX BQ2,30,200,2,5,80,0,0,A22408785GODEX AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,Code128 subset A E
UCC 128		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BR,30,57,2,5,80,0,1,002240878512345678 9 BR,30,210,2,5,80,0,0,002240878512345678 9 AB,400,25,1,1,0,0,Human Readable AB,400,180,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,UCC128 E
Post NET		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BS,30,100,2,5,80,0,1,22408 BS,30,230,2,5,80,0,0,22408 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,Post NET 5 E
ITF 14		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BT,30,57,2,5,80,0,1,012345011238 BT,30,200,2,5,80,0,0,01234011238 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,ITF14 E
EAN 128		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BU,30,57,2,5,80,0,2,0010084423744920094 1 BU,30,200,2,5,80,0,0,001008442374492009 41 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,EAN128 E

RPS 128		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BV,30,57,2,5,80,0,1,2240878522408785123 45 BV,30,200,2,5,80,0,0,224087852240878512 345 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,RPS128 E
China Postal Code		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BW,30,57,2,5,80,0,1,22408785 BW,30,200,2,5,80,0,0,22408785 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,China Postal Code E
HIBC		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BX,30,57,2,6,80,0,1,22-.$ /+%40 BX,30,200,2,6,80,0,0,22-.$ /+%40 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,HIBC E
Plessey		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BY,30,57,2,5,80,0,1,22408785 BY,30,200,2,5,80,0,0,22408785 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,Plessey MSI2 1 mod10 E
I 2 of 5 with Shipping Bearer Bars		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 BZ,30,57,2,5,80,0,1,2240878512345 BZ,30,200,2,5,80,0,0,2240878512345 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AC,36,300,1,1,0,0I,I 2 of 5 with Shipping Bearer Bars E

UCC/EAN-128 K-MART		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 B1,30,57,2,5,80,0,1,224087858901234567 B1,30,200,2,5,80,0,0,224087858901234567 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,UCC/EAN 128 K-MART E
UCC/EAN-128 RANDOM		
	^L Dy2-me-dd Th:m:s R8,13,631,790,8,8 B2,500,60,2,5,80,1,1,224087852240878567822408785224087 8 B2,250,60,2,5,80,1,0,224087852240878567822408785224087 8 AB,550,400,1,1,0,1,Human Readable AB,300,400,1,1,0,1,No Human Readable AD,36,720,1,1,0,0I,UCC/EAN 128 RANDAN E	
Telepen		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 B3,30,57,2,5,80,0,1,22408785 B3,30,200,2,5,80,0,0,22408785 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,Telepen E
FIM		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 B4,110,80,1,1,50,0,1,A B4,350,80,1,1,50,0,1,B AB,130,220,1,1,0,0,char A AB,370,220,1,1,0,0,char B AD,36,300,1,1,0,0I,FIM E

GS1 Databar		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 B55,30,57,2,5,80,0,1,1234567890000 B55,30,200,2,5,80,0,0,1234567890000 AB,400,25,1,1,0,0,Human Readable AB,400,170,1,1,0,0,No Human Readable AD,36,300,1,1,0,0I,GS1 Databar E
Maxicode		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 M200,50,1,1,2,840,068107317,666,0,12345 6 AD,36,300,1,1,0,0I,MaxiCode E
PDF417		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 PC50,100,3,10,3,3,3,19 &*01234567 012&* AD,36,300,1,1,0,0I,PDF 417 E
QR Code		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 W100,60,1,1,M,8,7,10,0 0123456789 W400,60,1,2,M,8,7,10,0 0123456789 AB,130,230,1,1,0,0,mode 1 AB,430,230,1,1,0,0,mode 2 AD,36,300,1,1,0,0I,QR Code E
Micro QR Code		^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 W100,80,1,3,M,0,7,10,0 0123456789 AD,36,300,1,1,0,0I,Micro QR Code E

DataMatrix (Square)	
	^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 XRB250,100,7,0,50 01234567890123456789012345678901234567890123456789 AD,36,300,1,1,0,0I,DataMatrix Code Square E
DataMatrix (Rectangular)	
	^L Dy2-me-dd Th:m:s R8,13,631,384,8,8 XRB180,100,7,0R,50 01234567890123456789012345678901234567890123456789 AD,36,300,1,1,0,0I,DataMatrix Code Rectangle E

II. Command Examples

How to construct a label using EZ-Series command:

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	E is ending of label format

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

Example:

The following example is printing a label with EAN8. The 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 the printing with EZ-Series printers.

