2D Barcode Scanner

User Manual

HF-V1.3

Content

Product Introduction

This user guide is only suitable for 2D barcode scanner. The purpose is to enable users to fully master the use of the scanner. This manual is mainly for the software engineers and some customers who want to know the device in further.

The 2D barcode scanner can read all kinds of main 1D and 2D codes, including:
1D：Codabar、Code11、Code39、Code32、Interleaved 2 of 5、Industrial 2 of 5、Matrix 2 of 5、Code93、Code128、GS1-128、UPC-A、UPC-E、EAN 8、EAN 13、ISBN、ISSN、GS1 DataBar（RSS14）、GS1 DataBar Limited、GS1 DataBar Expanded、MSI、Standard 25、Plessey
2D: PDF417、Micro PDF417、QR Code、Micro QR、Data Matrix、Aztec Code、Hanxin code、Maxicode

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

The product has been configured with parameters suitable for most common application functions before packing. In most cases, users can use it directly without making any adjustments. The default functions and parameters are listed in the appendix of this manual for reference. The options marked with '*' in the setting code also represent the default functions or parameters.

Quick To Use

Install Method

For USB cable version scanners, it is plug and play, no need extra driver or power supply. That's convenient appropriate for Windows, Linux, Android and other system. It also support Virtual COM port, just need an extra driver supply, which can be offered by manufacturer or dealers. The physical serial port conforms to standard RS-232 interfaces, which can directly communicate with standard RS232 device. Please note an additional DC 5V power supply is generally required for RS232 interface. For details, please refer to the serial port function section.

Quick To Use

The scanner will startup in a short time after connecting to a power supply, scanner will automatically load the preset settings during startup, including interface, power on indication, volume indication, configuration, parameters setting. Normally, pressing the button can activate decoding. If the decoding is completed, the device will turn off reading, output data, sound or LED prompt (depending on the settings). In additional, the scanner also supports automation induction trigger, serial command trigger.

Setting Method

There are two methods for set up.

One method is scanning a barcode to finish setting.
Example: "Decoding sound tone 1", or "Enable code 39".

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

Factory Default Setting

All the scanners have a factory default setting. Reading the "Restore factory default" barcode will restore all the settings of the scanner to the factory default.

You are most likely to use this barcode in the following situations:
1. The scanner settings are wrong, such as scanner can not read barcodes.
2. You have forgotten what settings you made for the scanner before, and you do not want to be affected by the previous settings.
3. The scanner is set to use a function that is not often used, and it has been used.
Note: * indicates the default value

Restore factory default

Version Information

The version number information is the current firmware version, and the device information includes the current version built time, firmware version, hardware information, device name, and SN number.

Version information   Device information

Function Settings

Interface Selection

USB Interface

When setting the USB interface, the scanner can be simulated as a HID-KBW device. In this mode, the scanner will become a virtual keyboard to send data to the host.

USB-KBW*

USB Virtual Serial Port

If the application of the host using the serial communication method to receive data, the scanner can be set to the USB-VCOM mode. This function requires the installation of the corresponding driver on the host.

JA060

USB-VCOM

RS232 Interface

The scanner with RS232 cable communicates with the host through the serial communication interface. It supports receiving reading data, issuing commands to control the scanner, and changing the function parameters of the scanner.

JA000

RS232

RS232 Baud Rate

The RS232 baud rate setting is only used in RS232 interface, It means sending data from the scanner to the host at a specified rate. The host must be set to the same baud rate as the scanner.

BA030

9600*

BA000

1200

BA010

2400

BA020

4800

BA040

19200

BA050

38400

BA060

57600

BA070

115200

BA080

25600

Parity Check

Parity check provides an efficient method of checking character bit patterns.

BB000	BB010	BB020
None*	Even parity	Odd parity

Stop Bit

BC000	BC010
1 bit*	2 bits

Data Bit

BD030	BD020
8 bits*	7 bits

Scan Mode

DC000	DC010
Manual*	Auto sense

Same Barcode Scan Delay Setting

The scanner will delay read when it reading the same barcode, the delay time is calculated from scan window leaving the barcode.

