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	Modified the gs128 menu, the default is invalid	2019-4-16
SV1.1_HV1.2_190330_d027	1. Modified the 39full conversion tail C error; 2. Modified the 39full conversion is not correct; 3. Modified the setting of switch to USB keyboard mode, save the parameters before set; 4. Modified the USB to serial port setting successful voice prompt error; 5. Modified the compatible XP system; 6. Modify the button press until the decoding is successful or release the button to turn off the light; 7.Increase the USB network mode and communicate with the host computer through the USB network mode;	2019-4-17
SV1.3_HV1.2_190330_d027	1. Modify the lighting effect to improve the decoding effect; 2. Modified the communication between the compatible USB network and the host computer except the Win10 system;	2019-4-19
SV1.4_HV1.2_190330_d027	1. Add the function of modifying the IP address, which can be set by the host 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 the sound is changed to 2.7K 2. This version of HS-26.	2019-5-6
SV1.6_ZS_HV1.2_2K7_190330_d031	1.reatly improve the decoding performance 2. Set the early exit decoding function 3. Modified the callback function lost problem 4. code128 can solve hidden characters, and related to the menu;	2019-5-23
SV1.7_ZS_HV1.2_2K7_190330_d031	1.The output code length default is changed to 4-50 2.The maximum sound is changed to 2.7K	2019-5-23
SV1.7_ZS_HV1.2_2.048K_190330_d031	The maximum sound is changed to 2.048K	2019-5-23
SV1.8_ZS_HV1.2_2.048K_QZ_190330_d033	1.Increase the hardware watchdog 2. The maximum sound is changed to 2.048K 3. Solve the problem of noise at start-up 4. Because the RTC fails, the callback function uses the counting method 5.Accelerate the anti-white code 6. Modify the HID send speed	2019-5-30
SV1.8_ZS_HV1.2_2.048K_MZ_190330_d033	Increase the hardware watchdog 2. The maximum sound is changed to 2.048K 3. Solve the problem of noise at start-up 4. Because the RTC fails, the callback function uses the counting method 5.Accelerate the anti-white code	2019-5-31

	6. Modify the HID send speed 7. Serial output, no terminator, initialized to self-sensing mode	
SV1.9_ZS_HV1.2_2K7_QZ_190330_d033	1.Initialize open 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 open anti-white code 2. Can switch to self-sensing mode	2019-6-1
SV2.0_ZS_HV1.2_2.048K_MZ_190330_d033	Add the 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 problem 5. PDF corner decoding problem	2019-6-10

Catalogue

目录

1、Product Introduction

This user guide applies to 2600U, 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.

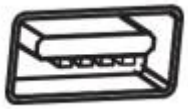
1.2 Unpack your device

After you open the shipping carton containing the product, take the following steps:

- Take the accessories for scanner out from package.
- Check with the packing list to see if everything is complete and in good condition. If there are any damaged or missing components, please keep the original package 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.

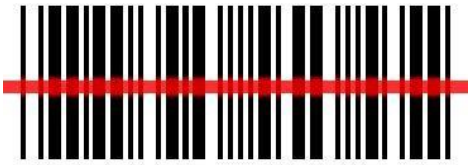
* Prohibit any cleaning solvents, except for the cleaning water.

1.7 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：

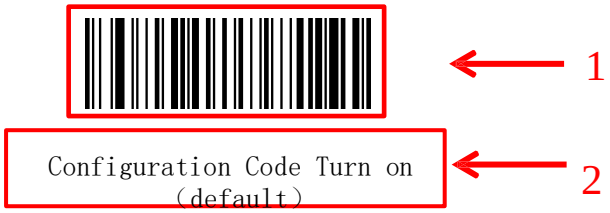


2、Barcode Setting

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



This is the mark of Configuration Code Turn on (default)

The logo consists of two parts:

1. Set the barcode part of the code

2.Set the name of the option or function, such as the function to open the configuration code

2.2Basic 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 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

2.2.5 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 keyboard

USB MAC KB(Not Enabled)

Host mode(Command decoding + physical serial port)

Scanning this barcode is prohibited in

You can set serial port interface by scanning below barcode.

