GM73 Bar Code Reader Module
User Manual

Hangzhou Grow Technology Co., Ltd.
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Catalog

1 Introduction of Module

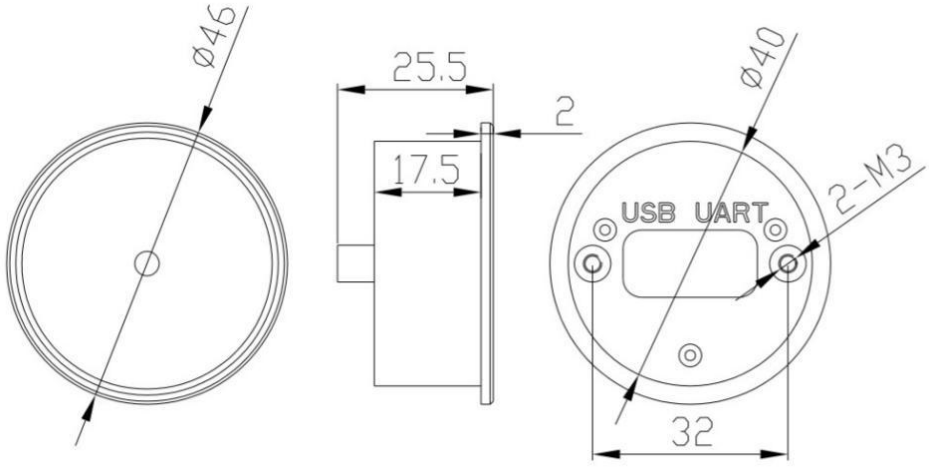
1.1 Introduction

GM73 Bar code reader module is a high integration and high performance scanner, mainly used to read payment codes. The bar code and QR code formats that can be recognized are **QR Code, Data Matrix, PDF417,maxicode,Aztec,hanxin,EAN,UPC,Code 39,Code 93,Code 128,UCC/EAN 128, Code 11,Codabar, Interleaved 2 of 5, Standard 25，MSI-Plessey,GS1 Databar, Industrial 25, Matrix 2 of 5.**

1.2 Technical Specification

Scanning Performance	Scan Mode		640*480 CMOS
	Read Code Type	2D	QR Code, Data Matrix, PDF417,maxicode,Aztec,hanxin
		1D	EAN,UPC,Code 39,Code 93,Code 128,UCC/EAN 128,
			Codabar, Interleaved 2 of 5, Standard 25，MSI-Plessey
			GS1 Databar, Industrial 25, Matrix 2 of 5
	Accuracy of reading		One Dimensional Code:6mil
	Working Mode		Continuous Mode, Induction Mode, Manual Mode
	Depth of Field	Alipay	30-150mm
		Bus	50-120mm
	Contrast		≥25%
	Scanning angle		Intersection angle 360°, Elevation ± 55°, Deflection angle ± 55°
	Viewing Angle		Inclination 60°, Elevation 46°
Mechanical/ Electrical Parameters	Interface		TTL-232、USB
	Dimension		Diameter 46mm
	Operating Current		≤100mA
Environmental Parameters	Operating Temperature		-20℃~+50℃
	Storage Temperature		-40℃~+70℃
	Operating Humidity		5%~95% (Non-Condensing)
	Environmental Light		0~100000LUX

1.3 Dimension (mm)



1.4 Circuit Board Interface

1.5 Interface definition

UART interface definition:

Pin	Name	Definition	Description
1	5V	Power Input	Power Input
2	TX	Data Output	TTL3.3V logical level
3	RX	Data Input	TTL 3.3V logical level
4	GND	Power Input	Signal ground. Connected to power ground

Interface note:

a) Baud rate 9600bps; 8 bit data; 1 bit stop bit; No check.

b) If the upper computer is MCU (3.3v), it is directly connected to TX and RX. If the upper computer is PC, the RS232 level conversion chip needs to be hooked up.

USB interface definition:

Pin	Name	Definition	Description
1	5V	Power Input	Power Input DC5V
2	D+	Data Output	USB
3	D-	Data Input	USB
4	GND	Power Input	Signal ground. Connected to power ground

2 Factory Mode Information

2.1 Factory Default Configuration

Factory default setting

2.2 Setup Code

***Setup code on**

Off

3 Communication Interface

3.1 Serial Port

It's default and common to connect module and mainframe(such as PC, POS) by serial communication interface. Make sure communication parameter for module and mainframe are same, then it will communicate smooth and correctly. **Serial port related configuration: Baud rate:9600, Data bit:8, Verification: No, Stop bit:1**

TTL 232 Interface

3.1.1 Baud rate

1200bps

2400bps

4800bps

***9600bps(Default)**

19200bps

38400bps

57600bps

115200bps

3.1.2 Parity Bit

Odd number

Even number

***No parity**

3.1.3 Stop Bit

***1 bit stop bit**

2 bit stop bit

3.1.4 Software Shake Hand

Forbid ACK/NAK

***Allow ACK/NAK**

3.2 USB KBW

USB KBW Keyboard

3.3 USB COM Keyboard

USB COM

4 Read Mode

4.1 Manual Mode

4.1.1 Button Holding Mode

Set to button holding mode, press the button to trigger reading, and release the button to end reading. If the reading is successful or the reading time exceeds the single reading time, the reading will be finished.

Manual Mode- Button Holding

4.1.2 Button Trigger Mode

Set to the button trigger mode, press the button to start reading, release the button, read will not stop. If the reading is successful or the reading time exceeds the single reading time, the reading will be finished.

Manual Mode- Button Trigger

4.2 Continuous Mode(Default)

On this mode, reading module read code continuous and automatic. Read successfully or the reading time exceeds the single reading time,the reading will be finished,and automatically trigger the next reading.

***Continuous Mode**

4.2.1 Break Time Settlement

Time between two read.

Default:500ms, Unit:100ms, Range:0-9900ms

You can set the break time by scanning the bar code, example:

Set 0.5ms, first scan the bar code below. Then scan the “0” and “5” bar code in the Digital Setting Code (Appendix 1).

Break time settlement

4.3 Induction Mode

In automatic sensing mode, the reading engine detects the brightness of the surrounding environment. When the brightness changes, module will begin to read, read successfully or the reading time exceeds the single reading time,the reading will be finished. Regardless of the last read success or failure, the module will be redetects the brightness of the surrounding environment.

Induction Mode

4.3.1 Stable Induction Time

Stable time before entering the test environment. Default: 500ms, Unit:100ms, Range:0-9900ms

You can set the stable time by scanning the bar code, example:

Set 200ms,first scan the bar code below. Then scan the “0” and “2” bar code in the Digital Setting Code (Appendix 1).

Set 1500ms,first scan the bar code below. Then scan the “1” and “5” bar code in the Digital Setting Code (Appendix 1).

Stable Induction Time

4.3.2 Sensitivity Rating Setting

There are three levels of sensitivity to choose from, default: high sensitivity.

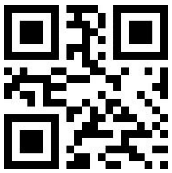
***High Sensitivity**

Medium Sensitivity

Low Sensitivity

4.4 Host Mode

Through the instruction to trigger the reading engine, and it can end the reading by instruction, read successfully or the reading time exceeds the single reading time,the reading will be finished.



Host Mode

4.5 Single Scan Time

This parameter is the duration of a single decoding. Time from 0.5s to 25.5s, step size 0.1s. **Default 3s.** Example:

Set 0.5s, first scan the bar code below. Then scan the “0”,“0” and “5” bar code in the Digital Setting Code (Appendix 1).

Set 10.5s, first scan the bar code below. Then scan the “1”,“0” and “5” bar code in the Digital Setting Code (Appendix 1).

Single scan time

4.5.1 Single Scan Time Quickly Set Up

Infinite

3s

5s

10s

15s

20s

4.6 Time Interval For The Same Code Read

It means, after reading a barcode, refuse to read the same code for a set period of time. Only after a set period of time, it can be able to read and output. Default: 500ms, Unit:100ms, Range:0-9900ms.

Mainly for continuous mode and automatic induction mode.

Example: Set 0.5s, first scan the bar code below. Then scan the “0” and “5” bar code in the Digital Setting Code (Appendix 1).