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 Label Dispenser 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
E	Label content of stop symbol

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

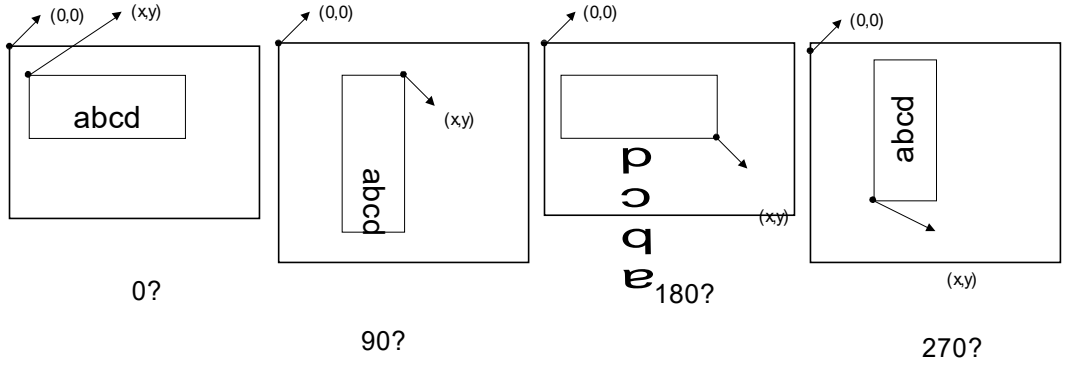
C:\>COPY EX1.TXT PRN↵

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:



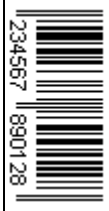
1. Text

Example	Result	Rotate printing	Result
^Q50,0,2 ^W50 ^S6 ^H10 ^R10 ~D8,27,00,8,39,36 ^L AC,10,10,1,1,1,0,PRINTER AC,10,50,1,1,1,0,^D AC,10,100,1,1,1,0,^T E	PRINTER AUG/27/00 08:39:36	^Q50,0,0 ^W50 ^S6 ^H10 ^L AC,100,30,1,1,1,0,ROTATION 0 AC,38,0,1,1,1,1,ROTATION 90 AC,260,150,1,1,1,2,ROTATION 180 AC,290,200,1,1,1,3,ROTATION 270 E	ROTATION 0 ROTATION 90 ROTATION 180 ROTATION 270

Adjusting the character spacing	Result	Asia Font	Result
^Q30,0,0 ^W50 ^S6 ^H10 ^L AC,10,10,1,1,10,0,PRINTER AC,10,100,1,1,1,0,PRINTER E	P R I N T E R PRINTER	^L AZ,100,12,1,1,0,4,中文 AZ,223,65,1,1,0,5, 中 文 AZ,60,100,1,1,0,6, 中 文 AZ,90,144,1,1,0,7,中文 E	中文 中文 文中 中文

The data output is a default setting and user can change it with ~D command (refer to page46).
The time output format is a default setting and user can change it with T command.

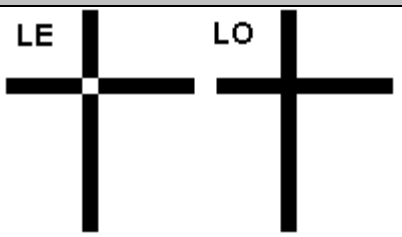
2. Barcode

Example	Result	Rotation of barcode	Result
^H10 ^S6 ^Q30,0,2 ^W60 ^L BB,20,100,3,3,100,0,1,1234567 E		^H10 ^S6 ^W25 ^Q30,0,2 ^L BE,100,20,2,4,80,1,1,123456789012 E	

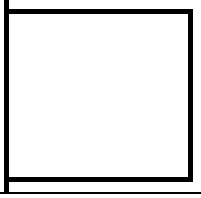
3. RTC Setting

Change the date formatting	Result
Dy4-me-dd	2000-MAY-29
Dy4/mn/dd	2000/05/29
Dmn|dd|y4	05|29|2000
Dy4	2000
Dme	MAY
Ddd	09
Dy4-me	2000-MAY
Dme-dd	MAY-29

4. Line printing

Example	Description	Result
^Q50,3 ^W100 ^E32 ^H7 ^P1 ^S6 ^L Lo,212,45,311,53 Lo,244,11,252,128 Le,34,43,149,51 Le,72,8,80,121 E	; Darkness= 7 ; Speed = 6 inch/second ; Label height = 50mm, gap = 3 mm ; Label width = 100mm	

