



# 2D barcode scanner Manual

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# Chapter 1 Comprehensive Settings

## Introduction

This manual is mainly used to introduce how to set the corresponding functions of the scanner product;

There are two ways to set up the scanner.

## Configuration codes

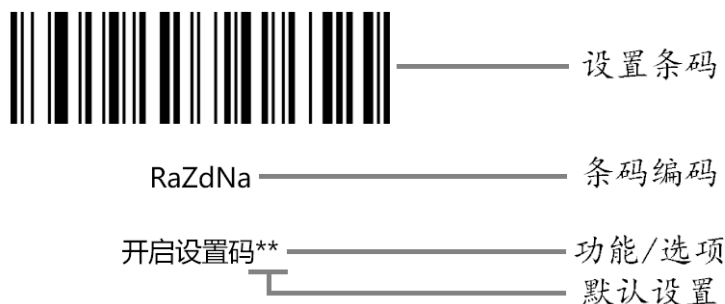
The scanner can set the corresponding function by reading the corresponding one or a group of special bar codes. In the following chapters, we will introduce the corresponding setting options and functions in detail and provide the corresponding setting codes.

## Configuration commands

The host can send a set of hexadecimal strings to set the scanner. In the following chapters, in addition to the setting code, we will also introduce the setting command string.

The scanner can be automatically operated by setting instructions. You can also integrate all relevant setting instructions into the software through secondary development, and process relevant instructions in batches.

## Set code identification



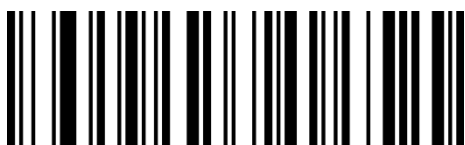
### Instructions for use:

In manual barcode reading mode, the operation steps for scanning barcodes are as follows

1. Hold the trigger button of the scanner pressed, the line of sight is activated, and a red line of sight appears.
2. Aim the red line of sight to the center of the bar code, move the scanner and adjust the distance between it and the bar code to find the best reading distance.
3. When the success prompt sounds and the red lighting line goes out, the code reading is successful, and the scanner transmits the decoded data to the host.

## Enable/Disable setting codes

The setting code can be turned off. When the scanner is set to "Enable setting code", when scanning the setting code, the setting function will work. When the scanner is set to "Off setting code", when scanning the setting code, the scan engine An error tone will appear and the setting function will not work. The default is "Enable Setting Code".



RaZdNa

Enable setting code\*\*



RaZdXa

Turn off setting code

## Sending data of setting codes

The content of the setting code can be allowed to be sent. After reading the "send setting code" and setting successfully, the content will be sent to the host when the setting code is read; after reading the "do not send setting code" and setting is successful, the scanner will no longer send the setting code content .

The default is "Do not send setting code"



WaZaBb

Send content of the setting codes



WaZaRa

Do not send\*\*

## Restore factory default

All scanners have a factory default setting. Reading the "Restore Factory Default" setting barcode will make all the scanner's properties set to the default state of the software.



BeQeCe

Restore factory default

### Instructions :

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

1. Scanner settings are wrong, such as barcodes that cannot be recognized.
2. You forgot what settings you made to the scanner before, and you don't want to use the previous settings.
3. Set the scanner to use some infrequently used functions, and use it after completion.

## Check version

Use the scanner to scan the following barcode, you can check the current scanner version number information



BeReCd

Check version number

## User default settings

In addition to the factory settings, users can also save their frequently used configuration as user default settings. By scanning "Save User Default Settings", the current configuration information of the device can be saved as user default settings. If there are already users in the reading module Default setting information, the new configuration information after this operation will replace the original user default setting information.



UaQdWa

Save User default



BeQeEe

Restore factory default

Example: Set the closed EAN-13 code as a custom user factory value.

Step 1: Scan the barcode of "Enable Setting Code";

Step 2: Scan the bar code "EAN-13 Prohibited";

Step 3: Scan the barcode of "Save User Default Settings";

Step 4: Scan the barcode of "Close Setting Code".

## Sound settings

### All sounds settings



WaZaCb

Enable all sounds settings\*\*

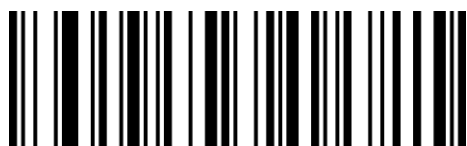


WaZaSa

Disable all sounds settings

### Power-on prompt

Turn on or turn off the beep sound when starting up



RaOdNa

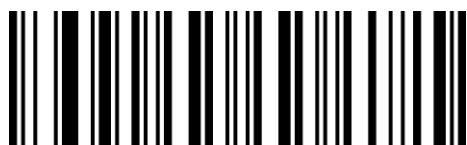
Turn on \*\*



RaOdXa

Turn off

### Setup code prompt



WaZaZa

Turn on \*\*



WaZaPa

Turn off



## Successful decoding sound



RaDeXa

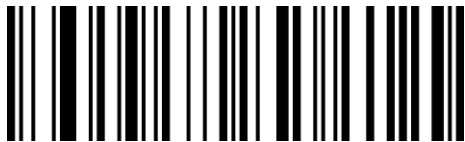
Enable Successful decoding sound\*\*



RaDeNa

Disable Successful decoding sound

## Set the duration of the prompt tone for successful decoding



RaCeZa

Short sound



RaCePa

Long sound\*\*

## Decoding successful prompt audio rate



LbDeUb

1.6KHZ



LbDeEc

2.0KHZ\*\*



LbDeAb

2.7KHZ



LbDeKb

4.2KHZ

## Decoding successful prompt sound volume setting



BbDePb

Enable sound



BbDeFb

Low volume



BbDeVa

Medium volume



BbDeLa

High volume\*\*

## Error warning sound



GbZaNb

Low 2.5KHZ\*\*



GbZaXa

Medium 3.25KHZ



GbZaHb

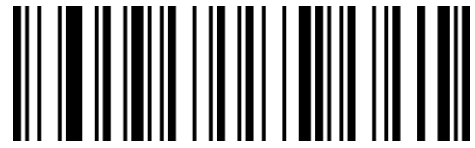
High 4.2KHZ

## Successful decoding indicator light



RaBeYa

Turn on indicator light\*\*



RaBeOa

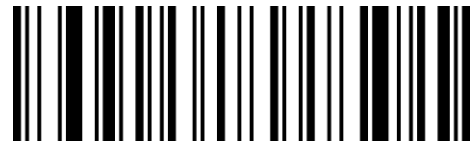
Turn off indicator light

## Indicator light mode



WaAbRa

Light on while working\*\*



WaAbBb

Light off while working

## Light settings

### Fill light

The illuminator can provide auxiliary lighting for shooting and reading, and the light beam illuminates the reading target to improve the reading performance and the ability to adapt to weak ambient light.



GbWaHb

Turn on \*\*



GbWaNa

Turn off

## Aiming light

The aiming beam can help users find the best reading distance when shooting and reading.

The user can choose any of the following modes according to the application environment.

The aiming light is turned on by default, and it is blinking.

**Turn on the aiming light (default setting):** The aiming light will stay on during shooting and reading, and will be off at other times.

**Turn off the aiming light:** the aiming light will not light up under any circumstances.

**The aiming light is always on:** After the reading engine is powered on, the aiming beam is continuously projected.

**Aiming light flashes:** After the reading engine is powered on, the aiming beam continues to flash.



GbWaZa

Turn on aiming light \*\*



GbWaPa

Turn off aiming light



GbWaJb

Aiming light always on



GbWaTb

Aiming light flashes

## Data Format

### Data output format

In order to output correctly according to the specified encoding format, you need to determine the user's application environment. If the text is displayed in a word document, scan the Unicode configuration code, if it is displayed in Excel or notepad, scan the Codepage configuration code. The default is Codepage mode.



GbBbVa

Codepage ( notepad , Excel... ) \*\*



GbBbFb

Unicode ( WORD , QQ )

## Output in different languages

After setting the data output format, you need to determine the language system and barcode encoding format currently used by the user's PC, and then scan the following corresponding configuration codes according to the PC's language system and barcode encoding format. The default PC system language is CH, UTF8\GB2312 encoding.

PC language is CH

UTF-8/GB2312\*\*



0dPbLa

PC language is CH

BIG 5



0dPbIbc

PC language is BIG 5

BIG 5



0dPbPb

PC language is CH

Shift-JIS



0dPbJbc

PC language is JP

Shift-JIS



0dPbVa

PC language is Korean

CP949



0dPbFb

PC language is Thai

CP874



0dPbGbc



PC language is Russia

KOI8-R



OdPbHbc

## Invoice function

### Enable / Disable Invoice function



WaBbXa

Enable



WaBbNa

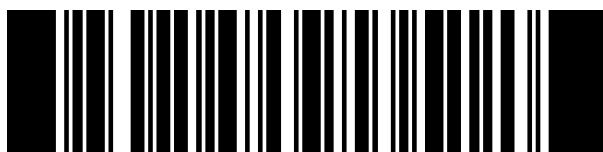
Disable\*\*

## Image recognition settings

### Reversed code reading setting 1

正相条码：浅色底，深色条的条码

反相条码：深色底，浅色条的条码，又称反白条码，反色条码



CbQdRa

Read normal code\*\*



CbQdLb

Read reversed code



CbQdBb

Read both

Note: After enabling "read both normal code and reversed code" or "Normal and Reverse Image Recognition", in order to ensure the reading effect, only UPC-A/ UPC-E0/ UPC-E1/ EAN-8/ EAN-13 reverse is enabled by default. Color code. If you need to set other reverse codes, please refer to the following bar codes.

## Reversed code reading setting 2



PdZdQbc

Read all 1D reversed cods



PdBeQbc

Read all 2D reversed cods



PdAeQbc

Not to readall 1D reversed cods\*\*



PdCeQbc

Not to readall 2D reversed cods\*\*

## Prompt for unsuccessful reading

After the button is pressed and released, the barcode is not read, and NR (NO READ) message is allowed to be sent. Any feasible prefix or suffix can be appended to this message.



SaCbCb

Enable NR



SaCbSa

Disable NR\*\*

Turn on NR: When the code reading is unsuccessful, the key is released or the code reading is timed out and the code reading unsuccessful message is sent.

Turn off NR: When the code reading is unsuccessful, the message of unsuccessful code reading will not be sent.

## QR URL code settings

Scan the setting code below to enable or disable the QR code generated by the URL.



WaQbPa

Enable QR URL\*\*



WaQbZa

Disable QR URL

# Chapter 2 Communication Settings

## Introduction

When using this scanner to communicate with different hosts, you need to set the scanner to the corresponding communication interface mode. You can set the scanner's functions by scanning one or more setting bar codes. You can choose to use USB (USB-KBW, USB-COM), TTL, RS232 serial communication interface modes, etc.

## USB keyboard interface

The USB keyboard interface is the USB-KBW interface. When the USB data cable is connected, the scanner can be set to the USB-KBW input mode. In this mode, the scanner will become a virtual keyboard, and the data receiving host accepts the virtual keyboard input like a real keyboard input. The sending process after the scanner decodes the data is to hit each key corresponding to the data in the virtual keyboard.

The default scanner uses USB-KBW communication, simulating USB keyboard input mode, no driver installation is required.



VbZcWag

USB-KBW\*\*

## National keyboard layout

The keyboard key arrangement, symbols, etc. corresponding to different national languages are not the same. The scanner can be virtualized into different countries' keyboard formats according to actual needs. The keyboard layout setting applies to the USB-KBW interface mode, and the default is "American English keyboard" .



JdCcTc

English ( USA ) \*\*



JdCcLbc

Greek



JdCcGbc

Dutch



JdCcJc

Spanish



JdCcCbc

Swiss German



JdCcLa

Brazilian Portuguese



JdCcEbc

Danish



JdCcDbc

British English



JdCcZb

Italian



JdCcFb

French



JdCcBbc

German



JdCcNbc

Hungarian



JdCcRbc

Swedish



JdCcQbc

Slovakia



JdCcIbc

Portuguese



JdCcSbc

Romanian



JdCcWqc

Belgian French



JdCcTbc

Turkish-F



JdCcXac



JdCcObc

Turkish-Q



JdCcQdc

Polish



JdCcVac

Russian MS



JdCcGdc

Japanese

Ukrainian



## Control character (function key) output mode

Control character (0x00-0x1F) output mode selection in ASCII code

**Output function keys:** control characters are used as self-defined function keys. For specific functions, see "**Appendix-Control Character List**".

**Output Ctrl key combination** (this function is used with prefix and suffix): Ctrl key combination output control characters. For specific functions, please refer to "**Appendix-Control Character List**".

**ALT mode output control characters:** support full control character output in Chinese environment, see "**Appendix-ASCII code table**" for specific functions.

**Output Enter, DownArrow:** shield other control characters, only output: 0x07 output Enter, 0x0A output DownArrow, 0x0D output Enter.



QbBbQa

Output function keys\*\*



QbBbKb

ALT mode output control characters



QbBbAb

Output Ctrl key combination



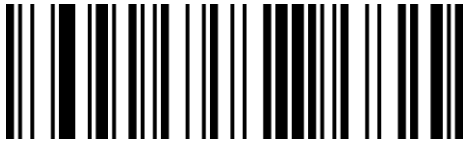
QbBbUb

Output Enter&DownArrow

## Virtual keyboard output method

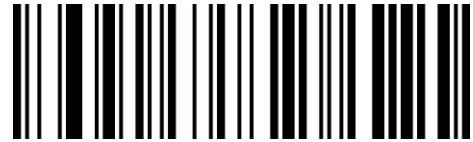
Control character (0x20-0xFF) output mode selection in ASCII code.

When the virtual keyboard is turned on, all characters between 0x20 and 0xFF are output using the virtual keyboard.



WaBbPa

Disable Virtual keyboard\*\*



WaBbZa

Enable Virtual keyboard

## Case conversion

By setting the character case conversion function of the scanner, the English letters of the scanner output data can be case-converted.

For example: when the content of the barcode is aBC123, set the scanner to "all lowercase", the data obtained by the host will be "abc123". The default is Normal normal output.



BbLdOa

Normal\*\*



BbLdYa

Upper



BbLdIb

Lower



BbLdSb

Inverse

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

## USB transfer speed



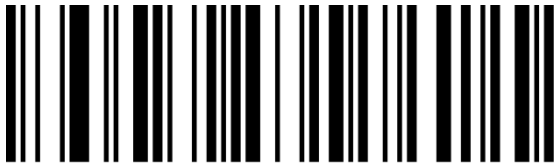
OdJcVac

Normal\*\*



OdJcJc

Fast speed



OdJcVa

Very Fast speed

## USB-COM virtual serial port interface (CDC)

When the scanner uses a USB connection, and at the same time you want the host to receive data through a serial port, you should use the USB virtual serial port. From the point of view of the host-side system interface, the scanner is equivalent to connecting with the host through a serial port. This function requires the corresponding driver to be installed on the host.



VbZcXag

USB-COM

## USB HID-POS

The USB HID-POS interface is recommended for new application software. It can send 56 characters in a single USB message, and it is faster than the analog keyboard interface. After setting the HID-POS, you need to restart the bar coder.

Feature :

#Based on the HID interface, no driver is required.

#Support two-way communication

#The communication speed is much faster than the analog keyboard interface and the traditional RS-232 interface.



VbZcYag

HID-POS

PID(HEX): B4B1

VID(HEX): 0525

## TTL/RS232 interface

Serial communication interface is a common way to connect scanners and host devices, and can be used to connect host devices such as PCs and POS machines. When the scanner uses the serial communication interface, the serial communication protocol parameter configuration must be completely matched between the scanner and the host device to ensure the accuracy of the transmitted data.

Serial port default communication protocol: baud rate 9600, check character NONE



VbZcNc

TTL/RS232

Parameter	默认
Serial communication type	Standard TTL/RS232
Baud Rate	9600
Parity Type	None
Data Bits	8
Stop Bits	1

## Serial port transmission speed (delay between characters)

This parameter is used to adjust the delay time between the barcode characters of the scanner. When the input host needs slower data transmission, scan the corresponding barcode below to increase the inter-character delay, which can adjust the transmission speed and improve the safety and integrity of the data output Sex.



JdGeKbc

Low speed 25ms



JdGeVac

Medium speed 10ms



JdGeVa

High speed 1ms\*\*

The delay time between custom characters is 1ms by default, and the range is 0-255ms.

For setting steps, please refer to "Appendix-Customized Parameter Example"



TdGeLa

~ Delay time between custom characters



## Baud rate

The baud rate is the number of bits transmitted per second in serial data communication.

The baud rate used by the scanner and the data receiving host must be consistent to ensure the accuracy of data transmission. The scanner supports the baud rates listed below in bit/s.



VbCdRdc

4800bps



VbCdSdc

9600bps\*\*



VbCdUdc

19200bps



VbCdVdc

38400bps



VbCdWdc

57600bps



VbCdVac

115200bps

## Chapter 3 Reading Mode

### Trigger mode

You can set the scanning mode of the scanner according to your needs. The default reading mode is manual reading. In this mode, the scanner starts to read the code after pressing the trigger button, and the code reading is successful or stops after the trigger button is released.

