

SGBS 400/SGBS kiosk. 2D Barcode Scanner Setting Manual

Revision History

Version	Description	Data
V1.0	Initial Version	2015-06-07
V1.1	Add Rate	2016-01-05
V1.2	Add Comand Table	2017-10-06

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Chapter1 System Settings

Introduction

The user can set the function of the barcode reader by scanning one or more setting barcodes.



Scanning Instructions

In the Trigger Mode, the scanning barcode operation steps are as follows

1. Hold down the trigger key of the barcode reader, the line of sight is activated, red red line of sight appears.
2. Align the red line of sight with the bar code center, move the bar code reader and adjust the distance between it and the bar code to find the best reading distance.
3. After hearing the successful prompt sound, and the red lighting line is extinguished, the reading is successful, and the barcode reader transmits the decoded data to the host..

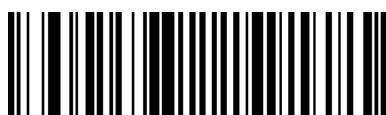
Note: During the reading process, you will find the distance between the barcode reader and the barcode within a certain range for the barcode of the same batch, and the reading success rate will be very high. This distance is the best reading distance.

Restore Defaults

All barcode readers have a factory default setting. Reading the "Restore default settings" barcode will restore all barcode reader property settings to the factory state.

You are most likely to use this bar code in the following situations:

- 1、 Error in barcode reader settings, such as barcode not recognized.
- 2、 You have forgotten what settings were made for the barcode reader before, and you do not want to use the previous settings.
- 3、 The bar code reader is set to use some infrequently used features and is used after completion.



0D0100.

Restore default settings

version

Use the scanner to scan the version number bar code, you can view the current bar coder

version number information



0D1302?.

version

Reading mode selection

Trigger Mode

If the Trigger Mode is enabled, you could activate the scanner by providing an external hardware trigger, or using a serial trigger command. When in manual trigger mode, the scanner scans until a barcode is read, or until the hardware trigger is released. When in serial mode, the scanner scans until a barcode has been read or until the deactivate command is sent.



091A00.

Manual Trigger Mode – Normal*



091B00.

Manual Trigger Mode – Cellphone

Serial Trigger Command:

Command Trigger: [0x02][0xF4][0x03]

Command Untrigger: [0x02][0xF5][0x03]

Sense Mode

This set the scanner to work in Sense mode.



090901.

Sense Mode – Normal



090902.

Sense Mode - Cellphone



090903.

Sense Mode – Continue Scan

Good Read Beeper

Enable or disable all sounds and scan the corresponding bar code below



0502101.

Enable*



0502100.

disable

Good Read Beeper Volume

There are three levels of volume levels to choose from, default: Loud



05021D3.

Loud*



05021D2.

Medium



05021D1.

Low

Good Read Beeper Duration



0502160.

Normal *



0502161.

Short

Good Read Beeper Tone



05020D1680.

Low Frequency



05020D3280.

Medium High Frequency



05020D2790.

Medium Frequency*



05020D4290.

High Frequency

Trigger Mode Reread Delay



080B080.

No Delay*



080B08500.

Delay 500 MS



080B082000.

Delay 2000 MS

Sense Mode Reread Delay



080B06500.

Delay 500 MS *



080B06750.

Delay 750 MS



080B061000.

Delay 1000 MS

Illumination

Manual Trigger Mode Illumination setting



0401004.

Illumination Level 4(High) *



0401003.

Illumination Level 3



0401002.

Illumination Level 2



0401001.

Illumination Level 1(Low)

Aiming

When scanning/capturing image, the engine projects an aiming pattern which allows positioning the target barcode within its field of view and thus makes decoding easier.

Normal: The engine projects an aiming pattern only during barcode scanning/capture.

OFF: Aiming pattern is OFF all the time.



0409062.

Normal*



0409060.

OFF

Data transmission speed



060D041.

Fast



060D040.

Slow*

Inverse color



024B000.

Normal*



024B001.

Only Inverse ON



024B002.

Inverse And Normal Both ON

Different national language transmission In QR Code







Scan Chinese In QR Codes

Application environment	QR coding rule		
	UTF8\GB2312	Big5	Shift-JIS
word		 091841.	
documents	 091842.		 091840.
Excel or notepad		 091848.	
system languages:CH	 091849.		 091847.
Sample Code	 (GB2312) 采菊东篱下，悠然见南山。  (UTF8) 鳳凰臺上鳳凰遊 鳳去臺空江自流	 關關雎鳩，在河之洲。 窈窕淑女，君子好逑。	 123 あいうえ ABC かき くけこ 456







Scan Japanese In QR Codes

Application environment	QR coding rule	
	UTF8\GB2312	Shift-JIS
word documents	 091842.	 091840.
Excel or notepad system languages:JP	 091846.	 091845.
Sample Code	 こんにちは	 123 あいうえ ABC かきくけこ 456

Scan Korean In QR Codes

application environment	QR coding rule	
	UTF8	CP949
word documents	 091842.	 091844.
Excel or notepad system languages:Korean	 09184B.	 09184A.
Sample Code	 안녕하세요	 123바깥쪽크기 트.채TT

Scan Thai in QR codes?

Application environment	QR coding rule	
	UTF8	CP874
word documents	 091842.	 091843.
Excel or notepad system languages:Thai	 09184D.	 09184C.
Sample Code	 แบบทดสอบภาษาไทยบาร์โค้ด	 12345678 ห ฟ ต ดาสกหฟร้่า แส่ส KTB CO.,LTD

Chapter2 Communication setting

Introduction

When using this barcode to communicate with different hosts, you need to set the barcode reader to the corresponding communication interface mode.

The user can set the barcode scanner function by scanning one or more setting barcodes.

Users can choose to use USB-KBW, USB-COM, TTL / RS232 serial communication interface mode.

USB Interface

Before using USB Communication interface, scanner must be set as USB cable.



0606001.

USB Cable

USB-KBW Mode

When you connect the engine to the Host via a USB connection, you can enable the USB-KBW feature by scanning the barcode below. Then engine's transmission will be simulated as USB keyboard input. The Host receives keystrokes on the virtual keyboard. It works on a Plug and Play basis and no driver is required.



090500.

USB-KBW Mode

Country/language keyboard layout selection

Different national languages correspond to the keyboard keys arrangement, symbols, etc. are different, the barcode scanner can be virtual according to the actual needs of different countries keyboard.



060E000.

1 – U.S. *



060E007.

2 – UK



060E008.

3 – Denmark



060E003.

4 – France



060E002.

5 – Finland



060E0027.

6 – Turkey_F



060E005.

7 – Italy



060E009.

8 – Norway



060E0035.

9 – Albania



060E001.

10 – Belgium



060E0033.

11 – Bosnia



060E0016.

12 – Brazil



060E0032.

13 – Croatia



060E0015.

14 – Czech



060E0011.

15 – Dutch



060E0041.

16 – Estonia



060E004.

17 – Germany



060E0017.

18 – Greek



060E0019.

19 – Hungary



060E0073.

20 – Irish



060E0042.

21 – Latvia



060E0044.