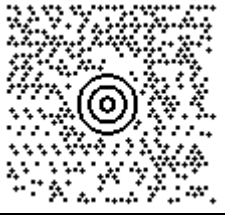
5. Rectangle printing

Example	Description	Result
^H10 ^S6 ^Q50,2 ^W70 ^L R20,20,120,120,8,8 E	; Darkness = 10 ; Speed = 6 inch/second ; Label height = 50mm, gap = 2 mm ; Label width= 70mm ; (x,y) = (20,20), (x1,y1) = (120,120) lrw = 8 dots, ubw = 8 dots	

6. PDF417

Example	Result
^Q50,0,3 ^W70 ^S6 ^H10 ^L P30,20,3,3,3,3,1,100 12345678 12345678 12345678 12345678 12345678 12345678 12345678 12345678 12345678 12345678 E	

7. Maxicode

Example	Result
^Q50,0,0 ^W70 ^S6 ^H10 ^L M30,20,1,1,2,840,068107317,8,0,123456 E	

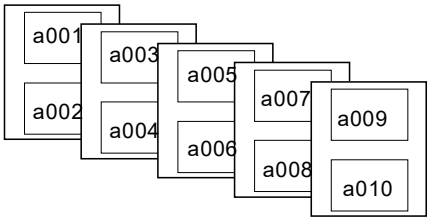
8. DataMatrix Code

Example	Result
^Q60,3 ^W80 ^H19 ^P1 ^S2 ^L XRB314,134,8,0,10 0123456789 XRB312,438,8,0R,10 0123456789 E	 

9. Label Dispenser setting

Example	Result
^Q50,2 ^W50 ^S6 ^O1 ^E8 ^P1 ^H10 ^L AD,20,20,1,1,3,0, Label Dispenser Function E	; Label height= 50mm, gap= 2mm ; Label width= 50mm ; Speed =6 inch/second ; Label Dispenser enable ; Set stop position to 8 mm ; Printing one label ; Darkness = 10 ; Label format begin sign ; Label format end and begin print

10. Cutter setting

Example	Description	Result
^Q20,0,0 ^H5 ^S2 ^P10 ^D2 ^C1 ^L R10,10,120,90,2,2 C0,001,+1,A1 AC,20,30,1,1,1,0,a^C0 E	;plain paper length:20mm ;feed label length :0mm ;print 10 labels ;2 labels per cut	

11. Serial number

<table>
<tr><th colspan="4">TEXT</th></tr>
<tr><th>Example 1</th><th>Result</th><th>Example 2</th><th>Result</th></tr>
<tr><td>^Q10,0,0
^W30
^S6
^H10
^P10
^L
C0,0000,+2,A1
AB,10,10,1,1,2,0,^C0
E</td><td>0018
0016
0014
0012
0010
0008
0006
0004
0002
0000</td><td>~P10

If you want to continue printing 10 more serial numbers that is starting from 0018, enter the command “~P10”. With this command you do not have to re-enter all the command in example.</td><td>0038
0036
0034
0032
0030
0028
0026
0024
0022
0020</td></tr>
<tr><th>Example 3</th><th>Result</th><th>Example 4</th><th>Result</th></tr>
<tr><td>^Q10,0,0
^W30
^S6
^H10
^P4
^C2
^L
C0,0000,+2,A1
AB,10,10,1,1,2,0,^C0
E</td><td>0006
0006
0004
0004
0002
0002
0000
0000</td><td>^Q10,0,0
^W30
^S6
^H10
^P8
^L
C0,0000,+2,A1
AB,10,10,1,1,2,0,abc^C0def
E</td><td>abc0014def
abc0012def
abc0010def
abc0008def
abc0006def
abc0004def
abc0002def
abc0000def</td></tr>
<tr><th colspan="4">Barcode</th></tr>
<tr><th colspan="2">Barcode with serial number</th><th colspan="2">Result</th></tr>
<tr><td colspan="2">^H10
^S6
^Q20,0,2
^W50
^P10
^L
C0,000,-1,A3
BE,20,100,3,3,100,0,1,111111^C0111
E</td><td colspan="2">  </td></tr>
</table>

