

**ARTDEV**  
DEVELOPED FOR YOU



V3.1F

# Content

Connection Method.....	5
Enable/Disable Configuration barcode.....	5
Version No.....	5
Factory Default Setting.....	5
Data Interface.....	6
USB Keyboard Layout.....	6
Control Character Escaping.....	6
Control Character Output.....	7
CR/LF character processing(USB Keyboard).....	7
USB Keyboard Transfer Speed.....	8
Convert Case.....	8
Keyboard Layouts.....	9
Virtual Keyboard.....	13
Selection Of Host Operating System In Virtual Keyboard Mode.....	14
Barcode Encoding Configuration.....	14
Output Encoding Format.....	15
Invoice Function.....	15
Switch On/Off Invoice Function.....	15
Invoice Type.....	16
RS232 Interface Configuration.....	16
Baud Rate.....	16
Data bit, Stop bit, Parity bit.....	17
GS Control Character Replacement.....	19
Scan Mode.....	20
Auto Sense Mode off.....	20
Auto Sense Mode on.....	20
Repeat Barcode Detection.....	20
Light Configuration.....	21
LED Indicator Light.....	21
Buzzer Configuration.....	21
Volume Setting.....	21
Prompt Tone Setting.....	22
Successfully Decode Prompt Tone Setting.....	22
Successfully Decode Prompt Audio Frequency Setting (Tone).....	23
Successfully Decode Prompt Duration Setting.....	23
Error Warning Prompt Frequency Setting (Tone).....	24
Prefix and Suffix Configuration.....	24
Start Character.....	24
Terminal Character.....	25
Custom Prefix.....	25
Output Options.....	26
Edit.....	26

Custom Suffix.....	26
Output Options.....	26
Edit.....	27
Code ID.....	27
Output Options.....	27
Edit.....	28
AIM ID.....	28
Barcode Prefix And Suffix Order Selection.....	28
Prefix.....	29
Suffix.....	29
Data edition.....	29
Transmission configuration.....	30
Field Length Configuration.....	30
Inverse color barcode selection.....	31
Barcode Type Selection.....	31
Enable/Disable All barcodes.....	31
Enable/Disable All 1D barcodes.....	32
Enable/Disable All 2D barcodes.....	32
Codabar.....	32
Codabar Start/Terminal Character.....	33
Set Length Range For Codabar.....	33
Code 39.....	33
Code 39 Parity Check.....	34
Code 39 Full ASCII.....	34
Set Length Range For Code 39.....	35
Code 32(Enable code39 first).....	35
Interleaved 2 of 5 (ITF25).....	36
Interleaved 2 of 5 (ITF25) Check Bit.....	36
Interleaved 2 of 5 (ITF25) Length Selection.....	37
Set Length Range for Interleaved 2 of 5.....	38
Industrial 2 of 5.....	38
Set Length Range for Industrial 2 of 5.....	39
Matrix 2 of 5 (4-24bit).....	39
Set Length Range for Matrix 2 of 5.....	40
Code 93.....	40
Set Length Range for Code 93.....	40
Code 11.....	41
Code 11 Parity Check Output.....	41
Code 11 Parity Selection.....	41
Set Length Range for Code 11.....	42
Code 128.....	42
GS1-128.....	42
Set Length Range for CODE-128.....	43
UPC-A.....	43

UPC-A Check Bit.....	43
UPC-A Convert to EAN-13.....	44
UPC-E.....	44
UPC-E Check Bit.....	44
UPC-E Expand to UPC-A.....	45
EAN/JAN-8.....	45
EAN-8 Convert to EAN-13.....	45
EAN/JAN-13.....	46
UPC/EAN/JAN Add on code.....	46
EAN13 Convert to ISBN.....	46
EAN13 Convert to ISSN.....	47
GS1 DataBar (RSS14).....	47
GS1 DataBar Limited.....	47
GS1 DataBar Expanded.....	48
PDF417.....	48
Micro PDF417.....	49
QR Code.....	49
QR Code URL Link.....	49
Micro QR.....	50
Data Matrix.....	50
Aztec Code.....	50
Appendix.....	51
Data and Edit barcode.....	51
Barcode type ID Table.....	53
AIM ID Table.....	54
Visible Character ASCII Table.....	55
Control Character Set (USB keyboard mode).....	56
Control Character Set (RS232,USB,VCP).....	57
Configuration of instructions and examples.....	58
Example for user-defined prefix and suffix:.....	58
Example for barcode length range configuration.....	59
Example for USB keyboard transmit speed configuration.....	60

## Connection Method

Put scanner connect the dedicated joint, on the other side plug into PC port.  
If the barcode configuration was turned off, please turn on the barcode configuration .

## Enable/Disable Configuration barcode

Scanner can set up when enabled barcode function.In contrast, the scanner can't set up if disabled. Need to switch on and set up again.



Enable Configuration Function (Default)



Disable Configuration Function

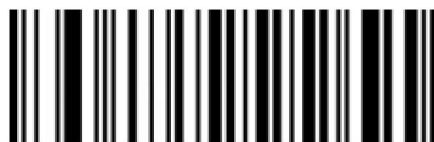
## Version No.



Version Number

## Factory Default Setting

Scanning the below barcode can restore the scanner the factory default.



Restore Factory Default Configuration

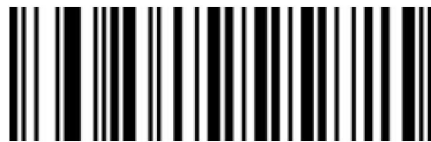
## Data Interface

This scanner support USB-KBW, RS232, USB Virtual Com. Scanning the below barcode is USB-KBW mode.



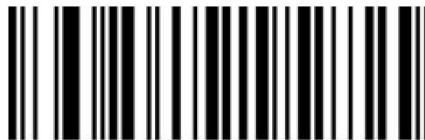
USB-KBW (Default)

Scanning the below barcode is RS 232 mode.



RS232

Scanning the below barcode is USB Virtual Com mode(driver is needed).



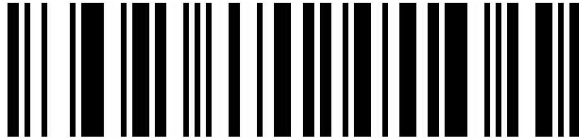
USB Virtual Com

## USB Keyboard Layout

### Control Character Escaping

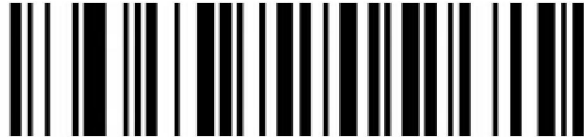


Enable

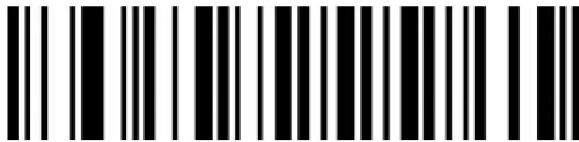


Disable (Default)

### Control Character Output



Disable

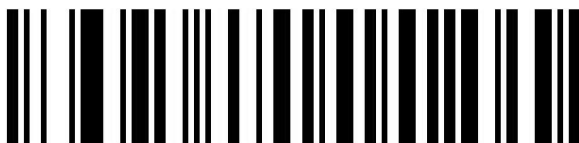


Enable

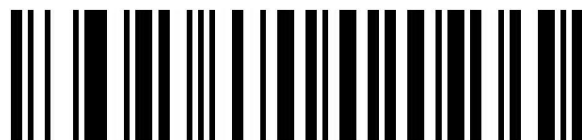
### CR/LF character processing(USB Keyboard)



Only 0A(LF) line feed



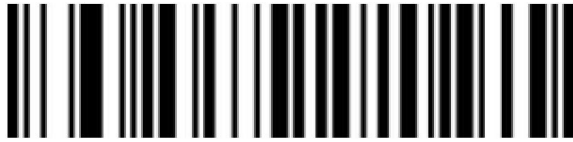
Only 0D (CR) line feed (Default)



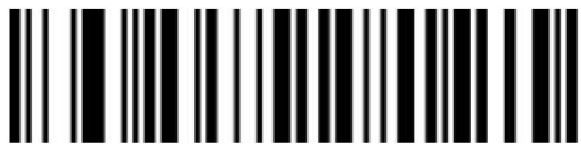
All convert to 0A (LF)/0D(CR)

## USB Keyboard Transfer Speed

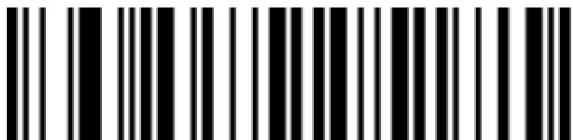
Used for set up scanning speed under USB keyboard mode. If PC in a lower function, please choose low scanning speed to make sure its accuracy.



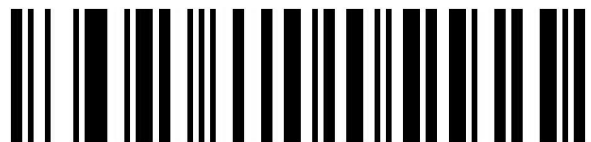
Low (Default)



Middle



High

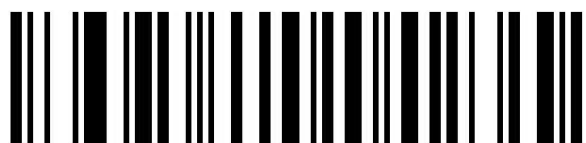


Custom Sending Speed (2ms~50ms)

## Convert Case



Original data (Default)

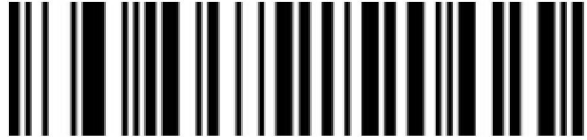


Case Inversion





All Convert to Upper Case

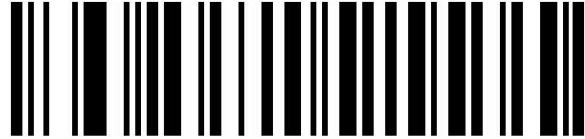


All Convert to Lower case

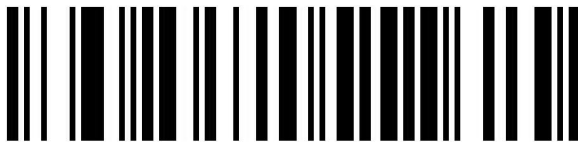
## Keyboard Layouts



English (United States)  
(Default)