22 – Lithuania



060E0034.

23 – Macedonia



060E0010.

24 – Spain



060E0020.

25 – Poland



060E0013.

26 – Portugal



060E0025.



060E0026.

27 – Romania

28 – Russia



060E0028.

29 – Japan

USB-COM

When the barcoder uses USB communication interface, but the host application uses serial communication to receive data, you can set the barcode to USB virtual serial communication mode. This feature requires installing the appropriate driver on the host.



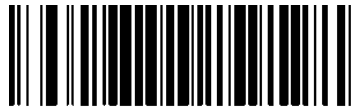
090400.

USB-COM

TTL/RS232 mode

The serial communication interface is a common way to connect barcode and host devices and can be used to connect host devices such as PC and POS.

When using the serial communication interface of the barcode scanner, the barcode scanner and the host device must be completely matched in the configuration parameters of the serial communication protocol to ensure the accuracy of data transmit.



0606000.

TTL/RS232

Serial Default :

Parameter	Factory Default
Serial Communication	Standard TTL-232
Baud Rate	115200
Parity Check	None
Data Bits	8
Stop Bits	1
Hardware Flow Control	None

Baud rate

Baud rate is the number of bits transmitted per second for serial data communication. The baud rate used by the barcode reader and the data receiving host must be consistent to ensure the accuracy of data transmit. The bar coder supports the baud rates listed below, in bits/s, Default Rate: 115200.



0607023.

2400



0607025.

9600



0607027.

38400



0607029.

115200 *



0607024.

4800



0607026.

19200



0607028.

57600

Data Bit & Parity Check & Stop Bit



0607030.

None Parity /7 Data Bits/1 Stop Bit



0607032.

None Parity /8 Data Bits/1 Stop Bit*



0607035.

Even Parity /8 Data Bits/1 Stop Bit



0607031.

None Parity /7 Data Bits/2 Stop Bits



0607034.

Even Parity /7 Data Bits/2 Stop Bits



0607033.

Even Parity /7 Data Bits/1 Stop Bit



0607036.

Odd Parity /7 Data Bits/1 Stop Bit



0607038.

Odd Parity /8 Data Bits/1 Stop Bit



0607037.

Odd Parity /7 Data Bits/2 Stop Bit

Chapter3 Data Editing

Introduction

After the barcode scanner is successfully decoded, the device will get a series of data, which can be numbers, English, symbols, etc. In application, we may not only need the barcode data information, or the barcode contains data information can not meet your requirement. For example, you may want to know which type of barcode you get from this string of data information or attach special data to the string data, which may not be included in the barcode data information.

Increasing these contents while making code, it is bound to increase the length of the barcode and the flexibility is not enough. It is not a good way.

At this moment, we think of artificially adding some contents before or after the barcode data information, and these added contents can be changed in real time according to the demand, and can be selectively added or masked. This is the prefix and suffix of barcode data information.

The method of adding prefixes and suffixes , can meet the requirement and need to modify the contents of the barcode information.

Note: Data editing format: <Code ID>< Custom Prefix > <barcode data> <custom suffix ><suffix>

Add Custom Prefix



080400.

Set Custom Prefix



0D0400.

Save



0D0500.

Not Save

To set a customer prefix, scan the “Set Custom Prefix” barcode and the numeric barcodes which representing the hexadecimal values of a desired prefix, and then scan the Save barcode. Refer to “Appendix: ASCII Table” for hexadecimal values of characters.

Example: Set the custom Prefix to “VC”

1. Check the hex values of “VC” in the ASCII Table. (“VC” : 0x56,0x43)
2. Scan the “Set Custom Prefix” barcode.
3. Scan the numeric barcodes” 9” ,” 9” , ”5” , ”6” , ”4” , ”3” in “Appendix: Digit Barcodes” .
4. Scan the Save barcode.

Add Custom Suffix



080500.

Set Custom Suffix



0D0400.

Save



0D0500.

Not Save

To set a customer prefix, scan the “Set Custom Suffix” barcode and the numeric barcodes which representing the hexadecimal values of a desired prefix, and then scan the Save barcode. Refer to “Appendix: ASCII Table” for hexadecimal values of characters.

Example: Set the custom Suffix to “DY”

1. Check the hex values of “DY” in the ASCII Table. (“DY” : 0x44,0x59)
2. Scan the “Set Custom Prefix” barcode.
3. Scan the numeric barcodes” 9” , ” 9” , ” 4” , ” 4” , ” 5” , ” 9” in “Appendix: Digit Barcodes” .
4. Scan the Save barcode.

Clear All Prefix and Suffix



080404.

Clear All Prefix And Suffix*

Suffix setting

The end character is used to mark the end of a complete data message. The suffix of end character must be the last content of a data transmit, then there will be no additional data.

Difference between suffix of end character and customized suffix is that the contents and decoding information of the customized suffix , prefix and other contents can be

formatted, but suffix of end character can' t make it.



090200.

Add CR



090300.

Add CR+LF



090202.

Add LF



090201.

Add TAB

Character conversion

By setting the character conversion function of the barcode scanner, the upper case and lower case conversions of the English letters of the barcode output data can be performed. For example, if the content of the barcode is aBC123, set the barcode to “all in lower case” and the data obtained by the host will be “abc123” . The default is Normal output.



060D020.

Normal (No Change) *



060D021.

Upper (Capitalize)



060D022.

Lower (All lowercase)

Note: This parameter is only valid in standard keyboard input mode and keyboard emulation input control character mode.

Chapter4. BarCode Parameter Settings

Introduction

Each type of barcode has its own unique properties, Through the setting code of this chapter, you can adjust the barcode reader to adapt to these property changes. The fewer types of barcodes that are enabled to enable reading, The faster the barcode reads. You can disable barcode scanners from reading barcode types that will not be used, to improve the performance of the barcode scanner.

Global setting

Enable/Disable All Symbologies

If the "Disable All Symbologies" feature is enabled, the engine will not be able to read any non-programming barcodes except the programming barcodes.



0201001.

Enable All Symbologies



0201000.

Disable All Symbologies

Restore Symbology Default Setting

Symbologies Enable: Code 128, Code 39, UPC, EAN, Interleaved 2 of 5, Code 93, Coda Bar, GS1-128, DataMatrix, PDF417, QR, Maxi Code, Aztec.



090101.

Restore Symbology Default

Optimize Performance for Retail Use Case

Make for optimize scan performance in most retail barcode scan use case.

Symbologies Enable: UPC, EAN, Code128, QR, PDF417.



091832.

Only Enable Retail Barcode

UPC-A

Enable/Disable UPC-A



0211011.

Enable UPC-A*



0211010.

Disable UPC-A

Transmit Check Digit



0211021.

Transmit UPC-A Check Digit*



0211020.

Not Transmit UPC-A Check Digit

UPC-A Addenda

Additional bits refer to 2 or 5 digit barcodes added after the normal barcode, As shown below, the left blue line box is an ordinary bar code, the right side of the red box is an additional bit. The default is to turn off extra bits.



Enable 2 Digit Addenda



Disable 2 Digit Addenda*



Enable 5 Digit Addenda



Disable 5 Digit Addenda*

UPC-A Addenda Required

When required is scanned, the scanner will only read UPC-E barcodes that have addenda.