Time Interval For The Same Code Read

4.6.1 Same Code Quickly Set Up

No delay

Delay 1s

Delay 3s

Delay 5s

Delay 7s

Infinite delay

5 Lighting and Collimate

5.1 Lighting

Head lamp is used to additional lighting when read.

***The light turn on only when read (Default)**

Always on

Always off

5.2 Collimation

There will be a pointing light beam which can help user to find best distance.

Note: Flashing and non-flashing functions only work if the collimation LED is set to be **Always on** or **on when read**. After the LED is set to be off, if you want to set the LED flashing function, please first set the collimation LED to be **Always on** or **on when reading.**

***The light turn on only when read (Default)**

Always on

Always off

Flashing

Non-Flashing

6 Prompts

6.1 Keyboard

6.1.1 Keyboard Settlement

Scan following code to change keyboard.

***American English(Default)**

Belgium

Finland

Austria,Germany

France

Italy

Sweden

UK

Denmark

Spain

Norway

Portugal

Turkey F

Turkey Q

Japan

Russia

Czech

Thailand

Ukraine

Brazil(ABNT2)

Greek

Hungary

Netherlands

Poland(214)

Romania (standard)

Slovakia

Multi-country General

6.1.2 Keyboard Type

After enabling the virtual keyboard, you can output the correct data in any keyboard language mode. When using virtual keyboard, you must make sure the keypad number keys are valid.

*Standard Keyboard

Virtual Keyboard

6.1.3 Keyboard Output Character Time Interval

Time from 0ms to 1000ms Unit: 5ms Default: 5ms

0ms

10ms

6.1.4 ASCII Control Character Output Mode Selection

Control character (0x00-0x20) output mode selection in ASCII code

Output function keys: control characters are used as custom function keys. See appendix 4 for specific functions

Output Ctrl combination key (this function is used with prefix and suffix) : Ctrl combination key output control characters, specific functions are shown in appendix 4

ALT output control characters: full control character output is supported in Chinese environment, refer to standard ASCII table for details

Output Enter and DownArrow: mask other control characters, output only: 0x07 output Enter,0x0A output DownArrow, 0x0D output Enter.

Output function keys(0x00)

Output Ctrl combination key(0x01)

ALT output control characters(0x02)

Output Enter and DownArrow(0x03)

6.2 Prompts Tone

6.2.1 Buzzer Type

***Passive Buzzer**

Active Buzzer

6.2.2 Silent Mode

Close All Prompts

***Forbid to Close All Prompts**

6.2.3 Volume Level

Default: high pitch

***High Pitch**

Middle

Low

6.2.4 Decoding Successful Prompt Tone

***Decoding Successful Prompt Tone ON**

Decoding Successsful Prompt Tone OFF

6.2.5 Starting Up Prompt

***Starting Up Prompt ON**

Starting Up Prompt OFF

6.2.6 Setup Code Prompt

***Setup Code Prompt ON**

Setup Code Prompt OFF

6.3 Decoding Successful Prompt Light

Decoding success prompt light on a certain time, the premise is that the prompt light is used as a decoding prompt.

Forbid

***Allow**

6.4 Decoding Prompt Working Mode

***Power on Always off**

Power on Always on

6.5 Decoding Prompt

If the barcode cannot be decoded within the timeout period before releasing the trigger button, it is allowed to send "unread" messages.Any possible prefix or suffix can be attached to this message.

When this function is disabled, no message can be sent to the host even if the barcode cannot be decoded.

***Forbid sending NR**

Allow sending NR

6.6 Keyboard Output Force Letter Case Conversion

Example: If the barcode is ab123dE, if scan the "convert to uppercase" bar code, the output is AB123DE; if scan the "convert to lowercase" bar code,the output is abc123de.

Default: Keyboard case is not converted.

***Keyboard case is not converted**

All uppercase

All lowercase

Case reversal

6.7 Output Data Code Format

Read following to print Chinese data according to specified code format

0: Original type 1:GBK format: notepad, EXCEL

2: UNICODE format: WORD and input box for chat tools

Original Type

***GBK**

Unicode

6.8 Input Data Code Format

***AUTO**

(0x00)

GBK(GB2312)

(0x01)

UTF8

(0x02)

ASCII

(0x03)

Japanese

DEC Multinational Character Set(MCS)

Japanese single byte

7 Data Edition

7.1 CODE ID

Users can identify different types of bar code by CODE ID.

CODE ID use one character to identify and can be self- defined. Pls see the Appendix 3.

***Not allowed to send ID**

Allowed to send ID

7.2 Terminator Character

Terminator character is add character format after decoding data: decoded data + terminator character.

***No Terminator**

#&CR LF

%CR

TAB

CRCR

CR LF CR LF

7.3 Add Prefix and Suffix

7.3.1 Prefix

1) Scan "Set Multiple Prefixes" setting code

Set Multiple Prefixes in succession

2) Scan the digital setting code in turn, and there will be a successful tone for every four

3) Scan "Finish Setting Multiple Prefixes Suffixes" setting code and finish setting

Finish Setting Multiple Prefixes Suffixes

7.3.2 Suffix(Similar to a prefix, you can add a newline to suffix if you need a newline)

1) Scan "Set Multiple Suffixes" setting code

Set Multiple Suffixes in succession

2) Set Suffixes

3) Scan "Finish Setting Multiple Prefixes Suffixes" setting code and finish setting

Finish Setting Multiple Prefixes Suffixes

7.3.3 Prefix Suffix Take Effect

***Only output the decoded data**

Output multiple Suffixes

Output multiple Prefixes

Output multiple Prefixes and Suffixes

7.4 Hide Header, Middle and Tail Characters

7.4.1 Hide Header Characters

Decoding data for header data hiding, it can be configured to hide any length.

If the configured length exceeds the barcode data length, all contents of the current barcode are hidden

***Forbid**

Allow

Set the number of Hide Header Characters

Set the number of Hide Header Characters, ranging from 1 to 255.

Scan the follow barcode and then scan the digital setting code. For example, if 16 characters need to be hidden, then scan the digital setting code sequentially: 0, 1 and 6.

The number of Hide Header Characters

7.4.2 Hide Middle Characters

Decoding data for middle data hiding,and any starting position and length can be configured.

If the starting position of the configuration exceeds the barcode data length, the current barcode is not hidden.

If the configured length exceeds the remaining barcode data length, all barcode data after the start location is hidden.

*Forbid

Follow

Sets the Start Location of Hide Middle Characters

Sets the start location of hide middle characters,ranging from 1 to 255.

Scan the follow barcode and then scan the digital setting code. For example, if you need to hide data after the third character (starting with the fourth character),scan the digital setting code successively: 0 0 3.

The start bit of Hide Middle Characters

Sets the Length of Hide Middle Characters

Sets the length of hide middle characters,ranging from 1 to 255.

Scan the follow barcode and then scan the digital setting code. For example, if 16 characters need to be hidden, then scan the digital setting code sequentially: 0, 1 and 6.

The Length of Hide Middle Characters

7.4.3 Hide Tail Characters

Decoding data for tail data hiding, it can be configured to hide any length.

If the configured length exceeds the barcode data length, all contents of the current barcode are hidden.

***Forbid**

Follow

Set the number of Tail Header Characters

Set the number of Tail Header Characters, ranging from 1 to 255.

Scan the follow barcode and then scan the digital setting code. For example, if 16 characters need to be hidden, then scan the digital setting code sequentially: 0, 1 and 6.

The number of Tail Header Characters

7.5 Set STX and ETX

Forbid

STX Prefix

ETX Suffix 1

STX(Prefix)+ETX(Suffix 1)

7.6 Any Character Replacement Function

This function can replace any character in barcode data with another character, supporting data number 1:1 or 1:n replacement, such as the replacement of A--B, A--BC, A--BCD...

