2D Barcode Scanner

User's Manual

V1.0.3

CONTENTS

I. Product Introduction

This user guide is only suitable for 2D barcode scanner. The purpose is to know all knowledge with barcode identification equipment for customers. This manual is mainly for the software engineers and some customerswho want to know the device in further.

This manual lists the main function of the scanner, including: barcode reading, supported barcode type,data edition,command setting and advance setting.

II Quick to use

2.1 Install method

For USB device, it is plug and play, no need extra power supply to identify HID device. That's convenient appropriate forWindows,Linux,Androidand other system. Also, support Virtual COM port, just need an extra drivesupply,which can be supported by this company or dealers to offer.The physical serial port conforms to standard RS-232 interfaces, which can directly communicate with standard RS232 device.Note ,in case of serial port,additional Power DC 5V is generally required. For details, please refer to the serial port function section.Some of models support for KB interface. Need to power off the device and plug in the device with common keyboard, then power on again and start to communicate.

2.2 Quick to use

After connecting in a short time on device, the scanner will be on by itself, include interface, power on indicate, volume indicate,configuration, parameters setting. Normally, directly pressing the button can activatedecoding. In additional, some models also support automation induction trigger, serial command trigger.

2.3 Settings method

There are two methods for set up.

One method is without parameter set up which scan one barcode is ok.
Example: "enable successful reading voice prompt", or "enable Code 39".

The other method needs to set up parameter.
Example: set "98" as suffix.
Setting steps: "custom suffix", "3", "9", "3", "8","Save".

III Function settings

Default

Enable All Codes
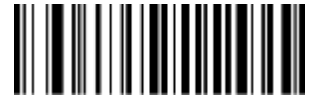
Disable AllCodes

Enable All 1D Codes

Disable All 1D Codes

Enable All 2D Codes

Disable All 2D Codes
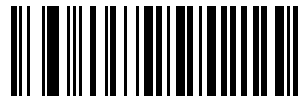
Version Information

3.1 Interface selection

RS232

USB-KB

USB Virtual COM

3.2 Scan mode

Manual

Sense

Continuous

Single Continuous

3.3 Sensitivity
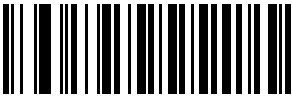
Low

Medium
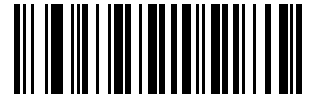
High

Keyboard function

The scanner is essentially an input device and can be understood as a keyboard device. Different countries use different keyboard layouts, and corresponding keyboard function.

3.4 Language settings
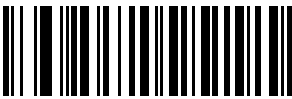
USA

Japan
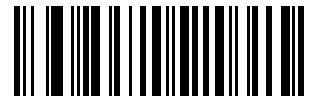
Brazil

Czech

Denmark

Sweden

France

Italy

Norway
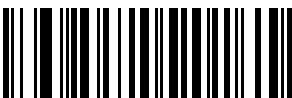
Spain

Slovakia
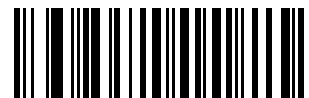
Turkey

UK

Germany

Greece

Hungary

3.5 Caps lock Function

This function can lock "Caps lock" function key, and keep the letter format without change.

Off

On

3.5.1 Number lock Function

This function can move the numeric keypad in the letter area to the keypad area and enter the numeric keypad with keypad.

Off

On

3.5.2 Character prompt

For non-visual characters, you can set the prompt tone, indicating that there are non-printable characters in the data.

Enable

Disable

3.5.3 Character delay

For some systems with slower processing speed, can set character delay.

NotDelay

Short Delay(20ms)

Long Delay(40ms)

3.5.4 Alt Emulate keyboard

This feature can simulate the ASCII mode of sending keyboard data, without the keyboard layout affection.