DN013	DN014	DN015
200ms*	500ms	1s

DN016	DN017	DN019
5s	10s	30s

Keyboard Function

Keyboard Language Setting

JD200	JD201	JD202
USA*	Japan	Brazil
JD203	JD204	JD205
Czech	Denmark	Sweden
JD206	JD207	JD208
France	Italy	Norway
JD209	JD210	JD211
Spain	Slovakia	Turkey Q
JD212	JD213	JD214
UK	Germany	Greece
JD215	JD216	JD217
Hungary	Turkey (F)	Finland

|||||||||||||||||||||||| JD218

Russia

|||||||||||||||||||||||| JD219
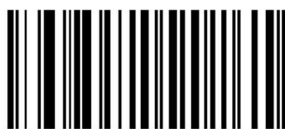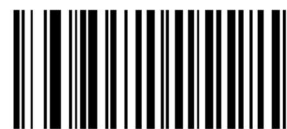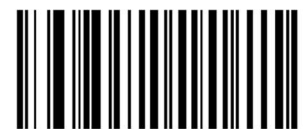
Netherlands

Number Lock Function

Enabling this function can move the numeric keypad in the letter area to the keypad area and input the number with keypad.

|||||||||||||||||||||||| JD110

Number lock on

|||||||||||||||||||||||| JD120

Number lock off *

Note: Before enabling this function, please make sure that the Number Lock of the host is turned on. If the "Alt Emulate Keyboard Mode" is turned on, this function will be invalid.

Case Conversion

|||||||||||||||||||||||| JD040

No Conversion*

|||||||||||||||||||||||| JD041

All convert to upper case

|||||||||||||||||||||||| JD042

All convert to lower case

Character Input Delay

The time interval between key pressing during character input, from the last key release to the next key press.
Note: The default interval 5ms is to be compatible with hosts with different performance and operating systems and ensure data output stability. You need to set longer delay time if the data still lost due to slow running of system.

|||||||||||||||||||||||| JD050

No delay

|||||||||||||||||||||||| JD053

Delay 5ms*

|||||||||||||||||||||||| JD054

Delay 10ms

|||||||||||||||||||||||| JD056

Delay 20ms

|||||||||||||||||||||||| JD058

Delay 40ms

Alt Emulate Keyboard

In order to enable the scanner to input any ASCII characters (hexadecimal 0x00 to 0xFF) in any keyboard languages, the keyboard can be set to Alt Emulate Keyboard mode. When using this mode to send characters, the speed will be slow because more data to be sent.

ZA153	JD062
Alt emulate keyboard off *	Alt emulate keyboard on

Control Character Escape

The control characters escape output rules by this product cannot be recognized in some systems or software. You can achieve this function by setting the control character escape.

The following escape will be operated after successful decoding:

1. Press and hold the "CTRL" key
2. Press the letter keys on the keyboard in sequence according to the character escape (check the appendix for details)
3. Release the "CTRL" key

ZA131	ZA130
Control character escape off*	Control character escape on

Invisible Character Output

Example: The following QR code has 'CR' invisible character:

123«CR»456

The default output data: 123
456
Ignore invisible characters: 123456
Note: If the barcode contains 0x0A characters, LF cannot be displayed in WINDOWS. Please set 0x0A to replace 0x0D (Enter).

JD190	JD191
Don't ignore invisible characters*	Ignore invisible characters

Input Encoding Format

Select the encoding format for creating the code (if it is PDF417, QR Code, Data Matrix, etc.). After setting, the code can be correctly recognized. UTF-8 and Shift-JIS encoding format barcodes are automatically recognized as default.

JD260	JD270	ZA330
UTF-8	GBK	Automatic*
ZA344	ZA345	ZA346
KOI-8	BIG5	JIS

Output Encoding Format

If the data the host receiving does not display the correct characters, the barcode could be created by a different encoding format.

JD160	JD170	JD171
USA*	GBK	Unicode
JD172	JD173	JD174
Shift-JIS	UTF-8	BIG5

GS Control Character Replacement

ZA132	ZA137	ZA133
No replacement*	Replace GS to Ç	Replace GS to	

ZA134

Replace GS to ^]

ZA135

Replace GS to]

ZA136

Replace GS to <GS>

ZA138

Enable custom GS replacement

DB001

Custom GS replacement setting

Custom GS Replacement Instruction(replace to 10 characters at most)

Example: Replace GS character to '#GS#'

1. Scan 'Enable custom GS replacement'

2. Scan 'Custom GS replacement setting'

3. Scan ASCII hex value codes of #GS#, ASCII hex value of #GS# are 0x23 0x47 0x53 0x23 in 'Appendix ASCII table', then scan '2' '3' '4' '7' '5' '3' '2' '3' barcodes in the 'Data Edit And Setting Parameter Barcodes'

4. Scan 'Save' in the 'Data Edit And Setting Parameter Barcodes'

Data Edit

Prefix Setting

Example: set "a" as prefix(hexadecimal value of a is 61).