French (France)



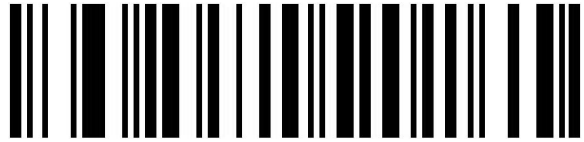
Italian (Italy)



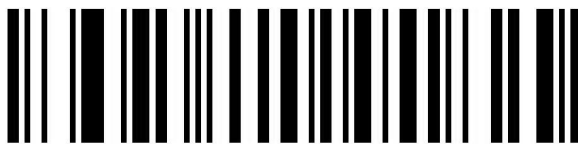
Italian 142 (Italy)



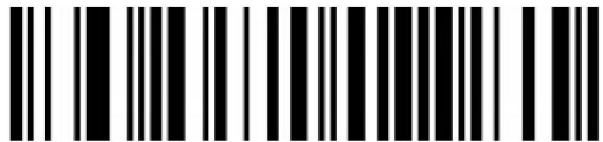
German (Germany)



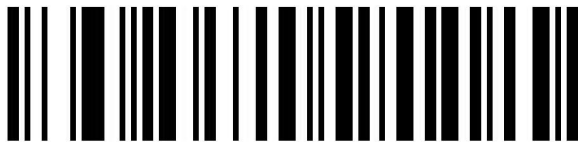
Spanish (Spain)



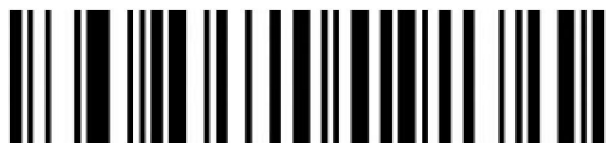
Spanish (Latin America)



Finnish



Japanese



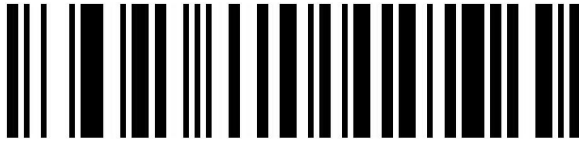
Russian (MS)



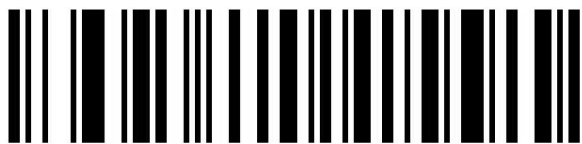
Russian (typewriter)



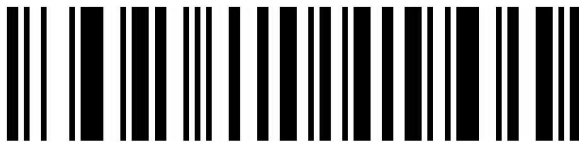
Arabic (101)



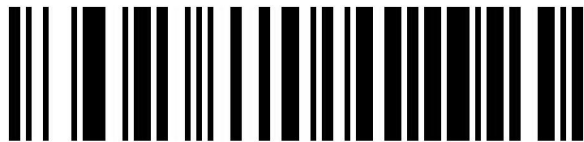
Irish



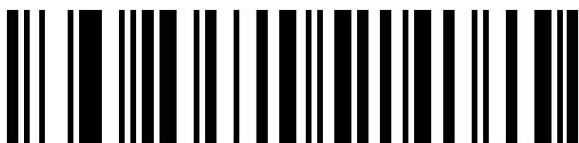
Polish (214)



Polish (Programmers)



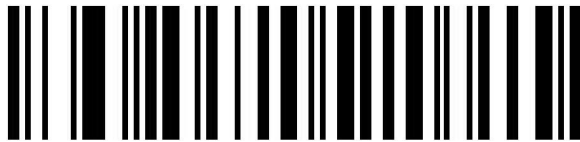
Dutch (Netherlands)



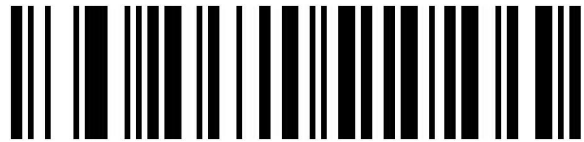
Czech (QWERTZ)



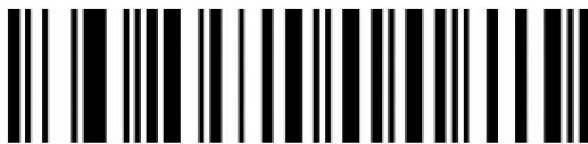
Portuguese (Portugal)



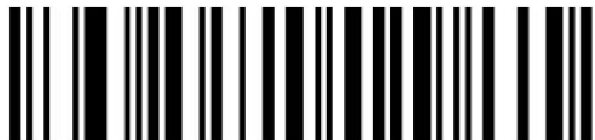
Portuguese (Brazil)



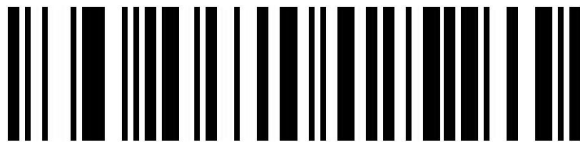
Swedish (Sweden)



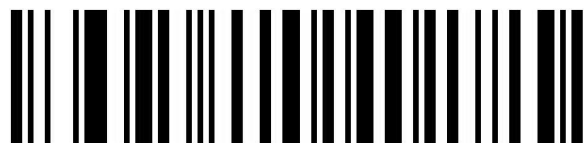
Turkish Q



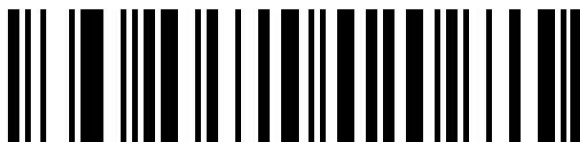
Turkish F



Greek (MS)



French (Belgium)



English (UK)

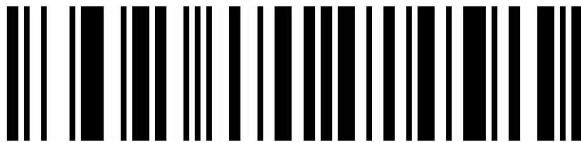
## Virtual Keyboard

Mode 1: Do not support output the characters between 0x20 to 0xFF by using the virtual keyboard, under the current keyboard layout.

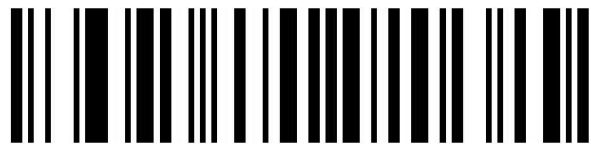
The characters between 0x00~0x1F are output according to the definition of control characters (Refer to Appendix)

Model 2: Support output the characters between 0x20 to 0xFF by using the virtual keyboard. The characters between 0x00~0x1F are output according to the definition of control characters (Refer to Appendix)

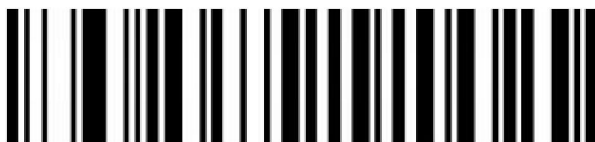
Model 3: Support output the characters between 0x00 ~ 0xFF by using the virtual keyboard



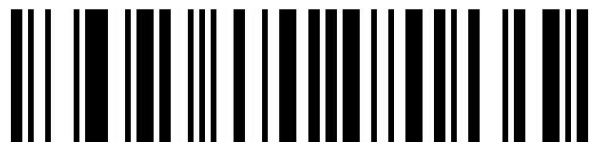
Turn Off (Default)



Turn On (Mode 1)

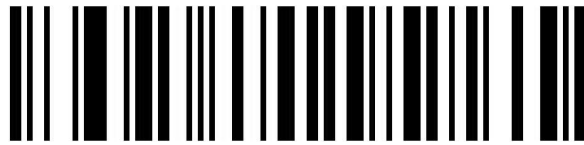


Turn On (Mode 2)

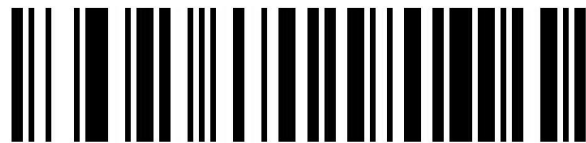


Turn On (Mode 3)

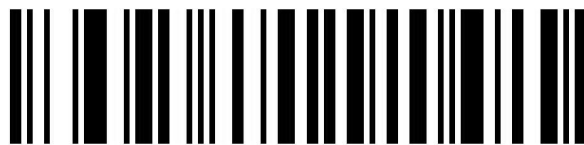
## Selection Of Host Operating System In Virtual Keyboard Mode



WINDOWS (Default)



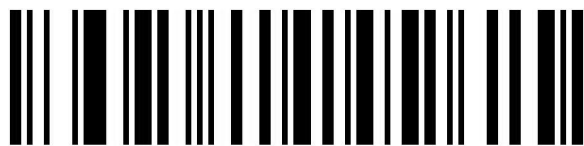
MAC OS



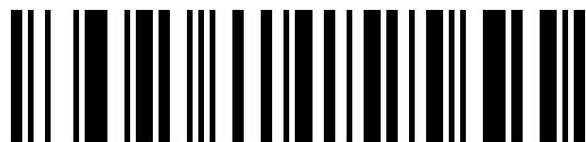
LINUX

## Barcode Encoding Configuration

In a normal situation , the barcode encoding was identified accurately.  
Please use manual to set up if encountered peculiar characters, that make sure output barcode content correctly.



Auto (Default)



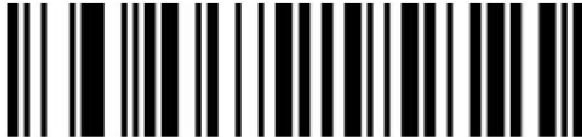
KOI8-R code

## Output Encoding Format

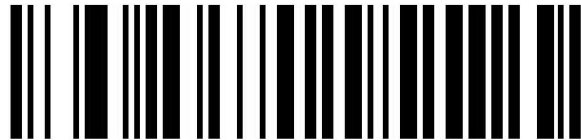
To output correctly in the specified encoding format.

