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**ScanAvenger**  
**Wireless / Bluetooth / USB**  
**1D Barcode Scanner**

## Disclaimer

Please read through the manual carefully before using the product and operate it according to the manual. It is advised to keep this manual for future reference.

Do not disassemble the device or remove the seal label from the device as this will void the warranty.

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# Chapter1 System Settings

## Introduction

The user manual has 2 parts. This first part focuses on configuration codes for the system of the scanner and the second party on the wireless engine. 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 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.



000B0

Restore default settings

## version

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



000A0

version

## User default settings

You can customize "user default settings" according to your needs. When the user sets the corresponding settings code, it will replace the original default factory settings. Even the user configuration set before power failure will not be lost.



00000

User default settings



00001

Replace with factory default settings

**Instructions:**

1. Read "Open Settings Code" bar code 09990 (default is open, no scanning is required);
2. Read the bar code of the corresponding function.
3. Read the "User Default Settings" bar code 00000;
4. Read the "Replace and Restore Default Settings" bar code 00001;
5. Read the "Close Settings Code" bar code 09991.

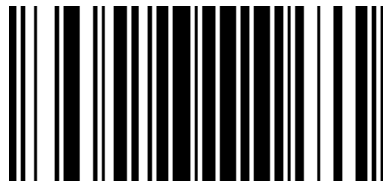
**Note:** When the above two barcodes are used together, you can save the current set function as the factory default value after following the above steps. Even after scanning the "Restore factory default" barcode 000B0, it will still be the current set function.

## Use Settings Code

Setting codes are used as a special bar code. We can scan different settings codes to achieve different functions for scanners. CODE 128 barcode type is selected when making setting code, and the format of ^ 3 + barcode coding is used to make setting code.

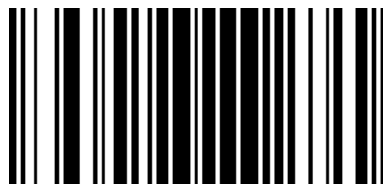
### Start off setting code

The setting code can be turned off. When the barcode reader is set to "Enter Setup" , the setup function will work when the setup code is scanned. When the barcode reader is set to "Exit Setup" , the scanner engine will scan the setup code. There will be an error tone, the setting function will not work, the default is "Enter Setup".



09990

Enter Setup\*

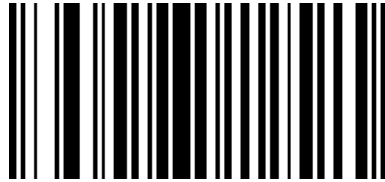


09991

Exit Setup

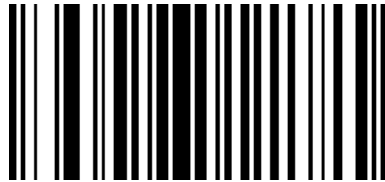
## Programming Barcode Data

Programming barcode data can be transmitted to the Host. Scan the appropriate barcode below to enable or disable the transmission of programming barcode data (i.e. the characters under programming barcode) to the host. Default is setting code not send.



02501

Transmit Programming Barcode Data



02500

Not Transmit Programming Barcode Data \*

## Sound settings

The scanner will have different prompt sounds in use, including boot-up sounds, scan settings sounds, and scan ordinary codes sounds. You can turn off or turn on the corresponding prompt sounds according to your needs.

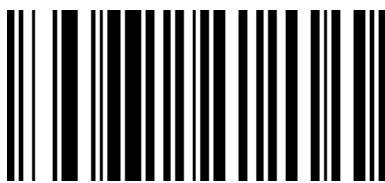
**Turn on all sounds:** turn on the boot sound, turn on the set code sound, turn on the ordinary code sound;

**Turn off all sounds:** turn off the boot sound, turn on the setup code, and turn on the normal code.

**Turn off the normal code sound:** turn on the boot sound, turn on the set code sound, and turn off the normal code sound.

**Open Settings Sound:** Turn off boot-up sound, turn on Settings Sound, turn off Settings Sound.

The default is "Turn on all sounds".



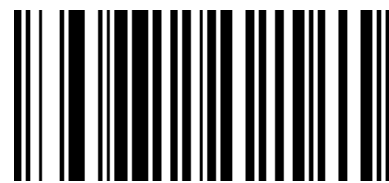
014201

Turn on all sounds \*



014203

Turn off the normal code sound



014200

Turn off all sounds



014207

Open Settings Sound

## Increased/decreased sound



014300

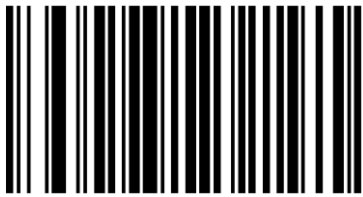


014301

Increased sound

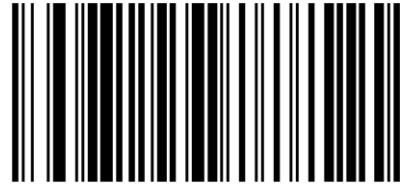
Reduced sound

### Sound frequency



0145800

2.0KHZ\*



0145AAA

2.7KHZ

### Instructions:

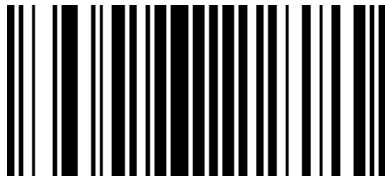
Set the scanner frequency to 2730 HZ.

1. Firstly, the decimal 2730 is converted to hexadecimal value, namely AAA.
2. According to the coding rules of setting codes, the corresponding setting codes are made as [<sup>^</sup>30145AAA].
3. The settings can be completed by scanning the settings codes directly.

## USB transmission speed

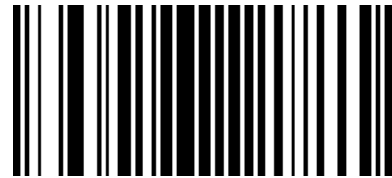
This bar scanner supports adjusting data transmission speed. For some non-standard USB input used in WINDOWS devices, such as the USB interface converted by PS2, the security and integrity of data output can be reduced by properly reducing the transmission speed of the bar scanner.

The default is "No USB Fast Transfer".



02301

Allow USB Fast Transfer

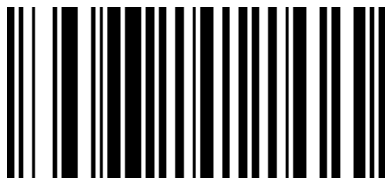


02300

No USB Fast Transfer \*

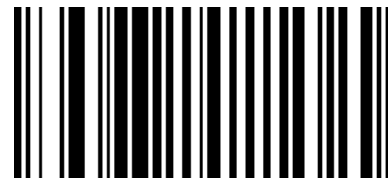
You can adjust the transmission speed of USB according to adjusting the delay between data characters. The smaller the delay, the faster the transmission speed. Conversely, the slower the transmission speed. You can customize the delay between characters according to your needs. You can set the delay time range to 0-30MS, and set the code to  $\wedge 3+0145$ +the hexadecimal value of delay/2MS.

Default is "Delay 4MS".



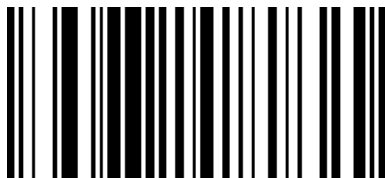
001500

No delay (fastest)



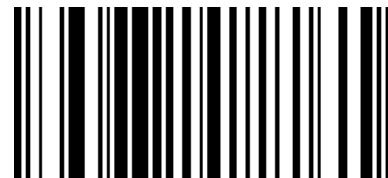
001502

Delay 4MS\*



001504

Delay 8MS



001506

Delay 12MS

### Instructions:

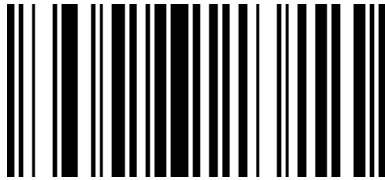
Set the inter-character delay to 24MS.

1. First, the value of delay time/2MS is 12, corresponding to the hexadecimal value of 0C.
2. Set the code to  $\wedge 300150C$ ;
3. Making bar codes of setting codes according to the coding of setting codes;
3. The settings can be completed by scanning the settings codes directly.



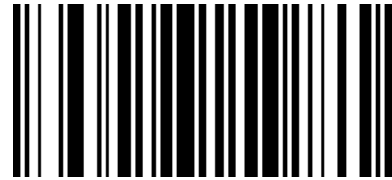
## Image recognition method

The barcode reader supports the recognition of reverse-colored images (anti-white bar codes). The user can set whether or not the image needs to be reversed according to the requirements. The default is forward image recognition.



00161

Forward image recognition\*



00160

Reverse image recognition

## 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.

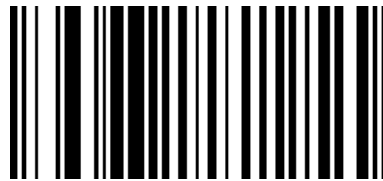
Users can choose to use USB-KBW, USB-COM, PS2, TTL / RS232 serial communication interface mode.

### USB interface

In the mode of USB interface, there are three kinds of communication protocols to choose. The default mode is USB-KBW, that is, USB keyboard mode, which simulates the transmission of data from USB keyboard to host computer.

## USB-KBW Mode

By default, the barcode reader uses USB-KBW communication to simulate the USB keyboard input mode without installing a driver.



000602

USB-KBW\*

## 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.



0005000

USA/China (English) \*



0005002

Netherlands (Dutch)



0005004

Argentina (Latin American)



0005001

Canada (French)



0005003

Spain (Spanish - International)



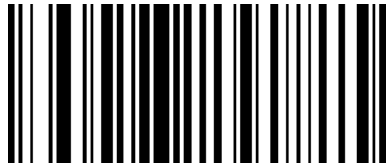
0005005

Brazil (Portuguese)



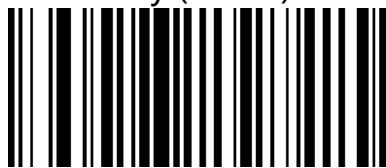
0005006

Denmark (Danish)



0005008

Italy (Italian)



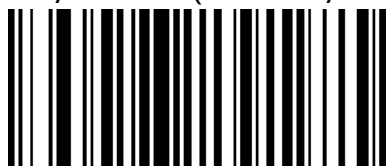
0005010

Germany (Slang)



0005012

Sweden/Finland (Swedish/Finnish)



0005014

Portugal (Portuguese)



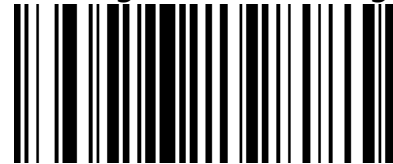
0005016

Belgium (Dutch)



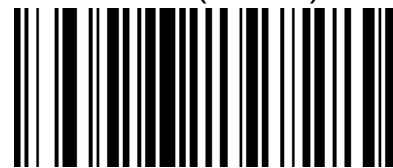
0005007

United Kingdom (British English)



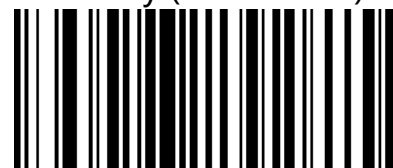
0005009

France (French)



0005011

Norway (North Sami)



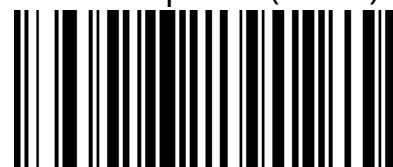
0005013

Slovak (Slovak)



0005015

Czech Republic (Czech)



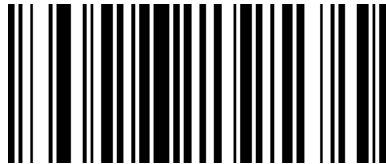
0005017

Turkish-F



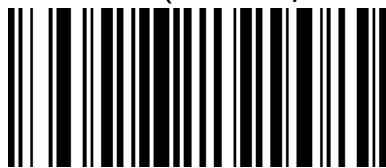
0005018

Turkish-Q



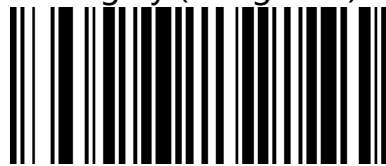
0005020

Switzerland (German/French)



0005022

Hungary (Hungarian)



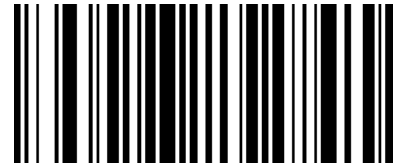
0005024

Russia (Russian)



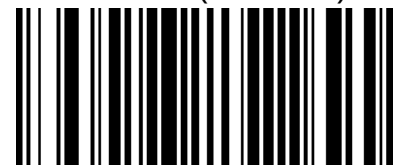
0005019

Poland (Polish 214)



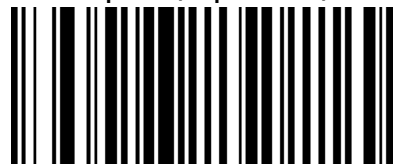
0005021

Croatian (Croatian)



0005023

Japan (Japanese)



0005025

Arabic (Egypt)

## USB-COM

When the scanner 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.

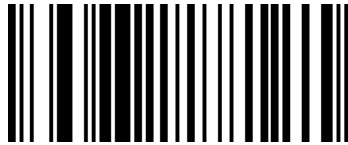


000603

USB-COM

## USB-HID Mode

When the scanner uses USB-HID, the host will use the scanner as a HID-like device. The scanner using USB-HID mode can control the scanning work through the host without installing the driver. Detailed USB-HID data format and usage method can contact our technical service personnel.



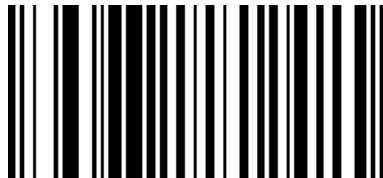
000604

USB-HID

## 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.

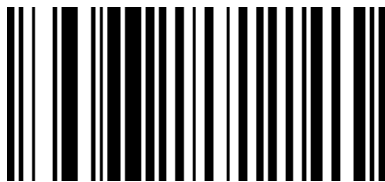


000601

TTL/RS232

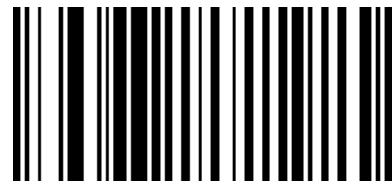
## Baud rate

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 scanner supports the baud rates listed below, in bits/s.



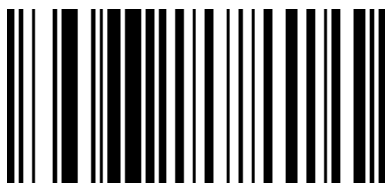
000701

600bps



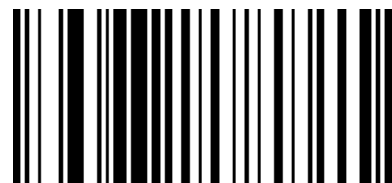
000702

1200bps



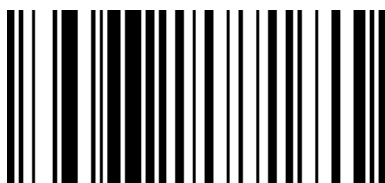
000703

2400bps



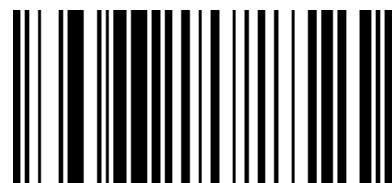
000704

4800bps



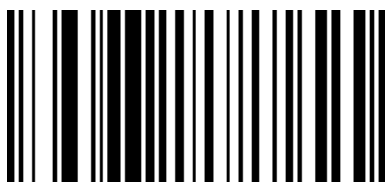
000705

9600bps\*



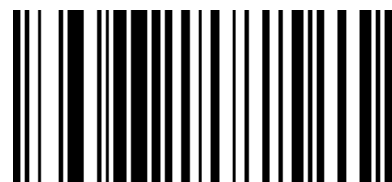
000706

19200bps



000707

38400bps



000708

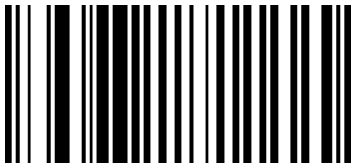
57600bps



000709

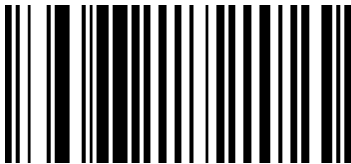
115200bps

### Parity bit



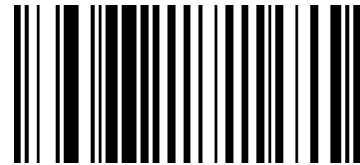
001001

Odd parity check



001000

No check (NONE) \*

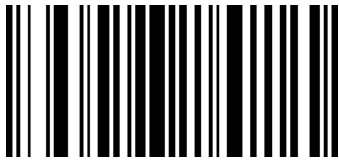


001002

Parity check

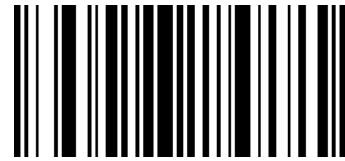


## Data bits



00080

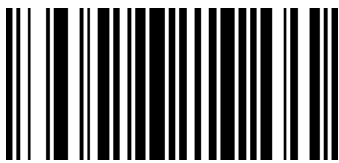
8-bit data bits \*



00081

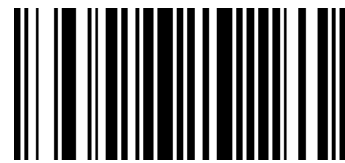
7-bit data bits

## Stop bit



00090

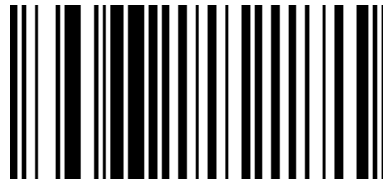
1\*



00091

2

## PS2 Keyboard Mode



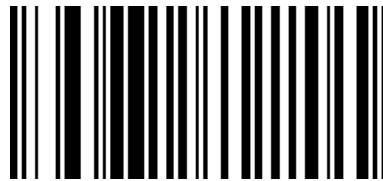
000600

PS2

## Chapter3 Reading mode

### Trigger Mode

The user can set the reading mode of the barcode reader according to the needs. The default state is the Trigger Mode. In this mode, the barcode reader starts reading after pressing the trigger button, and the barcode reader stops reading after successfully reading or unlocking the trigger button.

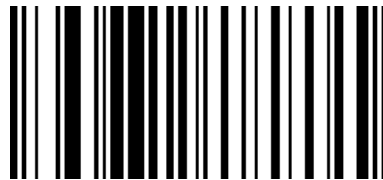


013300

Trigger Mode\*

### Continuous scanning mode

After the setting is completed, the red light is in a long light state. When a bar code passes through, the bar code reader automatically reads the bar code. The same barcode cannot be read repeatedly unless it is removed again.

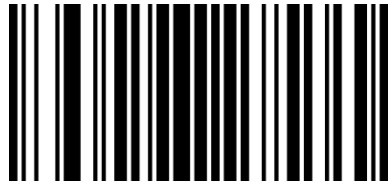


013304

Continuous scanning mode

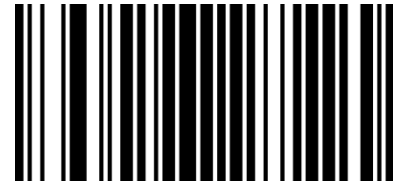
## Sense Mode

After the setting is completed, there is no need to trigger, and the barcode reader starts detecting the change of the environment before the window. After the reading is complete, it stops and is in the monitoring state waiting for the next environmental change. In this mode, clicking the trigger button can also start reading.



02311

Turn on Sense Mode



02310

Turn off Sense Mode\*

Note: When using this mode, it needs to be switched by Trigger Mode.

## Sensitivity

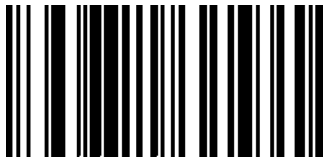
Sensitivity is the degree of the reader's sensitivity to the dramatic changes of the surrounding environment in the state of inductive reading. You can use rings according to your own

In order to improve the efficiency of code reading, the sensitivity is selected.