Operation brief Description:

7.6.1 First scan "Set the Replaced Object"

Set the Replaced Object

For example: Separator GS, corresponding digital setting code is 1029, respectively scan 1,0,2,9

7.6.2 Scan "Set Replacement Data"

Set Replacement Data

For example: Symbol }, corresponding digital setting code is 1125, respectively scan 1,1,2,5

7.6.3 Complete Setting

Complete Setting

7.6.4 Scan "Allow Data Replacement" to Enable the Replacement Function

Allow Replacement

Forbid Replacemant

8 All Types of Bar Code Can be Decoded

8.1 Global Enable Switch

Allow

Forbid

8.2 1D Code Global Enable Switch

Allow

Forbid

8.3 2D Code Global Enable Switch

Allow

Forbid

8.4 Forward and backward reading

Allow

Forbid

8.5 UPC-A

8.5.1 UPC-A

*Allow

Forbid

8.5.2 UPC-A Leading Code

No Leading Code

*System Characters (Default)

System Character & Country Code

8.5.3 UPC-A Check Bit

UPC-A Check bit is not transmitted

*Transmit UPC-A Check bit

8.6 UPC-A Extra Code

8.6.1 UPC-A 2-bit Extra Code

Allow

*Forbid

8.6.2 UPC-A 5-bit Extra Code

Allow

*Forbid

8.6.3 UPC-A Extra Code Must be Identified

Allow

*Forbid

8.7 UPC-E

8.7.1 UPC-E

*Allow

Forbid

8.7.2 UPC-E Leading Code

*No Leading Code

System Characters (Default)

System Character & Country Code

8.7.3 UPC-E Check Bit

UPC-E Check bit is not transmitted

*Transmit UPC-E Check bit

8.8 UPC-E Extra Code

8.8.1 UPC-E 2-bit Extra Code

Allow

***Forbid**

8.8.2 UPC-E 5-bit Extra Code

Allow

***Forbid**

8.8.3 UPC-E Extra Code Must be Identified

Allow

***Forbid**

8.9 UPC-E Turn UPC-A

Allow

***Forbid**

8.10 UPC-A Turn EAN-13

Allow

***Forbid**

8.11 UPC-E1

Allow

Forbid

8.12 EAN-8

8.12.1 EAN-8

***Allow**

Forbid

8.12.2 EAN-8 Check Bit

Forbid

Allow

8.13 EAN-8 Extra Code

8.13.1 EAN-8 2-bit Extra Code

Allow

***Forbid**

8.13.2 EAN-8 5-bit Extra Code

Allow

*Forbid

8.13.3 EAN-8 Extra Code Must be Identified

Allow

*Forbid

8.14 EAN-13

8.14.1 EAN-13

*Allow

Forbid

8.14.2 EAN-13 Check Bit

Forbid

*Allow

8.15 Bookland EAN(ISBN)

When ISBN are forbidden, they are treated as EAN13

Allow (0x01)

***Forbid (0x00)**

8.16 EAN-13 Extra Code

8.16.1 EAN-13 2-bit Extra Code

Allow

***Forbid**

8.16.2 EAN-13 5-bit Extra Code

Allow

***Forbid**

8.16.3 EAN-13 Extra Code Must be Identified

Allow

***Forbid**

8.17 CODE 128

*Allow

Forbid

8.18 GS1-128(UCC/EAN-128)

*Allow

Forbid

8.19 Interleaved 2 of 5

8.19.1 I 2 of 5

*Allow

Forbid

8.19.2 Interleaved 2 of 5 Identify Length

Users can set to decode Interleaved 2 of 5 within a certain length range.

Example:Set to decode only Interleaved 2 of 5 within 4-20 bit length range.

First scan the bar code below, and then scan 0,4,2,0 bar code in Appendix 1 in sequence. Change the selection or cancel an incorrect input setting, scan the bar code in Appendix 2.

Industrial 2 of 5 within a certain length range

Industrial 2 of 5 in any length range

8.19.3 Interleaved 2 of 5 Check Bit Verification

Allow

***Forbid**

8.19.4 Interleaved 2 of 5 Check Bit Transmission

Allow

***Forbid**

8.20 Matrix 2 of 5

8.20.1 Matrix 2 of 5

Allow

***Forbid**

8.20.2 Matrix 2 of 5 Identify Length

Users can set to decode Matrix 2 of 5 within a certain length range.

Example:Set to decode only Matrix 2 of 5 within 4-20 bit length range.

First scan the bar code below, and then scan 0,4,2,0 bar code in Appendix 1 in sequence. Change the selection or cancel an incorrect input setting, scan the bar code in Appendix 2.

Matrix 2 of 5 within a certain length range

Matrix 2 of 5 in any length range

8.20.3 Matrix 2 of 5 Check Bit Verification

Allow

***Forbid**

8.20.4 Matrix 2 of 5 Check Bit Transmission

Allow

***Forbid**

8.21 Industrial 2 of 5

8.21.1 Industrial 2 of 5

Allow

***Forbid**

8.21.2 Industrial 2 of 5 Identify Length

Users can set to decode Industrial 2 of 5 within a certain length range.

Example:Set to decode only Industrial 2 of 5 within 4-20 bit length range.

First scan the bar code below, and then scan 0,4,2,0 bar code in Appendix 1 in sequence. Change

the selection or cancel an incorrect input setting, scan the bar code in Appendix 2.

Industrial 2 of 5 within a certain length range

Industrial 2 of 5 in any length range

8.22 Standard 2 of 5

8.22.1 Standard 2 of 5

Allow

***Forbid**

8.22.2 Standard 2 of 5 Identify Length

Users can set to decode Standard 2 of 5 within a certain length range.

Example:Set to decode only Standard 2 of 5 within 4-20 bit length range.

First scan the bar code below, and then scan 0,4,2,0 bar code in Appendix 1 in sequence. Change the selection or cancel an incorrect input setting, scan the bar code in Appendix 2.

Standard 2 of 5 within a certain length range

Standard 2 of 5 in any length range

8.23 Code 39

8.23.1 Code 39

*Allow

Forbid

8.23.2 Code 39 Length

Can solve for any length of code39

8.23.3 Code 39 Check Bit Verification

Verification check bit

*Check bits are not validated

8.23.4 Code 39 Check Bit

Transmission Check Bit

*No check bits are transmitted

8.23.5 Code39 Transmit Start Character and Stop Character

Allow

*Forbid

8.24 Code 39 Full ASCII

Allow

***Forbid**

8.25 Code 32

8.25.1 Code 32

Allow

***Forbid**

8.25.2 Code 32 Add the Prefix A

Allow

***Forbid**

8.26 Code 93

8.26.1 Code93

Allow

***Forbid**

8.26.2 Code93 Length

Can read for any length of code93

8.27 Code 11

8.27.1 Code 11

Allow

***Forbid**

8.27.2 Code 11 Length

Can solve for any length of code11

8.27.3 Code 11 Check Bit Verification

Allow

One check bit

Two check bit

8.27.4 Code 11 Check Bit Transmission

Allow

***Forbid**

8.28 Codabar

8.28.1 Codabar

Allow

***Forbid**

8.28.2 Codabar Length

Can solve for any length of Codabar

8.28.3 Start and End Character Formats

T initiators and terminators are allowed to be one of the four characters: "A", "B", "C", "D";The terminator is also allowed to be one of the four characters "T", "N", "*", "E".

***ABCD/ABCD**

ABCD/TN*E

8.28.4 Start and End Character Send

Remove the start and stop characters

***Allow start and stop characters**

8.29 MSI

8.29.1 MSI

Allow

***Forbid**

8.29.2 MSI Length

Can read for any length of MSI

8.30 GS1-Databar

Allow

***Forbid**

8.31 GS1 Composite Code

Allow

***Forbid**

8.32 QR Code

8.32.1 QR Code

*Allow

Forbid

8.32.2 Forward and Backward Reading

*Only read Forward

Forward and Backward both can read

8.33 Data Matrix

8.33.1 Data Matrix

*Allow

Forbid

8.33.2 Forward and Backward Reading

Only read Forward

Only read Backward

Forward and Backward both can read

8.34 PDF 417

8.34.1 PDF 417

***Allow**

Forbid

8.35 Aztec Code

Allow

***Forbid**

8.36 Maxi Code

Allow

***Forbid**

8.37 Han Xin Codes

Allow

***Forbid**

8.38 Mirror

8.38.1 QR Mirror

*Forbid

Allow

8.38.2 DM Mirror

*Forbid

Allow

Appendix 1：Digital Setting Code

0

1

2

3

4

5

6

7

8

9

Appendix 2：Cancel Barcode

Change the selection or cancel an incorrect input, scan the bar code below.