Enable UPC-A Addenda Required



Disable UPC-A Addenda Required*

UPC-A Addenda Separator



0211071.

Enable UPC-A Addenda Separator*



0211070.

Disable UPC-A Addenda Separator

UPC-A Number System

The number system digit of UPC symbol is normally transmitted at the beginning of the scanned data, but the unit can be programmed so it will be not transmitted.



0211031.

Enable UPC-A Number System *



0211030.

Disable UPC-A Number System

UPC-E

Enable/Disable UPC-E



0212011.

Enable UPC-E0*



0212021.

Enable UPC-E1



0212010.

Disable UPC-E0



0212020.

Disable UPC-E1*

Transmit UPC-E0 Check Digit



0212041.

Transmit UPC-E0 Check Digit*



0212040.

Not Transmit UPC-E0 Check Digit

UPC-E0 Addenda

Additional bits refer to 2 or 5 digit barcodes added after the normal barcode, As shown below, the left blue line box is an ordinary bar code, the right side of the red box is an additional bit. The default is to turn off extra bits.



0212061.

Enable 2 Digit Addenda



0212060.

Disable 2 Digit Addenda*



0212071.

Enable 5 Digit Addenda



0212070.

Disable 5 Digit Addenda*

UPC-E0 Addenda Required

When required is scanned, the scanner will only read UPC-E barcodes that have addenda.



0212081.

Enable UPC-E0 Addenda Required



0212080.

Disable UPC-E0 Addenda Required*

UPC-E0 Addenda Separator



0212091.

Enable UPC-E0 Addenda Separator *



0212090.

Disable UPC-E0 Addenda Separator

UPC-E0 Number System

The number system digit of UPC symbol is normally transmitted at the beginning of the scanned data, but the unit can be programmed so it will be not transmitted.



0212051.

Enable UPC-E0 Number System*



0212050.

Disable UPC-E0 Number System

UPC-E0 Expand

UPC-E0 expand expands the UPC-E code to the 12 digits, UPC-A format.



0212031.

Enable UPC-E0 Expand



0212030.

Disable UPC-E0 Expand*

EAN-8

Enable/Disable EAN-8



0214011.

Enable EAN-8 *



0214010.

Disable EAN-8

Transmit Check Digit

EAN-8 is 8 digits in length with the last one as its check digit used to verify the accuracy of the data.



0214021.

Transmit EAN-8 Check Digit*



0214020.

Not Transmit EAN-8 Check Digit

EAN-8 Addenda

Additional bits refer to 2 or 5 digit barcodes added after the normal barcode, as shown below, The left blue line box is an ordinary bar code, the right side of the red box is an additional bit. The default is to turn off extra bits.



0214031.

Enable 2 Digit Addenda



0214030.

Disable 2Digit Addenda*



0214041.

Enable 5 Digit Addenda



0214040.

Disable 5 Digit Addenda *

EAN-8 Addenda Required



0214051.

Enable EAN-8 Addenda Required



0214050.

Disable EAN-8 Addenda Required*

EAN/JAN-8 Addenda Separator

When this feature is enabled, there is a space between barcode and addenda. When this feature is disabled, there is no space.



Enable EAN/JAN-8 Addenda Separator*



Disable EAN/JAN-8 Addenda Separator

EAN-13

Enable/Disable EAN-13



Enable EAN-13*



Disable EAN-13

Transmit Check Digit



Transmit EAN-13 Check Digit*



Not Transmit EAN-13 Check Digit

EAN-13 Addenda

Additional bits refer to 2 or 5 digit barcodes added after the normal barcode, as shown below, the left blue box is an ordinary bar code, and the right red box is an extra bit. The default is to turn off extra bits.



0213031.

Enable 2 Digit Addenda



0213030.

Disable 2-Digit Addenda *



0213041.

Enable 5 Digit Addenda



0213040.

Disable 5-Digit Addenda*

EAN-13 Addenda Required



0213051.

Enable EAN-13 Addenda Separator*



0213050.

Disable EAN-13 Addenda Separator

EAN/JAN-13 Addenda

When this feature is enabled, there is a space between barcode and addenda. When this feature is disabled, there is no space.



Enable EAN/JAN-13 Addenda Separator*



Disable EAN/JAN-13 Addenda Separator

ISBN Translate

When enable this feature and is scanned, EAN-13 Book land symbols are translated into their equivalent ISBN number format.



Enable ISBN Translate



Disable ISBN Translate*

Code 128

Enable/Disable Code 128



020A011.

Enable Code 128*



020A010.

Disable Code 128

Message Length

Message length can be set to the maximum value or minimum value. The value between the maximum and the minimum is valid.

The maximum value and minimum value can be set using "Programming Command" .

Please check the "Chapter 5 serial communication instruction" for the detail.

Code 128 max length command: 020A03. The parameter of this command can be set from min to 90.

Code 128 min length command: 020A02. The parameter of this command can be set from 0 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 020A0325 ; Min: 020A0210.

GS1-128

Enable/Disable GS1-128



020B001.

Enable GS1-128*



020B000.

Disable GS1-128

Message Length

Message length can be set to the maximum value, minimum value. The data between the maximum and the minimum is valid.

The maximum value and minimum value can be set using Programming command. Please check the "Chapter 5 serial communication instruction" for the detail.

GS1-128 max length command: 020B03. The parameter of this command can be set from min to 80.

GS1-128 min length command: 020B02. The parameter of this command can be set from 0 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 020B0325 ; Min: 020B0210.

Code 39

Enable/Disable Code 39



0203011.

Enable Code 39*



0203010.

Disable Code 39

Transmit Start/Stop Character



0203051.

Transmit Start/Stop Character



0203050.

Not Transmit Start/Stop Character*

Code 39 Check Character



0203040.

No Check Char*



0203042.

Validate And Transmit



0203041.

Validate No Transmit

Code 39 Full ASCII



0203021.

Enable Code 39 Full ASCII



0203020.

Disable Code 39 Full ASCII*

Message Length

Message length can be set to the maximum value, minimum value. The value is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the "Chapter 5 serial communication instruction" for the detail.

Code 39 max length command: 020308. The parameter of this command can be set from min to 48.

Code 39 min length command: 020307. The parameter of this command can be set from 0 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 02030825 ; Min: 02030710.

Code 39 Append

This function allows the scanner to append several Code 39 barcode data together before transmitting to host. When the scanner encounters a Code 39 barcode with append character (ex. Space character), it buffers the data until it reads a Code 39 barcode which does not have append character. Then the data is transmitted in the order that the barcodes were read.



Enable Append



Disable Append *

Code 93

Enable/Disable Code 93



020D011.

Enable Code 93*



020D010.

Disable Code 93

Message Length

Message length can be set to the maximum value, minimum value. The data between the maximum and the minimum is valid.

The maximum value and minimum value can be set using Programming command. Please check the "Chapter 5 serial communication instruction" for the detail.

Code 93 max length command: 020D03. The parameter of this command can be set from min to 80.

