

2D Wired Barcode Scanner

Setting Manual

---

## Disclaimer

Please read all content of this manual carefully before using product which is described in this manual. This manual is helpful for using product safely. Please keep well for next use.

Do not dismantle terminal equipment or tear up sealed bidding, otherwise our company will do not be responsible for repairing or replacing the terminal.

The pictures in this manual are for reference only. Please refer to the actual product if there is any discrepancy between individual pictures and actual product. For the improvement and update of this product, our company reserves the right to modify the document at any time without notice.

All information contained in this manual is protected by copyright. Our company reserves all rights. Units and individuals are not allowed to extract, copy or combine all or part of this document in any way or for any reason without permission. The products described in this manual may include the copyrighted software of our company or a third party. Units and individuals are not allowed to copy, distribute, modify, excerpt, reverse editing, decode, reverse engineering, lease, transfer, sublicense or other violations of software copyright for the aforementioned software in any form unless permission is obtained from the relevant right holder.

Our company has the final right to interpret this statement.

## Version

| Version | Version Description  | Release date |
|---------|--|--------------|
| V1.0    | Initial Version  | 2020-09-20   |
| V1.1    | Add Instructions   | 2020-12-25   |
| V1.2    | Add custom setting   | 2021-02-01   |
| V1.21   | Add GS1 composite code setting   | 2021-02-10   |
| V1.22   | Add virtual keyboard setting   | 2021-02-21   |
| V1.23   | Add QR URL code settings, hide characters, and customize data insertion functions  | 2021-02-25   |
| V1.24   | Add USB-HID, Febraban, multi-language code, simplify custom setting instructions   | 2021-03-12   |
| V1.25   | Add instructions for using variable parameters   | 2021-03-18   |
| V1.26   | Add Telepen code setup codes   | 2021-04-15   |
| V1.27   | Add USB high-speed transfer mode   | 2021-05-15   |
| V1.28   | Add low power mode and OCR setup code  | 2021-08-25   |
| V1.29   | Add same code delay time (0-12.5s)   | 2021-09-23   |
| V1.30   | Modify setup code of UPC-E additional bit separator  | 2021-10-20   |
| V1.31   | Add new data output format, central mode, ctrl escape 2, HID message format, setting of instruction feedback value and example of custom parameter setting | 2021-12-25   |
| V1.32   | Optimize minimum recognition digit of Code 39, I25, Codabar, Code 11 and MSI   | 2022-01-18   |
| V1.33   | Optimize Code 39, I25, Codabar, Code 11 and MSI  | 2022-01-22   |
| V1.34   | The different code delay of continuous mode is increased, and the minimum number of ITF25 code reading bits is modified to 6.                              | 2022-05-04   |
| V1.35   | Fixed the serial interface instruction to adjust the West European character set format to the input format.   | 2022-08-03   |

|       |   |            |
|-------|---|------------|
| V1.36 | Add postal code Settings, different country text output, different code systems to hide and add characters, bar code samples, multinational text output, etc. | 2022-11-21 |
| V1.37 | Optimize AIM parameters, increase coupon code, optimize pharma minimum read value, etc.   | 2022-11-28 |

# Content

|  |           |
|--|-----------|
| <b>DISCLAIMER</b> .....                                | <b>2</b>  |
| <b>CONTENT</b> .....                                   | <b>6</b>  |
| <b>CHAPTER 1 COMPREHENSIVE SETTINGS</b> .....          | <b>14</b> |
| INTRODUCTION.....                                      | 14        |
| SETUP CODE .....                                       | 14        |
| SETTING INSTRUCTION .....                              | 14        |
| SETUP CODE IDENTIFICATION .....                        | 15        |
| <b>PROCEDURE:</b> .....                                | <b>15</b> |
| <b>NOTE:</b> .....                                     | <b>15</b> |
| SETUP CODE FUNCTION.....                               | 16        |
| SETUP CODE CONTENT.....                                | 16        |
| FACTORY DEFAULT .....                                  | 17        |
| USER DEFAULT SETTING .....                             | 18        |
| VERSION.....   | 19        |
| SOUND.....   | 20        |
| <i>All Sounds</i> .....                                | 20        |
| <i>Power-on Sound</i> .....                            | 20        |
| <i>Setup Code Sound</i> .....                          | 20        |
| <i>Sound of Scanning Normal Barcode</i> .....          | 21        |
| <i>Duration of Scanning Normal Barcode Sound</i> ..... | 21        |
| <i>Frequency of Sound</i> .....                        | 22        |
| <i>Volume of Sound</i> .....                           | 22        |
| <i>Warning of Error Scanning</i> .....                 | 23        |
| LIGHT .....  | 24        |
| <i>Illumination Light</i> .....                        | 24        |
| <b>IT IS USED FOR AUXILIARY LIGHTING</b> .....         | <b>24</b> |
| <i>Fill Light Status</i> .....                         | 25        |
| AIMING LIGHT .....                                     | 26        |
| <i>Aiming Light</i> .....                              | 26        |
| INDICATOR LIGHT OF SCANNING BARCODE .....              | 27        |
| <i>The Light State</i> .....                           | 27        |
| LOW-POWER MODE.....                                    | 28        |
| DATA FORMAT .....                                      | 29        |