Step:

"Enable custom prefix setting",

"Custom prefix setting",

"6", (data edit parameter table)

"1", (data edit parameter table)

"Save".(data edit parameter table)

DF000

Disable custom prefix setting*

DF010

Enable custom prefix setting

DA000

Custom prefix setting

Suffix Setting

Example: set "a" as suffix(hexadecimal value of a is 61).

Step:

"Enable custom suffix setting",

"Custom suffix setting",

"6", (data edit parameter table)

"1", (data edit parameter table)

"Save".(data edit parameter table)

Disable custom suffix setting*	Enable custom suffix setting	Custom suffix setting

Terminator And Start Character Setting

The terminator is at the end of the data, and the start character is at the front of the data. The key value of the terminator ETX is End, and the key value of the start character STX is Home.

No terminator	Terminator Enter* (0x0D)	Terminator(CR/LF) (0x0D 0x0A)
Terminator TAB	Terminator ETX	Terminator LF (0x0A)
No start character*	Start character STX	

Data Cutting

Send full data*	Send start field of data	Send middle field of data
Send end field of data	Send start+middle field of data	Send start+end field of data

Send middle+end field of data

Data Bit Setting

The data edit function can cut the barcode data into three fields: start/middle/end fields by configuring the data length of the start/end fields. Please set the length and sending of the start/end fields according to actual needs.
Note: Customized prefix and suffix, start character, terminator, CODE ID, AIM ID and other non original data are not affected by the data edit function.
Example: Set the start field as 2 characters, set the end field as 3 characters, send middle field data.
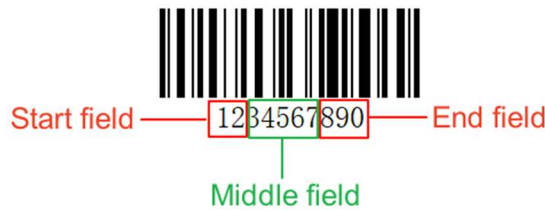
Steps:
"Set start field length"
"2", (data edit parameter table)
"Save".(data edit parameter table)
"Set end field length"
"3", (data edit parameter table)
"Save".(data edit parameter table)
"Send middle field of data"

Set start field length

Set end field length

Barcode Data 0D 0A Line Feed Setting

Only 0A line feed

Only 0D line feed*

0A 0D both line feed

Code ID Prefix

After turning on Code ID, the corresponding Code ID prefix will appear in the output data. For details, please refer to the appendix.

DH000	DH010
Disable*	Enable

Sound Settings

Decoding Prompt Sound

CD000	CD010
Off	On*

Decoding Prompt Sound Volume

CD030	CD032
High volume*	Low volume

Decoding Prompt Sound Tone

CD020	CD021	CD022
Tone 1	Tone 2	Tone 3

Advanced Setting

White LED Fill Light Setting

Note: Turning off fill light may affect reading performance

CA000	CA020

On*	Off

Red LED Aiming Light Setting

CB000	CB020
On*	Off

Scan Prompt Light Setting

AH040	AH030
On*	Off

Inverse Color Barcode Reading

AB260	AB262
Only read normal codes*	Read both normal & inverse codes

GS1 AI Character

Read barcodes containing GS1 AI characters, such as GS1-128, GS1-DM, GS1-Databar, and medical UDI barcodes, and output AI characters containing brackets. For example:

(01) 0 0000123 00001 7 (17) 240601   (01) 0 0000123 00001 7

GS1-DM	GS1-128	
EN050	EN060	EN070
No processing	Output including bracket	Output including bracket+LF

Barcode Function Setting

Overall Setting

Each type of barcode has its own unique features. The settings in this chapter can be used to adjust the scanner

to adapt to these feature changes.

The fewer barcode types turned on "Enable Reading", the faster the scanner will read. Disabling some barcode types can improve reading performance.

