User's Manual

V6.0A

Introduction

This product is 1D laser barcode scanner, also known as barcode reader or barcode gun scanner, is a technical equipment to read barcode information, by adopting optics theory, decoding and then transferring the information to computer terminal devices via the data cable, widely used in supermarket barcode billing, logistics barcode tracking, books ISBN barcode management, document barcodes voucher recording, industrial automation applications.

This scanner adopts ARM 32bits CPU, full-featured, rich in decoding barcodes types, including: Industrial 25; Standard 25; Matrix 25; China post 25; Interleave 25; Code 11; Codebar; MSI/Plessey; UK/Plessey; Code39; Standard 39; Code 39 full ASCII; Code 32; Code 93; Code 128; UPC-A; UPC-E; EAN-13; EAN-8; EAN/UPC+2/+5; ISBN; ISSN; GS1-RSS14; GS1-limited; GS1-Expended; GS1 STACK (GS1 is optional) etc.

One scanner supports KB, USB-HID, RS232, USB-Virtual COM interfaces all (with interface automatic judgment), supports USB online firmware upgrade (DFU), supports serial command trigger and configuration (need to refer to other manuals), compatible with USB2.0, USB3.0, Windows NT, 2000, XP, WIN7, WIN8 etc.

Before using the product, please read this manual carefully. Any help is needed, please contact us or our distributors. We will certainly be happy to help you.

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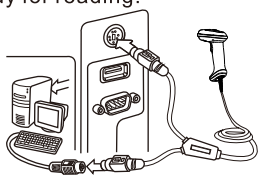
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1. Getting Started

Installing keyboard wedge scanner

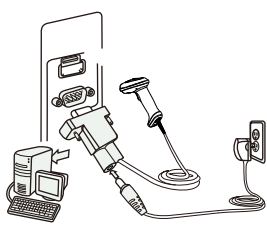
1.Make sure that the scanner has the correct cable for your system.
2.Turn off the power of the system.(or PC)
3.Unplug the keyboard from the system.
4.Connect Y cable to the system and keyboard.
5.Turn on the power of the system.
6.If the indicator LED lights up, buzzer sounds, the scanner is ready for reading.



Keyboard interface

Installing the RS-232 interface scanner

1.Make sure there is power supply for the scanner.
2.Connect the cable to the RS-232C port of the device.
3.Make sure the host device have communication program (Xcom,progam,Hyperterminal) before transmitting data.



RS-232 interface

Installing an USB interface scanner (connect two ends, the windows will detect automatically)

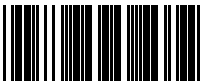
2. Setup Procedure

The general procedure to program is as follows.
1. Scan the command barcode “Start”.
2. Scan one or more parameters.
3. Scan the command barcode “End” to finish procedure.

Example 1. To set the RS232 parameters to 9600,8,0,1.
1.Scan the barcode “Start”.
2.Scan ”9600” ”8” ”0” ”1”.
3.Scan the barcode “End”.

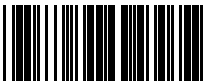
Example 2. To set additional digit for UPC/EAN.
1.Scan the barcode “Start”.
2.Scan “Addenda 5 digit Enable”
3.Scan the barcode “End”.

Remark:
1.“Reserved” is reserved for firmware
2.This manual is subiected to change without notice.



Start

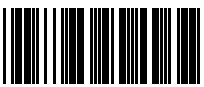
3. Default Setting



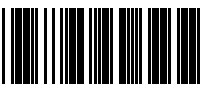
Default

"*"denotes default setting

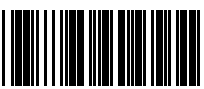
4. Interface Selection



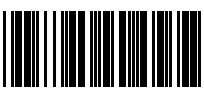
*AUTO



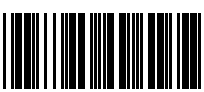
KB/USB-HID



RS232/ USB Virtual serial port
（driver is needed for virtual serial port）



Reserved 1

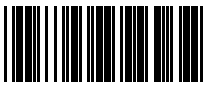


Reserved 2

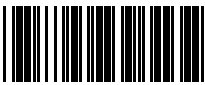
End

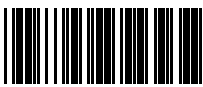
5. Keyboard Interface

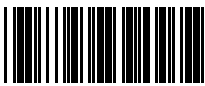
5-1. Funtion code selection

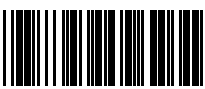

*Function keyboard ON


Function keyboard OFF


Number lock ON


*Number lock OFF


Capslock ignore ON


*Capslock ignore OFF

Start

5-2. Language

*US

French

German

English

Turkey-Q

Danish

Japanese

Spanish (International)