|   |           |
|---|-----------|
| <i>Text Output in Different Countries</i> .....   | 29        |
| <i>Data Output Format</i> .....   | 31        |
| <i>Different operating systems output languages of different countries</i> .....          | 32        |
| IMAGE RECOGNITION SETTINGS .....  | 33        |
| <i>Inverse Setting 1</i> .....  | 33        |
| DECODE CENTER AREA SETTINGS .....   | 34        |
| <i>Quickly set the decode area size</i> .....   | 35        |
| PROMPT FOR UNSUCCESSFUL READING .....   | 36        |
| QR URL CODE .....   | 37        |
| <b>SCAN THE SETUP CODE BELOW TO TURN ON OR OFF THE QR CODE GENERATED BY THE URL .....</b> | <b>37</b> |
| <i>Invoice Function</i> .....   | 37        |
| <b>CHAPTER 2 COMMUNICATION SETTINGS .....</b>   | <b>38</b> |
| INTRODUCTION .....  | 38        |
| USB KEYBOARD INTERFACE.....   | 38        |
| <i>National Keyboard Layout</i> .....   | 39        |
| <i>Output Mode of Control Character</i> .....   | 42        |
| <i>Output Method of Virtual Keyboard</i> .....  | 44        |
| CASE CONVERSION .....   | 45        |
| USB TRANSMISSION SPEED.....   | 46        |
| <i>Caps Lock Status Setting</i> .....   | 47        |
| USB-COM VIRTUAL SERIAL PORT ( CDC ) .....   | 48        |
| USB HID-POS.....  | 49        |
| <i>HID-POS Message Format</i> .....   | 50        |
| <b>THE SCANNER WILL SEND MESSAGE AFTER SCANNING SUCCESSFULLY. ....</b>                    | <b>50</b> |
| TTL/RS232 SERIAL PORT INTERFACE .....   | 51        |
| <i>Baud Rate</i> .....  | 52        |
| <i>Serial Port Transmission Speed (Delay between Characters)</i> .....                    | 53        |
| <b>CHAPTER 3 SCANNING MODE.....</b>   | <b>54</b> |
| MANUAL.....   | 54        |
| <i>Manual - Trigger Timeout</i> .....   | 55        |
| <b>WHEN TIMEOUT IS REACHED, THE SCANNER STOPS SCANNING AND WAITS FOR ANOTHER TRIGGER</b>  |           |
| <b>PRESS.....</b>   | <b>55</b> |
| <i>Manual - Custom Trigger Timeout</i> .....  | 56        |
| CONTINUOUS .....  | 57        |
| <i>Continuous - Same Barcode Scanning Delay</i> .....                                     | 58        |

**DEFAULT: 400MS, CONTINUOUS SCANNING MODE ONLY ..... 58**

*Continuous - Different Barcode Reading Delay ..... 60*  
INDUCTION ..... 61  
*Induction - Image Stabilization Time ..... 62*  
*Induction - Sensitivity ..... 63*

**CHAPTER 4 DATA EDITING ..... 64**

INTRODUCTION ..... 64  
CODE ID PREFIX ..... 65  
AIM ID PREFIX ..... 65  
START STX AND END ETX SETTINGS ..... 66  
TERMINATOR ..... 67  
GS CHARACTER SUBSTITUTION ..... 68  
CUSTOM PREFIX ..... 69  
*Setting for Custom Prefix ..... 69*  
*Clear Custom Prefix ..... 69*

**SCAN THE "CLEAR CUSTOM PREFIX" BARCODE TO CLEAR ALL CUSTOM PREFIX CHARACTERS. .... 69**

CUSTOM SUFFIX ..... 70  
*Setting for Custom Suffix ..... 70*  
*Clear Custom Suffix ..... 70*

**SCAN THE "CLEAR CUSTOM SUFFIX" BARCODE TO CLEAR ALL SET CUSTOM SUFFIX CHARACTERS. .... 70**

PREFIX AND SUFFIX ARE ADDED ACCORDING TO THE BARCODE TYPE ..... 71

**SETUP STEPS: ..... 71**

*Set Custom Characters to Appear as Prefixes or Suffixes ..... 73*  
*Clear All Barcode Type Prefixes and Suffixes ..... 73*  
HIDDEN CHARACTER ..... 74  
*Set The Hidden Head Characters ..... 74*  
*Set The Middle Characters ..... 76*  
*Set The Hidden Tail Characters ..... 79*  
HIDE THE HEAD/MIDDLE/TAIL CHARACTERS BASED ON THE BARCODE TYPE ..... 80  
*Hide Header Data ..... 80*  
*Hide Middle Data ..... 83*  
*Hide Tail Data ..... 88*  
INSERT CUSTOM DATA ..... 91  
*Sets The Position to Insert Custom Characters ..... 91*  
*Sets The Data Content for Inserting Custom Characters ..... 92*  
*Clear Caret Characters ..... 92*

