### Manual

# User Guide

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#### 1:Start

#### About User Manual

The user manual includes symbologies settings, function settings (lighting, keyboard type and factory reset, etc.) and interface settings. If you need to change the function you need, scan the configuration according to the configuration code below. All bands (\*) indicate factory default values.

Reset default





Interface Mode Initialization

Recognized as a USB keyboard type, scan the "USB Keyboard" barcode.

In the environment where the application software requires a serial port, the USB can be recognized as a USB COM type, and the user needs to install a driver if it is recognized as a USB COM type.





#### 2:Function Mode Settings

This chapter can configure the function mode of the device, including working mode (such as Image reverse, etc.), Aimer setting, lighting configuration, Led indicator setting and speaker setting, etc. You only need to scan the corresponding configuration code as required.

Working Mode





There are 15 levels of sensitivity in automatic scan mode, 1 is the highest, 15 is the lowest 49859X, X represents the level (498591-4985915)





Automatic scan mode same barcode interval setting The same barcode time can be set to 1-127 (minimum is 1, maximum is 127) When making configuration barcodes, add "^3" characters in front, such as: ^381029X(X means the same barcode interval, 1 means 50ms, 127 means 127\*50ms), choose code 128. 81029X, X for (810291-81029127)



50ms









810296 **300ms**  All Barcodes Enable/Disable











Enable All 2D Barcodes



Disable All 2D Barcodes

QR mirror



**DATAMATRIX Mirror** 



Enable



**All Mirror** 





Image Reverse





\*Normal Image

Light Setting





499871 \*Light Enable





499761 Led lighting Reverse







**Beeper Duration** 

Speaker setting

499820 \*Speaker on



Normal



2.7KHz







2.0KHz











No Beeper

Test Mode

After being configured in test mode, the device automatically triggers decoding every one second.

Blink test mode



\*cancel Blink test mode



#### **Sleep Setting**

When making the configuration barcode, add "^3" character in front, such as: ^352419X (X means sleep time), choose code 128.





100s Sleep Time

Tertiary lighting setup



Level 1





Code reading timeout setting









180s





**RS232 Interface** 



**RS232 Baud Rate** 



















Data Bits





Stop Bits



2 bits



Parity Bits



ο









#### 3: Output Settings

#### Regarding output settings

This chapter can configure the output of the device, including enter/linefeed, adding prefix/suffix, setting bar code length, removing bar code digits (removing the beginning/end), and multi-country keyboard switching settings, etc. You only need to scan the corresponding configuration as required code.

Enter/linefeed Setting



Add enter





Add CR&LF



Serial output settings



Serial output utf-8



Serial output GBK



Serial output according to barcode content

Remove barcode from beginning/end Remove barcode from beginning/end

Remove the number of digits from the bar code "^349719X" (X is the number of digits to be removed, the last 1 means to remove one digit, if it is 2, remove two digits, if it is 0, it is not removed normally, and the user can configure it by himself)



#### Remove 1 digit from barcode

Remove the digit "^357719X" from the end of the barcode (X is the number of digits to be removed, the last 1 means to remove one digit, if it is 2, remove two digits, if it is 0, it is not removed normally, and the user can configure it by himself)



#### Remove 1 digit from the end of the barcode

Barcode length setting

Barcode length can be set from 1-255 (minimum length is 1, maximum length is 255)

It need add "^3"characters in front when making a configuration barcode, such as: ^398119X (X represents the length of the barcode), select code 128



Length 1



length 255

Remove barcode from beginning/end



Barcode length lock

Additional code settings



Enable two additional codes



Disable two additional codes



Enable five additional codes



Disable five additional codes

\*



All UPC/EAN codes must have an additional code



Additional code is not required

**Keyboard mode output Chinese** 

The keyboard mode can be output in Chinese. If you need to output in Chinese, please scan the corresponding configuration code as required. (The default state is no Chinese, but other national languages can be input)



Default code



Can be used in word , not in excel, txt



Can be used in txt, excel, not in word

Multi-country keyboard Language















Singapore



France



Italy



20





Japan



Sierra Leone











#### Virtual Keyboard

You may need to type your characters in the form of ASCII code. In this case, you can configure the corresponding configuration code as required to configure the virtual keyboard.