The default reading mode is "manual reading mode".



VbBeJb

Trigger mode\*\*

## Trigger mode- Key-press timeout

Key-press timeout refers to the time-out period when the key is pressed and not released. If the barcode is not read within the time-out period, the barcode reading will end and wait for the next trigger.



UaZcCb

No time limited



MdZcAbc

3S\*\*



MdZcKbc

5S



MdZcJcc

10S



MdZcIdc

15S



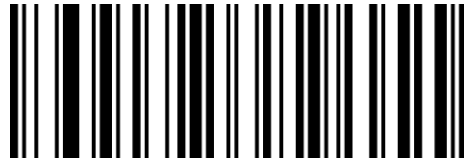
MdZcVaHa

20S

## Trigger mode - key-press timeout customization

Custom key timeout is used to set a custom key timeout time, default: 3S, step length: 200ms, range: 0-50S.

For setting steps, please refer to "**Appendix-Customized Parameter Example**"



WdZcLa

~key-press timeout customization

## Continuous reading mode

After setting, the scanner is in continuous scanning state, without triggering, the reading engine starts to read the code immediately. When the reading is successful, the information is output or the single reading time is over, the reading engine will wait for a period of time (settable) and it will start automatically. Read the code once. If the following conditions do not occur, the scanning engine will work in cycles as described above: during the code reading process, the user can also click the trigger button to manually pause the code reading. Click the trigger button to read the engine will continue to read the code cyclically



VbBeZa

Continuous reading mode

## Continuous mode-the same barcode reading delay

The same code reading interval means that after reading a bar code, within the set time period, refuse to read the same bar code. It can be read and output only after the duration is exceeded or the power is cut off and restarted. Default: 800MS, continuous reading mode is valid.



JdHeLa

No delay



JdHeVa

Delay 100MS



JdHeFb

Delay 200MS



JdHeNd

Delay 800MS\*\*



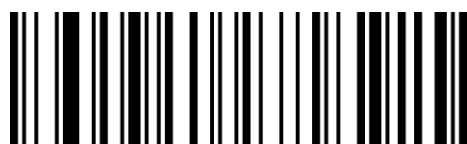
JdHeXac

Delay 1200MS



JdHeFbc

Delay 2000MS



RaHeCb

NO time out

## Continuous Mode-Customize the same barcode reading delay

Customizing the same barcode reading delay is used to set the timeout time of the customized same barcode reading delay, default: 800ms, step length: 100ms, range: 0-25000ms.

For setting steps, please refer to "**Appendix-Customized Parameter Example**"



TdHeLa

~Customize the same barcode reading delay

## Auto sense mode

Turn on the machine and enter the barcode reading state, and stop reading the barcode until the barcode is successfully read or the time set for one barcode reading timeout is reached. When a new barcode appears, it will re-enter the barcode reading state. In this mode, the reread delay can be used to prevent the same barcode from being read multiple times. Sensitivity can change the sensitivity of the sensing mode to light.



VbBePa

Auto sense mode

Note: When using the induction mode, the button can be triggered, and the bar coder will automatically enter the induction mode when the button is triggered over time.



## Autosense mode-image stabilization time

In the induction mode, when the scanner stops reading the barcode, it will enter a process of re-adapting to the changes in the reading environment (image). After the image is stabilized, it will enter the induction state and wait for the barcode to appear. By modifying the image stabilization timeout, the time to adapt to the environment can be adjusted.



OdCbVa

50ms



OdCbFb

100ms



OdCbPb

150ms



OdCbZb

200ms



OdCbJc

250ms\*\*

## Auto sense mode- Customize image stabilization time

Customizing the same barcode reading delay is used to set the timeout time of the customized same barcode reading delay, default: 250ms, step length: 50ms, range: 0-25000ms.

For setting steps, please refer to "**Appendix-Customized Parameter Example**"



YdCbLa

~Customize image stabilization time

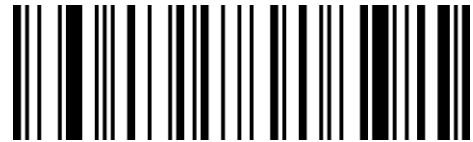
## Autosense mode- Autosense sensitivity

Sensitivity refers to the degree of change in the detection scene in the induction reading mode. When the reading module judges that the degree of scene change meets the requirements, it will switch from the monitoring state to the reading state.



AcDbVa

High sensitivity\*\*



AcDbFb

Medium sensitivity



AcDbPb

Low sensitivity

# Chapter 4 Data editing

## Code ID prefix

You often need to know the type of barcode currently scanned.

We can use the Code ID prefix to identify the barcode type.

Please refer to "Appendix-Code ID & AIM ID" for the corresponding barcode type of Code ID. The default is "Disable Code ID".



WaFbRa

Disable Code ID\*\*



WaFbBb

Enable Code ID

## AIM ID prefix

AIM is the abbreviation of Automatic Identification Manufacturers (Association of Automatic Identification Manufacturers).

AIM ID defines identification codes for various standard barcodes.

See the table below for specific definitions. The scanner can add this identification code before the barcode data after decoding, that is, the AIM prefix. Prefix format: "]" + AIM prefix + digit "0", for example, the AIM ID prefix of Code 128 is "]C0".

Please refer to "Appendix-Code ID & AIM ID" for the corresponding barcode type of AIM ID.



QaXdQa

Disable AIM ID\*\*



QaXdAb

Enable AIM ID

## User customized prefix

### Set customized prefix

Add up to 10 characters for the customized prefix.

For setting steps, please refer to "Appendix-Customized Parameter Example"



BeReTd

Set customized prefix

### Clear customized prefix



BeReSd

Clear customized prefix

## User customized suffix

### Set customized suffix

Add up to 10 characters for the customized prefix.

For setting steps, please refer to "Appendix-Customized Parameter Example"



BeReWd

Set customized suffix

### Clear customized suffix



BeReRd

Clear customized suffix

## Hide character

The function of hiding characters can realize the function of displaying only a certain segment of data by controlling different fields of the barcode content to achieve the function of hiding the data.

First, we divide a bar code data into three groups of head, middle, and tail data, and then set the length of the head, middle, and tail according to actual needs, and set the fields that need to be displayed according to actual needs.

### Set hide head character

If the configured length exceeds the length of the barcode data, the entire content of the current barcode will be hidden.



WaQbCb

Enable hide head character



WaQbSa

Disable hide head character \*\*

### Set hide head character digit

Set the number of hidden digits, the range is 1-255. For setting steps, please refer to "Appendix-Customized Parameter Example"



YdRbLa

## Set hide head character digit

### Set hide middle character digit

If the configured starting position exceeds the length of the barcode data, the current barcode will not be hidden.

If the configured length exceeds the remaining barcode data length, all barcode data after the start position will be hidden.



WaQbBb

Enable hide middle character



WaQbRa

Disable hide middle character\*\*

### Set hide middle character start position

Set the start position of the hidden intermediate data, the range is 1-255.

If you want to hide the data after the third character (the fourth one starts to hide), the decimal value of the digital setting code is: "0", "0", "3".

Set the number of hidden digits in the middle data, the range is 1-255.

For setting steps, please refer to "Appendix-Customized Parameter Example"



YdSbLa

Set hide middle character start position



### Set hide middle character digit

Configure the length of hidden intermediate data, ranging from 1-255.

If you need to hide 16 characters, the decimal value of the number setting code is: "0", "1", "6". For the setting steps, please refer to "Setting data number code".



YdTbLa

Set hide middle character digit

### Set hide tail character

If the configured length exceeds the length of the barcode data, the entire content of the current barcode will be hidden. .



WaQbAb

Enable hide tail character



WaQbQa

Disable hide tail character\*\*

### Set hide tail character digit

Set the number of hidden digits, the range is 1-255. For setting steps, please refer to "Appendix-Customized Parameter Example"



YdUbLa

Set hide tail character digit

## Insert customized data

Supports inserting customized data at any position of the barcode, up to 10 bits.



WaQbYb

Enable show customized character



WaQbOa

Disable show customized character\*\*

## Set insert customized character position

Set the position to insert the customized character, the range is 1-255.

If the position where you need to insert a character is 16 characters, the decimal value of the number setting code is: 0 1 6. For the setting steps, please refer to "Setting the Digital Code".

If the set position is 0, it is inserted into the head of decoded data.

If the set position is more than the length of decoded data, the end of the decoded data will be inserted by default.

For setting steps, please refer to "Appendix-Customized Parameter Example"



YdFcLa

Set insert customized character position

### **Set insert customized character**

Set and insert customized characters, scan the custom characters to be set, the setting steps are similar to the customized prefixes and suffixes, please refer to "Appendix-Examples of custom parameters".



BeReYc

Set insert customized character

## Character replacement

The character replacement function supports replacing any character (the character to be replaced) appearing in the barcode with another character that needs to be displayed.

For setting steps, please refer to "Appendix-Customized Parameter Example"



VdEeLa

Character to be replaced



VdFeLa

replacement character

Note: If you need to clear the replacement character, set the "character to be replaced" to NULL, that is, the decimal is "000".

## Start character STX and end character ETX settings

The start character and end character are used to mark the beginning or end of a complete data message.

The start character/end character must be the first/last content of a piece of data when it is sent, and there will be no data before it.

Default no start character, no end character.



BbKdPa

Modify start character as no\*\*



BbKdZa

Modify end character as <ETX>



BbKdJb

Modify start character as <STX>



BbKdTb

Modify start and end character as

<STX+ETX>

## End character setting

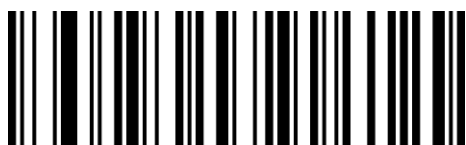
The suffix is used to mark the end of a complete data message.

The suffix must be the last content when a piece of data is sent, and there will be no additional data after that.



LbKdGb

Modify end character as <CR> (0x0D)\*\*



LbKdUc

Modify end character as <LF> (0x0A)



LbKdWa

Modify end character as <CR><LF> (0x0D,0x0A)



LbKdQb

Modify end character as <HT> (0x09)



LbKdAc

Modify end character

as <CR><CR> (0x0D,0x0D)



LbKdKc

Modify end character

as <CR><LF><CR><LF> (0x0D ,0x0A,

0x0D ,0x0A)

LbKdMa

Modify end character as NONE

## Chapter 5 Barcode setting

### Global setting



GbYaXa



GbYaHb

Enable all barcode types



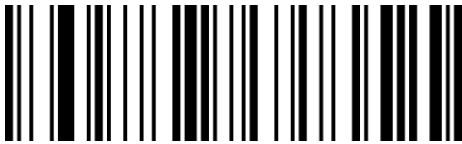
GbYaZa

Disable all barcode types



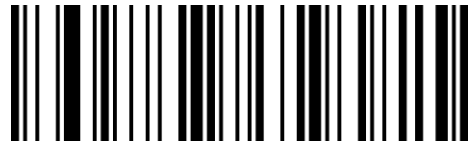
GbYaJb

Enable all 1D barcode types



GbYaBb

Disable all 1D barcode types



GbYaLb

Enable all 2D barcode types

Disable all 2D barcode types

Note: When you disable all barcode types, the setting code will not be disabled.



## UPC-A



QaYaBb

Enable UPC-A\*\*

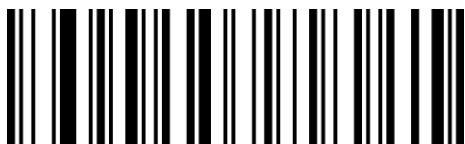


QaYaRa

Disable UPC-A

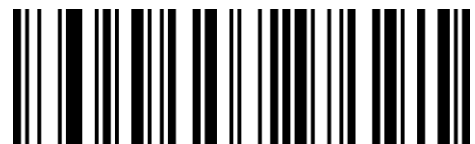
## Send parity character

The UPC-A barcode data is fixed to 12 characters, and the 12th digit is the check character, which is used to verify the correctness of all 12 characters. The default is to transmit parity character.



QaTdCb

Send parity\*\*

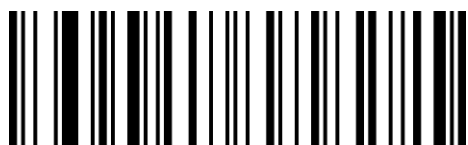


QaTdSa

Don't send parity

## 2/5 additional digit

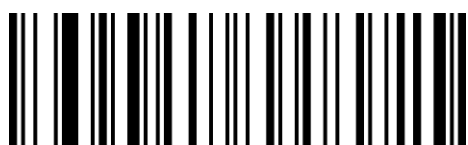
Additional digits means that the 2 or 5 digital barcodes appended to the normal barcode, as shown in the figure below, the blue area on the left is the common barcode, and the red area on the right is the additional digit. The default is to turn off additional bit.



**QaIbCb**  
Enable 2 digits



**QaIbSa**  
Disable 2 digits\*\*



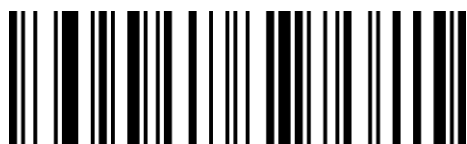
**QaIbBb**  
Enable 5 digits



**QaIbRa**  
Disable 5 digits\*\*

## Mandatory additional digits

After scanning "mandatory reading with additional digits", the barcode reader can only read barcodes with additional digits.



QaIbYa

mandatory reading with additional digits



QaIbOa

Not mandatory reading with additional digits\*\*

## Additional bit separator

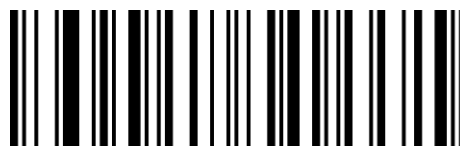
If this feature is enabled, there is a space between barcode data and additional data.

If this feature is disabled, there is no space. Factory default is to enable separator.



QaIbXa

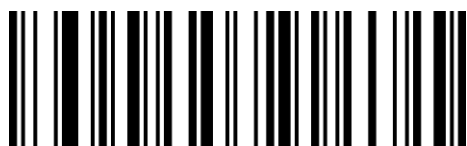
Enable separator\*\*



QaIbNa

Disable separator

## Send system character



QaTdWa

Send system character\*\*



QaTdMa

Don' t send system character

## Transfer to EAN-13

The UPC-A barcode type supports extending settings.

After the extension is enabled, the barcode information is expanded to 13 digits, prefixed with "0", and the type is converted to EAN-13, and the default is no conversion.



QaTdVa

Barcode information conversion



QaTdLa

No barcode information conversion\*\*

## UPC-E



QaYaVa

Enable UPC-E0\*\*



QaYaLa

Disable UPC-E0

## UPC-E1



WaYaVa

Enable UPC-E1



WaYaLa

Disable UPC-E1\*\*

## Send parity

UPC-E barcode data is fixed to 8 characters, and the 8th digit is a check character, which is used to verify the correctness of all 8 characters. The default is to send parity.



QaTdBb

Send parity\*\*

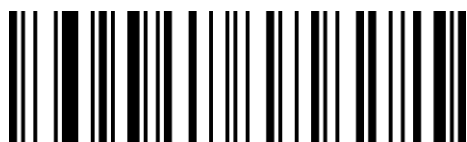


QaTdRa

Don't send parity

## 2/5 additional digit

Additional digits means that the 2 or 5 digital barcodes appended to the normal barcode, as shown in the figure below, the blue area on the left is the common barcode, and the red area on the right is the additional digit. The default is to turn off additional bit.



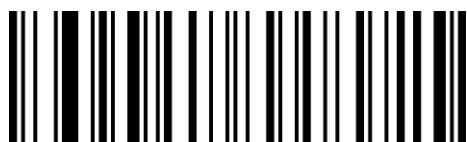
QaIbCb

Enable 2 digits



QaIbSa

Disable 2 digits\*\*



QaIbBb

Enable 5 digits



QaIbRa

Disable 5 digits\*\*

## Mandatory additional digits

After scanning "mandatory reading with additional digits", the barcode reader can only read barcodes with additional digits.



QaIbYa



QaIbOa

mandatory reading with additional digits

Not mandatory reading with additional digits\*\*

## Additional bit separator

If this feature is enabled, there is a space between barcode data and additional data.

If this feature is disabled, there is no space. Factory default is to enable separator.



QaIbXa

Enable separator\*\*



QaIbNa

Disable separator

## Send leading characters (system character/country code)

The country code of the UPC-E barcode is a prefix character, which is generally not displayed in the human-recognizable characters below the barcode, and "0" represents USA.



QaTdYa

Send system character\*\*



QaTdOa

Don' t send system character

## Transfer to UPC-A

The UPC-E barcode type supports extending settings.

After the extension is enabled, the barcode information is expanded to 12 digits, the type is converted to UPC-A, and the default is no conversion.



