USER GUIDE

About This User Guide

Pls read all the content of the user guide carefully to use the products safely and effectively. You are advised of keeping it properly for your using reference.

Disclaimer

Please do not dismantle the product or tear up the seal on it, otherwise we won't provide warranty or replacement service.

The pictures in this user guide are for reference only. If there are any pictures which not match the actual product, please take actual products as the standard. Updated information is subject to change without notice.

Service Information

For technical assistant or product service and repair, please contact us.

Version Record

Version number	Version description	Version date
SV1.1_HV1.2_190330_20190330d024-190330	Initial version	2019-4-15
SV1.1_HV1.2_190330_d025	The gs128 menu has been modified. It is invalid by default	2019-4-16
SV1.1_HV1.2_190330_d027	1. Modified the C error of 39full conversion tail; 2. The 39full conversion is not correct; 3. Change the setting of switching to USB keyboard mode, save the parameters before setting; 4. Modify the sound prompt error of USB serial port setting success; 5. Modified compatible XP system; 6. Modify the problem that the key is pressed until the decoding is successful or the key is released to turn off the light; 7. Add USB network mode, communicate with upper computer through USB network mode;	2019-4-17
SV1.3_HV1.2_190330_d027	1. The lighting effect is modified to improve the decoding effect; 2. The communication between USB network and host computer is modified except win10 system;	2019-4-19
SV1.4_HV1.2_190330_d027	1. Add the function of modifying IP address, which can be set by upper computer or scanning mode 2. When set to USB network mode, the default IP	2019-4-30

	address is 32.45.78.1	
SV1.5_HV1.2_190330_d027	1. The default frequency of sound is changed to 2.7K 2. The shipping version of hs-26	2019-5-6
SV1.6_ZS_HV1.2_2K7_190330_d031	1. Greatly improve decoding performance 2. Early exit decoding function is set 3. Modified the problem of missing callback function 4. Code128 can solve hidden character, which is related to menu;	2019-5-23
SV1.7_ZS_HV1.2_2K7_190330_d031	1. The default value of output code length is changed to 4-50 2. Change the maximum sound to 2.7K	2019-5-23
SV1.7_ZS_HV1.2_2.048K_190330_d031	Change the maximum sound to 2.048k	2019-5-23
SV1.8_ZS_HV1.2_2.048K_QZ_190330_d033	1. Add hardware watchdog 2. Change the maximum sound to 2.048k 3. Solve the problem of noise during startup 4. Because of RTC failure, the callback function adopts counting method 5. Speed up anti white code 6. Modify hid sending speed	2019-5-30
SV1.8_ZS_HV1.2_2.048K_MZ_190330_d033	1. Add hardware watchdog 2. Change the maximum sound to 2.048k 3. Solve the problem of noise during startup	2019-5-31

	4. Because of RTC failure, the callback function adopts counting method 5. Speed up anti white code 6. Modify hid sending speed 7. Serial output, no terminator, initialized to self sensing mode	
SV1.9_ZS_HV1.2_2K7_QZ_190330_d033	1. Initialize turn on anti white code 2. Can switch to self sensing mode	2019-6-1
SV1.9_ZS_HV1.2_2.048K_QZ_190330_d033	1. Initialize turn on anti white code 2. Can switch to self sensing mode	2019-6-1
SV2.0_ZS_HV1.2_2.048K_MZ_190330_d033	Add aging test mode	2019-6-5
SV2.0_ZS_HV1.2_2K048_QZ_190605_d037	1. Pdf optimization 2, DM optimization 3. QR high density optimization 4. QR code crash 5. The problem of PDF missing angle decoding	2019-6-10
SV3.4_ZS_HV1.0_PTY_P9_HT_OLD_20200317.250718	1.UPC-A to EAN-13. 2.EAN-13 to ISSN 3.UPC-A/EAN/JAN extra-code	2020-3-24
SV3.5_ZS_HV1.0_PTY_P14_HT_OLD_20200422_4.7.200416.250718		2020-4-23

SV3.7_ZS_HV1.0_PTY_P16_HT_OLD_20200511_4.7.200416.250718	1. Solve suffix cannot be added 2. Solve the problem that data lost when UPC-A to EAN-13 3. Solve the problem that EAN13 to ISSN doesn't work 4. Add getting CPUID barcode function (for internal use only) 5. Before MP6300Y (2.7khz buzzer) 2019.11.11 version are all old camera	2020-5-13

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1.Product Introduction

This user guide applies to MP6300Y, which identify 1D&2D barcodes by 2D image scanning pattern. The scanners above are of strong identification capability, and support automatic continuous scanning mode with fast and flexible scanning speed.

In this chapter, we will introduce the instruction of scanner with pictures, please compare to the scanner you bought when reading this user guide, which is good for your understanding. This chapter applies to regular users, maintenance personnel, and software developers.

1.1 Main feature

* Complete independent research and development, possessing the complete set of patent, plug and play without the need to install driver.

* Wide voltage design to avoid the data can’t be transmitted due to voltage fluctuation.

* 32-bit master chip equipped with patented software, the scanner can smoothly decode reflective,

wrinkled, blurred, and colorful barcode, and can also normally scan in light and dark environment.

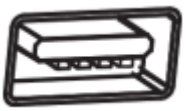
* Adopt all tantalum capacitors and anti-oxidation optical technology, avoiding the problem of performance declining after long-term using.