Enable Virtual Keyboar d

> 595890 Disable Virtual Keyboard





Disable Virtual Keyboard Front Zero

Caps Lock







4:Symbologies

Symbologies configuration

This chapter can configure the bar code system for the device, including UPC/EAN, Codebar code, Code39, Full ASCII Code39, Interleaved 2 of 5, Code93, UPC-A, GS1 DataBar Omnidirectional, GS1 DataBar Expanded, PDF417, QR Code, Airline 2 of 5(China Post) and Airline 2 of 5 support barcode configurations. You only need to scan the corresponding configuration codes in sequence. (Default is \*)

1. Airline 2 of 5













**Reverse Colors Aztec Enable** 



\*Reverse Aztec Disable

3. Codabar











Enable and transmit Check Digit





\*Disable start and End character





Both Normal and Reverse color

4. Codablock A



\*Disable







\*Disable

6. Code 128







Both Normal and Reverse color



27. Code











\*No transmit Check Digit







9. Code 39







**Enable Check Digit** 







Enable Start and End Character



\*Disable Start and End Character





Both Norml and Reverse Color









10. Code93

11.Composite





\*Disable

12. Data Matrix Code









Disable Reverse DM code

13.DOT\_CODE





\*Disable







**Both Normal and Reverse Color** 











No Transmit EAN-8 Check Digit



Enable EAN-8 to EAN-13

\*Disable EAN -8 to EAN-13











17. Full ASCII Code39





18. GS1 DataBar Expanded





19. GS1 DataBar Limited



Enable



20. GS1 DataBar Omnidirectional









22. Hong Kong 2 of 5(China post)



Enable



Notice: When reading a postal, all other postal need close.

23. Interleaved 2 of 5







**Enable Check Digit** 





Enable and Transmit Check Digit



**Both Normal and Reverse Color** 



24. Matrix 2 of 5











\*No Transmit Matrix 2 of 5 Check Digit

25. Maxicode





26. MicroPDF417



27. Micro QR Code





Enable Micro QR Code Reverse



\* Disable Micro QR Reverse







29. PDF417









30. Pharmacode





31. QR Code









\*Disable Reverse QR





Disable Website QR code

32.RSS-14



Enable







34. RSS-EXPANDED





35. Straight 2 of 5 Industrial





36. Telepen





**37. Trioptic Code** 













UPC-A No Transmit Check Digit



\* Transmit UPC-A Number System Characters



No Transmit UPC-A Number System Characters





924850 \*Disable UPC-A to EAN-13

39. UPC-Е





Disable



Check Digit



Transmit UPC-E Check Digit



\*No Transmit UPC-E start Character



Transmit UPC-E Start Character





\*Disable Extend UPC-E to 12 Digits

40. UPCE





Disable

#### 5: Special Function Configuration (Example)

#### **On Special Function Configuration**

This chapter lists some configuration examples and describes the configuration methods of special functions to help users get familiar with the use of the product. You only need to scan the corresponding configuration codes in sequence to complete the configuration of special functions.

Only Set Prefix and Suffix to Interleaved 2 of 5 Barcodes





Disable





Scan VAT Information Code:

Scan the following configuration codes in turns



Can be used in notes, excel, cannot be used in word





#### No Transmit the First 10 Characters

If the bar code to be scanned is (1234567890ABCDEFGHIJKLMN), scan the following configuration codes in sequence:



Output: ABCDEFGHIJKLMN Display all information:



Output: 1234567890ABCDEFGHIJKLMN

Web Page Chinese Input Settings

Scan from top to bottom:





598694 Utf-8 code (can be used in word, cannot be used in notes, excel)





The following is configuration added # configuration)











Programming Mode

Barcode Length Locking Configuration (Length Locking Supports Up to 6 Barcode Types)

Add a length lock configuration process for a single barcode type:

Example 1

Lock the CODE 128 barcode length to 10, and the CODE 128 barcode type byte value is 083 by

looking up the barcode type table.