Enable/Disable Reading 1D/2D Barcodes

Enable all 1D barcodes

Disable all 1D barcodes

Enable all 2D barcodes

Disable all 2D barcodes

UPC/EAN/JAN Additional Code

Disable reading UPC/EAN/JAN with additional codes*

Adaptive reading UPC/EAN/JAN with additional codes

Only read UPC/EAN/JAN with additional codes

Disable reading UPC/EAN/JAN with additional codes*

Only read UPC/EAN/JAN with additional codes

Adaptive reading UPC/EAN/JAN with additional codes

Codabar

EJ010	EJ020
Disable	Enable*

Codabar Check Bit Setting
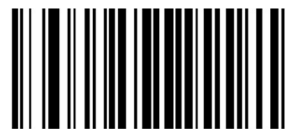
EJ050	EJ060	EJ070
Disable*	Enable but not send check bit	Enable & send check bit

Codabar Start/End Character Sending

EJ090	EJ080
Enable	Disable*

Set Reading Length Range For Codabar

EJ030	EJ040
Minimum length(0~50bits)	Maximum length(0~50bits)

Code 11

FI010	FI020
Disable*	Enable

Code 11 Check Bit Setting

‖‖‖‖‖ EP050	‖‖‖‖‖ EP130	‖‖‖‖‖ EP140
Disable*	Enable but not send check bit	Enable & send check bit

‖‖‖‖‖ EP060	‖‖‖‖‖ EP070
1 check bit, MOD11	2 check bits, MOD10/MOD11

Set Reading Length Range For Code 11

‖‖‖‖‖ EP030	‖‖‖‖‖ EP040
Minimum length(0~50bits)	Maximum length(0~50bits)

Code 128

‖‖‖‖‖ EA010	‖‖‖‖‖ EA020
Disable	Enable*

Set Reading Length Range For Code 128

‖‖‖‖‖ EA030	‖‖‖‖‖ EA040
Minimum length(0~50bits)	Maximum length(0~50bits)

GS1 128

EV080	EV070
Disable*	Enable

Code 39

EI010	EI020
Disable	Enable*

Code 39 Check Bit Setting

EI050	EI060	EI070
Disable*	Enable but not send check bit	Enable & send check bit

Code 39 Start/End Character Sending

EI080	EI090
Disable*	Enable

Code 39 Full ASCII

EI110	EI100
Enable	Disable*

Set Reading Length Range For Code 39

‖‖‖‖‖‖‖‖‖‖‖‖
EI030

‖‖‖‖‖‖‖‖‖‖‖‖
EI090

Minimum length(0~50bits)　　　　Maximum length(0~50bits)

Code 93

‖‖‖‖‖‖‖‖‖‖‖‖
EK010

‖‖‖‖‖‖‖‖‖‖‖‖
EK020

Disable*　　　　Enable

Code 93 Check Bit Setting

‖‖‖‖‖‖‖‖‖‖‖‖
EK050

‖‖‖‖‖‖‖‖‖‖‖‖
EK060

‖‖‖‖‖‖‖‖‖‖‖‖
EK070

Disable*　　　　Enable but not send check bit　　　　Enable & send check bit

Set Reading Length Range For Code 93

‖‖‖‖‖‖‖‖‖‖‖‖
EK030

‖‖‖‖‖‖‖‖‖‖‖‖
EK040

Minimum length(0~50bits)　　　　Maximum length(0~50bits)

EAN 8

‖‖‖‖‖‖‖‖‖‖‖‖
EB010

‖‖‖‖‖‖‖‖‖‖‖‖
EB020

Disable　　　　Enable*

EAN 8 Check Bit Sending

‖‖‖‖‖‖‖‖‖
EB030

Disable

‖‖‖‖‖‖‖‖‖
EB040

Enable*

EAN 8 Expand To EAN 13

‖‖‖‖‖‖‖‖‖
EB090

Enable

‖‖‖‖‖‖‖‖‖
EB100

Disable*

EAN 13

‖‖‖‖‖‖‖‖‖
EC010

Disable

‖‖‖‖‖‖‖‖‖
EC020

Enable*

EAN 13 Check Bit Sending

‖‖‖‖‖‖‖‖‖
EC030

Disable

‖‖‖‖‖‖‖‖‖
EC040

Enable*

UPC-A

‖‖‖‖‖‖‖‖‖
EE010

Disable

‖‖‖‖‖‖‖‖‖
EE020

Enable*

UPC-A Check Bit Sending

‖‖‖‖‖‖‖ EE030	‖‖‖‖‖‖‖ EE040
Disable	Enable*

UPC-A Prefix Character Output Setting

‖‖‖‖‖‖‖ EE090	‖‖‖‖‖‖‖ EE100	‖‖‖‖‖‖‖ EE180
No prefix	System character*	System character and country code