Italian

Universal language

End

5-3. KB clock

*10K

20K

30K

6. RS-232 Interface

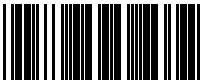
6-1. Baud Rate

1200

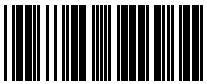
2400

4800

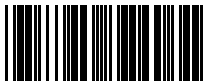
*9600



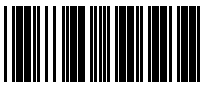
Start



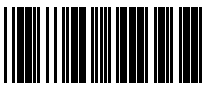
14400



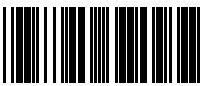
19200



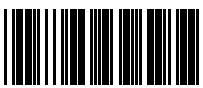
28800



38400

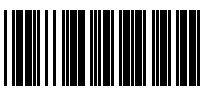


57600



115200

6-2. Data bits



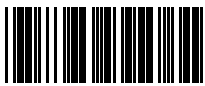
7bit

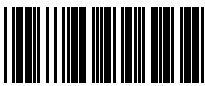


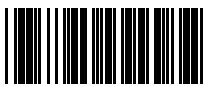
*8bit

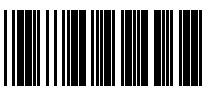
End

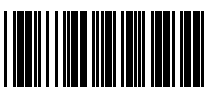
6-3. Parity


*None


Odd


Even

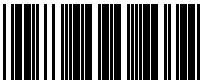

Reserved 1


Reserved 2

6-4. Stop bits

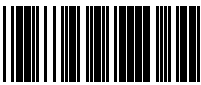

*1bit


2bit



Start

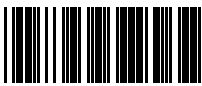
6-5. Hand shaking



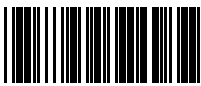
NAK ON



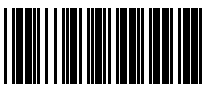
*NAK OFF



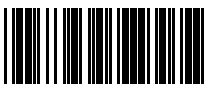
CTS/RTS ON



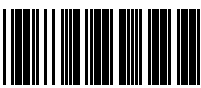
*CTS/RTS OFF



XON/XOFF ON



*XON/XOFF OFF



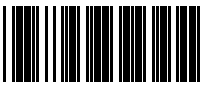
Repeat scan delay (1~255)

Example: If scanner needs 150ms of delay
Delay time T = N*10
150ms = N * 10
N = 15
So scan: “Start” “Repeat scan delay” “0” “1” “5” “END”.

XON: 0X11
XOFF: 0X13
ACK: 0X06
NAK: 0X15

End

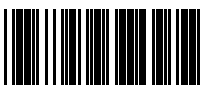
6-6. COM port switch configuration



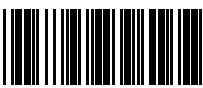
*COM control master switch ON



COM control master switch OFF



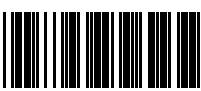
*COM trigger ON



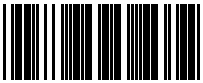
COM trigger OFF



*COM beep ON



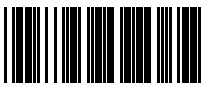
COM beep OFF



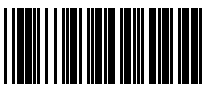
Start

7. Data Format

7-1. Code ID

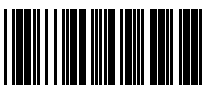


ON

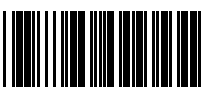


*OFF

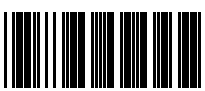
7-2. Terminator



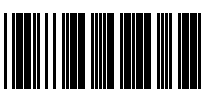
None



Tab(0X0D+0X0A)



*Enter(0X0D)



Space(0X20)



Return(0X0A)

End

7-3. Febraban transfer function

Febraban ON

*Febraban OFF

7-4. Data interception

*Not intercept

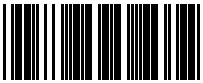
Intercept from left to right

Intercept from right to left

Data interception starting digit

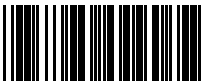
Data interception ending digit

Example:barcode "0123456", need to intercept "234". Scan "Start" "Data interception starting digit" "0" "0" "3" "data intercept ending digit" "0" "0" "5" "Intercept from left to right" "End".

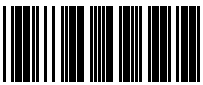


Start

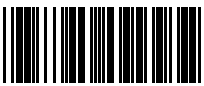
7-5. Caps lock



*Original data



Upper case compulsive

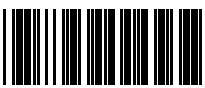


Lower case compulsive

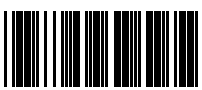


Upper and lower case convert compulsive

7-6. Barcode data inversion



ON



*OFF

7-7. Set the barcode length as prefix (2 digits)



ON



*OFF

End

7-8. Prefix and Suffix for all codes

Prefix for all codes

Suffix for all codes

Example: add “SN” prefix to all codes.
Scan “Start” “Prefix for all codes” “S” “N” “Prefix for all codes” “End”.

7-9. Reading length setting for all codes

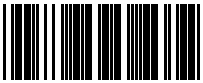
Minimun length for all codes

Maximum length for all codes

Reading length setting for all codes is used to limit the barcode length that can be read (is subjected to the data length).

For example: set the reading length as 5-10 digit.

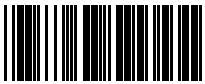
Scan “Start” “Minimun length for all codes” “0” “0” “5” “Maximun length for all codes” “0” “1” “0” “End”.
After that, any barcodes shorter than 5 digits or longer than “10” digits can not be read successfully.



