NG 6600

Barcode Scanner

Engine Manual

Open/close the configuration code

When the configuration code function is enabled, all configuration barcodes can be scanned for scanner configuration.

When the configuration code function is disabled, other configuration barcodes cannot be scanned for scanner configuration. You need to reopen to scan the configuration code for scanner configuration.

Enable setting code (Factory default)

Disable setting code

Version

Version

Interface

The scanning device supports USB keyboard, USB serial port (USB-COM), and serial port interface mode.

Scan the barcode below can be configured as USB keyboard.

USB keyboard (Factory default)

Scan the barcode below to configure the scanner to serial mod e.

Serial mode

Scan the barcode below to configure the scanner to USB serial mode. (Requires driver installation)

USB serial (USB-COM)

USB keyboard

Control the character escape

Enable control the character escape

Disable control the character escape(default)

Carriage return and line feed processing in the barcode content (USB keyboard)

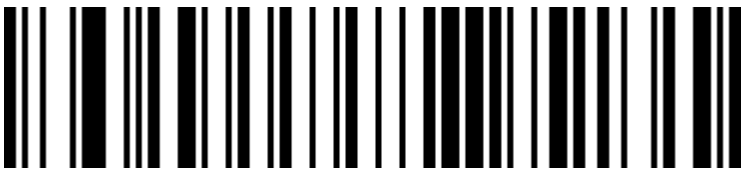
0A (Line Feed LF) only

0D (Carriage Return CR) (default)

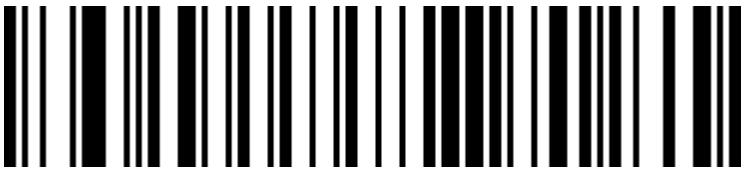
Both 0A(Line Feed LR) and 0D(Carriage Return CR)

USB keyboard transmission speed

Used to configure the speed when sending data by USB keyboard mode. If the PC that you are using has low performance, we recommend to choose a low speed to ensure transmission accuracy.



Transmission speed slow (default)



Transmission speed middle

Transmission speed high

Customize speed（2ms~50ms）

USB keyboard uppercase and lowercase output control

Formal output (default)

Uppercase and lowercase transfer

All uppercase

All lowercase

Keyboard Layouts

English (United States) (default)

French (France)

Italian (Italy)

Italian 142 (Italy)

German (Germany)

Spanish (Spain)

Spanish (Latin America)

Finnish

Japanese

Russian (MS)

Russian (typewriter)

Arabic (101)

Irish

Polish (214)

Polish (Programmers)

Dutch (Netherlands)

Czech (QWERTZ)

Portuguese (Portugal)

Portuguese (Brazil)

Swedish (Sweden)

Turkish Q

Turkish F

Greek (MS)

French (Belgium)

English (UK)

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 output according to the control characters (Check Appendix).

Mode 2: All characters between 0x20 and 0xFF are output using the virtual keyboard mode. Characters between 0x00 and 0x1F are output according to the control characters (Check appendix).

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

Virtual keyboard off (default)

Enable virtual keyboard (Mode 1)

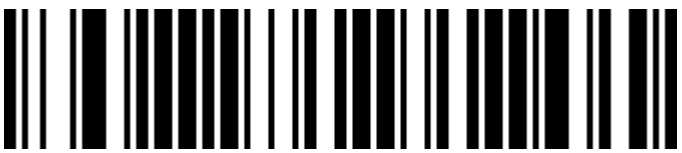
Enable virtual keyboard (Mode 2)

Enable virtual keyboard (Mode 3)

The system selection in virtual keyboard mode

WINDOWS（default)

MAC OS

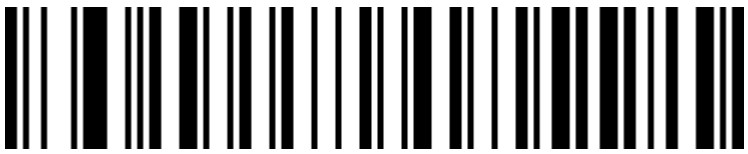


LINUX

Output encoding format

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 encoding（default）

GBK encoding（Notepad/excel）

UNICODE encoding（Word）

Invoice function

Enable and disable invoice function

Disable invoice（default）

Enable invoice

To ensure the correct output of the invoice content, when opening the i nvoice code function, please configure the Chinese character output mod e to GBK code (Notepad/excel), and turn off the function of changing th e original content of the barcode, such as Code ID, custom pre/suffix, an d start character.