QaTdAb

Barcode information conversion

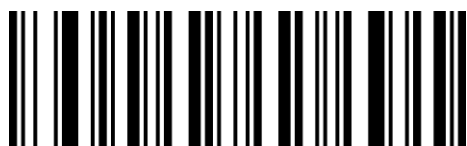


QaTdQa

No barcode information conversion\*\*



## EAN/JAN 8



QaYaZa

Enable EAN/JAN 8\*\*



QaYaPa

Disable EAN/JAN 8

## Send parity

EAN/JAN 8 barcode data is fixed to 8 characters, and the 8th digit is a check character, which is used to verify the correctness of all 8 characters. The default is to send parity.



QaXdVa

Send parity\*\*

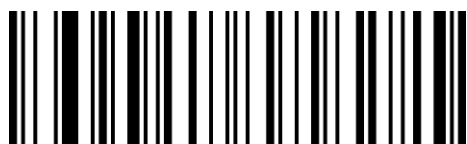


QaXdLa

Don' t send parity

## 2/5 additional digit

Additional digits means that the 2 or 5 digital barcodes appended to the normal barcode, as shown in the figure below, the blue area on the left is the common barcode, and the red area on the right is the additional digit. The default is to turn off additional bit.



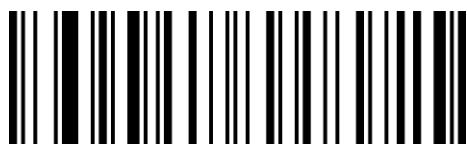
QaIbCb

Enable 2 digits



QaIbSa

Disable 2 digits\*\*



QaIbBb

Enable 5 digits

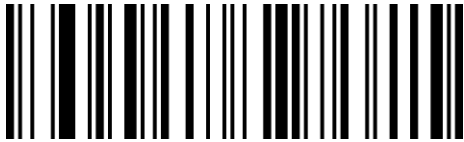


QaIbRa

Disable 5 digits\*\*

## Mandatory additional digits

After scanning "mandatory reading with additional digits", the barcode reader can only read barcodes with additional digits.



QaIbYa



QaIbOa

mandatory reading with additional digits

Not mandatory reading with additional digits\*\*

## Additional bit separator

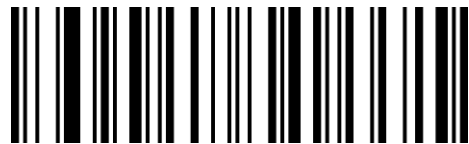
If this feature is enabled, there is a space between barcode data and additional data.

If this feature is disabled, there is no space. Factory default is to enable separator.



QaIbXa

Enable additional bit separator\*\*



QaIbNa

Disable additional bit separator

## Transfer to EAN-13

The EAN-8 barcode type supports extending settings.

After the extension is enabled, the barcode information is expanded to 13 digits, the type is converted to EAN-13, and the default is no conversion.



QaTdXa

Barcode information conversion



QaTdNa

No barcode information conversion\*

## EAN/JAN 13



QaYaWa

Enable EAN/JAN 13\*\*



QaYaMa

Disable EAN/JAN 13

## Send parity

EAN/JAN 13 barcode data is fixed to 13 characters, and the 13th digit is a check character, which is used to verify the correctness of all 12 characters. The default is to send parity.



QaXdXa

Send parity\*\*

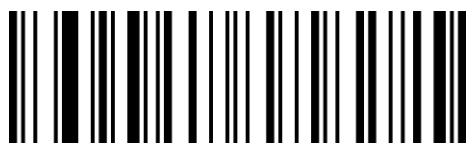


QaXdNa

Don' t send parity

## 2/5 additional digit

Additional digits means that the 2 or 5 digital barcodes appended to the normal barcode, as shown in the figure below, the blue area on the left is the common barcode, and the red area on the right is the additional digit. The default is to turn off additional bit.



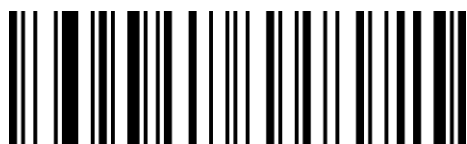
QaIbCb

Enable 2 digits



QaIbSa

Disable 2 digits\*\*



QaIbBb

Enable 5 digits

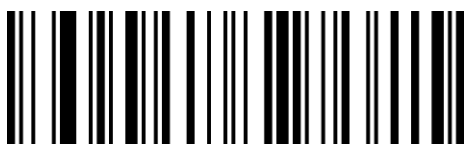


QaIbRa

Disable 5 digits\*\*

## Mandatory additional digits

After scanning "mandatory reading with additional digits", the barcode reader can only read barcodes with additional digits.



QaIbYa



QaIbOa

mandatory reading with additional digits    Not mandatory reading with additional digits\*\*

## Additional bit separator

If this feature is enabled, there is a space between barcode data and additional data.

If this feature is disabled, there is no space. Factory default is to enable separator.



QaIbXa

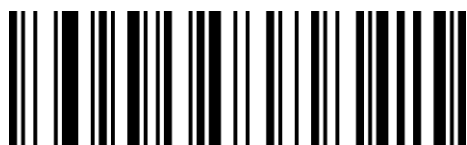
Enable additional bit separator \*\*



QaIbNa

Disable additional bit separator

## Transfer to ISBN



QaIbCb



QaIbSa

Enable ISBN conversion

Disable ISBN conversion\*\*

### Send ISBN parity



QaJbAb

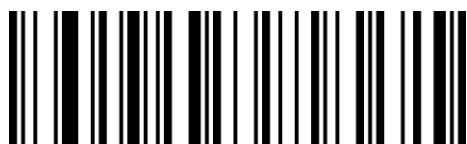
Send ISBN parity



QaJbQa

Don't send ISBN parity\*\*

### Transfer to ISSN



RaVcCb

Enable ISSN conversion



RaVcSa

Disable ISSN conversion\*\*



QaTdXa

Enable ISSN



QaTdNa

Disable ISSN\*\*

## Send ISSN parity



RaVcAb

Send parity



RaVcQa

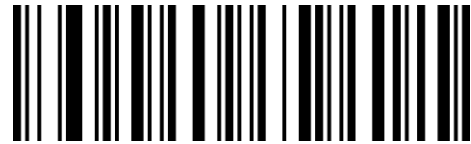
Don' t send parity\*\*

## Code 128



QaXaYa

Enable Code 128\*\*



QaXaOa

Disable Code 128

## Set code 128 barcode length

The default reading digits of Code128 is 0-80, and the scanner can be configured to only read Code 128 barcodes with a length between (including) the minimum length (0-80) and the maximum length (0-80).



XdIbLa

minimum length



XdJbLa

maximum length



## GS1-128(UCC/EAN 128)



RaYcVa

Enable GS1-128\*\*



RaYcLa

Disable GS1-128

## Set GS1-128 barcode length

The default reading digits of GS1-128 is 0-80, and the scanner can be configured to only read GS1-128 barcodes with a length between (including) the minimum length (0-80) and the maximum length (0-80).



XdKbLa

minimum length



XdLbLa

maximum length

## ISBT 128

### ISBT 128 connection function



TaCeCb

Enable ISBT 128 connection



TaCeSa

Disable ISBT 128 connection\*\*

Note: ISBT 128 is a subcategory of Code128, which can be turned on or off through the Code128 setting.

The ISBT128 connection function is used to set whether to read ISBT barcodes with additional digits.

When the setting is enabled, ISBT with additional digits can be read 128 barcodes, ISBT 128 barcodes without additional bits can also be read.

## Code 39



QaXaWa

Enable Code 39\*\*



QaXaMa

Disable Code 39

## Parity

Code 39 barcode data is not mandatory to include a check character. If there is a check character, it is the last character of the data. The check character is a value calculated based on all data to check whether the data is correct.

You can turn on or off the check character according to your needs, and set whether to send check characters.

The default setting is "disable parity, don' t send parity".



QaYaYa

Enable Mod 43 parity



QaYaOa

Disable parity \*\*



QaVdAb

Send parity



QaVdQa

Don' t send parity \*\*

## Send start and end character

Code 39 barcode data has a character "\*" before and after it is used as the start and end character.

You can set whether to send the start and end character together with the barcode data after the barcode is successfully read.



QaVdVa

Send start and end character



QaVdLa

Don't send start and end character \*\*

## Full ASCII

Code 39 code data can include all ASCII characters, but the scanner only reads some ASCII characters by default. By setting, you can turn on the function of reading all ASCII characters.

The default is "Disable all ASCII characters".



QaYaCb

Enable all ASCII character



QaYaSa

Disable all ASCII character \*\*

## Set Code 39 barcode length

The default reading digits of Code39 is 0-48, and the scanner can be configured to only read Code 39 barcodes with a length between the minimum length (0-48) and the maximum length (0-48).



XdMbLa

Minimum length



XdNbLa

Maximum length

## Code 32 Pharmaceutical ( PARAF )

Code 32, Code 32 Pharmaceutical, is a form of Code 39 barcode used by Italian pharmacies.

This barcode is also called PARAF.

The output format of Code 32 is: \* + A + 8 digits + 1 digit parity + \*.



QaYaAb

Enable Code 32



QaYaQa

Disable Code 32 \*\*

## Parity



WaYaWa

Send parity \*\*



WaYaMa

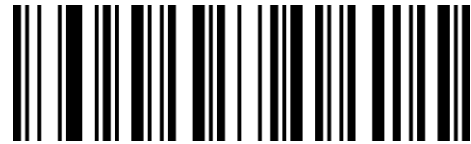
Don' t send parity

## Code 32 add prefix A



QaVdXa

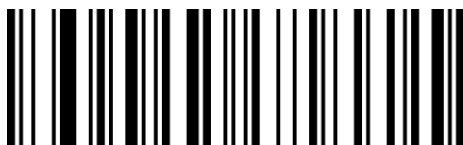
Enable A before barcode information



QaVdNa

Disable A before barcode information \*\*

## Code 32 fail reading



QaZaCb

Enable Code 32 fail reading\*\*



QaZaSa

Disable Code 32 fail reading

Note: Code 32 Pharmaceutical barcode is a subcategory of Code39.

It is an error to read the output content of Code 32 when Code 32 is disabled. The default Code 32 fail reading is enabled.

When Code 32 fail reading is disabled, and if Code 32 is disabled, it' s not allowed to read Code32, normal Code 39 barcodes at this time.

## Code 93



QaXaXa

Enable Code 93\*\*



QaXaNn

Disable Code 93

## Set Code 93 barcode length

The default reading digits of Code93 is 0-80, and the scanner can be configured to only read Code 93 barcodes with a length between the minimum length (0-80) and the maximum length (0-80).



XdEcLa

Minimum length



XdFcLa

Maximum length

## Code 11



QaWaYa

Enable Code 11



QaWaOa

Disable Code 11\*\*

## Parity

Code 11 barcode data has a check character. If there is a check character, it is the last one or second character of the data.

The check character is a value calculated based on all data to check whether the data is correct.



QaYdQa

1 digit parity\*\*



QaYdAb

2 digit parity

## Send parity



QaVdYa

Send parity\*\*



QaVdOa

Don't send parity



## Set Code 11 barcode length

The default reading digits of Code11 is 2-80, and the scanner can be configured to only read Code 11 barcodes with a length between the minimum length (2-80) and the maximum length (2-80).



XdObLa

Minimum length



XdPbLa

Maximum length

## Codabar ( NW-7 )



QaXaZa

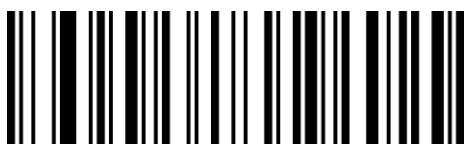
Enable Codabar\*



QaXaPa

Disable Codabar

## Parity



QaAbLa

No parity\*\*



QaAbVa

Mod 16 parity

## Send parity



QaYdBb

Send parity



QaYdRa

Don't send parity \*\*

## Start and end character setting



QaVdCb

Send start and end character



QaVdSa

Don't send start and end character\*\*

## Start and end character format

Codabar start and end characters are allowed to be one of the four characters "A", "B", "C", and "D"; the terminator is also allowed to be "T", "N", "\*", "E" is one of these four characters.



WaMbSa

ABCD/ABCD\*\*

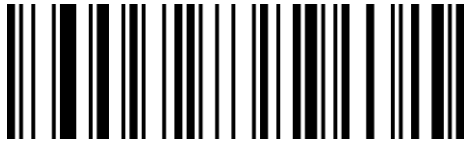


WaMbCb

ABCD/TN\*E

## Set Codabar barcode length

The default reading digits of Codabar is 2-60, and the scanner can be configured to only read Codabar barcodes with a length between the minimum length (2-60) and the maximum length (2-60).



XdGcLa

Minimum length



XdHcLa

Maximum length

## Interleaved 2 of 5



QaXaAb

Enable Interleaved 2 of 5\*\*



QaXaQa

Disable Interleaved 2 of 5

## Parity

Interleaved 2 of 5 barcode data is not mandatory to include a check character. If there is a check character, it is the last character of the data.

The check character is a value calculated based on all data to check whether the data is correct. You can turn on or off the check according to your needs, and set whether to send check characters.

The code number of Interleaved 2 of 5 barcode must be an even number. The check character is included in the code. If it is an odd number, the first digit should be filled with 0. The default is "Disable Interleaved 2 of 5 parity", "Don't send Interleaved 2 of 5 parity".



QaZaLa

Disable parity\*\*



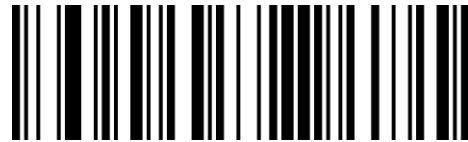
QaZaVa

Enable Mod 10 parity



QaVdZa

Send Mod 10 parity



QaVdPa

Don't send Mode 10 parity\*\*

### Set Interleaved 2 of 5 barcode length

The default reading digits of Interleaved 2 of 5 is 1-80, and the scanner can be configured to only read Interleaved 2 of 5 barcodes with a length between the minimum length (1-80) and the maximum length (1-80).



XdSbLa

Minimum length



XdTbLa

Maximum length

## Matrix 2 of 5



QaWaAb

Enable Matrix 2 of 5\*\*



QaWaQa

Disable Matrix 2 of 5

## Parity

Matrix 2 of 5 barcode data is not mandatory to include a check character. If there is a check character, it must be the last byte of the data.

The check character is a value calculated from all data except the check character to check whether the data is correct. The default is "Disable parity".



AbBbBb

Enable parity



AbBbRa

Disable parity\*\*



AbBbLb

Enable parity, but don't send parity

## Set Matrix 2 of 5 barcode length

The default reading digits of Matrix 2 of 5 is 1-80, and the scanner can be configured to only read Matrix 2 of 5 barcodes with a length between the minimum length (1-80) and the maximum length (1-80).



XdYbLa

Minimum length



XdZbLa

Maximum length

## Industrial 2 of 5



QaXaVa

Enable Industrial 2 of 5\*\*



QaXaLa

Disable Industrial 2 of 5

## Set Industrial 2 of 5 barcode length

The default reading digits of Industrial 2 of 5 is 1-45, and the scanner can be configured to only read Industrial 2 of 5 barcodes with a length between the minimum length (1-45) and the maximum length (1-45).



XdUbLa

Minimum length



XdVbLa

Maximum length

## Standard 2 of 5(IATA 2 of 5)



QaWaZa

Enable Standard 2 of 5



QaWaPa

Disable Standard 2 of 5\*\*

## Set standard 2 of 5 barcode length

The default reading digits of standard 2 of 5 is 1-45, and the scanner can be configured to only read standard 2 of 5 barcodes with a length between the minimum length (1-45) and the maximum length (1-45).



XdWbLa

Minimum length



XdXbLa

Maximum length

## MSI Plessey



QaYaXa

Enable MSI Plessey



QaYaNa

Disable MSI Plessey\*\*

## Parity

MSI Plessey barcode data is not mandatory to include a check character. If there is a check character, it must be the last one or second of the data.

The check character is a value calculated from all data except the check character to check whether the data is correct. The default is "Disable parity".



AbDbPa

Disable parity \*\*



AbDbJb

1 digit Mod 10 parity



AbDbTb

2 digits Mod 10 parity



AbDbZa

1 digit Mod10 , 1 digit Mod 11 parity





QaVdWa

Send parity

QaVdMa

Don' t send parity\*\*

## Set MSI Plessey barcode length

The default reading digits of MSI Plessey is 1-255, and the scanner can be configured to only read MSI Plessey barcodes with a length between the minimum length (1-255) and the maximum length (1-255).



XdCcLa

Minimum length



XdDcLa

Maximum length

## Telepen



QaWaCb

Enable Telepen



QaWaSa

Disable Telepen\*\*



QaWaBb



QaWaRa

Number type

letter and number type\*\*

## Set Telepen barcode length

The default reading digits of Telepen is 1-60, and the scanner can be configured to only read Telepen barcodes with a length between the minimum length (1-60) and the maximum length (1-60).