1.2 Open package

Open the package and take out the products and accessories. Check whether all items are complete and whether there are damaged parts according to the packing list. If there are any damaged or missing parts, please keep the original packaging and contact your supplier for after-sales service.

1.3 Communication port

The scanner must be connected to a host to operate. Host can be a PC, POS machine, intelligent terminal with USB or RS-232 interface.

USB	USB interface on host	
RS-232	RS-232 interface on host	

1.4 Start-up, shutdown, standby and restart

Start-up：Connect host computer with scanner, which will automatically start-up and in working state.

Shutdown：Remove the data cable which is connected with scanner; remove the USB which is connected with host computer; remove the power adapter which is inserted into RS-232 serial port.

Standby：Scanner with automatic sleep standby function, if 30 minutes without work it will be in standby mode, but it will automatically start-up when barcode approach.

Restart：If the scanner crashes or doesn't respond, please switch it off and restart.

1.5 Maintenance

* The window must be kept clean, the supplier do not bear the guarantee responsibility due to the

improper maintenance.

* Avoid the window being wear and tear or scratched by hard object

* Use the hairbrush to remove the stain on the window

* Clean the window with a soft cloth, such as lens cleaning cloth

* Spraying liquid onto the window is prohibited.

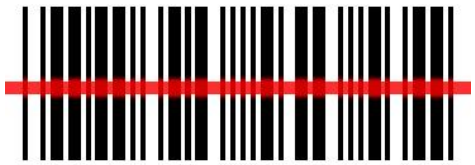
* Prohibit any cleaning solvents, except for the cleaning water.

1.6 Reading skills

If the barcode is small, it should be closer to the scanning window; if the barcode is large, it should be far away from the scanning window a little more, thus easier to be read correctly.

If the barcode is highly reflective (for example, the coated surface), you may need to tilt the barcode at an angle to successfully scan it.

Barcode scanning example:

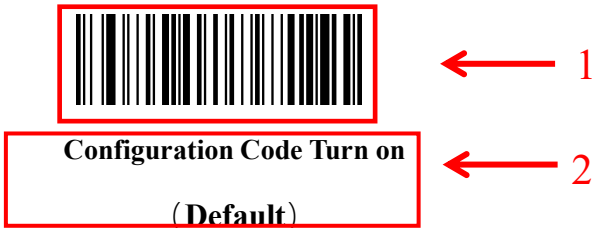


2.Barcode Menu

This model of laser desktop barcode scanner is designed to change settings by reading some special barcode, which we will give you a detailed introduction and show you all the barcodes for the corresponding setting in this section.

The greatest advantage of this setting method is direct, intelligible and user friendly.

2.1 Mark Setting



2.2 Setting barcodes

2.2.1 Turn on/Turn off configuration code

When the configuration code is turn on, All configuration codes available;

When the configuration code is turn off, you need setting it.

Configuration Code Turn On（Default)

Configuration Code Turn Off

2.2.2 Restore Factory Defaults

Restore Factory Defaults

2.2.3 Read product batch version

Product Batch Version

2.2.4 Time-out setting

Select time-out interval

No Time-Out(Default)

3s

5s

10s

2.2.5 Read user defaults

Save the current menu settings as user-defined menu settings.

Save User Defaults

You can restore the menu settings for the user-defined menu settings.

Restore User Defaults

2.2.6 Interface Setting

This desktop scanner support USBKB、USB to serial port、serial port interface.

You can set USB PC KB、USB MAC KB interface by scanning below barcode.

USB KB（Default）

USB MAC KB（Not enable）

Host mode (command decoding + physical serial port)

You can set serial port interface by scanning below barcode.

Serial port

You can set USB to serial port interface by scanning below barcode. (Need drive, please contact the sales)

USB to Serial Port（Not enable）

USB Upgrade

2.2.7 Serial port setting

2.2.7.1 Baud rate setting

Baud rate 4800

Baud rate 9600（Default）

Baud rate 38400

Baud rate 19200

Baud rate 57600

Baud rate 115200

2.2.7.2 Serial port data bits, stop bits, check bit setting

7 data bits，1 stop bit，no check bit

7 data bits，1 stop bit，even-parity check

7 data bits，1 stop bit，odd-parity check

7 data bits，2 stop bits，no

7 data bits，2 stop bit，even-parity check

7 data bits，2 stop bits，odd-parity check

8 data bits，1 stop bit，no check bit

8 data bits，1 stop bit，even-parity check

8 data bits，1 stop bit，odd-parity check

8 data bits，2 stop bits，no check bit

8 data bits，2 stop bit，
even-parity check

8 data bits，2 stop bits，odd-parity check

2.2.8 LED control

Normal Mode（Default）

Always Off

Always On

2.2.9 Character escape

Enable character escape

Disable Character Escape（Default）

2.2.10 GS Control Character escape(Control Character Escape Function need to be enable)（Not enable）

No ReplacemEnt (Not Enable)

Note: Output character“Ç”, must scan "Enable virtual keyboard " Open (Mode 1)"or (Mode 2) or (Mode 3) first

Replace With Ç (Not enable)

Replace with | (Not enable)

Replace with ^] (Not enable)

Replace with] (Not enable)

Replace with <GS> (Not enable)

2.2.11 Prefix setting

No prefix（Default）

<STX><data>

2.2.12 Suffix setting

No Suffix

<Data><CR>

<Data><LF>

<Data><CR><LF>（Default）

<Data><TAB>

<Data>< ETX>

2.2.13 Unicode Output Mode

Latin-1（Default）

GBK（INotepad/excel）

UNICODE（Word）

2.2.14 Inverse code option

（**Only 1D/Data Matrix/Aztec**）

Only Decode Normal Code（Default）

Only Decode Inverse Code（Not Enable）

Decode Both Normal Code And Inverse Code

2.2.17 Virtual keyboard

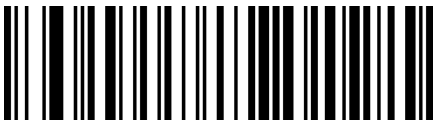
Mode 1: The characters between 0x20 and 0xFF are output in the virtual keyboard mode that is not supported by the current keyboard layout. The characters between 0x00 and 0x1F are defined according to the control characters.