|   |           |
|---|-----------|
| <i>Displays The Inserted Character Data</i> ..... | 92        |
| <i>Sets The Inserted Custom Character</i> .....   | 93        |
| CHARACTER SUBSTITUTION .....                      | 94        |
| CTRL-SHIFT-ALT FUNCTION KEY PREFIX SETTING .....  | 95        |
| <i>Function Key Prefix Enable/Disable</i> .....   | 95        |
| <i>Ctrl Function Key</i> .....                    | 95        |
| <i>Shift Function Key</i> .....                   | 95        |
| <i>Alt Function Key</i> .....                     | 95        |
| <i>Customize The Main Key</i> .....               | 96        |
| <b>CHAPTER 5 BARCODE PARAMETER SETTING</b> .....  | <b>97</b> |
| INTRODUCTION .....                                | 97        |
| GLOBAL SETTING .....                              | 98        |
| UPC-A .....                                       | 99        |
| <i>Transmit Check Character</i> .....             | 99        |
| <i>2/5 Additional Digits</i> .....                | 100       |
| <i>Mandatory Additional Digits</i> .....          | 101       |
| <i>Additional Digit Separator</i> .....           | 101       |
| <i>Transmit System Character</i> .....            | 102       |
| <i>Convert to EAN-13</i> .....                    | 102       |
| UPC-E .....                                       | 103       |
| UPC-E0 .....                                      | 103       |
| UPC-E1 .....                                      | 103       |
| <i>Transmit Check Character</i> .....             | 104       |
| <i>2/5 Additional Digits</i> .....                | 105       |
| <i>Mandatory Additional Digits</i> .....          | 106       |
| <i>Additional Digit Separator</i> .....           | 106       |
| <i>Transmit System Character</i> .....            | 107       |
| <i>Convert to UPC-A</i> .....                     | 107       |
| EAN/JAN 8 .....                                   | 108       |
| <i>Transmit Check Character</i> .....             | 108       |
| <i>2/5 Additional Digits</i> .....                | 109       |
| <i>Mandatory Additional Digits</i> .....          | 110       |
| <i>Additional Digit Separator</i> .....           | 110       |
| <i>Convert to EAN13</i> .....                     | 111       |
| EAN/JAN 13 .....                                  | 112       |
| <i>Transmit Check Character</i> .....             | 112       |
| <i>2/5 Additional Digits</i> .....                | 113       |
| <i>Mandatory Additional Digits</i> .....          | 114       |
| <i>Additional Digit Separator</i> .....           | 114       |
| ISBN .....  | 115       |
| <i>Transmit Check Character</i> .....             | 115       |
| ISSN .....  | 116       |
| <i>Transmit Check Character</i> .....             | 116       |

|   |     |
|---|-----|
| CODE 128 .....  | 117 |
| <i>Number of Recognized Characters</i> .....              | 117 |
| GS1-128(UCC/EAN 128).....                                 | 118 |
| <i>Number of Recognized Characters</i> .....              | 118 |
| ISBT 128 .....  | 119 |
| <i>ISBT 128 Connect Function</i> .....                    | 119 |
| CODE 39 .....   | 119 |
| <i>Check Character</i> .....                              | 120 |
| <i>Start and End Characters</i> .....                     | 121 |
| <i>Full ASCII Characters</i> .....                        | 121 |
| <i>Number of Recognized Characters</i> .....              | 122 |
| CODE 32PHARMACEUTICAL ( PARAF ) .....                     | 123 |
| <i>Transmit Check Character</i> .....                     | 123 |
| <i>Code 32 Add Prefix "A"</i> .....                       | 124 |
| <i>Code 32 Failed Scan</i> .....                          | 124 |
| CODE 93 .....   | 125 |
| <i>Number of Recognized Characters</i> .....              | 125 |
| CODE 11 .....   | 126 |
| <i>Check Character</i> .....                              | 127 |
| <i>Number of Recognized Characters</i> .....              | 128 |
| CODABAR ( NW-7 ) .....                                    | 128 |
| <i>Check Character</i> .....                              | 129 |
| <i>Start and End Characters</i> .....                     | 129 |
| <i>Start and End Characters Format</i> .....              | 130 |
| <i>Number of Recognized Characters</i> .....              | 130 |
| INTERLEAVED 2 OF 5 .....                                  | 131 |
| <i>Check Character</i> .....                              | 132 |
| <i>Number of Recognized Characters</i> .....              | 133 |
| MATRIX 2 OF 5 .....                                       | 134 |
| <i>Check Character</i> .....                              | 134 |
| <i>Number of Recognized Characters</i> .....              | 135 |
| INDUSTRIAL 2 OF 5 .....                                   | 136 |
| <i>Number of Recognized Characters</i> .....              | 136 |
| STANDARD 2 OF 5(IATA 2 OF 5) .....                        | 137 |
| <i>Number of Recognized Characters</i> .....              | 137 |
| NEC 2 OF 5 .....  | 138 |
| <i>Check Character</i> .....                              | 138 |
| <i>Number of Recognized Characters</i> .....              | 139 |
| MSI PLESSEY.....  | 140 |
| <i>Check Character [22.01.21 with this barcode]</i> ..... | 141 |
| <i>Number of Recognized Characters</i> .....              | 142 |
| TELEPEN.....  | 143 |
| <i>Telepen Character Format</i> .....                     | 143 |
| <i>Number of Recognized Characters</i> .....              | 144 |