XdQbLa

Minimum length



XdRbLa

Maximum length

## Febraban ( Brazil bank code)

### Febraban ( ITF25 )



WaNbVa

Enable Febraban



WaNbLa

Disable Febraban\*\*

### Febraban ( Code 128 )



WaNbWa



WaNbMa

Enable Febraban

Disable Febraban\*\*

### Parity



WaNbXa

Enable Febraban parity



WaNbNa

Disable Febraban parity\*\*

### GS1 DataBar 14(RSS-14)



QaAbYa

Enable GS1 DataBar 14\*\*



QaAbOa

Disable GS1 DataBar 14

Note: GS1 DataBar 14 is also called GS1 Databar Omnidirectional、RSS-14.

### GS1 DataBar Limited ( RSS-Limited )



QaAbZa



QaAbPa

Enable RSS-Limited\*\*

Disable RSS-Limited

Note: GS1 DataBar Limited is also called RSS-Limited.

## GS1 DataBar Expanded(RSS-Expanded)



QaAbAb

Enable RSS-Expanded\*\*



QaAbQa

Disable RSS-Expanded

Note : GS1 DataBar Expanded is also called RSS-Expanded.

## Set GS1 Databar Expanded barcode length

The default reading digits of GS1 Databar Expanded is 4-74, and the scanner can be configured to only read GS1 Databar Expanded barcodes with a length between the minimum length (4-74) and the maximum length (4-74).



XdIcLa

Minimum length



XdJcLa

Maximum length

## QR Code



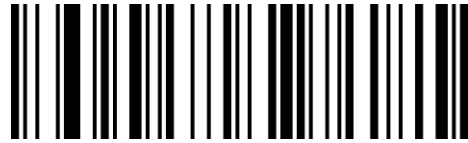
QaCbXa  
Enable QR Code\*\*



QaCbNa  
Disable QR Code



QaCbOa  
Only read normal QR\*\*



QaCbYa  
Read normal and reversed QR

## Set QR barcode length

The default reading digits of QR barcode is 1-7089, and the scanner can be configured to only read QR barcodes with a length between the minimum length (1-7089) and the maximum length (1-7089).

Reading minimum length = minimum length high digit \* 256 + minimum length low digit

Reading maximum length = maximum length high digit \* 256 + maximum length low digit



XdYdLa

Minimum length(low digit)



XdZdLa

Minimum length(high digit)



XdAeLa

Maximum length(low digit)



XdBeLa

Maximum length(high digit)

## Micro QR Code



QaCbAb

Enable Micro QR Code\*\*



QaCbQa

Disable Micro QR Code



QaCbRa

Only read normal Micro QR\*\*



QaCbBb

Read normal and reversed Micro QR

## Data Matrix



QaBbYa

Enable Data Matrix\*\*



QaBbOa

Disable Data Matrix

## Data Matrix Rectangular code



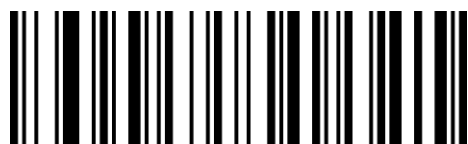
QaBbWa

Enable Data Matrix rectangular code



QaBbMa

Disable Data Matrix rectangular code\*\*



QaBbNa

Only read normal Data matrix\*\*



QaBbXa

Read normal and reversed Data matrix

## Set Data matrix barcode length

The default reading digits of Data matrix is 1-3116, and the scanner can be configured to only read Data matrix barcodes with a length between the minimum length (1-3116) and the maximum length (1-3116).

Reading minimum length = minimum length high digit \* 256 + minimum length low digit

Reading maximum length = maximum length high digit \* 256 + maximum length low digit



XdUdLa

Minimum length(low digit)



XdVdLa

Minimum length(high digit)



XdWdLa

Maximum length(low digit)



XdXdLa

Maximum length(high digit)

## PDF 417



QaWaVa

Enable PDF 417\*\*



QaWaLa

Disable PDF 417



## Set PDF417 barcode length

The default reading digits of PDF417 is 1-2750, and the scanner can be configured to only read PDF417 barcodes with a length between the minimum length (1-2750) and the maximum length (1-2750).

Reading minimum length = minimum length high digit \* 256 + minimum length low digit

Reading maximum length = maximum length high digit \* 256 + maximum length low digit



XdGdLa

Minimum length(low digit)



XdHdLa

Minimum length(high digit)



XdIdLa

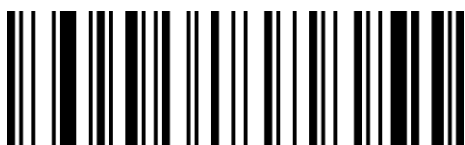
Maximum length(low digit)



XdJdLa

Maximum length(high digit)

## Micro PDF 417



QaAbCb

Enable Micro PDF 417



QaAbSa

Disable Micro PDF 417\*\*

## Set Micro PDF417 barcode length

The default reading digits of micro PDF417 is 1-366, and the scanner can be configured to only read micro PDF417 barcodes with a length between the minimum length (1-366) and the maximum length (1-366).

Reading minimum length = minimum length high digit \* 256 + minimum length low digit

Reading maximum length = maximum length high digit \* 256 + maximum length low digit



XdKdLa

Minimum length(low digit)



XdLdLa

Minimum length(high digit)



XdMdLa

Maximum length(low digit)



XdNdLa

Maximum length(high digit)

## MaxiCode



QaCbZa

Enable MaxiCode



QaCbPa

Disable MaxiCode\*\*

## Set Maxicode barcode length

The default reading digits of maxicode is 1-150, and the scanner can be configured to only read maxicode barcodes with a length between the minimum length (1-150) and the maximum length (1-150).



XdSdLa

Minimum length



XdTdLa

Maximum length

## Aztec Code



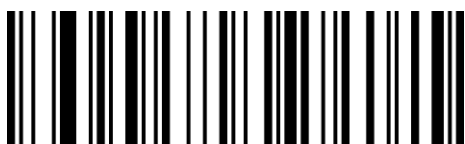
QaCbVa

Enable Aztec Code



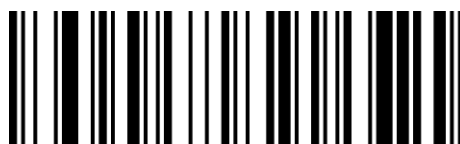
QaCbLa

Disable Aztec Code\*\*



QaCbMa

Only read normal Aztec\*\*



QaCbWa

Read normal and reversed Aztec

## Set Aztec barcode length

The default reading digits of Aztec is 1-3832, and the scanner can be configured to only read Aztec barcodes with a length between the minimum length (1-3832) and the maximum length (1-3832).

Reading minimum length = minimum length high digit \* 256 + minimum length low digit

Reading maximum length = maximum length high digit \* 256 + maximum length low digit



XdOdLa

Minimum length(low digit)



XdPdLa

Minimum length(high digit)



XdQdLa

Maximum length(low digit)



XdRdLa

Maximum length(high digit)

## HanXin Code



SaRdWa

Enable HanXin Code



SaRdMa

Disable HanXin Code\*\*

## Set Hanxin barcode length

The default reading digits of hanxin is 1-7883, and the scanner can be configured to only read hanxin with a length between the minimum length (1-7883) and the maximum length (1-7883).

Reading minimum length = minimum length high digit \* 256 + minimum length low digit

Reading maximum length = maximum length high digit \* 256 + maximum length low digit



XdCeLa

Minimum length(low digit)



XdEeLa

Maximum length(low digit)



XdDeLa

Minimum length(high digit)



XdFeLa

Maximum length(high digit)

## China Post Code



QaZaBb

Enable China Post



QaZaRa

Disable China Post \*\*

Note: China Post Code is also called Hong Kong 2 of 5.

## Set China post length

The default reading digits of China post is 2-80, and the scanner can be configured to only read China post barcodes with a length between the minimum length (2-80) and the maximum length (2-80).



XdOcLa

Minimum length



XdPcLa

Maximum length

## GS1 Composite Code



RaUcBb

Enable GS1 Composite Code



RaUcRa

Disable GS1 Composite Code\*\*

## Set GS1 Composite Code length

The default reading digits of GS1 Composite Code is 1-2435, and the scanner can be configured to only read GS1 Composite Code with a length between the minimum length (1-2435) and the maximum length (1-2435).

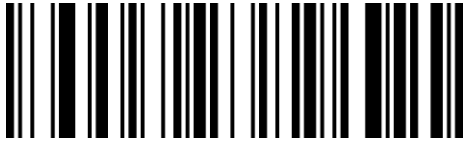
Reading minimum length = minimum length high digit \* 256 + minimum length low digit

Reading maximum length = maximum length high digit \* 256 + maximum length low digit



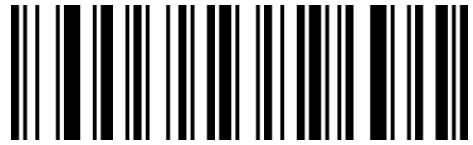
XdKcLa

Minimum length(low digit)



XdMcLa

Maximum length(low digit))



XdLcLa

Minimum length(high digit) )



XdNcLa

Maximum length(high digit)

# Chapter 6 Communication Instructions

## Introduction

The user can send a serial port command from the host to set the reading module. Normal communication can be realized only when the communication parameter configuration is completely matched between the reading module and the host device. The default serial communication parameters of the reading module: baud rate 9600bps, no parity, 8 data bits, 1 stop bit, no flow control.

## Command feedback value

When sending a command to the scanner, after sending the command, the scanner will return a corresponding string to indicate the success or failure of the command execution.

Successful execution returns: 0x06

Execution failure return: 0x15

## Trigger instruction

Open scan (hexadecimal): 16 42 65 52 65 51 62 2E

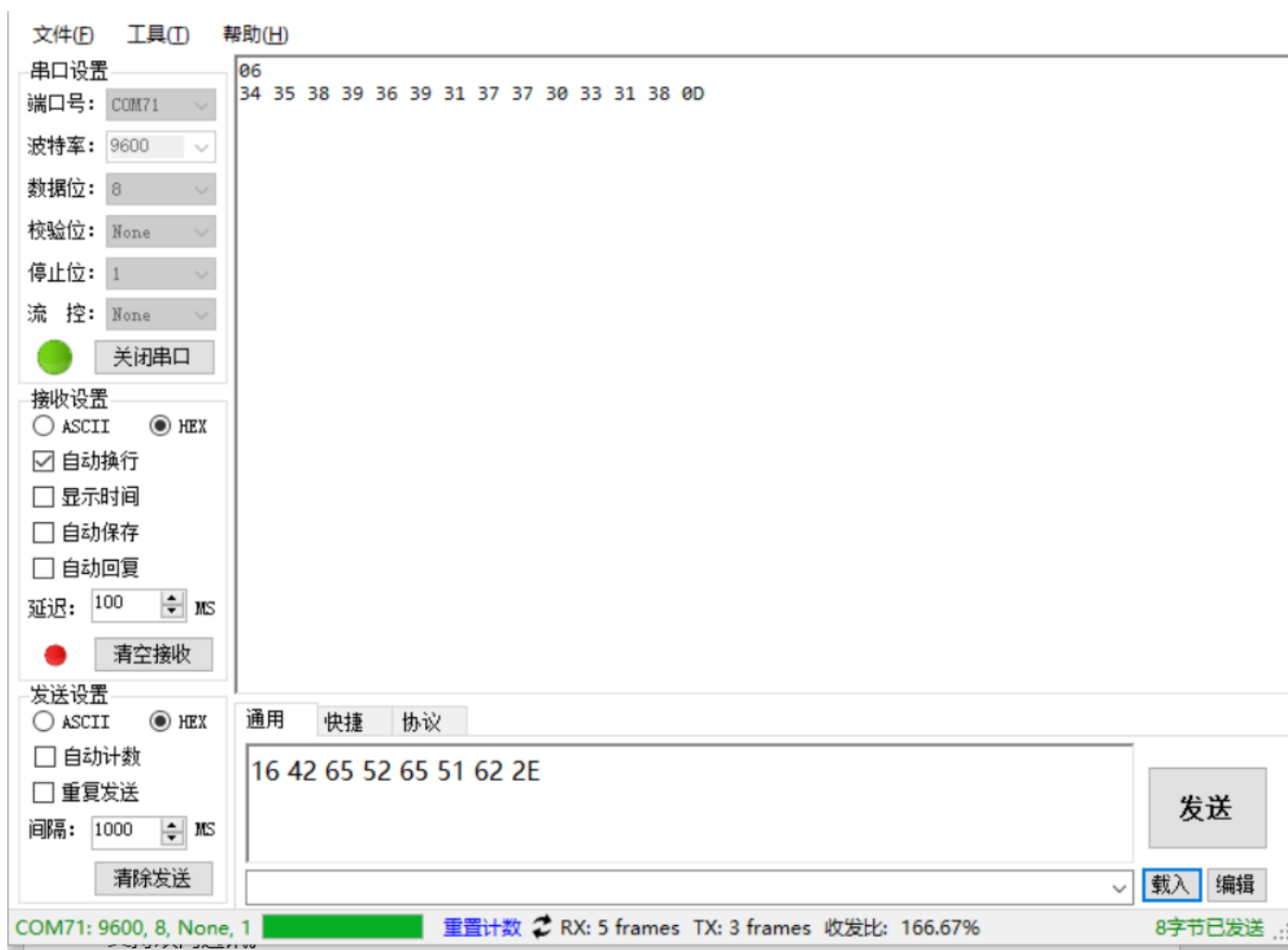
Close scan (hexadecimal): 16 42 65 52 65 52 62 2E

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



## Command sending example

Send a hexadecimal command to control scanning, use the open decoding command to send, confirm the serial port protocol setting, and enter the corresponding command to send in the command sending input box.



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

# Chapter 7 Appendix

## Appendix-Data Code

The data code is used to configure the prefix and suffix, code length or other variable value configuration. When using the data code, it needs to be used in conjunction with

"Appendix-Enter/Exit Data Code Setting Mode".



## Appendix-Enter/Exit Data Code Setting Mode

When the user configures the prefix and suffix, code length or other variable value configuration, you need to scan the "enter/exit data code setting mode" setting code first to enter the data code setting mode. After entering the data code configuration mode, only scanning the variable length configuration code with the "~" symbol is valid. To set other configuration codes, you need to exit the data code setting mode first.



BeReGe

Enter/exit data code setting mode

## Enter/exit data code setting mode

### Example-add prefix and suffix settings

**For example: add a custom prefix of XY to all barcode types**

First, check the "Appendix-ASCII Code Table" to check that the three-digit decimal value corresponding to the character XY that needs to be prefixed is 088,089.

Step 1: Scan the setting code of "Enter/Exit Data Code Setting Mode" in the appendix (the buzzer will sound 3 times);



BeReGe

Enter/exit data code setting mode

Step 2: Scan the "~set custom prefix" setting code;



BeReTd

~Set custom prefix

Step 3: Scan "0", "8" and "8" of "Appendix-Data Code" in turn to set the code. (Every three is a group, the buzzer sounds 1, 2, and 3 respectively).



Step 4: Scan the "~set custom prefix" setting code;



BeReTd

~Set custom prefix

Step 5: Scan "0", "8" and "9" of "Appendix-Data Code" in turn to set the code. (Every three is a group, the buzzer sounds 1, 2, and 3 respectively).



Step 5: Scan the "Enter/Exit Data Code Setting Mode" setting code in the appendix to complete the setting (the buzzer will sound 3 times).



BeReGe

Enter/exit data code setting mode

Note: You can set up to 10 custom prefixes. Repeat the second and third steps to set multiple prefixes. After each prefix is set, it will automatically switch to the next prefix setting (1-10 from left to right) , After setting the 10th, it will automatically jump to the first prefix setting.

## Example-Set the length of one-dimensional code

Note: 1. If the code system to be set: minimum length > maximum length, any length of the code system can be decoded.

2. If the code system to be set: minimum length = maximum length, the decodable length of the code system is fixed to the set value.

3. Some QR codes do not have high and low byte settings, you can also refer to this step.

**For example: set the reading length of Code 128 to 6-15 digits.**

First confirm that the three-digit decimal values corresponding to 6, and 15 are 006 and 015.

Step 1: Scan the setting code of "Enter/Exit Data Code Setting Mode" in the appendix (the buzzer will sound 3 times);



BeReGe

Enter/exit data code setting mode

Step 2: Scan the "~Minimum Length" setting code of Code 128;



XdIbLa

~Minimum length

Step 3: Scan "0", "0" and "6" of "Appendix-Data Code" in turn to set the code. (Every three is a group, the buzzer sounds 1, 2, and 3 respectively).



Step 4: Scan the "~Max Length" setting code of Code 128;



XdJbLa

~Maximum length

Step 5: Scan "0", "1" and "5" of "Appendix-Data Code" in turn to set the code. (Every three is a group, the buzzer sounds 1, 2, and 3 respectively).



Step 6: Scan the setting code of "Enter/Exit Data Code Setting Mode" in the appendix to complete the setting (the buzzer sounds 3 times).



BeReGe

Enter/exit data code setting mode



## Example-Set the length of the QR code

Note: 1. If the code system to be set: minimum length > maximum length, any length of the code system can be decoded.

2. If the code system to be set: minimum length = maximum length, the decodable length of the code system is fixed to the set value.

For example: Set the length of QR Code reading to 20-300 digits.