Mode 2: All characters between 0x20 and 0xFF are output under the virtual keyboard mode, and characters between 0x00 and 0x1F are defined according to the control characters.

Mode 3: The characters used between 0x00 and 0xFF are output under the virtual keyboard mode.

Disable Virtual Keyboard（Default）

Enable Virtual Keyboard (Mode 1)



Enable Virtual Keyboard (Mode 2)

Enable Virtual Keyboard (Mode 3)

2.3 Beeper and LED notifications

2.3.1 Beeper Volume setting

Volume Low

Volume High（Default）

2.3.2 Startup beep

Shut Down Startup Beep

Open Startup Beep

（Default）

2.3.3 Good read beep

Good Read Beep On

Good Read Beep Off（Defaul

t）

2.3.4 Beep pitch-good read

Low Pitch（Default）

Middle Pitch

High Pitch

2.3.5 Beep duration-good read

Tone Long（Defaul

t）

Tone Pip

2.3.6 Error sound

You will hear 4 continue alarm sounds when data upload failure, one single alarm sound means scan indistinguishableness barcode.

Error Sound Low Pitch（Default）

Error Sound Middle Pitch

Error Sound High Pitch

2.3.7 Good-read LED

Good-Read LED Off

Good-Read LED On（Default）

2.4 Timeout between decodes (Same barcodes)(works in Auto scan mode)

2.4.1 Timeout between decodes (Same barcodes)

To avoid being repeatedly with a barcode, you can set the scan interval.

200ms

500ms（Default）

750ms

1s

2.4.2 Reading time

Single Reading Time

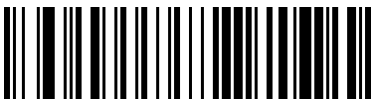
In the inductive reading mode, this parameter refers to the maximum time that the reading engine is allowed to continuously collect and recognize before reading is successful. After the successful reading or the timeout of a single reading, the reading engine will enter the interval of not collecting and reading. The setting range of single code reading time is 0.1-25 seconds, and the step length is 0.1 seconds. Indicates that the reading time is infinite. The default duration is 3.0 seconds.

2.5 USB keyboard setting

There barcode is used to set the update speed when scanner is in USB keyboard pattern. If the performance of your PC is lower, we suggest you choose slow update speed to make sure the scanner update the right data.

Slow Update Speed

Middle Update Speed



Fast Update Speed（Default）

User-Defined Update Speed（2ms~50ms）

2.6 Line feed setting（USB keyboard）

Only 0A(Line Feed)Works

Only 0D(Carriage Return)Works

（Default）

Both 0A(LR) And 0D(CR) Works

2.7 USB keyboard text-transform

Normal Output（Default）

Case Reversal

All Caps

Lower Case

2.8 Keyboard layout setting

English (United States)

French (France)

Italian (Italy)

Italian 142 (Italy) (Not enable)

German (Germany)

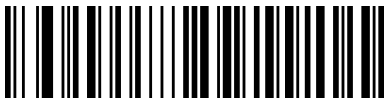
Spanish (Spain)

Spanish (Latin America) （Not enable）

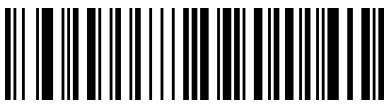
Finnish （Not enable）

Japanese （Not enable）

Russian (MS) （Not enable）



Russian (typewriter) （Not enable）

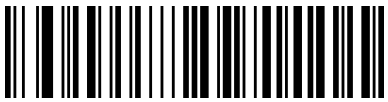


Arabic (101) （Not enable）

Irish（Not enable）

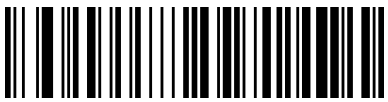
Polish (214)（Not enable）

Polish (Programmers)（Not enable）

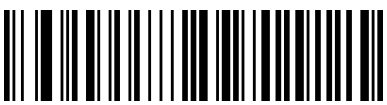


Dutch (Netherlands)（Not enable）

Czech (QWERTZ)（Not enable）



Portuguese (Portugal)



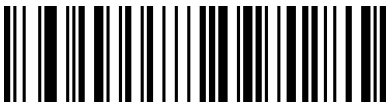
Portuguese (Brazil)

Swedish (Sweden) （Not enable）

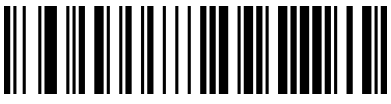
Turkish Q

Turkish F （Not enable）

Greek (MS) （Not enable）



French (Belgium)



English (UK) （Not enable）

2.9 Barcode data hiding settings

Original Barcode Data

Transfer Start Field Only

Transfer Only Intermediate Fields

Transfer Only End Fields

Start And End Fields Only

Set Start Field Length

Set End Field Length

2.10 Symbologies

2.10.1 Enable/disable all Symbologies

Enable all barcode might slow down scanner decode speed. We suggest enable the barcode you need based on your scene. Enable all barcode is default