Invoice type

Special invoice (default)

Formal invoice

Serial configuration

Baud rating

Baud 4800

Baud 9600 (default)

Baud 19200

Baud 38400

Baud 57600

Baud 115200

Serial data bit, stop bit, check bit configuration

7-bit data, 1 bit stop, no parity

7-bit data, 1 bit stop, even parity

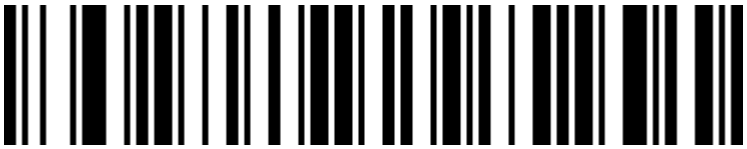
7-bit data, 1 bit stop, odd parity

7-bit data, 2-bit stop, no parity

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

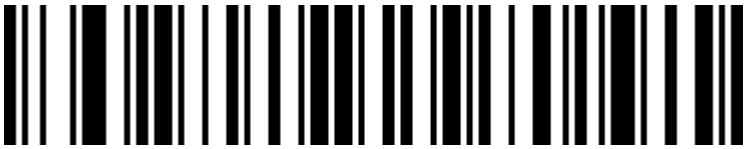
7-bit data, 2-bit stop, odd parity

8-bit data, 1 bit stop, no parity (default)



8-bit data, 1 bit stop, even parity

8-bit data, 1 bit stop, odd parity



8-bit data, 2-bit stop, no parity

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

8-bit data, 2-bit stop, odd parity

GS Control character replacement

No replace (default)

To output the character "Ç", you must firstly scan "Enable virtual

keyboard” (mode 1) or (mode 2) or (mode 3)

Replace to Ç

Replace to |

Replace to ^]

Replace to]

Replace to <GS>

Scan mode

This product has auto sense mode. Scan the barcode below to configure.

Disable auto sense mode

When auto sense mode is disabled, you should trigger scanner by pressing button. This mode is factory default.

Disable auto sense (default)

Enable auto sense mode

When the auto sense mode is enabled, the scanner can automatically detect the barcode in front of the lens and scan barcode.

Enable auto sense

Same barcode decoding time

It is used to configure the interval time of decoding the same barcode. If the setting time is not exceeded, the same barcode will only be scanned once time.

Same barcode detection interval 500ms

Same barcode detection interval 750ms (default)

Same barcode detection interval 1s

Same barcode detection interval 2s

Center mode

When the center mode is enabled, the scanner will only recognize the barcode which is located in the center of the screen that the scanner lens is facing. By default this configuration is disabled.

Disable center mode (default)

Enable center mode

Light configuration

LED indication

Disable decoding successfully LED indication light

Enable decoding successfully LED indication light (default)

Buzzer setting

Sound

Sound low

Sound high (default)

Setup the scanner indication sound

Disable setup the scanner indication sound

Enable setup the scanner indication sound (default)

Successfully decoding indication sound

Disable decoding successfully indication sound

Enable successfully decoding sound (default)

Successfully decoding indication sound frequency (Tone)

Successfully decoding indication sound frequency 1 (Factory default)

Successfully decoding indication sound frequency 2 (2.7K)

Successfully decoding indication sound frequency 3

Successfully decoding indication sound time

Successfully decoding indication sound time long (default)

Successfully decoding indication sound time short

Error warning indication sound frequency (tone)

In the event of a data transmission failure, there will be four continuous error warning sound, and a single error warning sound will appear when scanning an unrecognized configuration code.

Error warning indication sound frequency low (default)

Error warning indication sound frequency low (default)

Error warning indication sound frequency high

Prefix and suffix

Start character

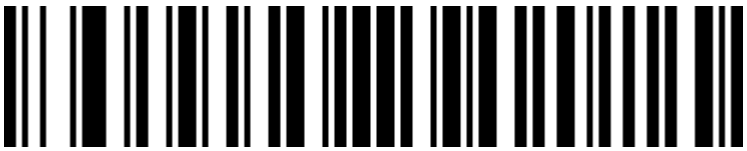
No use start character (default)

Start character set to STX

End character

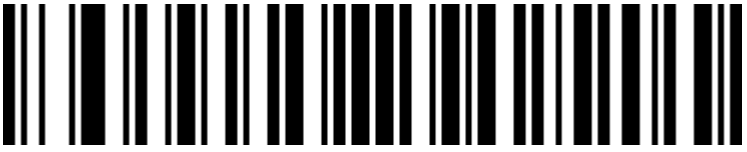
No end character

End character set to " carriage return"



End character set to "Line feed"

End character set to "Line feed" and " carriage return" (default)



End character set to "Tab"

End character set to “ETX”

Customized prefix

Output

Enable Customized prefix output

Disable customized prefix output (Factory default)

Edit

Clear all customized prefix

Customized prefix

(Please set according to the barcode type ID table and data , edit barcode in the appendix after scanning.)