|  |     |
|--|-----|
| TRIOPTIC CODE.....                           | 145 |
| BC412 .....                                  | 146 |
| <i>Number of Recognized Characters</i> ..... | 146 |
| FEBRABAN .....                               | 147 |
| <i>Code 128 Type</i> .....                   | 147 |
| <i>Check Character</i> .....                 | 147 |
| COUPON .....                                 | 148 |
| <i>UPC-A Coupon</i> .....                    | 148 |
| <i>EAN-13(99) Coupon</i> .....               | 148 |
| QR CODE .....                                | 149 |
| <i>QR Code Normal/Reverse</i> .....          | 149 |
| <i>QR Code Append</i> .....                  | 150 |
| <i>Number of Recognized Characters</i> ..... | 150 |
| MICRO QR CODE.....                           | 151 |
| <i>Micro QR Code Normal/Reverse</i> .....    | 151 |
| DATA MATRIX .....                            | 152 |
| <i>Data Matrix Rectangular Code</i> .....    | 152 |
| <i>Data Matrix Normal/Reverse</i> .....      | 152 |
| <i>Number of Recognized Characters</i> ..... | 153 |
| PDF 417 .....                                | 154 |
| <i>Number of Recognized Characters</i> ..... | 154 |
| MICRO PDF 417 .....                          | 155 |
| <i>Number of Recognized Characters</i> ..... | 155 |
| MAXICODE .....                               | 156 |
| <i>Number of Recognized Characters</i> ..... | 156 |
| AZTEC CODE .....                             | 157 |
| <i>Aztec Code Normal/Reverse</i> .....       | 157 |
| <i>Number of Recognized Characters</i> ..... | 158 |
| HANXIN CODE.....                             | 159 |
| <i>Number of Recognized Characters</i> ..... | 159 |
| PHARMA CODE ( ONE-TRACK ) .....              | 161 |
| CODABLOCK A CODE.....                        | 161 |
| <i>Number of Recognized Characters</i> ..... | 162 |
| CODABLOCK F CODE .....                       | 162 |
| <i>Number of Recognized Characters</i> ..... | 163 |
| GS1 DATABAR 14 (RSS-14) .....                | 164 |
| GS1 DATABAR LIMITED ( RSS-LIMITED ) .....    | 164 |
| GS1 DATABAR EXPANDED(RSS-EXPANDED).....      | 165 |
| <i>Number of Recognized Characters</i> ..... | 165 |
| GS1 COMPOSITE CODE .....                     | 166 |
| <i>GS1-128 Composite</i> .....               | 166 |
| <i>UPC Composite</i> .....                   | 167 |
| <i>Number of Recognized Characters</i> ..... | 168 |
| TLC 39 CODE.....                             | 169 |