Code 93 min length command: 020D02. The parameter of this command can be set from 0 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 020D0325 ; Min: 020D0210.

Code 93 Append

This function allows the scanner to append several Code 93 barcode data together before transmitting to host. When the scanner encounters a Code 93 barcode with append character (ex. Space character), it buffers the data until it reads a Code 93 barcode which does not have append character. Then the data is transmitted in the order that the barcodes were read.



020D051.

Enable Code 93 Append



020D050.

Disable Code 93 Append *

Code 11

Enable/Disable Code 11



0209011.

Enable Code 11*



0209010.

Disable Code 11

Transmit Check Digit



0209040.

One Check Digit



0209041.

Two Check Digit*

Interleaved 2 of 5

Enable/Disable Interleaved 2 of 5



0204011.

Enable Interleaved 2 of 5*



0204010.

Disable Interleaved 2 of 5

Interleaved 2 Of 5 Check Digit



0204020.

No Check Char *



0204022.

Validate And Transmit



0204021.

Validate Not Transmit

Message Length

Message length can be set to the maximum value, minimum value. The data between the maximum and the minimum is valid.

The maximum value and minimum value can be set using Programming Command. Please check the "Chapter 5 serial communication instruction" for the detail.

Interleaved 2 of 5 max length command: 020404. The parameter of this command can be set from min to 80.

Interleaved 2 of 5 min length command: 020403. The parameter of this command can be set from 2 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 02040425 ; Min: 02040310.

Matrix 2 of 5

Enable/Disable Matrix 2 of 5



0208011.

Enable Matrix 2 of 5



0208010.

Disable Matrix 2 of 5*

Message Length

Message length can be set to the maximum value, minimum value. The value is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the "Chapter 5 serial communication instruction" for the detail.

Matrix 2 of 5 max length command: 020803. The parameter of this command can be set from min to 80.

Matrix 2 of 5 min length command: 020802. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 02080325 ; Min: 02080210.

Industrial 2 of 5

Enable/Disable Industrial 2 of 5



0206011.

Enable Industrial 2 of 5



0206010.

Disable Industrial 2 of 5*

Message Length

Message length can be set to the maximum value, minimum value. The value is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the "Chapter 5 serial communication instruction" for the detail.

Industrial 2 of 5 max length command: 020603. The parameter of this command can be set from min to 48.

Industrial 2 of 5 min length command: 020602. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 02060325 ; Min: 02060210.

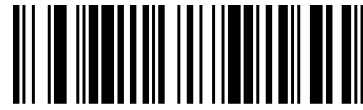
Standard 2 of 5(IATA)

Enable/Disable Standard 2 of 5



027011.

Enable Standard 2 of 5



027010.

Disable Standard 2 of 5*

Note: the barcode is also called Straight 2 of 5.

Codabar (NW-7)

Enable/Disable Codabar



Enable Codabar*



Disable Codabar

Transmit Start/Stop Character



Transmit Start/Stop Character



Not Transmit Start/Stop Character *

Codabar Check Character



No Check Char *



Validate And Transmit



Validate No Transmit

Message Length

Message length can be set to the maximum value, minimum value. The data between the maximum and the minimum is valid.

The maximum value and minimum value can be set using Programming command. Please check the "Chapter 5 serial communication instruction" for the detail.

Coda bar max length command: 020206. The parameter of this command can be set from min to 60.

Coda bar min length command: 020205. The parameter of this command can be set from 2 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 02020625 ; Min: 02020510.

MSI Plessey

Enable/Disable MSI Plessey



020E011.

Enable MSI Plessey



020E010.

Disable MSI Plessey*

MSI Check Character



020E021.

Validate Type10 Transmit



020E020.

Validate Type10 No Transmit *



020E024.

Validate Type10 And Type11 No Transmit



020E025.

Validate Type10 And Type11 Transmit



020E023.

Validate 2 Type10 Transmit



020E022.

Validate 2 Type10 No Transmit



020E026.

Disable MSI Check

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the "Chapter 5 serial communication instruction" for the detail.

MSI max length command: 020E04. The parameter of this command can be set from min to 48.

MSI min length command: 020E03. The parameter of this command can be set from 4 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 020E0425 ; Min: 020E0310.

GS1 DataBar Limited (RSS Limited)

Enable/Disable RSS Limited



021A011.

Enable RSS Limited*



021A010.

Disable RSS Limited

GS1 DataBar Omnidirectional (RSS Omnidirectional)

Enable/Disable RSS Omnidirectional



0219011.

Enable RSS Omnidirectional*



0219010.

Disable RSS Omnidirectional

GS1 DataBar Expanded (RSS Expanded)

Enable/Disable RSS Expanded



021B011.

Enable RSS Expanded*



021B010.

Disable RSS Expanded

GS1 Composite

Enable/Disable GS1 Composite



Enable GS1 Composite



Disable GS1 Composite*

China Postal Code (Datalogic 2 of 5)

Enable/Disable China Postal Code



Enable China Postal Code



Disable China Postal Code *

Telepen

Enable/Disable Telepen



Enable Telepen



Disable Telepen *

QR Code

Enable/Disable QR Code



0237011.

Enable QR Code*



0237010.

Disable QR Code

QR Code Append

This function allows the scanner to append several QR barcode data together before transmitting to host. When the scanner encounters a QR barcode with append character (ex. Space character), it buffers the data until it reads a QR barcode which does not have append character. Then the data is transmitted in the order that the barcodes were read.



0237081.

Enable QR Code Append *



0237080.

Disable QR Code Append

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum is valid.

The maximum value and minimum value can be set using Programming command. Please check the "Chapter 5 serial communication instruction" for the detail.

QR max length command: 023703. The parameter of this command can be set from min to 7089.

QR min length command: 023702. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Data Matrix

Enable/Disable Data Matrix



0236011.

Enable Data Matrix*



0236010.

Disable Data Matrix

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the "Chapter 5 serial communication instruction" for the detail.

Data Matrix max length command: 023603. The parameter of this command can be set from min to 3116.

Data Matrix min length command: 023602. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 02360325 ; Min: 02360210.

PDF 417

Enable/Disable PDF 417



021F011.

Enable PDF 417*



021F010.

Disable PDF 417

Enable/Disable Micro PDF 417



0220011.

Enable Micro PDF 417



0220010.

Disable Micro PDF 417*

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the "Chapter 5 serial communication instruction" for the detail.

PDF417 max length command: 021F06. The parameter of this command can be set from min to 2750.

PDF417 min length command: 021F05. The parameter of this command can be set from 1 to max. Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 021F0625 ; Min: 021F0510.

Aztec Code

Enable/Disable Aztec Code



0233011.

Enable Aztec Code*



0233010.

Disable Aztec Code

Aztec Append



0233081.

Enable Aztec Append *



0233080.

Disable Aztec Append

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the "Chapter 5 serial communication instruction" for the detail.

Aztec max length command: 023306. The parameter of this command can be set from min to 3832.

Aztec min length command: 023305. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 02330625 ; Min: 02330510.

MaxiCode

Enable/Disable MaxiCode



0234011.

Enable MaxiCode



0234010.

Disable MaxiCode*

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the "Chapter 5 serial communication instruction" for the detail.