1. Scan "Enter/Exit Programming Mode" to enter the device to programming mode..

2.Scan "Configure barcode type 1 length".

- 3. Scan the bytecode values "0", "1", and "0" in sequence.
- 4. Scan "Configure Barcode Type 1 Byte Value".

5. Scan the bytecode values "0", "8", and "3" in sequence.

6. Scan to enter/exit programming mode.

Add length lock for multiple barcode types: Example 2

1.Scan "Enter/Exit Programming Mode" to enter the device to programming mode.

2. Scan "Configure barcode type 1 length".

3.Scan the bytecode values in turn.

4.Scan "Configure Barcode Type 1 Byte Value".

5.Scan the bytecode values in turn.

6.Scan "Configure Barcode Type 2 Length".

7.Scan the bytecode values in turn.

8.Scan "Configure barcode type 2-byte value".

9.Scan the bytecode values in turn.

10.Scan the bytecode values in turn.



Enter/Exit Programming Mode





Configure Barcode Type 1 Byte Value



977090 Configure Barcode Type 2 Length



Configure Barcode Type 2 Byte Value





Configure Barcode Type 3 Byte Value





Configure Barcode Type 4Byte Value



971090 Configure Barcode Type 5 Length



Configure Barcode Type 5 Byte Value



Configure Barcode Type 6 Length



Configure Barcode Type 6 Byte Value

Data code Table (decimal system)







## 







Barcode byte value	Barcode Type
002	UPC-E
003	EAN-8
004	UPC-A
005	EAN-13
080	CODE 39
081	CODABAR
082	INTERLEAVED 2 OF 5
083	CODE 128
084	CODE 93
091	MSI
092	CODE 11
093	AIRLINE 2 OF 5
094	MATRIX 2 OF 5
095	TELEPEN
096	UK PLESSEY
097	AIRLINE(13 DIGITS)
098	STANDARD 2 OF 5
099	TRIOPTIC
101	RSS14
102	RSS LIMIT
103	RSS EXT
104	PDF417
105	MICRO PDF417
106	DATA MATRIX
107	AZTEC
108	QR
109	MAXICODE

#### Bacode Type List

#### To add Prefix /Suffix (support Max ten bites individually)

Set prefix process:

Example1, add prefix a byte with the character "(", corresponding to the ASCII decimal number 040.)

- 1. Scan "Enter/Exit Programming Mode" to put the device into programming mode.
- 2. Scan "Configure prefix 1st byte".
- 3. Scan the byte code values "0", "4" and "0" in turn.
- 4. Scan "Enter/Exit Programming Mode".

Set Suffix process:

Example 2, add suffix a byte with the character ")", corresponding to the ASCII decimal number 041.

- 1. Scan "Enter/Exit Programming Mode" to put the device into programming mode.
- 2. Scan "Configuration suffix 1st byte".
- 3. Scan the byte code values "0", "4" and "1" in turn.
- 4. Scan "Enter/Exit Programming Mode".

Set multiple byte prefixes:

Example 3, add multiple byte prefixes

- 1. Scan "Enter/Exit Programming Mode" to put the device into programming mode.
- 2. Scan "Configure prefix 1st byte".
- 3. Scan the 1st byte code value in sequence.
- 4. Scan "Configure prefix 2nd byte".
- 5. Scan the 2nd byte code value in sequence.
- 6. Repeat 4,5, steps .....
- 7. Scan "Enter/Exit Programming Mode".

Add multiple byte suffix:

Similar to add multiple prefix

Clear all prefix:

Scan the "Clear all prefixes" barcode

Clear all suffix:

Scan the "Clear all prefixes" barcode.