Cancel

Appendix 3: Code ID

Code Characters	Bar code Type
A	UPC-A, UPC-E, EAN-8, EAN-13
B	Code 39, Code 32
C	Codabar
D	Code 128, ISBT 128
E	Code 93
F	Interleaved 2 of 5/ITF, ITF14
G	Industrial 2 of 5, Standard 2 of 5
H	CODE11
J	MSI, MSI/Plessey
K	UCC/EAN-128/GS1-128
L	Bookland EAN/ISBN，ISSN
R	GS1 DataBar-14, GS1 DataBar Limited, GS1 DataBar Expanded, RSS
V	Matrix 25
r	PDF417
u	DataMatrix(DM)
q	QR
a	Aztec Code
x	Maxi Code
c	HanXin

Appendix 4: Character Comparison Table

Scan Value	Hexadecimal value	Keyboard Operation	Keyboard+Ctrl Operation
1000	00h	Null	CTRL 2
1001	01h	Keypad Enter	CTRL A
1002	02h	Caps lock	CTRL B
1003	03h	Right Arrow	CTRL C
1004	04h	Up Arrow	CTRL D
1005	05h	Null	CTRL E
1006	06h	Null	CTRL F
1007	07h	Enter	CTRL G
1008	08h	Left Arrow	CTRL H
1009	09h	Horizontal Tab	CTRL I
1010	0Ah	Down Arrow	CTRL J
1011	0Bh	Vertical Tab	CTRL K
1012	0Ch	Backspace	CTRL L
1013	0Dh	Enter	CTRL M
1014	0Eh	Insert	CTRL N
1015	0Fh	Esc	CTRL O
1016	10h	F11	CTRL P
1017	11h	Home	CTRL Q
1018	12h	Print Screen	CTRL R
1019	13h	Delete	CTRL S
1020	14h	tab+shift	CTRL T
1021	15h	F12	CTRL U
1022	16h	F1	CTRL V
1023	17h	F2	CTRL W
1024	18h	F3	CTRL X
1025	19h	F4	CTRL Y
1026	1Ah	F5	CTRL Z
1027	1Bh	F6	CTRL [

1028	1Ch	F7	CTRL \
1029	1Dh	F8	CTRL]
1030	1Eh	F9	CTRL 6
1031	1Fh	F10	CTRL -
1032	20h	Space	Space
1033	21h	/A	!
1034	22h	/B	‘
1035	23h	/C	#
1036	24h	/D	$
1037	25h	/E	%
1038	26h	/F	&
1039	27h	/G	‘
1040	28h	/H	(
1041	29h	/I	)
1042	2Ah	/J	*
1043	2Bh	/K	+
1044	2Ch	/L	,
1045	2Dh	-	-
1046	2Eh	.	.
1047	2Fh	/	/
1048	30h	0	0
1049	31h	1	1
1050	32h	2	2
1051	33h	3	3
1052	34h	4	4
1053	35h	5	5
1054	36h	6	6
1055	37h	7	7
1056	38h	8	8
1057	39h	9	9
1058	3Ah	/Z	:
1059	3Bh	%F	;

1060	3Ch	%G	<
1061	3Dh	%H	=
1062	3Eh	%I	>
1063	3Fh	%J	?
1064	40h	%V	@
1065	41h	A	A
1066	42h	B	B
1067	43h	C	C
1068	44h	D	D
1069	45h	E	E
1070	46h	F	F
1071	47h	G	G
1072	48h	H	H
1073	49h	I	I
1074	4Ah	J	J
1075	4Bh	K	K
1076	4Ch	L	L
1077	4Dh	M	M
1078	4Eh	N	N
1079	4Fh	O	O
1080	50h	P	P
1081	51h	Q	Q
1082	52h	R	R
1083	53h	S	S
1084	54h	T	T
1085	55h	U	U
1086	56h	V	V
1087	57h	W	W
1088	58h	X	X
1089	59h	Y	Y
1090	5Ah	Z	Z
1091	5Bh	%K	[

1092	5Ch	%L	\
1093	5Dh	%M	]
1094	5Eh	%N	^
1095	5Fh	%O	_
1096	60h	%W	‘
1097	61h	+A	a
1098	62h	+B	b
1099	63h	+C	c
1100	64h	+D	d
1101	65h	+E	e
1102	66h	+F	f
1103	67h	+G	g
1104	68h	+H	h
1105	69h	+I	i
1106	6Ah	+J	j
1107	6Bh	+K	k
1108	6Ch	+L	l
1109	6Dh	+M	m
1110	6Eh	+N	n
1111	6Fh	+O	o
1112	70h	+P	p
1113	71h	+Q	q
1114	72h	+R	r
1115	73h	+S	s
1116	74h	+T	t
1117	75h	+U	u
1118	76h	+V	v
1119	77h	+W	w
1120	78h	+X	x
1121	79h	+Y	y
1122	7Ah	+Z	z
1123	7Bh	%P	{

1124	7Ch	%Q	|
1125	7Dh	%R	}
1126	7Eh	%S	~
1127	7Fh		Undefined

Appendix 5: Supported Barcode Type

Barcode Type	Hexadecimal Value	Barcode Type	Hexadecimal Value
Not Applicable	0x00	EAN 13 with 5 Supps.	0x8B
Code 39	0x01	EAN 13	0x0B
Codabar	0x02	EAN 13 with 2 Supps.	0x4B
Code 128, Setup128	0x03	EAN 13 with 5 Supps.	0x8B
Discrete 2 of 5	0x04	MSI	0x0E
IATA 2 of 5	0x05	GS1-128	0x0F
Interleaved 2 of 5	0x06	UPC E1	0x10
Code 93	0x07	UPC E1 with 2 Supps.	0x50
UPC A	0x08	UPC E1 with 5 Supps.	0x90
UPC A with 2 Supps.	0x48	Trioptic Code 39	0x15
UPC A with 5 Supps.	0x88	Bookland EAN	0x16
UPC E0	0x09	Coupon Code	0x17
UPC E0 with 2 Supps.	0x49	GS1 DataBar-14	0x30
UPC E0 with 5 Supps.	0x89	GS1 DataBar Limited	0x31
EAN 8	0x0A	GS1 DataBar Expanded	0x32
EAN 8 with 2 Supps	0x4A	Code11	0x0C
EAN 8 with 5 Supps	0x8A	PDF417	0xF0
QR	0xF1	Data Matrix(DM)	0xF2
Aztec Code	0xF3	Maxi Code	0xF4
Veri Code	0xF5	Han Xin	0xF7
AIM128	0xA2	ISSN	0xA3
PLESSEY	0xA4		

Appendix 6: Serial Port Instruction

When the scanner is not working, it is in sleep mode.Under the sleep mode, need to wake up first, then send the effective command. (Wake up command:0x00,50ms,then send the effective command)

To start decoding and stop decoding the serial port command needs to be valid in host mode. Please switch to the host mode first.

Table 6-1

Name	Instructions
CMD_ACK	04 D0 04 00 FF 28
CMD_NAK	RESEND:05 D1 04 00 01 FF 25 BAD_CONTEXT:05 D1 04 00 02 FF 24 DENIED:05 D1 04 00 06 FF 20
DECODE_DATA	None
LED_OFF	05 E8 04 00 01 FF 0E
LED_ON	05 E7 04 00 01 FF 0F
PARAM_DEFAULTS	04 C8 04 00 FF 30
PARAM_REQUEST	Listed in the table below
PARAM_SEND	Listed in the table below
REQUEST_REVISION	04 A3 04 00 FF 55
REPLY_REVISION	None
SCAN_DISABLE	04 EA 04 00 FF 0E
SCAN_ENABLE	04 E9 04 00 FF 0F
SLEEP	04 EB 04 00 FF 0D
START_DECODE	04 E4 04 00 FF 14
STOP_DECODE	04 E5 04 00 FF 13
WAKEUP	None
RESET	04 FA 04 00 FE FE
Custom buzzer sound	05 E6 04 00 00 FF 11 05 E6 04 00 01 FF 10

