

OM7520M

2D Scanner

User Guide

About This User Guide

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

Disclaimer

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

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

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Service Information

For technical assistant or product service and repair, please contact: sales@riotec.com.tw

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1、 Introduction

This user guide applies to OM7520M 2D Scanner, which identify 1D&2D barcodes by 2D image scanning pattern, and apply the complete set of patent technology developed by RIOTEC Co., Ltd. These Scanners above are of strong identification capability, and support automatic continuous scanning mode with fast and flexible scanning speed.

2、Barcode Menu

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

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

2.1 Setting barcodes

2.1.2 Restore Factory Defaults



Restore Factory Defaults

2.1.2 Read user defaults

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



Save user defaults

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



Restore user defaults

2.1.3 Interface Setting

This Scanner support USB KB or Serial communication by scanning below barcode。 (Please install PL2303 driver for USB Serial)



USB KB



Serial communication (Please install PL2303 driver for USB Serial)

2.1.4 Baud rate setting



Baud Rate 4800



Baud Rate 9600



Baud Rate 38400



Baud Rate 19200



Baud Rate 57600



Baud Rate 115200

2.1.5 Start character setting



Cancel start character



Add STX as start character

2.1.6 Ending character setting



Cancel ending character



Add Enter



Add Tab



Add ETX

2.1.7 Inverse code option

(Only 1D/ DataMatrix / Aztec)



Only decode normal code



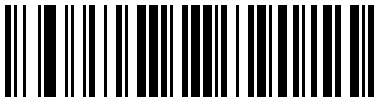
Only decode inverse code



Decode both normal code and inverse code

2.2 Beeper and LED notifications

2.2.1 Beeper Volume setting



Volume low



Volume high

2.2.2 Startup beep



Shut down startup beep



Open startup beep

2.2.3 Good read beep



Good read beep on



Good read beep off

2.2.4 Beep pitch-good read



Low pitch



Middle pitch



High pitch

2.2.5 Beep duration-good read



Tone long



Tone pip

2.2.6 Good-read LED



Good-read LED off



Good-read LED on

2.3 Timeout between decodes (Same barcodes)

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



500ms



750ms



1s



2s

2.4 USB keyboard update speed setting

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



Slow update speed



Middle update speed



Fast update speed

2.5 USB keyboard text-transform



Normal output



Case reversal



All Caps

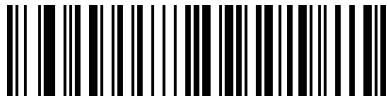


Lower case

2.6 Keyboard layout setting



French (France)



Italian 142 (Italy)



Spanish (Spain)



Japanese



English (United States)



Italian (Italy)



German (Germany)



Finnish



Russian (MS)



Russian (typewriter)



Arabic (101)



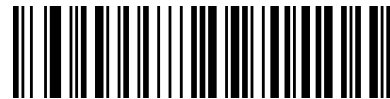
Irish



Polish (214)



Polish (Programmers)



Dutch (Netherlands)



Czech (QWERTZ)



Portuguese (Portugal)



Portuguese (Brazil)



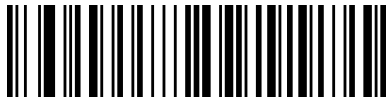
Swedish (Sweden)



Turkish Q



Turkish F



Greek (MS)

2.7 Symbologies

2.7.1 enable/disable all symbologies

Enable all barcode might slow down scanner Decode speed.

We suggest enable the barcode you need based on your scene.