For example: It's GBK code when output in the Notepad /Excel; It's UNICODE when output in the Word.

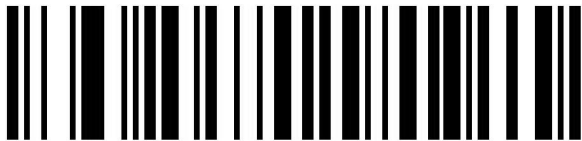
When output is English/Latin-1 encode format, the output mode will affected by the function switch of virtual keyboard. When output is GBK/UNICODE, the output mode will compelled to virtual keyboard.



English/Latin-1 (Default)



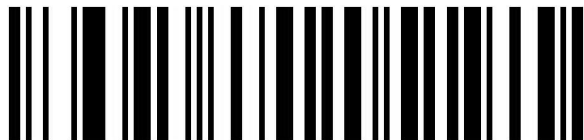
GBK (Notepad/excel)



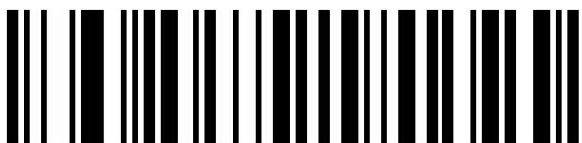
UNICODE (Word)

## Invoice Function

### Switch On/Off Invoice Function



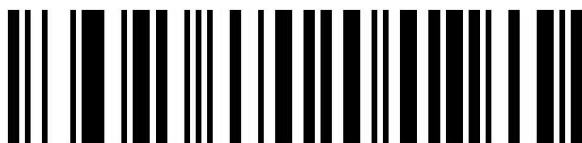
OFF (Default)



On

To ensure the correct output of the invoice content, when switch on the invoice code function, please configure the Chinese character output mode to GBK code (Notepad/Excel), and at the same time switch off like Code ID, User-defined prefix/suffix, and starting character to change original barcode content function.

## Invoice Type



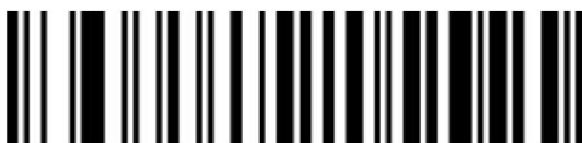
VAT Invoice (Special) (Default)



VAT Invoice (Normal)

## RS232 Interface Configuration

### Baud Rate



4800

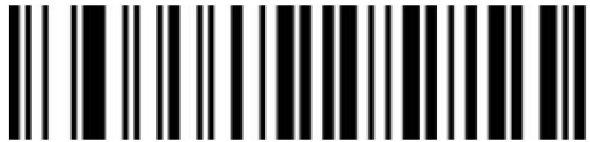


9600 (Default)

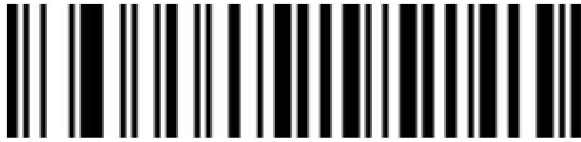


19200





38400

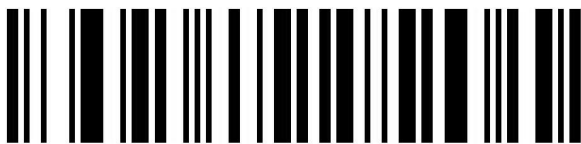


57600

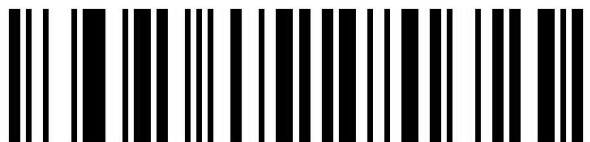


115200

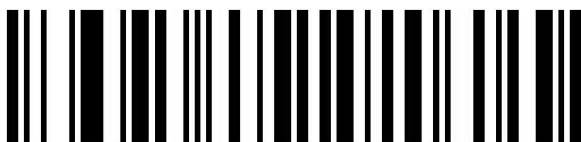
### Data bit, Stop bit, Parity bit



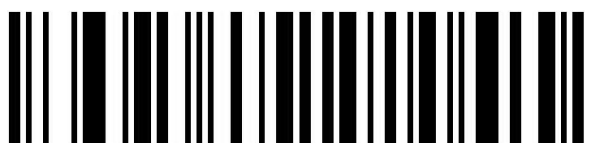
7 Bit, 1 Stop Bit, No Parity



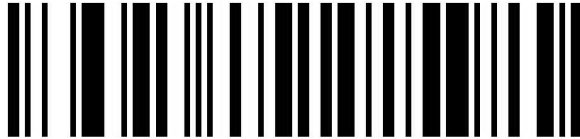
7 Bit, 1 Stop Bit, Even Parity



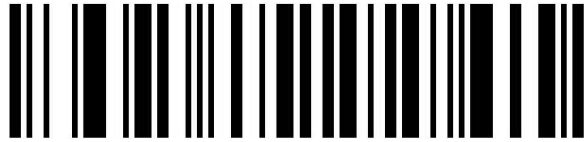
7 Bit, 1 Stop Bit, Odd Parity



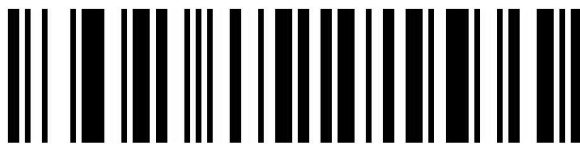
7 Bit, 2 Stop Bit, No Parity



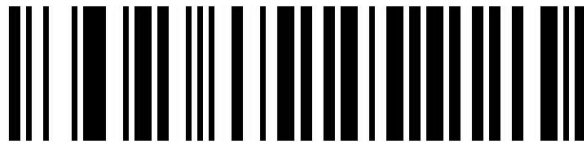
7 Bit, 2 Stop Bit, Even Parity



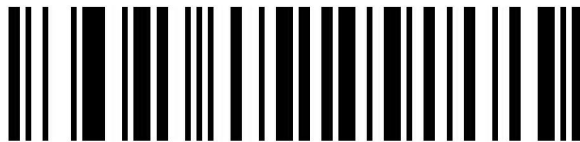
7 Bit, 2 Stop Bit, Odd Parity



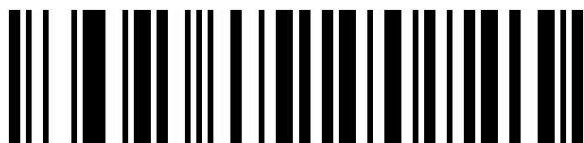
8 Bit, 1 Stop Bit, No Parity(Default)



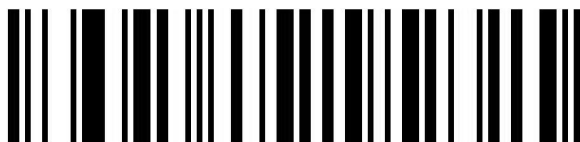
8 Bit, 1 Stop Bit, Even Parity



8 Bit, 1 Stop Bit, Odd Parity



8 Bit, 2 stop Bit, No Parity

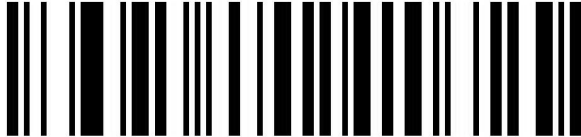


8 Bit, 2 Stop Bit, Even Parity



8 Bit, 2 Stop Bit, Odd Parity

## GS Control Character Replacement

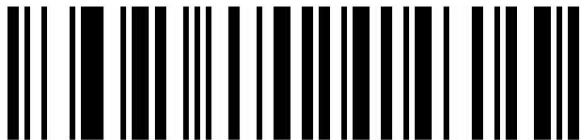


Do Not Replace (Default)

When output character is “Ç”, please first to scan” Virtual keyboard (Mode one or Mode two or Mode three)”.



Replace Ç



Replace |



Replace ^]



Replace ]

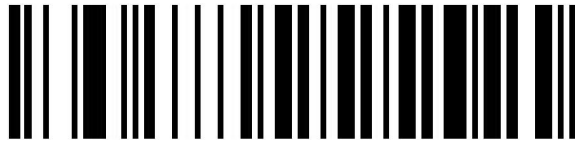


Replace <GS>

## Scan Mode

### Auto Sense Mode off

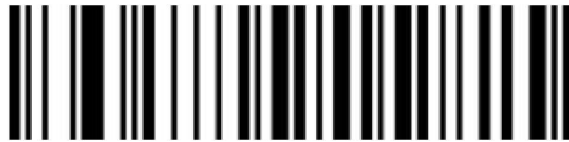
Decoding by pulling the trigger of the scanner when auto sense mode is off. It's default mode.



Off (Default)

### Auto Sense Mode on

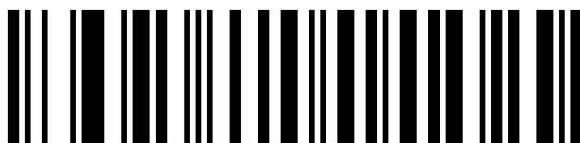
The scanner can sense barcode for decoding automatically.



On

### Repeat Barcode Detection

Use for decode same barcode of interval time, it will decode only one time if not exceeded set time.