Table 6-2

Parameter Name	Serial Instructions
Default Configuration	Factory Default Configuration:08 C6 04 08 00 F2 FF 00 FD 35
Scanning duration	4s：07 C6 04 08 00 88 28 FE 77 10s:07 C6 04 08 00 88 64 FE 3B
Single Scan Time(Scanning duration)Quickly Set Up	Infinite：08 C6 04 08 00 F2 FA 00 FD 3A 3s：08 C6 04 08 00 F2 FA 03 FD 37 5s：08 C6 04 08 00 F2 FA 05 FD 35 10s：08 C6 04 08 00 F2 FA 0A FD 30 15s：08 C6 04 08 00 F2 FA 0B FD 2F 20s：08 C6 04 08 00 F2 FA 0C FD 2E 30s：08 C6 04 08 00 F2 FA 0D FD 2D 60s：08 C6 04 08 00 F2 FA 0E FD 2C
Trigger Mode	Button Holding：07 C6 04 08 00 8A 00 FE 9D Button Trigger：07 C6 04 08 00 8A 02 FE 9B Continuous scanning：07 C6 04 08 00 8A 04 FE 99 Automatic Induction: 07 C6 04 08 00 8A 09 FE 94 Host：07 C6 04 08 00 8A 08 FE 95
Break Time Settlement	0s:07 C6 04 08 00 89 00 FE 9E 0.5s: 07 C6 04 08 00 89 05 FE 99 3s：07 C6 04 08 00 89 1E FE 80
Buzzer Voice	Low：07 C6 04 08 00 8C 02 FE 99 Middle: 07 C6 04 08 00 8C 01 FE 9A High: 07 C6 04 08 00 8C 00 FE 9B
Buzzer Type	*Passive Buzzer: 08 C6 04 08 00 F2 D8 00 FD 5C Active Buzzer: 08 C6 04 08 00 F2 D8 01 FD 5B

Decoding Successful Prompt Tone	On：07 C6 04 08 00 38 01 FE EE Off：07 C6 04 08 00 38 00 FE EF
Terminator Character Setting	Forbid:08 C6 04 08 00 F2 05 00 FE 2F CR LF:08 C6 04 08 00 F2 05 01 FE 2E CR:08 C6 04 08 00 F2 05 02 FE 2D TAB: 08 C6 04 08 00 F2 05 03 FE 2C CR CR：08 C6 04 08 00 F2 05 04 FE 2B CR LF CR LF：08 C6 04 08 00 F2 05 05 FE 2A
Decoding Successful Prompt Light	Forbid: 08 C6 04 08 00 F2 0B 00 FE 29 Allow: 08 C6 04 08 00 F2 0B 01 FE 28
Decoding Prompt Light Control	Power on Always off: 08 C6 04 08 00 F2 CB 00 FD 69 Power on Always on: 08 C6 04 08 00 F2 CB 01 FD 68
Silent	Forbid: 08 C6 04 08 00 F2 0C 00 FE 28 Allow: 08 C6 04 08 00 F2 0C 01 FE 27
Starting Up Prompt	Forbid: 08 C6 04 08 00 F2 0D 00 FE 27 Allow: 08 C6 04 08 00 F2 0D 01 FE 26
Setup Code Prompt	Forbid: 08 C6 04 08 00 F2 0E 00 FE 26 Allow: 08 C6 04 08 00 F2 0E 01 FE 25
Send “Not read” message	On：07 C6 04 08 00 5E 01 FE C8 Off：07 C6 04 08 00 5E 00 FE C9
Allows scan configuration bar code	On：07 C6 04 08 00 EC 01 FE 3A Off：07 C6 04 08 00 EC 00 FE 3B
Send the Setup Code Information	On：08 C6 04 08 00 F1 71 01 FD C3 Off：08 C6 04 08 00 F1 71 00 FD C4
Prefix/Suffix Value Prefix Suffix 1 Suffix 2	Prefix string setting 31 Suffix string setting 32 33 ： 0B C6 04 08 00 69 31 68 32 6A 33 FD 52 Prefix:0x00 Suffix 0x0D 0x0A Implement a newline：

	0B C6 04 08 00 69 00 68 0D 6A 0A FD D1
Scan Data Send Format	Code：07 C6 04 08 00 EB 00 FE 3C Code+Suffix：07 C6 04 08 00 EB 01 FE 3B Code+Suffix 2：07 C6 04 08 00 EB 02 FE 3A Code+Suffix 1+Suffix 2：07 C6 04 08 00 EB 03 FE 39 Prefix+Code：07 C6 04 08 00 EB 04 FE 38 Prefix+Code+Suffix 1：07 C6 04 08 00 EB 05 FE 37 Prefix+Code+Suffix 2：07 C6 04 08 00 EB 06 FE 36 Prefix+Code+Suffix 1+Suffix 2：07 C6 04 08 00 EB 07 FE 35
Baud rate	1200：07 C6 04 08 00 9C 03 FE 88 2400：07 C6 04 08 00 9C 04 FE 87 4800：07 C6 04 08 00 9C 05 FE 86 9600：07 C6 04 08 00 9C 06 FE 85 19200：07 C6 04 08 00 9C 07 FE 84 38400：07 C6 04 08 00 9C 08 FE 83 57600：07 C6 04 08 00 9C 09 FE 82 115200：07 C6 04 08 00 9C 0A FE 81
Parity	Odd number： 07 C6 04 08 00 9E 00 FE 89 Even number： 07 C6 04 08 00 9E 01 FE 88 Tag： 07 C6 04 08 00 9E 02 FE 87 Black space：07 C6 04 08 00 9E 03 FE 86 None： 07 C6 04 08 00 9E 04 FE 85
Software Shake Hand	Allow：07 C6 04 08 00 9F 01 FE 87

	Forbid：07 C6 04 08 00 9F 00 FE 88
Decoded packet format	Send the original decoded data：07 C6 04 08 00 EE 00 FE 39 Send the decoded data of data packet：07 C6 04 08 00 EE 01 FE 38
Host serial response times out	0.1s: 07 C6 04 08 00 9B 01 FE 8B
Stop Bit	1 bit stop bit: 07 C6 04 08 00 9D 01 FE 89 2 bit stop bit: 07 C6 04 08 00 9D 02 FE 88
Intercharacter Delay	1s: 07 C6 04 08 00 6E 01 FE B8
Host Character Timeout	500ms:07 C6 04 08 00 EF 32 FE 06 200ms:07 C6 04 08 00 EF 14 FE 24 50ms: 07 C6 04 08 00 EF 05 FE 33
Communication Interface	Serial:08 C6 04 08 00 F2 01 00 FE 33 USB KBW:08 C6 04 08 00 F2 01 01 FE 32 USB Serial: 08 C6 04 08 00 F2 01 02 FE 31 HID POS:08 C6 04 08 00 F2 01 0E FE 25
PS2 Mode	AUTO: 08 C6 04 08 00 F2 A6 00 FD 8E Single PS2: 08 C6 04 08 00 F2 A6 01 FD 8D
Lighting Control	The light turn on only when read :08 C6 04 08 00 F2 02 00 FE 32 Always on :08 C6 04 08 00 F2 02 01 FE 31 Always off : 08 C6 04 08 00 F2 02 02 FE 30
Collimation Control	The light turn on only when read :08 C6 04 08 00 F2 03 00 FE 31 Always on :08 C6 04 08 00 F2 03 01 FE

	30 Always off : 08 C6 04 08 00 F2 03 02 FE 2F
Collimation whether flashing	*Flashing: 08 C6 04 08 00 F2 B8 00 FD 7C Not Flashing: 08 C6 04 08 00 F2 B8 01 FD 7B
Sensitivity Rating	Super High Sensitivity:08 C6 04 08 00 F2 04 00 FE 30 High Sensitivity:08 C6 04 08 00 F2 04 01 FE 2F Medium Sensitivity:08 C6 04 08 00 F2 04 02 FE 2E Low Sensitivity:08 C6 04 08 00 F2 04 03 FE 2D
Custom Sensitivity	00:08 C6 04 08 00 F3 01 00 FE 32 01:08 C6 04 08 00 F3 01 01 FE 31 05:08 C6 04 08 00 F3 01 05 FE 2D 10:08 C6 04 08 00 F3 01 0A FE 28 15:08 C6 04 08 00 F3 01 0F FE 23
Stable Induction Time	500ms:08 C6 04 08 00 F3 02 05 FE 2C 1000ms:08 C6 04 08 00 F3 02 0A FE 27 300ms: 08 C6 04 08 00 F3 02 03 FE 2E
1D Backward Barcode Reading	Forbid：08 C6 04 08 00 F2 91 00 FD A3 Allow：08 C6 04 08 00 F2 91 01 FD A2
Output Character Set Type	Original: 08 C6 04 08 00 F2 06 00 FE 2E GBK:08 C6 04 08 00 F2 06 01 FE 2D UNICODE:08 C6 04 08 00 F2 06 02 FE 2C
Keyboard Settlement	America: 08 C6 04 08 00 F6 01 01 FE 2E Belgium: 08 C6 04 08 00 F6 01 02 FE