You can customize the sensing sensitivity according to the requirement, and set the code to [^ 30265XX]

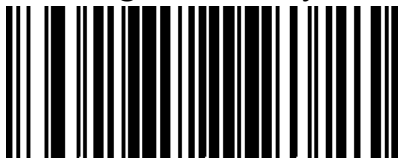
The first X denotes coarse tuning, the value is 0-F, the second X denotes fine tuning, the value is 0-F, the smaller the value is, the more sensitive the induction is.

The default sensitivity is 026537.



026531

High sensitivity



02653F

Low sensitivity



026537

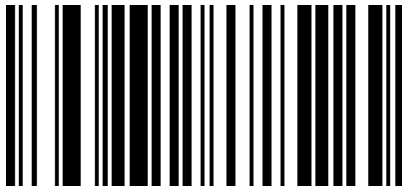
Medium sensitivity\*

## Flashing mode

When the settings are finished, manual trigger is needed to open the scan. The red light of the scanner is flashing, and the scanner begins to detect the change of the environment before the window. After reading the code, the red light is always on for 3 seconds. After 3 seconds, the unread bar code automatically flickers.

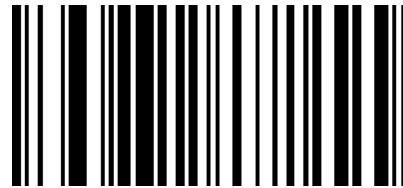
Key Open: In this state, the bar scanner can be turned on or off at any time by pressing the button.

Key off: In this state, the key does not work.



013306

Flashing (Key Open)



013305

Flashing (Key OFF)

## Press Key to delay single read mode

After setting up, press the trigger button, the red light of the bar scanner will light up for 3 seconds, the unread code lamp will go out after 3 seconds overtime, or the back light will go out after reading the code. The button will not work before the light goes out.

You can customize the timeout according to your needs, and set the setting code of the timeout to [^ 30235X0]

Among them, X means the time-out time is X seconds, the value is 0-F in hexadecimal system, 0 means no time-out, 1 means 1 second time-out, and so on. F means 15 seconds time-out. The default key timeout time is "3 seconds overtime".



013301

### Press key to delay single read mode



023510

1 second timeout



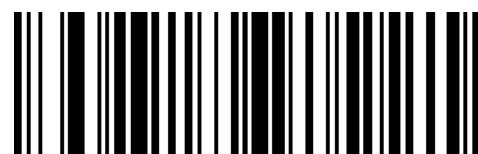
023530

3 second timeout\*



0235A0

10 second timeout



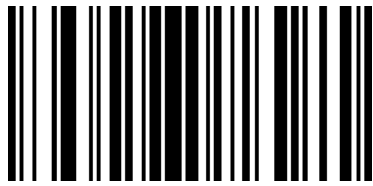
0235F0

15 second timeout

## Test mode

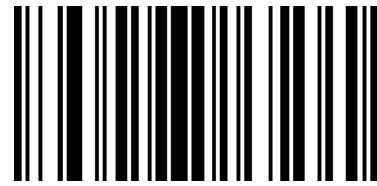
When using the test mode, we need to set the scanner as "Long Bright Read Mode 013304", and then turn on the test mode. After the setup is completed, the device enters the continuous reading state without triggering. When the code is successful, the device

enters the waiting state. Once again, the code is successfully read, and it enters the waiting state again.



02571

Open Test Mode



02570

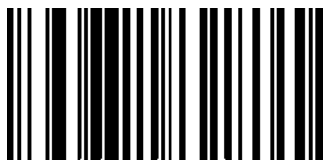
Close Test mode

You can customize the scan interval of the test mode according to the requirements, and set the interval to set the code to [^ 30263XX]

XX denotes the hexadecimal value corresponding to the interval time, expressed by 0-F, interval time = XX corresponds to the decimal value / 10, and when XX = 00, there is no interval time.

For example, the XX value is 01, the interval time is 1/10 = 0.1 seconds; the XX value is 0F, and the interval time is 15/10 = 1.5 seconds.

The default interval is "1S"



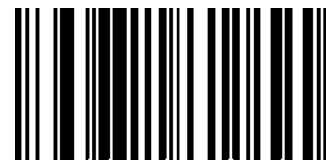
026300

No interval



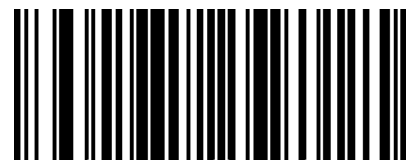
026309

interval 0.9S



026301

interval 0.1S



02630F

interval 1.5S



# Chapter4 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 cannot 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.

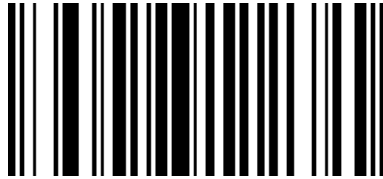
At this moment, we think of artificially adding some contents before or after the barcode data information, and these added contents can be changed in real time according to the demand, and can be selectively added or masked. This is the prefix and suffix of barcode data information.

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: <customize prefix> <barcode data> <customize suffix> <suffix data>**

## Code ID Setting

In the process of using the barcode reader, the user often needs to know the barcode type of the currently scanned barcode, and we can use the Code ID prefix to identify the barcode type. Code ID corresponds to the barcode type please refer to "**Appendix - Code ID**", by default does not send Code ID.



01401

Send CODE ID

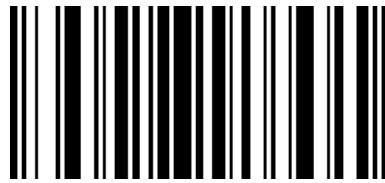


01400

Not Send Code ID\*

## Custom Prefix

First read "**Set Custom Prefix**", then scan the character barcode corresponding to "**Appendix - Character Table**" according to the requirements. You can complete the setup. The prefix character can add up to 32 characters.



02240

Set Custom Prefix

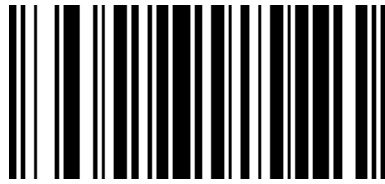
**For example:** Set the custom prefix to "VC" (hexadecimal value is 0x56/0x43):

1. Read "Startup Setup Code"
2. Read the above "Setting Custom Prefix"
3. Read the corresponding bar codes 1086 and 1067 in "Appendix - Character Table"
- 4 read "Exit to set prefix and suffix"
5. Read "Close Setup Code"

Note: After completing the above steps, if you read any bar code, the barcode reader will add a custom prefix string "VC" before the bar code data.

Clear all the prefix.

Scan "clear all the prefix codes" , user can clear all the prefix codes.

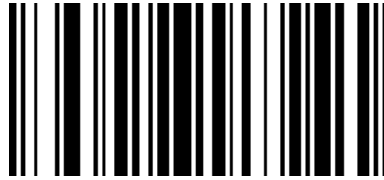


02220

clear all the prefix codes

## Custom suffix

First read the "**Set custom suffix**", and then scan the character code corresponding to "Appendix - Character Table" according to requirements. You can complete the setup. The suffix character can add up to 32 characters.



02241

Set custom suffix

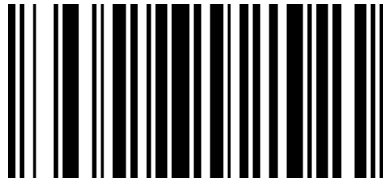
**For example:** Set the custom prefix to "VC" (hexadecimal value is 0x56/0x43):

1. Read "**Startup Setup Code**"
2. Read the above "**Set custom suffix**"
3. Read the corresponding bar codes 1086 and 1067 in "**Appendix - Character Table**"
- 4 read "**Exit to set prefix and suffix**"
5. Read "**Close Setup Code**"

Note: After setting according to the above steps, read any bar code, the bar scanner will add custom suffix string "VC" after the bar code data.

## Clear all suffixes

Scan the "**Clear all suffixes**" barcode to clear all set suffix characters



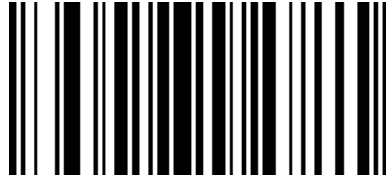
02200

Clear all suffixes

**Note: Clear suffix characters do not include suffix terminators.**

## Exit to set prefix and suffix

After users add a custom suffix, you can scan "Exit suffix" to finish adding suffixes.



02242

Exit to set prefix and suffix"

## Hidden characters

Users can hide the bar code output barcode according to their needs. For example, for the bar code "123456", the data received by the host is "3456" when the preceding two characters are hidden. When the trailing 2-bit characters are hidden, the data received by the host is "1234".

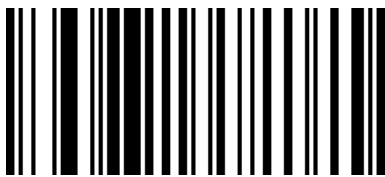
### Hide the front character

The user can scan the following bar codes according to the requirements, and set the hidden front digits.



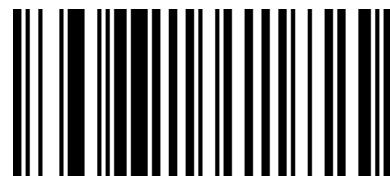
023401

Hide the front 1 character



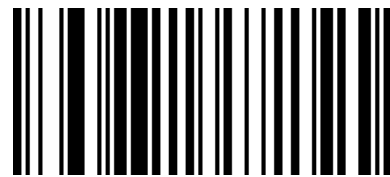
023403

Hide the front 3 characters



023402

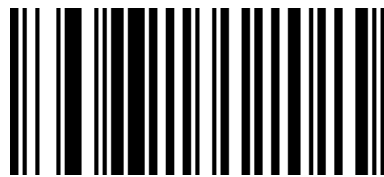
Hide the front 2 characters



023405

Hide the front 5 characters

### Unhide the front character



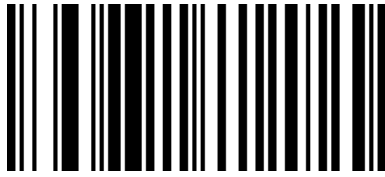
023400

Unhide leading characters

### Hide the Postposition character

Users can scan the following bar codes according to their needs and set the corresponding number of digits to be hidden.





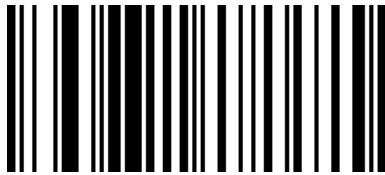
023301

Hide the Postposition 1 character



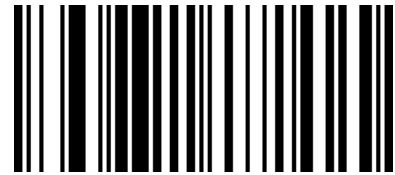
023302

Hide the Postposition 2 characters



023303

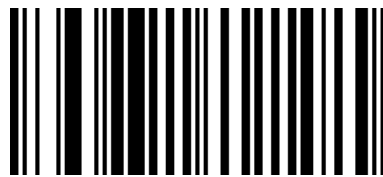
Hide the Postposition 3 characters



023305

Hide the Postposition 5 characters

**Unhide the Postposition character**



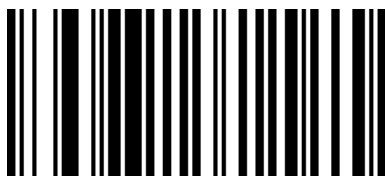
023300

Unhide the Postposition character

## Hide intermediate characters

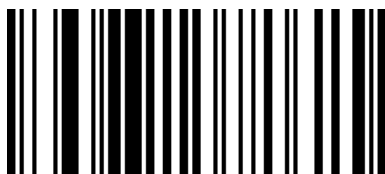
Users can scan the following bar codes according to their needs and set the hidden middle digits. The setup procedure consists of two steps. First, the beginning of the character is scanned for the Mth bit, and then the middle N-bit character is hidden by scanning. For example, for the barcode "12345678", set the two characters "56" to be hidden, first scan the first 4 characters, then scan to hide the middle 2 characters, and the host receives the data as "123478"

### *The Mth character starts to set the bar code*



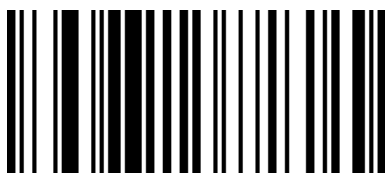
024001

from first character start



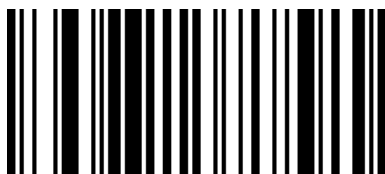
024003

from third character start



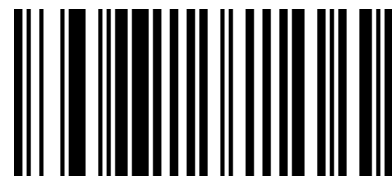
024005

from fifth character start



024007

from seventh character start



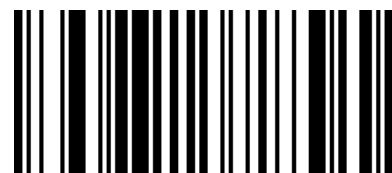
024002

from second character start



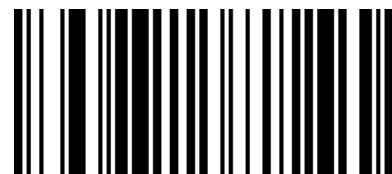
024004

from fourth character start



024006

from sixth character start



024008

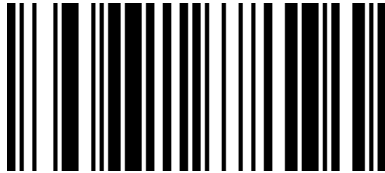
from eighth character start

### *Hide intermediate N-bit characters*



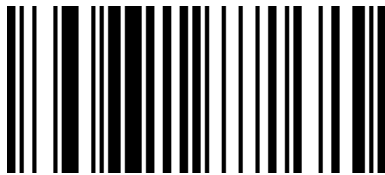
023901

Hide intermediate 1 character



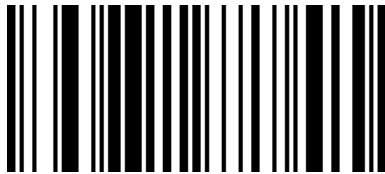
023903

Hide intermediate 3 characters



023905

Hide intermediate 5 characters



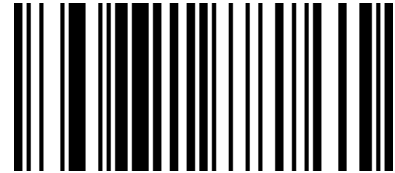
023907

Hide intermediate 7 characters



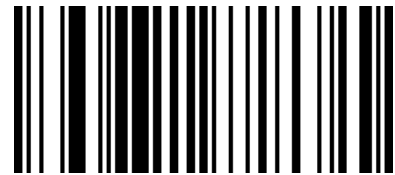
023902

Hide intermediate 2 characters



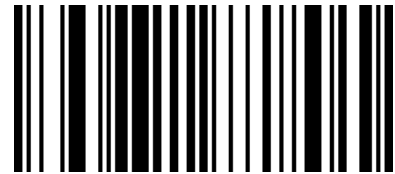
023904

Hide intermediate 4 characters



023906

Hide intermediate 6 characters



023908

Hide intermediate 8 characters

### Unhide the middle character



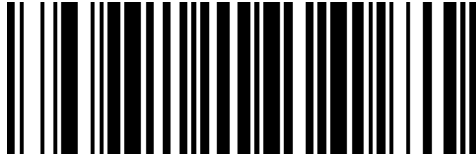
023900

Unhide the middle character

## 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.



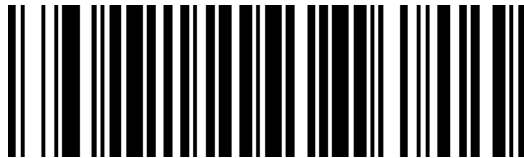
0212@0D

Add CR\*



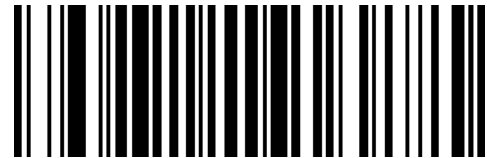
0212@0A

Add LF



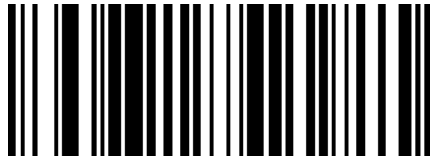
0213@0D0A

Add CR+LF



0212@09

Add Tab



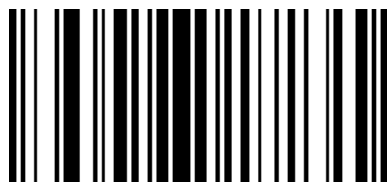
0210@

None

## Character conversion

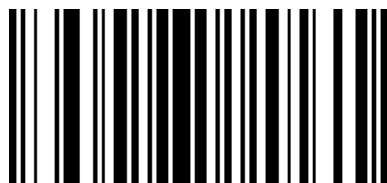
By setting the character conversion function of the barcode scanner, the upper case and lower-case conversions of the English letters of the barcode output data can be performed.

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.



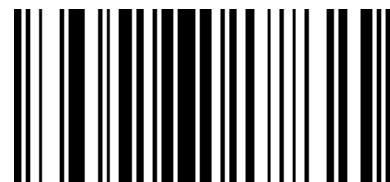
02510

Normal (No Change) \*



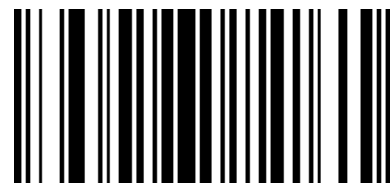
02512

Lower (All lowercase)



02511

Upper (Capitalize)



02513

Inverse (Case inversion)

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

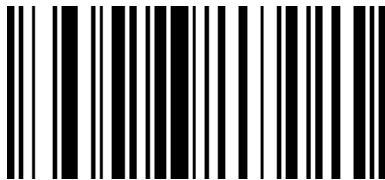
# Chapter5. Bar Code Parameter Settings

## 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.

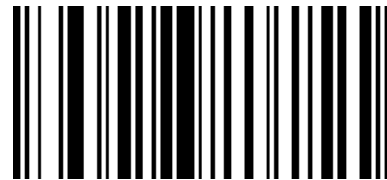
## UPC-A

### Enable/Disable UPC-A



000341

Enable UPC-A\*

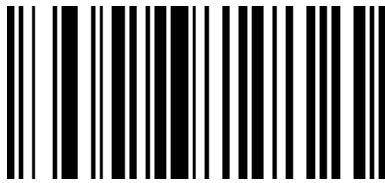


000340

Disable UPC-A

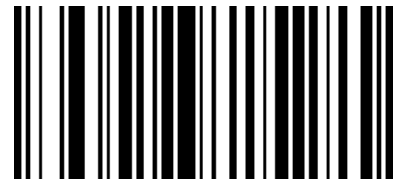
## Transmit Check Digit

UPC-A Barcode data is fixed at 13 characters, Number 13 is the parity bit, used to verify the correctness of all 13 characters, the default is to transmit the check digit.



00421

Transmit check Digit \*



00420

Do not transmit check Digit

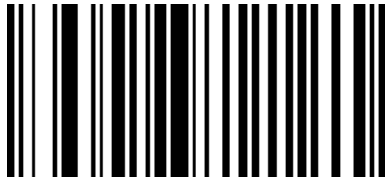
## Whether to read additional bits

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.



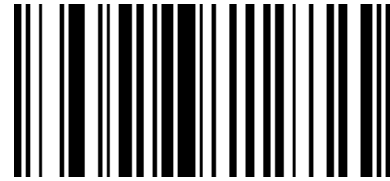
## System character

UPC-A The country code of the barcode is the prefix character, this character is not normally displayed in human-readable characters below the bar code, "0" representative USA. The first character in the human-readable character is a system character. Default does not send country characters transmit system character.