The two-dimensional code length setting is essentially the same as the one-dimensional code length setting, but the minimum/maximum length setting of the two-dimensional code may be greater than 255, so the length needs to be divided into two settings.

For example, when the maximum length of QR is 300, you need to simply decompose the maximum length value before setting, and divide 300 into high and low bytes, then the high byte is  $300/256 = 1$  (divided up), and the low byte is  $300\% 256=44$  (take the remainder). If the maximum length is <256, the high byte is 0.



XdYdLa

~Minimum length (low byte)



XdZdLa

~Minimum length (high byte)



XdAeLa

~Maximum length (low byte)

XdBeLa

~Maximum length (high byte)

Step 1: Scan the setting code of "Enter/Exit Data Code Setting Mode" in the appendix (the buzzer will sound 3 times);



BeReGe

Enter/exit data code setting mode

Step 2: Scan the "~Minimum Length (High Byte)" setting code of QR Code;



XdZdLa

~Minimum length (high byte)

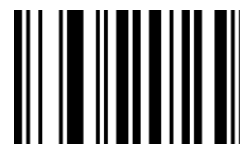
Step 3: Scan "0", "0" and "0" of "Appendix-Data Code" in turn to set the code. (Every three is a group, the buzzer sounds 1, 2, and 3 respectively).



0



0



0

Step 4: Scan the "~Minimum length (low byte)" setting code of QR Code;



XdYdLa

~Minimum length (low byte)

Step 5: Scan "0", "2" and "0" of "Appendix-Data Code" in turn to set the code. (Every three is a group, the buzzer sounds 1, 2, and 3 respectively).



0



2



0

Step 4: Scan the "~Maximum Length (High Byte)" setting code of QR Code;



XdBeLa

~Maximum length (high byte)

Step 5: Scan "0", "0" and "1" of "Appendix-Data Code" in turn to set the code. (Every three is a group, the buzzer sounds 1, 2, and 3 respectively).



0



0



1

Step 4: Scan the "~Max length (low byte)" setting code of Code 128;



XdAeLa

~Maximum length (low byte)

Step 5: Scan "0", "4" and "4" of "Appendix-Data Code" in turn to set the code. (Every three is a group, the buzzer sounds 1, 2, and 3 respectively).



0

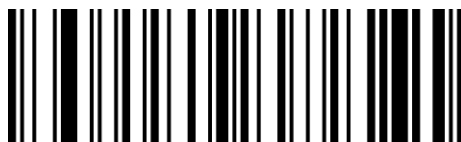


4



4

Step 6: Scan the setting code of "Enter/Exit Data Code Setting Mode" in the appendix to complete the setting (the buzzer sounds 3 times).



BeReGe

Enter/exit data code setting mode

## Example-Hidden character settings

**For example: set to hide the first 3 characters of the barcode.**

Sample barcode: 1616abcd



The original content of the bar code is: 1616abcd, and 6abcd will be output after setting the hidden 3 characters in the head.

Step 1: Scan the setting code of "Enter/Exit Data Code Setting Mode" in the appendix (the buzzer will sound 3 times);



BeReGe

Enter/exit data code setting mode

Step 2: Scan the setting code of "~Head Data Hidden Digits";



YdRbLa

~Hidden number of header data

Step 3: Scan "0", "0" and "3" of "Appendix-Data Code" in turn to set the code. (Every three is a group, the buzzer sounds 1, 2, and 3 respectively).



Step 4: Scan the setting code of "Enter/Exit Data Code Setting Mode" in the appendix to complete the setting (the buzzer sounds 3 times).



BeReGe

Enter/exit data code setting mode

Step 5: Scan the "Enable Hidden Head Characters" setting code;



WaQbCb

Turn on hiding head characters

## Example-character substitution settings

For example: replace the 6 appearing in the sample barcode with the letter X.

First, check the three-digit decimal value of the replaced character "6" through "Appendix-ASCII Code Table", and the three-digit decimal value of the replaced character "X" is 088.



The original content of the barcode is: 1616abcd, output 1X1Xabcd after setting.

Step 1: Scan the setting code of "Enter/Exit Data Code Setting Mode" in the appendix (the buzzer will sound 3 times);



BeReGe

Enter/exit data code setting mode

Step 2: Scan the "~character to be replaced" setting code;



VdEeLa

~The character to be replaced

Step 3: Scan "0", "5" and "4" of "Appendix-Data Code" in turn to set the code. (Every three is a group, the buzzer sounds 1, 2, and 3 respectively).



Step 4: Scan the "~Replace character" setting code;



VdFeLa

~Replacement character

Step 5: Scan "0", "8" and "8" of "Appendix-Data Code" in turn to set the code. (Every three is a group, the buzzer sounds 1, 2, and 3 respectively).



Step 5: Scan the "Enter/Exit Data Code Setting Mode" setting code in the appendix to complete the setting (the buzzer will sound 3 times).



BeReGe

Enter/exit data code setting mode



## Appendix-Default Setting Table

parameter name	default setting	remark
<b>Comprehensive settings</b>		
Setting code function	ON	On by default
Set code to send	OFF	Off by default
Turn on all notification sounds	ON	
Turn on boot sound	ON	
Turn on the configuration code prompt sound	ON	
Turn on the decoding success tone	ON	
Duration of successful decoding tone	ordinary	
Decoding successful prompt audio rate	2.0KHZ	
Decoding successful prompt tone volume	high	
Error warning tone	Low frequency	
Turn on the indicator light for successful barcode reading	ON	
Cue light working mode	Standby off for a long time, working on	

Turn on the fill light	ON
Turn on the aiming light	ON
Data output format	Codepage
Text output in different countries	UTF-8/GB2312 encoding
Invoice function	OFF
Image inversion	Normal phase image recognition
All 1D barcodes are inverted	OFF
All 2D barcodes are inverted	OFF
Prompt for unsuccessful reading	OFF
<b>Communication settings</b>	
Interface mode	USB-KBW
Keyboard mode	American English
Control character output mode	Output function keys
Turn on the virtual keyboard	OFF
Case conversion	OFF Normal
USB transfer speed	ordinary
Serial port transmission speed	fast
Baud rate	9600
Serial verification	No verification
Data bit	8-bit
Stop bit	1 bit

<b>Reading mode</b>		
Reading mode	Manual reading	
Manual reading mode-key timeout	3S	
Continuous reading-the same barcode reading delay	ON	800MS
Induction reading mode-image stabilization time	250ms	
<b>Induction Reading</b>	high	
<b>Mode-Induction Sensitivity</b>		
<b>Data editing</b>		
Send Code ID	OFF	
Send AIM ID	OFF	
Custom prefix	OFF	
Custom suffix	OFF	
Hide head characters	OFF	
Hide middle characters	OFF	
Hide trailing characters	OFF	
Display insert custom characters	OFF	
Start and end	OFF	no
Terminator	CR	
<b>Barcode parameter setting</b>		

Open all barcodes	OFF
<b>UPC-A</b>	
Allow reading	ON
Send check character	ON
Read 2 additional bits	OFF
Read 5 additional digits	OFF
Mandatory additional bits, 2 bits allowed	OFF
Mandatory additional bits, 5 bits allowed	OFF
Transmission system characters	ON
Open separator	ON
Convert to EAN-13	OFF
<b>UPC-E</b>	
Allow reading UPC-E0	ON
Allow reading UPC-E1	OFF
Send check character	ON
Read 2 additional bits	OFF
Read 5 additional digits	OFF
Mandatory additional bits, 2 bits allowed	OFF
Mandatory additional bits, 5 bits	OFF

allowed		
Open separator	ON	
Transmission system characters	ON	System character
Convert to UPC-A	OFF	
<b>EAN-8</b>		
Allow reading	ON	
Send check character	ON	
Read 2 additional bits	OFF	
Read 5 additional digits	OFF	
Mandatory additional bits, 2 bits	OFF	
allowed		
Mandatory additional bits, 5 bits	OFF	
allowed		
Open separator	ON	
Convert to EAN-13	OFF	
<b>EAN-13</b>		
Allow reading	ON	
Send check character	ON	
Read 2 additional bits	OFF	
Read 5 additional digits	OFF	
Mandatory additional bits, 2 bits	OFF	
allowed		

Mandatory additional bits, 5 bits allowed	OFF
Open separator	ON
Convert to ISBN	OFF
Transmit ISBN check character	OFF
Convert to ISSN	OFF
<b>Code 128</b>	
Allow reading	ON
Default reading length	0-80
<b>GS 1-128</b>	
Allow reading	ON
Default reading length	0-80
<b>ISBT 128</b>	
Allow reading	OFF
<b>Code 39</b>	
Allow reading	ON
MOD43 check	OFF
Transmission check	OFF
Transmission start character and end character	OFF
Recognize Full ASCII	OFF
Default reading length	0-48

<b>Code 32</b>		
Allow reading	OFF	
Transmission check	ON	
Add A before opening the barcode	OFF	
Failed to open Code32 to read	ON	
<b>Code 93</b>		
Allow reading	ON	
Default reading length	0-80	
<b>Code 11</b>		
Allow reading	OFF	
Turn on verification	ON	1-bit parity
Transmission check	ON	
Default reading length	2-80	
<b>Codabar</b>		
Allow reading	ON	
Turn on verification	OFF	
Transmission check	OFF	
Transmission start character and end character	OFF	
Start and stop format	ABCD/ABCD	
Default reading length	2-60	

<b>Interleaved 2 of 5</b>	
Allow reading	ON
Turn on verification	OFF
Transmission check	OFF
Default reading length	1-80
<b>Matrix 2 of 5</b>	
Allow reading	ON
Turn on verification	OFF
Default reading length	1-80
<b>Industrial 2 of 5</b>	
Allow reading	ON
Default reading length	1-45
<b>Standard 2 of 5</b>	
Allow reading	OFF
Default reading length	1-45
<b>MSI Plessey</b>	
Allow reading	OFF
Turn on verification	OFF
Transmission check	OFF
Default reading length	1-255
<b>Telepen</b>	
Allow reading	OFF



Character type	Letter type
Default reading length	1-60
<b>Febraban</b>	
Reading allowed (ITF25 type)	OFF
Reading allowed (Code128 type)	OFF
Turn on Febraban	OFF
<b>RSS-14</b>	
Allow reading	ON
<b>RSS-Limited</b>	
Allow reading	ON
<b>RSS-Expanded</b>	
Allow reading	ON
Default reading length	4-74
<b>QR Code</b>	
Allow reading	ON
Reverse reading	OFF
Default reading length	1-7089
<b>Micro QR Code</b>	
Allow reading	ON
Reverse reading	OFF
<b>Data Matrix</b>	
Allow reading	ON

Allow reading rectangular codes	OFF
Reverse reading	OFF
Default reading length	1-3116
<b>PDF 417</b>	
Allow reading	ON
Default reading length	1-2750
<b>Micro PDF 417</b>	
Allow reading	OFF
Default reading length	1-366
<b>MaxiCode</b>	
Allow reading	OFF
Default reading length	1-150
<b>Aztec</b>	
Allow reading	OFF
Reverse reading	OFF
Default reading length	1-3832
<b>HanXin Code</b>	
Allow reading	OFF
Default reading length	1-7883
<b>China Post Code</b>	
Allow reading	OFF
Default reading length	2-80

<b>GS1 Composite Code</b>	
Allow reading	OFF
Default reading length	1-2435

## Appendix-Code ID & AIM ID

Item	Barcode type	Code ID	AIM ID	Description
1	Code 128	A	]C0	
2	GS1 128	B	]C1	
3	EAN-8	C	]E4	
4	EAN-8 with Add-on	C	]E3	
5	EAN-13	D	]E0	
6	EAN-13 with Add-on	D	]E3	
7	UPC-E	E	]E0	
8	UPC-E with Add-on	E	]E3	
9	UPC-A	F	]E0	
10	UPC-A with Add-on	F	]E3	
11	UPC-E1	E	]X0	
12	ISBN	d	]E0	
13	Code11	1	]Hm	m: 0,1,3
14	Code39 Base32	f	]X0	
15	Interleaved 2 of 5	G	]Im	m: 0,1,3
16	Industrial 2 of 5	h	]S0	
17	Standard 2 of 5	H	]R0	
18	Code 39	I	]Am	m: 0,1,3,4,5,7
19	Codabar	J	]Fm	m: 0,2,4
20	MSI Plessey	K	]Mm	m: 0,1,2,3,5,6,7
21	Code 93	L	]G0	
22	GS1 Databar Omnidirectional	M	]e0	

23	GS1 Databar Limited	[	]e0	
24	GS1 Databar Expanded	]	]e0	
25	HongKong 2 of 5(China Post)	P	]X9	
26	Matrix 2 of 5	Q	]X0	
27	PDF417	N	]Lm	m: 0,1,2
28	Micro PDF417	O	]Lm	m: 0,1,2,3,4,5
29	Hanxin	S	]XH	
30	AztecCode	T	]zm	m: 0-9,A-C
31	QR code	U	]Qm	m: 0-6
32	Micro QR	U	]Qm	m: 0-6
33	Data Matrix	V	]dm	m: 0-6
34	Maxi Code	W	]Um	m: 0-3
35	GS1 Composite Code	M / [ / ] / ...	]e0	
36	Telepen	8	]Bm	m: 0,1,2,4

Note: The Code ID of GS1 Composite Code depends on the type of composite code.

## Appendix-Control Character List

Note: The ASCII code table 0-31 is for the control characters in different interface modes. The scanner can use the relevant settings to achieve the functions of the following table.

<b>Hexadecimal</b>	<b>ASCII value (Decimal)</b>	<b>Corresponding key value (Function key operation)</b>	<b>Corresponding key value (Ctrl key combination operation)</b>
00	00	Null	Ctrl+2
01	01	Keypad Enter	Ctrl+A
02	02	Caps lock	Ctrl+B
03	03	Right Arrow	Ctrl+C
04	04	Up Arrow	Ctrl+D
05	05	Null	Ctrl+E
06	06	Null	Ctrl+F
07	07	Enter	Ctrl+G
08	08	Left Arrow	Ctrl+H
09	09	Horizontal Tab	Ctrl+I
0A	10	Down Arrow	Ctrl+J
0B	11	Vertical Tab	Ctrl+K
0C	12	Backspace	Ctrl+L
0D	13	Enter	Ctrl+M
0E	14	Insert	Ctrl+N
0F	15	Esc	Ctrl+O

10	16	F11	Ctrl+P
11	17	Home	Ctrl+Q
12	18	Print Screen	Ctrl+R
13	19	Delete	Ctrl+S
14	20	tab+shift	Ctrl+T
15	21	F12	Ctrl+U
16	22	F1	Ctrl+V
17	23	F2	Ctrl+W
18	24	F3	Ctrl+X
19	25	F4	Ctrl+Y
1A	26	F5	Ctrl+Z
1B	27	F6	Ctrl+[
1C	28	F7	Ctrl+\
1D	29	F8	Ctrl+]
1E	30	F9	Ctrl+6
1F	31	F10	Ctrl+-

## Appendix-ASCII code table

Note: ASCII code table 0-31 are invisible characters used as control characters, and 32-127 are visible characters

Hexadecimal	ASCII value (decimal)	character
00	00	NUL (Null char.)
01	01	SOH (Start of Header)标题开始
02	02	STX (Start of Text) 文本开始
03	03	ETX (End of Text) 文本结束
04	04	EOT (End of Transmission)传输结束
05	05	ENQ (Enquiry) 询问
06	06	ACK (Acknowledgment) 确认
07	07	BEL (Bell)
08	08	BS (Backspace) 退格
09	09	HT (Horizontal Tab) 水平制表符
0A	10	LF (Line Feed) 换行
0B	11	VT (Vertical Tab) 纵向制表符
0C	12	FF (Form Feed) 格式贖给
0D	13	CR (Carriage Return) 回车
0E	14	SO (Shift Out) 移出
0F	15	SI (Shift In) 移入
10	16	DLE (Data Link Escape) 数据传送换码



11	17	DC1 (XON) (Device Control 1) 设备控制1 ( XON )
12	18	DC2 (Device Control 2) 设备控制2
13	19	DC3 (XOFF) (Device Control 3) 设备控制3 ( XOFF )
14	20	DC4 (Device Control 4) 设备控制4
15	21	NAK (Negative Acknowledgment) 否定字符
16	22	SYN (Synchronous Idle) 同步字符
17	23	ETB (End of Trans. Block) 结束传送字组
18	24	CAN (Cancel) 取消
19	25	EM (End of Medium)媒体结束
1A	26	SUB (Substitute) 替代
1B	27	ESC (Escape) 退出
1C	28	FS (File Separator) 文件分隔符
1D	29	GS (Group Separator)分组符
1E	30	RS (Request to Send) 记录分隔符号
1F	31	US (Unit Separator) 单元分隔符
20	32	SP (Space)
21	33	! (Exclamation Mark)
22	34	" (Double Quote)
23	35	# (Number Sign)
24	36	\$ (Dollar Sign)
25	37	% (Percent)
26	38	& (Ampersand)