Enable All Symbologies（Default）

Disable All Symbologies

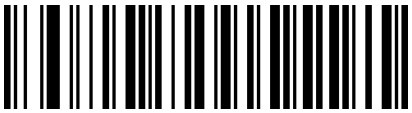
2.10.2 Enable/disable all 1D Symbologies

Enable All 1D Symbologies

Disable All 1D Symbologies

2.10.3 Enable/disable all 2D Symbologies

Enable All 2D Symbologies



Disable all 2D Symbologies

2.10.4 Codabar

Enable Codabar

Disable Codabar

2.10.5 Codabar start/ending character setting

Don’t Send Codabar Start/ending Character (Default)

Send Codabar Start/Ending Character

2.10.6 Codabar limitation of length

Codabar Min Length（1~127bit）

Codabar Max Length（1~127bit）

2.10.7 Code 39

Enable Code 39

Disable Code 39

2.10.8 Code 39 check bit

Disable Code 39 Check Bit (Default)

Enable Code 39 Check Don’t Send Check Bit

Enable Code 39 Check Send Check Bit

2.10.9 Code 39 Full ASCII

Enable Full ASCII

Disable Full ASCII (Default)

2.10.10 Code 39 limitation of length

Code 39 Max Length (1~127bit)

Code 39 Min Length (1~127bit)

2.10.11 Code 32 (Code 39 needs to be enabled） （Not Enabled）

Enable Code 32

Disable Code 32

2.10.12 Interleaved 2 of 5 （ITF5）

Enable ITF25

Disable ITF25

2.10.13 Interleaved 2 of 5 （ITF5）check bit

Disable ITF25 Check (Default)

Enable ITF25 Check Don’t Send Check Bit

Enable ITF25 Check Send Check Bit

2.10.14 Interleaved 2 of 5 （ITF5）length setting

ITF25 No Fixed Length (4-128bit)（Default）

ITF25 6 Bit Length

ITF25 8 Bit Length

ITF25 10 Bit Length

ITF25 12 Bit Length

ITF25 14 Bit Length

ITF25 16 bit Length

ITF25 18 bit Length

ITF25 20 bit Length

ITF25 22 bit Length

ITF25　24 bit length

2.10.15 Interleaved 2 of 5 Limitation of length

Interleaved 2 of 5 min limitation length （4~128 bit）

Interleaved 2 of 5 max limitation length (4~128bit)

2.10.16 Industrial 2 of 5 (Industrial 25code)（4-24bit）

Enable Industrial 2 of 5

Disable Industrial 2 of 5

2.10.17 Industrial 2 of 5 Limitation of length

Industrial 2 of 5 min length (4~128bit)

Industrial 2 of 5 max length (4~128bit)

2.10.18 Matrix 2 of 5 (matrix 25 code)（4-24 bit）

Enable Matrix 2 of 5

Disable Matrix 2 of 5

2.10.19 Matrix 2 of 5 Limitation of length

Matrix 2 of 5 min length (4~128 bit)

Matrix 2 of 5max length (4~128bit)

2.10.20 Standard 25（Not enable）

Enable Standard 25 (default)

Disable Standard 25

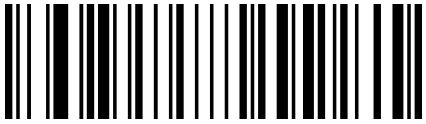
2.10.21 Standard 25Limitation of length

Standard 25 min length（4~128 bit）

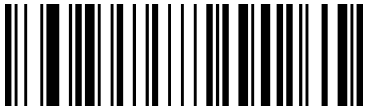
Standard 25max length

（4~128 bit）

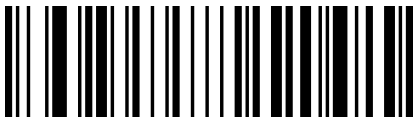
2.10.22 Standard 25 check bit setting



Standard 25 don’t check (Default)



Standard 25 Check, Not Output



Standard 25 Check And Output

2.10.23 Code 93

Enable Code 93

Disable Code 93

2.10.24 Code 93 Limitation of length

Code 93 min length（1~127 bit）

Code 93 max length（1~127 bit）

2.10.25 Code 11（Not Enabled）

Enable Code 11

Disable Code 11 (Default)

2.10.26 Code 11 check bit output（Not Enabled）

Enable Code 11Check Bit Output

Disable Code 11check Bit Output

2.10.27 Code 11 check bit option（Not Enabled）

Disable Code 11 Check Bit (Default)

Code 11 One Check Bit

Code 11 Two Check Bit

2.10.28 Code 11 Limitation of length（Not Enabled）

Code 11 min length（1~127 bit）

Code 11 max length（1~127bit）

2.10.29 Code 128

Enable Code 128

Disable Code 128

2.10.30 Code 128 Limitation of length

Code 128 min length (1~127 bit)

Code 128 max length (1~127 bit)

2.10.31 GS1-128(requires CODE 128 to be enable)

Enable GS1-128

G

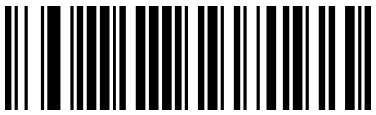
Disable GS1-128

2.10.32 ISBT-128 (Not enable)

Disable ISBT 128（Not enable）

Enable ISBT 128 （Not enable）

2.10.33 Plessey（Not enable）



Enable Plessey (default)