00400

Transmit system character \*

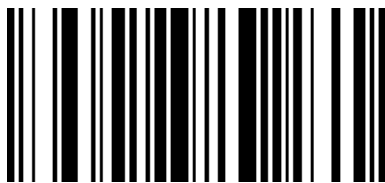


00401

Do not Transmit system character

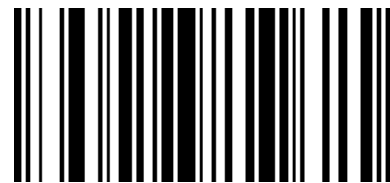
## Extended settings

UPC-A barcode type supports extended settings, after opening extensions, barcode information expanded to 13 bits, add "0" in front of and the type is converted to EAN-13, the default is not extended.



00391

Barcode information extension and the type is converted to EAN-13



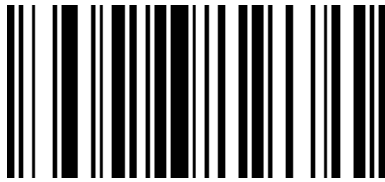
00390

Barcode information does not expand \*



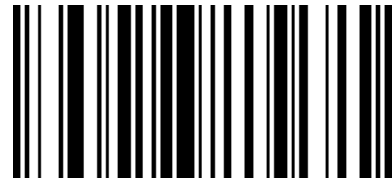
## UPC-E

### Enable/Disable UPC-E



00351

Enable UPC-E\*

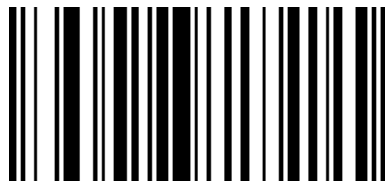


00350

Disable UPC-E

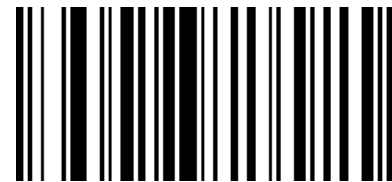
### Transmit Check Digit

UPC-E Barcode data is fixed at 8 characters bit 8 is the parity bit used to verify the correctness of all 8 characters, the default is to transmit the check digit.



00441

Transmit check Digit \*

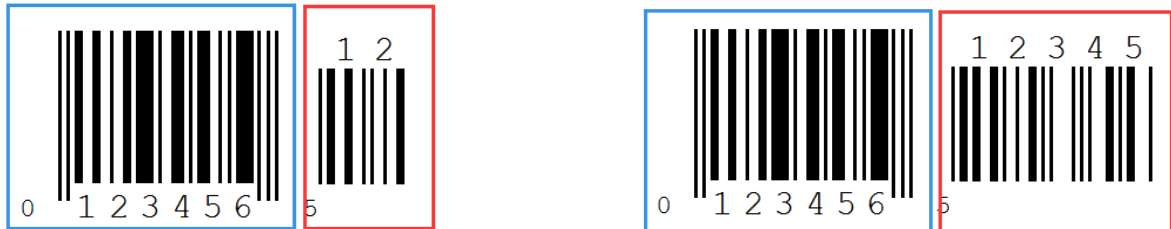


00440

Do not Transmit check Digit

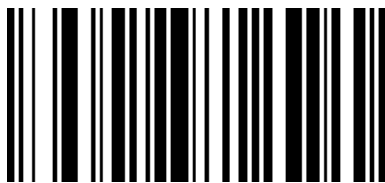
### Whether to read additional bits

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.



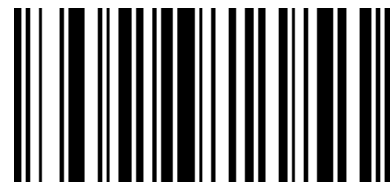
### System character

UPC-E the system code of the barcode is the prefix character, default delivery system character.



00430

Transmit system character \*



00431

Do not transmit system character

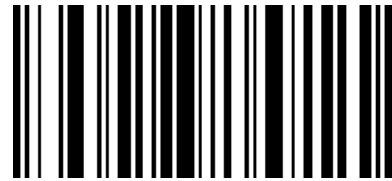
## Extended settings

UPC-E barcode type supports extended settings, after opening extensions, Barcode information expanded to 13 bits, and the type is converted to UPC-A, the default is not extended.



00381

Barcode information is expanded, and the type is converted to UPC-A

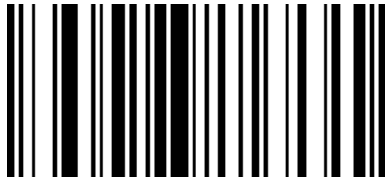


00380

Do not expand barcode information \*

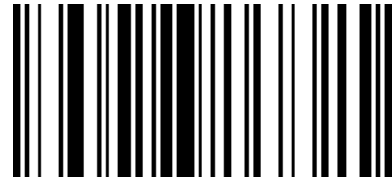
## EAN-8

### Enable/Disable EAN-8



00371

Enable EAN-8\*

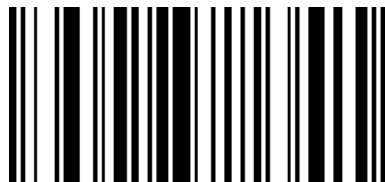


00370

Disable EAN-8

### Transmit Check Digit

EAN-8 barcode data is fixed at 8 characters, Bit 8 is the parity bit, used to verify the correctness of all 8 characters the default is to transmit the check digit.



00571

Transmit check Digit \*

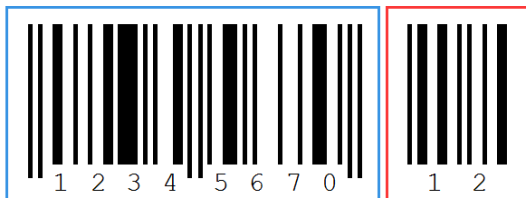


00570

Do not Transmit check Digit

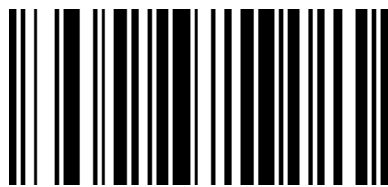
### Whether to read additional bits

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.



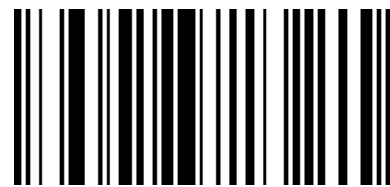
### System character

EAN-8 barcode system code is a prefix character default Not Transmit system character.



00560

Transmit System character\*

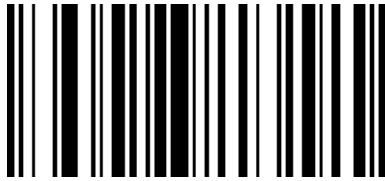


00561

Not Transmit System Character

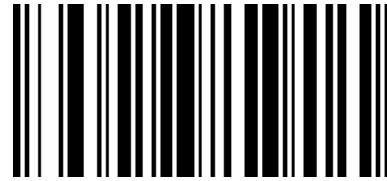
## EAN-13

### Enable/Disable EAN-13



00361

Enable EAN-13\*



00360

Disable EAN-13

### Transmit Check Digit

EAN-13 barcode data is fixed at 13 characters, Bit 13 is the parity bit used to verify the correctness of all 13 characters the default is to transmit check digit.



00461

Transmit Check Digit \*



00460

Do not transmit check Digit

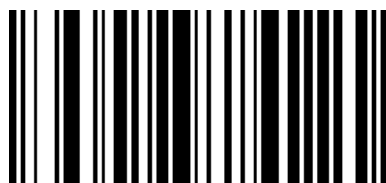
## Whether to read additional bits

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.



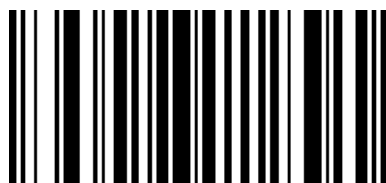
## Extended settings

EAN-13 barcode type supports extended settings, can be set to expand EAN-13 code to ISBN or ISSN barcode. The default is not extended.



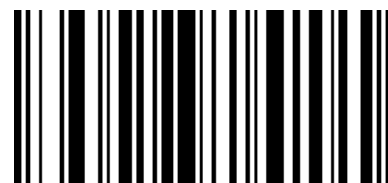
00481

Expanded to ISBN



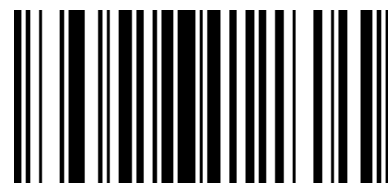
01501

Expanded to ISSN



00480

Do not expand to ISBN\*

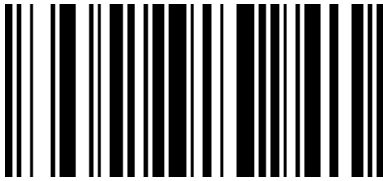


01500

Do not expand to ISSN\*

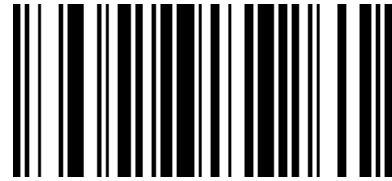
## Code 128

### Enable/Disable Code 128



00691

Enable Code 128\*



00690

Disable Code 128

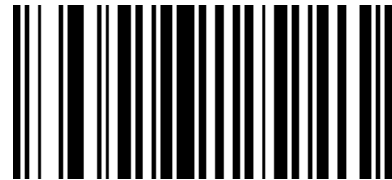
## Code 39

### Enable/Disable Code 39



00221

Enable Code 39\*



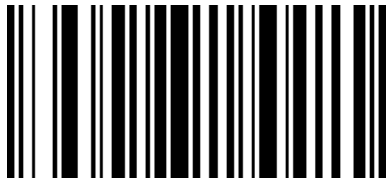
00220

Disable Code 39



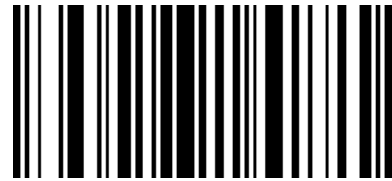
## Transmit Start/Stop Character

A character "\*" as a start and stop character before and after the Code 39 barcode data you can set whether the start and stop characters are transmitted together with the barcode data after the reading is successful.



00281

Transmit Start/Stop Character



00280

Do not Transmit Start/Stop Character\*

## Check Bit Settings

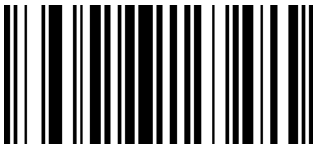
Code 39 barcode data is not mandatory to contain a check bit, if there is a check bit, it is the last character of the data. Check bits are values calculated from all data to verify the correctness of the data. You can turn on or off the check as required and set whether to send the check bits.

The default is "Close MOD43 Check" and "No Transfer Check".



00251

Transfer check



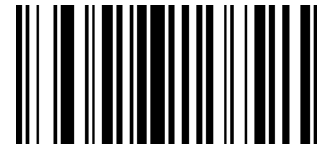
00241

Open MOD43 Check



00250

No transmission check \*

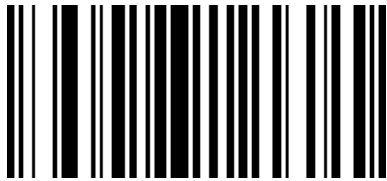


00240

Close MOD43 Check \*

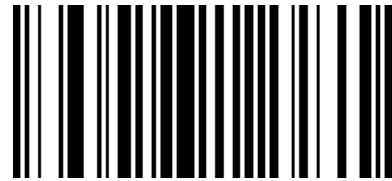
## Enable/Disable Code 39 Full ASCII

Code 39 data can include all ASCII characters, but the barcode reader only reads some ASCII characters by default by setting, you can turn on the function of reading full ASCII characters default Enable all ASCII characters.



00231

Enable Code 39 Full ASCII\*



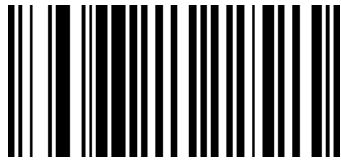
00230

Disable Code 39 Full ASCII\*

## Setting Code 39 Minimum Read Length

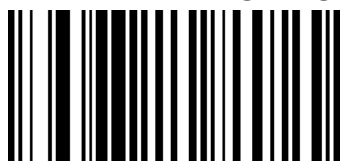
You can customize the minimum reading length from Code 39 to your needs. Set the code to [<sup>^</sup> 3 + 0032XX], support 1-15 bits, corresponding to the hexadecimal value of 01-0F, 01 means the minimum length of 1.

Default is "Minimum Read Length 2" "



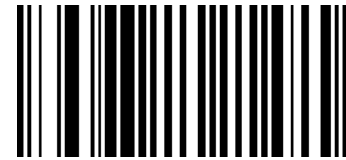
003201

The minimum reading length is 1



003202

The minimum reading length is 3



003202

The minimum reading length is 2\*

## Code 32

### Enable/Disable Code 32



01951

Enable Code 32



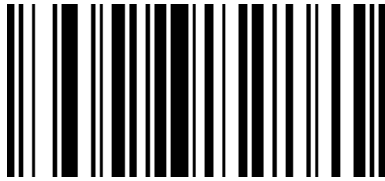
01950

Disable Code 32\*

Note: Opening Code32 has an effect on Code39.

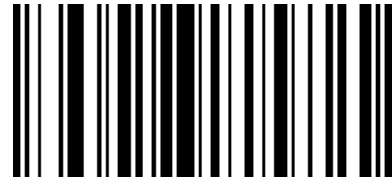
## Code 93

### Enable/Disable Code 93



00621

Enable Code 93\*



00620

Disable Code 93

### Check Digit Verification

Code 93 barcode data does not include check digits, if there is a check digit is the last 2 characters of the data. the check digit is a calculated value based on all data used to verify that the data is correct.



01901

Transmit Check Digit After Verification

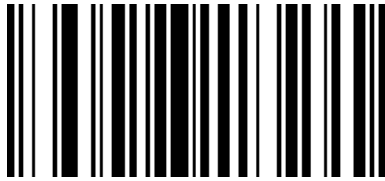


01900

Do Not Transmit Check Digit After  
Verification \*

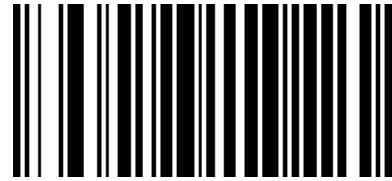
## Code 11

### Enable/Disable Code 11



01261

Enable Code 11\*



01260

Disable Code 11

### Check Digit Verification

Code 11 Barcode data does not necessarily include check bits, if there is a check digit, it can be the last 1 or 2 characters of the data. The check digit is a value calculated from all data to verify that the data is correct.



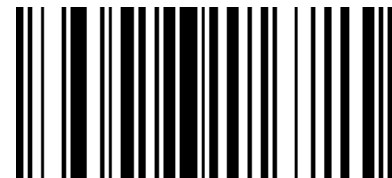
01272

C Check \*



01273

CK Check



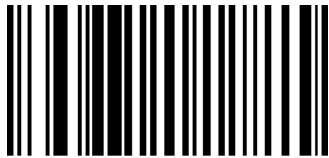
01271

Automatic CK Check

## Setting Code 11 Minimum Read Length

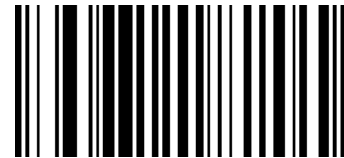
You can customize the minimum reading length from Code11 codes according to your requirements. Set the code to [<sup>^</sup> 3 + 0128XX], support 1-15 bits, corresponding to the hexadecimal value of 01-0F, 01 means the minimum length of 1.

Default to "Minimum Read Length 4" "



012801

The minimum reading length is 1

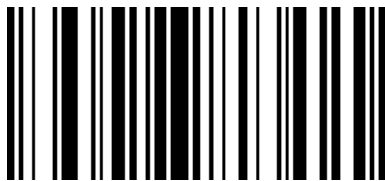


012804

The minimum reading length is 4\*

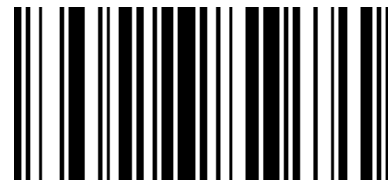
## Interleaved 2 of 5

### Enable/Disable Interleaved 2 of 5



00961

Enable Interleaved 2 of 5\*



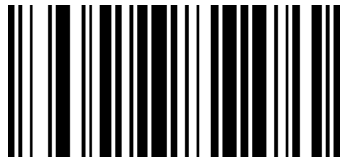
00960

Disable Interleaved 2 of 5

## Check Bit Settings

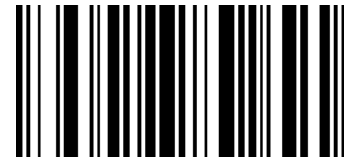
Interleaved 2 of 5 bar code data is not mandatory to contain check bits. If there are check bits, it is the last character of the data. Check bits are values calculated from all data to verify the correctness of the data. You can turn on or off the check as required and set whether to send the check bits.

The default is "Turn off Interleaved 2 of 5 checks" and "Do not send Interleaved 2 of 5 checks".



00251

Transfer Interleaved 2 of 5 Check



00250

Do not transmit Interleaved 2 of 5 checks

\*



00241

Open Interleaved 2 of 5 Check



00240

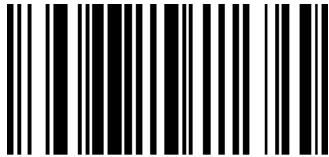
Close Interleaved 2 of 5 Check \*



## Setting Interleaved 2 of 5 Minimum Read Length

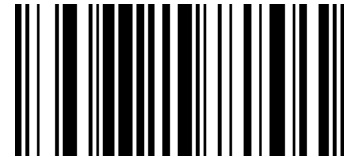
You can customize the minimum reading length from Interleaved 2 of 5 codes according to your requirements. Set the code to [<sup>^</sup> 3 + 0097XX], support 2-14 bits, corresponding to the hexadecimal value of 02-0E, 02 means the minimum length of 2 (Interleaved 2 of 5 digits can only be even digits).

Default to "Minimum Read Length is 4" "



009702

Minimum Read Length is 2

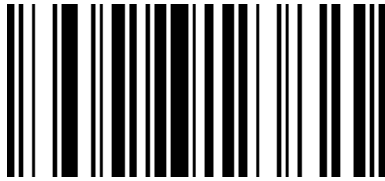


009704

Minimum Read Length is 4\*

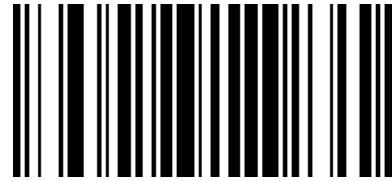
## Matrix 2 of 5

### Enable/Disable Matrix 2 of 5



01461

Enable Matrix 2 of 5\*



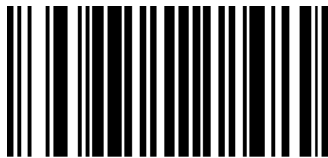
01460

Disable Matrix 2 of 5

### Setting Matrix 2 of 5 Minimum Read Length

You can customize the minimum reading length from Matrix 2 of 5 codes according to your requirements. Set the code to [<sup>^</sup> 3 + 0148XX], support 1-15 bits, corresponding to the hexadecimal value of 01-0F, 01 represents the minimum length of 1

Default to "Minimum Read Length 3".