Serial port(Defaults)

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

USB to serial port

This barcode is used when connecting to the host computer and upgrading.

USB to network port

USB upgrade

2.2.6 Serial port setting

2.2.6.1 Baud rate setting

Baud Rate 4800

Baud Rate 9600(default)

Baud Rate 38400

Baud Rate 19200

Baud Rate 57600

Baud Rate 115200

2.2.6.2Serial data bit, stop bit, check bit configuration

7data bits, 1stop bits, no check bit

7data bits, 1stop bits,even check bit

7data bits, 1stop bits, odd check bit

7data bits, 2stop bits, no check bit

7data bits, 2stop bits, even check bit

7data bits, 2stop bits, odd check bit

8data bits, 1stop bits, no check bit
（default）

8data bits, 1stop bits, even check bit

8data bits, 1stop bits, odd check bit

8data bits, 2stop bits, no check bit

8data bits, 2stop bits, even check bit

8data bits, 2stop bits, odd check bit

2.2.7 Scan Mode

Manual scanning model

Auto-sensing mode
(default)

2.2.8 Lighting Control

Normal mode (default)

Lighting always off

Lighting always on

2.2.9 Aiming light control

Normal mode (default)

Aiming light always off

Aiming light always on

2.2.10 Illumination

Turn on Illumination

Turn off Illumination(default

2.2.11 GS Control character substitution(Enable character escape first)

Not replaced

The output character "Ç" must Enable virtual keyboard first

（mode1）" or（mode2）或（mode3）

Replace with Ç（Not Enable
d）

Replace with |

Replace with ^] (Not Enabled)

Replace with] (Not Enabled)

Replace with <GS> (Not Enabled)

2.2.12 Start character setting

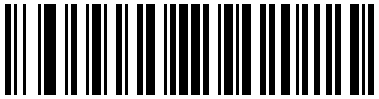
Cancel start character(default)

Add STX as start character

2.2.13 Ending character setting

Cancel ending character

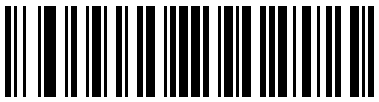
Add Enter



Add Tab

Add Enter+Tab (default)

Add \t



Add ETX

2.2.14 Chinese output mode

In order to output correctly according to the specified encoding format, you need to specify the output encoding format, such as Simplified Chinese in Notepad / excel output configuration into GBK encoding, in Word and other output configured into UNICODE encoding.

When the output encoding format is configured as English/Latin-1 encoding, the output

mode of the USB keyboard is affected by the virtual keyboard function switch. When the output encoding format is configured as GBK encoding / UNICODE encoding, the output mode of the USB keyboard is forced to be the virtual keyboard output.

English/Latin-1 code(default)

GBK code

(Notepad/excel)

UNICODE code（Word）

2.2.15 Invoice (For China)

Disable invoice code(default)

Enable invoice code

Note: In order to make sure the invoice output correctly, when you use invoice function please set C hi nese out put to C hi nes e ou tpu t(Notepad/excel), at the same time, turned off the function of changing the original content of the barcode, such as CodeID, custom pre/postfix, and start character.

2.2.16 Invoice type (for China)

Special invoice (default)

plain invoice

2.2.17 Inverse code option

(only 1D/DataMatrix/Aztec)

Only decode normal code (default)

Only decode inverse code

Decode both normal code and inverse code (default)

2.2.18 rtual keyboard

Mode 1： The characters between 0x20～0xFF output using the virtual keyboard mode that is not supported under the current keyboard layout. The characters between 0x00~0x1F output according to control characters define.

Mode 2：The characters between 0x20～0xFF both using the virtual keyboard mode to output. The characters between 0x00~0x1F output according to control characters define.