Disable Plessey

2.10.34 Plessey Limitation of length（Not enable）

Plessey Min Length（1~127 bit）

Plessey Max Length （1~127 bit）

2.10.35 Plessey check bit optional（Not enable）

Plessey Don’t Check

Plessey Check Anf Send Check Bit

Plessey Check Don’t Send Check Bit (Default)

2.10.36 MSI plessey（Not enable）

Enable MSI Plessey (Default)

Disable MSI Plessey

2.10.37 MSI plessey Limitation of length（Not enable）

MSI Plessey Min Length （1~127 bit）

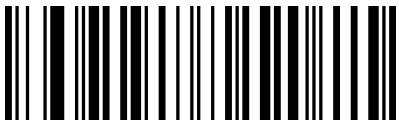
MSI Plessey Max Length （1~127 bit）

2.10.38 MSI plessey check bit output （Not enable）

MSI Plessey Check Bit Output

MSI Plessey Check Bit Don’t Output (Default)

2.10.39 MSI plessey Check mode selection setting



MSI Plessey Don’t Check

MSI Plessey One Check Bit MOD10 (Default)

MSI Plessey Two Check Bit MOD10/MOD10

MSI Plessey Two Check Bit MOD10/MOD11

2.10.40 UPC-A

Enable UPC-A

Disable UPC-A

2.10.41 UPC-A check bit

Send UPC-A Check Bit (Default)

Don’t Send UPC-A Check Bit

2.10.42UPC-A to EAN-13 （Not enable）

Enable UPC-A to EAN-13

Disable UPC- A To EAN-13 (Default)

2.10.43 UPC-E

Enable UPC-E

Disable UPC-E

2.10.44 UPC-E check bit

Send UPC-E Check Bit (Default)

Don’t Send UPC-E Check Bit

2.10.45 UPC-E expand UPC-A

Enable UPC-E Expand UPC-A

Disable UPC-E Expand UPC-A (Default)

2.10.46 EAN/JAN-8

Enable EAN/JAN-8

Disable EAN/JAN-8

2.10.47 EAN/JAN-13

Enable EAN/JAN-13

Disable EAN/JAN-13

2.10.48 UPC/EAN/JAN extra-code（Not enable）

Ignore UPC/EAN/JAN Extra-Code (Default)

Decode UPC/EAN/JAN Extra-Code

Adapt UPC/EAN/JAN Extra-Code

2.10.49 EAN13 to ISBN

Enable EAN13 To ISBN

Disable EAN13 To ISBN (Default)

2.10.50 EAN13 to ISSN（Not enable）

Enable EAN13 To ISSN

Disable EAN13 To ISSN(Default)

2.10.51 GS1 DataBar（RSS14）(Stacked)

Enable GS1 DataBar

Disable GS1 DataBar

2.10.52 GS1 DataBar（RSS14）(Stacked) AI（01）character send（Not enable）

Send AI（01）Character (Default)

Don’t Send AI（01）

Character

2.10.53 GS1 DataBar Limited

Enable GS1 DataBar Limited

Disable GS1 DataBar Limited

2.10.54 GS1 DataBar Limited AI（01）character send（Not enable）

Send AI（01）Character (Default)

Don’t Send AI（01）Character

2.10.55 GS1 DataBar Expanded

Enable GS1 DataBar Expanded

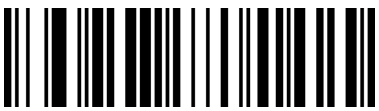
Disable GS1 DataBar Expanded

2.10.56 PDF417

Enable PDF417

Disable PDF417

2.10.57 Micro PDF417



Enable Micro PDF417

Disable Micro PDF417

2.10.58 QR Code

Enable QR

Disable QR

Disable QR Code URL Link (Default)

Enable QR Code URL Link

2.10.59 Micro QR

Enable Micro QR

Disnable Micro QR

2.10.60 Data Matrix

Enable Data Matrix

Disable Data Matrix

2.11 User-defined prefix setting

Output

Enable User-Defined Prefix Output

Disable User-Defined Prefix Output (Default)

Edit

Clear All User-Defined Prefix

User-Defined Prefix

(Please follow the barcode type ID table and data and edit barcode in the appendix after scanning)

2.12 User-defined suffix setting

Output options

Disable User-Defined Suffix Output

Disable User-Defined Suffix Output (Default)

Edit

Clear All User-Defined Suffixes

User-Defined Suffix

(Please follow the barcode type ID table and data and edit barcode in the appendix after scanning)

2.13 Barcode prefix&suffix order selection

Prefix

<Prefix><CODE ID><AIM ID><User-Defined Prefix>(Default)

<Prefix><User-Defined Prefix><CODE ID><AIM ID>

Suffix

<User-Defined Suffix><CODE ID><AIM ID><Suffix> (Default)

<CODE ID><AIM ID><User-Defined Suffix><Suffix>

2.14 Code ID setting

Output options

Disable CODE ID (Default)

Enable CODE ID Former Barcode

Disable CODE ID Latter Barcode

Edit

User-Defined CODE ID

(Please follow the barcode type ID table and data and edit barcode in the appendix after scanning)

Clear All User-Defined CODE ID

2.15 AIM ID setting

Disable Barcode AIM ID (Default)