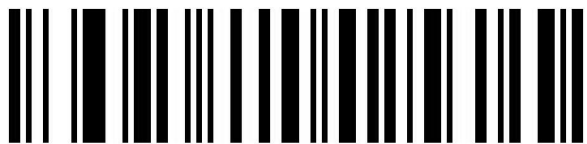
500ms



750ms (Default)



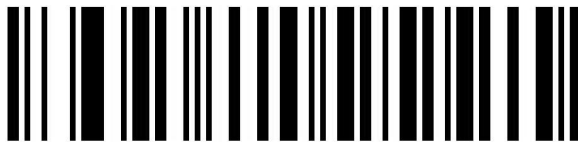
1s



2s

## Light Configuration

### LED Indicator Light



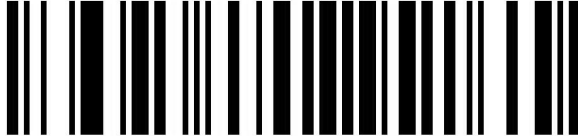
Off



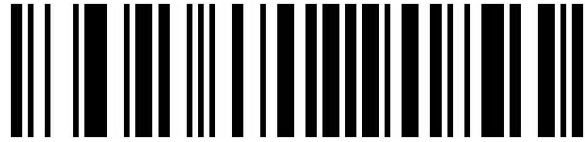
On (Default)

## Buzzer Configuration

### Volume Setting

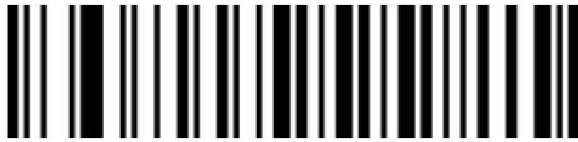


Low

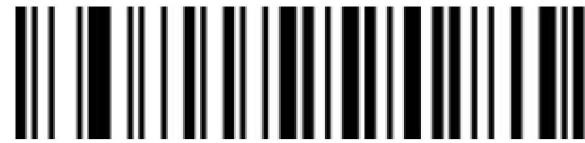


High (Default)

### Prompt Tone Setting



Off

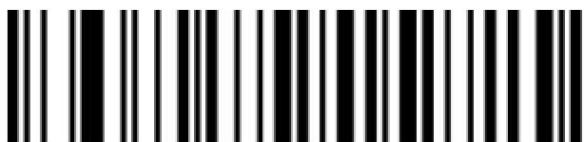


On (Default)

### Successfully Decode Prompt Tone Setting



Off

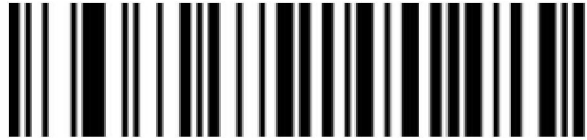


On (Default)

## Successfully Decode Prompt Audio Frequency Setting (Tone)



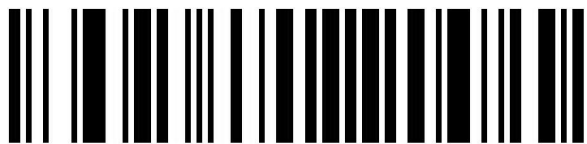
1 (Default)



2



3

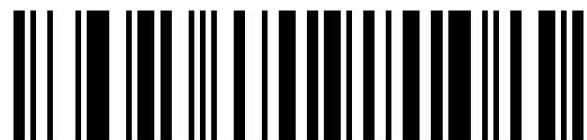


Custom

## Successfully Decode Prompt Duration Setting



Long (Default)



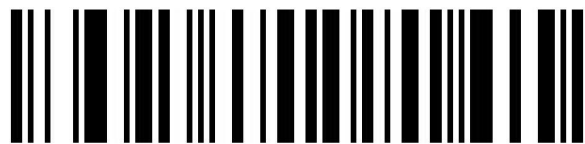
Short

## Error Warning Prompt Frequency Setting (Tone)

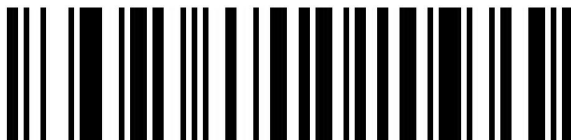
There will be four consecutive error warning tones if data transmission fails, and a single error warning tone when the unrecognized configuration code is scanned.



Low (Default)



Middle



High

## Prefix and Suffix Configuration

### Start Character



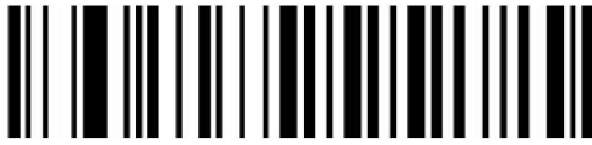
None (Default)



STX



## Terminal Character



None



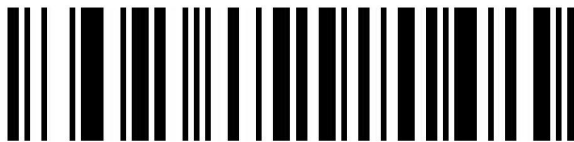
Enter



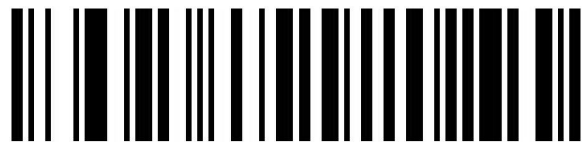
LF



CR/LF (Default)



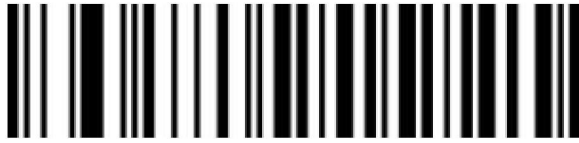
TAB



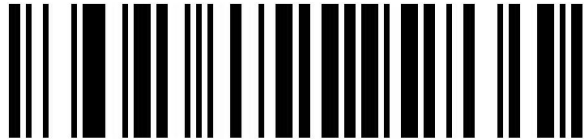
ETX

## Custom Prefix

## Output Options

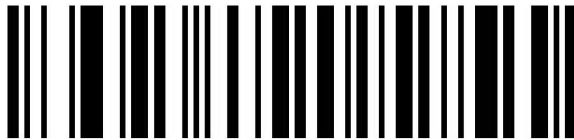


On

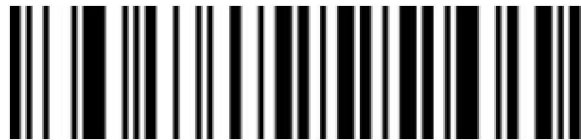


Off (Default)

## Edit



Clear All Custom Prefix

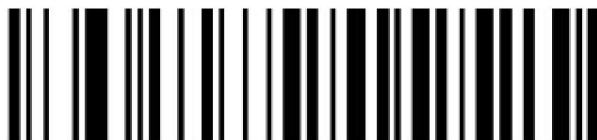


Set Custom Prefix

(Please set up ID Table ,Data, and edit barcode refer to the appendix after scanning.)

## Custom Suffix

### Output Options

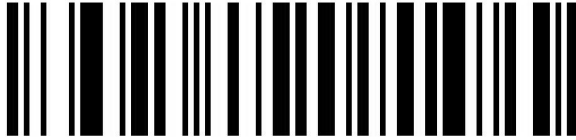


On

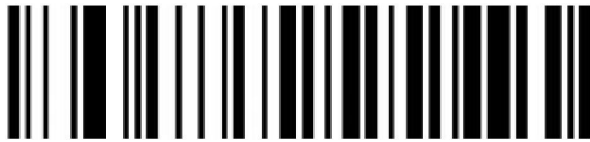


Off (Default)

## Edit



Clear All Custom Suffix

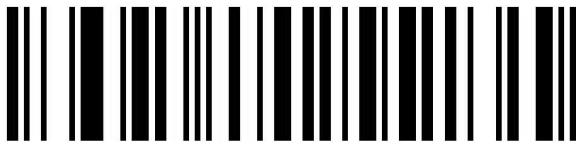


Set Custom Suffix

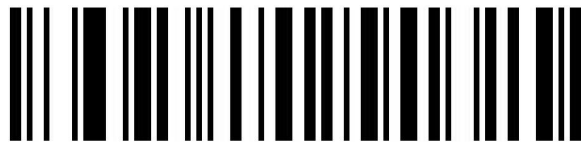
(Please set up ID Table ,Data, and edit barcode refer to the appendix after scanning.)

## Code ID

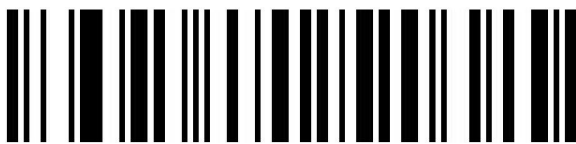
### Output Options



Off (Default)

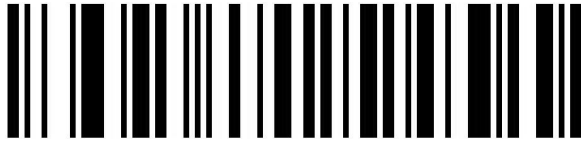


Before Switch on



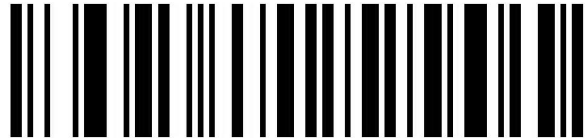
After Switch On

## Edit



Set Custom Prefix

(Please set up ID Table ,Data, and edit barcode refer to the appendix after scanning.)

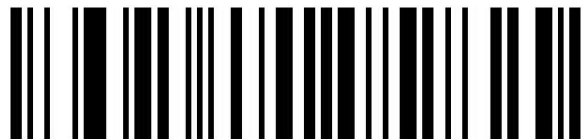


Clear All Custom Prefix

## AIM ID



Off (Default)



Before Switch On



After Switch On

## Barcode Prefix And Suffix Order Selection

## Prefix



Start Character+CODE ID+AIM ID+Custom Prefix (Default)

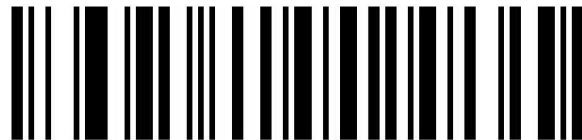


Start Character+ Custom Prefix + CODE ID+AIM ID

## Suffix



Custom Suffix+CODE ID+AIM ID+Terminal Character (Default)



CODE ID+AIM ID+Custom Suffix+Terminal Character

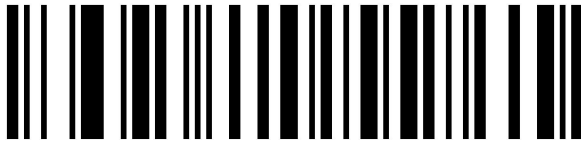
## Data edition

The Data editing function can customize the barcode content into the three fields of Start/Center/End by configuring the Start/End field length.