014801

Minimum Read Length is 1

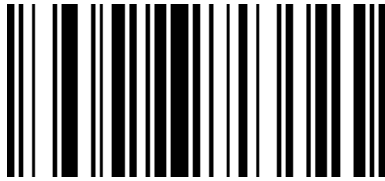


014803

Minimum Read Length is 3\*

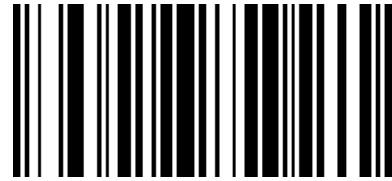
## Industrial 2 of 5

### Enable/Disable Industrial 2 of 5



01061

Enable Industrial 2 of 5\*



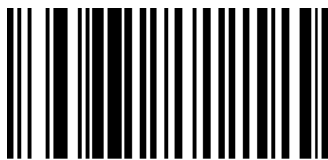
01060

Disable Industrial 2 of 5

### Setting Minimum Read Length for Industrial 2 of 5

You can customize the minimum reading length from Industrial 2 of 5 codes according to your requirements. Set the code to [<sup>^</sup> 3 + 0107XX], support 1-15 bits, corresponding to the hexadecimal value of 01-0F, 01 represents the minimum length of 1

Default to "Minimum Read Length 3"



010701

The minimum reading length is 1

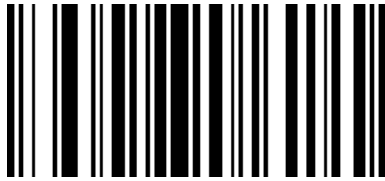


010703

The minimum reading length is 3\*

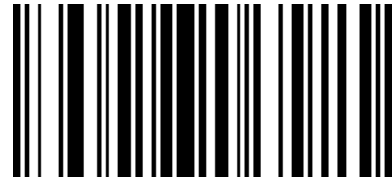
## Standard 2 of 5(IATA)

### Enable/Disable Standard 2 of 5



01871

Enable Standard 2 of 5\*



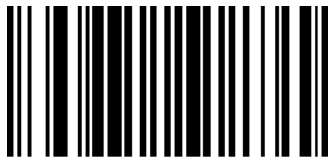
01870

Disable Standard 2 of 5

### Setting Standard 2 of 5 Minimum Read Length

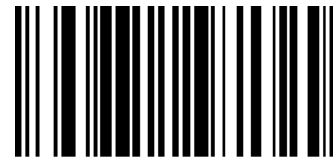
You can customize the minimum reading length from Standard 2 of 5 codes according to your requirements. Set the code to [<sup>^</sup> 3 + 0189XX], support 1-15 bits, corresponding to the hexadecimal value of 01-0F, 01 represents the minimum length of 1

Default to "Minimum Read Length 4" "



018901

The minimum reading length is 1

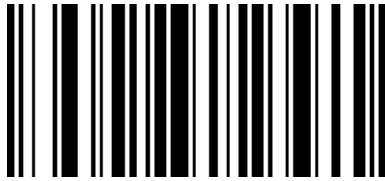


018904

The minimum reading length is 4\*

## Codabar (NW-7)

### Enable/Disable Codabar



00851

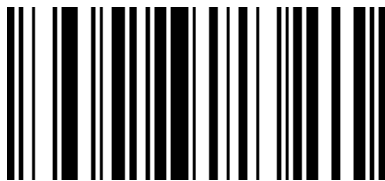
Enable Codabar\*



00850

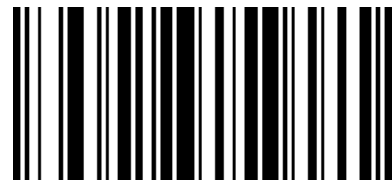
Disable Codabar

### Transmit Start/Stop Character



00861

Transmit Start/Stop Character



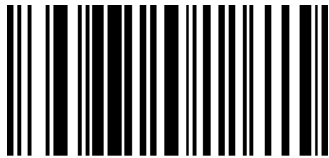
00860

Do not Transmit Start/Stop Character\*

## Setting Codabar Minimum Read Length

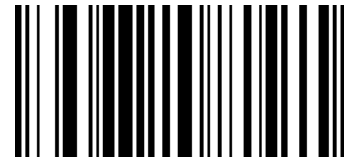
You can customize the minimum reading length from Codabar code according to your requirements. Set the code to [<sup>^</sup> 3 + 0187XX], support 1-15 bits, corresponding to the hexadecimal value of 01-0F, 01 represents the minimum length of 1

Default to "Minimum Read Length 4" "



018701

The minimum reading length is 1

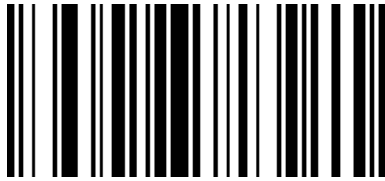


018704

The minimum reading length is 4\*

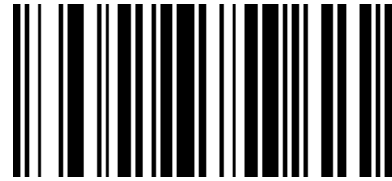
## Plessey

### Enable/Disable Plessey



01161

Enable Plessey



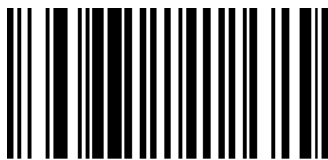
01160

Disable Plessey\*

### Set Plessey Minimum Read Length

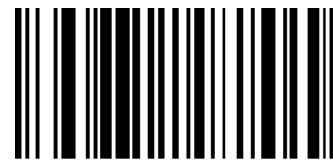
You can customize the minimum reading length from Plessey code according to your requirements. Set the code to [<sup>^</sup> 3 + 0119XX], support 1-15 bits, corresponding to the hexadecimal value of 01-0F, 01 represents the minimum length of 1

Default to "Minimum Read Length is 4".



011901

Minimum Read Length is 1

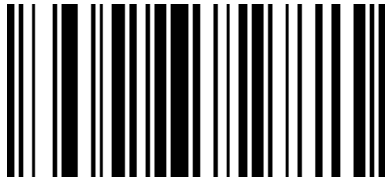


011904

Minimum Read Length is 4\*

## MSI Plessey

### Enable/Disable MSI Plessey



01151

Enable MSI Plessey



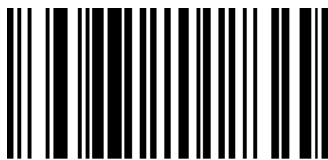
01150

Disable MSI Plessey\*

### Setting MSI Plessey Minimum Read Length

You can customize the minimum reading length from MSI Plessey code according to your requirements. Set the code to [<sup>^</sup> 3 + 0118XX], support 1-15 bits, corresponding to the hexadecimal value of 01-0F, 01 represents the minimum length of 1

Default to "Minimum Read Length is 4" "



011801

Minimum Read Length is 1



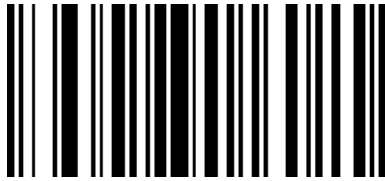
011804

Minimum Read Length is 4\*



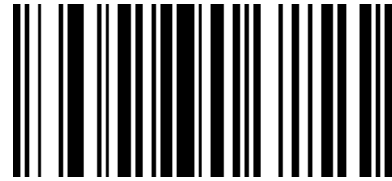
## GS1 DataBar Limited (RSS Limited)

### Enable/Disable RSS Limited



01771

Enable RSS Limited



01770

Disable RSS Limited\*

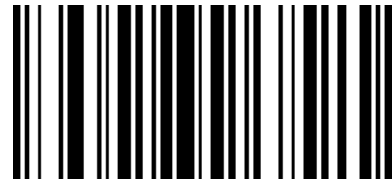
## GS1 DataBar Omnidirectional (RSS Omnidirectional)

### Enable/Disable RSS Omnidirectional



01671

Enable RSS Omnidirectional

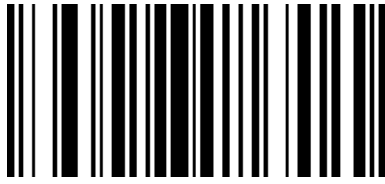


01670

Disable RSS Omnidirectional\*

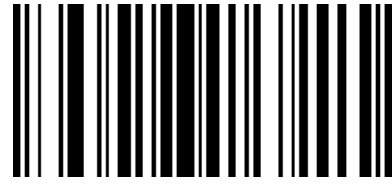
## China Post (Datalogic 2 of 5)

### Enable/Disable China Post



01571

Enable China Post

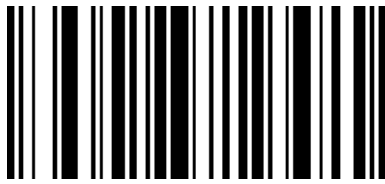


01570

DisableChina Post\*

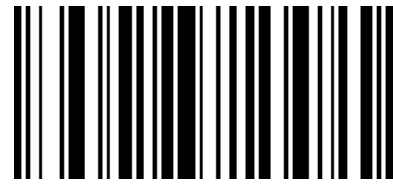
## Add-on Code

Users can do additional setting by scanning following UPC/EAN/JAN code



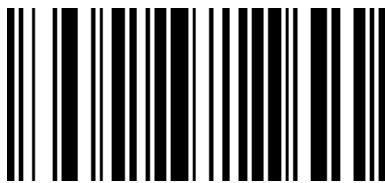
00551

Enable 2-Digit add-on Code



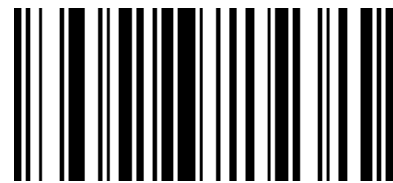
00552

Enable 5-Digit add-on Code



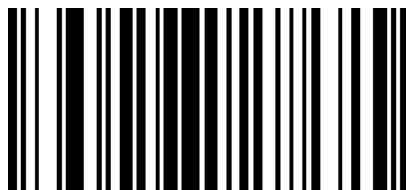
00553

Enable 2-Digit or 5-Digit add-on Code



00550

Disable Add-on Code\*



02611

Add-on Code Required



02610

Add-on Code Not Required

# Chapter6 Serial Communication Instruction

## Instruction

When using the serial port mode, the barcode reader can control the barcode scanner to send commands or set related functions by sending relevant instructions.

Serial instruction is fixed to 16 bytes in one frame (16bytes, 1byte=8bit) .

## Frame format structure

Serial port instruction one frame format is as follows:

STX+CMD+DA0+DA1+DA2+DA3+DA4+DA5+DA6+.....+DA10+DA11+ETX+SUM

To ensure data accuracy, the last byte of a frame of data (16 bytes) is the checksum, assuming that the first 15 bytes are a, and then  $SUM = 256 - (a \& 0xFF)$ .

Among them:

STX=0x02; ETX=0x03 (STX and ETX values are ASCII hexadecimal defined values)

CMD represents a control or setup instruction.

## Instruction Parsing

When CMD=0x01, it indicates a control instruction.

DA0=0x01, control the barcode reader switch command, can control the barcode reader to open or close the decoding function.

DA1=0x00, Controlling the Barcode Off (Decoding Off)

DA1=0x01, control the barcode reader on (open decoding, no timeout, no highlighting until decoding is complete, until the decoding is completed.)

DA1=0x02, control the barcode reader on (open decode, timeout)

DA2~DA3, timeout in 1ms (format 0xDA3 0xDA2) When CMD = 0x02, indicates setting instruction.

When CMD=0x02, it represents the setting instruction

DA0, the setting code is valid byte length + 1 (if display version number setting code is 000A0, length is 5, DA0=6)

DA1, fixed to 0x82

DA2~DA11, setting code content (set bar code encoding), DA2 start insufficient bit complement 0x00

## Instruction save

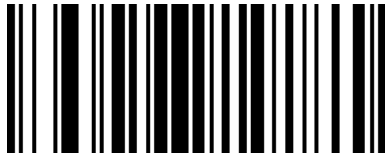
When the user sends a set barcode reader parameter using an instruction, after sending the setup instruction, an instruction to save the parameter needs to be sent to save the current parameter. (Open and close instructions do not need to be saved)

STX	CMD	DA0	DA1	DA2	DA3	DA4~DA10	DA11	ETX	SUM
02H	01H	03H	AAH	55H	00H	00H~00H	00H	03H	F8H

Save parameter instructions: 02 01 03 AA 55 00 00 00 00 00 00 00 00 00 03 F8

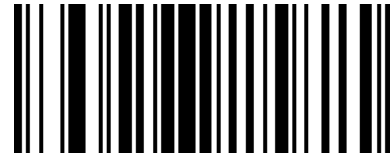
## Instruction Feedback Setting

After the setup response is turned on (scan code 02421, or serial port send command is enabled), if the setup command is executed successfully, it will respond with a response character ACK (ASCII code 0x06). If it can't be executed successfully, it will answer a NAK (ASCII code) 0x15.



02421

Enable response

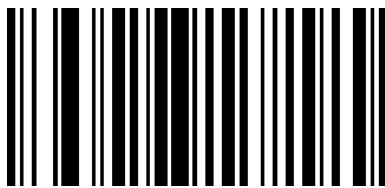


02420

Disable response\*

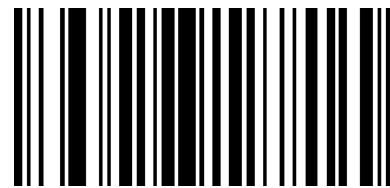
## Sound Feedback Settings

When the audio feedback is turned on (scan code 01411, or serial port command is enabled), if the setup command is successfully executed, the buzzer will sound, and the instruction execution sound feedback is turned off by default.



01411

Turn on feedback sound



01410

Turn off feedback sound \*

## Trigger instruction

Turn on scan: 02 01 01 02 B8 0B 00 00 00 00 00 00 00 03 34

Turn off scan: 02 01 01 00 00 00 00 00 00 00 00 00 03 F9

## Case Analysis

### Close decoding

CMD=0x01, DA0=0x01, DA1=0x00, DA2~DA11=0x00,

$a = (0) * 16 + (2 + 1 + 1 + 3) * 1 = 7 = 0x07$

$SUM = 256 - (0x07 \& FF) = 256 - (111 \& 11111111) = 256 - 7 = 249 = 0xF9$

STX	CMD	DA0	DA1	DA2	DA3	DA4~DA10	DA11	ETX	SUM
02H	01H	01H	00H	00H	00H	00H~00H	00H	03H	F9H

Hexadecimal instructions: 02 01 01 00 00 00 00 00 00 00 00 00 03 F9

### Turn on decode timeout 3 seconds

CMD=0x01, DA0=0x01, DA1=0x02, DA2=B8, DA3=0B, DA4~DA11=0x00,

Time out 3S=3000MS=0x0BB8

$a = (B) * 16 + (2 + 1 + 1 + 2 + 8 + B + 3) * 1 = 204 = 0xCC$

$SUM = 256 - (0xCC \& FF) = 256 - (11001100 \& 11111111) = 256 - 204 = 52 = 0x34$

STX	CMD	DA0	DA1	DA2	DA3	DA4~DA10	DA11	ETX	SUM
02H	01H	01H	02H	B8H	0BH	00~00H	00H	03H	34H

Hexadecimal instructions: 02 01 01 02 B8 0B 00 00 00 00 00 00 03 34

### Set the baud rate 115200

Set instruction code: 000709

CMD=0x02, DA0=0x07, DA1=0x82,

DA2~DA7=000709=0x30,0x30,0x30,0x30,0x37,0x30,0x39

$a = (8 + 3 + 3 + 3 + 3 + 3 + 3) * 16 + (2 + 2 + 7 + 2 + 9 + 5 + 3) * 1 = 448 = 0x1C0$

$SUM = 256 - (0x1C0 \& FF) = 256 - (111000000 \& 11111111) = 256 - 192 = 64 = 0x40$

ST	CM	DA	DA	DA	DA	DA	DA	DA	DA	DA8~DA	ET	SU
X	D	0	1	2	3	4	5	6	7	11	X	M



02		07	82	30	30	30	37	39	35		03	
H	02H	H	H	H	H	H	H	H	H	00H~00H	H	40H

Hexadecimal instructions: 02 02 07 82 30 30 30 37 30 39 00 00 00 00 03 40

### Add carriage return line feed

Set instruction code: 0213@\r\n

CMD=0x02, DA0=0x08, DA1=0x82,

DA2~DA8=0213@\r\n =0x30,0x32,0x31,0x33,0x40,0x0D,0x0A

$a = (8+3+3+3+3+4) * 16 + (2+2+8+2+2+1+3+13+10+3) * 1 = 430 = 0x1ae = 256 -$

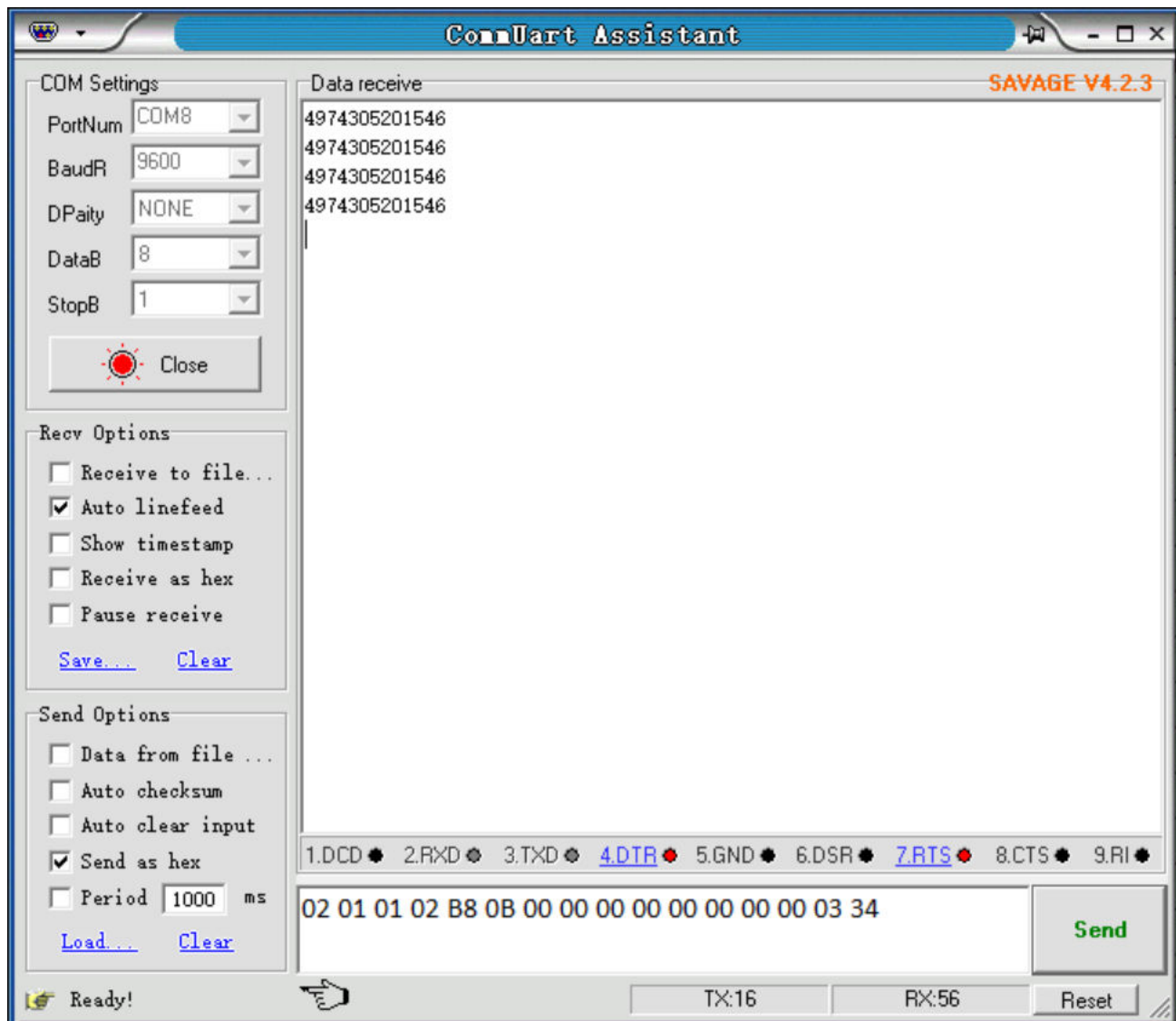
$(0x1ae \& 0xFF) = 256 - (110101110 \& 11111111) = 256 - (10101110) = 256 - 174 = 82 = 0x52$

ST	CM	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA9~D	ET	SU
X	D	0	1	2	3	4	5	6	7	8	A11	X	M	
02	02	08	82	30	32	31	33	40	0D	0A	00H~00	03	52	
H	H	H	H	H	H	H	H	H	H	H	H	H	H	

Hexadecimal instructions: : 02 02 08 82 30 32 31 33 40 0D 0A 00 00 00 03 52

## Instruction sending example

Send a hexadecimal command to control the scan. Use the instruction to open the decode timeout for 3 seconds to confirm the serial port protocol setting. Enter the corresponding command in the command sending input box.