Maxi Code max length command: 023403. The parameter of this command can be set from min to 150.

Maxi Code min length command: 023402. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 02340325 ; Min: 02340210.

Hanxin Code

Enable/Disable Hanxin Code



0238011.

Enable Hanxin Code



0238010.

Disable Hanxin Code*

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the "Chapter 5 serial communication instruction" for the detail.

Hanxin max length command: 023803. The parameter of this command can be set from min to 7833.

Hanxin min length command: 023802. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command: Max: 02380325 ; Min: 02380210.

Chapter5 serial communication instruction

Introduction

When using the serial mode, the bar code can control the bar code to scan or set up relevant functions by sending relevant instructions.

Command format

The barcode is used "prefix + command" format for a set of instructions, the user can choose to send sixteen hexadecimal string or instructions to control the bar code reader.

Prefix: 02 F0 03

Command: "Appendix – Command Table"

Command format: prefix + Command

Example: Version

Command: 0D1302?

String: [0X02][0XF0][0X03]0D1302?.

HEX: 02 F0 03304431333032 3F 2E

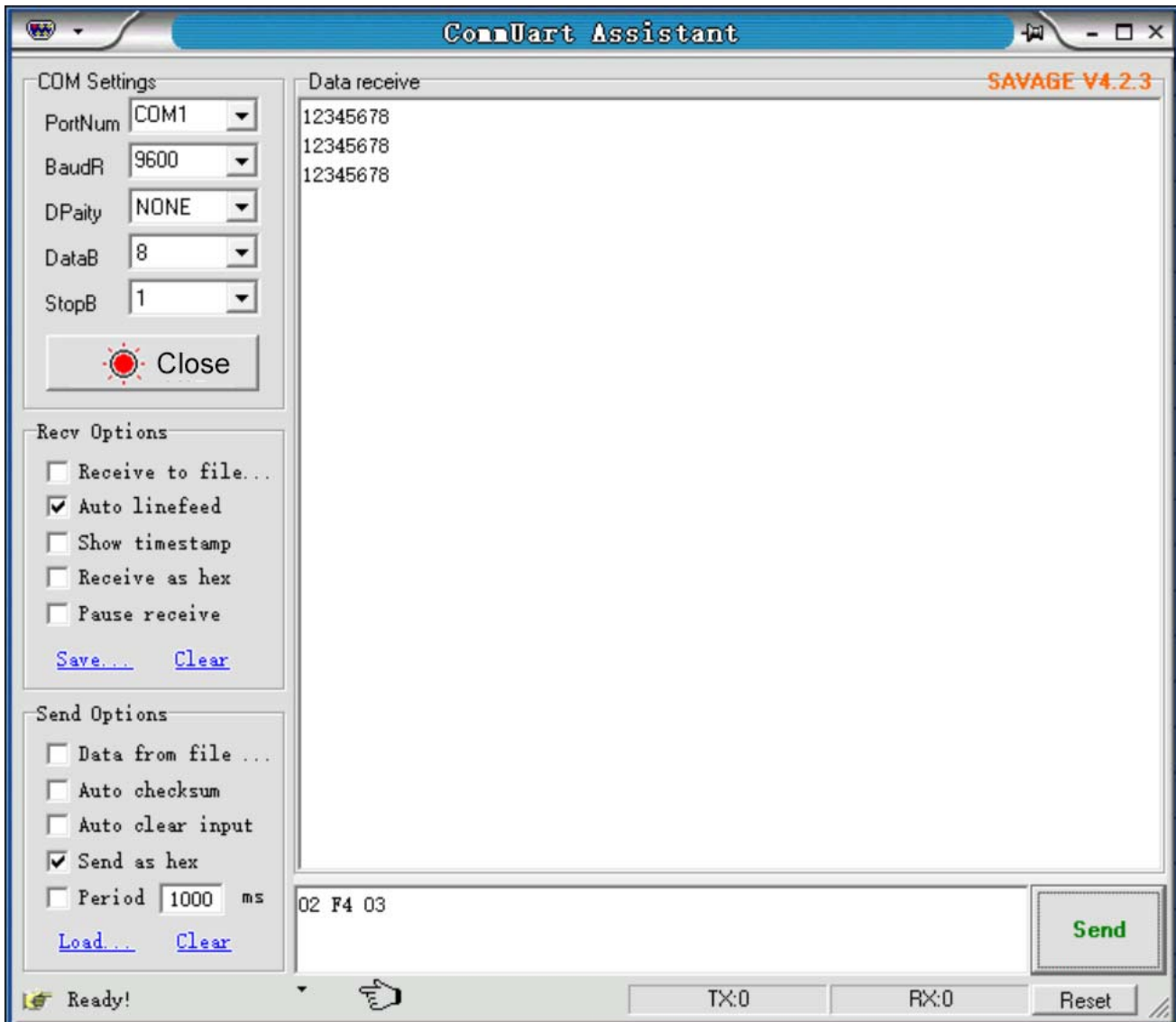
Trigger instruction

Open scan: [0x02][0xF4][0x03]

Close scan: [0x02][0xF5][0x03]

Instruction sending example

Send HEX command control scan, send open scan command, confirm the serial port protocol settings, input the corresponding input command in the instruction input box.



Note: please refer to the "Appendix – Command" for detailed instructions

Chapter5 Appendix

Appendix – Default Settings Sheet

Parameter name	Default setting	Instruction Remark
Comprehensive settings		
Setting code function	ON	
Reading mode	Trigger Mode	Normal
Good Read Beeper	ON	
Good Read Beeper Volume	Loud	
Good Read Beepr Duration	Normal	
Good Read Beeper Tone	Medium Frequency	
Trigger Mode Reread Delay	OFF	
Sense Mode Reread Delay	500MS	
Illumination	Level 4(High)	
Aiming	Normal	
Data Transmission Speed	Slow	
Inverse Color	Normal	
Different national language transmission In QR Code	OFF	
Communication settings		
Interface mode	TTL/RS232	
Keyboard mode	1-U.S.	
Baud rate	115200	
Serial port verification	No check	
Data bits	8	
Stop bit	1bit	
Data editing		
Transmit Custom Prefix	OFF	
Transmit Custom Suffix	OFF	
Suffix setting	None	
Character conversion	No Change	Normal

Parameter name	Default setting	Instruction remark
Barcode parameter settings		
Enable All Symbologies	OFF	
UPC-A		
Enable	ON	
Check Digit	ON	
Enable 2 Digit Addenda	OFF	
Enable 5 Digit Addenda	OFF	
Enable UPC-A Addenda Required	OFF	
Enable UPC-A Addenda Separator	ON	
Enable UPC-A Number System	ON	
UPC-E		
Enable UPC-E0	ON	
Enable UPC-E1	OFF	
UPC-E0 Check Digit	ON	
Enable 2 Digit Addenda	OFF	
Enable 5 Digit Addenda	OFF	
Enable UPC-E0 Addenda Required	OFF	
Enable UPC-E0 Addenda Separator	ON	
Enable UPC-E0 Number System	ON	
UPC-E0 Expand	OFF	
EAN-8		
Enable	ON	
Transmit EAN-8 Check Digit	ON	
Enable 2 Digit Addenda	OFF	
Enable 5 Digit Addenda	OFF	
Enable EAN-8 Addenda Required	OFF	
Enable EAN-8 Addenda Separator	ON	
EAN-13		
Enable	ON	