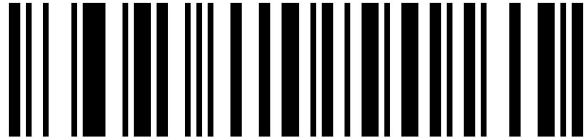
Please configure the length of the Start/End field and the transport configuration according to the actual needs.

Note: Custom presuffix, start, end, CODE ID, AIM ID and other non-barcode content will not be affected by the data editing function.

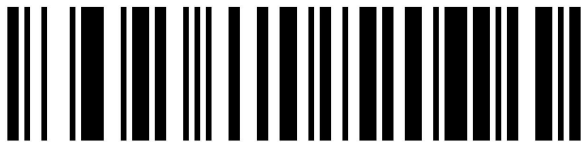
## Transmission configuration



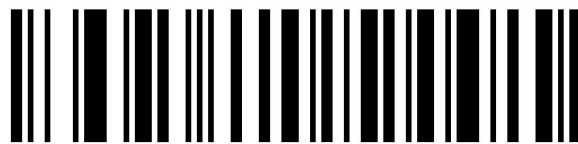
Transfer the full Data field



Only transfer the Start field

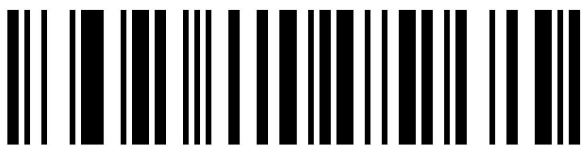


Only transfer the Center field

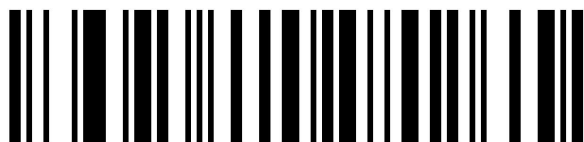


Only transfer the End field

## Field Length Configuration



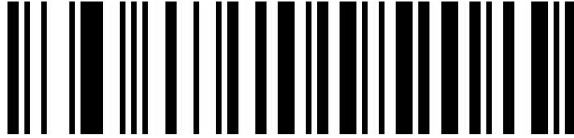
Set Start field length



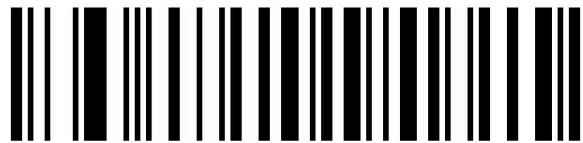
Set End field length

## Inverse color barcode selection

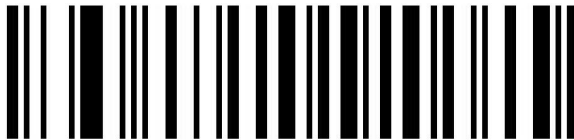
(Only 1D/DataMatrix/Aztec)



Normal Color



Inverse Color

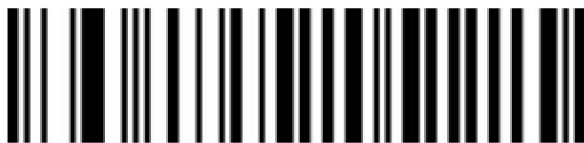


Both (Normal/Inverse)

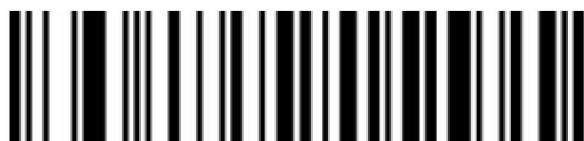
## Barcode Type Selection

### Enable/Disable All barcodes

Enable all barcodes will low down decoding speed. So, we suggest you switch on scanner when needed. (Default is switch on state)

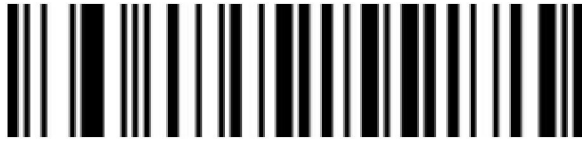


Enable All

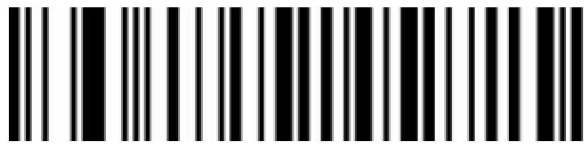


Disable All

## Enable/Disable All 1D barcodes

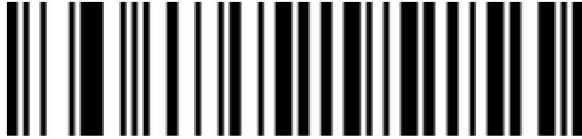


Enable All



Disable All

## Enable/Disable All 2D barcodes



Enable All



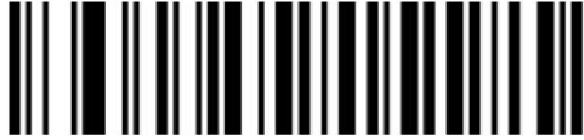
Disable All

## Codabar



Enable



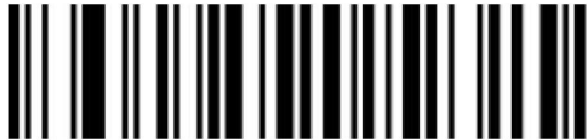


Disable

### Codabar Start/Terminal Character

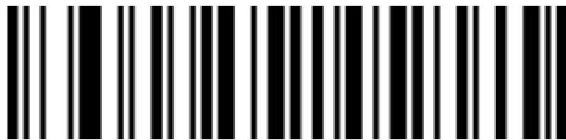


Not Send Codabar Start/Terminal Character (Default)

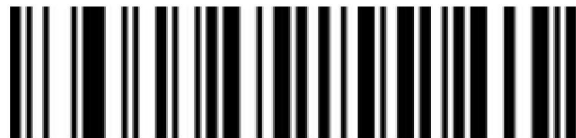


Send Codabar Start/Terminal Character

### Set Length Range For Codabar

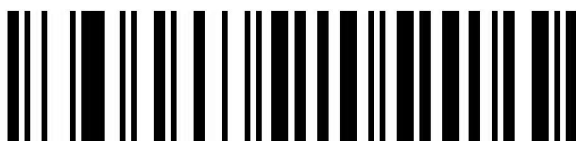


Minimum Length (0~50bit)

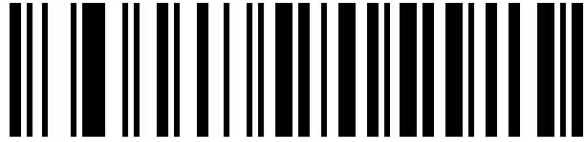


Maximum Length (0~50bit)

### Code 39

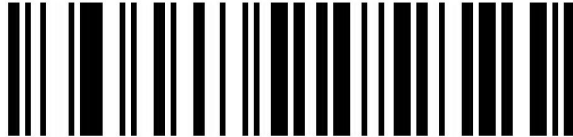


Enable

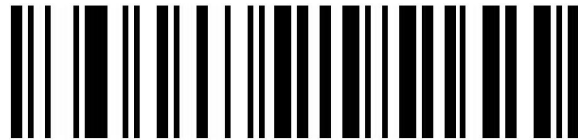


Disable

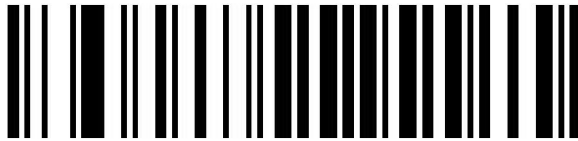
### Code 39 Parity Check



Disable (Default)

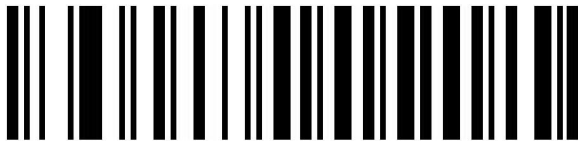


Enable But Not Transfer

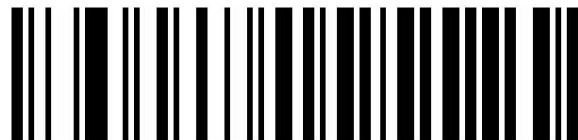


Enable & Transfer

### Code 39 Full ASCII

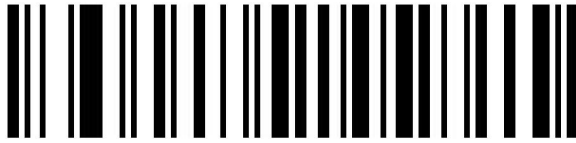


Enable

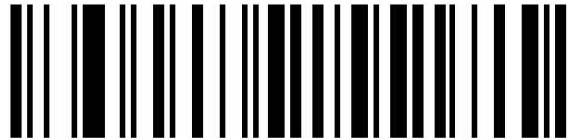


Disable (Default)

### Set Length Range For Code 39

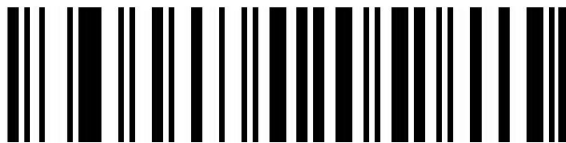


Minimum Length (0~50bit)

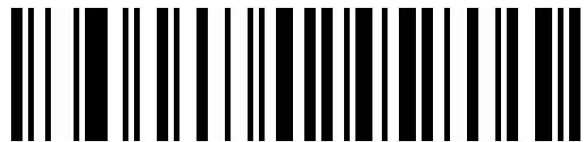


Maximum (0~50bit)