UPC-E

‖‖‖‖‖‖‖ ED010	‖‖‖‖‖‖‖ ED020
Disable	Enable*

UPC-E Check Bit Sending

‖‖‖‖‖‖‖ ED030	‖‖‖‖‖‖‖ ED040
Disable	Enable*

UPC-E Prefix Character Output Setting

‖‖‖‖‖‖‖ ED090	‖‖‖‖‖‖‖ ED100	‖‖‖‖‖‖‖ ED180
No prefix	System character*	System character and country code

UPC-E Expand To UPC-A

‖‖‖‖‖‖‖‖ ED110	‖‖‖‖‖‖‖‖ ED120
Disable*	Enable

Matrix 25

‖‖‖‖‖‖‖‖ ED010	‖‖‖‖‖‖‖‖ ED020
Disable	Enable*

Matrix Check Bit Setting

‖‖‖‖‖‖‖‖ EG050	‖‖‖‖‖‖‖‖ EG060	‖‖‖‖‖‖‖‖ EG070
Disable*	Enable but not send check bit	Enable & send check bit

Set Reading Length Range For Matrix 25

‖‖‖‖‖‖‖‖ EG030	‖‖‖‖‖‖‖‖ EG040
Minimum length(0~50bits)	Maximum length(0~50bits)

RSS14

‖‖‖‖‖‖‖‖ FM010	‖‖‖‖‖‖‖‖ FM020
Disable	Enable*

RSS-Stack

‖‖‖ ‖‖‖‖ ‖‖‖‖ EN010	‖‖‖ ‖‖‖‖ ‖‖‖‖ EN020
Disable	Enable*

RSS-Expanded

‖‖‖ ‖‖‖‖ ‖‖‖‖ FJ010	‖‖‖ ‖‖‖‖ ‖‖‖‖ EN020
Disable	Enable*

RSS-Expanded Stack

‖‖‖ ‖‖‖‖ ‖‖‖‖ FK010	‖‖‖ ‖‖‖‖ ‖‖‖‖ FK020
Disable	Enable*

RSS-Limited

‖‖‖ ‖‖‖‖ ‖‖‖‖ FL010	‖‖‖ ‖‖‖‖ ‖‖‖‖ FL020
Disable	Enable*

Code 32

‖‖‖ ‖‖‖‖ ‖‖‖‖ EI130	‖‖‖ ‖‖‖‖ ‖‖‖‖ EI120
Disable	Enable*

Code 32 Check Bit Setting

Disable*	Enable but not send check bit	Enable & send check bit

Code 32 Start Character Setting

Enable	Disable*

Interleaved 2 of 5

Disable	Enable*

Interleaved 2 of 5 Check Bit Setting

Disable*	Enable but not send check bit	Enable & send check bit

Set Reading Length Range For Interleaved 2 of 5

Minimum length(0~50bits)	Maximum length(0~50bits)

Industrial 25

|||||||||||||||||
ER010

Disable

|||||||||||||||||
ER020

Enable*

Industrial 25 Check Bit Setting

|||||||||||||||||
ER050

Disable

|||||||||||||||||
ER060

Enable but not send check bit

|||||||||||||||||
ER070

Enable & send check bit

Set Reading Length Range For Industrial 25

|||||||||||||||||
ER030

Minimum length(0~50bits)

|||||||||||||||||
ER040

Maximum length(0~50bits)

Standard 25

|||||||||||||||||
ES010

Disable

|||||||||||||||||
ES020

Enable*

Standard 25 Check Bit Setting

|||||||||||||||||
ES050

Disable*

|||||||||||||||||
ES060

Enable but not send check bit

|||||||||||||||||
ES070

Enable & send check bit

Set Reading Length Range For Standard 25

ES030

Minimum length(0~50bits)