Mode 3：The characters between 0x00～0xFF both using the virtual keyboard mode to output.

Disable virtual keyboard(default)

Enable virtual keyboard(mode1)

Enable virtual keyboard(mode2)

Enable virtual keyboard(mode3)

2.3 Beeper, LED notifications and Vibration prompt setting barcode

2.3.1 Beeper Volume setting

Volume low

Volume high(default)

2.3.2 Start-up beep

Shut down start-up beep

Open start-up beep(default)

2.3.3 Start-up vibration prompt

Open start-up vibration prompt (default)

Shut down start-up vibration prompt

2.3.4 Good read beep

good read beep off

good read beep on(default)

2.3.5 Beep pitch-good read

Beep pitch-good read open (default)

Beep pitch-good read off (default)

2.3.6 Good read Prompt audio rate (tone)

tone low (default)

tone middle

tone high

2.3.7 beep duration-good read

Tone long (default)

Tone short

2.3.8 Error sound

You will hear 4 continue alarm sounds when data upload failure, one single alarm sound means scan an unrecognized configuration code.

error sound low pitch(default)

error sound middle pitch

error sound high pitch

2.3.9 Good-read LED

Good-read LED off

Good-read LED on (default)

2.4 Timeout between decodes (Same barcodes)（Self-induction mode）

2.4.1Timeout between same decode

It is used to configure the interval for reading the same barcode. If the setup time is not exceeded, the same barcode will be read one time only .

200ms

500ms(default)

750ms

1s

2.4.2 Reading time

Single reading time

In the inductive reading mode, this parameter refers to the maximum length of time that the reading engine is allowed to continue to collect and recognize before the reading is successful. After a successful reading or a single reading timeout, the reading engine will enter an interval that does not capture the reading. The single reading time setting range is 0.1~25 seconds and the step size is 0.1 second. Indicates that the reading time is infinitely long. The default duration is 3.0 seconds.

2.5 USB keyboard update speed 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 (default)

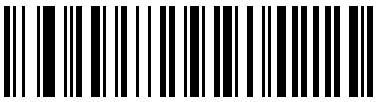
Middle update speed

Fast update speed (default)

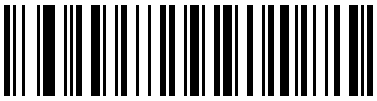
Custom update speed (2ms~50ms)

2.6 OA & LF setting（USB keyboard）

Only 0A(LF) line feed



Only 0D(CR)line feed (default)



Both 0A(LR) and 0D(CR) line feed

2.7 USB keyboard text-transform

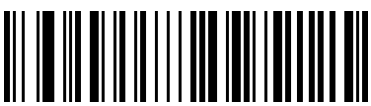
Normal output (default)

Case reversal

all Caps

lower case

2.8 Keyboard layout setting



English (United States)

French (France)

Italian (Italy)

Italian 142 (Italy) (Not Enable

d)

German (Germany)

Spanish (Spain)

Spanish (Latin America) (Not Enabled)

Finnish (Not Enabled)

Japanese （Not Enabled)

Russian (MS) （Not Enabled)

Russian (typewriter) （Not Enabled)

Arabic (101) （Not Enabled)

Irish （Not Enabled)

Polish (214) （Not Enabled)

Polish (Programmers) （Not Enabled)

Dutch (Netherlands) (Not Enabled)

Czech (QWERTZ) (Not Enabled)

Portuguese (Portugal) (Not Enabled)

Portuguese (Brazil) (Not Enabled)

Swedish (Sweden) (Not Enabled)

Turkish Q

Turkish F （Not Enabled)

Greek (MS) （Not Enabled)

French (Belgium)

English (UK)

2.9 Symbologies

2.9.1 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

2.9.2 Codabar

Enable Codabar

Disable Codabar

2.9.3 Codabar start/ending character setting

Don’t send Codabar start/ending character (default)