27	39	` (Single Quote)
28	40	( (Right / Closing Parenthesis)
29	41	) (Right / Closing Parenthesis)
2A	42	* (Asterisk)
2B	43	+ (Plus)
2C	44	, (Comma)
2D	45	- (Minus / Dash)
2E	46	. (Dot)
2F	47	/ (Forward Slash)
30	48	0
31	49	1
32	50	2
33	51	3
34	52	4
35	53	5
36	54	6
37	55	7
38	56	8
39	57	9
3A	58	: (Colon)
3B	59	; (Semi-colon)
3C	60	< (Less Than)

3D	61	= (Equal Sign)
3E	62	> (Greater Than)
3F	63	? (Question Mark)
40	64	@ (AT Symbol)
41	65	A
42	66	B
43	67	C
44	68	D
45	69	E
46	70	F
47	71	G
48	72	H
49	73	I
4A	74	J
4B	75	K
4C	76	L
4D	77	M
4E	78	N
4F	79	O
50	80	P
51	81	Q
52	82	R

53	83	S
54	84	T
55	85	U
56	86	V
57	87	W
58	88	X
59	89	Y
5A	90	Z
5B	91	[ (Left / Opening Bracket)
5C	92	\ (Back Slash)
5D	93	] (Right / Closing Bracket)
5E	94	^ (Caret / Circumflex)
5F	95	_ (Underscore)
60	96	' (Grave Accent)
61	97	a
62	98	b
63	99	c
64	100	d
65	101	e
66	102	f
67	103	g
68	104	h

69	105	i
6A	106	j
6B	107	k
6C	108	l
6D	109	m
6E	110	n
6F	111	o
70	112	p
71	113	q
72	114	r
73	115	s
74	116	t
75	117	u
76	118	v
77	119	w
78	120	x
79	121	y
7A	122	z
7B	123	{ (Left/ Opening Brace)
7C	124	(Vertical Bar)
7D	125	} (Right/Closing Brace)
7E	126	~ (Tilde)

7F

127

DEL (Delete) 删除

## Appendix-Instruction Set

Note: Serial commands need to be used in serial mode

Features	Set code	Instructions (HEX)
1. Scan Control-Start Scan	NG	16 42 65 52 65 51 62 2E
2. Scan control-turn off scanning	NG	16 42 65 52 65 52 62 2E
3. Turn on the configuration code	RaZdNa	16 52 61 5A 64 4E 61 2E
4. Turn off the configuration code	RaZdXa	16 52 61 5A 64 58 61 2E
5. Send the setup code	WaZaBb	16 57 61 5A 61 42 62 2E
6. Do not send setting code	WaZaRa	16 57 61 5A 61 52 61 2E
7. Restore factory defaults	BeQeCe	16 42 65 51 65 43 65 2E
8. Read version	BeReCd	16 42 65 52 65 43 64 2E
9. Save user default settings	UaQdWa	16 55 61 51 64 57 61 2E
10. Restore user default settings	BeQeEe	16 42 65 51 65 45 65 2E
11. Turn on all prompts	WaZaCb	16 57 61 5A 61 43 62 2E
12. Turn off all prompts	WaZaSa	16 57 61 5A 61 53 61 2E
13. Turn on the boot sound	RaOdNa	16 52 61 4F 64 4E 61 2E
14. Turn off the power-on prompt	RaOdXa	16 52 61 4F 64 58 61 2E
15. Turn on the setting code prompt sound	WaZaZa	16 57 61 5A 61 5A 61 2E
16. Turn off the setting code prompt	WaZaPa	16 57 61 5A 61 50 61 2E
17. Turn on the decoding success	RaDeXa	16 52 61 44 65 58 61 2E

tone		
18. Turn off the decoding success tone	RaDeNa	16 52 61 44 65 4E 61 2E
19. Short time for successful decoding	RaCeZa	16 52 61 43 65 5A 61 2E
20. The time of the prompt tone for successful decoding is normal	RaCePa	16 52 61 43 65 50 61 2E
21. Decoding successful prompt audio frequency-1.6KHZ lower	LbDeUb	16 4C 62 44 65 55 62 2E
22. Decoding successful prompt audio frequency-low to medium 2.0KHZ	LbDeEc	16 4C 62 44 65 45 63 2E
23. Decoding successful prompt audio frequency-medium 2.7KHZ	LbDeAb	16 4C 62 44 65 41 62 2E
24. Decoding successful prompt audio frequency-4.2KHZ higher	LbDeKb	16 4C 62 44 65 4B 62 2E
25. Decoding successful prompt tone volume off	BbDePb	16 42 62 44 65 50 62 2E
26. The volume of the decoding success prompt tone is low	BbDeFb	16 42 62 44 65 46 62 2E
27. The volume of the decoding success prompt tone is medium	BbDeVa	16 42 62 44 65 56 61 2E
28. The volume of the prompt tone for successful decoding is high	BbDeLa	16 42 62 44 65 4C 61 2E
29. Error warning tone-low	GbZaNa	16 47 62 5A 61 4E 61 2E



frequency		
30. Error warning tone- medium frequency	GbZaXa	16 47 62 5A 61 58 61 2E
31. Error warning tone-high frequency	GbZaHb	16 47 62 5A 61 48 62 2E
32. Turn on the indicator light for successful barcode reading	RaBeYa	16 52 61 42 65 59 61 2E
33. Turn off the indicator light for successful barcode reading	RaBeOa	16 52 61 42 65 4F 61 2E
34. Reminder light-standby, long off, working on	WaAbRa	16 57 61 41 62 52 61 2E
35. Reminder Light-Standby is always on and work is off	WaAbBb	16 57 61 41 62 42 62 2E
36. Turn on the fill light	GbWaHb	16 47 62 57 61 48 62 2E
37. Turn off the fill light	GbWaNa	16 47 62 57 61 4E 61 2E
38. Turn on the aiming light	GbWaZa	16 47 62 57 61 5A 61 2E
39. Turn off the aiming light	GbWaPa	16 47 62 57 61 50 61 2E
40. The aiming light keeps on	GbWaJb	16 47 62 57 61 4A 62 2E
41. Aiming light flashes	GbWaTb	16 47 62 57 61 54 62 2E
42. Data output format-English	GbBbLa	16 47 62 42 62 4C 61 2E
43. Data output format-Codepage	GbBbVa	16 47 62 42 62 56 61 2E
44. Data output format-Unicode	GbBbFb	16 47 62 42 62 46 62 2E
45. Chinese System-Simplified Chinese	OdPbLa	16 4F 64 50 62 4C 61 2E

46. Chinese System-Traditional Chinese	OdPbIbc	16 4F 64 50 62 49 62 63 2E
47. Traditional Chinese System-Traditional Chinese	OdPbPb	16 4F 64 50 62 50 62 2E
48. Chinese System-Shift-JIS	OdPbJbc	16 4F 64 50 62 4A 62 63 2E
49. Japanese system-Shift-JIS	OdPbVa	16 4F 64 50 62 56 61 2E
50. Korean Language System-CP949	OdPbFb	16 4F 64 50 62 46 62 2E
51. Thai Language System-CP874	OdPbGbc	16 4F 64 50 62 47 62 63 2E
52. Russian system-KOI8-R	OdPbHbc	16 4F 64 50 62 48 62 63 2E
53. Turn on the invoice function	WaBbXa	16 57 61 42 62 58 61 2E
54. Turn off the invoice function	WaBbNa	16 57 61 42 62 4E 61 2E
55. Normal phase image recognition	CbQdRa	16 43 62 51 64 52 61 2E
56. Reverse Image Recognition	CbQdLb	16 43 62 51 64 4C 62 2E
57. Normal and reverse image recognition	CbQdBb	16 43 62 51 64 42 62 2E
58. All one-dimensional barcodes are turned on in reverse	PdZdQbc	16 50 64 5A 64 51 62 63 2E
59. All 1D barcodes are reversed off	PdAeQbc	16 50 64 41 65 51 62 63 2E
60. All two-dimensional barcodes are turned on in reverse	PdBeQbc	16 50 64 42 65 51 62 63 2E
61. All 2D barcodes are reversed off	PdCeQbc	16 50 64 43 65 51 62 63 2E
62. Turn on QR URL to be readable	WaQbPa	16 57 61 51 62 50 61 2E

63. Turn off the readable QR URL	WaQbZa	16 57 61 51 62 5A 61 2E
64. Turn on NR	SaCbCb	16 53 61 43 62 43 62 2E
65. Turn off NR	SaCbSa	16 53 61 43 62 53 61 2E
66. USB-KBW interface	VbZcWag	16 56 62 5A 63 57 61 67 2E
67. American English	JdCcTc	16 4A 64 43 63 54 63 2E
68. Greece	JdCcLbc	16 4A 64 43 63 4C 62 63 2E
69. Netherlands	JdCcGbc	16 4A 64 43 63 47 62 63 2E
70. Spain	JdCcJc	16 4A 64 43 63 4A 63 2E
71. Swiss German	JdCcCbc	16 4A 64 43 63 43 62 63 2E
72. Brazil	JdCcLa	16 4A 64 43 63 4C 61 2E
73. Denmark	JdCcEbc	16 4A 64 43 63 45 62 63 2E
74. British English	JdCcDbc	16 4A 64 43 63 44 62 63 2E
75. Italy	JdCcZb	16 4A 64 43 63 5A 62 2E
76. France	JdCcFb	16 4A 64 43 63 46 62 2E
77. German	JdCcBbc	16 4A 64 43 63 42 62 63 2E
78. Hungary	JdCcNbc	16 4A 64 43 63 4E 62 63 2E
79. Sweden	JdCcRbc	16 4A 64 43 63 52 62 63 2E
80. Svallock	JdCcQbc	16 4A 64 43 63 51 62 63 2E
81. Portugal	JdCcIbc	16 4A 64 43 63 49 62 63 2E
82. Romania	JdCcSbc	16 4A 64 43 63 53 62 63 2E
83. Belgium	JdCcWqc	16 4A 64 43 63 5A 61 63 2E

84. Turkish-F	JdCcTbc	16 4A 64 43 63 54 62 63 2E
85. Turkish-Q	JdCcXac	16 4A 64 43 63 58 61 63 2E
86. Poland	JdCcObc	16 4A 64 43 63 4F 62 63 2E
87. Russian MS	JdCcQdc	16 4A 64 43 63 51 64 63 2E
88. Japan	JdCcVac	16 4A 64 43 63 56 61 63 2E
89. Ukraine	JdCcGdc	16 4A 64 43 63 47 64 63 2E
90. USB keyboard-output function keys	QbBbQa	16 51 62 42 62 51 61 2E
91. USB keyboard-output Ctrl key combination	QbBbAb	16 51 62 42 62 41 62 2E
92. USB keyboard-ALT mode output control characters	QbBbKb	16 51 62 42 62 4B 62 2E
93. USB keyboard-output Enter&DownArrow	QbBbUb	16 51 62 42 62 55 62 2E
94. Turn off the virtual keyboard	WaBbPa	16 57 61 42 62 50 61 2E
95. Turn on the virtual keyboard	WaBbZa	16 57 61 42 62 5A 61 2E
96. Character conversion-no conversion	BbLdOa	16 42 62 4C 64 4F 61 2E
97. Character conversion-all uppercase	BbLdYa	16 42 62 4C 64 59 61 2E
98. Character conversion-all lowercase	BbLdIb	16 42 62 4C 64 49 62 2E
99. Character conversion-reverse case	BbLdSb	16 42 62 4C 64 53 62 2E

100.	USB transfer speed-normal	OdJcVac	16 4F 64 4A 63 56 61 63 2E
101.	USB transfer speed-high	OdJcJc	16 4F 64 4A 63 4A 63 2E
102.	USB transfer speed-ultra high	OdJcVa	16 4F 64 4A 63 56 61 2E
103.	USB-COM virtual serial port	VbZcXag	16 56 62 5A 63 58 61 67 2E
104.	HID-POS	VbZcYag	16 56 62 5A 63 59 61 67 2E
105.	TTL/RS232 serial port	VbZcNc	16 56 62 5A 63 41 62 67 2E
106.	Baud rate-4800	VbCdRdc	16 56 62 43 64 52 64 63 2E
107.	Baud rate-9600	VbCdSdc	16 56 62 43 64 53 64 63 2E
108.	Baud rate-19200	VbCdUdc	16 56 62 43 64 55 64 63 2E
109.	Baud rate-38400	VbCdVdc	16 56 62 43 64 56 64 63 2E
110.	Baud rate -57600	VbCdWdc	16 56 62 43 64 57 64 63 2E
111.	Baud rate -115200	VbCdVac	16 56 62 43 64 56 61 63 2E
112.	Serial port transmission speed-low	JdGeKbc	16 4A 64 47 65 4B 62 63 2E
113.	Serial port transmission speed-medium	JdGeVac	16 4A 64 47 65 56 61 63 2E
114.	Serial port transmission speed-high	JdGeVa	16 4A 64 47 65 56 61 2E
115.	Customize the delay time between characters	TdGeLa	16 4A 64 47 65 XX XX XX 2E
116.	Scan Mode-Manual Mode	VbBeJb	16 56 62 42 65 4A 62 2E

117.	Key-press timeout-unlimited	UaZcCb	16 55 61 5A 63 43 62 2E
118.	Key-press timeout-3S	MdZcAbc	16 4D 64 5A 63 41 62 63 2E
119.	Key timeout-5S	MdZcKbc	16 4D 64 5A 63 4B 62 63 2E
120.	Key timeout-10S	MdZcJcc	16 4D 64 5A 63 4A 63 63 2E
121.	Key-press timeout -15S	MdZcIdc	16 4D 64 5A 63 49 64 63 2E
122.	Key-press timeout-20S	MdZcVaHa	16 4D 64 5A 63 56 61 48 61
123.	~Custom button timeout	WdZcLa	16 4D 64 5A 63 XX XX XX 2E
124.	Continuous reading mode	VbBeZa	16 56 62 42 65 5A 61 2E
125.	Continuous mode same code delay-no delay	JdHeLa	16 4A 64 48 65 4C 61 2E
126.	Continuous mode same code delay -100ms	JdHeVa	16 4A 64 48 65 56 61 2E
127.	Continuous mode same code delay -200ms	JdHeFb	16 4A 64 48 65 46 62 2E
128.	Continuous mode same code delay -800ms	JdHeNd	16 4A 64 48 65 4E 64 2E
129.	Continuous mode same code delay -1200ms	JdHeXac	16 4A 64 48 65 58 61 63 2E
130.	Continuous mode same code delay-2000ms	JdHeFbc	16 4A 64 48 65 46 62 63 2E
131.	Continuous mode same code delay-no timeout	RaHeCb	16 52 61 48 65 43 62 2E
132.	~Customize the same	TdHeLa	16 4A 64 48 65 XX XX XX 2E

barcode reading delay		
133. Scan Mode-Induction Mode	VbBePa	16 56 62 42 65 50 61 2E
134. Induction mode-image stabilization time 50ms	OdCbVa	16 4F 64 43 62 56 61 2E
135. Induction mode-image stabilization time 100ms	OdCbFb	16 4F 64 43 62 46 62 2E
136. Induction mode-image stabilization time 150ms	OdCbPb	16 4F 64 43 62 50 62 2E
137. Induction mode-image stabilization time 200ms	OdCbZb	16 4F 64 43 62 5A 62 2E
138. Induction mode-image stabilization time 250ms	OdCbJc	16 4F 64 43 62 4A 63 2E
139. ~Induction Mode-Customized Image Stabilization Duration	YdCbLa	16 4F- 64 43 62 XX XX XX 2E
140. Induction Mode-High Sensitivity	AcDbVa	16 41 63 44 62 56 61 2E
141. Induction Mode-Medium Sensitivity	AcDbFb	16 41 63 44 62 46 62 2E
142. Induction Mode-Low Sensitivity	AcDbPb	16 41 63 44 62 50 62 2E
143. Code ID-Close	WaFbRa	16 57 61 46 62 52 61 2E
144. Code ID-Open	WaFbBb	16 57 61 46 62 42 62 2E
145. AIM ID-Close	QaXdQa	16 51 61 58 64 51 61 2E