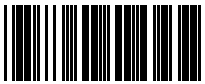
Start

8. Barcode Setting

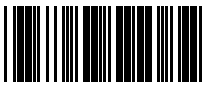
8-1. Industrial 2 of 5



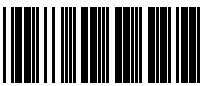
Industrial 2 of 5 enable



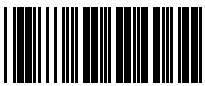
*Industrial 2 of 5 disable



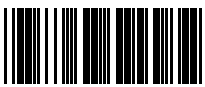
Verify check



*Not verify check



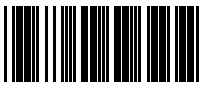
Verify check transmit

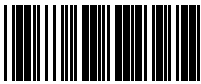


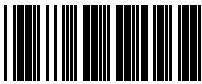
*Verify check not transmit

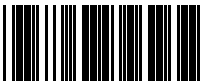
End

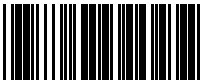
8-2. Standard 2 of 5

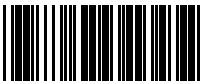

Standard 2 of 5 enable


*Standard 2 of 5 disable


Verify check


*Not verify check


Verify check transmit


*Verify check not transmit

Start

8-3. Chinese postal 2 of 5

Chinese postal 2 of 5 enable

*Chinese postal 2 of 5 disable

Verify check

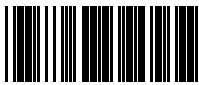
*Not verify check

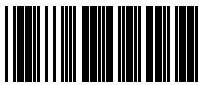
Verify check transmit

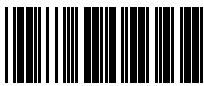
*Verify check not transmit

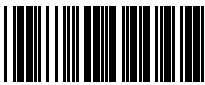
End

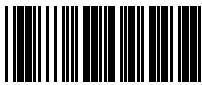
8-4. Interleaved 2 of 5

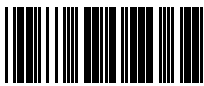

*Interleaved 2 of 5 enable

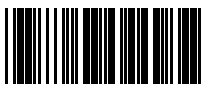

Interleaved 2 of 5 disable

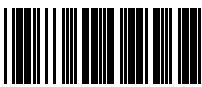

Verify check

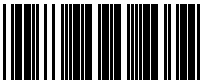

*Not verify check


Verify check transmit


*Verify check not transmit

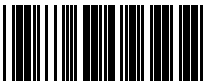

*Transmit the first “0”


Not transmit the first “0”