|  |            |
|--|------------|
| <i>TLC39 Mandatory Attached</i> .....  | 169        |
| OCR.....   | 170        |
| <i>ID/Passport OCR</i> .....   | 171        |
| <i>OCR Check</i> .....   | 171        |
| POSTAL CODE – 1D.....  | 172        |
| CHINA POST CODE.....   | 172        |
| <i>Number of Recognized Characters</i> .....   | 172        |
| KOREA POST.....  | 173        |
| <i>Korea Post Reverse Output</i> .....   | 173        |
| <i>Korea Post Check Character</i> .....  | 174        |
| <i>Number of Recognized Characters</i> .....   | 174        |
| POSTAL CODE – 2D.....  | 175        |
| AUSTRALIAN POST.....   | 175        |
| <i>Australian Error Correction Bit</i> .....   | 175        |
| BRITISH POST.....  | 176        |
| USPS INTELLIGENT MAIL.....   | 177        |
| JAPANESE POST.....   | 177        |
| PLANET CODE.....   | 178        |
| <i>Planet Code Check Character</i> .....   | 178        |
| POSTNET.....   | 179        |
| <i>Postnet Check Character</i> .....   | 179        |
| UPU 4-STATE.....   | 180        |
| KIX CODE.....  | 180        |
| <b>CHAPTER 6 COMMUNICATION INSTRUCTIONS</b> .....  | <b>181</b> |
| INTRODUCTION.....  | 181        |
| COMMAND FEEDBACK VALUE.....  | 181        |
| TRIGGER INSTRUCTION.....   | 181        |
| ACK/NAK.....   | 182        |
| INSTRUCTION SENDING EXAMPLE.....   | 182        |
| <b>CHAPTER 7 APPENDIX</b> .....  | <b>183</b> |
| APPENDIX-ENTER/EXIT DATA CODE SETTING MODE.....  | 183        |
| APPENDIX-DATA CODE.....  | 184        |
| APPENDIX - DEFAULT SETTINGS TABLE.....   | 185        |
| APPENDIX - CUSTOM PARAMETER EXAMPLES.....  | 198        |
| <i>Example - Customize The Center Area Size</i> .....  | 201        |
| <i>Example - Customize Key Timeout</i> .....   | 203        |
| <i>Example - Customize Image Stabilization Duration</i> .....  | 207        |
| <i>Example - Adding Prefix and Suffix Settings</i> .....   | 209        |
| <i>Example -Adding Prefixes and Suffixes According to Barcode Type</i> .....                         | 211        |
| <i>Example - Hiding Character Settings</i> .....   | 213        |
| <i>Example - Inserting Custom Data</i> .....   | 215        |
| <i>Example - Hide Prefix Characters by Barcode Type: Hide the First Three UPC-E Characters</i> ..... | 218        |

---

|  |     |
|--|-----|
| <i>Example -Hide Middle Characters According to Barcode Type: Hide UPC-E Middle 2-bit Characters Starting From the 3rd bit</i> | 220 |
| <i>Example -Hide Postcharacter According to Barcode Type: Hide the Last 3 bits of UPC-E Character</i>                          | 222 |
| <i>Example - Character substitution Settings</i>   | 224 |
| <i>Example - Custom Function Key Prefixes</i>  | 227 |
| <i>Example - Set One-dimensional Code Read Length</i>  | 229 |
| <i>Example - Set Two-dimensional Code Read Length</i>  | 232 |
| APPENDIX-CODE ID & AIM ID  | 237 |
| APPENDIX - CONTROL CHARACTER TABLE   | 240 |
| APPENDIX -ASCII CODE TABLE   | 242 |
| APPENDIX - INSTRUCTION SETS  | 249 |
| APPENDIX - INSTRUCTIONS FOR USING VARIADIC DIRECTIVES  | 291 |
| APPENDIX - REFERENCE BARCODE EXAMPLES  | 293 |
| 1D Barcode   | 293 |
| 2D Barcode   | 297 |
| Composite Code and OCR   | 299 |
| 1D Postal Code   | 304 |
| 2D Postal Code   | 305 |
| APPENDIX - MULTILINGUAL TEXT OUTPUT  | 306 |
| <i>Example - Simplified Chinese Text Output</i>  | 306 |
| <i>Example - Simplified Chinese Text Output (Linux system)</i>   | 307 |
| <i>Example - Traditional Chinese Text Output</i>   | 309 |
| <i>Example - Japanese Text Output</i>  | 310 |
| <i>Example - German Output</i>   | 311 |
| <i>Example - French Output</i>   | 312 |
| <i>Example - Spanish Output</i>  | 313 |
| <i>Example - Italian Output</i>  | 314 |

---

# Chapter 1 Comprehensive Settings

## Introduction

This manual is mainly used to introduce how to set the corresponding functions of the scanner. There are two ways to set up the scanner.

## Setup Code

The scanner can set the corresponding function by reading the setup codes. In the following chapters, we will introduce the corresponding setting options and functions in detail and provide the corresponding setup codes.

## Setting Instruction

The host can send a set of hexadecimal strings to set the scanner. In the following chapters, we will 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 and process relevant instructions in batches through secondary development.

## Setup code Identification



### Procedure:

In manual scan mode, the operation steps for scanning barcodes are as follows:

1. Press and hold the trigger button of the scanner, the red aiming light will appear.
2. Align the aiming light to the center of the barcode, move the scanner and adjust the distance between it and the barcode to find the best scanning distance.
3. When the prompt sound is heard and the aiming light goes out, it means successful and the scanner will transmit the decoded data to the host.

### Note:

During the scanning process, for the same kind of barcodes, there will be a high recognition with a suitable distance. This is the best recognition distance.

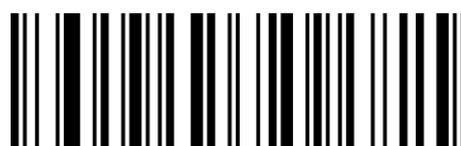
## Setup Code Function

The setup code can be turned off. When the scanner is set to "On", the setting function will work with setup code is scanned. When the scanner is set to "Off", the error tone will appear and the setting function will not work with setup code is scanned. The default is "On".