Customized suffix

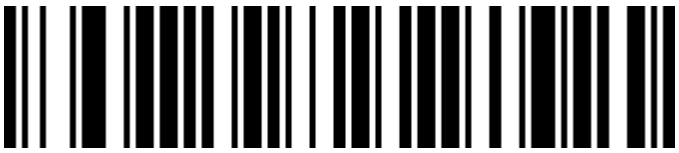
Output

Enable customized suffix output

Disable customized suffix output (default)

Edit

Clear all the suffix



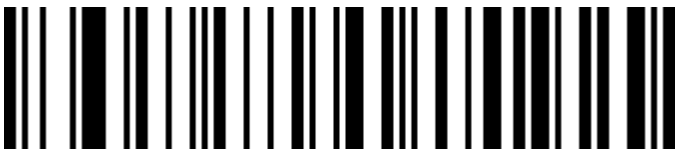
Customized suffix

(Please set according to the barcode type ID table and data , edit barcode in the appendix after scanning.)

Code ID

Output

Disable CODE ID (default)



Enable CODE ID before barcode

Enable CODE ID after barcode

Edit

Customized CODE ID

(Please set according to the barcode type ID table and data , edit barcode in the appendix after scanning.)

Clear all customized CODE ID

AIM ID

Disable barcode AIM ID （ default)

Enable AIM ID before barcode

Enable AIM ID before barcode

Barcode prefix suffix order selection

Prefix

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

Start character+Customized prefix+CODE ID+AIM ID

Suffix

Customized suffix+CODE ID+AIM ID+End character (default)

CODE ID+AIM ID+Customized suffix+End character

Character edit

The data edit function can customize the Data field of the complete barcode content into 3 fields of Start / Center / End by configuring the Start / End field length. Please configure the length and transmission configuration of the Start / End field according to actual needs.

Note: The contents of non-barcodes such as customized suffixes, start characters, end characters, CODE ID, AIM ID are not affected by the data editing function.

Transmission configuration

Transmit complete characters（default)

Only transmit first part

Only transmit Center part

Only transmit End part

character length configuration

Set first part length

Set End part length

Note: The field length configuration is in bytes and is configured using decimal data.

For example: Set the length of the Start segment to 10 bytes, scan the barcode for setting the length of the Start segment, and then scan the data in the appendix and edit the 1, 0 in the barcode to save.

Inversed barcode option

（**Mainly for 1D barcodes /Data Matrix/Aztec**）

Only normal barcode

Only inverse barcode

Both normal and inverse barcode

Barcode type

Enable / Disable all the barcodes

Enable all barcode types may result in slower decoding speed.

We suggest to open the required barcode type according to the requirement. All barcodes are on by default.

Enable all the barcode type

Disable all the barcode type

Enable / Disable all the 1D barcodes

Enable all the 1D barcode type

Disable all the 1D barcode type

Enable / Disable all the 2D barcodes

Enable all the 2D barcode type

Disable all the 2D barcode type

Codabar

Enable/Disable barcode

Enable Codabar

Disable Codabar

Codabar Start / End character

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

Send Codabar start/end character

Codabar length limited setting

Codabar length limited setting

Codabar maximum length (0~50 bits)

Code 39

Enable/Disable barcode

Enable Code 39

Disable Code 39

Code 39 parity

Disable Code 39 parity（default）

Enable Code 39 parity but don’ t send parity

Enable Code 39 parity and send parity

Code 39 Full ASCII

Enable Full ASCII

Disable Full ASCII（Factory default）

Code 39 length limited setting

Code 39 minimum length (0~50 bits)

Code 39 maximum length (0~50 bits)

Code 32 (Need enable code39)

Enable/ Disable barcode

Enable Code 32

Disable Code 32

Interleaved 2 of 5 (ITF25)