Enable all symbologies



Disable all symbologies

2.7.2 Codabar



Enable Codabar



Disable Codabar

2.7.3 Codabar start/ending character setting



Send Codabar start/ending character



Don't send Codabar start/ending character

2.7.4 Code 11



Disable Code 11



Enable Code 11

2.7.5 Code 39



Disable Code 39



Enable Code 39

2.7.6 Code 39 check bit



Enable Code 39 check don't send check bit



Disable Code 39 check



Enable Code 39 check send check bit

2.7.7 Code 39 Full ASCII



Enable Full ASCII



Disable Full ASCII

2.7.8 Code 32 (Code 39 needs to be enabled)



Enable Code 32



Disable Code 32

2.7.9 Interleaved 2 of 5 (ITF5)



Disable ITF25



Enable ITF25

2.7.10 Interleaved 2 of 5 (ITF5) check bit



Enable ITF25 check don't send check bit



Disable ITF25 check



Enable ITF25 check send check bit

2.7.11 Industrial 2 of 5



Disable Industrial 2 of 5



Enable Industrial 2 of 5

2.7.12 Matrix 2 of 5



Enable Matrix 2 of 5



Disable Matrix 2 of 5

2.7.13 Code 93



Enable Code 93



Disable Code 93

2.7.14 Code 128



Enable Code 128



Disable Code 128

2.7.15 GS1-128



Enable GS1-128



Disable GS1-128

2.7.16 UPC-A



Enable UPC-A



Disable UPC-A

2.7.17 UPC-A check bit



Send UPC-A check bit



Don't send UPC-A check bit

2.7.18 UPC-A to EAN-13



Enable UPC-A to EAN-13



Disable UPC-A to EAN-13

2.7.19 UPC-E



Enable UPC-E



Disable UPC-E

2.7.20 UPC-E check bit



Send UPC-E check bit



Don't send UPC-E check bit

2.7.21 UPC-E to UPC-A



Enable UPC-E to UPC-A



Disable UPC-E to UPC-A

2.7.22 EAN/JAN-8



Enable EAN/JAN-8



Disable EAN/JAN-8

2.7.23 EAN/JAN-13



Enable EAN/JAN-13



Disable EAN/JAN-13

2.7.24 UPC/EAN/JAN extra-code



Ignore UPC/EAN/JAN extra-code



Decode UPC/EAN/JAN extra-code



Adapt UPC/EAN/JAN extra-code

2.7.25 EAN13 to ISBN



Enable EAN13 to ISBN



Disable EAN13 to ISBN

2.7.26 EAN13 to ISSN



Enable EAN13 to ISSN



Disable EAN13 to ISSN

2.7.27 GS1 DataBar (RSS14)



Enable GS1 DataBar



Disable GS1 DataBar

2.7.28 GS1 DataBar Limited



Enable GS1 DataBar Limited



Disable GS1 DataBar Limited

2.7.29 GS1 DataBar Expanded



Enable GS1 DataBar Expanded



Disable GS1 DataBar Expanded

2.7.30 PDF417



Enable PDF417



Disable PDF417

2.7.31 Micro PDF417



Enable Micro PDF417



Disable Micro PDF417

2.7.32 QR Code



Enable QR



Disable QR

2.7.33 Micro QR



Enable Micro QR



Disable Micro QR

2.7.34 Data Matrix



Enable Data Matrix



Disable Data Matrix

2.7.35 Aztec Code



Enable Aztec



Disable Aztec

2.8 User-defined prefix setting

Output



Enable user-defined prefix output



Disable user-defined prefix output

Edit



Clear all user-defined prefix



User-defined prefix

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

2.9 User-defined suffix setting

Output



Enable user-defined suffix output



Disable user-defined suffix output

Edit



Clear all user-defined suffix



User-defined suffix

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

2.10 Code ID

Output



Disable CODE ID



Enable CODE ID before barcode



Enable CODE ID after barcode

Edit



User-defined CODE ID

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

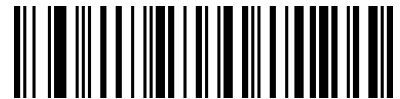


Clear all user-defined CODE ID

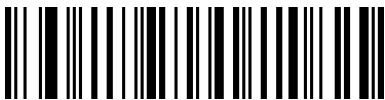
2.11 AIM ID setting



Disable AIM ID



Enable AIM ID before barcode



Enable AIM ID after barcode

APPENDIX

Appendix 1 data and editing code



1



3



5



7



9



0



2



4



6



8



Appendix 2 code type ID table

Code type	HEX	CODE ID(default)
All codes	99	
Codabar	61	a
Code128	6A	j
Code32	3C	<
Code93	69	i
Code39	62	b
Code11	68	h
EAN		
EAN-13	64	d
EAN-8	44	D
GS1		
GS1 DataBar	79	y
GS1 DataBar Limited	7B	{
GS1 DataBar Expanded	7D	}
GS1-128 (EAN-128)	49	l
2 of 5		
Interleaved 2 of 5	65	e
Matrix 2 of 5	6D	m
Industry 2 of 5	66	f
UPC		
UPC-A	63	c
UPC-E	45	E
Aztec Code	7A	z
DataMatrix	77	w
PDF417	72	r
Micro PDF417	52	R
QR Code	73	s
Micro QR Code	73	s

Appendix 3 eyeball character ASCII table

decimal	hexadecimal	character	decimal	hexadecimal	character	decimal	hexadecimal	character
32	20	<SPACE>	64	40	@	96	60	`
33	21	!	65	41	A	97	61	a
34	22	"	66	42	B	98	62	b
35	23	#	67	43	C	99	63	c
36	24	\$	68	44	D	100	64	d
37	25	%	69	45	E	101	65	e
38	26	&	70	46	F	102	66	f
39	27	'	71	47	G	103	67	g
40	28	(	72	48	H	104	68	h
41	29	)	73	49	I	105	69	i
42	2A	*	74	4A	J	106	6A	j
43	2B	+	75	4B	K	107	6B	k
44	2C	,	76	4C	L	108	6C	l
45	2D	-	77	4D	M	109	6D	m
46	2E	.	78	4E	N	110	6E	n
47	2F	/	79	4F	O	111	6F	o
48	30	0	80	50	P	112	70	p
49	31	1	81	51	Q	113	71	q
50	32	2	82	52	R	114	72	r
51	33	3	83	53	S	115	73	s
52	34	4	84	54	T	116	74	s