Enter/exit program mode



Configure 2<sup>nd</sup> bytes

To add Prefix /Suffix (support Max ten bites individually)



Configure Prefix 1st bytes



Configure 2<sup>nd</sup> bytes





960090 Configure prefix 5<sup>th</sup> bytes



Configure Prefix 6th Bytes







Configure Prefix 9th bytes



**Configure Prefix 2rd bytes** 





Configure Suffix 1<sup>st</sup> bytes



Configure Suffix 2<sup>nd</sup> bytes



Configure Suffix 3rd bytes





Configure Suffix 5<sup>th</sup> bytes



Configure Suffix 6th bytes









**Configure Suffix 10th bytes** 



Data Code Table (decimal system)







# 







#### **ASCII Table**

Dec	Char	Dec	Char	Dec	Char	Dec	Char
000	NUL	032	SP	064	@	096	"
001	SOH	033	!	065	Α	097	а
002	STX	034	"	066	В	098	b
003	ETX	035	#	067	С	099	С
004	EOT	036	\$	068	D	100	d
005	ENQ	037	%	069	E	101	е
006	ACK	038	&	070	F	102	f
007	BEL	039	`	071	G	103	g
008	BS	040	(	072	н	104	h
009	нт	041	)	073	I	105	i
010	LF	042	*	074	J	106	j
011	VT	043	+	075	К	107	k
012	FF	044	3	076	L	108	T
013	CR	045	—	077	М	109	m
014	SOH	046		078	N	110	n
015	SI	047	1	079	0	111	0
016	DLE	048	0	080	Р	112	р
017	DC1	049	1	081	Q	113	q
018	DC2	050	2	082	R	114	r
019	DC3	051	3	083	S	115	s
020	DC4	052	4	084	т	116	t
021	NAK	053	5	085	U	117	u
022	SYN	054	6	086	V	118	v
023	ETB	055	7	087	W	119	w
024	CAN	056	8	088	х	120	x
025	EM	057	9	089	Y	121	у
026	SUB	058	:	090	Z	122	z
027	ESC	059	;	091	[	123	{
028	FS	060	<	092	١	124	
029	GS	061	=	093	]	125	}
030	RS	062	>	094	٨	126	2
031	US	063	?	095	_	127	DEL
ASCII Extend Character (CP-1252 code)							
Dec	Char	Dec	Char	Dec	Char	Dec	Char
128	€	160		192	À	224	à
129		161	i	193	Á	225	á
130	,	162	¢	194	Â	226	â
131	f	163	£	195	Ã	227	ã
132	"	164	¤	196	Ä	228	ä

197

198

Å

Æ

å

æ

229

230

165

166

133

134

.... † ¥

ł

135	‡	167	§	199	Ç	231	Ç
136	^	168		200	È	232	è
137	‰	169	©	201	É	233	é
138	Š	170	а	202	Ê	234	ê
139	<	171	«	203	Ë	235	ë
140	Œ	172	7	204	Ì	236	ì
141		173		205	Í	237	í
142	Ž	174	®	206	Î	238	î
143		175	-	207	Ϊ	239	ï
144		176	0	208	Ð	240	ð
145	6	177	±	209	Ñ	241	ñ
146	,	178	2	210	Ò	242	ò
147	"	179	3	211	Ó	243	Ó
148	"	180		212	Ô	244	ô
149	•	181	μ	213	Õ	245	Õ
150	-	182	¶	214	Ö	246	ö
151	-	183	•	215	×	247	÷
152	~	184	5	216	Ø	248	ø
153	тм	185	1	217	Ù	249	ù
154	Š	186	0	218	Ú	250	ú
155	>	187	»	219	Û	251	û
156	œ	188	1⁄4	220	Ü	252	ü
157		189	1/2	221	Ý	253	ý
158	ž	190	3/4	222	Þ	254	þ
159	Ÿ	191	5	223	ß	255	ÿ