Enable/ Disable barcode

Enable ITF25

Disable ITF25

Interleaved 2 of 5 (ITF25) parity

Enable ITF25

Disable ITF25

Interleaved 2 of 5 (ITF25) parity

Disable ITF25 parity (default)

Enable ITF25 parity but don’ t send parity

Enable ITF25 parity and send parity

Interleaved 2 of 5 (ITF25) length option

ITF25 random length (6-50 bits) (default)

ITF25 6 bits length

ITF25 8 bits length

ITF25 10 bits length

ITF25 12 bits length

ITF25 14 bits length

ITF25 16 bits length

ITF25 18 bits length

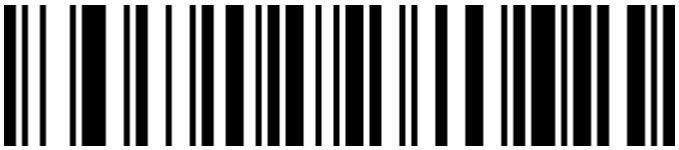
ITF25 20 bits length

ITF25 22 bits length

ITF25 24 bits length

Interleaved 2 of 5 length limited setting

Interleaved 2 of 5 minimum length (0~50 bits)



Interleaved 2 of 5 maximum length (0~50 bits)

Industrial 2 of 5

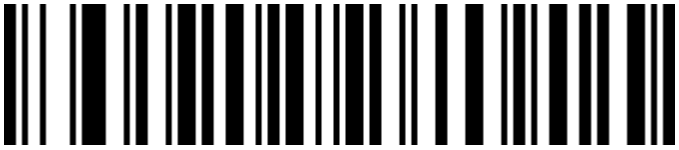
Enable/Disable barcode

Enable Industrial 2 of 5

Disable Industrial 2 of 5

Industrial 2 of 5 length limited setting

Industrial 2 of 5 minimum length (0~50 bits)



Industrial 2 of 5 maximum length (0~50 bits)

Matrix 2 of 5 (4-24 bits)

Enable/Disable barcode

Enable Matrix 2 of 5

Disable Matrix 2 of 5

Matrix 2 of 5 length limited setting

Matrix 2 of 5 minimum length (0~50 bits)

Matrix 2 of 5 maximum length (0~50 bits)

Code 93

Enable/Disable barcode

Enable Code 93

Disable Code 93

Code 93 length limited setting

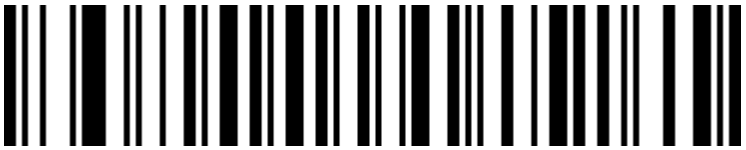
Code 93 length limited setting

Code 93 maximum length (0~50 bits)

Code 11

Enable/Disable barcode

Enable Code 11



Disable Code 11 (default)

Code 11 parity output

Enable Code 11 parity output

Disable Code 11 parity output (default)

Code 11 parity option

Disable Code 11 parity (default)

Code 11 1 bit parity

Code 11 2 bits parity

Code 11 length limited setting

Code 11 minimum length (0~50 bits)

Code 11 maximum length (0~50 bits)

Code 128

Enable Code 128

Disable Code 128

ISBT-128

Disable ISBT 128

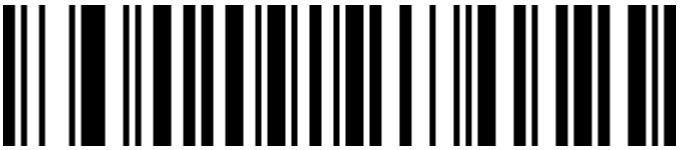
Enable ISBT 128

GS1-128

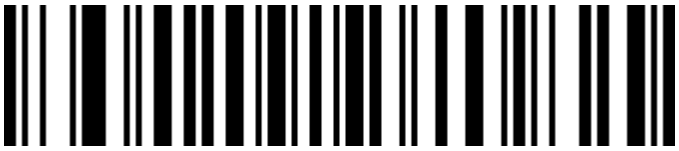
Enable GS1-128

Disable GS1-128

128 code length limited setting



128 code minimum length (0~50 bits)



128 code maximum length (0~50 bits)

UPC-A

Enable/Disable barcode

Enable UPC-A

Disable UPC-A

UPC-A parity

Send UPC-A parity (default)

Don’t send UPC-A parity

UPC-A transfer EAN-13

Enable UPC-A transfer EAN-13

Disable UPC-A transfer EAN-13 (default)