	2D Brazil（ABNT2）：08 C6 04 08 00 F6 01 03 FE 2C Denmark: 08 C6 04 08 00 F6 01 06 FE 29 Finland: 08 C6 04 08 00 F6 01 07 FE 28 France: 08 C6 04 08 00 F6 01 08 FE 27 Austria,Germany: 08 C6 04 08 00 F6 01 09 FE 26 Greek：08 C6 04 08 00 F6 01 0A FE 25 Hungary：08 C6 04 08 00 F6 01 0B FE 24 Italy: 08 C6 04 08 00 F6 01 0D FE 22 Netherlands：08 C6 04 08 00 F6 01 0F FE 20 Norway: 08 C6 04 08 00 F6 01 10 FE 1F Poland：08 C6 04 08 00 F6 01 11 FE 1E Portugal：08 C6 04 08 00 F6 01 12 FE 1D Romania（Standard）：08 C6 04 08 00 F6 01 13 FE 1C Russia: 08 C6 04 08 00 F6 01 14 FE 1B Slovakia: 08 C6 04 08 00 F6 01 15 FE 1A Spain: 08 C6 04 08 00 F6 01 16 FE 19 Sweden: 08 C6 04 08 00 F6 01 17 FE 18 Turkey_F: 08 C6 04 08 00 F6 01 19 FE 16 Turkey_Q: 08 C6 04 08 00 F6 01 1A FE 15 UK: 08 C6 04 08 00 F6 01 1B FE 14 Japan: 08 C6 04 08 00 F6 01 1C FE 13

	Czech: 08 C6 04 08 00 F6 01 1D FE 12 Thailand Keyboard Kedmanee：08 C6 04 08 00 F6 01 1E FE 11 Ukraine：08 C6 04 08 00 F6 01 1F FE 10 Arabic Language_101：08 C6 04 08 00 F6 01 20 FE 0F Croatia：08 C6 04 08 00 F6 01 21 FE 0E Korea：08 C6 04 08 00 F6 01 22 FE 0D Bulgaria：08 C6 04 08 00 F6 01 23 FE 0C
Keyboard Output Character Time Interval	0ms: 08 C6 04 08 00 F3 04 00 FE 2F 5ms: 08 C6 04 08 00 F3 04 01 FE 2E 10ms: 08 C6 04 08 00 F3 04 02 FE 2D
Keyboard Output Character Time Interval Quickly Set Up	0ms: 08 C6 04 08 00 F2 B2 00 FD 82 10ms: 08 C6 04 08 00 F2 B2 01 FD 81 50ms: 08 C6 04 08 00 F2 B2 02 FD 80
Keyboard Output Force Letter Case Conversion	Keyboard case is not converted: 08 C6 04 08 00 F2 A1 00 FD 93 All uppercase: 08 C6 04 08 00 F2 A1 01 FD 92 All lowercase: 08 C6 04 08 00 F2 A1 02 FD 91 Case reversal: 08 C6 04 08 00 F2 A1 03 FD 90
Keyboard Type	Standard Keyboard：08 C6 04 08 00 F2 B4 00 FD 80 Virtual Keyboard：08 C6 04 08 00 F2 B4 01 FD 7F
STX and ETX Setting	Forbid：08 C6 04 08 00 F2 B7 00 FD 7D STX(Prefix)：08 C6 04 08 00 F2 B7 01 FD 7C ETX(Suffix 1)：08 C6 04 08 00 F2 B7 02

	FD 7B STX(Prefix)+ETX(Suffix 1)：08 C6 04 08 00 F2 B7 03 FD 7A
ASCII Control Character Output Mode Selection	Output function keys:08 C6 04 08 00 F2 AD 00 FD 87 Output Ctrl combination key:08 C6 04 08 00 F2 AD 01 FD 86 ALT output control characters:08 C6 04 08 00 F2 AD 02 FD 85 Output Enter、DownArrow:08 C6 04 08 00 F2 AD 03 FD 84
1D Code Global Enable Switch	Forbid：08 C6 04 08 00 F2 11 00 FE 23 Allow：08 C6 04 08 00 F2 11 01 FE 22
2D Code Global Enable Switch	Forbid：08 C6 04 08 00 F2 50 00 FD E4 Allow：08 C6 04 08 00 F2 50 01 FD E3
All Code Global Enable Switch	Forbid：08 C6 04 08 00 F2 90 00 FD A4 Allow：08 C6 04 08 00 F2 90 01 FD A3
Hide Header Characters	Forbid：08 C6 04 08 00 F2 C6 00 FD 6E Allow：08 C6 04 08 00 F2 C6 01 FD 6D
Hide Middle Characters	Forbid：08 C6 04 08 00 F2 C7 00 FD 6D Allow：08 C6 04 08 00 F2 C7 01 FD 6C
Hide Tail Characters	Forbid：08 C6 04 08 00 F2 C8 00 FD 6C Allow：08 C6 04 08 00 F2 C8 01 FD 6B
Same Code Delay	1500ms:08 C6 04 08 00 F3 03 0F FE 21 500ms:08 C6 04 08 00 F3 03 05 FE 2B 300ms: 08 C6 04 08 00 F3 03 03 FE 2D
Same Code Delay Quickly Set Up	No delay：08 C6 04 08 00 F2 C9 00 FD 6B Delay 1s：08 C6 04 08 00 F2 C9 01 FD 6A Delay 3s：08 C6 04 08 00 F2 C9 03 FD 68 Delay 5s：08 C6 04 08 00 F2 C9 05 FD

	66 Delay 7s：08 C6 04 08 00 F2 C9 07 FD 64 Infinite delay （Forbid Same Code Read）：08 C6 04 08 00 F2 C9 09 FD 62
Set Multiple Prefixes in succession	SetMultiple Prefixes in succession：08 C6 04 08 00 F3 10 00 FE 23
Set Multiple Suffixes in succession	Set Multiple Suffixes in succession：08 C6 04 08 00 F3 11 00 FE 22
Finish Setting Multiple Prefixes Suffixes in succession	Finish Setting Multiple Prefixes Suffixes in succession：08 C6 04 08 00 FF F6 00 FD 31
Setting Multiple Prefixes Suffixes Data Transfer Format	Data+Multiple Suffixes：07 C6 04 08 00 EB 08 FE 34 Multiple Prefixes+Data：07 C6 04 08 00 EB 09 FE 33 Multiple Prefixes+Data+Multiple Suffixes：07 C6 04 08 00 EB 0A FE 32
Heartbeat Control	Forbid：08 C6 04 08 00 F2 CD 00 FD 67 Heartbeat don’t need ACK：08 C6 04 08 00 F2 CD 01 FD 66 Heartbeat need ACK：08 C6 04 08 00 F2 CD 02 FD 65
UPC-A	
Read	Forbid：07 C6 04 08 00 01 00 FF 26 Allow：07 C6 04 08 00 01 01 FF 25
Transmit UPC-A Check Character	Forbid：07 C6 04 08 00 28 00 FE FF Allow：07 C6 04 08 00 28 01 FE FE
Extra Code	None(00)：07 C6 04 08 00 10 00 FF 17 Allow（01）：07 C6 04 08 00 10 01 FF 16 Automatic differentiation(02)：07 C6 04 08 00 10 02 FF 15
Leading Code	None(00)：07 C6 04 08 00 22 00 FF 05