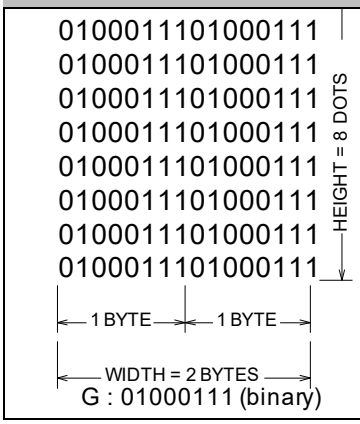
12. Graphic driver format

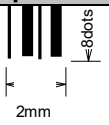
Example	Description
^Q20,2 ^W50 ^R20 ~G G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA G(AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA E	 ; Left margin = 20 dots For this example, ASCII "("character is 40 decimal (=40 bytes). Total 14 lines, so the graphics height is 1.75mm (14 dots) Result 

13. Pattern command setting

Example	Result
^Q,20,0,0 ^W40 ^S6 ^D5 ^L Q40,10,2,8 GGGGGGGGGGGGGGGG E	 Length: 2x8=16

Description





14. Rotate label format for printing

Example	Description	Result
^Q40,2 ^W50 ^S6 ^H10 ~R50 ^L AC,153,42,1,1,1,2,ROTATE BB,156,112,2,5,50,2,1,1234567 E	; Label size is 40 mm(h) x 50 mm(w); 2 mm gap ; Rotate the label format 180◦for printing	
^Q50,0,0 ~R200 ^L AC,20,10,1,1,1,0,ROTATE BB,20,45,2,5,50,0,1,1234567 E	; Disable the rotate function	

15. Download graphic to printer's memory

Following the below steps to download graphic to printer.

1. Prepare a graphic file (file name: TREE.PCX, file size: 922 bytes).
2. Prepare two text files (TEST1.TXTand TEST2.TXT, see the following contents).

TEST1.TXT	TEST2.TXT	Print Result
~EP,TREE,922	^Q30,0,0 ^W50 ^S2 ^H5 ^L Y30,50,TREE E	

3. In DOS mode, running the following commands.

COPY TEST1.TXT PRN↵

COPY TREE.PCX PRN/B↵

COPY TEST2.TXT PRN↵

16. Download label and variable settings

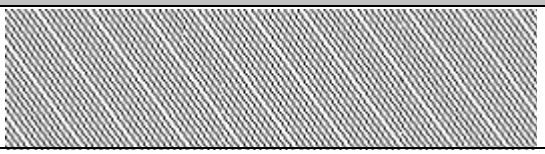
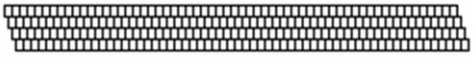
Example	Description
^Ftest ^Q50,0,15 ^W70 ^H10 ^S6 ^E12 ^L C0,0000,+1,serial no. V00,10,name V01,8,barcode V02,6,price AE,108,306,1,1,1,0,$^V02 AC,39,27,1,1,1,0,S/N.^C0 AD,126,78,1,1,1,0,^V00 BA,108,135,2,5,100,0,1,^V01 E	; Download label to memory card and the label name is “test”. ; Setting serial number is C0 ; Setting three variables V00, V01, V02

17. 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 to 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.

18. Print head test & Version list

Example	Result
~T	
~V	EZXXXX : VX.XXX Serial port :96,N,8,1  1 DRAM installed Image buffer size : 1475K 000 FORM(S) IN MEMORY 000 GRAPHIC (S) IN MEMORY 000 FONT(S) IN MEMORY 000 ASIAN FONT(S) IN MEMORY 150K BYTES FREE MEMORY ^S6 ^H8 ^R000 ~R200 ^W100 ^Q100,3 Option : ^D0 ^O0 ^AD Gap Sensor AD : 129 162 195 (3)

19. Use variable settings

	Example	Result
1. User input unit price and amount. Printer calculates total price.	~MDELF,test1 ^Ftest1 ^Q60,0,0 ^P1 ^L V00,10,Price V01,10,Amount V02,10,Total Price V#OP*,V02,V00,V01 V#SET,UNPROMPT,V02 AC,30,110,1,1,0,0,Price: ^V00 AC,30,189,1,1,0,0,Amount: ^V01 AE,30,273,1,1,0,0,Total Price: ^V02 E ^Ktest1 100 3 E ~P1	Price: 100 Amount: 3 Total Price: 300
2. Calculation sample	~MDELF,test2 ^Ftest2 ^Q60,0,0 ^L V00,10,Input V00 V01,10,Input V01 V02,10,Input V02 V03,20,Input V03 V04,20,Input V05,20,Input V06,20,Input V#OP+,V02,V01,V00 V#OP-,V03,V01,V00 V#OP*,V04,V01,V00 V#OP/,V05,V01,V00 V#OP%,V06,V01,V00 V#SET,UNPROMPT,V02 V#SET,UNPROMPT,V03 V#SET,UNPROMPT,V04 V#SET,UNPROMPT,V05 V#SET,UNPROMPT,V06 AA,38,37,1,1,0,0,V00=^V00 AA,38,77,1,1,0,0,V01=^V01 AE,38,115,1,1,0,0,V1+V0=^V02 AE,38,165,1,1,0,0,V1-V0=^V03 AE,38,215,1,1,0,0,V1*V0=^V04 AE,38,265,1,1,0,0,V1/V0=^V05 AE,38,315,1,1,0,0,V1 MOD V0=^V06 E ^Ktest2 10 20 E ~P1	V00=10 V01=20 V1+V0=30 V1-V0=10 V1*V0=200 V1/V0=2 V1 MOD V0 = 0