Transmit EAN-13 Check Digit	ON	
Enable 2 Digit Addenda	OFF	
Enable 5 Digit Addenda	OFF	
EAN-13 Addenda Required	OFF	
EAN-13 Addenda Separator	ON	
Enable ISBN Translate	OFF	
Code 128		
Enable	ON	
GS1-128		
Enable	ON	
Code 39		
Enable	ON	
Transmit Check Digit	OFF	
Transmit Start/Stop Character	OFF	
Enable Code 39 Full ASCII	OFF	
Enable Append	OFF	
Code 93		
Enable	ON	
Enable Code 93 Append	OFF	
Code 11		
Enable	ON	
Check	ON	Two Check
Interleaved 2 of 5		
Enable	ON	
Check Digit	OFF	
Matrix 2 of 5		
Enable	OFF	
Industrial 2 of 5		
Enable	OFF	
Standard 2 of 5		
Enable	OFF	

Transmit Check Digit	OFF	
Codabar		
Enable	ON	
Transmit Start/Stop Character	OFF	
Check Char	OFF	No Check
MSI Plessey		
Enable	OFF	
Check Character	ON	Validate 2 Type 10 No Transmit
RSS Limited		
Enable	ON	
RSS Omnidirectional		
Enable	ON	
RSS Expanded		
Enable	ON	
GS1 Composite		
Enable	OFF	
China Postal Code		
Enable	OFF	
Telepen		
Enable	OFF	
QR Code		
Enable	ON	
Enable QR code Append	ON	
Data Matrix Code		
Enable	ON	
Data Matrix reading	Single Code	
Data Matrix Reverse	Normal	
PDF 417 Code		
Enable	ON	

Enable Micro PDF 417	OFF
Aztec Code	
Enable	ON
Aztec Append	ON
MaxiCode	
Enable	OFF
Hanxin Code	
Enable	OFF

Appendix – Digit Barcodes

The parameter requires the exact value Scan the appropriate digital setting code.

0	1	2	3
 Y0Y	 Y1Y	 Y2Y	 Y3Y

4	5	6	7
 Y4Y	 Y5Y	 Y6Y	 Y7Y

8	9	A	B
 Y8Y	 Y9Y	 YAY	 YBY

C	D	E	F
 YCY	 YDY	 YEY	 YFY

Appendix – Command Table

Function	Serial Command	Return
1. Restore default settings	0D0100.	0D0100[0x06].
2. Version	0D1302?.	Returning the software version
3. Open Scan	[0x02][0xF4][0x03]	NA
4. Close Scan	[0x02][0xF5][0x03]	NA
5. Manual Trigger Mode – Normal	091A00.	091A00[0x06].
6. Manual Trigger Mode – Cellphone	091B00.	091B00[0x06].
7. Sense Mode – Normal	090901.	090901[0x06].
8. Sense Mode – Continue Scan	090903.	090903[0x06].
9. Sense Mode – Cellphone	090902.	090902[0x06].
10. Enable Good Read Beeper	0502101.	0502101[0x06].
11. Disable Good Read Beeper	0502100.	0502100[0x06].
12. Volume-Loud	05021D3.	05021D3[0x06].
13. Volume-Medium	05021D2.	05021D2[0x06].
14. Volume-Low	05021D1.	05021D1[0x06].
15. Beeper Tone-Low Frequency	05020D1680.	05020D1680[0x06].
16. Beeper Tone-Medium Frequency	05020D2790.	05020D2790[0x06].
17. Beeper Tone-Medium High Frequency	05020D3280.	05020D3280[0x06].
18. Beeper Tone-High Frequency	05020D4290.	05020D4290[0x06].

19. Beeper Duration-Normal	0502160.	0502160[0x06].
20. Beeper Duration-Short	0502161.	0502161[0x06].
21. Trigger Mode Reread Delay-No Delay	080B080.	080B080 [0x06].
22. Trigger Mode Reread Delay- Delay 500MS	080B08500.	080B08500[0x06].
23. Trigger Mode Reread Delay- Delay 2000MS	080B082000.	080B082000[0x06].
24. Sense Mode Reread Delay-Delay 500MS	080B06500.	080B06500[0x06].
25. Sense Mode Reread Delay-Delay 750MS	080B06750.	080B06750[0x06].
26. Sense Mode Reread Delay-Delay 1000MS	080B061000.	080B061000[0x06].
27. Illumination-Level 4 (high)	0401004.	0401004[0x06].
28. Illumination-Level 3	0401003.	0401003[0x06].
29. Illumination-Level 2	0401002.	0401002[0x06].
30. Illumination-Level 1 (Low)	0401001.	0401001[0x06].
31. Aiming-Normal	0409062.	0409062[0x06].
32. Aiming-OFF	0409060.	0409060[0x06].
33. Data Transmission speed-Fast	060D041.	060D041 [0x06].
34. Data Transmission speed-Slow	060D040.	060D040[0x06].
35. Inverse Color-Normal	024B000.	024B000[0x06].
36. Only Inverse ON	024B001.	024B001[0x06].
37. Inverse And Normal Both ON	024B002.	024B002[0x06].

38. USB Cable	0606001.	NA
39. USB KBW	090500.	NA
40. USB-COM	090400.	NA
41. TTL/RS232	0606000.	NA
42. Baud Rate 2400BPS	0607023.	0607023[0x06].
43. Baud Rate 4800BPS	0607024.	0607024[0x06].
44. Baud Rate 9600BPS	0607025.	0607025[0x06].
45. Baud Rate 19200BPS	0607026.	0607026[0x06].
46. Baud Rate 38400BPS	0607027.	0607027[0x06].
47. Baud Rate 57600BPS	0607028.	0607028[0x06].
48. Baud Rate 115200BPS	0607029.	0607029[0x06].
49. N/8/1	0607032.	0607032[0x06].
50. N/7/1	0607030.	0607030[0x06].
51. N/7/2	0607031.	0607031[0x06].
52. E/8/1	0607035.	0607035[0x06].
53. E/7/1	0607033.	0607033[0x06].
54. E/7/2	0607034.	0607034[0x06].
55. O/8/1	0607038.	0607038[0x06].
56. O/7/1	0607036.	0607036[0x06].
57. O/7/2	0607037.	0607037[0x06].
58. Set Custom Prefix	08040099XX.	08040099XX[0x06].