ALT Mode OFF   ALT Mode ON

3.5.5 Shift Function

Shift Lock Off   Shift Lock On

3.6 Serial Port function

The serial port supports the standard RS-232 interface and TTL-232 standard. The virtual serial port function is not affected by this section.

3.6.1 Baud rate

1200 bps   2400 bps

4800 bps   9600 bps

19200 bps   38400 bps

57600 bps   115200 bps

3.6.2 Parity

None

Even

Odd

3.6.3 Stop bits

1 Bit

2 Bit

3.6.4 Data bits

7 Bit

8 Bit

3.6.5 Control flow

Off

On

3.7 Data Edit

3.7.1 Prefix and Suffix settings

Prefix and suffix are the basic data edit function, including terminal characters setting are also included in this section,

Example: set "a" as prefix.

Step: "Enable custom prefix", "set custom prefix", "6", "1", "Save".

Disable Custom Prefix

Enable Custom Prefix

Set Custom Prefix

Disable Custom Suffix

Enable Custom Suffix

Set Custom Suffix

Terminating Character 0x0D

Terminating Character 0x0D 0x0A

3.7.2 Convert Case

Not Convert

All ToConvert Upper Case

All To Convert Lower Case

3.7.3 AIMFunction

AIM Disable

AIM Enable

3.8 Sound Settings

Starting-up indicator
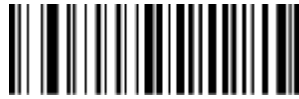
Off	On

3.8.1 Decode indicator

Off	On

High	Medium	Low

3.8.2 Decode Indicate type
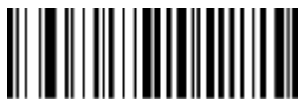
Type1	Type2	Type3

3.9 Advance function settings

3.9.1 Illumination

AlwaysOn	Flashing	Off

3.9.2 Aiming

Always On	Flashing	Off

3.9.3 Scan Delay Function

Different Barcode Scan Delay On	Same Barcode Scan Delay On	Same Barcode Scan Delay Off

3.9.4 same barcode delay function

Off	On	Parameter Setting

3.9.5 Anti-color code read

Only Read Black Code	Only Read Anti-color Code	Read Black And Anti-color Code Both

IV Barcode function settings

4.1 Code 128

Disable EAN128

Enable EAN128

Disable Code128

Enable Code128

Set TheMinimum Length

Set The Maximum Length

4.2 EAN-8

Disable EAN-8

Enable EAN-8

NotTransmit Check Digit

Transmit Check Digit

Not Convert EAN-8 To EAN-13

Convert EAN-8 To EAN-13

Disable 2-Digit Add-On Code

Enable 2-Digit Add-On Code

||||||||||||||||||||

Disable 5-Digit Add-On Code

||||||||||||||||||||

Enable 5-Digit Add-On Code

4.3 EAN13

||||||||||||||||||||

Disable ISBN

||||||||||||||||||||

EnableISBN

||||||||||||||||||||

ISBN Send 13 DigitsISBN

||||||||||||||||||||

Send 10 Digits

||||||||||||||||||||

Disable EAN-13

||||||||||||||||||||

EnableEAN-13

||||||||||||||||||||

Not Transmit Check Digit

||||||||||||||||||||

Transmit Check Digit

||||||||||||||||||||

Disable 2-Digit Add-On Code

||||||||||||||||||||

Enable 2-Digit Add-On Code

||||||||||||||||||||

Disable 5-Digit Add-On Code

||||||||||||||||||||

Enable 5-Digit Add-On Code

4.4 UPC-E

||||||||||||||||||||

Disable UPC-E

||||||||||||||||||||

Enable UPC-E

NotTransmit Check Digit	Transmit Check Digit
Not Transmit System Character"0"	Transmit System Character
Not Convert UPC-ETo UPC-A	Convert UPC-E To UPC-A
Transmit UPC-E To UPC-A	Transmit UPC-E Country Code + System Character
Disable 2-Digit Add-On Code	Enable 2-Digit Add-On Code
Disable 5-Digit Add-On Code	Enable 5-Digit Add-On Code