Send Codabar start/ending character

2.9.4 Codabar limitation of length

Codabar min length (1~127bit)

Codabar max length (1~127bit)

2.9.5 Code 39

Enable Code 39

Disable Code 39

2.9.6 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

2.9.7 Code 39 Full ASCII

Enable Full ASCII

Disable Full ASCII (default)

2.9.8 Code 39 limitation of length

Code 39 min length (1~127bit)

Code 39 max length (1~127bit)

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

Enable Code 32

Disable Code 32

2.9.10 Interleaved 2 of 5 (ITF5)

Enable ITF25

Disable ITF25

2.9.11 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

2.9.12 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

2.9.13 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)

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

Enable Industrial 2 of 5

Disable Industrial 2 of 5

2.9.15 Industrial 2 of 5 Limitation of length

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

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

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

Enable Matrix 2 of 5

Disable Matrix 2 of 5

2.9.17 atrix 2 of 5 Limitation of length

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

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

2.9.18 Standard 25

Enable Standard 25 (default)

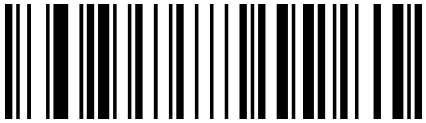
Disable Standard 25

2.9.19 Standard 25Limitation of length

Standard 25 min length（4~128 bit）

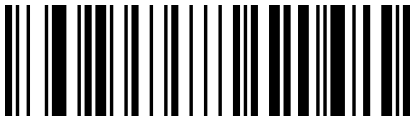
Standard 25max length（4~128 bit）

2.9.20 Standard 25 check bit



Standard 25 don’t check (default)

Standard 25 check, not output



Standard 25check and output

2.9.21 Code 93

Enable Code 93

CDisable Code 93

2.9.22 Code 93 Limitation of length

Code 93 min length （1~127 bit)

Code 93 max length （1~127bit)

2.9.23 Code 11（Not Enabled）

Enable Code 11

Disable Code 11 (default)

2.9.24 Code 11 check bit output（Not Enabled）

Enable Code 11check bit output

Disable Code 11check bit output

2.9.25 Code 11 check bit option（Not Enabled）

Disable Code 11check bit (default)

Code 11 one check bit

Code 11 two check bit

2.9.26 Code 11 Limitation of length（Not Enabled）

Code 11 min length（1~127 bit)

Code 11 max length（1~127bit)

2.9.27 Code 128

Enable Code 128

Disable Code 128

2.9.28 Code 128 Limitation of length

Code 128 min length (1~127 bit)

Code 128 max length (1~127 bit)

2.9.29 GS1-128

Enable GS1-128

G

Disable GS1-128

2.9.30 ISBT-128

Disable ISBT 128

Enable ISBT 128

2.9.31 Plessey

Enable Plessey (default)

Disable Plessey

2.9.32 Plessey Limitation of length

Plessey min length (1~127bit)

Plessey max length (1~127bit)

2.9.33 Plessey check bit optional

Plessey don’t check

Plessey check anf send check bit

Plessey check don’t send check bit (default)

2.9.34 MSI plessey

Enable MSI plessey (default)

Disable MSI plessey

2.9.35 MSI plessey Limitation of length

MSI plessey min length (1~127 bit)

MSI plessey max length (1~127bit)

2.9.36 MSI plessey check bit output

MSI plessey check bit output

MSI plessey check bit don’t output (default)

2.9.37 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

2.9.38 UPC-A

Enable UPC-A

Disable UPC-A

2.9.39 UPC-A check bit

Send UPC-A check bit (default)

don’t send UPC-A check bit

2.9.40PC-A to EAN-13

Enable UPC-A toEAN-13

Disable UPC-A to EAN-13 (default)

2.9.41 UPC-E

Enable UPC-E

Disable UPC-E

2.9.42 UPC-E check bit

Send UPC-E check bit (default)

don’t send UPC-E check bit

2.9.43 UPC-E expand UPC-A

Enable UPC-E expand UPC-A

Disable UPC-E expand UPC-A (default)