### Code 32(Enable code39 first)

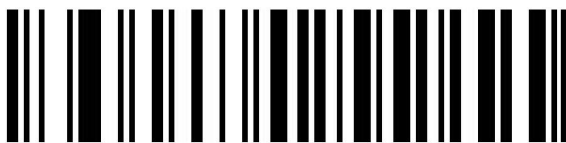


Enable

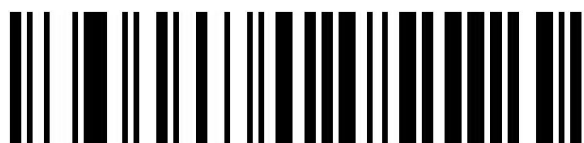


Disable

### Code 32 Prefix



Enable



Disable

## Interleaved 2 of 5 (ITF25)

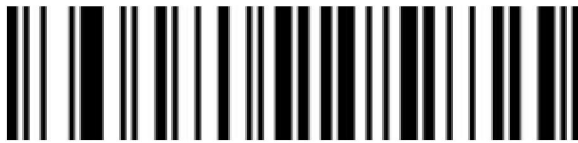


Enable

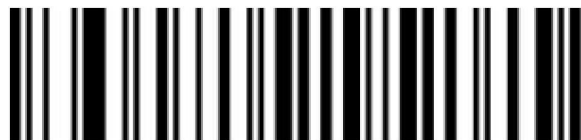


Disable

## Interleaved 2 of 5 (ITF25) Check Bit



Disable Check Bit (Default)

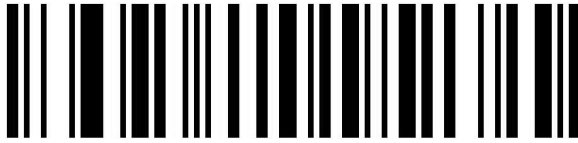


Enable Check and Not Send Check Bit

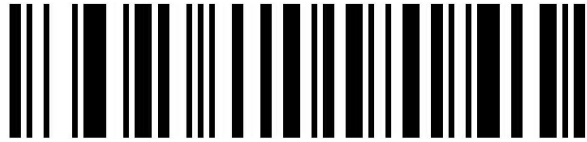


Enable Check & Send Check Bit

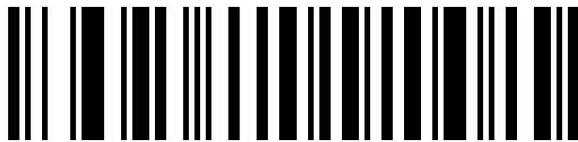
## Interleaved 2 of 5 (ITF25) Length Selection



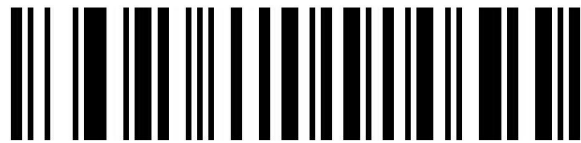
Random Length (6-50bit) (Default)



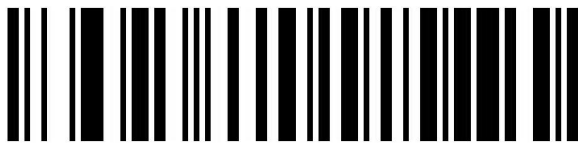
6 Bit



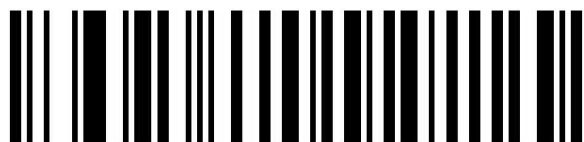
8 Bit



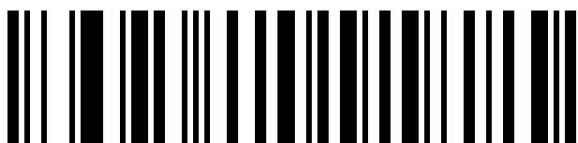
10 Bit



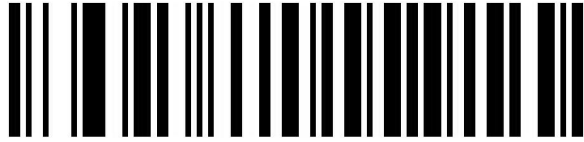
12 Bit



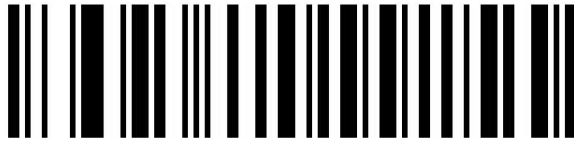
14 Bit



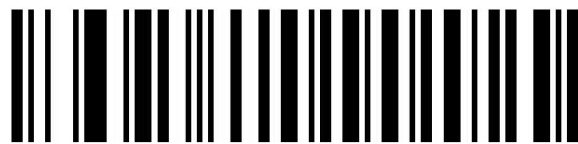
16 Bit



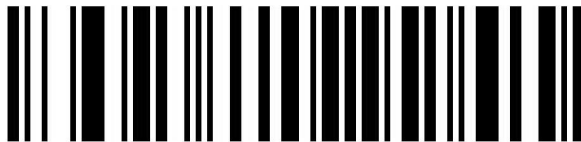
18 Bit



20 Bit

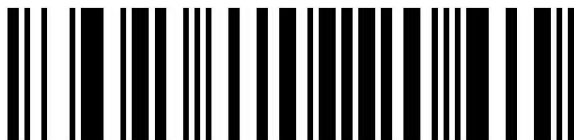


22 Bit

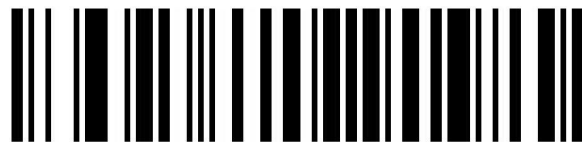


24 Bit

### Set Length Range for Interleaved 2 of 5

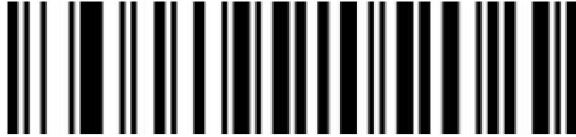


Minimum (0~50bit)

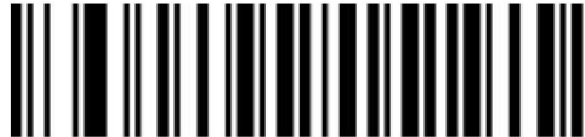


Maximum (0~50bit)

### Industrial 2 of 5



Enable



Disable

### Set Length Range for Industrial 2 of 5



Minimum (0~50bit)

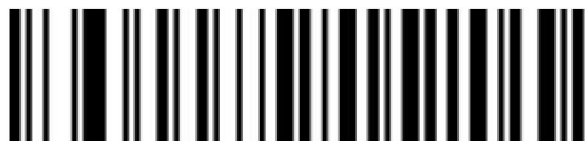


Maximum (0~50bit)

### Matrix 2 of 5 (4-24bit)



Enable

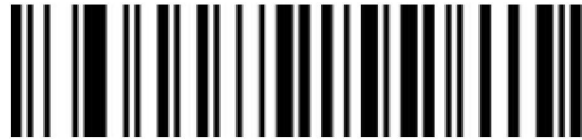


Disable

## Set Length Range for Matrix 2 of 5



Minimum (0~50bit)

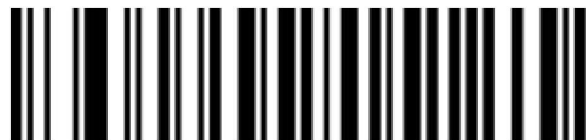


Maximum (0~50bit)

## Code 93



Enable

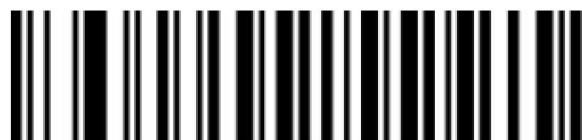


Disable

## Set Length Range for Code 93



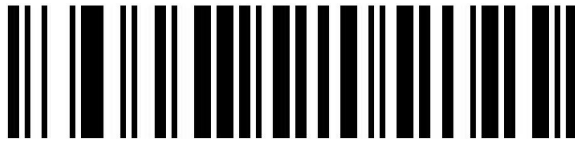
Minimum (0~50bit)



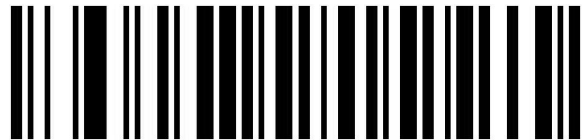
Maximum (0~50bit)



## Code 11

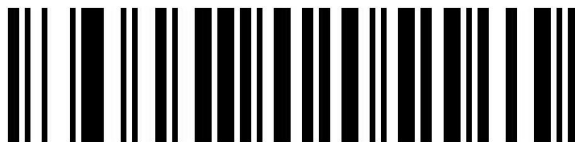


Enable

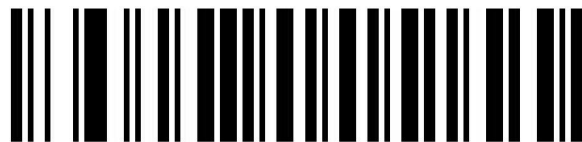


Disable (Default)

## Code 11 Parity Check Output

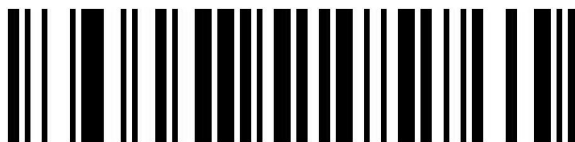


Enable

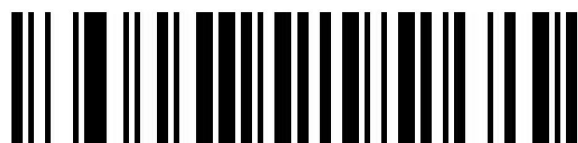


Disable (Default)

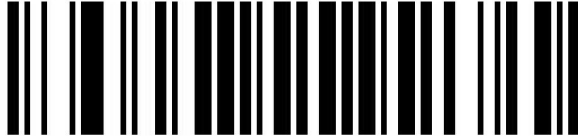
## Code 11 Parity Selection



Disable (Default)

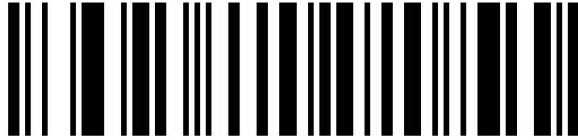


1 Bit

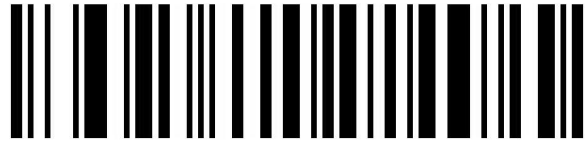


2 Bit

### Set Length Range for Code 11

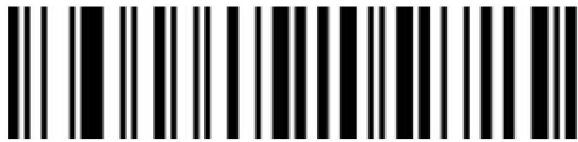


Minimum (0~50bit)