4.5 UPC-A

Disable UPC-A	Enable UPC-A
Not Transmit Check Digit	Transmit Check Digit

||||||||||||||||||||||

No Transmit System Character"0"

||||||||||||||||||||||

Transmit System Character"0"

||||||||||||||||||||||

No Preamble

||||||||||||||||||||||

Disable 2-Digit Add-On Code

||||||||||||||||||||||

Enable 2-Digit Add-On Code

||||||||||||||||||||||

Disable 5-Digit Add-On Code

||||||||||||||||||||||

Enable 5-Digit Add-On Code

4.6 Interleaved 25

||||||||||||||||||||||

Disable Interleaved 25

||||||||||||||||||||||

Enable Interleaved 25

||||||||||||||||||||||

Set TheMinimum Length

||||||||||||||||||||||

Set The Maximum Length

||||||||||||||||||||||

Not Check

||||||||||||||||||||||

Check, Not Transmit Check Digit

||||||||||||||||||||||

Check,Transmit Check digit

4.7 MATRIX 25

||||||||||||||||||||||

Disable Matrix 25

||||||||||||||||||||||

Enable Matrix 25

||||||||||||||||||||

Set TheMinimum Length

||||||||||||||||||||

Set The Maximum Length

||||||||||||||||||||

Not Check

||||||||||||||||||||

Check, Not Transmit Check Digit

||||||||||||||||||||

Check,TransmitCheck Digit

4.8 CODE 39

||||||||||||||||||||

Disable CODE 39

||||||||||||||||||||

Enable CODE 39

||||||||||||||||||||

Set TheMinimum Length

||||||||||||||||||||

Set The Maximum Length

||||||||||||||||||||

Not Check

||||||||||||||||||||

Check

||||||||||||||||||||
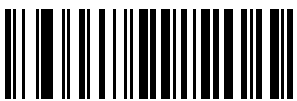
Not Transmit Start-Stop Character

||||||||||||||||||||
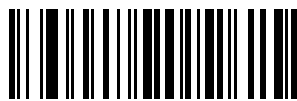
Transmit Start-Stop Character

||||||||||||||||||||
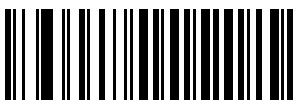
Full ASCII code39

||||||||||||||||||||

Standard code 39

4.9 CODE 32

Enable Code32
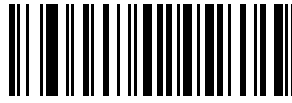
Disable Code32
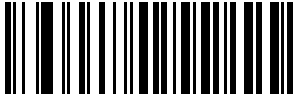
EnablePrefix "0"

DisablePrefix"0"
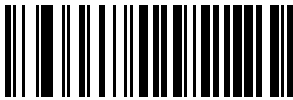
Transmit Check Digit
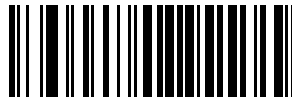
Not Transmit Check Digit