Note: For detailed instructions, please refer to "Appendix - Instruction Set"

# Chapter7 Appendix

## Appendix - Default Settings Sheet

Parameter name	Default setting	Instruction Remark
<b>Comprehensive settings</b>		
Setting code function	ON	Default on
Send setup code	OFF	Default off
Sound Settings	Open	Open All Sounds
Sound frequency	2.0KHZ	
USB Fast pass	OFF	
Character delay	4MS	
Image recognition method	Forward image recognition	
<b>Communication settings</b>		
Interface mode	USB-KBW	
Keyboard mode	American English	
Baud rate	9600	
Serial port verification	No check	
Data bits	8	
Stop bit	1	
<b>Reading mode</b>		
Reading mode	Manual reading	
Inductive Reading Model	OFF	
Sensitivity	ON	medium
Key Delay Single Reading Timeout	3S	
Interval time of continuous reading mode	1S	

<b>Data editing</b>		
Send Code ID	OFF	
Send a custom prefix	OFF	
Send a custom suffix	OFF	
End of transmit suffix	ON	Allow, Enter
Character conversion	OFF	Normal
<b>Barcode parameter settings</b>		
<b>UPC-A</b>		
Enable	ON	
Transmit Check Digit	ON	
Enable 2-Digit add-on Code	OFF	
Enable 5-Digit add-on Code	OFF	
2-Digit Add-on Code Required	OFF	
5-Digit Add-on Code Required	OFF	
Transfer system character	ON	
Barcode information expanded to EAN-13	OFF	
<b>UPC-E</b>		
Enable	ON	
Transmit Check Digit	ON	
Enable 2-Digit add-on Code	OFF	
Enable 5-Digit add-on Code	OFF	
2-Digit Add-on Code Required	OFF	

5-Digit Add-on Code Required	OFF
Transfer system character	ON
Expanded to UPC-A	OFF
When expanding, the type is converted to UPC-A	OFF
<b>EAN-8</b>	
Enable	ON
Transmit Check Digit	ON
Enable 2-Digit add-on Code	OFF
Enable 5-Digit add-on Code	OFF
2-Digit Add-on Code Required	OFF
5-Digit Add-on Code Required	OFF
Transfer system character	ON
<b>EAN-13</b>	
Enable	ON
Transmit Check Digit	ON
Enable 2-Digit add-on Code	OFF
Enable 5-Digit add-on Code	OFF
2-Digit Add-on Code Required	OFF
5-Digit Add-on Code Required	OFF
Expand to ISBN	OFF
<b>Code 128</b>	
Enable	ON

Transmit Check Digit	OFF
<b>Code 39</b>	
Enable	ON
Transmit Start/Stop Character	OFF
Enable Code 39 Full ASCII	ON
<b>Code 93</b>	
Enable	ON
Transmit Check Digit	OFF
<b>Code 11</b>	
Enable	ON
Check	ON
Transmit Check Digit	OFF
<b>Interleaved 2 of 5</b>	
Enable	ON
<b>Matrix 2 of 5</b>	
Enable	ON
<b>Industrial 2 of 5</b>	
Enable	ON
<b>Standard 2 of 5</b>	
Enable	ON
<b>Codabar</b>	
Enable	ON
Transmit Start/Stop Character	OFF
<b>Plessey</b>	
Enable	OFF

<b>MSI Plessey</b>	
Enable	OFF
<b>RSS Limited</b>	
Enable	OFF
<b>RSS Omnidirectional</b>	
Enable	OFF
<b>China Post</b>	
Enable	OFF
<b>Add-on Code</b>	
Enable add-on Code	OFF
Add-on Code Required	OFF

## Appendix -Code ID

No.	Barcode type	Code ID Code	Barcode type code (Suffix)
1	All Barcode	@	00
2	CODE 128	a	01
3	EAN 8	c	03
4	EAN 13	d	04
5	UPC-A	e	05
6	UPC-E	f	06
7	CODE 93	i	09
8	GS1 Omnidirectional	j	0A
9	GS1 Limited	k	0B
10	CODE 39	m	0D
11	Interleaved 2 of 5	n	0E
12	Industrial 2 of 5	o	0F
13	Standard 2 of 5	p	10
14	Matrix 2 of 5	q	11
15	China Post	r	12
16	MSI	s	13
17	Plessey	t	14
18	Code 11	u	15
19	Codabar	v	16



## Appendix - Instruction Set

1. Function	instructions	Hexadecimal instructions
2. Turn on scanning without timeout	NA	02 01 01 01 00 00 00 00 00 00 00 00 00 00 03 F8
3. Turn on scanning timeout 3 seconds	NA	02 01 01 02 B8 0B 00 00 00 00 00 00 00 00 03 34
4. Turn on scanning timeout 10 seconds	NA	02 01 01 02 10 27 00 00 00 00 00 00 00 00 03 C0
5. Close the scan	NA	02 01 01 00 00 00 00 00 00 00 00 00 00 00 03 F9
6. Command saving	NA	02 01 03 AA 55 00 00 00 00 00 00 00 00 00 03 F8
7. Restore default settings	000B0	02 02 06 82 30 30 30 42 30 00 00 00 00 00 03 6F
8. Check the software version	000A0	02 02 06 82 30 30 30 41 30 00 00 00 00 00 03 70
9. User default settings	00000	02 02 06 82 30 30 30 30 30 00 00 00 00 00 03 81
10. Replace factory default settings	00001	02 02 06 82 30 30 30 30 31 00 00 00 00 00 03 80
11. Enter Setup	09990	02 02 06 82 30 39 39 39 30 00 00 00 00 00 03 66
12. Exit Setup	09991	02 02 06 82 30 39 39 39 31 00 00 00 00 00 03 65
13. Transmit Programming Barcode Data	02501	02 02 06 82 30 32 35 30 31 00 00 00 00 00 03 79
14. Not Transmit Programming Barcode Data ent	02500	02 02 06 82 30 32 35 30 30 00 00 00 00 00 03 7A

15. Turn on all sounds	014201	02 02 07 82 30 31 34 32 30 31 00 00 00 00 03 48
16. Turn off all sounds	014200	02 02 07 82 30 31 34 32 30 30 00 00 00 00 03 49
17. Turn Off Ordinary Code Sound	014203	02 02 07 82 30 31 34 32 30 33 00 00 00 00 03 46
18. Open Settings Sound	014207	02 02 07 82 30 31 34 32 30 37 00 00 00 00 03 42
19. Voice increase	014300	02 02 07 82 30 31 34 33 30 30 00 00 00 00 03 48
20. Voice reduction	014301	02 02 07 82 30 31 34 33 30 31 00 00 00 00 03 47
21. Sound frequency 2.0KHZ	0145800	02 02 08 82 30 31 34 35 38 30 30 00 00 00 03 0D
22. Sound frequency 2.7KHZ	0145AAA	02 02 08 82 30 31 34 35 41 41 41 00 00 00 03 E2
23. Allow USB Fast Transfer	02301	02 02 06 82 30 32 33 30 31 00 00 00 00 00 03 7B
24. Ban USB Fast Transfer	02300	02 02 06 82 30 32 33 30 30 00 00 00 00 00 03 7C
25. Fast transmission speed (no delay)	001500	02 02 07 82 30 30 31 35 30 30 00 00 00 00 03 4A
26. Moderate transmission speed (delay 4MS)	001502	02 02 07 82 30 30 31 35 30 32 00 00 00 00 03 48
27. Slow transmission speed (delay 6MS)	001504	02 02 07 82 30 30 31 35 30 34 00 00 00 00 03 46
28. Slow transmission speed (delay 12MS)	001506	02 02 07 82 30 30 31 35 30 36 00 00 00 00 03 44

29. Normal Image Recognition	00161	02 02 06 82 30 30 31 36 31 00 00 00 00 00 03 79
30. Image Reverse Recognition	00160	02 02 06 82 30 30 31 36 30 00 00 00 00 00 03 7A
31. USB-KBW	000602	02 02 07 82 30 30 30 36 30 32 00 00 00 00 03 48
32. USB-COM	000603	02 02 07 82 30 30 30 36 30 33 00 00 00 00 03 47
33. USB-HID	000604	02 02 07 82 30 30 30 36 30 34 00 00 00 00 03 46
34. TTL/RS232	000601	02 02 07 82 30 30 30 36 30 31 00 00 00 00 03 49
35. baud rate 600bps	000701	02 02 07 82 30 30 30 37 30 31 00 00 00 00 03 48
36. baud rate 1200bps	000702	02 02 07 82 30 30 30 37 30 32 00 00 00 00 03 47
37. baud rate 2400bps	000703	02 02 07 82 30 30 30 37 30 33 00 00 00 00 03 46
38. baud rate 4800bps	000704	02 02 07 82 30 30 30 37 30 34 00 00 00 00 03 45
39. baud rate 9600bps	000705	02 02 07 82 30 30 30 37 30 35 00 00 00 00 03 44
40. baud rate 19200bps	000706	02 02 07 82 30 30 30 37 30 36 00 00 00 00 03 43
41. baud rate 38400bps	000707	02 02 07 82 30 30 30 37 30 37 00 00 00 00 03 42
42. baud rate 57600bps	000708	02 02 07 82 30 30 30 37 30 38 00 00 00 00 03 41

43. baud rate 115200bps	000709	02 02 07 82 30 30 30 37 30 39 00 00 00 00 03 40
44. Odd parity check	001001	02 02 07 82 30 30 31 30 30 31 00 00 00 00 03 4E
45. Parity check	001002	02 02 07 82 30 30 31 30 30 32 00 00 00 00 03 4D
46. No check	001000	02 02 07 82 30 30 31 30 30 30 00 00 00 00 03 4F
47. 8-bit data bits	00080	02 02 06 82 30 30 30 38 30 00 00 00 00 00 03 79
48. 7-bit data bits	00081	02 02 06 82 30 30 30 38 31 00 00 00 00 00 03 78
49. Stop bit 1	00090	02 02 06 82 30 30 30 39 30 00 00 00 00 00 03 78
50. Stop bit 2	00091	02 02 06 82 30 30 30 39 31 00 00 00 00 00 03 77
51. PS2	000600	02 02 07 82 30 30 30 36 30 30 00 00 00 00 03 4A
52. Trigger Mode	013300	02 02 07 82 30 31 33 33 30 30 00 00 00 00 03 49
53. Continuous scanning mode	013304	02 02 07 82 30 31 33 33 30 34 00 00 00 00 03 45
54. Turn on Sense Mode	02311	02 02 06 82 30 32 33 31 31 00 00 00 00 00 03 7A
55. Turn off Sense mode	02310	02 02 06 82 30 32 33 31 30 00 00 00 00 00 03 7B
56. High sensitivity	026531	02 02 07 82 30 32 36 35 33 31 00 00 00 00 03 3F

57. Medium Sensitivity	026537	02 02 07 82 30 32 36 35 33 37 00 00 00 00 03 39
58. Low sensitivity	02653F	02 02 07 82 30 32 36 35 33 46 00 00 00 00 03 2A
59. Flashing mode (key on)	013306	02 02 07 82 30 31 33 33 30 36 00 00 00 00 03 43
60. Flashing mode (Key off)	013305	02 02 07 82 30 31 33 33 30 35 00 00 00 00 03 44
61. Key delay single read mode	013301	02 02 07 82 30 31 33 33 30 31 00 00 00 00 03 48
62. 1 second timeout	023510	02 02 07 82 30 32 33 35 31 30 00 00 00 00 03 45
63. 3 second timeout	023530	02 02 07 82 30 32 33 35 33 30 00 00 00 00 03 43
64. 10 second timeout	0235A0	02 02 07 82 30 32 33 35 41 30 00 00 00 00 03 35
65. 15 second timeout	0235F0	02 02 07 82 30 32 33 35 46 30 00 00 00 00 03 30
66. Open Test Mode	02571	02 02 06 82 30 32 35 37 31 00 00 00 00 00 03 72
67. Close Test Mode	02570	02 02 06 82 30 32 35 37 30 00 00 00 00 00 03 73
68. No interval	026300	02 02 07 82 30 32 36 33 30 30 00 00 00 00 03 45
69. interval 0.1S	026301	02 02 07 82 30 32 36 33 30 31 00 00 00 00 03 44
70. interval 0.9S	026309	02 02 07 82 30 32 36 33 30 39 00 00 00 00 03 3C

71. interval 1.5S	02630F	02 02 07 82 30 32 36 33 30 46 00 00 00 00 03 2F
72. Transfer CODE ID	01401	02 02 06 82 30 31 34 30 31 00 00 00 00 00 03 7B
73. Transfer CODE ID	01400	02 02 06 82 30 31 34 30 30 00 00 00 00 00 03 7C
74. Add a custom prefix	0223XX	XX Hexadecimal code that corresponds to the "Appendix - Character Table" character, add one at a time, can add up. Example: add the character A (0x41), set the code to 022341, The instruction is: 02 02 07 82 30 32 32 33 34 31 00 00 00 00 03 44
75. Clear all prefixes	02220	02 02 06 82 30 32 32 32 30 00 00 00 00 00 03 7B
76. Add a custom suffix	0221XX	XX is the hexadecimal code of the "Appendix - Character Table" corresponding character, each time you add one, you can add it cumulatively. Example: Add the character B (0x42), the setting code is 022142, and the instruction is: 02 02 07 82 30 32 32 31 34 32 00 00 00 00 03 45
77. Clear all suffixes	02200	02 02 06 82 30 32 32 30 30 00 00 00 00 00 03 7D

78. Hide the leading 1 character	023401	02 02 07 82 30 32 33 34 30 31 00 00 00 00 03 46
79. Hide the leading 2 characters	023402	02 02 07 82 30 32 33 34 30 32 00 00 00 00 03 45
80. Hide the leading 3 characters	023403	02 02 07 82 30 32 33 34 30 33 00 00 00 00 03 44
81. Hide the leading 5 characters	023405	02 02 07 82 30 32 33 34 30 33 00 00 00 00 03 44
82. Unhide leading characters	023400	02 02 07 82 30 32 33 34 30 30 00 00 00 00 03 47
83. Hide the one-bit character	023301	02 02 07 82 30 32 33 33 30 31 00 00 00 00 03 47
84. Hide the last 2 characters	023302	02 02 07 82 30 32 33 33 30 32 00 00 00 00 03 46
85. Hides the last 3 characters	023303	02 02 07 82 30 32 33 33 30 33 00 00 00 00 03 45
86. Hide the last 5 characters	023305	02 02 07 82 30 32 33 33 30 35 00 00 00 00 03 43
87. Unhide the trailing characters	023300	02 02 07 82 30 32 33 33 30 30 00 00 00 00 03 48
88. Hiding the middle of the first character begins	024001	02 02 07 82 30 32 34 30 30 31 00 00 00 00 03 49
89. Hiding the middle of the second character starts	024002	02 02 07 82 30 32 34 30 30 32 00 00 00 00 03 48
90. Hiding the middle of the third character starts	024003	02 02 07 82 30 32 34 30 30 33 00 00 00 00 03 47
91. Hiding the middle of the 4th character starts	024004	02 02 07 82 30 32 34 30 30 34 00 00 00 00 03 46

92. Hiding the middle of the 5th character starts	024005	02 02 07 82 30 32 34 30 30 35 00 00 00 00 03 45
93. Hiding the middle of the 6th character starts	024006	02 02 07 82 30 32 34 30 30 36 00 00 00 00 03 44
94. Hiding the middle of the 7th character starts	024007	02 02 07 82 30 32 34 30 30 37 00 00 00 00 03 43
95. Hiding the middle of the 8th character starts	024008	02 02 07 82 30 32 34 30 30 38 00 00 00 00 03 42
96. Hide the middle 1 character	023901	02 02 07 82 30 32 33 39 30 31 00 00 00 00 03 41
97. Hide the middle 2 characters	023902	02 02 07 82 30 32 33 39 30 32 00 00 00 00 03 40
98. Hide the middle 3 characters	023903	02 02 07 82 30 32 33 39 30 33 00 00 00 00 03 3F
99. Hide the middle 4 characters	023904	02 02 07 82 30 32 33 39 30 34 00 00 00 00 03 3E
100. Hide the middle 5 characters	023905	02 02 07 82 30 32 33 39 30 35 00 00 00 00 03 3D
101. Hide the middle 6 characters	023906	02 02 07 82 30 32 33 39 30 36 00 00 00 00 03 3C
102. Hide the middle 7 characters	023907	02 02 07 82 30 32 33 39 30 37 00 00 00 00 03 3B
103. Hide the middle 8 characters	023908	02 02 07 82 30 32 33 39 30 38 00 00 00 00 03 3A
104. Unhide the middle character	023300	02 02 07 82 30 32 33 39 30 30 00 00 00 00 03 42
105. Add Enter	0212@«CR»	02 02 07 82 30 32 31 32 40 0D 00 00 00 00 03 5E



106. Add LF	0212@«LF»	02 02 07 82 30 32 31 32 40 0A 00 00 00 00 03 61
107. Add CR+LF	0213@«CR» «LF»	02 02 08 82 30 32 31 33 40 0D 0A 00 00 00 03 52
108. Add Tab	0122@«HT»	02 02 07 82 30 32 31 32 40 09 00 00 00 00 03 62
109. None	0210@	02 02 06 82 30 32 31 30 40 00 00 00 00 00 03 6E
110. Character conversion - Normal	02510	02 02 06 82 30 32 35 31 30 00 00 00 00 00 03 79
111. Character conversion - Upper	02511	02 02 06 82 30 32 35 31 31 00 00 00 00 00 03 78
112. Character conversion - Lower	02512	02 02 06 82 30 32 35 31 32 00 00 00 00 00 03 77
113. Character conversion- Inverse	02513	02 02 06 82 30 32 35 31 33 00 00 00 00 00 03 76
114. Enable UPC-A	000341	02 02 07 82 30 30 30 33 34 31 00 00 00 00 03 48
115. Disable UPC-A	000340	02 02 07 82 30 30 30 33 34 30 00 00 00 00 03 49
116. UPC-A Transmit Check Digit	00421	02 02 06 82 30 30 34 32 31 00 00 00 00 00 03 7A
117. UPC-A Do not Transmit Check Digit	00420	02 02 06 82 30 30 34 32 30 00 00 00 00 00 03 7B
118. UPC-A Transfer system character	00400	02 02 06 82 30 30 34 30 30 00 00 00 00 00 03 7D
119. UPC-A Do not send system character	00401	02 02 06 82 30 30 34 30 31 00 00 00 00 00 03 7C

120. UPC-A Barcode information extension	00391	02 02 06 82 30 30 33 39 31 00 00 00 00 00 03 74
121. UPC-A Barcode information does not expand	00390	02 02 06 82 30 30 33 39 30 00 00 00 00 00 03 75
122. Enable UPC-E	00351	02 02 06 82 30 30 33 35 31 00 00 00 00 00 03 78
123. Disable UPC-E	00350	02 02 06 82 30 30 33 35 30 00 00 00 00 00 03 79
124. UPC-E Transmit Check Digit	00441	02 02 06 82 30 30 34 34 31 00 00 00 00 00 03 78
125. UPC-E Do not Transmit Check Digit	00440	02 02 06 82 30 30 34 34 30 00 00 00 00 00 03 79
126. UPC-E Transfer system character	00430	02 02 06 82 30 30 34 33 30 00 00 00 00 00 03 7A
127. UPC-E Do not send system characters	00431	02 02 06 82 30 30 34 33 31 00 00 00 00 00 03 79
128. UPC-E Bar code information extension	00381	02 02 06 82 30 30 33 38 31 00 00 00 00 00 03 75
129. UPC-E Barcode information does not expand	00380	02 02 06 82 30 30 33 38 30 00 00 00 00 00 03 76
130. Enable EAN-8	00371	02 02 06 82 30 30 33 37 31 00 00 00 00 00 03 76
131. Disable EAN-8	00370	02 02 06 82 30 30 33 37 30 00 00 00 00 00 03 77
132. EAN-8 Transmit Check Digit	00571	02 02 06 82 30 30 35 37 31 00 00 00 00 00 03 74
133. EAN-8 Do not Transmit Check Digit	00570	02 02 06 82 30 30 35 37 30 00 00 00 00 00 03 75