ES040

Maximum length(0~50bits)

MSI

EU010

Disable*

EU020

Enable

MSI Check Bit Setting

EU050

Disable*

EU090

Enable but not send check bit

EU100

Enable & send check bit

EU060

1 Check Bit MOD10

EU070

2 Check Bits MOD10

EU080

MOD10/MOD11 Both

Set Reading Length Range For MSI

EU030

Minimum length(0~50bits)

EU040

Maximum length(0~50bits)

Plessey

ET010

Disable*

ET020

Enable

Plessey Check Bit Setting

||||| ET050 |||||	||||| ET060 |||||	||||| ET070 |||||
Disable*	Enable but not send check bit	Enable & send check bit

Set Reading Length Range For Plessey

||||| ET030 |||||	||||| ET040 |||||
Minimum length(0~50bits)	Maximum length(0~50bits)

DataMatrix

||||| FE010 |||||	||||| FE020 |||||
Disable	Enable*

Set Reading Length Range For DataMatrix

||||| FE030 |||||	||||| FE040 |||||
Minimum length(0~50bits)	Maximum length(0~50bits)

QR

||||| FC010 |||||	||||| FC020 |||||
Disable	Enable*

URL Link QR Code Reading

|||||||||||||||||||||||||||
FC140

Enable*

|||||||||||||||||||||||||||
FC150

Disable

Set Reading Length Range For QR

|||||||||||||||||||||||||||
FC030

Minimum length(0~50bits)

|||||||||||||||||||||||||||
FC040

Maximum length(0~50bits)

Micro QR

|||||||||||||||||||||||||||
FR010

Disable*

|||||||||||||||||||||||||||
FR020

Enable

PDF 417

|||||||||||||||||||||||||||
FB010

Disable

|||||||||||||||||||||||||||
FB020

Enable*

Set Reading Length Range For PDF 417

|||||||||||||||||||||||||||
FB030

Minimum length(0~50bits)

|||||||||||||||||||||||||||
FB040

Maximum length(0~50bits)

Micro PDF

‖‖‖‖‖‖‖ FQ010	‖‖‖‖‖‖‖ FQ020
Disable*	Enable

Maxicode

‖‖‖‖‖‖‖ FF010	‖‖‖‖‖‖‖ FF020
Disable*	Enable

Set Reading Length Range For Maxicode

‖‖‖‖‖‖‖ FF030	‖‖‖‖‖‖‖ FF040
Minimum length(0~50bits)	Maximum length(0~50bits)

Aztec

‖‖‖‖‖‖‖ FD010	‖‖‖‖‖‖‖ FD020
Disable*	Enable

Set Reading Length Range For Aztec

‖‖‖‖‖‖‖ FD030	‖‖‖‖‖‖‖ FD040
Minimum length(0~50bits)	Maximum length(0~50bits)

Han Xin Code
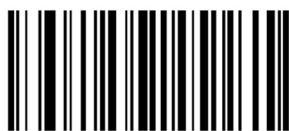

Disable*

Enable

Set Reading Length Range For Han Xin Code
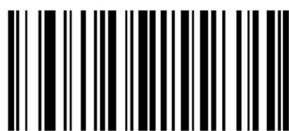
Minimum length(0~50bits)

Maximum length(0~50bits)

Appendix

Data Edit And Setting Parameter Barcodes

0

1

2
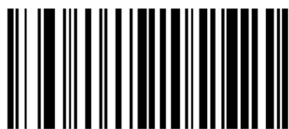
3

AA040

4

AA050

5

AA060

6

AA070

7

AA080

8

AA090

9

AA100

A

AA110

B

AA120

C

D

E

F

Save

Cancel 1 data of current setting

Cancel all data of current setting

Code ID Table

Code Type	CODE ID	Code Type	CODE ID
UPC-A	c	INDU-25	D
UPC-E	c	STANDARD-25	d
EAN-8	d	CODABAR	a
EAN-13	d	MSI	m
ISSN	n	PLESSEY	n
ISBN	B	RSS LIM	y
CODE-128	j	RSS EXP	y
GS1-128	j	RSS EXP	y
ISBT-128	j	RSS ST	y
CODE-39	j	QR	Q