Enable Former Barcode AIM ID

Enable Latter Barcode AIM ID

Appendix

Appendix 1 Data and edit barcode

0

1

2

3

4

5

6

7

8

9

A

B

C

D

E

F

Cancel a string of data read before

Cancel current setting

Cancel a string of data read before

Save

Appendix 2 Barcode type ID table

Barcode type	HEX	CODE ID(default)
All code system	99	
Codabar	61	a
Code128	6A	j

ISBT-128	6A	j
Code32	3C	<
Code93	69	i
Code39	62	b
Code11	48	h
Plessey	70	（Not enable）
MSI plessey	6D	（Not enable）
EAN-13	64	d
EAN-8	64	D
GS1 DataBar（RSS14） (Stacked)	52	y
GS1 DataBar Limited	52	{
GS1 DataBar Expanded	52	}
GS1-128 (EAN-128)	6A	l
2 of 5		
Interleaved 2 of 5	65	e
Matrix 2 of 5	76	m

Industry 2 of 5	44	f
Stamdard 25	73	(Not enable)
UPC-A	63	c
UPC-E	63	E
ISBN	42	d
ISSN	6E	(Not enable)
DataMatrix	75	w
PDF417	72	r
Micro PDF417	53	R
QR Code	51	S
Micro QR Code	51	S

Barcode type	AIM ID	Description
All code system		
Codabar	]Fm	m: 0~1
Code128	]C0	m: 0, 1, 2, 4
ISBT-128	]C4	]CD
Code32	]A0	]XD
Code93	]G0	
Code39	]Am	m: 0, 1, 3, 4, 5, 7
Code11	]Hm	m: 0, 1, 3, 8, 9
Plessey	]P0	(Not enable)
MSI plessey	]Mm	(Not enable)
EAN-13	]Em	m: 0, 1, 3, 4
EAN-8	]Em	m: 0, 1, 3, 4
GS1 DataBar(RSS14) (Stacked)	]e0	
GS1 DataBar Limited	]em	]eD
GS1 DataBar Expanded	]em	]e0
GS1-128 (EAN-128)	]C1	

2 of 5		
Interleaved 2 of 5	]Im	m: 0, 1, 3
Matrix 2 of 5	]X0	
Industry 2 of 5	]S0	
Stamdard 25	]Rm	(Not enable)
UPC-A	]Em	m: 0, 3
UPC-E	]Em	m: 0, 3
ISBN	]X0	]ED
ISSN	]X0	(Not enable)
DataMatrix	]dm	m: 0~6
PDF417	]Lm	m: 0~5
Micro PDF417	]Lm	m: 0~5
QR Code	]Qm	m: 0~6
Micro QR Code	]Qm	m: 0~6

Appendix 3 Invisible character ASCII table

10 hex	Hex	Corresponding character
0	00	NUL
1	01	SOH
2	02	STX
3	03	ETX
4	04	EOT
5	05	ENQ
6	06	ACK
7	07	BEL
8	08	BS
9	09	HT
10	0A	LF
11	0B	VT
12	0C	FF
13	0D	CR
14	0E	SO
15	0F	SI
16	10	DLE
17	11	DC1

18	12	DC2
19	13	DC3
20	14	DC4
21	15	NAK
22	16	SYN
23	17	ETB
24	18	CAN
25	19	EM
26	1A	SUB
27	1B	ESC
28	1C	FS
29	1D	GS
30	1E	RS
31	1F	US

Appendix 4 Visible character ASCII table

10 hex	*Hexadecimal*	*Character*	*10 hex*	*Hexadecimal*	*Character*	*10 hex*	*Hexadecimal*	*Character*
32	*20*	*<SPACE>*	*64*	*40*	*@*	*96*	*60*	*`*
33	*21*	*!*	*65*	*41*	*A*	*97*	*61*	*a*
34	*22*	*“*	*66*	*42*	*B*	*98*	*62*	*b*
35	*23*	*#*	*67*	*43*	*C*	*99*	*63*	*c*
36	*24*	*$*	*68*	*44*	*D*	*100*	*64*	*d*
37	*25*	*%*	*69*	*45*	*E*	*101*	*65*	*e*
38	*26*	*&*	*70*	*46*	*F*	*102*	*66*	*f*
39	*27*	*‘*	*71*	*47*	*G*	*103*	*67*	*g*
40	*28*	*(*	*72*	*48*	*H*	*104*	*68*	*h*
41	*29*	*)*	*73*	*49*	*I*	*105*	*69*	*i*
42	*2A*	*	*74*	*4A*	*J*	*106*	*6A*	*j*
43	*2B*	+	*75*	*4B*	*K*	*107*	*6B*	*k*
44	*2C*	,	*76*	*4C*	*L*	*108*	*6C*	*l*
45	*2D*	-	*77*	*4D*	*M*	*109*	*6D*	*m*
46	*2E*	.	*78*	*4E*	*N*	*110*	*6E*	*n*
47	*2F*	/	*79*	*4F*	*O*	*111*	*6F*	*o*
48	*30*	*0*	*80*	*50*	*P*	*112*	*70*	*p*