2.9.44 EAN/JAN-8

Enable EAN/JAN-8

Disable EAN/JAN-8

2.9.45 EAN/JAN-13

Enable EAN/JAN-13

Disable EAN/JAN-13

2.9.46 UPC/EAN/JAN extra-code

Ignore UPC/EAN/JAN extra-code (default)

Decode UPC/EAN/JAN extra-code

Adapt UPC/EAN/JAN extra-code

2.9.47 EAN13 to ISBN

Enable EAN13 to ISBN

Disable EAN13 to ISBN (default)

2.9.48 EAN13 to ISSN

Enable EAN13 to ISSN

Disable EAN13 to ISSN (default)

2.9.49 GS1 DataBar (RSS14) (Stacked)

Enable GS1 DataBar

Disable GS1 DataBar

2.9.50 GS1 DataBar (RSS14) (Stacked) AI (01) character send

Send AI（01）character (default)

Don’t send AI（01）character

2.9.51 GS1 DataBar Limited

Enable GS1 DataBar Limited

Disable GS1 DataBar Limited

2.9.52 GS1 DataBar Limited AI (01) character send

Send AI（01）character (default)

Don’t send AI (01) character

2.9.53 GS1 DataBar Expanded

Enable GS1 DataBar Expanded

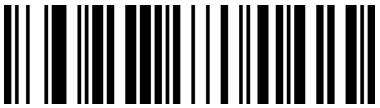
Disable GS1 DataBar Expanded

2.9.54 PDF417

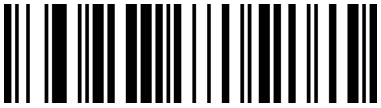
Enable PDF417

Disable PDF41

2.9.55 Micro PDF417



Enable Micro PDF417



Disable Micro PDF417

2.9.56 QR Code

Enable QR

Disable QR

2.9.57 ro QR

Enable Micro QR

Disable Micro QR

2.9.58 Data Matrix

Enable Data Matrix

Disable Data Matrix

2.10 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

(After scan this code you can set the prefix you want based on the data and barcode in table ID)

2.11 User-defined suffix setting

output

Enable user-defined suffix output

Disable user-defined suffix output（default）

edit

clear all user-defined suffix

User-defined suffix

（After scan this code you can set the prefix you want based on the data and barcode in table ID）

2.12 Barcode prefix and suffix order selection

Prefix

Start character + CODE ID + AIM ID + Custom prefix (default)

Start character +Custom prefix +CODE ID+AIM ID

Suffix

Custom suffix+CODE ID+AIM ID+ end character (default)

CODE ID+AIM ID+Custom suffix+end character

2.13 Code ID

output

Disable CODE ID (default)

Enable CODE ID before barcode

Enable CODE ID after barcode

edit

Custom CODE ID

（After scan this code you can set the prefix you want based on the data and barcode in table ID）

clear all user-defined CODE ID

2.14 AIM ID setting

Disable AIM ID（default）

Enable AIM ID before barcode

Enable AIM ID after barcode

Configuration Code Turn on（Default)

APPENDIX

Appendix 1 data and editing code

1

0

2

3

4

5

6

7

8

9

A

B

C

D

E

F

Cancel all data read before

Cancel current setting

Save

cancel the data read last time

Appendix 2 Barcode Type Code ID Table

Code type	HEX	CODE ID (default)
All codes	99	

Codabar	61	a
Code128	6A	j
ISBT-128	6A	j
Code32	3C	<
Code93	69	i
Code39	62	b
Code11	48	H
Plessey	70	p
MSI plessey	6D	m
EAN-13	64	d
EAN-8	64	d
GS1 DataBar (RSS14) (Stacked)	52	R
GS1 DataBar Limited	52	R
GS1 DataBar Expanded	52	R
GS1-128 (EAN-128)	6A	j
2 of 5		
Interleaved 2 of 5	65	e
Matrix 2 of 5	76	v
Industry 2 of 5	44	D
Stamdard 25	73	s
UPC-A	63	c
UPC-E	63	c
ISBN	42	B
ISSN	6E	n
DataMatrix	75	u