CODE-93	i	Micro QR	Q
CODE-32	j	Micro PDF417	S
ITF-25	e	PDF417	r
ITF-6	e	DM	u
ITF-14	e	MAXICODE	x
INT-25	e	AZTEC	z
MATRIX-25	v	Han Xin CODE	h
CODE-11	H		

Appendix ASCII table

DEC	HEX	Character	DEC	HEX	Character	DEC	HEX	Character
32	20	<SPACE>	64	40	@	96	60	`
33	21	!	65	41	A	97	61	a
34	22	"	66	42	B	98	62	b
35	23	#	67	43	C	99	63	c
36	24	$	68	44	D	100	64	d
37	25	%	69	45	E	101	65	e
38	26	&	70	46	F	102	66	f
39	27	'	71	47	G	103	67	g
40	28	(	72	48	H	104	68	h
41	29	)	73	49	I	105	69	i
42	2A	*	74	4A	J	106	6A	j
43	2B	+	75	4B	K	107	6B	k
44	2C	,	76	4C	L	108	6C	l
45	2D	-	77	4D	M	109	6D	m
46	2E	.	78	4E	N	110	6E	n
47	2F	/	79	4F	O	111	6F	o
48	30	0	80	50	P	112	70	p
49	31	1	81	51	Q	113	71	q
50	32	2	82	52	R	114	72	r
51	33	3	83	53	S	115	73	s
52	34	4	84	54	T	116	74	s
53	35	5	85	55	U	117	75	u
54	36	6	86	56	V	118	76	v
55	37	7	87	57	W	119	77	w
56	38	8	88	58	X	120	78	x
57	39	9	89	59	Y	121	79	y
58	3A	:	90	5A	Z	122	7A	z
59	3B	;	91	5B	[	123	7B	{
60	3C	<	92	5C	\	124	7C		
61	3D	=	93	5D	]	125	7D	}
62	3E	>	94	5E	^	126	7E	~
63	3F	?	95	5F	_			

Control Character Table(USB-KBW Mode)

DEC	HEX	Key Value(Disable Control Character Escape)	Key Value(Enable Control Character Escape)
0	00	Reserve	Ctrl+@
1	01	Insert	Ctrl+A
2	02	Home	Ctrl+B
3	03	End	Ctrl+C
4	04	Delete	Ctrl+D
5	05	PageUp	Ctrl+E
6	06	PageDown	Ctrl+F
7	07	ESC	Ctrl+G
8	08	Backspace	Ctrl+H
9	09	Tab	Ctrl+I
10	0A	Enter(Output will be influenced by CR/LF settings)	Ctrl+J
11	0B	Caps Lock	Ctrl+K
12	0C	Print Screen	Ctrl+L
13	0D	Enter(Output will be influenced by CR/LF settings)	Ctrl+M
14	0E	Scroll Lock	Ctrl+N
15	0F	Pause/Break	Ctrl+O
16	10	F11	Ctrl+P
17	11	Direction Key↑	Ctrl+Q
18	12	Direction Key↓	Ctrl+R
19	13	Direction Key←	Ctrl+S
20	14	Direction Key→	Ctrl+T
21	15	F12	Ctrl+U
22	16	F1	Ctrl+V
23	17	F2	Ctrl+W
24	18	F3	Ctrl+X
25	19	F4	Ctrl+Y
26	1A	F5	Ctrl+Z
27	1B	F6	Ctrl+[
28	1C	F7	Ctrl+\
29	1D	F8	Ctrl+]
30	1E	F9	Ctrl+^
31	1F	F10	Ctrl+_

Examples For Setting

Example of barcode reading length setting

When setting the minimum reading length of a barcode, you need to ensure that the minimum length you set is not longer than the current maximum length setting, otherwise an error will be prompted. Similarly, when setting

the maximum reading length of a barcode, you need to ensure that the maximum length you set is not less than the current minimum length setting.

Ex1: Set the reading length of Code128 as 4-12 characters

"Minimum length(0~50bits)"-----------Set Reading Length Range For Code 128

"4"---------------Data Edit And Setting Parameter Barcodes

"Save"--------------Data Edit And Setting Parameter Barcodes

"Maximum length(0~50bits)"-----------Set Reading Length Range For Code 128

"1"---------------Data Edit And Setting Parameter Barcodes

"2"---------------Data Edit And Setting Parameter Barcodes

"Save"--------------Data Edit And Setting Parameter Barcodes