RaZdNa

On\*\*



RaZdXa

Off

## Setup Code Content

The content of setup code can be sent. After scanning the "Send Content", the content will be sent to the host when the setup code is scanned. After scanning the "Do not send Content", the scanner will no longer send the setup code content. The default is "Do not send Content".



WaZaBb

Send Content

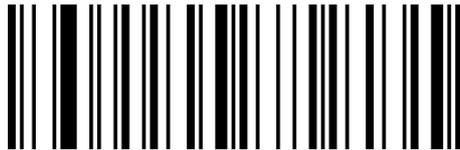


WaZaRa

Do not send Content\*\*

## Factory Default

All scanners have a factory default setting. The scanner's properties will be set to the default state of the software with scanning the "Factory Default" setup code.



BeQeCe

Factory Default

### **Instruction:**

You could 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 and you do not want to use the previous settings.
3. Some infrequent functions were set and do not want to keep using it.

## User Default Setting

Users can 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 the old information has been saved, the new configuration information will replace the original user default setting information after this operation.



UaQdWa

Save user default settings



BeQeEe

Restore user default settings

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

Step 1: Scan the barcode of "Open setup code".

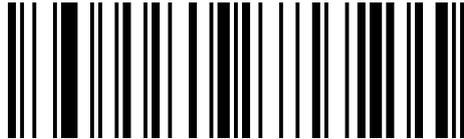
Step 2: Scan the barcode "Prohibit scanning EAN-13".

Step 3: Scan the barcode of "Save user default settings".

Step 4: Scan the barcode of "Close setup code".

## Version

Use the scanner to scan the version barcode and you will view the information of current scanner version.

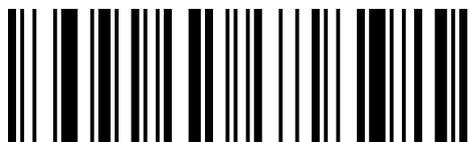


BeReCd

Version

## Sound

### All Sounds



WaZaCb

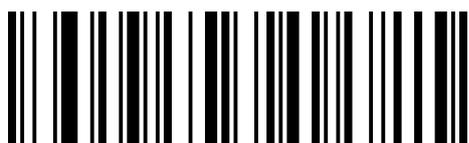
On\*\*



WaZaSa

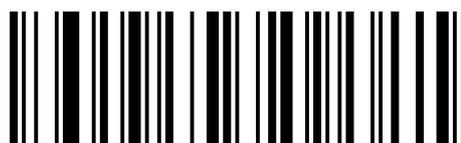
Off

### Power-on Sound



RaOdNa

On\*\*



RaOdXa

Off

### Setup Code Sound



WaZaZa

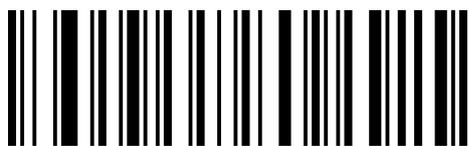
On\*\*



WaZaPa

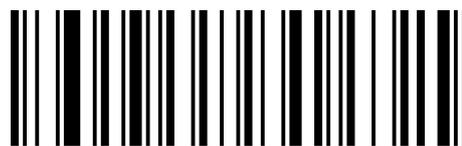
Off

## Sound of Scanning Normal Barcode



RaDeXa

On\*\*



RaDeNa

Off

## Duration of Scanning Normal Barcode Sound



RaCeZa

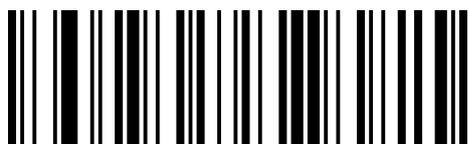
Short



RaCePa

Normal\*\*

## Frequency of Sound



LbDeUb

Low frequency 1.6KHZ



LbDeEc

Low-medium frequency 2.0KHZ\*\*



LbDeAb

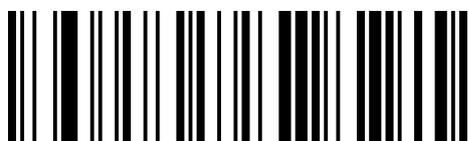
Medium frequency 2.7KHZ



LbDeKb

High frequency 4.2KHZ

## Volume of Sound



BbDePb

Off



BbDeFb

Low



BbDeVa

Medium



BbDeLa

High\*\*

## Warning of Error Scanning



GbZaN

Low frequency 2.5KHZ\*\*



GbZaX

Medium frequency 3.25KHZ



GbZaH

High frequency 4.2KHZ

# Light

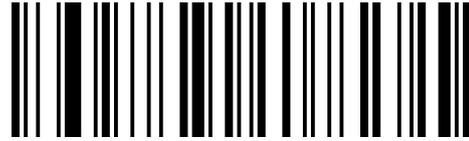
## Illumination Light

It is used for auxiliary lighting.