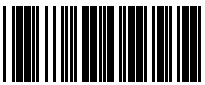


Start

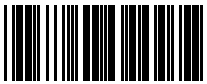
8-5. Matrix 2 of 5



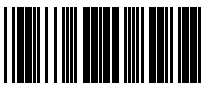
Matrix 2 of 5 enable



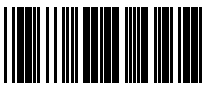
*Matrix 2 of 5 disable



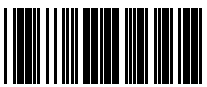
Verify check



*Not verify check



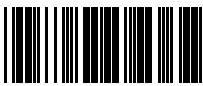
Verify check transmit

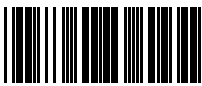


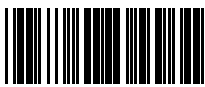
*Verify check not transmit

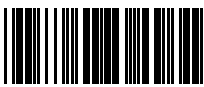
End

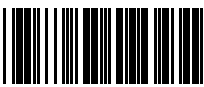
8-6. Codabar

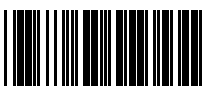

*Codabar enable


Codabar Disable

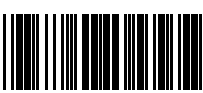

Verify check

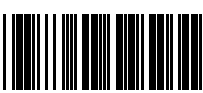

*Not verify check

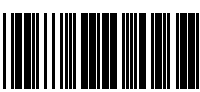

Verify check transmit

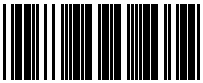

*Verify check not transmit


Transmit start & stop digit


*Not transmit start & stop digit

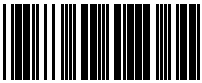

*Transmit start & stop
ABCD/ABCD


Transmit start & stop
ABCD/TN*E

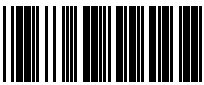


Start

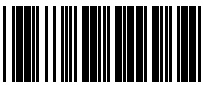
8-7. Code MSI



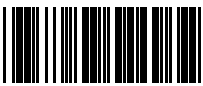
Code MSI enable



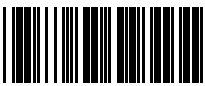
*Code MSI disable



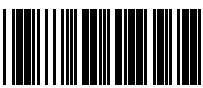
Verify check



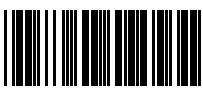
*Not verify check



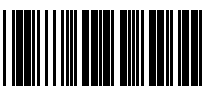
*Verify the second check digit



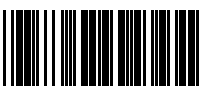
Not verify the second check digit



Verify the first check digit MOD11



*Verify the first check digit MOD10



Verify the second check digit MOD11



*Verify the second check digit MOD10

End

Verify check transmit

*Verify check not transmit

8-8. UK/Plessey

*Code UK enable

Code UK disable

*Verify check

Not verify check

Verify check transmit

*Verify check not transmit

Start

8-9. Code 11

Code 11 enable

*Code 11 disable

Verify check

*Not verify check

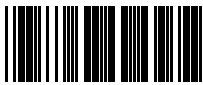
*Verify the second check digit

Not verify the second check digit

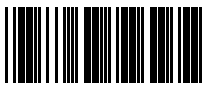
Verify the first check digit MOD09

*Verify the first check digit MOD10

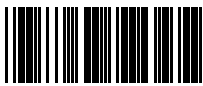
End



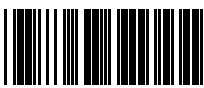
Verify the second check digit MOD09



*Verify the second check digit MOD10



Verify check transmit



*Verify check not transmit

8-10. Code 93



*Code 93 enable



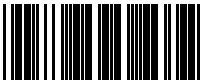
Code 93 disable



Verify check

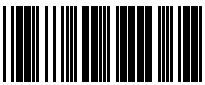


*Not verify check

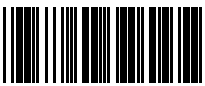


Start

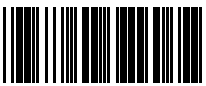
8-11. Code 39



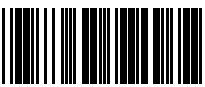
*Code 39 enable



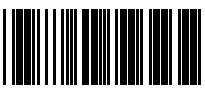
Code 39 disable



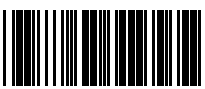
Verify check



*Not verify check



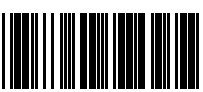
*Full ASCII 39



Standard 39



Verify check transmit

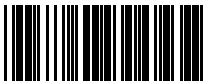


*Verify check not transmit

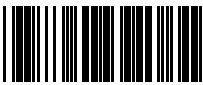


Transmit start & stop*

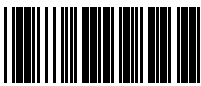
End



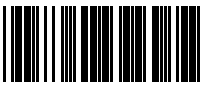
Not transmit start & stop



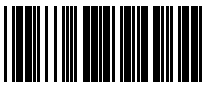
Code 32 enable



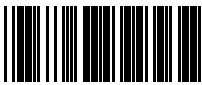
*Code 32 disable



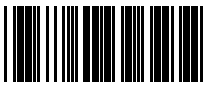
Transmit code 32 prefix A



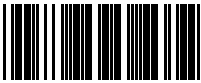
*Not transmit code 32 prefix A



Transmit code 32
checking digit

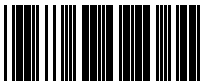


*Not transmit code 32
checking digit

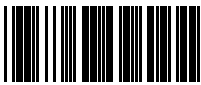


Start

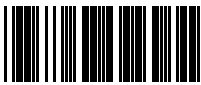
8-12. Supplements +2/+5



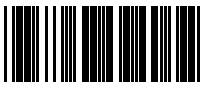
Addenda 2 digit enable



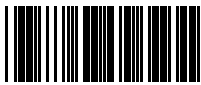
*Addenda 2 digit disable



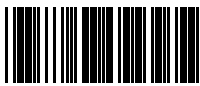
Addenda 5 digit enable



*Addenda 5 digit disable



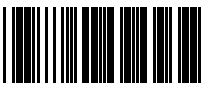
Space Separator enable

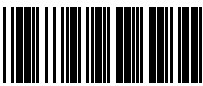


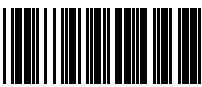
*Space Separator disable

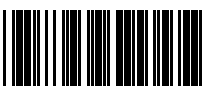
End

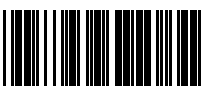
8-13. UPC-A

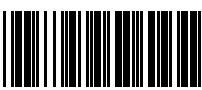

*UPC-A enable


UPC-A disable

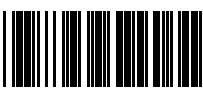

*Transmit leading digit


Not transmit leading digit


Convert to EAN-13


*Not convert to EAN-13


*Transmit checking digit


Not transmit checking digit

Start

8-14. UPC-E

*UPC-E enable

UPC-E disable

*Transmit leading digit “0”

Not transmit leading digit “0”

Convert to UPC-A

*Not convert to UPC-A

Convert to EAN-13

*Not convert to EAN-13

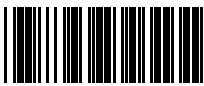
*Transmit checking digit

Not transmit checking digit

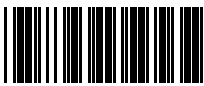
Remark: if "Covert to UPC-A" and "Convert to EAN-13" are enabled both, in actuality convert to EAN-13.

End

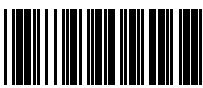
8-15. EAN-13



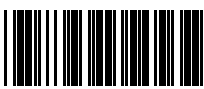
*EAN-13 enable



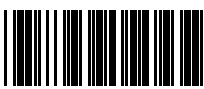
EAN-13 disable



*Transmit leading digit



Not transmit leading digit



*Transmit second digit



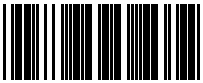
Not transmit second digit



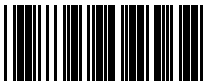
ISBN enable



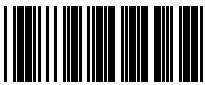
*ISBN disable



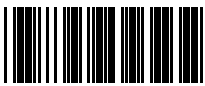
Start



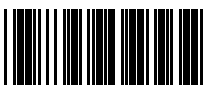
ISSN enable



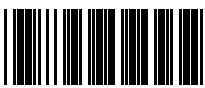
*ISSN disable



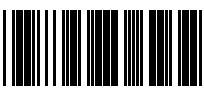
Addendum mandatory
for 378_379



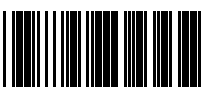
*Not addendum mandatory
for 378_379



Addendum mandatory
for 978_977



*Not addendum mandatory
for 978_977



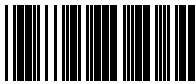
Addendum mandatory
for 434_439



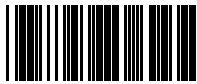
*Not addendum mandatory
for 434_439

Remark: enable 2 digit or 5 digit addenda on page 27 before enable "Addendun mandatory" function.