146.	AIM ID-Open	QaXdAb	16 51 61 58 64 41 62 2E
147.	~The first character of custom prefix	NG	16 49 64 46 63 XX XX XX 2E
148.	~The second character of the custom prefix	NG	16 49 64 47 63 XX XX XX 2E
149.	~3rd character of custom prefix	NG	16 49 64 48 63 XX XX XX 2E
150.	~4th character of custom prefix	NG	16 49 64 49 63 XX XX XX 2E
151.	~The 5th character of the custom prefi	NG	16 49 64 4A 63 XX XX XX 2E
152.	~The 6th character of custom prefix	NG	16 49 64 4B 63 XX XX XX 2E
153.	~7th character of custom prefix	NG	16 49 64 4C 63 XX XX XX 2E
154.	~The 8th character of custom prefix	NG	16 49 64 4D 63 XX XX XX 2E
155.	~9th character of custom prefix	NG	16 49 64 4E 63 XX XX XX 2E
156.	~10th character of custom prefix	NG	16 49 64 4F 63 XX XX XX 2E
157.	Clear custom prefix	BeReSd	16 42 65 52 65 53 64 2E
158.	~The first character of custom suffix	NG	16 49 64 50 63 XX XX XX 2E
159.	~Second character of	NG	16 49 64 51 63 XX XX XX 2E



custom suffix		
160. ~3rd character of custom suffix	NG	16 49 64 52 63 XX XX XX 2E
161. ~4th character of custom suffix	NG	16 49 64 53 63 XX XX XX 2E
162. ~The 5th character of custom suffix	NG	16 49 64 54 63 XX XX XX 2E
163. ~The 6th character of custom suffix	NG	16 49 64 55 63 XX XX XX 2E
164. ~7th character of custom suffix	NG	16 49 64 56 63 XX XX XX 2E
165. ~The 8th character of custom suffix	NG	16 49 64 57 63 XX XX XX 2E
166. ~The 9th character of custom suffix	NG	16 49 64 58 63 XX XX XX 2E
167. ~10th character of custom suffix	NG	16 49 64 59 63 XX XX XX 2E
168. Clear custom suffix	BeReRd	16 42 65 52 65 52 64 2E
169. Turn on hiding head characters	WaQbCb	16 57 61 51 62 43 62 2E
170. Turn off hiding head characters	WaQbSa	16 57 61 51 62 53 62 2E
171. ~The number of hidden digits in the header data	YdRbLa	16 4F 64 52 62 XX XX XX 2E
172. Turn on hiding middle	WaQbBb	16 57 61 51 62 42 62 2E

characters		
173. Turn off the hidden middle character	WaQbRb	16 57 61 51 62 52 62 2E
174. ~Intermediate data hiding start bit	YdSbLa	16 4F 64 53 62 XX XX XX 2E
175. ~Hidden digits of intermediate data	YdTbLa	16 4F 64 54 62 XX XX XX 2E
176. Turn on hiding tail characters	WaQbAb	16 57 61 51 62 41 61 2E
177. Turn off hiding tail characters	WaQbQa	16 57 61 51 62 51 61 2E
178. ~The number of hidden bits in the tail data	YdUbLa	16 4F 64 55 62 XX XX XX 2E
179. Turn on display custom characters	WaQbYb	16 57 61 51 62 59 62 2E
180. Turn off display of custom characters	WaQbOa	16 57 61 51 62 4F 61 2E
181. ~Set the position to insert custom characters	YdFcLa	16 4F 64 46 63 XX XX XX 2E
182. ~Insert the first character	NG	16 4F 64 56 62 XX XX XX 2E
183. ~Insert the second character	NG	16 4F 64 57 62 XX XX XX 2E
184. ~Insert the 3rd character	NG	16 4F 64 58 62 XX XX XX 2E
185. ~Insert the 4th character	NG	16 4F 64 59 62 XX XX XX 2E
186. ~Insert the 5th character	NG	16 4F 64 5A 62 XX XX XX 2E

187.	~ Insert the 6th character	NG	16 4F 64 41 63 XX XX XX 2E
188.	~Insert the 7th character	NG	16 4F 64 42 63 XX XX XX 2E
189.	~ Insert the 8th character	NG	16 4F 64 43 63 XX XX XX 2E
190.	~Insert the 9th character	NG	16 4F 64 44 63 XX XX XX 2E
191.	~ Insert the 10th character	NG	16 4F 64 45 63 XX XX XX 2E
192.	~The character to be replaced	VdEeLa	16 4C 64 45 65 XX XX XX 2E
193.	~Replacement characters	VdFeLa	16 4C 64 46 65 XX XX XX 2E
194.	Start Character-None	BbKdPa	16 42 62 4B 64 50 61 2E
195.	Start character-STX	BbKdJb	16 42 62 4B 64 4A 62 2E
196.	Terminator-ETX	BbKdZa	16 42 62 4B 64 5A 61 2E
197.	Start and end characters-STX+ETX	BbKdTb	16 42 62 4B 64 54 62 2E
198.	Terminator-Carriage Return (0x0D)	LbKdGb	16 4C 62 4B 64 47 62 2E
199.	Terminator-line feed (0x0A)	LbKdUc	16 4C 62 4B 64 55 63 2E
200.	Terminator-Carriage Return and Line Feed (0x0D0A)	LbKdWa	16 4C 62 4B 64 57 61 2E
201.	Terminator-Tab HT (0x09)	LbKdQb	16 4C 62 4B 64 51 62 2E
202.	Terminator-Carriage Return (0x0D0D)	LbKdAc	16 4C 62 4B 64 41 63 2E
203.	Terminator-Carriage return and line feed (0x0D0A0D0A)	LbKdKc	16 4C 62 4B 64 4B 63 2E

<b>204.</b>	Terminator-None	LbKdMa	16 4C 62 4B 64 4D 61 2E
<b>205.</b>	Open all barcode types	GbYaXa	16 47 62 59 61 58 61 2E
<b>206.</b>	Close all barcode types	GbYaHb	16 47 62 59 61 48 62 2E
<b>207.</b>	Turn on all one-dimensional barcodes	GbYaZa	16 47 62 59 61 5A 61 2E
<b>208.</b>	Close all one-dimensional barcodes	GbYaJb	16 47 62 59 61 4A 62 2E
<b>209.</b>	Open all QR codes	GbYaBb	16 47 62 59 61 42 62 2E
<b>210.</b>	Close all QR codes	GbYaLb	16 47 62 59 61 4C 62 2E
<b>211.</b>	UPC-A-Open	QaYaBb	16 51 61 59 61 42 62 2E
<b>212.</b>	UPC-A-Close	QaYaRa	16 51 61 59 61 52 61 2E
<b>213.</b>	UPC-A-Transmit Check Digit	QaTdCb	16 51 61 54 64 43 62 2E
<b>214.</b>	UPC-A-Do not transmit check digit	QaTdSa	16 51 61 54 64 53 61 2E
<b>215.</b>	UPC-A-Open 2 additional bits	QaIbCb	16 51 61 49 62 43 62 2E
<b>216.</b>	UPC-A-Close 2 additional bits	QaIbSa	16 51 61 49 62 53 61 2E
<b>217.</b>	UPC-A-open 5 additional bits	QaIbBb	16 51 61 49 62 42 62 2E
<b>218.</b>	UPC-A-Close 5 additional bits	QaIbRa	16 51 61 49 62 52 61 2E
<b>219.</b>	UPC-A-mandatory	QaIbYa	16 51 61 49 62 59 61 2E

inclusion of additional bits		
<b>220.</b> UPC-A-It is not mandatory to include additional bits	QaIbOa	16 51 61 49 62 4F 61 2E
<b>221.</b> UPC-A-open extra bit separator	QaIbXa	16 51 61 49 62 58 61 2E
<b>222.</b> UPC-A-Close extra bit separator	QaIbNa	16 51 61 49 62 4E 61 2E
<b>223.</b> UPC-A-Transmission System Characters	QaTdWa	16 51 61 54 64 57 61 2E
<b>224.</b> UPC-A-Do not transmit system characters	QaTdMa	16 51 61 54 64 4D 61 2E
<b>225.</b> UPC-A-convert to EAN-13	QaTdVa	16 51 61 54 64 5A 61 2E
<b>226.</b> UPC-A- not converted to EAN-13	QaTdLa	16 51 61 54 64 50 61 2E
<b>227.</b> UPC-E0-open	QaYaVa	16 51 61 59 61 56 61 2E
<b>228.</b> UPC-E0-Close	QaYaLa	16 51 61 59 61 4C 61 2E
<b>229.</b> UPC-E1-Open	WaYaVa	16 57 61 59 61 56 61 2E
<b>230.</b> UPC-E1-Close	WaYaLa	16 57 61 59 61 4C 61 2E
<b>231.</b> UPC-E-Transmit Check Digit	QaTdBb	16 51 61 54 64 42 62 2E
<b>232.</b> UPC-E- Do not send check digit	QaTdRa	16 51 61 54 64 52 61 2E
<b>233.</b> UPC-E-Open 2 additional bits	QaIbCb	16 51 61 49 62 43 62 2E

<b>234.</b> UPC-E-Close 2 additional bits	QaIbSa	16 51 61 49 62 53 61 2E
<b>235.</b> UPC-E-open 5 additional bits	QaIbBb	16 51 61 49 62 42 62 2E
<b>236.</b> UPC-E-Close 5 additional bits	QaIbRa	16 51 61 49 62 52 61 2E
<b>237.</b> UPC-E-Mandatory to include additional bits	QaIbYa	16 51 61 49 62 59 61 2E
<b>238.</b> UPC-E-It is not mandatory to include additional bits	QaIbOa	16 51 61 49 62 4F 61 2E
<b>239.</b> UPC-E-open extra bit separator	QaIbXa	16 53 61 41 65 58 61 2E
<b>240.</b> UPC-E-Close additional bit separator	QaIbNa	16 53 61 41 65 4E 61 2E
<b>241.</b> UPC-E-Transmission System Characters	QaTdYa	16 51 61 54 64 59 61 2E
<b>242.</b> UPC-E-Do not transmit system characters	QaTdOa	16 51 61 54 64 4F 61 2E
<b>243.</b> UPC-E-Convert to UPC-A	QaTdAb	16 51 61 54 64 41 62 2E
<b>244.</b> UPC-E- not converted to UPC-A	QaTdQa	16 51 61 54 64 51 61 2E
<b>245.</b> EAN/JAN-8-open	QaYaZa	16 51 61 59 61 5A 61 2E
<b>246.</b> EAN/JAN-8-Close	QaYaPa	16 51 61 59 61 50 61 2E
<b>247.</b> EAN/JAN-8-Transmit Check Digit	QaXdVa	16 51 61 58 64 56 61 2E

248.	EAN/JAN-8- Do not send check digit		QaXdLa	16 51 61 58 64 4C 61 2E
249.	EAN/JAN-8-Open additional bits	2	QaIbCb	16 51 61 49 62 43 62 2E
250.	EAN/JAN-8-Close additional bits	2	QaIbSa	16 51 61 49 62 53 61 2E
251.	EAN/JAN-8-open additional bits	5	QaIbBb	16 51 61 49 62 42 62 2E
252.	EAN/JAN-8-Close additional bits	5	QaIbRa	16 51 61 49 62 52 61 2E
253.	EAN/JAN-8 is mandatory to include additional bits		QaIbYa	16 51 61 49 62 59 61 2E
254.	EAN/JAN-8 is not mandatory to include additional bits		QaIbOa	16 51 61 49 62 4F 61 2E
255.	EAN/JAN-8 enable additional digit separator		QaIbXa	16 51 61 49 62 58 61 2E
256.	EAN/JAN-8 turn off additional digit separator		QaIbNa	16 51 61 49 62 4E 61 2E
257.	EAN/JAN-8-Convert to EAN-13		QaTdXa	16 51 61 54 64 58 61 2E
258.	EAN/JAN-8-not converted to EAN-13		QaTdNa	16 51 61 54 64 4E 61 2E
259.	EAN/JAN -13-open		QaYaWa	16 51 61 59 61 57 61 2E
260.	EAN/JAN -13-Close		QaYaMa	16 51 61 59 61 4D 61 2E

<b>261.</b> EAN/JAN-13-Transmit Check Digit		QaXdXa	16 51 61 58 64 58 61 2E
<b>262.</b> EAN/JAN-13-Do not send check digit		QaXdNa	16 51 61 58 64 4E 61 2E
<b>263.</b> EAN/JAN-13-Open additional bits	2	QaIbCb	16 51 61 49 62 43 62 2E
<b>264.</b> EAN/JAN-13-Turn off additional bits	2	QaIbSa	16 51 61 49 62 53 61 2E
<b>265.</b> EAN/JAN-13-open additional bits	5	QaIbBb	16 51 61 49 62 42 62 2E
<b>266.</b> EAN/JAN-13-Close additional bits	5	QaIbRa	16 51 61 49 62 52 61 2E
<b>267.</b> EAN/JAN-13 is mandatory to include additional bits		QaIbYa	16 51 61 49 62 59 61 2E
<b>268.</b> EAN/JAN-13 is not mandatory to include additional bits		QaIbOa	16 51 61 49 62 4F 61 2E
<b>269.</b> EAN/JAN-13 enable additional digit separator		QaIbXa	16 51 61 49 62 58 61 2E
<b>270.</b> EAN/JAN-13 turn off extra bit separator		QaIbNa	16 51 61 49 62 4E 61 2E
<b>271.</b> EAN/JAN -13-Open ISBN conversion		QaJbCb	16 51 61 4A 62 43 62 2E
<b>272.</b> EAN/JAN -13-Close ISBN conversion		QaJbSa	16 51 61 4A 62 53 61 2E



<b>273.</b>	Transmit ISBN check character	QaJbAb	16 51 61 4A 62 41 62 2E
<b>274.</b>	Do not transmit ISBN check character	QaJbQa	16 51 61 4A 62 51 61 2E
<b>275.</b>	EAN/JAN -13-Open ISSN conversion	RaVcCb	16 52 61 56 63 43 62 2E
<b>276.</b>	EAN/JAN -13-Close ISSN conversion	RaVcSa	16 52 61 56 63 53 61 2E
<b>277.</b>	ISSN-Open	QaTdXa	16 51 61 54 64 58 61 2E
<b>278.</b>	ISSN-Close	QaTdNa	16 51 61 54 64 4E 61 2E
<b>279.</b>	ISSN transmits check character	RaVcAb	16 52 61 56 63 41 62 2E
<b>280.</b>	ISSN does not transmit check characters	RaVcQa	16 52 61 56 63 51 61 2E
<b>281.</b>	Code 128-Open	QaXaYa	16 51 61 58 61 59 61 2E
<b>282.</b>	Code 128-Close	QaXaOa	16 51 61 58 61 4F 61 2E
<b>283.</b>	~Code 128-Minimum length	XdIbLa	16 4E 64 49 62 XX XX XX 2E
<b>284.</b>	~Code 128-Maximum length	XdJbLa	16 4E 64 4A 62 XX XX XX 2E
<b>285.</b>	GS1-128-Open	RaYcVa	16 52 61 59 63 56 61 2E
<b>286.</b>	GS1-128-Close	RaYcLa	16 52 61 59 63 4C 61 2E
<b>287.</b>	~GS1-128-Minimum length	XdKbLa	16 4E 64 4B 62 XX XX XX 2E
<b>288.</b>	~GS1-128-Maximum	XdLbLa	16 4E 64 4C 62 XX XX XX 2E

length		
289. ISBT 128-Enable the connection function	TaCeCb	16 54 61 43 65 43 62 2E
290. ISBT 128-Close connection function	TaCeSa	16 54 61 43 65 53 61 2E
291. Code 39-Open	QaXaWa	16 51 61 58 61 57 61 2E
292. Code 39-Close	QaXaMa	16 51 61 58 61 4D 61 2E
293. Code 39-Enable Mode43 verification	QaYaYa	16 51 61 59 61 59 61 2E
294. Code 39-Close Check	QaYaOa	16 51 61 59 61 4F 61 2E
295. Code 39-Transmission Check	QaVdAb	16 51 61 56 64 41 62 2E
296. Code 39-Do not send verification	QaVdQa	16 51 61 56 64 51 61 2E
297. Code 39-Transmission start and end character	QaVdVa	16 51 61 56 64 56 61 2E
298. Code 39-Do not transmit start and end characters	QaVdLa	16 51 61 56 64 4C 61 2E
299. Code 39-Enable FullASCII	QaYaCb	16 51 61 59 61 43 62 2E
300. Code 39-Close FullASCII	QaYaSa	16 51 61 59 61 53 61 2E
301. ~Code 39-Minimum length	XdMbLa	16 4E 64 4D 62 XX XX XX 2E
302. ~Code 39-Maximum Length	XdNbLa	16 4E 64 4E 62 XX XX XX 2E
303. Code 32-Open	QaYaAb	16 51 61 59 61 41 62 2E

<b>304.</b>	Code 32-Closed	QaYaQa	16 51 61 59 61 51 61 2E
<b>305.</b>	Code 32-Enable verification transmission	WaYaWa	16 57 61 59 61 57 61 2E
<b>306.</b>	Code 32-Turn off verification transmission	WaYaMa	16 57 61 59 61 4D 61 2E
<b>307.</b>	Code 32-Add A before opening the barcode	QaVdXA	16 51 61 56 64 58 61 2E
<b>308.</b>	Code 32- Add A before closing the barcode	QaVdNa	16 51 61 56 64 4E 61 2E
<b>309.</b>	Failed to open Code 32 to read	QaZaCb	16 51 61 5A 61 43 62 2E
<b>310.</b>	Close Code 32 failed to read	QaZaSa	16 51 61 5A 61 53 61 2E
<b>311.</b>	Code 93-Open	QaXaXa	16 51 61 58 61 58 61 2E
<b>312.</b>	Code 93-Close	QaXaNn	16 51 61 58 61 4E 61 2E
<b>313.</b>	~Code 93-Minimum Length	XdEcLa	16 4E 64 45 63 XX XX XX 2E
<b>314.</b>	~Code 93-Maximum Length	XdFcLa	16 4E 64 46 63 XX XX XX 2E
<b>315.</b>	Code 11-Open	QaWaYa	16 51 61 57 61 59 61 2E
<b>316.</b>	Code 11-Close	QaWaOa	16 51 61 57 61 4F 61 2E
<b>317.</b>	Code 11-One-bit check	QaYdQa	16 51 61 59 64 51 61 2E
<b>318.</b>	Code 11-Two Digit Check	QaYdAb	16 51 61 59 64 41 62 2E
<b>319.</b>	Code 11-Transmission	QaVdYa	16 51 61 56 64 59 61 2E