134. EAN-8 Transmit System character	00560	02 02 06 82 30 30 35 36 30 00 00 00 00 00 03 76
135. EAN-8 Do not Transmit System character	00561	02 02 06 82 30 30 35 36 31 00 00 00 00 00 03 75
136. Enable EAN-13	00361	02 02 06 82 30 30 33 36 31 00 00 00 00 00 03 77
137. Disable EAN-13	00360	02 02 06 82 30 30 33 36 30 00 00 00 00 00 03 78
138. EAN-13 Transmit Check Digit	00461	02 02 06 82 30 30 34 36 31 00 00 00 00 00 03 76
139. EAN-13 Do not transmit Check Digit	00460	02 02 06 82 30 30 34 36 30 00 00 00 00 00 03 77
140. EAN-13 Extended to ISBN	00481	02 02 06 82 30 30 34 38 31 00 00 00 00 00 03 74
141. EAN-13 Do not Extended to ISBN	00480	02 02 06 82 30 30 34 38 30 00 00 00 00 00 03 75
142. EAN-13 Extended to ISSN	01501	02 02 06 82 30 31 35 30 31 00 00 00 00 00 03 7A
143. EAN-13 Do not Extended to ISSN	01500	02 02 06 82 30 31 35 30 30 00 00 00 00 00 03 7B
144. Enable Code 128	00691	02 02 06 82 30 30 36 39 31 00 00 00 00 00 03 71
145. Disable Code 128	00690	02 02 06 82 30 30 36 39 30 00 00 00 00 00 03 72
146. Enable Code 39	00221	02 02 06 82 30 30 32 32 31 00 00 00 00 00 03 7C
147. Disable Code 39	00220	02 02 06 82 30 30 32 32 30 00 00 00 00 00 03 7D

148. Code 39 Transmit Start/Stop Character	00281	02 02 06 82 30 30 32 38 31 00 00 00 00 00 03 76
149. Code 39 Do not Transmit Start/Stop Character	00280	02 02 06 82 30 30 32 38 30 00 00 00 00 00 03 77
150. Code 39 Transfer check	00251	02 02 06 82 30 30 32 35 31 00 00 00 00 00 03 79
151. Code 39 No transmission check	00250	02 02 06 82 30 30 32 35 30 00 00 00 00 00 03 7A
152. Code 39 Open MOD43 Check	00241	02 02 06 82 30 30 32 34 31 00 00 00 00 00 03 7A
153. Code 39 Close MOD43 Check	00240	02 02 06 82 30 30 32 34 30 00 00 00 00 00 03 7B
154. Code 39 Enable Code 39 Full ASCII	00231	02 02 06 82 30 30 32 33 31 00 00 00 00 00 03 7B
155. Code 39 - Disable Code 39 Full ASCII	00230	02 02 06 82 30 30 32 33 30 00 00 00 00 00 03 7C
156. Code 39 The minimum reading length is 1	003201	02 02 07 82 30 30 33 32 30 31 00 00 00 00 03 4A
157. Code 39 The minimum reading length is 2	003202	02 02 07 82 30 30 33 32 30 32 00 00 00 00 03 49
158. Code 39 The minimum reading length is 3	003203	02 02 07 82 30 30 33 32 30 33 00 00 00 00 03 48
159. Enable Code 32	01951	02 02 06 82 30 31 39 35 31 00 00 00 00 00 03 71
160. Disable Code 32	01950	02 02 06 82 30 31 39 35 30 00 00 00 00 00 03 72
161. Enable Code 93	00621	02 02 06 82 30 30 36 32 31 00 00 00 00 00 03 78

162. Disable Code 93	00620	02 02 06 82 30 30 36 32 30 00 00 00 00 00 03 79
163. Code 93 Transmit check Digit	01901	02 02 06 82 30 31 39 30 31 00 00 00 00 00 03 76
164. Code 93 Transmit check Digit	01900	02 02 06 82 30 31 39 30 30 00 00 00 00 00 03 77
165. Enable Code 11	01261	02 02 06 82 30 31 32 36 31 00 00 00 00 00 03 77
166. Disable Code 11	01260	02 02 06 82 30 31 32 36 30 00 00 00 00 00 03 78
167. Code 11 C Check	01272	02 02 06 82 30 31 32 37 32 00 00 00 00 00 03 75
168. Code 11 CK Check	01273	02 02 06 82 30 31 32 37 33 00 00 00 00 00 03 74
169. Code 11 automatic CK Check	01271	02 02 06 82 30 31 32 37 31 00 00 00 00 00 03 76
170. Code 11 The minimum reading length is 1	012801	02 02 07 82 30 31 32 38 30 31 00 00 00 00 03 44
171. Code 11 The minimum reading length is 4	012804	02 02 07 82 30 31 32 38 30 34 00 00 00 00 03 41
172. Enable Interleaved 2 of 5	00961	02 02 06 82 30 30 39 36 31 00 00 00 00 00 03 71
173. Disable Interleaved 2 of 5	00960	02 02 06 82 30 30 39 36 30 00 00 00 00 00 03 72
174. Transfer Interleaved 2 of 5 Check	00251	02 02 06 82 30 30 32 35 31 00 00 00 00 00 03 79
175. Do not transmit Interleaved 2 of 5 checks	00250	02 02 06 82 30 30 32 35 30 00 00 00 00 00 03 7A

176. Open Interleaved 2 of 5 Check	00241	02 02 06 82 30 30 32 34 31 00 00 00 00 00 03 7A
177. Close Interleaved 2 of 5 Check	00240	02 02 06 82 30 30 32 34 30 00 00 00 00 00 03 7B
178. Interleaved 2 of 5 Minimum Read Length is 1	009702	02 02 07 82 30 30 39 37 30 32 00 00 00 00 03 3E
179. Interleaved 2 of 5 Minimum Read Length is 4	009704	02 02 07 82 30 30 39 37 30 34 00 00 00 00 03 3C
180. Enable Matrix 2 of 5	01461	02 02 06 82 30 31 34 36 31 00 00 00 00 00 03 75
181. Disable Matrix 2 of 5	01460	02 02 06 82 30 31 34 36 30 00 00 00 00 00 03 76
182. Matrix 2 of 5 Minimum Read Length is 1	014801	02 02 07 82 30 31 34 38 30 31 00 00 00 00 03 42
183. Matrix 2 of 5 Minimum Read Length is 3	014803	02 02 08 82 30 31 34 38 30 31 33 00 00 00 03 0E
184. Enable Industrial 2 of 5	01061	02 02 06 82 30 31 30 36 31 00 00 00 00 00 03 79
185. Disable Industrial 2 of 5	01060	02 02 06 82 30 31 30 36 30 00 00 00 00 00 03 7A
186. Industrial 2 of 5 Minimum Read Length is 1	010701	02 02 07 82 30 31 30 37 30 31 00 00 00 00 03 47
187. Industrial 2 of 5 Minimum Read Length is 3	010703	02 02 07 82 30 31 30 37 30 33 00 00 00 00 03 45
188. Enable Standard 2 of 5	01871	02 02 06 82 30 31 38 37 31 00 00 00 00 00 03 70
189. Disable Standard 2 of 5	01870	02 02 06 82 30 31 38 37 30 00 00 00 00 00 03 71

190. Standard 2 of 5 Minimum Read Length is 1	018901	02 02 07 82 30 31 38 39 30 31 00 00 00 00 03 3D
191. Standard 2 of 5 Minimum Read Length is 3	018904	02 02 07 82 30 31 38 39 30 34 00 00 00 00 03 3A
192. Enable Codabar	00851	02 02 06 82 30 30 38 35 31 00 00 00 00 00 03 73
193. Disable Codabar	00850	02 02 06 82 30 30 38 35 30 00 00 00 00 00 03 74
194. Codabar Transmit Start/Stop Character	00861	02 02 06 82 30 30 38 36 31 00 00 00 00 00 03 72
195. Codabar Do not Transmit Start/Stop Character	00860	02 02 06 82 30 30 38 36 30 00 00 00 00 00 03 73
196. Codabar the minimum reading length is 1	018701	02 02 07 82 30 31 38 37 30 31 00 00 00 00 03 3F
197. Codabar the minimum reading length is 4	018704	02 02 07 82 30 31 38 37 30 34 00 00 00 00 03 3C
198. Enable Plessey	01161	02 02 06 82 30 31 31 36 31 00 00 00 00 00 03 78
199. Disable Plessey	01160	02 02 06 82 30 31 31 36 30 00 00 00 00 00 03 79
200. Plessey the minimum reading length is 1	011901	02 02 07 82 30 31 31 39 30 31 00 00 00 00 03 44
201. Plessey the minimum reading length is 4	011904	02 02 07 82 30 31 31 39 30 34 00 00 00 00 03 41
202. Enable MSI Plessey	01151	02 02 06 82 30 31 31 35 31 00 00 00 00 00 03 79
203. Disable MSI Plessey	01150	02 02 06 82 30 31 31 35 30 00 00 00 00 00 03 7A

204. MSI Plessey The minimum reading length is 1	011801	02 02 07 82 30 31 31 38 30 31 00 00 00 00 03 45
205. MSI Plessey The minimum reading length is 4	011804	02 02 07 82 30 31 31 38 30 34 00 00 00 00 03 42
206. Enable RSS Limited	01771	02 02 06 82 30 31 37 37 31 00 00 00 00 00 03 71
207. Disable RSS Limited	01770	02 02 06 82 30 31 37 37 30 00 00 00 00 00 03 72
208. Enable RSS Omni	01671	02 02 06 82 30 31 36 37 31 00 00 00 00 00 03 72
209. Disable RSS Omni	01670	02 02 06 82 30 31 36 37 30 00 00 00 00 00 03 73
210. Enable China Post	01571	02 02 06 82 30 31 35 37 31 00 00 00 00 00 03 73
211. Disable China Post	01570	02 02 06 82 30 31 35 37 30 00 00 00 00 00 03 74
212. Enable 2-Digit add-on Code	00551	02 02 06 82 30 30 35 35 31 00 00 00 00 00 03 76
213. Enable 5-Digit add-on Code	00552	02 02 06 82 30 30 35 35 32 00 00 00 00 00 03 75
214. Enable 2-Digit or 5-Digit add-on Code	00553	02 02 06 82 30 30 35 35 33 00 00 00 00 00 03 74
215. Disable Add-on Code	00550	02 02 06 82 30 30 35 35 30 00 00 00 00 00 03 77
216. Add-on Code Required	02611	02 02 06 82 30 32 36 31 31 00 00 00 00 00 03 77
217. Add-on Code Not Required	02610	02 02 06 82 30 32 36 31 30 00 00 00 00 00 03 78



218. Enable response	02421	02 02 06 82 30 32 34 32 31 00 00 00 00 00 03 78
219. Disable response	02420	02 02 06 82 30 32 34 32 30 00 00 00 00 00 03 79
220. Turn on feedback sound	01411	02 02 06 82 30 31 34 31 31 00 00 00 00 00 03 7A
221. Turn off feedback sound	01410	02 02 06 82 30 31 34 31 30 00 00 00 00 00 03 7B

## Appendix - Character Table (for adding suffixes)



1001

SOH (01)



1004

EOT (04)



1007

BEL (07)



1010

LF (0A)



1013

CR (0D)



1016

DEL (10)



1019

DC3 (13)



1022



1002

STX (02)



1005

ENQ (05)



1008

Backspace (08)



1011

VT (0B)



1014

SO (0E)



1017

DC1 (11)



1020

DC4 (14)



1023



1003

ETX (03)



1006

ACK (06)



1009

HT (09)



1012

FF (0C)



1015

SI (0F)



1018

DC2 (12)



1021

NAK (15)



1024





1025  
EM (19)



1028  
FS (1C)



1031  
US (1F)



1034  
" (22)



1037  
% (25)



1040  
( (28)



1043  
+ (2B)



1046  
. (2E)



1026  
SUB (1A)



1029  
GS (1D)



1032  
Space (20)



1035  
# (23)



1038  
& (26)



1041  
) (29)



1044  
, (2C)



1047  
/ (2F)



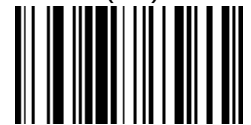
1027  
ESC (1B)



1030  
RS (1E)



1033  
! (21)



1036  
\$ (24)



1039  
' (27)



1042  
\* (2A)



1045  
- (2D)



1048  
0 (30)



1049  
1 (31)



1052  
4 (34)



1055  
7 (37)



1058  
: (3A)



1061  
= (3D)



1064  
@ (40)



1067  
C (43)



1050  
2 (32)



1053  
5 (35)



1056  
8 (38)



1059  
; (3B)



1062  
> (3E)



1065  
A (41)



1068  
D (44)



1051  
3 (33)



1054  
6 (36)



1057  
9 (39)



1060  
< (3C)



1063  
? (3F)



1066  
B (42)



1069  
E (45)



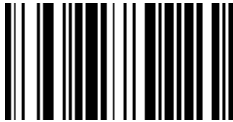
1070  
F (46)



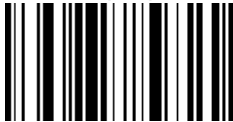
1073  
I (49)



1076  
L (4C)



1079  
O (4F)



1082  
R (52)



1085  
U (55)



1088  
X (58)



1091  
[ (5B)

1071  
G (47)



1074  
J (4A)



1077  
M (4D)



1080  
P (50)



1083  
S (53)



1086  
V (56)



1089  
Y (59)

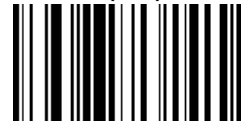


1092  
\ (5C)

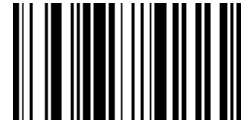
1072  
H (48)



1075  
K (4B)



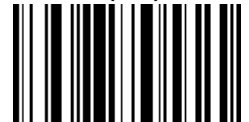
1078  
N (4E)



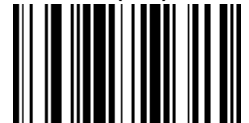
1081  
Q (51)



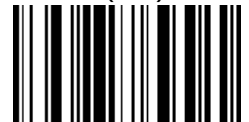
1084  
T (54)



1087  
W (57)



1090  
Z (5A)



1093  
] (5D)



1094  
^ (5E)



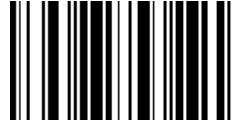
1095  
\_ (5F)



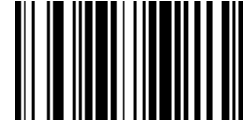
1096  
' (60)



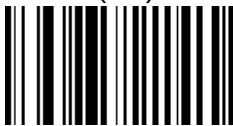
1097  
a (61)



1098  
b (62)



1099  
c (63)



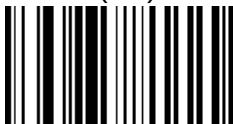
1100  
d (64)



1101  
e (65)



1102  
f (66)



1103  
g (67)



1104  
h (68)



1105  
i (69)



1106  
j (6A)



1107  
k (6B)



1108  
l (6C)



1109  
m (6D)



1110  
n (6E)



1111  
o (6F)



1112  
p (70)



1113  
q (71)



1114  
r (72)



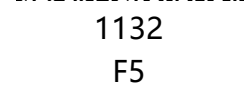
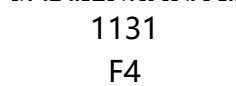
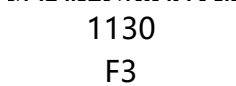
1115



1116



1117







1139  
F12



1142  
Page up



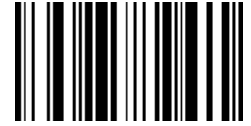
1140  
Insert



1143  
Delete



1141  
Home



1144  
END



1145  
Page arrow



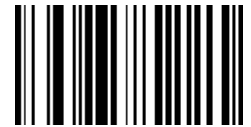
1148  
Down arrow



1146  
Right arrow



1149  
Up arrow



1147  
Left arrow

## Appendix - ASCII code table

Hexadecimal	ASCII value	character
<b>00</b>	00	NUL (Null char.)
<b>01</b>	01	SOH (Start of Header)
<b>02</b>	02	STX (Start of Text)
<b>03</b>	03	ETX (End of Text)
<b>04</b>	04	EOT (End of Transmission)
<b>05</b>	05	ENQ (Enquiry)
<b>06</b>	06	ACK (Acknowledgment)
<b>07</b>	07	BEL (Bell)
<b>08</b>	08	BS (Backspace)
<b>09</b>	09	HT (Horizontal Tab)
<b>0A</b>	10	LF (Line Feed)
<b>0B</b>	11	VT (Vertical Tab)
<b>0C</b>	12	FF (Form Feed)
<b>0D</b>	13	CR (Carriage Return)
<b>0E</b>	14	SO (Shift Out)
<b>0F</b>	15	SI (Shift In)
<b>10</b>	16	DLE (Data Link Escape)
<b>11</b>	17	DC1 (XON) (Device Control 1) XON)
<b>12</b>	18	DC2 (Device Control 2)
<b>13</b>	19	DC3 (XOFF) (Device Control 3) (XOFF)
<b>14</b>	20	DC4 (Device Control 4)
<b>15</b>	21	NAK (Negative Acknowledgment)
<b>16</b>	22	SYN (Synchronous Idle)
<b>17</b>	23	ETB (End of Trans. Block)
<b>18</b>	24	CAN (Cancel)
<b>19</b>	25	EM (End of Medium)
<b>1A</b>	26	SUB (Substitute)

<b>1B</b>	27	ESC (Escape)
<b>1C</b>	28	FS (File Separator)
<b>1D</b>	29	GS (Group Separator)
<b>1E</b>	30	RS (Request to Send)
<b>1F</b>	31	US (Unit Separator)
<b>20</b>	32	SP (Space)
<b>21</b>	33	! (Exclamation Mark)
<b>22</b>	34	" (Double Quote)
<b>23</b>	35	# (Number Sign)
<b>24</b>	36	\$ (Dollar Sign)
<b>25</b>	37	% (Percent)
<b>26</b>	38	& (Ampersand)
<b>27</b>	39	` (Single Quote)
<b>28</b>	40	( (Right / Closing Parenthesis)
<b>29</b>	41	) (Right / Closing Parenthesis)
<b>2A</b>	42	* (Asterisk)
<b>2B</b>	43	+ (Plus)
<b>2C</b>	44	, (Comma)
<b>2D</b>	45	- (Minus / Dash)
<b>2E</b>	46	. (Dot)
<b>2F</b>	47	/ (Forward Slash)
<b>30</b>	48	0
<b>31</b>	49	1
<b>32</b>	50	2
<b>33</b>	51	3
<b>34</b>	52	4
<b>35</b>	53	5
<b>36</b>	54	6
<b>37</b>	55	7

<b>38</b>	56	8
<b>39</b>	57	9
<b>3A</b>	58	: (Colon)
<b>3B</b>	59	; (Semi-colon)
<b>3C</b>	60	< (Less Than)
<b>3D</b>	61	= (Equal Sign)
<b>3E</b>	62	> (Greater Than)
<b>3F</b>	63	? (Question Mark)
<b>40</b>	64	@ (AT Symbol)
<b>41</b>	65	A
<b>42</b>	66	B
<b>43</b>	67	C
<b>44</b>	68	D
<b>45</b>	69	E
<b>46</b>	70	F
<b>47</b>	71	G
<b>48</b>	72	H
<b>49</b>	73	I
<b>4A</b>	74	J
<b>4B</b>	75	K
<b>4C</b>	76	L
<b>4D</b>	77	M
<b>4E</b>	78	N
<b>4F</b>	79	O
<b>50</b>	80	P
<b>51</b>	81	Q
<b>52</b>	82	R
<b>53</b>	83	S
<b>54</b>	84	T

<b>55</b>	85	U
<b>56</b>	86	V
<b>57</b>	87	W
<b>58</b>	88	X
<b>59</b>	89	Y
<b>5A</b>	90	Z
<b>5B</b>	91	[ (Left / Opening Bracket)
<b>5C</b>	92	\ (Back Slash)
<b>5D</b>	93	] (Right / Closing Bracket)
<b>5E</b>	94	^ (Caret / Circumflex)
<b>5F</b>	95	_ (Underscore)
<b>60</b>	96	' (Grave Accent)
<b>61</b>	97	A
<b>62</b>	98	B
<b>63</b>	99	C
<b>64</b>	100	d
<b>65</b>	101	e
<b>66</b>	102	f
<b>67</b>	103	g
<b>68</b>	104	h
<b>69</b>	105	i
<b>6A</b>	106	j
<b>6B</b>	107	k
<b>6C</b>	108	l
<b>6D</b>	109	m
<b>6E</b>	110	n
<b>6F</b>	111	o
<b>70</b>	112	p
<b>71</b>	113	q

<b>72</b>	114	r
<b>73</b>	115	s
<b>74</b>	116	t
<b>75</b>	117	u
<b>76</b>	118	v
<b>77</b>	119	w
<b>78</b>	120	x
<b>79</b>	121	y
<b>7A</b>	122	z
<b>7B</b>	123	{ (Left/ Opening Brace)
<b>7C</b>	124	(Vertical Bar)
<b>7D</b>	125	} (Right/Closing Brace)
<b>7E</b>	126	~ (Tilde)
<b>7F</b>	127	DEL (Delete)

## Introduction to part 2 – Wireless Functions

This second part of the manual is mainly used to introduce how to set up wireless related functions of wireless scanner products.