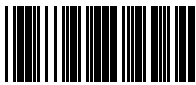
End



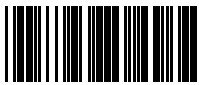
Addendum mandatory for 419_414



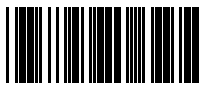
*Not addendum mandatory for 419_414



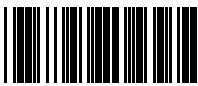
Addendum mandatory for 491



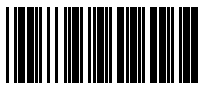
*Not addendum mandatory for 491



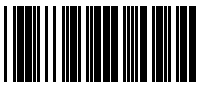
Addendum mandatory for 978_192



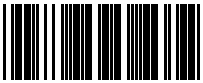
*Not addendum mandatory for 978_192



*Transmit checking digit

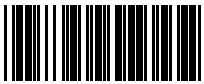


Not transmit checking digit

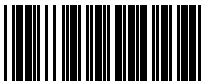


Start

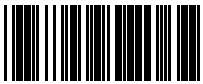
8-16. EAN-8



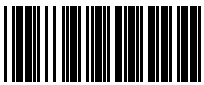
*EAN-8 enable



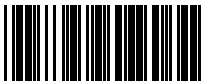
EAN-8 disable



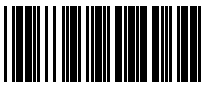
Transmit leading digit ”0”



*Not transmit leading digit “0”



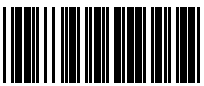
Convert to UPC-A



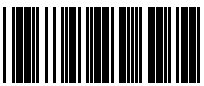
*Not convert to UPC-A



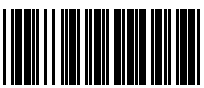
Convert to EAN-13



*Not convert to EAN-13



*Transmit checking digit

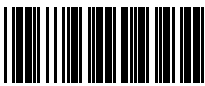


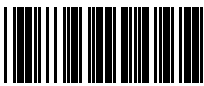
Not transmit checking digit

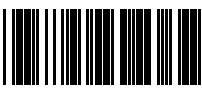
Remark: if "Covert to UPC-A" and "Convert t EAN-13" are enabled both, in actuality convert to EAN-13.

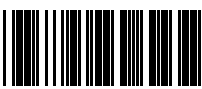
End

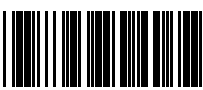
8-17. Code 128


*Code 128 enable

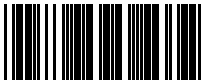

Code 128 disable


UCC 128 enable


*UCC 128 disable

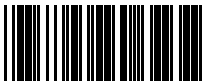

Transmit checking digit


*Not transmit checking digit

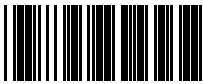


Start

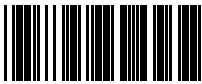
8-18. GS1



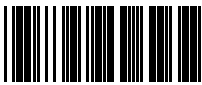
*GS1 enable



GS1 disable



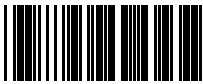
*RSS14 enable



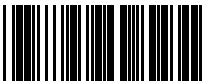
RSS14 disable



*AI_RSS14 enable



AI_RSS14 disable

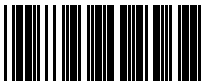


*Transmit RSS14 checking digit

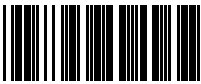


Not transmit RSS14 checking digit

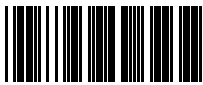
End



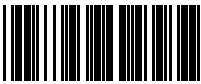
*RSS Limited enable



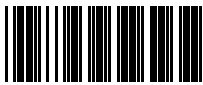
RSS Limited disable



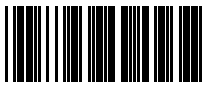
*AI Limited enable



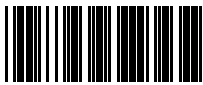
AI Limited disable



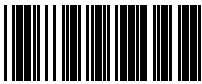
*Transmit RSS Limited checking digit



Not transmit RSS Limited checking digit

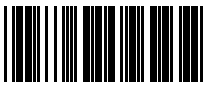


*RSS expanded enable

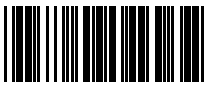


RSS expanded disable

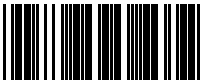
8-19. Black and White Inverse Code



Inverse code reading on
(Row type codes can not be read)

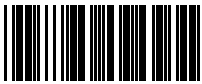


*Inverse code reading off

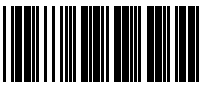


Start

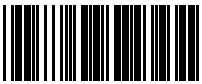
9. Scan Mode



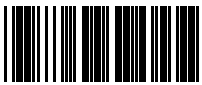
Testing



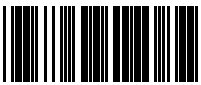
*Manual mode



Continuous scanning
(Chang Liang)



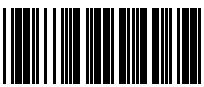
Continuous scanning
(flashing)



Reserved 1



Reserved 2



Repeat scan delay (1~255)

Example: If scanner needs 300ms of repeat scan delay.
Delay time T=N*10
300ms=N*10
N=30.
So scan: “Start” “Repeat scan delay ” “0” “3” “0” “End”.