GbWaRb

High



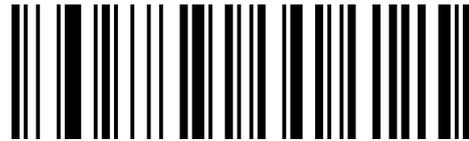
GbWaHb

\*\* Middle



GbWaXa

Low



GbWaNa

Off

*Note: 1 megapixels default to high, others default to medium.*

## Fill Light Status

Some products support setting the state of the light, when the scanned object is close to the bar code, the brightness will decrease, when the scanned object is far away from the bar code, the brightness of the bar code light will increase, this state is the change mode, and the default is this mode.



XaEeRa

Change Mode\*\*



XaEeBb

Continuous Mode

Note: The lighting status applies to the whole product

## Aiming Light

### Aiming Light

Aiming the beam helps the user find the best reading distance when shooting reading.

Users can select any of the following modes based on the application environment. Defaults to open aimed at lights, and the state.

On (default setting) : Aim light is on for long periods during shooting reading and off at other times.

Off: The sight light does not turn on under any circumstances.

Continuous: after the reading engine is powered on, the sight beam is continuously projected.

Flashing: After the reading engine is powered on, the sight beam blinks continuously.



GbWaZa

On\*\*



GbWaPa

Off



GbWaJb

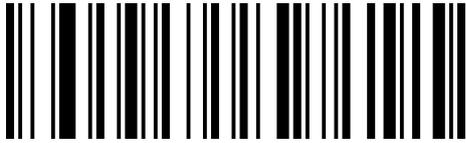
Continuous



GbWaTb

Flashing

## Indicator Light of Scanning Barcode



RaBeYa

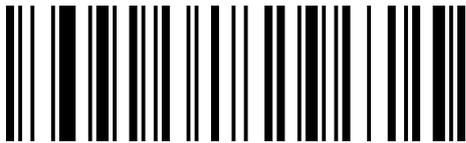
On\*\*



RaBeOa

Off

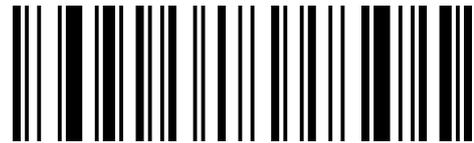
## The Light State



WaAbRa

Working: On

Standby: Off\*\*



WaAbBb

Working: Off

Standby: On

## Low-Power Mode



WaQbWa

On\*\*



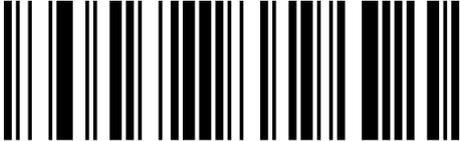
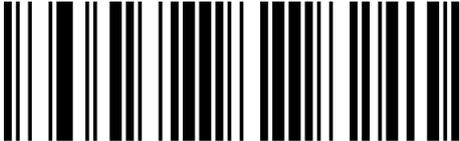
WaQbMa

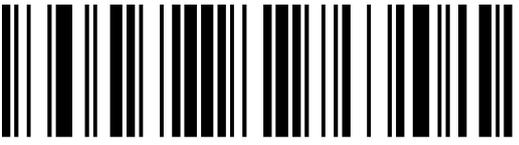
Off

## Data Format

### Text Output in Different Countries

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 is the PC system language is CH, UTF8\GB2312 encoding.

|   |  |
|---|--|
| PC system language is CH<br>UTF-8/GB2312 encoding** | <br>0dPbLa     |
| PC system language is CH<br>BIG 5 encoding          | <br>0dPbIbc |
| PC system language is BIG 5<br>BIG 5 encoding       | <br>0dPbPb   |
| PC system language is CH<br>Shift-JIS encoding      | <br>0dPbJbc |
| PC system language is JP<br>Shift-JIS encoding      | <br>0dPbVa   |

|   |   |
|---|---|
| PC system language is<br>Korean<br>CP949 encoding                     | <br>OdPbFb   |
| PC system language is Thai<br>CP874 encoding                          | <br>OdPbGbc   |
| PC system language is<br>Russia<br>KOI8-R encoding                    | <br>OdPbHbc  |
| After the Russian Codepage<br>CP1251 【 22.09.10 version<br>supports 】 | <br>OdPbRbc |
| European single-byte<br>character western character<br>set            | <br>OdPbYac |
| European double-byte<br>characters                                    | <br>OdPbNbc |

*Note: When the PC system language is JP, the two-dimensional code is UTF-8/GB2312 encoding, because the JP system side encoding does not have a perfect Chinese encoding, it will cause some Chinese can not be completely displayed in the JP system.*

## Data Output Format

The default is Codepage mode.