You can set the scanner by setting it up.

### Setup code

The scanner can set the corresponding function by reading one or a group of special barcodes. In the following chapters, we will introduce the corresponding setting options and functions in detail and provide the corresponding setting codes.

## Use instructions

All the functions of this barcode scanner are set by scanning the setting barcodes. First, scan "enter setup mode" barcode, and then scan the function barcode to be set, then scan the "exit setup mode" barcode after finishing setting. Some common function barcodes can scan the function barcode directly to complete the setting. This kind of barcode identification is ★, such as "★ power display".



%%EnterSet

Enter Setup Mode



%%ExitSet

Exit Setup Mode

Note: Wireless Version 1.18D later supports setting without entering or exiting settings.



# Restore Wireless Parameters

If in use of the process, accidentally scan to other function settings code, which led to the scanning function cannot be used normally, through the scan initialization barcode to restore to the initialization state.



%%SpecCode93

Restore Wireless Parameters

## Instructions:

This bar code is most likely to be used in the following situations:

1. Error in scanner setting.
2. You forget what settings you made for scanners before, and you don't want to use the previous settings.
3. Set up the scanner to use some unusual functions, and use after completion.

## Setting Custom Default Settings

By setting custom default settings, the default values of wireless parameters of wireless scanner can be set to the required functions. First scan the "Enter Settings Mode" bar code, then scan the required wireless parameter function, and then scan the "Exit Settings Mode" bar code after the completion of settings. The existing function will replace the original factory default value after the settings are completed, and the original state will not be restored even if the settings for restoring wireless parameters are set.



%%SpecCode92

Setting Custom Default Settings

## Version



%%SpecCode39

Display version information

# Wireless Matching Function Settings

This equipment can complete the wireless pairing operation in accordance with the following steps, the default factory has good pairing.



## Matching with Receiver

1. Pull out the wireless Receiver from the computer.
2. Scan " Enter Setup Mode ".
3. Scanning " Matching with Dongle " enters the matching mode, at which time the scanner light is extinguished and the code cannot be read.
4. Insert the receiver into the computer USB interface.
5. When you hear "DI", the receiver pair is successful.
6. Scan "Exit Setup Mode"

# Communication mode switching

a: Start the scanner and scan the "Enter Setup Mode" bar code



%%EnterSet

Enter Setup Mode

b: Scanning a Bar Code for a Communication Mode Based on Requirements



%%SpecCodeA8

2.4G Mode



%%SpecCodeA9

Virtual Bluetooth Mode



%%SpecCodeAA

Bluetooth HID Mode



%%SpecCodeAB

Bluetooth SPP Mode



%%SpecCodeAC

Bluetooth BLE Mode

c: Scan the "Exit Setup Mode" bar code and set up the communication mode to complete.



%%ExitSet



%%ExitSet

Exit Setup Mode

## Shutdown

Users can set bar codes by referring to "automatic sleep time". When users do not need the scanner to be in working state, they first scan the "Enter Setting Mode" bar code, and then scan the "Shutdown Instruction" to set bar codes. When the settings are completed, the scanner will be shut down immediately.



%%SpecCode38

Shutdown

## Electric quantity display

When users need to view the current scanner power, they can directly scan the "power display" set bar code, and view the current scanner power.



%%SpecCode15

★Electric quantity display

## Wireless transmission mode

The barcode scanner has two operating modes: Synchronous Mode and storage mode, through a different set code to operate the mode switch:

a: First scan "Enter setup mode " barcode

b: Scan the required operating mode barcode

c: Scan "Exit Set mode" barcode to switch the desired mode of operation

### Synchronous mode

Scanning "Synchronization Mode" sets bar code, setting bar scanner as synchronization mode, users scan common bar code, that is, sweep-and-pass, and discard it when disconnected.



%%SpecCode10

★Synchronous mode\*

## Storage mode

Scanning "storage mode" sets bar code, setting bar scanner as storage mode, users scan common bar code, do not upload directly to the computer, data will be stored in the bar code.



%%SpecCode11

★ Storage mode



# Data Control (Data Processing for Storage Mode)

## Data upload

When users need to upload data stored in barcodes to computers or mobile devices, scanning "data upload" can upload data to computers or mobile devices.

When using data upload, the barcode stored by the original scanner will not be deleted unless the data is scanned to clear the barcode.



%%SpecCode16

★data upload

## Total data

When users need to count the total amount of data stored in barcodes, scanning "Total Data" can upload the total amount of data stored in scanners to computers or mobile devices.



%%SpecCode17

★Total data

## Data clear

When the user needs to clear the data stored in the scanner, scanning "data clear" can clear all the data stored in the scanner.



%%SpecCode18

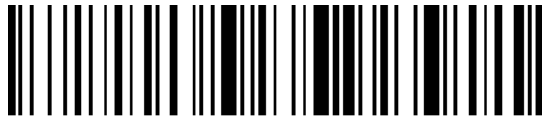
★data clear



# Long press 8 seconds into Bluetooth HID search

When using Bluetooth Scanner, the Bluetooth configuration connection can be faster when the HID search of Bluetooth is opened for 8 seconds.

A: Start the scanner and scan the "Enter Setup Mode" bar code



%%EnterSet

Enter Setup Mode

B: Functional Barcode for Scanning



%%SpecCode79

long press 8 seconds to enter Bluetooth HID search



%%SpecCode78

Close long press 8 seconds to enter Bluetooth HID search

C: Scan the "Exit Setup Mode" bar code and set up the communication mode to complete.



%%ExitSet

Exit Setup Mode

# Scanner Matching Steps

## Computer Matching (2.4 G)

For 2.4G matching steps, support XP, Win7, Win8, Win10, etc.

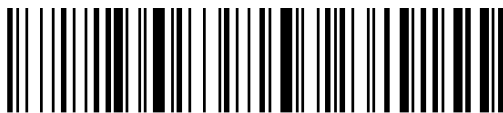
A: Start the scanner, scan "Enter Setup Mode" barcode



%%EnterSet

Enter Setup Mode

B: Scan "2.4G Mode" barcode



%%SpecCodeA8

2.4G Mode

C: Scan the "Matching with Receiver" bar code and enter the pairing state. The blue light on the left flashes quickly.

Note: At this time, the scanner is in a paired state, and the scanner does not glow when pressing the key.



%%SpecCode99

Matching with Receiver

D: Insert Dongle (receiver) and hear a "drop" sound, indicating the success of the connection pairing. The blue indicator on the right is always on.

E: Scan the "Exit Setup Mode" bar code to complete the matching process.



%%ExitSet

Exit Setup Mode

## Bluetooth terminal matching

Using Bluetooth mode, support Android, IOS system or PC terminal with Bluetooth function.

### **Method 1:**

A: Start the bar scanner, press the button for 8 seconds, and enter the Bluetooth HID matching mode. The left and right blue lights flicker alternately.

B: Turn Bluetooth on the device and search for "Barcode Scanner HID".

C: Click on the "Barcode Scanner HID" Bluetooth device to enter the pairing state.

d: Match success "Di" sound, the right blue light is always bright

## Method 2:

a: Start the scanner, scan "Enter Setup Mode" barcode



%%EnterSet

Enter Setup Mode

b: Scan the "Bluetooth HID mode" barcode



%%SpecCodeAA

Bluetooth HID Mode

c: Scan the "Paired With Dongle" barcode, enter the pair state. The left and right blue light will flash alternately. ( Or click the button double times to exit setup mode, back to the scanning state.)



%%SpecCode99

Paired With Dongle

d: Open Bluetooth in the device and search for the Barcode scanner HID

e: Click the Bluetooth device to enter the match status

f: Match success "Di" sound, the right blue light is always bright

g: Scan "Exit Setup Mode" barcode

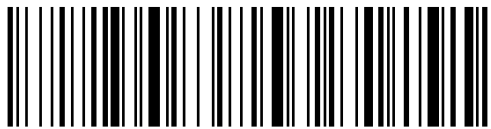


%%ExitSet

Exit Setup Mode

# Android, IOS system keyboard settings (Bluetooth function)

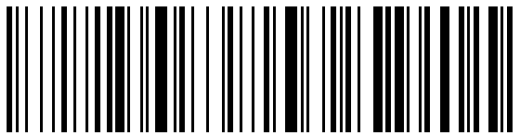
IOS keyboard out or hide (HID Mode)



%%SpecCode1A

★Out Or Hide

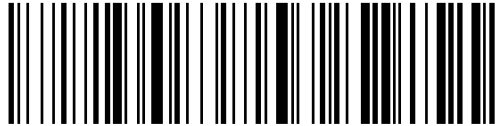
Double click for out IOS keyboard (Only HID Mode)



%%SpecCode7B

★Double click for out IOS keyboard

Double click for close IOS keyboard (Only HID Mode)



%%SpecCode7A

★Double Click For Close IOS keyboard

For keyboard display of Android system, please contact the supplier for Bluetooth input method APP (because of Android system, some mobile phone manufacturers can display virtual keyboard when connecting Bluetooth scanner)

# Transmission Speed Setting

A: Start the scanner and scan the "Enter Setup Mode" barcode



%%EnterSet

Enter Setup Mode

B: Select the desired keyboard language



%%SpecCodeB0

Fast



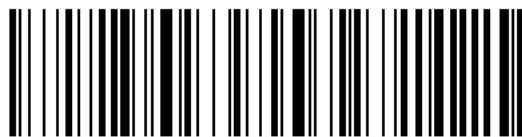
%%SpecCodeB1

Medium



%%SpecCodeB2

Low



%%SpecCodeB3

Very Low

c: scan "Exit Setup Mode" barcode



%%ExitSet



Exit Setup Mode

# Set Bluetooth Name

A: start scanning scanner, "enter setup mode" bar code



%%EnterSet

enter setup mode

B: Scan "Set Bluetooth Name" Barcode



%%SpecCodeEC

Set Bluetooth Name

C: Scan Bluetooth Name Barcode

Note: The default name of Bluetooth is "Barcode Scanner". After this step is set, the bar code will be set to the name of Bluetooth.

A) Names can only be set to 16 bytes at most. If the name bar code exceeds 16 bytes, the first 16 bytes are used as Bluetooth names by the scanner.

B) The complete name of Bluetooth includes: Bluetooth name + protocol type, which only supports modification of Bluetooth name. After changing the Bluetooth name, the names of all Bluetooth protocols have changed.

For example, if the Bluetooth name is Scanner, then the Bluetooth HID name is Scanner HID, the SPP name is Scanner SPP, and the BLE name is Scanner BLE.



Scanner

Sample Bluetooth Name "Scanner "

C: Scan "Exit Setup Mode" bar code, set successfully.



%%ExitSet

Exit Setup Mode

## Read Bluetooth Name

Scanning the "Read Bluetooth Name" bar code will query the Bluetooth name of the scanner.

Scanning the "Read Bluetooth Name" bar code will query the Bluetooth name of the scanner.



%%SpecCodeED

Read Bluetooth Name

# Sound setting

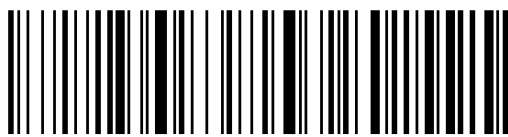
A: Start the scanner and scan into the setup mode barcode



%%EnterSet

Enter Setup Mode

B: Select the appropriate sound size or frequency to scan according to the needs and set the bar code



%%SpecCode94

turn sound off



%%SpecCode95

Low volume



%%SpecCode96

Middle volume



%%SpecCode97

High volume \*



%%SpecCode7C

Buzzer frequency 2K



%%SpecCode7D

Buzzer frequency 2.7K

C: Scan "Exit Settings Mode" bar code, set successfully.



%%ExitSet

Exit Setup Mode

# Vibration setting

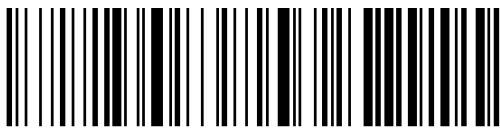
A: Start the scanner and scan into the setup mode barcode



%%EnterSet

Enter Setup Mode

B: Select the bar code that you want to turn on or off the vibration



%%SpecCode76

Turn Off Vibration (optional)



%%SpecCode77

Turn On Vibration (optional)

C: scan " Exit Setup Mode" barcode



%%ExitSet

Exit Setup Mode

Note: Vibration function is selected for some products.

# Sleep time setting

A: Start the scanner and scan into the setup mode barcode



%%EnterSet

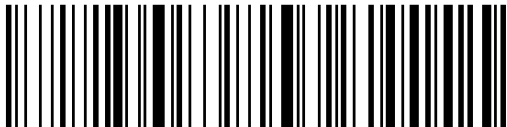
Enter Setup Mode

b: Select the sleep interval bar code



%%SpecCode30

Sleep interval 30s



%%SpecCode31

Sleep interval 1min



%%SpecCode32

Sleep interval 2min



%%SpecCode33

Sleep interval 5min



%%SpecCode34

Sleep interval 10min



%%SpecCode35

Sleep interval 30min



%%SpecCode36

Never Sleep



%%SpecCode38

Sleep Immediately

c: scan" Exit Setup Mode" barcode



%%ExitSet

Exit Setup Mode



# Language Settings

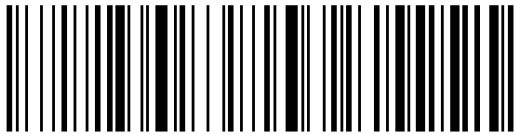
A: Start the scanner and scan into the setup mode barcode



%%EnterSet

Enter Setup Mode

b: Select the desired keyboard language



%%SpecCode40

English



%%SpecCode41

German



%%SpecCode42

French



%%SpecCode43

Spanish



%%SpecCode44

Italian



%%SpecCode45

Japanese



%%SpecCode47

Belgian



%%SpecCode46

International general keyboard

c: scan" Exit Setup Mode" barcode



%%ExitSet

Exit Setup Mode

Note: The international general keyboard supports all PC-side small languages.

# Suffix setting

A: Start the scanner and scan the "Enter Setup Mode" bar code



%%EnterSet

Enter Setup Mode

B: Select the appropriate terminator to scan according to the requirement and set the bar code. The default is CR.



%%SpecCode9C

Add CR\*



%%SpecCode9D

Add LF



%%SpecCode9E

Add CR+LF



%%SpecCode9F

Add TAB



%%SpecCode9F

None

C: Scan "Exit Setup Mode" bar code, complete settings



%%ExitSet

C: Scan "Exit Setup Mode" bar code, complete settings

# Case conversion settings

A: Start the scanner and scan the "Enter Setup Mode" bar code



%%EnterSet

Enter Setup Mode

B: Select the appropriate barcode settings to scan according to the requirements, and do not convert case to case.



%%SpecCodeA3

Convert to lowercase



%%SpecCodeA4

Convert to uppercase



%%SpecCodeA6

Case interchange



%%SpecCodeA5

No case conversion \*

C: Scan "Exit Setup Mode" bar code, complete settings



%%ExitSet

Exit Setup Mode

Note: This feature requires support after version 1.18D.



# Hidden Character GS Replacement Function

A: Start the scanner and scan the "Enter Setup Mode" bar code



%%EnterSet

Enter Setup Mode

B: Select the appropriate settings to scan the bar code according to the requirement, and set whether the GS character bit "|" needs to be replaced.



%%SpecCodeEF

Open GS character instead of "|"



%%SpecCodeEE

Close the GS character and replace it with "|"\*

C: Scan "Exit Settings Mode" bar code, complete settings



%%ExitSet

Exit Setup Mode

Note: This feature requires support after version 1.18D.

# Add prefix and suffix settings

This product supports up to 32-byte prefix and suffix settings.

A: Start the scanner and scan the "Enter Setup Mode" bar code



%%EnterSet

Enter Setup Mode

B: Select the appropriate bar code to scan according to the requirements, and set the prefix and suffix to add.



%%SpecCode9A

Set prefix



%%SpecCode9B

Set suffix

C: Scan "Exit Settings Mode" bar code, complete settings



%%ExitSet

Exit Setup Mode



### Setting the prefix and suffix steps

A: First scan the "Enter Settings Mode" bar code;

B: Scan the "Set Prefix" or "Set Suffix" barcodes;

C: Scanning the barcode corresponding to the characters that need to be added according to Appendix-Character Table;

C: Scan the "Exit Settings Mode" bar code to complete the settings.

### Cancel the prefix and suffix steps

A: First scan the "Enter Settings Mode" bar code;

B: Scan the "Set Prefix" or "Set Suffix" barcodes;

C: Scan the "Exit Settings Mode" bar code to complete the settings.

## Appendix -Led & Buzzer state description

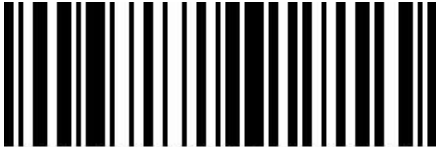
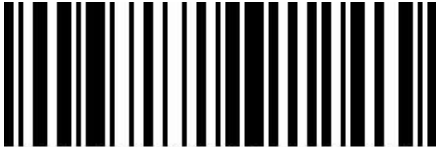
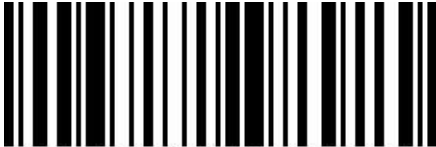

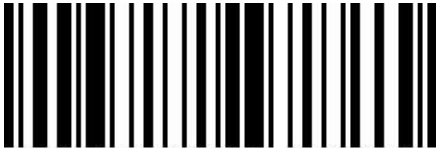


LED Light	Description
Left blue LED 1	Flash briefly if scanning
Right blue LED 2	successfully Wireless connection
Red LED	Charging
Blue 2 off, blue 1 Flash quickly	2.4G pairing mode
Blue 1 off, Blue 2 Flash quickly	SPP pairing mode
Blue 1 and Blue2 alternately flash	HID pairing mode
Blue 1 and Blue 2 Synchronize flash quickly	BLE pairing mode

## Appendix - buzzer prompt sound

Buzzer	Description
A long Sound	Power ON/OFF
A short sound(low frequency)	Scan common barcode, or paired, wireless connection success
3 short sound(low frequency)	Wireless transmission failure buffer full
5 short sound(low frequency) and stop scanning	Battery without electricity
2 short sound(low frequency)	Wireless disconnection
2 short sound(high frequency)	Setup code scanning is not work

Note: The lighting instructions in this section vary slightly according to different product configurations. If you need to know more, you can contact the supplier.