End

10. Redundancy

*None

2 times

3 times

4 times

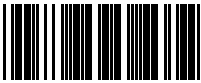
11. Automatic induction

*ON

OFF

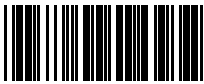
Sensitivity setting（1~255）

Remark: Press the button for 10 seconds, the scanner can be switched between "Automatica induction mode" and "Manual scan mode"

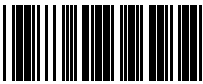


Start

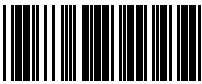
12. Beep Tones



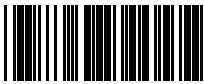
None



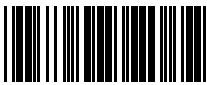
Beep duration short



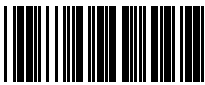
*Beep duration medium



Beep duration long



Set as customized duration



Customize duration (0.01~2.55S)

Example: If scanner needs 200ms of customized duration.

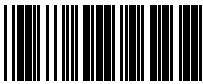
duration time T = N*10

200ms = N * 10

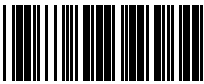
N =20.

So scan: “Start” “Customize duration” “0” “2” “0” “Set as customized duration” “End”.

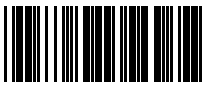
End



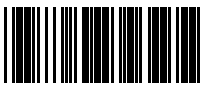
Low



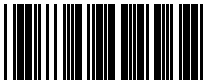
*Medium



High

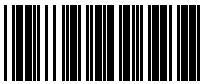


Set as customized tone

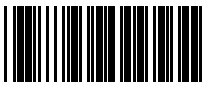


Customized tone (100-2550 HZ)

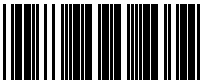
Example: If scanner needs 200HZ of customized tone.
Customized Tone = N*10
200HZ = N * 10
N =20.
So scan: “Start” “Customized tone” “0” “2” “0” “Set as customized tone” “End”.



*Starting sound on

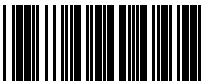


Starting sound off

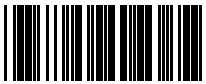


Start

13. Data Delay

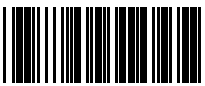


Delay between characters (T=N)
(1~255ms)

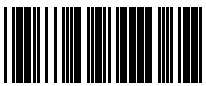


Barcode delay (T=10*N)
(10~2550ms)

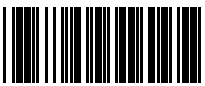
14. Reading Length for Each Kind of Code



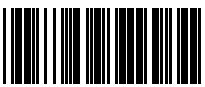
Industrial 2 of 5
minimum length



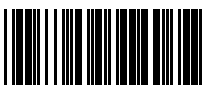
Industrial 2 of 5
maximum length



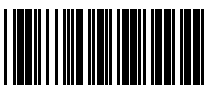
Standard 2 of 5
minimum length



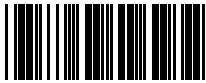
Standard 2 of 5
maximum length



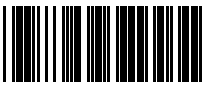
Matrix 2 of 5
minimum length



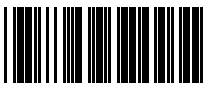
Matrix 2 of 5
maximum length



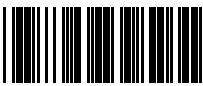
End



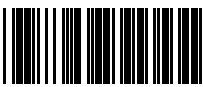
Chinese postal 2 of 5
minimum length



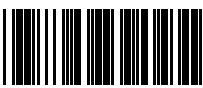
Chinese postal 2 of 5
maximum length



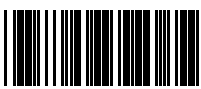
Interleaved 2 of 5
minimum length



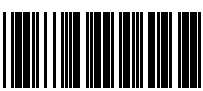
Interleaved 2 of 5
maximum length



Code 11 minimum length



Code 11 maximum length



Codabar minimum length



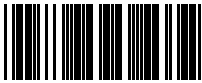
Codabar maximum length



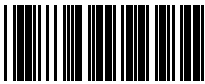
Code MSI minimum length



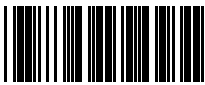
Code MSI maximum length



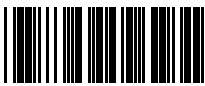
Start



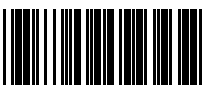
Code UK minimum length



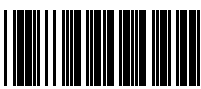
Code UK maximum length



Code 39 minimum length



Code 39 maximum length



Code 93 minimum length



Code 93maximum length



Code 128 minimum length



Code 128 maximum length



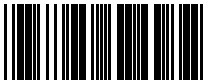
Expanded minimum length

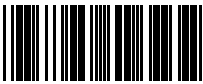


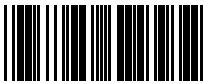
Expanded maximum length

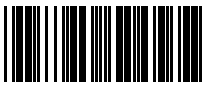
End

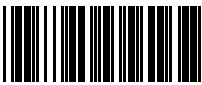
15. Prefix / Suffix for Each Kind of Code