	System identification（01）：07 C6 04 08 00 22 01 FF 04 Country\System identification(02)： 07 C6 04 08 00 22 02 FF 03
UPC-A 2 Bit Extra Code	Allow：08 C6 04 08 00 F2 40 01 FD F3 Forbid：08 C6 04 08 00 F2 40 00 FD F4
UPC-A 5 Bit Extra Code	Allow：08 C6 04 08 00 F2 41 01 FD F2 Forbid：08 C6 04 08 00 F2 41 00 FD F3
UPC-A Extra Code Must be Identified	Allow：08 C6 04 08 00 F2 42 01 FD F1 Forbid：08 C6 04 08 00 F2 42 00 FD F2
UPC-E	
Read	Forbid：07 C6 04 08 00 02 00 FF 25 Allow：07 C6 04 08 00 02 01 FF 24
Transmit UPC-E Check bit	Forbid：07 C6 04 08 00 29 00 FE FE Allow：07 C6 04 08 00 29 01 FE FD
Extra Code	None(00)：07 C6 04 08 00 10 00 FF 17 Allow（01）：07 C6 04 08 00 10 01 FF 16 Automatic differentiation(02)：07 C6 04 08 00 10 02 FF 15
Leading Code	None(00)：07 C6 04 08 00 23 00 FF 04 System identification（01）：07 C6 04 08 00 23 01 FF 03 Country\System identification(02)： 07 C6 04 08 00 23 02 FF 02
UPC-E Turn UPC-A	Forbid：07 C6 04 08 00 25 00 FF 02 Allow：07 C6 04 08 00 25 01 FF 01
UPC-E 2 Bit Extra Code	Allow：08 C6 04 08 00 F2 3D 01 FD F6 Forbid：08 C6 04 08 00 F2 3D 00 FD F7
UPC-E 5 Bit Extra Code	Allow：08 C6 04 08 00 F2 3E 01 FD F5 Forbid：08 C6 04 08 00 F2 3E 00 FD F6
UPC-E Extra Code Must be Identified	Allow：08 C6 04 08 00 F2 3F 01 FD F4

	Forbid：08 C6 04 08 00 F2 3F 00 FD F5
UPC-E1	Forbid：08 C6 04 08 00 F2 15 00 FE 1F Allow：08 C6 04 08 00 F2 15 01 FE 1E
EAN-8	
Read	Forbid：07 C6 04 08 00 04 00 FF 23 Allow：07 C6 04 08 00 04 01 FF 22
Extra Code	None(00)：07 C6 04 08 00 10 00 FF 17 Allow（01）：07 C6 04 08 00 10 01 FF 16
EAN-8 2 Bit Extra Code	Allow：08 C6 04 08 00 F2 37 01 FD FC Forbid：08 C6 04 08 00 F2 37 00 FD FD
EAN-8 5 Bit Extra Code	Allow：08 C6 04 08 00 F2 38 01 FD FB Forbid：08 C6 04 08 00 F2 38 00 FD FC
EAN-8 Extra Code Must be Identified	Allow：08 C6 04 08 00 F2 39 01 FD FA Forbid：08 C6 04 08 00 F2 39 00 FD FB
EAN-8 Send Check Bit	Forbid：08 C6 04 08 00 F2 80 00 FD B4 Allow：08 C6 04 08 00 F2 80 01 FD B3
EAN-13	
Read	Forbid：07 C6 04 08 00 03 00 FF 24 Allow：07 C6 04 08 00 03 01 FF 23
EAN-13 2 Bit Extra Code	Allow：08 C6 04 08 00 F2 3A 01 FD F9 Forbid：08 C6 04 08 00 F2 3A 00 FD FA
EAN-13 5 Bit Extra Code	Allow：08 C6 04 08 00 F2 3B 01 FD F8 Forbid：08 C6 04 08 00 F2 3B 00 FD F9
EAN-13 Extra Code Must be Identified	Allow：08 C6 04 08 00 F2 3C 01 FD F7 Forbid：08 C6 04 08 00 F2 3C 00 FD F8
EAN-13 Send Check Character	Forbid：08 C6 04 08 00 F2 16 00 FE 1E Allow：08 C6 04 08 00 F2 16 01 FE 1D
Extra Code	None(00)：07 C6 04 08 00 10 00 FF 17

	Allow（01）：07 C6 04 08 00 10 01 FF 16
Bookland EAN(ISBN)	
Read	Forbid：07 C6 04 08 00 53 00 FE D4 Allow：07 C6 04 08 00 53 01 FE D3
Format	Output 10 Bit:08 C6 04 08 00 F1 40 00 FD F5 Output 13 Bit:08 C6 04 08 00 F1 40 01 FD F4
Code 128 Code system switch	Forbid：07 C6 04 08 00 08 00 FF 1F Allow：07 C6 04 08 00 08 01 FF 1E
Code 128 Length	One Single length： 06：0B C6 04 08 00 F5 04 06 F5 05 00 FD 2A Two Single length： 04 and 06：0B C6 04 08 00 F5 04 06 F5 05 04 FD 26 Within a certain length range： 04 to 09：0B C6 04 08 00 F5 04 04 F5 05 09 FD 23 Any length range： 0B C6 04 08 00 F5 04 00 F5 05 00 FD 30
GS1-128 (UCC/EAN-128)	Forbid：07 C6 04 08 00 0E 00 FF 19 Allow：07 C6 04 08 00 0E 01 FF 18
UCC/EAN-128 Send Check Character	Allow：08 C6 04 08 00 F2 36 01 FD FD Forbid：08 C6 04 08 00 F2 36 00 FD FE
UCC/EAN-128 Length	One Single length： 06：0B C6 04 08 00 F5 06 06 F5 07 00 FD 26 Two Single length： 04 and 06：0B C6 04 08 00 F5 06 06 F5 07 04 FD 22 Within a certain length range：

	04 to 09：0B C6 04 08 00 F5 06 04 F5 07 09 FD 1F Any length range ： 0B C6 04 08 00 F5 06 00 F5 07 00 FD 2C
ISBT 128	Forbid：07 C6 04 08 00 54 00 FE D3 Allow：07 C6 04 08 00 54 01 FE D2
Code 39	Forbid：07 C6 04 08 00 00 00 FF 27 Allow：07 C6 04 08 00 00 01 FF 26
Code 39 Length	One Single length： Length 06： 09 C6 04 08 00 12 06 13 00 FE FA Length 16: 09 C6 04 08 00 12 10 13 00 FE F0 Length14: 09 C6 04 08 00 12 0E 13 00 FE F2 Two Single length： 02 and 04： 09 C6 04 08 00 12 04 13 02 FE FA 16 and 14： 09 C6 04 08 00 12 10 13 0E FE E2 Within a certain length range: 02 to 09： 09 C-6 04 08 00 12 02 13 09 FE F5 0x02 to 0x37(55)Default： 09 C6 04 08 00 12 02 13 37 FE C7 14 to 15: 09 C6 04 08 00 12 0E 13 0F FE E3 15 to 16: 09 C6 04 08 00 12 0F 13 10 FE E1 Any length range：09 C6 04 08 00 12 00 13 00 FE F0
Code 39	Forbid：07 C6 04 08 00 30 00 FE F7

Check Bit Verification	Allow：07 C6 04 08 00 30 01 FE F6
Send Code 39 Check Bit	Forbid：07 C6 04 08 00 2B 00 FE FC Allow：07 C6 04 08 00 2B 01 FE FB
Code 39 Full ASCII	07 C6 04 08 00 11 01 FF 15
Code 39 Transmit Start Character and Stop Character	Forbid：08 C6 04 08 00 F2 30 00 FE 04 Allow：08 C6 04 08 00 F2 30 01 FE 03
Convert Code 39 to Code 32（Italian medical code）	Forbid：07 C6 04 08 00 56 00 FE D1 Allow：07 C6 04 08 00 56 01 FE D0
Code 32 Prefixes	Forbid：07 C6 04 08 00 E7 00 FE 40 Allow：07 C6 04 08 00 E7 01 FE 3F
Code 93	Forbid：07 C6 04 08 00 09 00 FF 1E Allow：07 C6 04 08 00 09 01 FF 1D
Code 93 Length	One Single length： 04：09 C6 04 08 00 1A 041B 00 FE EC Two Single length： 04 and 06：09 C6 04 08 00 1A 06 1B 04 FE E6 Within a certain length range: 04 to 09：09 C6 04 08 00 1A 04 1B 09 FE E3 Any length range ：09 C6 04 08 00 1A 00 1B 00 FE F0
Code 11	Forbid：07 C6 04 08 00 0A 00 FF 1D Allow：07 C6 04 08 00 0A 01 FF 1C
Set Code 11 Length	One Single length： 06：09 C6 04 08 00 1C 06 1D 00 FE E6 Two Single length： 04 and 06：09 C6 04 08 00 1C 06 1D 04 FE E2 Within a certain length range: 04 to 09：09 C6 04 08 00 1C 04 1D