Maximum (0~50bit)

### Code 128

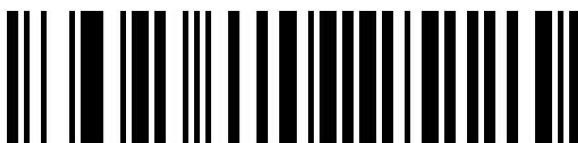


Enable

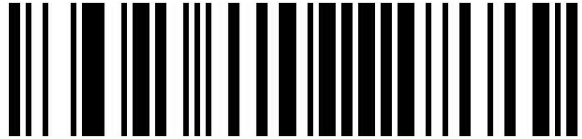


Disable

### GS1-128



Enable

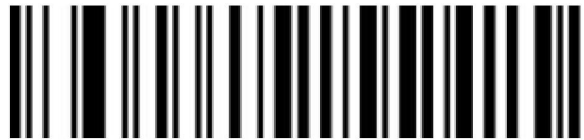


Disable

### Set Length Range for CODE-128

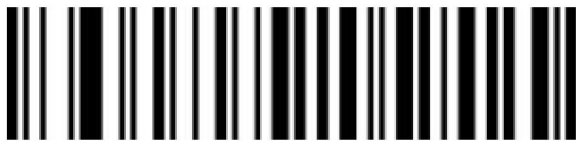


Minimum (0~50bit)



Maximum (0~50bit)

### UPC-A



Enable

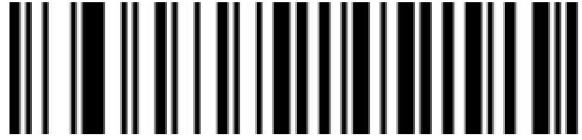


Disable

### UPC-A Check Bit

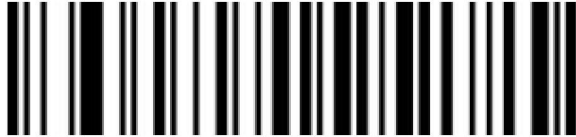


Send UPC-A Check Bit (Default)

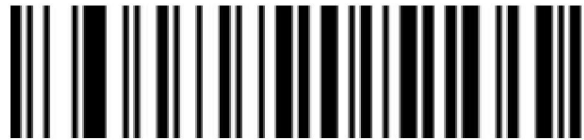


Not send UPC-A Check Bit

### UPC-A Convert to EAN-13

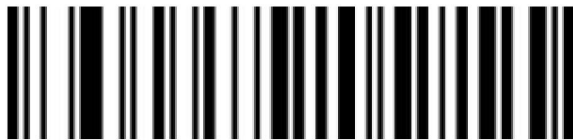


Enable UPC-A convert to EAN-13

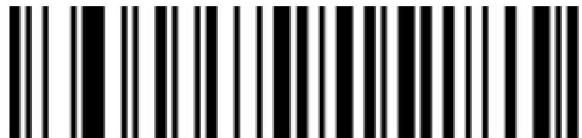


Disable UPC-A convert to EAN-13 (Default)

### UPC-E



Enable



Disable

### UPC-E Check Bit



Send UPC-E Check Bit (Default)

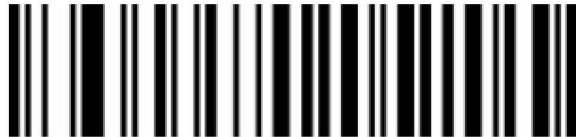


Not send UPC-E Check bit

### UPC-E Expand to UPC-A



Enable

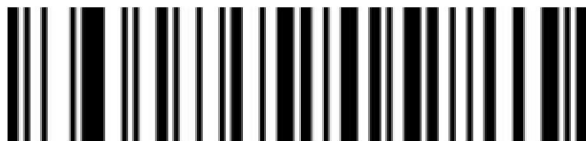


Disable (Default)

### EAN/JAN-8



Enable



Disable

### EAN-8 Convert to EAN-13

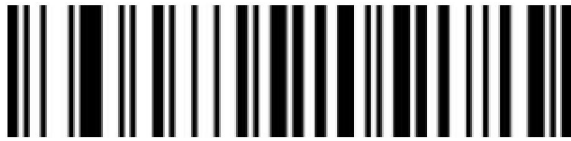


Disable EAN-8 convert to EAN-13

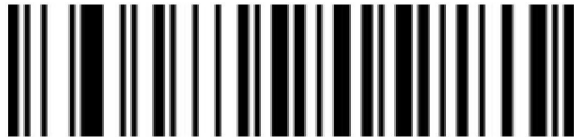


Enable EAN-8 convert to EAN-13

### **EAN/JAN-13**

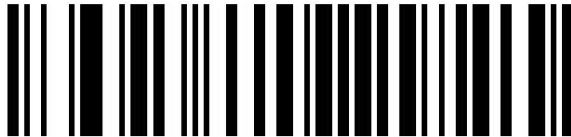


Enable

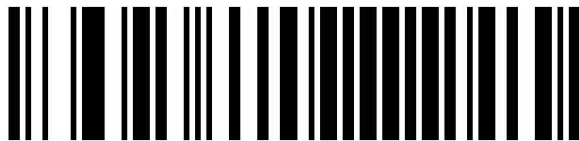


Disable

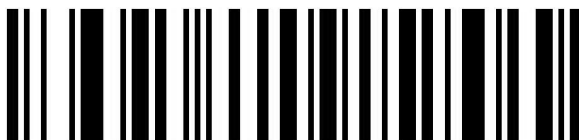
### **UPC/EAN/JAN Add on code**



Ignore UPC/EAN/JAN (Default)



Decode UPC/EAN/JAN

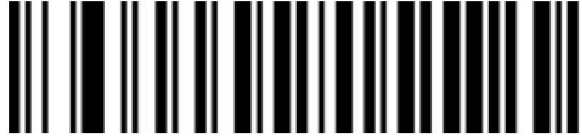


Custom UPC/EAN/JANA add on code

### **EAN13 Convert to ISBN**

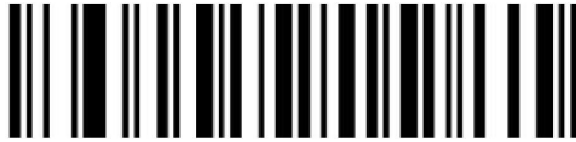


Enable

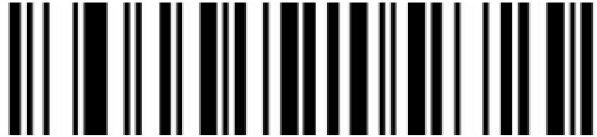


Disable (Default)

### **EAN13 Convert to ISSN**

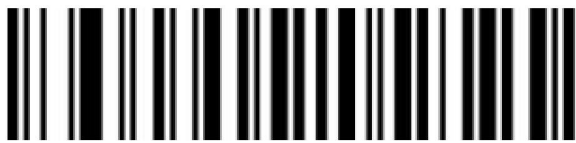


Enable

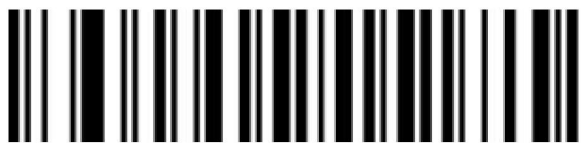


Disable (Default)