49	*31*	*1*	*81*	*51*	*Q*	*113*	*71*	*q*
50	*32*	*2*	*82*	*52*	*R*	*114*	*72*	*r*
51	*33*	*3*	*83*	*53*	*S*	*115*	*73*	*s*
52	*34*	*4*	*84*	*54*	*T*	*116*	*74*	t
53	*35*	*5*	*85*	*55*	*U*	*117*	*75*	*u*
54	*36*	*6*	*86*	*56*	*V*	*118*	*76*	*v*
55	*37*	*7*	*87*	*57*	*W*	*119*	*77*	*w*
56	*38*	*8*	*88*	*58*	*X*	*120*	*78*	*x*
57	*39*	*9*	*89*	*59*	*Y*	*121*	*79*	*y*
58	*3A*	*:*	*90*	*5A*	*Z*	*122*	*7A*	*z*
59	*3B*	*;*	*91*	*5B*	*[*	*123*	*7B*	*{*
60	*3C*	<	*92*	*5C*	\	*124*	*7C*	|
61	*3D*	=	*93*	*5D*	*]*	*125*	*7D*	*}*
62	*3E*	>	*94*	*5E*	^	*126*	*7E*	~
63	*3F*	*?*	*95*	*5F*	_			

Appendix 5 Default setting table

Parameter name		Default setting	Remarks
Communication settings			
TTL-232 （default）	Serial port baud rate	9600	
	Serial check bit	No check bit	
	Serial data bit	8 bit	
	Serial port stop	1 bit	
	Host mode	OFF	
USB	USB Keyboard layout	American keyboard	
	Barcode content contains carriage enter character feed processing （USB	0D only (enter character CR) Tab	
	Case conversion	Not converting	
	virtual keyboard	Off	
	USB keyboard sending speed	Fast speed	
	Control character escape output combination control key	Off	
	Chinese character output mode	English/Latin-1 code	
		Invoice function off	
Mode parameter			
Default reading mode		Self-induction mode	Manual mode, sensing mode
Self-induction mode	Recode detection interval	500ms	

	Trigger condition	sensing	
Lighting and aiming			
Lighting mode		Normal mode	
Aiming mode		Normal mode	
Prompt output			
Power on tone		on	
Decoding success tone	prompt	on	
	Beep type	audio rate low	
	Beep volume	high	
	Beep duration	long	
code read tone setting		Allow	
Decoding success LED prompt		On	

Data editing

Prefix and suffix		
Prefix adding	No add	
Prefix content	No	
AIM ID	No add	
Code ID	No add	
Suffix adding	No add	
Suffix content	No	

End character adding	Add	
End character content	0x0A，0×0D	Enter
Parameter name	**Default setting**	**Remark**
Barcode symbol parameter		
Inverted barcode reading	Open	Valid for all bar code symbol types
Code 128		
Reading	Allow	
Max length	127	
Min length	1	
GS1-128（UCC/EAN-128）		
Reading	Allow	
Max length	127	
Min length	1	
EAN-8		
Reading	Allow	
EAN-13		
Reading	Allow	

2 bit extension code	No reading	
5 bit extension code	No reading	
must have the extension code	No require	
ISSN		
Reading	Not allow	
ISBN		
Reading	Not allow	
UPC-E		
Reading	allow	
Output check character	Output	
Expand to UPC–A	No expand	
UPC-A		
Reading	allow	
Output check character	Output	
UPC-A to EAN-13	Off	
Interleaved 2 of 5		
Reading	allow	

Check	No check	
Max length	128	
Min length	4	
Matrix 2 of 5		
Read	Not allow	
Max length	128	
Min length	4	
Industrial 2 of 5		
Reading	allow	
Max length	128	
Min length	4	
Standard 2 of 5		
Reading	allow	
Check	No check	
Output check character	No output	
Max length	128	
Min length	4	

Code 39		
Reading	allow	
Check	No check	
Output check character	No output	
Support Full ASCII	Support	Default (off)
Max length	127	
Min length	1	
Code 32		
Reading	allow	
Codabar		
Reading	allow	
Check	No check	
Send start character and end character	No output	
Max length	127	
Min length	1	
Code 93		
Reading	allow	

Max length	127	
Min length	1	
GS1 Databar (RSS14) (Stacked)		
Reading	allow	
send AI(01) character	Send	
GS1 Databar Limited		
Reading	allow	
Send AI(01) character	Send	
GS1 Databar Expanded		
reading	allow	
Code 11		
reading	allow	
Check bit	Output	Off
Check bit option	Off	
Max length	127	
Min length	1	
Plessey		

reading	Allow	
Check bit	Check but don’t output	
Max length	127	
Min length	1	
MSI-Plessey		
Reading	allow	
Output check	Don’t output	
Check bit mode selection	1 bit MOD10	
Max length	127	
Min length	1	
PDF417		
Reading	allow	
Max length	2710	
Min length	1	
Micro PDF417		
Reading	allow	
Max length	2710	

Min length	1	
QR Code		
Reading	allow	
Max length	7089	
Min length	1	
Micro QR		
Reading	allow	
Max length	7089	
Min length	1	
Data Matrix		
Reading	allow	
Max length	3116	
Min length	1	

Appendix 6 operational character (USB keyboard)

10 hex	Hex	*Corresponding key value (disable CODE ID)*	*Corresponding key value (enable CODE ID)*
0	00	retain	Ctrl+@
1	01	Insert	Ctrl+A
2	02	Home	Ctrl+B
3	03	End	Ctrl+C
4	04	Delete	Ctrl+D
5	05	PageUp	Ctrl+E
6	06	PageDown	Ctrl+F
7	07	ESC	Ctrl+G
8	08	Backspace	Backspace
9	09	Tab	Tab
10	0A	Enter (The configuration of CRLF processing decide how it express)	Ctrl+J
11	0B	Caps Lock	Ctrl+K
12	0C	Print Screen	Ctrl+L
13	0D	Enter (The configuration of CRLF processing decide how it express)	Enter
14	0E	Scroll Lock	Ctrl+N
15	0F	Pause/Break	Ctrl+O