UPC-E

Enable/Disable barcode

Enable UPC-E

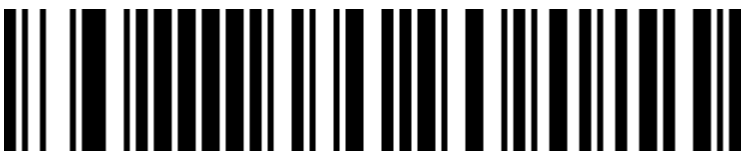
Disable UPC-E

UPC-E parity

Send UPC-E parity (default)

Don’t send UPC-E parity

UPC-E expand UPC-A



UPC-E expand UPC-A

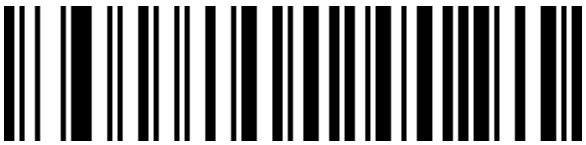
Disable UPC-E expand UPC-A (Factory default)

EAN/JAN-8

Enable EAN/JAN-8

Disable EAN/JAN-8

EAN/JAN-13



Enable EAN/JAN-13

Disable EAN/JAN-13

UPC/EAN/JAN Additional code

Ignore UPC/EAN/JAN additional code (default)

Decode UPC/EAN/JAN additional code

Adaptive UPC/EAN/JAN additional code

EAN13 transfer ISBN

Enable EAN13 transfer ISBN

Disable EAN13 transfer ISBN code (Factory default)

EAN13 transfer ISSN

Enable EAN13 transfer ISSN code

Disable EAN13 transfer ISSN code (Factory default)

GS1 DataBar (RSS14)

Enable GS1 DataBar

Disable GS1 DataBar

GS1 DataBar Limited

Enable GS1 DataBar Limited

Disable GS1 DataBar Limited

GS1 DataBar Expanded

Enable GS1 DataBar Expanded

Disable GS1 DataBar Expanded

PDF417

Enable PDF417

Disable PDF417

Micro PDF417

Enable Micro PDF417

Disable Micro PDF417

QR Code

Enable QR

Disable QR

Micro QR

Enable Micro QR

Disable Micro QR

Data Matrix

Enable Data Matrix

Disable Data Matrix

Aztec Code

Enable Aztec

Disable Aztec

Appendix

Data and Edit Barcode

0

1

2

3

4

5

6

7

8

9

A

B

C

D

E

F

Cancel current setting

Cancel a previously read string of data

Cancel a previously read string of data

Save

Barcode type ID form

Barcode type	HEX	CODE ID(Factory default)
	99	
Codabar	61	a
Code128	6A	j
Code32	3C	<
Code93	69	i
Code39	62	b
Code11	48	H
EAN-13	64	d
EAN-8	64	d
GS1 DataBar	79	y
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
UPC-A	63	c
UPC-E	63	c
ISBN	42	B

ISSN	6E	n
Aztec Code	7A	z
DataMatrix	75	u
PDF417	72	r
Micro PDF417	53	S
QR Code	51	Q
Micro QR Code	51	Q

AIM ID form

Barcode type	AIM ID	instructions
Codabar	]Fm	m: 0~1
Code128	]C0	m: 0, 1, 2, 4
Code32	]A0	
Code93	]G0	
Code39	]Am	m: 0, 1, 3, 4, 5, 7
Code11	]Hm	m: 0, 1, 3, 8, 9
EAN-13 / EAN-8	]Em	m: 0, 1, 3, 4
GS1 DataBar	]e0	
GS1-128 (EAN-128)	]C1	
Interleaved 2 of 5	]Im	m: 0, 1, 3
Matrix 2 of 5	]X0	
Industry 2 of 5	]S0	
UPC-A/ UPC-E	]Em	m: 0, 3
ISBN	]X0	
ISSN	]X0	
Aztec Code	]z0	
DataMatrix	]dm	m: 0~6
PDF417 / Micro PDF417	]Lm	m: 0~5

QR Code / Micro QR Code	]Qm	m: 0~6

Visible character ASCII form

Decimal system	Hex	Character	Decimal system	Hex	Character	Decimal system	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	s
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	_			

Control character set (USB keyboard mode)