PDF417	72	r
Micro PDF417	53	s
QR Code	51	Q
Micro QR Code	51	Q

Code type	AIM ID	Description
All codes		
Codabar	]Fm	m: 0~1
Code128	]C0	m: 0, 1, 2, 4
ISBT-128	]C4	
Code32	]A0	
Code93	]G0	
Code39	]Am	m: 0, 1, 3, 4, 5, 7
Code11	]Hm	m: 0, 1, 3, 8, 9
Plessey	]P0	
MSI plessey	]Mm	m: 0, 1, 7, 8, 9
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	
GS1 DataBar Expanded	]em	
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	m: 0, 8, 9
UPC-A	]Em	m: 0, 3
UPC-E	]Em	m: 0, 3
ISBN	]X0	

ISSN	]X0	
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 eyeball character ASCII table

10 hex	16 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 eyeball character ASCII table

10 hex	16 hex	character	10 hex	16 hex	character	10 hex	16 hex	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	Remark
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	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)

decimal	hexadecimal	*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)

decimal	hexadecimal	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

configuration instruction and example

Example for user-defined prefix and suffix:

You can edit 10 characters as prefix or suffix. (In order to make sure the prefix and suffix can output normally, please enable user-defined prefix or suffix first)

Example 1.1： Add XYZ to all type of barcode as prefix.

Look up appendix 2, you can find that the HEX value for all codes is “99”. Look up appendix 3, the HEX value for XYZ is “58,59,5A”. First scan “user-defined prefix” in 2.11 edit, then the scanner will have two sounds like “D…D…”, then scan 9，9，5，8，5，9，5，A，and save, the setting accomplished.

If you want to change the prefix or suffix you set before you save the setting, you can scan “**cancel the data read last time**” or “**Cancel all data read before**” to reset. If you want to give up setting scan “**Cancel current setting**”.

Example 1.2： Add R to QR code as prefix.

Look up appendix 2, you can find that the HEX value for QR code is “73”. Look up appendix 3, the HEX value for Q is “51”. First scan “**user-defined prefix**”, then the scanner will have two sounds like “D…D…”, then scan **5，1，5，2，and save**, the setting accomplished.

Example 1.3： Cancel user-defined prefix in QR code

When you customize the suffix, the custom suffix for this type of barcode is cleared by adding no other characters after the barcode type character.
Scan the configuration code Customize the prefix, then scan the appendix data and edit the 5,1 in the barcode to save it.
Note: If there is 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 pre/post suffixes added for various bar code types, scan to clear all custom prefixes and clear all custom suffix configuration codes.

Example for Barcode length limit configuration

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

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

Scan the configuration code Code 128 minimum length limit, then scan the appendix data and edit the 4 in the barcode, save,
Scan the 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 is 14 bit
Configure Interleaved 2 of 5 barcode length 14 bits to directly scan the quick configuration barcode **ITF25 14-bit** length configuration, or configure the barcode minimum and minimum length:
Scan the configuration code **Interleaved 2 of 5 minimum length limit**, then scan the appendix data and edit the bar code **1, 4, save**,
Scan the configuration code **Interleaved 2 of 5 maximum length limit**, then scan the appendix data and edit the **1, 4**, and **save** the barcode to complete the configuration.

Example 2.3: Configuring Code 39 barcode length to any length supported
Scan the configuration **code Code 39 minimum length limit**, then scan the appendix data and edit the **0**

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

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”.

Guangzhou Yoko Electron Co.,Ltd

Address：No.4 Changrong Road,Huangpu District,Guangzhou,

Guangdong Province,China

TEL：020-8206 5617

FAX：020-82065420

http://www.chinayoko.com/