16	10	F11	Ctrl+P
17	11	Direction key ↑	Ctrl+Q
18	12	Direction key ↓	Ctrl+R
19	13	Direction key ←	Ctrl+S
20	14	Direction key →	Ctrl+T
21	15	F12	Ctrl+U
22	16	F1	Ctrl+V
23	17	F2	Ctrl+W
24	18	F3	Ctrl+X
25	19	F4	Ctrl+Y
26	1A	F5	Ctrl+Z
27	1B	F6	ESC
28	1C	F7	Ctrl+\
29	1D	F8	Ctrl+]
30	1E	F9	Ctrl+^
31	1F	F10	Ctrl+_

Appendix 7 operational character (serial port and USB-VCOM)

10 hex	Hex	Corresponding character
0	00	NUL
1	01	SOH
2	02	STX
3	03	ETX
4	04	EOT
5	05	ENQ
6	06	ACK
7	07	BEL
8	08	BS
9	09	HT
10	0A	LF
11	0B	VT
12	0C	FF
13	0D	CR
14	0E	SO
15	0F	SI
16	10	DLE
17	11	DC1

18	12	DC2
19	13	DC3
20	14	DC4
21	15	NAK
22	16	SYN
23	17	ETB
24	18	CAN
25	19	EM
26	1A	SUB
27	1B	ESC
28	1C	FS
29	1D	GS
30	1E	RS
31	1F	US

Some feature configuration instructions and examples

Example of custom prefix and suffix configuration

Configure the barcode pre/suffix by scan code. Each prefix or suffix character can be up to 10.(To ensure that custom suffixes can be output, configure the scanner's custom pre/post suffix output option to be turned on.)

Example 1.1: Add a custom prefix XYZ to all types of barcode.

Query the appendix barcode type ID table,the HEX value of all code systems is 99. Query the visible character ASCII table,the HEX value corresponding to XYZ is 58, 59, 5A.

Scan configuration code, custom prefix,the barcode scanner will emit a "drip..drip.." two prompt, Then scan the appendix data and edit the 9, 9, 5, 8, 5, 9, 5, A in the bar code, save, and complete the configuration.

If you need to modify the scanned barcode before saving, you can also scan to cancel the previous data or cancel the previous data to reconfigure.If you need to abandon this configuration in the middle, directly scan to cancel the current settings.

Example 1.2：Add a custom prefix R to the QR code

Query the appendix barcode type ID table,the HEX value of all code systems is 51.Query the visible character ASCII table,the HEX value corresponding to R is 58, 59, 5A.

Scan the configuration code Customize The Prefix, then scan the appendix data and edit the 5, 1, 5, 2 in the barcode to save, that is, complete the configuration.

Example 1.3：Cancel the custom prefix of the QR code

When customizing prefixes and suffixes,behind the barcode type characters are saved without adding other characters,that is, clear the custom prefix and suffix for this type of barcode.Scan the configuration code Customize The Suffix, then scan the appendix data and edit the 5,1 in the bar code, save, and complete the configuration.

Noted:If there was a prefix added for all barcodes,the configured QR code prefix will be restored to the prefix added for all barcodes.

If you need to clear the prefix/ suffixes added for various bar code types,please scan "Clear all custom prefixes

" and "Clear all custom suffixes" configuration code.

Barcode length limit configuration example

When configuring the barcode minimum length limit, you must ensure that the configured minimum length is not greater than the current maximum length configuration.Otherwise an error will be indicated.Similarly,when configuring the barcode maximum length limit, must also ensure that the configured maximum length is not less than the current minimum length configuration.

Example 2.1: Configuring Code 128 barcode length is 4-12 bits

Scan configuration code **Code 128 minimum length limit,t**hen scan the appendix data and edit the 4 in the bar code, save.

Scan configuration code **Code 128 maximum length limit,**then scan the appendix data and edit the 1, 2, and save the barcode to complete the configuration.

Example 2.2：Configure Interleaved 2 of 5 barcode length to 14 bits

Configuring 14 bits of Interleaved 2 of 5 barcode length can scan directly and configure ITF25 14 bits of barcode lengths for configuration.It can also be configured by the maximum and minimum length of the barcode:

Scan configuration code **Interleaved 2 of 5** minimum length limit,then scan the appendix data and edit the 1, 4 in the bar code, save.

Scan configuration code **Interleaved 2 of 5** maximum length limit,then scan the appendix data and edit the 1, 4 in the bar code, save,the configuration is completed.

Example 2.3：Configure Code 39 barcode length to any length supported.

Scan configuration **code Code 39** minimum length limit,then scan the appendix data and edit the 0 in the bar code, save,

Scan configuration **code Code 39** maximum length limit,then scan the appendix data and edit the 0 in the bar code, save,the configuration is completed.

Scan configuration code **Interleaved 2 of 5** maximum length limit,then scan the appendix data and edit the 1, 4 in the bar code, save,the configuration is completed.

Example for USB keyboard send speed configuration

If the performance of the client PC is weak and the transmission error is easy to occur, you need to customize the USB keyboard transmission speed to a slower speed, such as 50ms:

Scan the configuration code **Customize the sending speed**, then scan the appendix data and edit the **5,0** in the barcode to **save** the configuration.

Set method of a single reading time modification

Example: Set the length of a single reading to 5.0s. Please read the following barcodes in order:

1. Read “Modify the length of a single reading”.
2. Read the data code "5" and "0".
3. Read “Save”