Decimal system	Hex	Corresponding key value (control character escape off)	Corresponding key value (control characters are escaped)
0	00	Keep	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	Ctrl+H
9	09	Tab	Ctrl+I
10	0A	Enter (Performance is affected by carriage return and line feed processing configuration)	Ctrl+J
11	0B	Caps Lock	Ctrl+K
12	0C	Print Screen	Ctrl+L
13	0D	Enter (Performance is affected by carriage return and line feed processing configuration)	Ctrl+M
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	Ctrl+[
28	1C	F7	Ctrl+\
29	1D	F8	Ctrl+]
30	1E	F9	Ctrl+^
31	1F	F10	Ctrl+_

Control character set (serial port and USB virtual serial port)

Decimal system	Hex	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 functional configuration instructions and examples

Configure barcode prefix / suffix by scanning barcode, each prefix or suffix can be up to 10 characters. (To ensure that custom suffixes can be output, please configure the scanner's custom suffix / suffix output options to be on.)

Example 1.1: Add customized prefix XYZ to all types of barcodes

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

Scan the configuration code customized prefix, the barcode scanner will issue

two beeps, and then scan the appendix data and edit the 9, 9, 5, 8, 5, 9, 5, A in the barcode, Save, then complete the configuration.

If you need to modify the scanned barcode before saving, you can also scan to “cancel the previous data” or “cancel a previously read string of data”. If you need to abandon the configuration midway, scan directly cancel the current setting.

Example 1.2: Add customized prefix R to QR code

Query the appendix barcode type ID table. The HEX value of the QR code is 51. Query the visible character ASCII table. The HEX value corresponding to R is 52.

Scan the configuration code to customize the prefix, then scan the data in the appendix and edit 5,1,5,2 in the barcode, save, then complete the configuration.

Example 1.3: Cancel customized prefix of QR code

When customized suffixes are used, no additional characters are saved after the barcode type characters to save the customized suffixes for this type of barcode.

Scan the configuration code “customize the prefix”, then scan the appendix data and edit 5, 1 in the barcode, save, and complete the configuration.

Note: If there is a prefix added for all barcodes before, the QR code prefix will be restored to the prefix added for all barcodes after configuration.

If you need to clear the prefix / suffix added for various barcode types, scan “clear all customized prefixes” and “ clear all customized suffix configuration codes”.

Barcode Length Limited Setting Example

When configuring the minimum barcode length configuration, you must ensure that the configured minimum length is not bigger than the current maximum length configuration, otherwise an error will be prompted. Similarly, when configuring the maximum bar code length, you must also ensure that the configured maximum length is not less than the current minimum length configuration.

Example 2.1: Configure Code 128 barcode length to 4-12 digits

Scan “Code 128 minimum length limit”, then scan 4 in the appendix data

and edit the barcode, save,

Scan “Code 128 maximum length limit”, then scan the appendix data and edit the 1, 2 in the barcode, save, then complete the configuration.

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

Configure Interleaved 2 of 5 barcode length 14 bits can directly scan and configure the barcode “ITF25 14-bit length” for configuration, or configure the maximum and minimum barcode length:

Scan “ Interleaved 2 of 5 minimum length limit”, then scan appendix data and edit 1, 4 in barcode, save,

Scan “ Interleaved 2 of 5 maximum length limit”, then scan the appended data and edit the 1, 4 in the barcode, save, then complete the configuration.

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

Scan “ Code 39 minimum length limit”, then scan appendix data and edit 0 in barcode, save,

Scan “Code 39 maximum length limit”, then scan the appendix data and edit the 0 in the barcode, save, then complete the configuration.

USB keyboard send speed configuration example

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

Scan the “ Customize speed”, then scan the appended data and edit the 5,0 in the barcode, save it, then complete the configuration.

Warning sound

When the data transmission is abnormal, the scanner will issue four continuous alarm sounds. If this happens, please check whether the connection line is normal.

Reading tips

1. In order to obtain a good reading effect, the aiming beam emitted by the handheld scanner should be aimed at the center of the barcode, but it can be

aimed in any direction for reading.

2. Hold the scanner in front of the barcode and press the button to align the collimator beam with the center of the barcode.

3. When the handheld scanner is close to the barcode , the smaller the aiming beam ,Or the larger the aiming beam.

4. If the barcode is small, the handheld scanner should be close to the barcode. If the barcode is large, the handheld scanner should be a little far away from the barcode, so that it is easier to read the barcode correctly.

5. If the barcode is highly reflective (for example: coated surface), you may need to make the scanner at an angle to successfully scan the barcode.

Safety

When using the handheld scanner, the illumination light is strong. Do not look directly or aim at your eyes to avoid discomfort or injury.