	XX represents the HEX of the corresponding character of the ASCII table	
59. Set Custom Suffix	08050099XX. HEX of the corresponding character of the ASCII table	08050099XX[0x06].
60. Save	0D0400.	NA
61. Not Save	0D0500.	NA
62. Clear All Prefix And Suffix	080404.	NA
63. AddCR	090200.	090200[0x06].
64. Add LF	090202.	090202[0x06].
65. Add CR+LF	090300.	090300[0x06].
66. Add TAB	090201.	090201[0x06].
67.		
68. Enable All Symbologies	0201001.	0201001[0x06].
69. Disable All Symbologies	0201000.	0201000[0x06].
70. Restore Symbology Default	090101.	090101[0x06].
71. Only Enable Retail Barcode	091832.	091832[0x06].
72. Enable UPC-A	0211011.	0211011[0x06].
73. Disable UPC-A	0211010.	0211010[0x06].
74. Transmit UPC-A Check Digit	0211021.	0211021[0x06].
75. Not Transmit UPC-A Check Digit	0211020.	0211020[0x06].
76. UPC-A Enable 2 Digit Addenda	0211041.	0211041[0x06].
77. UPC-A Disable 2 Digit Addenda	0211040.	0211040[0x06].

78. UPC-A Enable 5 Digit Addenda	0211051.	0211051[0x06].
79. UPC-A Disable 5 Digit Addenda*	0211050.	0211050[0x06].
80. Enable UPC-A Addenda Required	0211061.	0211061[0x06].
81. Disable UPC-A Addenda Required	0211060.	0211060[0x06].
82. Enable UPC-A Addenda Separator	0211071.	0211071[0x06].
83. Disable UPC-A Addenda Separator	0211070.	0211070[0x06].
84. Enable UPC-A Number System	0211031.	0211031[0x06].
85. Disable UPC-A Number System	0211030.	0211030[0x06].
86. Enable UPC-E0	0212011.	0212011[0x06].
87. Disable UPC-E1	0212010.	0212010[0x06].
88. Enable UPC-E1	0212021.	0212021[0x06]
89. Disable UPC-E1	0212020.	0212020[0x06]..
90. Transmit UPC-E0 Check Digit*	0212041.	0212041[0x06].
91. Not Transmit UPC-E0 Check Digit*	0212040.	0212040[0x06].
92. UPC-E Enable 2 Digit Addenda	0212061.	0212061[0x06].
93. UPC-E Disable 2 Digit Addenda	0212060.	0212060[0x06].
94. UPC-E Enable 5 Digit Addenda	0212071.	0212071[0x06].
95. UPC-E Disable 5 Digit Addenda	0212070.	0212070[0x06].
96. Enable UPC-E0 Addenda Required	0212081.	0212081[0x06].
97. Disable UPC-E0 Addenda Required	0212080.	0212080[0x06].
98. Enable UPC-E0 Addenda Separator	0212091.	0212091[0x06].
99. Disable UPC-E0 Addenda Separator	0212090.	0212090[0x06].

100.	Enable UPC-E0 Number System	0212051.	0212051[0x06].
101.	Disable UPC-E0 Number System	0212050.	0212050[0x06].
102.	Enable UPC-E0 Expand	0212030.	0212030[0x06].
103.	Disable UPC-E0 Expand	0212030.	0212030[0x06].
104.	Enable EAN-8	0214011.	0214011[0x06].
105.	Disable EAN-8	0214010.	0214010[0x06].
106.	Transmit EAN-8 Check Digit	0214021.	0214021[0x06].
107.	Not Transmit EAN-8 Check Digit	0214020.	0214020[0x06].
108.	EAN-8 Enable 2 Digit Addenda	0214031.	0214031[0x06].
109.	EAN-8 Disable 2Digit Addenda	0214030.	0214030[0x06].
110.	EAN-8 Enable 5 Digit Addenda	0214041.	0214041[0x06].
111.	EAN-8 Disable 5 Digit Addenda	0214040.	0214040[0x06].
112.	Enable EAN-8 Addenda Required	021451.	021451[0x06].
113.	Disable EAN-8 Addenda Required	021450.	021450[0x06].
114.	Enable EAN/JAN-8 Addenda Separator	0214061.	0214061[0x06].
115.	Disable EAN/JAN-8 Addenda Separator	0214060.	0214060[0x06].
116.	Enable EAN-13	0213011.	0213011[0x06].
117.	Disable EAN-13	0213010.	0213010[0x06].
118.	Transmit EAN-13 Check Digit	0213021.	0213021[0x06].
119.	Not Transmit EAN-13 Check Digit	0213020.	0213020[0x06].
120.	EAN-13 Enable 2 Digit Addenda	0213031.	0213031[0x06].
121.	EAN-13 Disable 2Digit Addenda	0213030.	0213030[0x06].

122.	EAN-13 Enable 5 Digit Addenda	0213041.	0213041[0x06].
123.	EAN-13 Disable 5 Digit Addenda	0213040.	0213040[0x06].
124.	Enable EAN-13 Addenda Required	0213051.	0213051[0x06].
125.	Disable EAN-13 Addenda Required	0213050.	0213050[0x06].
126.	Enable EAN-13 Addenda Separator	0213061.	0213061[0x06].
127.	Disable EAN-13 Addenda Separator	0213060.	0213060[0x06].
128.	Enable ISBN Translate	0213071.	0213071[0x06].
129.	Disable ISBN Translate	0213070.	0213070[0x06].
130.	Enable Code 128	020A011.	020A011[0x06]
131.	Disable Code 128	020A010.	020A010[0x06].
132.	Enable GS1-128	020B001.	020B001[0x06].
133.	Disable GS1-128	020B000.	020B000[0x06].
134.	Enable Code 39	0203011.	0203011[0x06].
135.	Disable Code 39	0203010.	0203010[0x06]..
136.	Code 39 Transmit Start/Stop Character	0203051.	0203051[0x06].
137.	Code 39 Not Transmit Start/Stop Character	0203050.	0203050[0x06].
138.	Code 39 No Check Char	0203040.	0203040[0x06].
139.	Code 39 Validate No Transmit	0203041.	0203041[0x06].
140.	Code 39 Validate And Transmit	0203042.	0203042[0x06].
141.	Enable Code 39 Full ASCII	0203021.	0203021[0x06].

142.	Disable Code 39 Full ASCII	0203020.	0203020[0x06].
143.	Code 39 Enable Append	0203031.	0203031[0x06].
144.	Code 39 Disable Append	0203030.	0203030[0x06].
145.	Enable Code 93	020D011.	020D011[0x06].
146.	Disable Code 93	020D010.	020D010[0x06].
147.	Code 93 Enable Append	020D051.	020D051[0x06].
148.	Code 93 Disable Append	020D050.	020D050[0x06].
149.	Enable Code 11	0209011.	0209011[0x06].
150.	Disable Code 11	0209010.	0209010[0x06].
151.	Code 11 One Check Digit	0209040.	0209040[0x06].
152.	Code 11 Two Check Digit	0209041.	0209041[0x06].
153.	Enable Interleaved 2 of 5	0204011.	0204011[0x06].
154.	Disable Interleaved 2 of 5	0204010.	0204010[0x06].
155.	Interleaved 2 of 5 No Check Char	0204020.	0204020[0x06].
156.	Interleaved 2 of 5 Validate Not Transmit	0204021.	0204021[0x06].
157.	Interleaved 2 of 5 Validate And Transmit	0204022.	0204022[0x06].
158.	Enable Matrix 2 of 5	0208011.	0208011[0x06].
159.	Disable Matrix 2 of 5	0208010.	0208010[0x06].
160.	Enable Industrial 2 of 5	0206011.	0206011[0x06].
161.	Disable Industrial 2 of 5	0206010.	0206010[0x06].