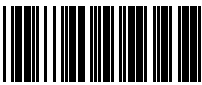

Industrial 2 of 5 prefix

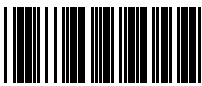

Industrial 2 of 5 suffix

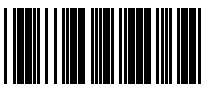

Standard 2 of 5 prefix

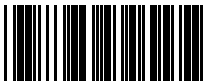

Standard 2 of 5 suffix

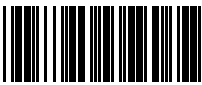

Matrix 2 of 5 prefix

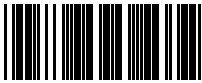

Matrix 2 of 5 suffix


Chinese postal 2 of 5 prefix

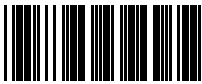

Chinese postal 2 of 5 suffix


Interleaved 2 of 5 prefix

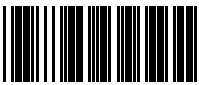

Interleaved 2 of 5 suffix



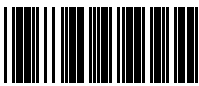
Start



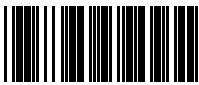
Code 11 prefix



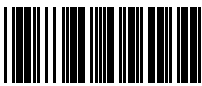
Code 11suffix



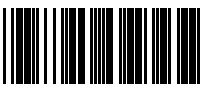
Codabar prefix



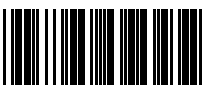
Codabar suffix



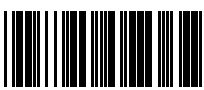
Code MSI prefix



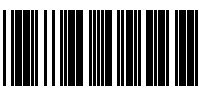
Code MSI suffix



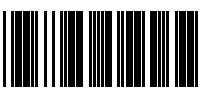
Code UK prefix



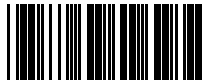
Code UK suffix



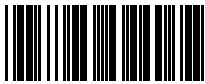
Code 39 prefix



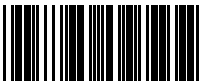
Code 39 suffix



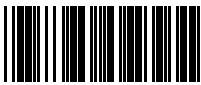
End



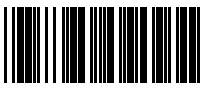
Code 93 prefix



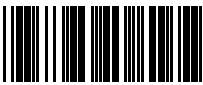
Code 93 suffix



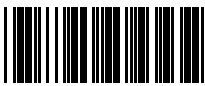
Code 128 prefix



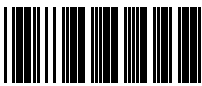
Code 128 suffix



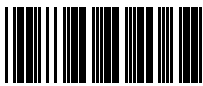
RSS Expaned prefix



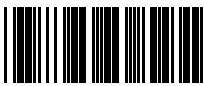
RSS Expanded suffix



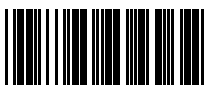
Code 32 prefix



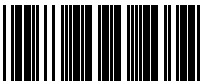
Code 32 suffix



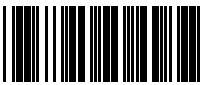
UPC−A prefix



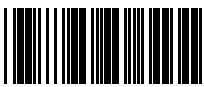
UPC−A suffix



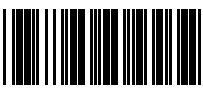
Start



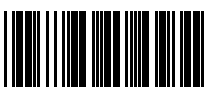
UPC-E prefix



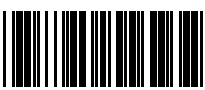
UPC-E suffix



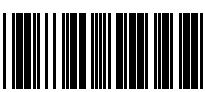
EAN-13 prefix



EAN-13 suffix



EAN-8 prefix



EAN-8 suffix



RSS14 prefix



RSS14 suffix



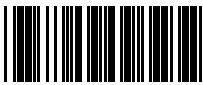
RSS Limited prefix

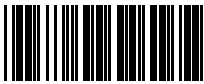


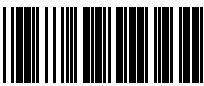
RSS Limited suffix

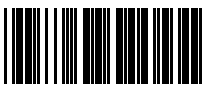
End

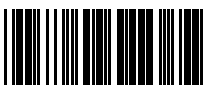
16. Version

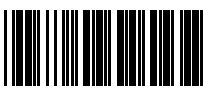

Version

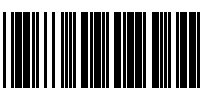

Reserved 1


Reserved 2


Reserved 3


Reserved 4


Reserved 5


Reserved 6

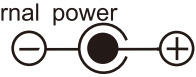

Reserved 7

17. Appendix

17-1. Pin assingment

PIN	Function
1	TXD
2	RXD
3	RTS
4	GND
5	PC_DATA/D+
6	PC_CLK/D-
7	VCC_5V
8	KB_CLK
9	KB_DATA
10	CTS

Note：JACK connector for external power
（Regulated+5Vdc/300mA)



17-2. Default barcode parameter settings table

TYPES	Read	Verify check	Transmit checking digt	Minimun length	Maxnimun length	ID
Industrial 2 of 5	N	N	N	4	64	A
Standard 2 of 5	N	N	N	4	64	B
MatriX 2 of 5	N	N	N	6	64	C
Chinese Postal 2 of 5	N	N	N	6	64	D
Interleave 2 of 5	YES	N	N	6	64	E
Code 11	N	YES	N	4	64	F
Codabar	YES	N	N	4	64	G
Code MSI	N	YES	N	4	64	H
Code UK	YES	YES	N	1	64	I
Code39	YES	N	N	1	64	J
Code32	N	N	N	8	8	N
Code93	YES	YES	N	1	64	K
EAN-13	YES	YES	N	13	13	Q
UPC-A	YES	YES	YES	12	12	O
EAN-8	YES	YES	YES	8	8	R
UPC-E	YES	YES	YES	7	7	P
Code128	YES	YES	N	1	100	L
RSS Truncated	YES	N	N	14	14	S
RSS Limited	YES	N	N	14	14	T
RSS Expanded	YES	N	N	1	74	M
Gray background denotes default						