	09 FE DF Any length range ：09 C6 04 08 00 1C 00 1D 00 FE EC
Code 11 Check Bit Verification	None：07 C6 04 08 00 34 00 FE F3 1 BIt：07 C6 04 08 00 34 01 FE F2 2 Bit：07 C6 04 08 00 34 02 FE F1
Send Code 11 Check Bit	Forbid：07 C6 04 08 00 2F 00 FE F8 Allow：07 C6 04 08 00 2F 01 FE F7
Interleaved 2 of 5/ITF/ Corss 25 Code	Forbid：07 C6 04 08 00 06 00 FF 21 Allow：07 C6 04 08 00 06 01 FF 20
Set Interleaved 2 of 5 Length	One Single length： 06：09 C6 04 08 00 16 06 17 00 FE F2 Two Single length： 04 and 06：09 C6 04 08 00 16 06 17 04 FE EE Within a certain length range: 04 to 09：09 C6 04 08 00 16 04 17 09 FE EB Any length range：09 C6 04 08 00 16 00 17 00 FE F8
Interleaved 2 of 5 Check Bit Verification	Forbid：07 C6 04 08 00 31 00 FE F6 Allow：07 C6 04 08 00 31 01 FE F5
Send Interleaved 2 of 5 Check Bit	Forbid：07 C6 04 08 00 2C 00 FE FB Allow：07 C6 04 08 00 2C 01 FE FA
Industrial 2 of 5	Forbid：07 C6 04 08 00 05 00 FF 22 Allow：07 C6 04 08 00 05 01 FF 21
Set Industrial 2 of 5 Length	One Single length： 06：09 C6 04 08 00 14 06 15 00 FE F6 Two Single length： 04 和 06：09 C6 04 08 00 14 06 15 04 FE F2

	Within a certain length range: 04 到 09：09 C6 04 08 00 14 04 15 09 FE EF Any length range：09 C6 04 08 00 14 00 15 00 FE FC
Matrix 25 matrix 25	Forbid：08 C6 04 08 00 F2 20 00 FE 14 Allow：08 C6 04 08 00 F2 20 01 FE 13
Matrix 25 Check Bit Verification	Forbid：08 C6 04 08 00 F2 21 00 FE 13 Allow：08 C6 04 08 00 F2 21 01 FE 12
Transfer Matrix 25 Check Character	Forbid：08 C6 04 08 00 F2 22 00 FE 12 Allow：08 C6 04 08 00 F2 22 01 FE 11
Matrix 25 Length	One Single length： 06：0B C6 04 08 00 F5 00 06 F5 01 00 FD 32 Two Single length： 04 and 06：0B C6 04 08 00 F5 00 06 F5 01 04 FD 2E Within a certain length range: 04 to 09：0B C6 04 08 00 F5 00 04 F5 01 09 FD 2B Any length range ： 0B C6 04 08 00 F5 00 00 F5 01 00 FD 38
Standard 25 / IATA 25/Standard 25	Forbid：08 C6 04 08 00 F2 23 00 FE 11 Allow：08 C6 04 08 00 F2 23 01 FE 10
Standard 25 Length	One Single length： 06：09 C6 04 08 00 F5 02 06 F5 03 00 FD 2E Two Single length： 04 and 06：09 C6 04 08 00 F5 02 06 F5 03 04 FD 2A Within a certain length range: 04 to 09：09 C6 04 08 00 F5 02 04

	F5 03 09 FD 27 Any length range ：09 C6 04 08 00 F5 02 00 F5 03 00 FD 34
Codabar	Forbid：07 C6 04 08 00 07 00 FF 20 Allow：07 C6 04 08 00 07 01 FF 1F
Set Codabar Length	One Single length： 04：09 C6 04 08 00 18 04 19 00 FE F0 Two Single length： 09 C6 04 08 00 18 05 19 04 FE EB Within a certain length range: 04 to 09：09 C6 04 08 00 18 04 19 09 FE E7 Any length range ：09 C6 04 08 00 18 00 19 00 FE F4
Codabar Check	Allow：08 C6 04 08 00 F2 4C 01 FD E7 Forbid：08 C6 04 08 00 F2 4C 00 FD E8
Codabar Send Check Character	Allow：08 C6 04 08 00 F2 4D 01 FD E6 Forbid：08 C6 04 08 00 F2 4D 00 FD E7
NOTIS Transmission Format	Forbid：07 C6 04 08 00 37 00 FE F0 Allow：07 C6 04 08 00 37 01 FE EF
Start Character and End Character Formats	ABCD/ABCD：08 C6 04 08 00 F2 31 00 FE 03 ABCD/TN*E：08 C6 04 08 00 F2 31 01 FE 02
Set the upper and lower case of the start and end characters	Upper Case：08 C6 04 08 00 F2 32 00 FE 02 Lower Case：08 C6 04 08 00 F2 32 01 FE 01
MSI /MSI PLESSEY	Forbid：07 C6 04 08 00 0B 00 FF 1C Allow：07 C6 04 08 00 0B 01 FF 1B
Set MSI Length	One Single length： 04：09 C6 04 08 00 1E 04 1F 00 FE E4

	Two Single length： 04 and 05：09 C6 04 08 00 1E 05 1F 04 FE DF Within a certain length range: 02 to 09：09 C6 04 08 00 1E 02 1F 09 FE DD Any length range ：09 C6 04 08 00 1E 00 1F 00 FE E8
MSI Check Bit	1 Bit: 07 C6 04 08 00 32 00 FE F5 2 Bit:07 C6 04 08 00 32 01 FE F4
Send MSI Check Bit	Forbid：07 C6 04 08 00 2E 00 FE F9 Allow：07 C6 04 08 00 2E 01 FE F8
GS1 DataBar(RSS) 14	Forbid：08 C6 04 08 00 F0 52 00 FD E4 Allow：08 C6 04 08 00 F0 52 01 FD E3
PDF417	Allow：07 C6 04 08 00 0F 01 FF 17 Forbid：07 C6 04 08 00 0F 00 FF 18
QRCode	Allow：08 C6 04 08 00 F0 25 01 FE 10 Forbid：08 C6 04 08 00 F0 25 00 FE 11
QR Forward and Backward Reading	Only read Forward：08 C6 04 08 00 F2 67 00 FD CD Only read Backward：08 C6 04 08 00 F2 67 01 FD CC Forward and Backward both can read：08 C6 04 08 00 F2 67 02 FD CB
MicroQRCode	Allow：08 C6 04 08 00 F1 3D 01 FD F7 Forbid：08 C6 04 08 00 F1 3D 00 FD F8
DataMatrix	Allow：08 C6 04 08 00 F0 24 01 FE 11 Forbid：08 C6 04 08 00 F0 24 00 FE 12
Forward and Backward Reading	Only read Forward: 08 C6 04 08 00 F2 6B 00 FD C9 Only read Backward: 08 C6 04 08 00 F2 6B 01 FD C8 Forward and Backward both can read: 08 C6 04 08 00 F2 6B 02 FD C7

MaxiCode	Forbid：08 C6 04 08 00 F0 26 00 FE 10 Allow：08 C6 04 08 00 F0 26 01 FE 0F
Aztec	Forbid：08 C6 04 08 00 F0 28 00 FE 0E Allow：08 C6 04 08 00 F0 28 01 FE 0D
Han Xin Code	Forbid：08 C6 04 08 00 F0 2F 00 FE 07 Allow：08 C6 04 08 00 F0 2F 01 FE 06
GS1 COMPOSITE COD	Forbid：08 C6 04 08 00 F2 17 00 FE 1D Allow：08 C6 04 08 00 F2 17 01 FE 1C