162.	Enable Standard 2 of 5	027011.	027011[0x06].
163.	Disable Standard 2 of 5	027010.	027010[0x06].
164.	Enable Codabar	0202011.	0202011[0x06].
165.	Disable Codabar	0202010.	0202010[0x06].
166.	Codabar Transmit Start/Stop Character	0202021.	0202021[0x06].
167.	Codabar Not Transmit Start/Stop Character	0202020.	0202020[0x06].
168.	Codabar No Check Char	0202030.	0202030[0x06].
169.	Codabar Validate No Transmit	0202031.	0202031[0x06].
170.	Codabar Validate And Transmit	0202032.	0202032[0x06].
171.	Enable MSI	020E011.	020E011[0x06].
172.	Disable MSI	020E010.	020E010[0x06].
173.	MSI Validate Type10 Transmit	020E021.	020E021[0x06].
174.	MSI Validate Type10 No Transmit	020E020.	020E020[0x06].
175.	MSI Validate Type10 And Type11 Transmit	020E025.	020E025[0x06].
176.	MSI Validate Type10 And Type11 No Transmit	020E024.	020E024[0x06]..
177.	MSI Validate 2 Type10 Transmit	020E023.	020E023[0x06].
178.	MSI Validate 2 Type10 No Transmit	020E022.	020E022[0x06].
179.	MSI Disable MSI Check	020E026.	020E026[0x06].
180.	Enable RSS Limited	021A011.	021A011[0x06].
181.	Disable RSS limited	021A010.	021A010[0x06].

182.	Enable RSS Omnidirectional	0219011.	0219011[0x06].
183.	Disable RSS Omnidirectional	0219010.	0219010[0x06].
184.	Enable RSS Expanded	021B011.	021B011[0x06].
185.	Disable RSS Expanded	021B010.	021B010[0x06].
186.	Enable GS1 Composite	0221011.	0221011[0x06]
187.	Disable GS1 Composite	0221010.	0221010[0x06]
188.	Enable China Postal Code	0218011.	0218011[0x06].
189.	Disable China Postal Code	0218010.	0218010[0x06].
190.	Enable Telepen	0210011.	0210011[0x06].
191.	Disable Telepen	0210010.	0210010[0x06].
192.	Enable QR Code	0237011.	0237011[0x06].
193.	Disable QR Code	0237010.	0237010[0x06].
194.	Enable QR Code Append	0237081.	0237081[0x06].
195.	Disable QR Code Append	0237080.	0237080[0x06].
196.	Enable Data Matrix	0236011.	0236011[0x06].
197.	Disable Data Matrix	0236010.	0236010[0x06].
198.	Enable PDF 417	021F011.	021F011[0x06].
199.	Disable PDF 417	021F010.	021F010[0x06].
200.	Enable Micro PDF 417	0220011.	0220011[0x06].
201.	Disable Micro PDF 417	0220010.	0220010[0x06].
202.	Enable Aztec	0233011.	0233011[0x06].
203.	Disable Aztec	0233010.	0233010[0x06].

204.	Enable Aztec Append	0233081.	0233081[0x06].
205.	Disable Aztec Append	0233080.	0233080[ox06].
206.	Enable Maxi code	0234011.	0234011[0x06].
207.	Disable Maxi code	0234010.	0234010[0x06].
208.	Enable Han xin	0238011.	0238011[0x06].
209.	Disable Han xin	0238010.	0238010[0x06].

Appendix - ASCII Table

HEX	ASCII	Characters
00	00	NUL (Null char.)
01	01	SOH (Start of Header)
02	02	STX (Start of Text)
03	03	ETX (End of Text)
04	04	EOT (End of Transmission)
05	05	ENQ (Enquiry)
06	06	ACK (Acknowledgment)
07	07	BEL (Bell)
08	08	BS (Backspace)
09	09	HT (Horizontal Tab)
0A	10	LF (Line Feed)
0B	11	VT (Vertical Tab)
0C	12	FF (Form Feed)
0D	13	CR (Carriage Return)
0E	14	SO (Shift Out)
0F	15	SI (Shift In)
10	16	DLE (Data Link Escape)
11	17	DC1 (XON) (Device Control 1) (XON)
12	18	DC2 (Device Control 2)

13	19	DC3 (XOFF) (Device Control 3) (XOFF)
14	20	DC4 (Device Control 4)
15	21	NAK (Negative Acknowledgment)
16	22	SYN (Synchronous Idle)
17	23	ETB (End of Trans. Block)
18	24	CAN (Cancel)
19	25	EM (End of Medium)
1A	26	SUB (Substitute)
1B	27	ESC (Escape)
1C	28	FS (File Separator)
1D	29	GS (Group Separator)
1E	30	RS (Request to Send)
1F	31	US (Unit Separator)
20	32	SP (Space)
21	33	! (Exclamation Mark)
22	34	" (Double Quote)
23	35	# (Number Sign)
24	36	\$ (Dollar Sign)
25	37	% (Percent)
26	38	& (Ampersand)
27	39	` (Single Quote)
28	40	((Right / Closing Parenthesis)

29	41) (Right / Closing Parenthesis)
2A	42	* (Asterisk)
2B	43	+ (Plus)
2C	44	, (Comma)
2D	45	- (Minus / Dash)
2E	46	. (Dot)
2F	47	/ (Forward Slash)
30	48	0
31	49	1
32	50	2
33	51	3
34	52	4
35	53	5
36	54	6
37	55	7
38	56	8
39	57	9
3A	58	: (Colon)
3B	59	; (Semi-colon)
3C	60	< (Less Than)
3D	61	= (Equal Sign)
3E	62	> (Greater Than)

3F	63	? (Question Mark)
40	64	@ (AT Symbol)
41	65	A
42	66	B
43	67	C
44	68	D
45	69	E
46	70	F
47	71	G
48	72	H
49	73	I
4A	74	J
4B	75	K
4C	76	L
4D	77	M
4E	78	N
4F	79	O
50	80	P
51	81	Q
52	82	R
53	83	S
54	84	T

55	85	U
56	86	V
57	87	W
58	88	X
59	89	Y
5A	90	Z
5B	91	[(Left / Opening Bracket)
5C	92	\ (Back Slash)
5D	93] (Right / Closing Bracket)
5E	94	^ (Caret / Circumflex)
5F	95	_ (Underscore)
60	96	' (Grave Accent)
61	97	A
62	98	B
63	99	C
64	100	d
65	101	e
66	102	f
67	103	g
68	104	h
69	105	i
6A	106	j

6B	107	k
6C	108	l
6D	109	m
6E	110	n
6F	111	o
70	112	p
71	113	q
72	114	r
73	115	s
74	116	t
75	117	u
76	118	v
77	119	w
78	120	x
79	121	y
7A	122	z
7B	123	{ (Left/ Opening Brace)
7C	124	(Vertical Bar)
7D	125	} (Right/Closing Brace)
7E	126	~ (Tilde)
7F	127	DEL (Delete)