### **GS1 DataBar (RSS14)**



Enable

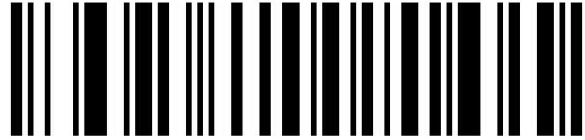


Disable

### **GS1 DataBar Limited**

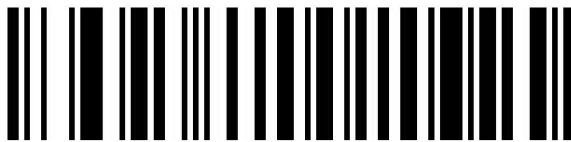


Enable

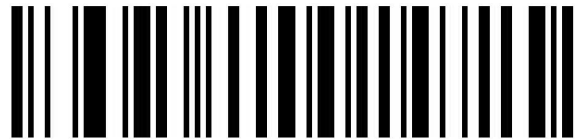


Disable

### GS1 DataBar Expanded



Enable



Disable

### PDF417



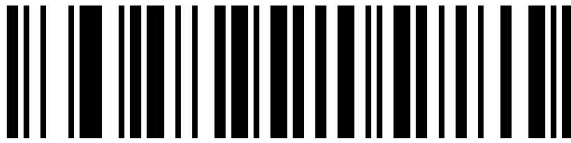
Enable



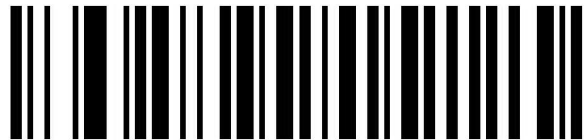
Disable



## Micro PDF417

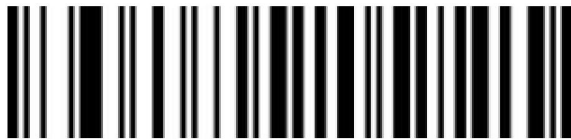


Enable



Disable

## QR Code

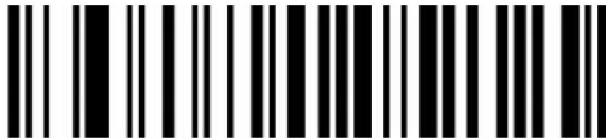


Enable



Disable

## QR Code URL Link

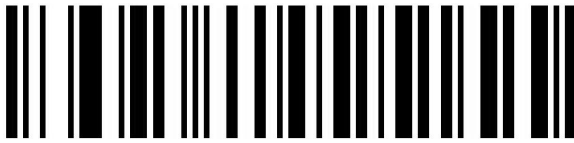


Disable

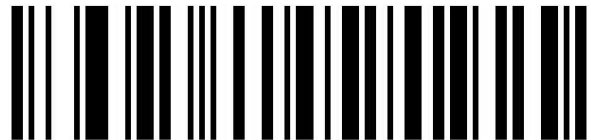


Enable

## Micro QR



Enable



Disable

## Data Matrix

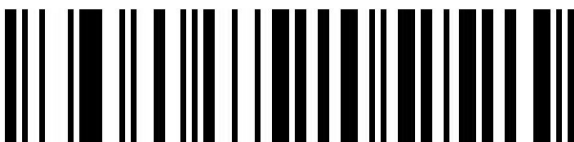


Enable



Disable

## Aztec Code



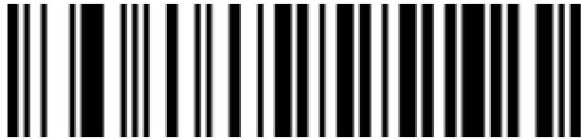
Enable



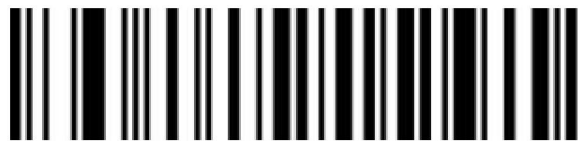
Disable

# Appendix

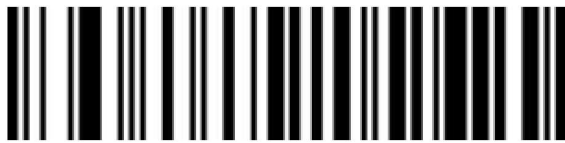
## Data and Edit barcode



0



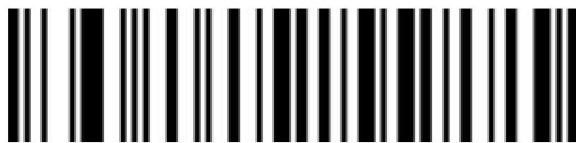
1



2



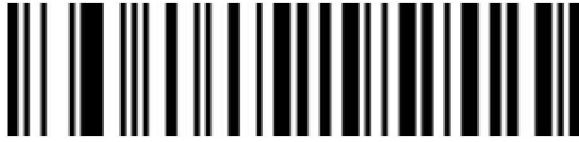
3



4



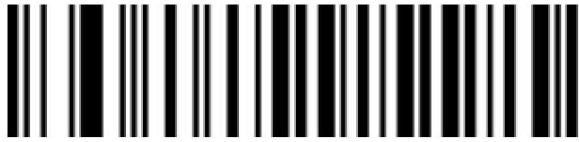
5



6



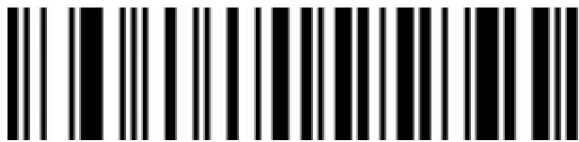
7



8



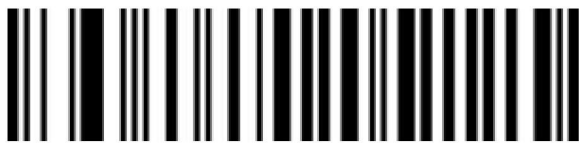
9



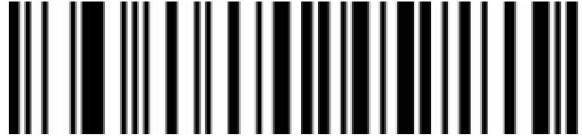
A



B



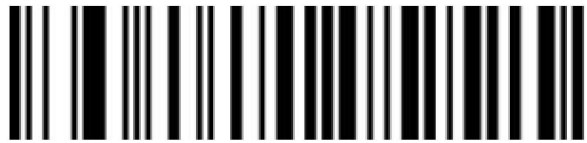
C



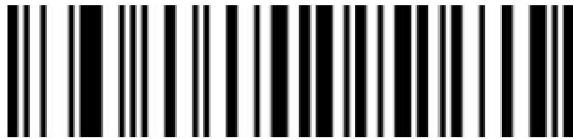
D



E



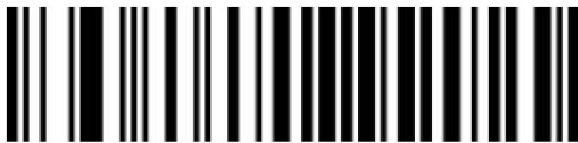
F



Cancel current setting



Cancel a string of data from previous read



Cancel the data from previous read



Save

## Barcode type ID Table

Code type	HEX	CODE
All codes	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	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/IATA	44	D
UPC-A	63	c
UPC-E	63	c
ISBN	42	B
ISSN	6E	n
MSI	6D	m
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 Table

Code type	AIM ID	Description
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 Table

Decimal	Hexadecimal	Character	Decimal	Hexadecimal	Character
32	20	<SPACE>	80	50	P
33	21	!	81	51	Q
34	22	"	82	52	R
35	23	#	83	53	S
36	24	\$	84	54	T
37	25	%	85	55	U
38	26	&	86	56	V
39	27	'	87	57	W
40	28	(	88	58	X
41	29	)	89	59	Y
42	2A	*	90	5A	Z
43	2B	+	91	5B	[
44	2C	,	92	5C	\
45	2D	-	93	5D	]
46	2E	.	94	5E	^
47	2F	/	95	5F	_
48	30	0	96	60	`
49	31	1	97	61	a
50	32	2	98	62	b
51	33	3	99	63	c
52	34	4	100	64	d
53	35	5	101	65	e
54	36	6	102	66	f
55	37	7	103	67	g
56	38	8	104	68	h
57	39	9	105	69	i
58	3A	:	106	6A	j

59	3B	;	107	6B	k
60	3C	<	108	6C	l
61	3D	=	109	6D	m
62	3E	>	110	6E	n
63	3F	?	111	6F	o
64	40	@	112	70	p
65	41	A	113	71	q
66	42	B	114	72	r
67	43	C	115	73	s
68	44	D	116	74	t
69	45	E	117	75	u
70	46	F	118	76	v
71	47	G	119	77	w
72	48	H	120	78	x
73	49	I	121	79	y
74	4A	J	122	7A	z
75	4B	K	123	7B	{
76	4C	L	124	7C	
77	4D	M	125	7D	}
78	4E	N	126	7E	~
79	4F	O			

### Control Character Set (USB keyboard mode)

Decimal	Hexadecimal	Corresponding key value (disable CODE ID)	Corresponding key value (enable CODE ID)
0	00	reserve	Ctrl+@
1	01	Insert	Ctrl+A
2	02	Home	Ctrl+B
3	03	End	Ctrl+C
4	04	Delete	Ctrl+D
5	05	Page Up	Ctrl+E
6	06	Page Down	Ctrl+F
7	07	ESC	Ctrl+G
8	08	Backspace	Ctrl+H
9	09	Tab	Ctrl+I
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)	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 (RS232,USB,VCP)

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 of instructions and examples

### 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:

Set "XYZ" as prefix on all codes

Before set up , please search HEX value for all codes is "99" (Appendix: barcode type ID Table); find "X" "Y" "Z" HEX value is "58" "59" "5A" (Appendix: Visible Character ASCII Table)

Step: Set "User-defined Prefix"; Set " 9" "9" "5" "8" "5" "9" "5" "A" (Appendix: data and edit barcode); Set "Save".

If you want to revise the scanned barcode before save, please set up "Cancel the data from previous read" or "Cancel a string of data from previous read" to reset. If you want to give up setting scan , then scan " Cancel current setting".

#### Example 1.2:

Set "R" as prefix on QR

Before set up, please search HEX value for QR code is "51"(Appendix: barcode type ID Table); find "R" HEX value is "52" (Appendix:Visible Character ASCII Table)

Step: Set " Custom prefix"; Set"5""1""5""2" (Appendix: data and edit barcode); Set" Save".

### **Example 1.3:**

Cancel Custom prefix in QR code

Step: Set" Custom prefix"; Set"5""1"; Set" Save"

Note: If set up prefix on all QR codes, it will default all QR codes prefix after set up. In contrast, if cancel all prefix / suffix on barcodes, please set " Clear All Custom Prefix" and "Clear All Custom Suffix".

## **Example for barcode length range configuration**

Please sure it not bigger than current maximum length range when set up minimum length. Otherwise, it will show error. In the same way, must be make sure it's not smaller than current minimum length range when set up maximum length.

### **Example 2.1:**

Set Code 128 length range is 4-12bit

Step: Set "Code 128 Minimum ( 0~50bit ) "; Set"4"; Set "Save" Set "Code 128 Maximum (0+50bit)"; Set"1""2"; Set "Save"

### **Example 2.2:**

Set Interleaved 2 of 5 length is 14bit

It can set up by "ITF25 14bit", through barcode length range of Maximum /Minimum to set,too.

Step: Set" Interleave 2 of 5 Minimum ( 0~50bit ) "; Set"1""4"; Set"Save" Set" Interleave 2 of 5 Maximum (0+50bit)"; Set"1""4"; Set"Save"

### **Example 2.3:**

Set Code 39 length is random length

Step: Set" Code 39 Minimum ( 0~50bit ) "; Set"0" ; Set"Save" Set"Code 39 Maximum (0+50bit)"; Set"0"; Set "Save"

## Example for USB keyboard transmit speed configuration

If PC in a lower function, it will appear error status. Need to set up a slow scanning speed with customized under USB keyboard mode. Such as: 50ms

Step: Set"Custom Sending Speed"; Set"5"0";Set"Save"

### Warning Tone

It will appear error warning for 4 times in a continue while transfer failure barcode. Please check if it's normal work when appear this situation.

### Read Skills

To get a good reading performance, a beam of aim light from scanner should be aimed at the centre of barcode, support to aim in any directions for read convenient,too.

More nearly barcode, the beam of aim light is smaller; More further barcode, the beam of aim light bigger. For reading barcode correctly, if barcode small, the scanner should be close to barcode, if barcode big, the scanner should be farther to barcode.

If the barcode is highly reflective (for example: coated surface), please adjust the scanner angle to read it successfully.



### Safety

Please not direct aim eye when the scanner has a strong ray of light, to avoid causing any hurt or unwell.