Check		
<b>320.</b> Code 11-Do not send verification	QaVdOa	16 51 61 56 64 4F 61 2E
<b>321.</b> ~Code 11-Minimum Length	XdObLa	16 4E 64 4F 62 XX XX XX 2E
<b>322.</b> ~Code 11-Maximum Length	XdPbLa	16 4E 64 50 62 XX XX XX 2E
<b>323.</b> Codabar-Open	QaXaZa	16 51 61 58 61 5A 61 2E
<b>324.</b> Codabar-Closed	QaXaPa	16 51 61 58 61 50 61 2E
<b>325.</b> Codabar-no parity	QaAbLa	16 51 61 41 62 4C 61 2E
<b>326.</b> Codabar-Mod 16 verification	QaAbVa	16 51 61 41 62 56 61 2E
<b>327.</b> Codabar-Transmission Check	QaYdBb	16 51 61 59 64 42 62 2E
<b>328.</b> Codabar-Do not send check	QaYdRa	16 51 61 59 64 52 61 2E
<b>329.</b> Codabar-transmission start and end characters	QaVdCb	16 51 61 56 64 43 62 2E
<b>330.</b> Codabar-Do not transmit start and stop characters	QaVdSa	16 51 61 56 64 53 61 2E
<b>331.</b> Codabar- ABCD/ABCD	WaMbSa	16 57 61 4D 62 53 61 2E
<b>332.</b> Codabar- ABCD/TN*E	WaMbCb	16 57 61 4D 62 43 62 2E
<b>333.</b> ~Codabar-minimum length	XdGcLa	16 4E 64 47 63 XX XX XX 2E
<b>334.</b> ~Codabar-Maximum	XdHcLa	16 4E 64 48 63 XX XX XX 2E

length		
<b>335.</b> Interleaved 2 of 5- On	QaXaAb	16 51 61 58 61 41 62 2E
<b>336.</b> Interleaved 2 of 5-Close	QaXaQa	16 51 61 58 61 51 61 2E
<b>337.</b> Interleaved 2 of 5-Turn off verification	QaZaLa	16 51 61 5A 61 4C 61 2E
<b>338.</b> Interleaved 2 of 5-Turn on Mod10 verification	QaZaVa	16 51 61 5A 61 56 61 2E
<b>339.</b> Interleaved 2 of 5- Transmission Mod 10 Verification	QaVdZa	16 51 61 56 64 5A 61 2E
<b>340.</b> Interleaved 2 of 5- Do not transmit Mod 10 verification	QaVdPa	16 51 61 56 64 50 61 2E
<b>341.</b> ~Interleaved 2 of 5 -Minimum length	QaXaAb	16 4E 64 53 62 XX XX XX 2E
<b>342.</b> ~Interleaved 2 of 5 -Maximum length	QaXaQa	16 4E 64 54 62 XX XX XX 2E
<b>343.</b> Matrix 2 of 5- On	QaWaAb	16 51 61 57 61 41 62 2E
<b>344.</b> Matrix 2 of 5-Close	QaWaQa	16 51 61 57 61 51 61 2E
<b>345.</b> Matrix 2 of 5-Enable verification	AbBbBb	16 41 62 42 62 42 62 2E
<b>346.</b> Matrix 2 of 5-Turn off verification	AbBbRa	16 41 62 42 62 52 61 2E
<b>347.</b> Matrix 2 of 5-Enable verification, do not send verification	AbBbLb	16 41 62 42 62 4C 62 2E

<b>348.</b> ~Matrix 2 of 5 -Minimum length	XdYbLa	16 4E 64 59 62 XX XX XX 2E
<b>349.</b> ~Matrix 2 of 5 -Maximum length	XdZbLa	16 4E 64 5A 62 XX XX XX 2E
<b>350.</b> Industrial 2 of 5-Open	QaXaVa	16 51 61 58 61 56 61 2E
<b>351.</b> Industrial 2 of 5-Close	QaXaLaQ	16 51 61 58 61 4C 61 2E
<b>352.</b> ~Industrial 2 of 5 -Minimum length	XdUbLa	16 4E 64 55 62 XX XX XX 2E
<b>353.</b> ~Industrial 2 of 5 -Maximum length	XdVbLa	16 4E 64 56 62 XX XX XX 2E
<b>354.</b> Standard 2 of 5-Open	QaWaZa	16 51 61 57 61 5A 61 2E
<b>355.</b> Standard 2 of 5-Close	QaWaPa	16 51 61 57 61 50 61 2E
<b>356.</b> ~Standard 2 of 5 -Minimum length	XdWbLa	16 4E 64 57 62 XX XX XX 2E
<b>357.</b> ~Standard 2 of 5 -Maximum length	XdXbLa	16 4E 64 58 62 XX XX XX 2E
<b>358.</b> MSI-Open	QaYaXa	16 51 61 59 61 58 61 2E
<b>359.</b> MSI-Close	QaYaNa	16 51 61 59 61 4E 61 2E
<b>360.</b> MSI-no calibration	AbDbPa	16 41 62 44 62 50 61 2E
<b>361.</b> MSI one bit Mod 10 check	AbDbJb	16 41 62 44 62 4A 62 2E
<b>362.</b> MSI two-digit Mod 10 check	AbDbTb	16 41 62 44 62 54 62 2E
<b>363.</b> MSI- Mod 11/10 check	AbDbZa	16 41 62 44 62 5A 61 2E
<b>364.</b> MSI-Transmit Check Digit	QaVdWa	16 51 61 56 64 57 61 2E

<b>365.</b>	MSI-Do not send check digit	QaVdMa	16 51 61 56 64 4D 61 2E
<b>366.</b>	~MSI -Minimum length	XdCcLa	16 4E 64 43 63 XX XX XX 2E
<b>367.</b>	~MSI -Maximum length	XdDcLa	16 4E 64 44 63 XX XX XX 2E
<b>368.</b>	Telepen-Open	QaWaCb	16 51 61 57 61 43 62 2E
<b>369.</b>	Telepen-closed	QaWaSa	16 51 61 57 61 53 61 2E
<b>370.</b>	Telepen-Digital Type	QaWaBb	16 51 61 57 61 42 61 2E
<b>371.</b>	Telepen-letter type	QaWaRa	16 51 61 57 61 52 62 2E
<b>372.</b>	~Telepen-Minimum length	XdQbLa	16 4E 64 51 62 XX XX XX 2E
<b>373.</b>	~Telepen-Maximum length	XdRbLa	16 4E 64 52 62 XX XX XX 2E
<b>374.</b>	Telepen-Open	QaWaCb	16 51 61 57 61 43 62 2E
<b>375.</b>	Telepen-closed	QaWaSa	16 51 61 57 61 53 61 2E
<b>376.</b>	Febraban-open (ITF25 type)	WaNbVa	16 57 61 4E 62 56 61 2E
<b>377.</b>	Febraban-closed (ITF25 type)	WaNbLa	16 57 61 4E 62 4C 61 2E
<b>378.</b>	Febraban-open (Code128 type)	WaNbWa	16 57 61 4E 62 57 61 2E
<b>379.</b>	Febraban-Closed (Code128 type)	WaNbMa	16 57 61 4E 62 4D 61 2E
<b>380.</b>	Febraban-Enable verification	WaNbXa	16 57 61 4E 62 58 61 2E
<b>381.</b>	Febraban-Turn off verification	WaNbNa	16 57 61 4E 62 4E 61 2E

<b>382.</b>	GS1 DataBar 14-Open	QaAbYa	16 51 61 41 62 59 61 2E
<b>383.</b>	GS1 DataBar 14-Close	QaAbOa	16 51 61 41 62 4F 61 2E
<b>384.</b>	GS1 DataBar Limited-Open	QaAbZa	16 51 61 41 62 5A 61 2E
<b>385.</b>	GS1 DataBar Limited-closed	QaAbPa	16 51 61 41 62 50 61 2E
<b>386.</b>	GS1 DataBar Expanded-open	QaAbZa	16 51 61 41 62 41 62 2E
<b>387.</b>	GS1 DataBar Expanded-Close	QaAbPaQ	16 51 61 41 62 51 61 2E
<b>388.</b>	~GS1 DataBar Expanded-Minimum Length	XdIcLa	16 4E 64 49 63 XX XX XX 2E
<b>389.</b>	GS1 DataBar Expanded-Maximum Length	XdJcLa	16 4E 64 4A 63 XX XX XX 2E
<b>390.</b>	QR Code-Open	QaCbXa	16 51 61 43 62 58 61 2E
<b>391.</b>	QR Code-Close	QaCbNa	16 51 61 43 62 4E 61 2E
<b>392.</b>	QR Code-Read-only normal phase	QaCbOa	16 51 61 43 62 4F 61 2E
<b>393.</b>	QR Code-Normal + Reverse Reading	AbCbYa	16 51 61 43 62 59 61 2E
<b>394.</b>	~QR Code-Minimum length (low byte)	XdYdLa	16 4E 64 59 64 XX XX XX 2E
<b>395.</b>	~QR Code-Minimum length (high byte)	XdZdLa	16 4E 64 5A 64 XX XX XX 2E
<b>396.</b>	~QR Code-Maximum length (low byte)	XdAeLa	16 4E 64 41 65 XX XX XX 2E



<b>397.</b> ~QR Code-Maximum length (high byte)	XdBeLa	16 4E 64 42 65 XX XX XX 2E
<b>398.</b> Micro QR Code-Open	QaCbAb	16 51 61 43 62 41 62 2E
<b>399.</b> Micro QR Code-Close	QaCbQa	16 51 61 43 62 51 61 2E
<b>400.</b> Micro QR Code-Read only normal phase	QaCbRa	16 51 61 43 62 52 61 2E
<b>401.</b> Micro QR Code-Normal + Reverse Reading	QaCbBb	16 51 61 43 62 42 62 2E
<b>402.</b> Data Matrix-Open	QaBbYa	16 51 61 42 62 59 61 2E
<b>403.</b> Data Matrix-Close	QaBbOa	16 51 61 42 62 4F 61 2E
<b>404.</b> Data Matrix-Allow reading rectangular codes	QaBbWa	16 51 61 42 62 57 61 2E
<b>405.</b> Data Matrix-Prohibited to read rectangular codes	QaBbMa	16 51 61 42 62 4D 61 2E
<b>406.</b>		
<b>407.</b> Data Matrix-Read-only normal phase	QaBbNa	16 51 61 42 62 4E 61 2E
<b>408.</b> Data Matrix-Normal phase + reverse phase reading	QaBbXa	16 51 61 42 62 58 61 2E
<b>409.</b> ~Data Matrix -Minimum length (low byte)	XdUdLa	16 4E 64 55 64 XX XX XX 2E
<b>410.</b> ~Data Matrix -Minimum length (high byte)	XdVdLa	16 4E 64 56 64 XX XX XX 2E
<b>411.</b> ~Data Matrix -Maximum length (low byte)	XdWdLa	16 4E 64 57 64 XX XX XX 2E

<b>412.</b> ~Data Matrix -Maximum length (high byte)	XdXdLa	16 4E 64 58 64 XX XX XX 2E
<b>413.</b> PDF 417-Open	QaWaVa	16 51 61 57 61 56 61 2E
<b>414.</b> PDF 417-Close	QaWaLa	16 51 61 57 61 4C 61 2E
<b>415.</b> ~PDF 417 -Minimum length (low byte)	XdGdLa	16 4E 64 47 64 XX XX XX 2E
<b>416.</b> ~PDF 417 -Minimum length (high byte)	XdHdLa	16 4E 64 48 64 XX XX XX 2E
<b>417.</b> ~PDF 417 -Maximum length (low byte)	XdIdLa	16 4E 64 49 64 XX XX XX 2E
<b>418.</b> ~PDF 417-Maximum length (high byte)	XdJdLa	16 4E 64 4A 64 XX XX XX 2E
<b>419.</b> Micro PDF 417-Open	QaAbCb	16 51 61 41 62 43 62 2E
<b>420.</b> Micro PDF 417-Close	QaAbSa	16 51 61 41 62 53 61 2E
<b>421.</b> ~Micro PDF 417 -Minimum length (low byte)	XdKdLa	16 4E 64 4B 64 XX XX XX 2E
<b>422.</b> ~Micro PDF 417 -Minimum length (high byte)	XdLdLa	16 4E 64 4C 64 XX XX XX 2E
<b>423.</b> ~Micro PDF 417 -Maximum length (low byte)	XdMdLa	16 4E 64 4D 64 XX XX XX 2E
<b>424.</b> ~Micro PDF 417 -Maximum length (high byte)	XdNdLa	16 4E 64 4E 64 XX XX XX 2E
<b>425.</b> MaxiCode-Open	QaCbZa	16 51 61 43 62 5A 61 2E
<b>426.</b> MaxiCode-Close	QaCbPa	16 51 61 43 62 50 61 2E

<b>427.</b>	~MaxiCode length	-Minimum	XdSdLa	16 4E 64 53 64 XX XX XX 2E
<b>428.</b>	~MaxiCode length	-Maximum	XdTdLa	16 4E 64 54 64 XX XX XX 2E
<b>429.</b>	Aztec-On		QaCbVa	16 51 61 43 62 56 61 2E
<b>430.</b>	Aztec-Close		QaCbLa	16 51 61 43 62 4C 61 2E
<b>431.</b>	Aztec-read-only phase	normal	QaCbMa	16 51 61 43 62 4D 61 2E
<b>432.</b>	Aztec-normal reverse phase reading	phase +	QaCbWa	16 51 61 43 62 57 61 2E
<b>433.</b>	~Aztec-minimum (low byte)	length	XdOdLa	16 4E 64 4F 64 XX XX XX 2E
<b>434.</b>	~Aztec-minimum (high byte)	length	XdPdLa	16 4E 64 50 64 XX XX XX 2E
<b>435.</b>	~Aztec-Maximum (low byte)	length	XdQdLa	16 4E 64 51 64 XX XX XX 2E
<b>436.</b>	~Aztec-Maximum (high byte)	length	XdRdLa	16 4E 64 52 64 XX XX XX 2E
<b>437.</b>	HanXin-Open		SaRdWa	16 53 61 52 64 57 61 2E
<b>438.</b>	HanXin-Close		SaRdMa	16 53 61 52 64 4D 61 2E
<b>439.</b>	~HanXin-minimum (low byte)	length	XdCeLa	16 4E 64 43 65 XX XX XX 2E
<b>440.</b>	~HanXin-minimum (high byte)	length	XdDeLa	16 4E 64 44 65 XX XX XX 2E
<b>441.</b>	~HanXin-Maximum	length	XdEeLa	16 4E 64 45 65 XX XX XX 2E

(low byte)		
<b>442.</b> ~HanXin-Maximum length (high byte)	XdFeLa	16 4E 64 46 65 XX XX XX 2E
<b>443.</b> China Post-Open	QaZaBb	16 51 61 5A 61 42 62 2E
<b>444.</b> China Post-Closed	QaZaRa	16 51 61 5A 61 52 61 2E
<b>445.</b> ~China Post -Minimum length	XdOcLa	16 4E 64 4F 63 XX XX XX 2E
<b>446.</b> ~China Post -Maximum Length	XdPcLa	16 4E 64 50 63 XX XX XX 2E
<b>447.</b> GS1 Composte Code-Enable	RaUcBb	16 52 61 55 63 42 62 2E
<b>448.</b> GS1 Composte Code-Close	RaUcRa	16 52 61 55 63 52 61 2E
<b>449.</b> ~GS1 Composte Code-Minimum length (low byte)	XdKcLa	16 4E 64 4B 63 XX XX XX 2E
<b>450.</b> ~GS1 Composte Code-Minimum length (high byte)	XdLcLa	16 4E 64 4C 63 XX XX XX 2E
<b>451.</b> ~GS1 Composte Code-Maximum length (low byte)	XdMcLa	16 4E 64 4D 63 XX XX XX 2E
<b>452.</b> ~GS1 Composte Code-Maximum length (high byte)	XdNcLa	16 4E 64 4E 63 XX XX XX 2E
<b>453.</b> Enter/exit data code setting mode	BeReGe	16 42 65 52 65 47 65 2E

<b>454.</b> Restart	BeReBd	16 42 65 52 65 42 64 2E
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## Appendix-Instructions for Use of Variable Parameter Instructions

Take the minimum length of 10 and the maximum length 30 of Code 128 as an example.

The XX XX XX in the instruction represents the ASCII code of the specific value of the variable parameter, which is fixed to 3 values.

Therefore, the ASCII code value corresponding to 10 is 30 31 30, and the ASCII code value corresponding to 30 is 30 33 30.

Finally, the instructions that need to be set correspond to -

~ Code128 minimum length	16 4E 64 49 62 30 31 30 2E
~ Code 128 maximum length	16 4E 64 4A 62 30 33 30 2E