20. dBase III data setting

Example:

customer.dbf has following data

NAME	ADDRESS	PHONE
Tom	Address of Tom	11111111
Mary	Address of Mary	22222222
John	Address of John	33333333
Joe	Address of Joe	44444444
Bob	Address of Bob	55555555
Gilbert	Address of Gilbert	66666666

Example	Description	Result
^Q60,0,0 ^P1 ^L FILEDB,OPEN,customer V00,10,Prompt0 V#LINKDB,PHONE,V00 FILEDB,FIND,NAME,Mary AC,79,120,1,1,0,0, Mary's phone: ^V00 E	Print out Mary's phone number	Mary's phone: 22222222
^Q60,0,0 ^P1 ^L FILEDB,OPEN,customer V00,10,Prompt0 V#LINKDB,ADDRESS,V00 FILEDB,FIND,NAME,John AC,79,120,1,1,0,0, ^V00 E	Print out John Address	Address of John
^Q60,0,0 ^P1 ^L FILEDB,OPEN,customer V00,10,Prompt V#LINKDB,NAME,V00 FILEDB,MOVE,LAST AC,79,120,1,1,0,0,Last Name is ^V00 E	Print out last person name	Last Name is Gilbert
^Q60,0,0 ^P1 ^L FILEDB,OPEN,customer V00,10,Prompt V#LINKDB,NAME,V00 FILEDB,MOVE,2 AC,79,120,1,1,0,0,Second Name is ^V00 E	Print second person name	Second Name is Mary

^Q60,0,0 ^P3 ^L FILEDB,OPEN,customer C0,1,+1,DB Move C V00,10,name V01,10,phone V#LINKDB,NAME,V00 V#LINKDB,PHONE,V01 FILEDB,MOVE,C0 AC,79,120,1,1,0,0,^V00 Phone is ^V01 E	Print first, second and third person phone number	Tom Phone is 11111111 Mary Phone is 22222222 John Phone is 33333333

About Code 128

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

Code 128 Subset A: Included the standard uppercase alphanumeric keyboard characters, control and special characters.

Code 128 Subset B: Includes the standard uppercase, lowercase alphanumeric keyboard characters and special characters.

Code 128 Subset C: Used for double density encoding of numeric data (the set of 100 digit pairs from 00 through 99).

Example	
Subset A: BQ2,8,8,2,5,40,0,0,AAPPLE	To select Code 128 Subset A, place a ASCII A before the data to be encoded.
Subset B: BQ2,8,8,2,5,40,0,0,BAPPLE	To select Code 128 Subset B, place a ASCII B before the data to be encoded.
Subset C: BQ2,8,8,2,5,40,0,0,C1234	To select Code 128 Subset C, place a ASCII C before the data to be encoded.
Special character handling: BQ2,8,8,2,5,40,0,0, ATEST&G	To encode FNC1 into a Code 128 Subset A, send the ASCII &G.