# Appendix - Character List

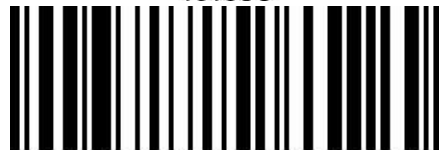
Serial number	character	1D Setup Code
1	SOH	 %%01
2	^B	 %%02
3	^C	 %%03
4	EOT	 %%04
5	ENQ	 %%05
6	ACK	 %%06
7	BEL	 %%07
8	Back Space	 %%08

9 Tab



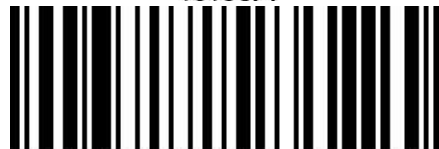
%%09

10 LF



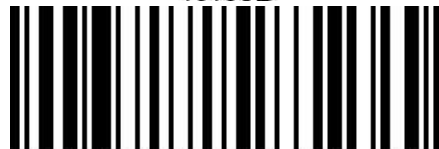
%%0A

11 VT



%%0B

12 FF



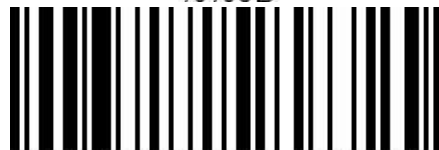
%%0C

13 CR



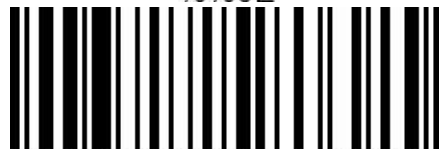
%%0D

14 F1



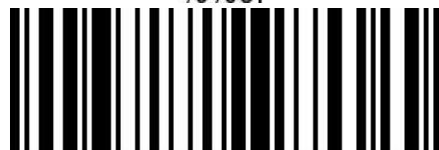
%%0E

15 F2



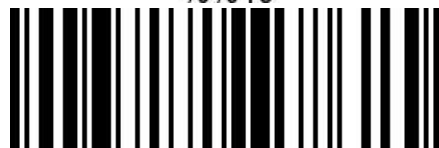
%%0F

16 F3



%%10

17 F4



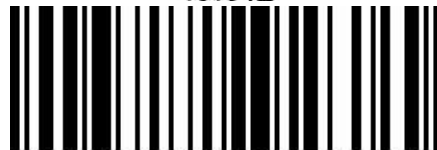
%%11

18 F5



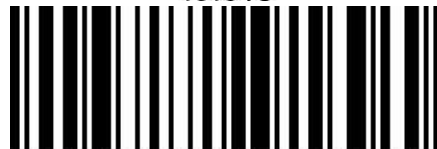
%%12

19 F6



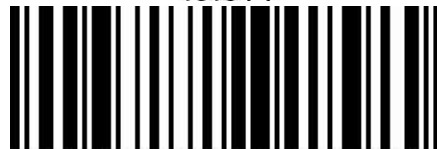
%%13

20 F7



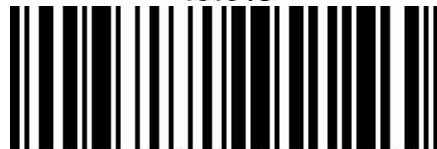
%%14

21 F8



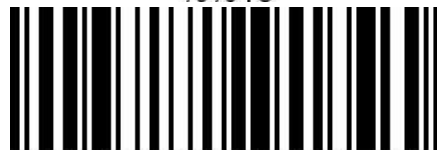
%%15

22 F9



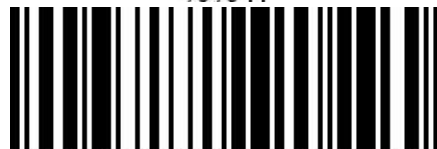
%%16

23 F10



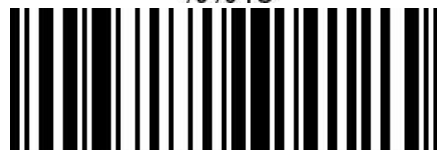
%%17

24 F11



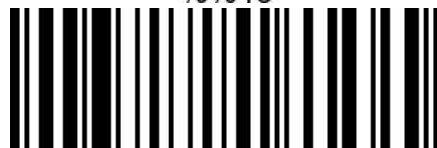
%%18

25 F12



%%19

26 SUB



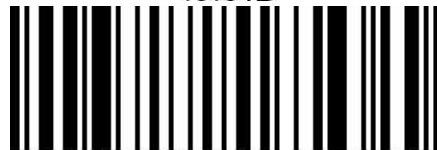
%%1A

27 Esc



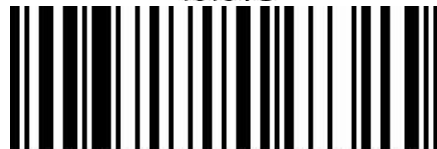
%%1B

28 Right Arrow



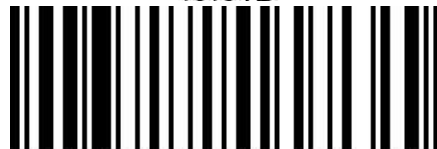
%%1C

29 Left Arrow



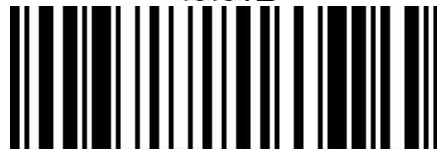
%%1D

30 Up Arrow



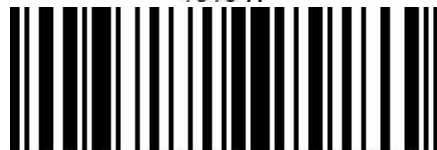
%%1E

31 Down Arrow



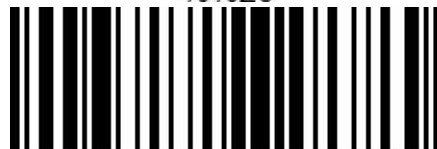
%%1F

32 Space



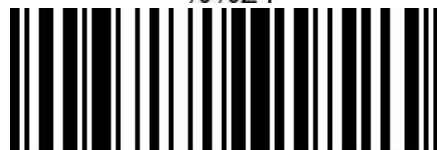
%%20

33 !



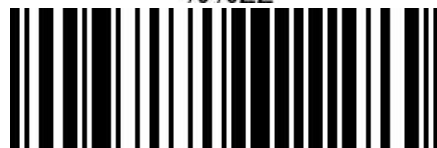
%%21

34 "



%%22

35 #



%%23

36

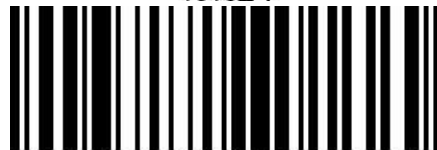
\$



%%24

37

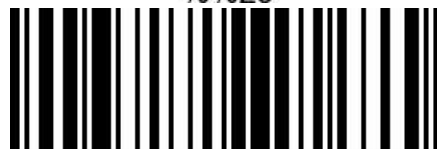
%



%%25

38

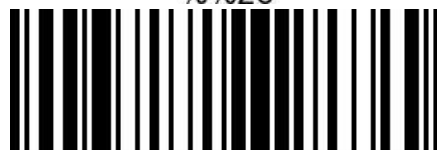
&



%%26

39

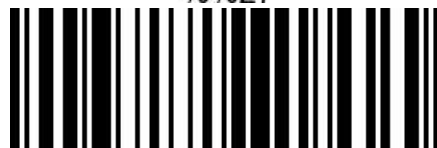
'



%%27

40

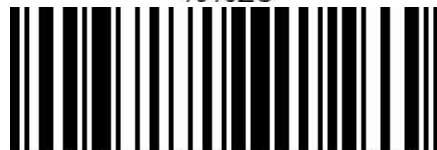
(



%%28

41

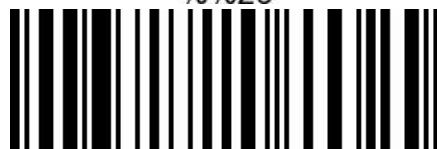
)



%%29

42

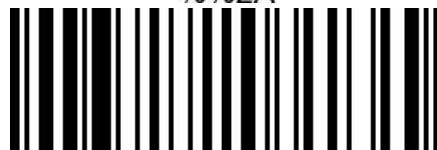
\*



%%2A

43

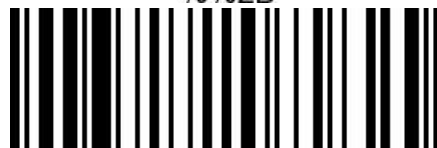
+



%%2B

44

,



%%2C



45

-



%%2D

46

.



%%2E

47

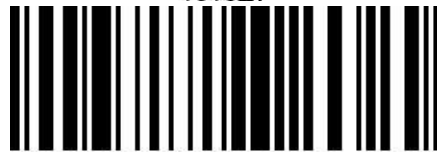
/



%%2F

48

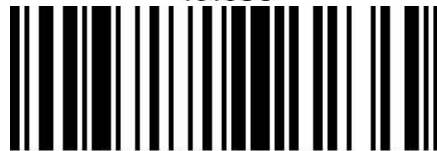
0



%%30

49

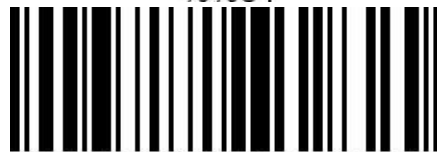
1



%%31

50

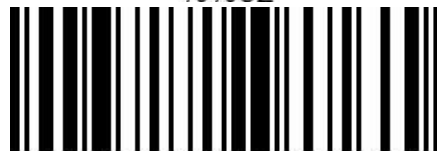
2



%%32

51

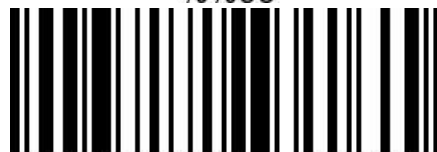
3



%%33

52

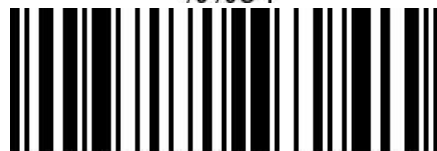
4



%%34

53

5



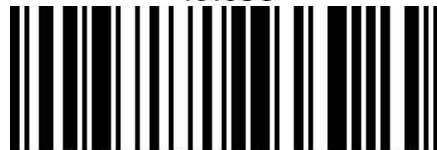
%%35

54 6



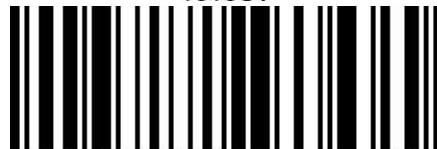
%%36

55 7



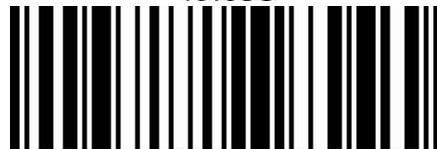
%%37

56 8



%%38

57 9



%%39

58 :



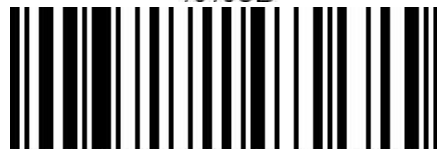
%%3A

59 ;



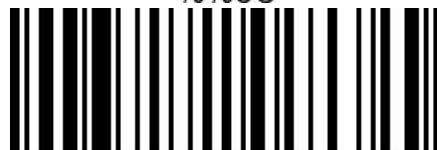
%%3B

60 <



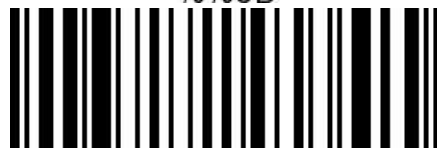
%%3C

61 =



%%3D

62 >



%%3E

63

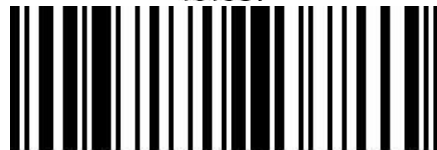
?



%%3F

64

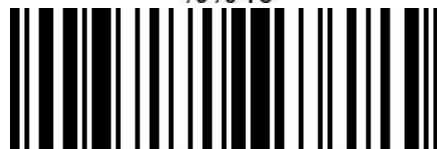
@



%%40

65

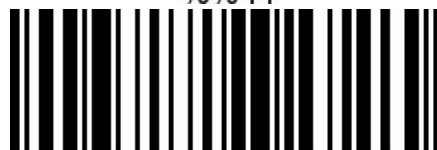
A



%%41

66

B



%%42

67

C



%%43

68

D



%%44

69

E



%%45

70

F



%%46

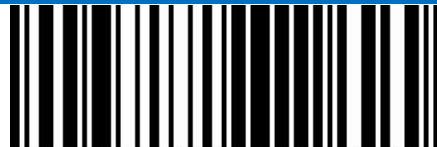
71

G



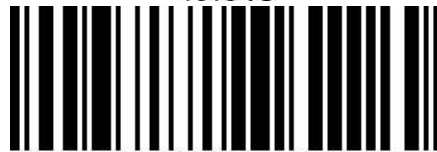
%%47

72 H



%%48

73 I



%%49

74 J



%%4A

75 K



%%4B

76 L



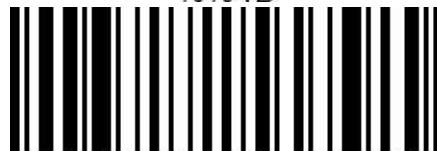
%%4C

77 M



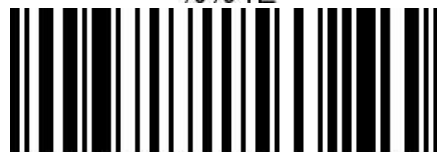
%%4D

78 N



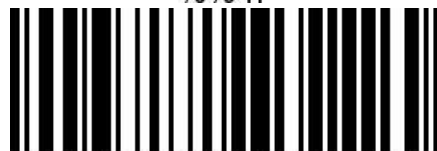
%%4E

79 O



%%4F

80 P



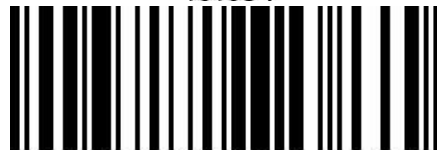
%%50

81 Q



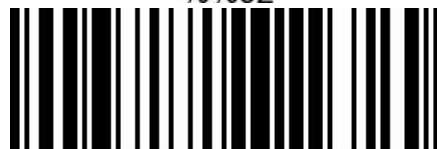
%%51

82 R



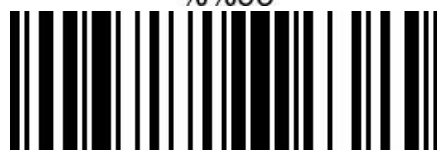
%%52

83 S



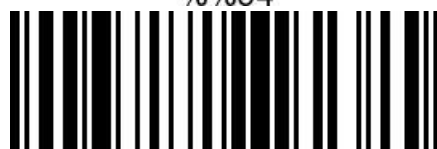
%%53

84 T



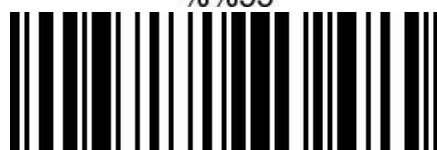
%%54

85 U



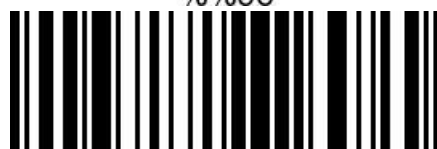
%%55

86 V



%%56

87 W



%%57

88 X



%%58

89 Y



%%59

90

Z



%%5A

91

[



%%5B

92

\



%%5C

93

]



%%5D

94

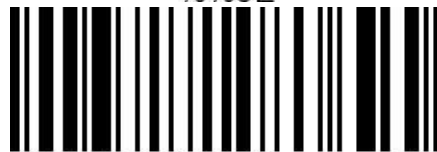
^



%%5E

95

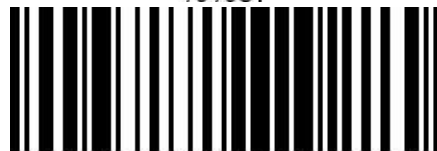
\_



%%5F

96

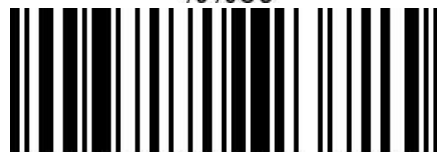
`



%%60

97

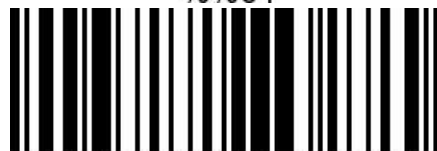
a



%%61

98

b



%%62

99

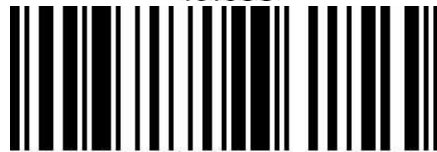
c



%%63

100

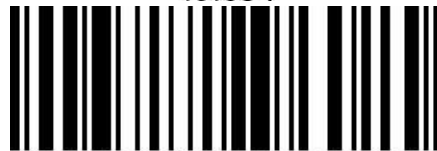
d



%%64

101

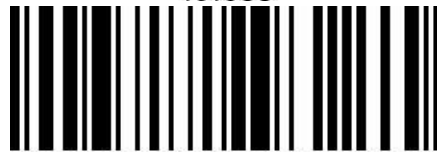
e



%%65

102

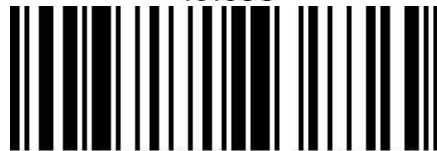
f



%%66

103

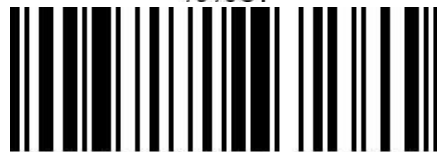
g



%%67

104

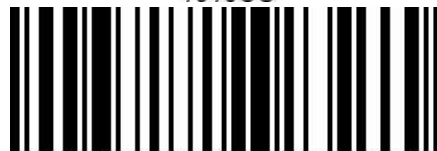
h



%%68

105

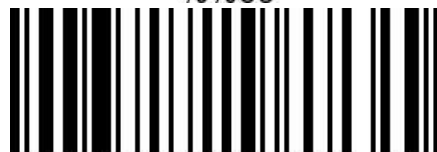
i



%%69

106

j



%%6A

107

k



%%6B

108

l



%%6C

109

m



%%6D

110

n



%%6E

111

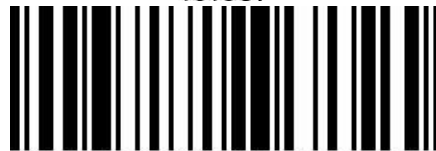
o



%%6F

112

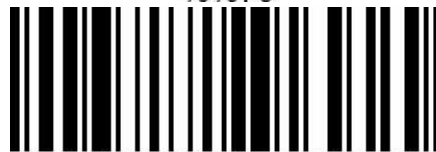
p



%%70

113

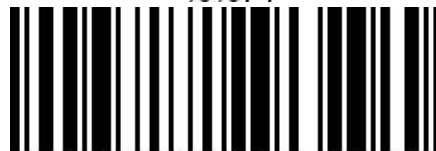
q



%%71

114

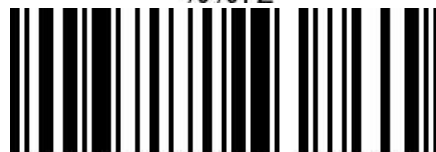
r



%%72

115

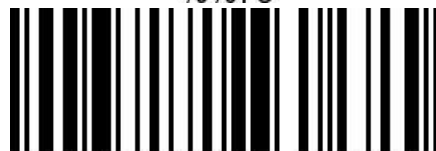
s



%%73

116

t



%%74

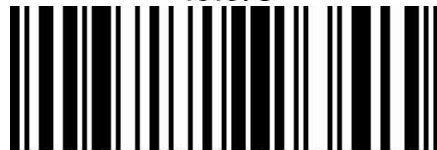


117 u



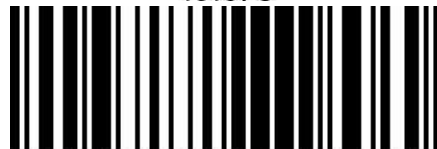
%%75

118 v



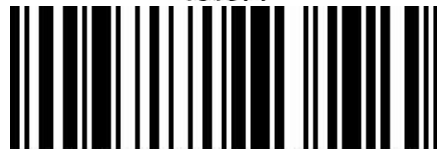
%%76

119 w



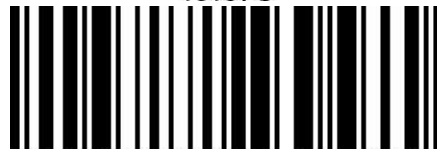
%%77

120 x



%%78

121 y



%%79

122 z



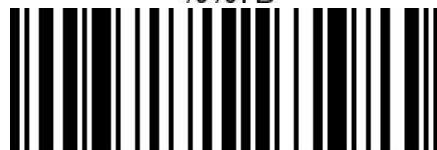
%%7A

123 {



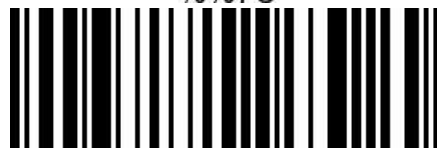
%%7B

124 |



%%7C

125 }



%%7D

126

~



%%7E

127

DEL



%%7F