53	35	5	85	55	U	117	75	u
decimal	hexadecimal	character	decimal	hexadecimal	character	decimal	hexadecimal	character
54	36	6	86	56	V	118	76	v
55	37	7	87	57	W	119	77	w
56	38	8	88	58	X	120	78	x
57	39	9	89	59	Y	121	79	y
58	3A	:	90	5A	Z	122	7A	z
59	3B	;	91	5B	[	123	7B	{
60	3C	<	92	5C	\	124	7C	|
61	3D	=	93	5D	]	125	7D	}
62	3E	>	94	5E	^	126	7E	~
63	3F	?	95	5F	_			

Appendix 4 operational character (USB keyboard)

<i>decimal</i>	<i>hexadecimal</i>	<i>Corresponding key value (disable CODE ID)</i>	<i>Corresponding key value (enable CODE ID)</i>
0	00	retain	Ctrl+@
1	01	Insert	Ctrl+A
2	02	Home	Ctrl+B
3	03	End	Ctrl+C
4	04	Delete	Ctrl+D
5	05	PageUp	Ctrl+E
6	06	PageDown	Ctrl+F
7	07	ESC	Ctrl+G
8	08	Backspace	Backspace
9	09	Tab	Tab
10	0A	Enter (The configuration of CRLF processing decide how it express)	Ctrl+J
11	0B	Caps Lock	Ctrl+K
12	0C	Print Screen	Ctrl+L
13	0D	Enter (The configuration of CRLF processing decide how it express)	Enter
14	0E	Scroll Lock	Ctrl+N
15	0F	Pause/Break	Ctrl+O
16	10	F11	Ctrl+P
17	11	Direction key ↑	Ctrl+Q

<i>decimal</i>	<i>hexadecimal</i>	<i>Corresponding key value (disable CODE ID)</i>	<i>Corresponding key value (enable CODE ID)</i>
18	12	Direction key ↓	Ctrl+R
19	13	Direction key ←	Ctrl+S
20	14	Direction key →	Ctrl+T
21	15	F12	Ctrl+U
22	16	F1	Ctrl+V
23	17	F2	Ctrl+W
24	18	F3	Ctrl+X
25	19	F4	Ctrl+Y
26	1A	F5	Ctrl+Z
27	1B	F6	ESC
28	1C	F7	Ctrl+\
29	1D	F8	Ctrl+]]
30	1E	F9	Ctrl+^
31	1F	F10	Ctrl+_

Appendix 5 operational character (serial communication)

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

decimal	hexadecimal	character
22	16	SYN
23	17	ETB
24	18	CAN
25	19	EM
26	1A	SUB
27	1B	ESC
28	1C	FS
29	1D	GS
30	1E	RS
31	1F	US

Configuration instruction and example

Example for user-defined prefix and suffix:

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

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

Look up appendix 2, you can find that the HEX value for all codes is "99". Look up appendix 3, the HEX value for XYZ is "58,59,5A". First scan "user-defined prefix" in 2.2.11 edit, then the scanner will have two sounds like "D...D...", then scan 9, 9, 5, 8, 5, 9, 5, A, and save, the setting accomplished.

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

Example 1.2: Add Q to QR code as prefix.

Look up appendix 2, you can find that the HEX value for QR code is "73". Look up appendix 3, the HEX value for Q is "51". First scan "user-defined prefix" in 2.2.11 edit, then the scanner will have two sounds like "D...D...", then scan 7, 3, 5, 1, and save, the setting accomplished.

Example 1.3: Cancel user-defined prefix in QR code

When you edit user-defined prefix and suffix, it will cancel the prefix and suffix you set if you scan "user-defined prefix" or "user-defined suffix" and add no character and save.

For example, cancel user-defined prefix in QR code, first scan "user-defined prefix", then scan 7,3, and save. The prefix in QR code has been canceled.

Note: If there is a prefix for all type of barcode, after you done the operation above, the QR code will have the prefix you set for all type barcode.

If you need to cancel all prefix or suffix for all type of barcode, please scan "clear all user-defined prefix" and "clear all user-defined suffix"

USB update speed setting example

If the PC is weak properties, it is easy to have error of transmission and you need to set USB keyboard update speed to low speed, like 50ms (user-defined speed)

First, scan "User-defined update speed" then scan 5, 0 in appendix 1 and save.