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

Revision	Sections changed from previous release			Doc. date	Prepared
A	First Edition			2010/11/23	Chard Hu
B	Add “*” to CODE 39			2011/08/15	Chard Hu
Revision	Sections changed from previous release			Doc. date	Prepared
C	**ADD**	**CANCEL**	**MODIFICATION**	2012/10/19	Betty Tsou
	^Z	^Bx	^An		
	^XSET,ACTIVEMESSAGE,n	^Mx	^D+dddd.hh		
	^XSET,ALIAS,string	^XSET,CF_FORMAT,1	^Dx		
	^XSET,ERRORPRINT,n	^XSET,LANGUAGE,n	^Fname		
	^XSET,FEEDCUT,n	^XSET,LOCKCMD,xxxx	^Gn		
	^XSET,HEATOFFSET,n	^XSET,MEMORY,n	^L		
	^XSET,ROTATION,n	^XSET,PASSWORD,n,x	^On		
	^XSET,UNPROMPT,p1	^XSET,UNICODE,n	^PI		
	~MCPY	^XSET,USBETHERNET,n	^Qx,y(,z		
	~MDEL*	~G	^Sx		
	~MMOV	Xx,y,narrow,data	^XGET,CONFIG		
	~S,STATUS	XRx,y,narrow,rotate,data	^XSET,ACTIVERESPONSE,n		
	~X6		^XSET,CODEPAGE,n		
	~X9		^XSET,ERRORPRINT,n		
	PMx,y,w,h,r,c,ec,max_len,rotation		^XSET,HEATOFFSET,n		
	V#ADDCHECKSUM43,x		^XSET,KEYBOARD,n		
	V#SET,FLOATFORMAT,X,Y,Vnn		^XSET,ROTATION,n		
	V#SET,PROMPTONCE,p1		^XSET,TOPOFFORM,n		
	V#SET,THOUFORMAT,V00ab[c]		^XSET,UNPROMPT,p1		
	Zx,y,a,b,c,d,e,n		^Yb,p,d,s		
	^NA,function[,p1]		~S,CHECK		
	^NL[,TrapIP,Community]		~S,n		
	^NL,ENABLE,n		~S,STATUS		
	^NR[,p[,ei[,sw]]]		~T		
	^NMACADDR[,addr]		~V		
	^NS[a,b,c,d,e,f,g,h,i]		~Xn		
	Firmware reversion difference between V1.xxx and G3.xxx		At,x,y,x_mul,y_mul,gap,rotationInverse,data		

Revision	Sections changed from previous release			Doc. date	Prepared
	ADD	**CANCEL**	**MODIFICATION**		
	^XSET,AUTOTPHTEST,x				
	^XSET,FEEDTYPE,n				
	^XSET,PAGEDELAY,n				
	^XSET,REALLENGHTPRINT,n				
	^XSET,RECALLCRLF,n				
	^XSET,SENSING,n				
D	^XSET,SPEEDDOWN,n			2013/08/08	Betty Tsou
	^XSET,TOPOFFORM,n				
	^XSET,WHENTOSENSING,n				
	~S,OFFSETa,n				
	~S, ES[p1]				
	~PCB,MODELNAME[n],name				
	V#SETZERO,Vxx				

Revision	Sections changed from previous release			Doc. date	Prepared
	ADD	**CANCEL**	**MODIFICATION**		
	^XSET,LOCKCMD,xxxx	^XSET,HEATOFFSET,n			
E		^XSET,PAGEDELAY,n		2013/08/19	Betty Tsou
		^XSET,SPEEDDOWN,n			
		Firmware reversion difference between V1.xxx and G3.xxx			

Revision History

Ver: L->M

New	Delete	Modify
^XSET,DBSEARCH,n	^XSET,DRAWMODE,n	^XSET,LOCKCMD,xxxx –Add new parameter (yyyy)
^XSET,DPIEMULATE,n	^XSET,RIBBONNEAREND,0 or 1	^XSET,PAUSEPRINT,n — Add new parameter n = 2
^XSETCUT,DOCUTTING,1	^XSET,RIBBONDIAMETER,n	Bt,x,y,narrow,wide,height,rotation,readable,data – Corrected the definition of Code 39
~X6	^XSET,RIBBONNEAREND,0 or 1	XRBx,y,enlarge,rotation[Saaabbb],length<CR>data –Add new parameter [Saaabbb]
~X7	^XSET,SCANNERMODE,n	
~X8	^XSET,SHOWDATETIME,n	
~X9	^XSET,SHUTDOWN,n,[s]	
Bt,x,y,narrow,wide,height,rotation[Gaaa],readable,data	^XSET,SPEEDDOWN,n	
Bt,x,y,narrow,wide,height,rotation[Babbcc],readable,data	^XSET,STANDBY,n	
B050,x, y, narrow, wide, height, rotation, readable,c,data	^XSET,TEARPAPERTIME,n	
B051,x, y, narrow, wide, height, rotation, readable, h ,m,data	Remove all LCD Set Commands items	
B052,x, y, narrow, wide, height, rotation, readable,c,r,m, data		
B053, x,y,mul,len,roatae<CR>data		
C#SET,UNPROMPT,x		
V#STRCUT,x,y,left,right		