4.10 CODABAR

Disable Codabar

EnableCodabar

Set TheMinimum Length

Set The Maximum Length

Not check

Check, Not Transmit Check Digit

Transmit Check Digit

NotTransmit Start-Stop Characters

Transmit Start-Stop Characters

ABCD AsStart-Stop Character

ABCD/TNE As Start-Stop Character

Start-Stop Characters In Upper Case

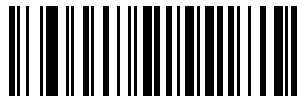Start-stop Characters In Lower Case

4.11 CODE 93

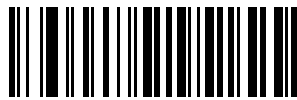Disable Code 93   Enable Code 93

Set TheMinimum Length   Set The Maximum Length

No Check   Check, Not Transmit Check Digit   Check, Transmit Check Digit

4.12 RSS

Disable RSS   Enable RSS

Not Transmit AL(01)Character   Transmit AL(01) Character

4.13 Industrial 25

Disable Industrial 25   Enable Industrial 25

Set TheMinimum Length   Set The Maximum Length

||||||| barcode |||||||

No Check

||||||| barcode |||||||

Check, Not Transmit Check Digit

||||||| barcode |||||||

Check, Transmit Check Digit

4.14 Standard 25

||||||| barcode |||||||

Disable Standard 25

||||||| barcode |||||||

Enable Standard 25

||||||| barcode |||||||

Set the Minimum Length

||||||| barcode |||||||

Set the Maximum Length

||||||| barcode |||||||

No Check

||||||| barcode |||||||

Check, Not Transmit Check Digit

||||||| barcode |||||||

Check,Transmit Check Digit

4.15 Plessey

||||||| barcode |||||||

Disable Plessey

||||||| barcode |||||||

Enable Plessey

||||||| barcode |||||||

SetTheMinimum Length

||||||| barcode |||||||

Set The Maximum Length

||||||| barcode |||||||

No Check

||||||| barcode |||||||

Check, Not Transmit Check Digit

||||||| barcode |||||||

Check,Transmit Check Digit

4.16 MSI

Disable MSI

Enable MSI

SetTheMinimum Length

Set The Maximum Length

No Check

Single Check Digit,MOD10

Double Check Digit:MOD10

Double Check Digit,MOD10/MOD11

Not Transmit Check Digits

Transmit Check Digits

4.17 QR

Disable QR

Enable QR

Set TheMinimum Length

Set The Maximum Length

Read Single QR Only

Read Double QR Only

4.18 PDF 417

Disable PDF417

Enable PDF417

Set TheMinimum Length

Set The Maximum Length

Read Single PDF417 Only

Read Double PDF417 Only

4.19 DM

Disable DataMatrix

Enable DataMatrix

Set The Minimum Length

Set The Maximum Length

Read Single DataMatrix Only

Read Double DataMatrix Only

Appendix I Factory Defaults Table

Appendix II Code ID Table

When the setting parameter turns on the function of CODE ID, the corresponding barcode data will be preceded by CID CODE, as shown below:

Barcode type	CID
UPCA	A
UPCE	B
EAN8	C
EAN13	D
ISSN	E
ISBN	F
CODE 128	G
GS1 128	H
ISBT128	J
CODE 39	K
CODE 93	L
CODE 11	M
ITF 25	N
ITF 6	O
ITF 14	P
MATRIX 25	S
IN 25	U
STANDARD 25	V
CODABAR	W
UK	X
MSI	Y
GS1	Z

Appendix III ASCII Table

BIN	DEC	HEX	COM	KEYBOARD
0000 0000	0	00	NUL	NULL
0000 0001	1	01	SOH	ENTER
0000 0010	2	02	STX	CAPS LOCK
0000 0011	3	03	ETX	NULL
0000 0100	4	04	EOT	NULL
0000 0101	5	05	ENQ	NULL
0000 0110	6	06	ACK	NULL
0000 0111	7	07	BEL	ENTER
0000 1000	8	08	BS	←
0000 1001	9	09	HT	TAB
0000 1010	10	0A	LF	↓
0000 1011	11	0B	VT	TAB
0000 1100	12	0C	FF	DELETE