17-3. Default setting table

List	Project Name	Description	Default
1	Scan mode		Manual scan
2	Interface setting		*Automatic
3	KB/USB	Keyboard language	US
4		Function keyboard	ON
5		Enable digital keypad	Disable
6		Caplock Ignore	Not ignore
7		KB clock	10K(slow)
8	RS-232	Baud rate	9600
9		Data bits	8
10		Parity	None
11		Stop bits	1
12		Communication handshake	None
13		Allow COM settings	No
14		COM trigger	Disable
15		COM beep	Disable
16	Data editing	Terminator	Enter(0x0d)
17		Caps lock	Origianl data
18		Data inversion	Disable
19		CODE ID	OFF
20		Data interception	All output
21		Overall Prefix and Suffix	None
22		Overall decoding length limitation	None
23		Character delay	None
24		String delay	None
25	Beeper settings	Successful decoding sound tips	Middle tone, Long duration
26		Starting sound tips	ON
27	Other functions	Repeated	None
28		Inverse barcode decoding	OFF
29		Automatic induction	ON

Remark: for USB-HID cable, KB cable, and RS232 cable, they can be detected automatically. If using vitual serial port, must configure to "RS232 / USB vitual serial port" (page 3).

17-4. ASCII TABLE

ASCII	HEX	DEC	ASCII	HEX	DEC
NUL	00	0	SP	20	32
SOH	01	1	!	21	33
STX	02	2	"	22	34
ETX	03	3	#	23	35
EOT	04	4	$	24	36
ENQ	05	5	%	25	37
ACK	06	6	&	26	38
BEL	07	7	'	27	39
BS	08	8	(	28	40
HT	09	9	)	29	41
LF	0A	10	*	2A	42
VT	0B	11	+	2B	43
FF	0C	12	,	2C	44
CR	0D	13	-	2D	45
SO	0E	14	.	2E	46
SI	0F	15	/	2F	47
DLE	10	16	0	30	48
DC1	11	17	1	31	49
DC2	12	18	2	32	50
DC3	13	19	3	33	51
DC4	14	20	4	34	52
NAK	15	21	5	35	53
SYN	16	22	6	36	54
ETB	17	23	7	37	55
CAN	18	24	8	38	56
EM	19	25	9	39	57
SUB	1A	26	:	3A	58
ESC	1B	27	;	3B	59
FS	1C	28	<	3C	60
GS	1D	29	=	3D	61
RS	1E	30	>	3E	62
US	1F	31	?	3F	63

ASCII	HEX	DEC	ASCII	HEX	DEC
@	40	64	`	60	96
A	41	65	a	61	97
B	42	66	b	62	98
C	43	67	c	63	99
D	44	68	d	64	100
E	45	69	e	65	101
F	46	70	f	66	102
G	47	71	g	67	103
H	48	72	h	68	104
I	49	73	i	69	105
J	4A	74	j	6A	106
K	4B	75	k	6B	107
L	4C	76	l	6C	108
M	4D	77	m	6D	109
N	4E	78	n	6E	110
O	4F	79	o	6F	111
P	50	80	p	70	112
Q	51	81	q	71	113
R	52	82	r	72	114
S	53	83	s	73	115
T	54	84	t	74	116
U	55	85	u	75	117
V	56	86	v	76	118
W	57	87	w	77	119
X	58	88	x	78	120
Y	59	89	y	79	121
Z	5A	90	z	7A	122
[	5B	91	{	7B	123
\	5C	92	|	7C	124
]	5D	93	}	7D	125
^	5E	94	~	7E	126
–	5F	95	DEL	7F	127

17-5. FULL ASCII TABLE



SOH



HT



STX



LF



ETX



VT



EOT



FF



ENQ



CR



ACK



SO



BEL



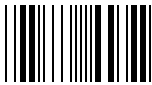
SI



BS



DLE



DC1



DC2



DC3



DC4



NAK



SYN



ETB



CAN



EM



SUB



ESC



FS



GS



RS



US



SPACE



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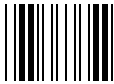
(



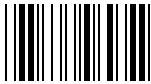
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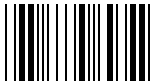
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e



f



g



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j



k



l



m



n



o



p



q



r



s



t



u



v



w



x



y



z



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F1(@A)



F2(@B)



F3(@C)



F4(@D)



F5(@E)



F6(@F)



F7(@G)



F8(@H)



F9(@I)



F10(@J)



F11(@K)



F12(@L)



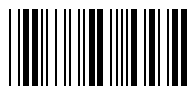
HOME(&A)



END(&B)



Cursor Right(&C)



Cursor Left(&D)



Cursor Up(&E)



Cursor Down(&F)



PgUp(&G)



PgDn(&H)



TAB(&I)



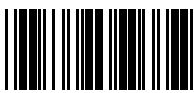
Back TAB(&J)



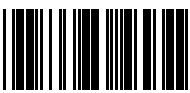
ESC(&K)



ENTER(&L)



Insert(&M)



Delet(&N)



Return(&O)



CTRL ON(&P)



CTRL OFF(&Q)



ALT ON(&R)



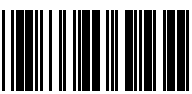
ALT OFF(&S)



SHIFT ON(&T)



SHIFT OFF(&U)



WIN (&V)



HOME (&W)



END (&X)

Sample bar codes

Code 39



Codabar



Interleaved 2 of 5



Code 128



UPC−A with 5



EAN-13 with 2