0000 1101	13	0D	CR	ENTER
0000 1110	14	0E	SO	INSERT
0000 1111	15	0F	SI	ESCAPSE
0001 0000	16	10	DLE	F11
0001 0001	17	11	DC1	HOME
0001 0010	18	12	DC2	PRINT SCREEN
0001 0011	19	13	DC3	DELETE
0001 0100	20	14	DC4	TAB+SHIFT
0001 0101	21	15	NAK	F12
0001 0110	22	16	SYN	F1
0001 0111	23	17	ETB	F2
0001 1000	24	18	CAN	F3
0001 1001	25	19	EM	F4
0001 1010	26	1A	SUB	F5
0001 1011	27	1B	ESC	F6
0001 1100	28	1C	FS	F7
0001 1101	29	1D	GS	F8
0001 1110	30	1E	RS	F9
0001 1111	31	1F	US	F10
0010 0000	32	20	（SPACE）	（SPACE）
0010 0001	33	21	!	!
0010 0010	34	22	"	"
0010 0011	35	23	#	#
0010 0100	36	24	$	$
0010 0101	37	25	%	%
0010 0110	38	26	&	&
0010 0111	39	27	'	'
0010 1000	40	28	(	(
0010 1001	41	29	)	)
0010 1010	42	2A	*	*
0010 1011	43	2B	+	+
0010 1100	44	2C	,	,
0010 1101	45	2D	-	-
0010 1110	46	2E	.	.
0010 1111	47	2F	/	/
0011 0000	48	30	0	0
0011 0001	49	31	1	1
0011 0010	50	32	2	2
0011 0011	51	33	3	3
0011 0100	52	34	4	4
0011 0101	53	35	5	5

0011 0110	54	36	6	6
0011 0111	55	37	7	7
0011 1000	56	38	8	8
0011 1001	57	39	9	9
0011 1010	58	3A	:	:
0011 1011	59	3B	;	;
0011 1100	60	3C	<	<
0011 1101	61	3D	=	=
0011 1110	62	3E	>	>
0011 1111	63	3F	?	?
0100 0000	64	40	@	@
0100 0001	65	41	A	A
0100 0010	66	42	B	B
0100 0011	67	43	C	C
0100 0100	68	44	D	D
0100 0101	69	45	E	E
0100 0110	70	46	F	F
0100 0111	71	47	G	G
0100 1000	72	48	H	H
0100 1001	73	49	I	I
0100 1010	74	4A	J	J
0100 1011	75	4B	K	K
0100 1100	76	4C	L	L
0100 1101	77	4D	M	M
0100 1110	78	4E	N	N
0100 1111	79	4F	O	O
0101 0000	80	50	P	P
0101 0001	81	51	Q	Q
0101 0010	82	52	R	R
0101 0011	83	53	S	S
0101 0100	84	54	T	T
0101 0101	85	55	U	U
0101 0110	86	56	V	V
0101 0111	87	57	W	W
0101 1000	88	58	X	X
0101 1001	89	59	Y	Y
0101 1010	90	5A	Z	Z
0101 1011	91	5B	[	[
0101 1100	92	5C	\	\
0101 1101	93	5D	]	]
0101 1110	94	5E	^	^

0101 1111	95	5F	_	_
0110 0000	96	60	`	`
0110 0001	97	61	a	a
0110 0010	98	62	b	b
0110 0011	99	63	c	c
0110 0100	100	64	d	d
0110 0101	101	65	e	e
0110 0110	102	66	f	f
0110 0111	103	67	g	g
0110 1000	104	68	h	h
0110 1001	105	69	i	i
0110 1010	106	6A	j	j
0110 1011	107	6B	k	k
0110 1100	108	6C	l	l
0110 1101	109	6D	m	m
0110 1110	110	6E	n	n
0110 1111	111	6F	o	o
0111 0000	112	70	p	p
0111 0001	113	71	q	q
0111 0010	114	72	r	r
0111 0011	115	73	s	s
0111 0100	116	74	t	t
0111 0101	117	75	u	u
0111 0110	118	76	v	v
0111 0111	119	77	w	w
0111 1000	120	78	x	x
0111 1001	121	79	y	y
0111 1010	122	7A	z	z
0111 1011	123	7B	{	{
0111 1100	124	7C				
0111 1101	125	7D	}	}
0111 1110	126	7E	~	~
0111 1111	127	7F	DEL	DEL

Appendix IV Set parameter table

0

1

2

3

4

5

6

7

8

9

A

B

C

D

E

F

Save

Cancel One Digit

Cancel AGroup Of Digits

Cancel All Digits