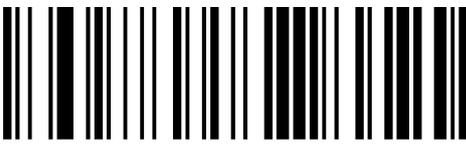
GbBbVa

Codepage \*\*



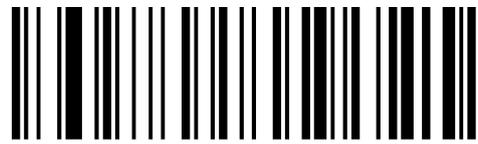
GbBbFb

Unicode



GbBbPb

UTF-8



GbBbLa

Original Data

## Different operating systems output languages of different countries



GbAbNa

Windows\*\*



GbAbXa

Linux1



GbAbHb

Linux2

## Image Recognition Settings

### Inverse Setting 1

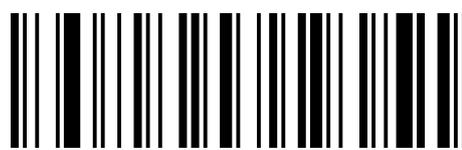
**Normal barcode:** dark barcode with light background.

**Inverted barcode:** light barcode with dark background.



CbQdRa

Normal Only \*\*



CbQdLb

Inverse Only



CbQdBb

Normal + Inverse

## Decode center area Settings



ObCcLa

Full area decoding\*\*



ObCcPb

Center area decoding



ObCcZb

Center mode decoding

**Full area decoding:** The entire area of the captured image (the whole image) is selected for decoding, and only the first barcode read is output.

**Center area decoding:** The center of the bar code must be located in the set area in order to successfully read. If there are multiple barcodes in the set area at the same time, only the first barcode read is output (in this case, it is recommended to reduce the size of the center area).

The default center area is 60%, that is, 20% at the top, 80% at the bottom, 20% on the left, and 80% on the right.

Aiming barcode decoding: only scan the central aiming barcode code.

**Center mode decoding:** Only the barcode aligned with the aiming light is read and decoded, because the aiming light and the shooting image have a certain distance, the actual center decoding of the image shooting shall be subject to.

## Quickly set the decode area size

To quickly set the decoding area, enable the decoding mode in the central area first.



BeReTb

40%



BeReUb

50%



BeReVb

60% \*\*

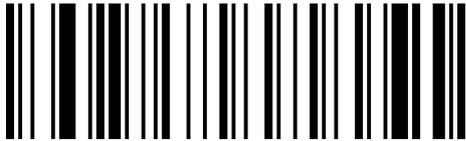


BeReWb

80%

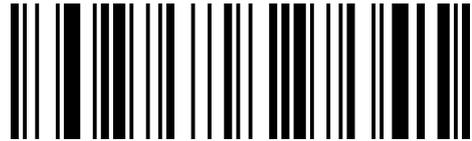
## Prompt for Unsuccessful Reading

The NR (NO READ) message will be sent when the barcode is not read. Any feasible prefix or suffix can be attached to this message.



SaCbCb

On



SaCbSa

Off\*\*

## QR URL Code

Scan the setup code below to turn on or off the QR code generated by the URL.



WaQbPa

On\*\*



WaQbZa

Off

## Invoice Function



WaBbXa

On



WaBbNa

Off\*\*

# 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 functions of scanner by scanning one or more setup barcodes. You can choose to use USB (USB-KBW, USB-COM, and USB-HID), TTL and RS232 serial communication interface modes, etc.

## USB Keyboard Interface

The default is USB-KBW communication. It will simulate USB keyboard input mode without installing driver.



VbZcWag

USB-KBW \*\*

## National Keyboard Layout

The keyboard layout setting is applicable to the USB-KBW interface mode and the default is "American English keyboard".



JdCcTc

American English\*\*



JdCcLbc

Greek (Greek)



JdCcGbc

Dutch (Dutch)



JdCcJc

Spain (Spanish Language)



JdCcCbc

Switzerland(German)



JdCcLa

Brazil (Portuguese)



JdCcEbc

Denmark



JdCcDbc

UK (British English)



JdCcZb

Italy (Italian)



JdCcFb

France (French)



JdCcBbc

Germany (German)



JdCcNbc

Hungary



JdCcRbc

Sweden (Swedish)



JdCcQbc

Slovakia



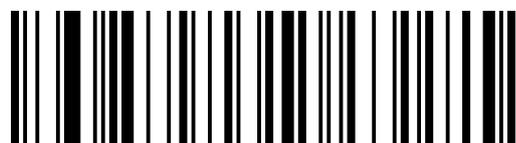
JdCclbc

Portuguese (Portuguese)



JdCcSbc

Romania



JdCcZac

Belgium (French)



JdCcTbc

Turkey-F



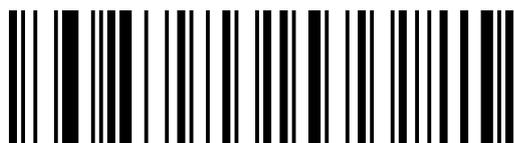
JdCcXac

Turkey-Q



JdCcObc

Poland (Polish)



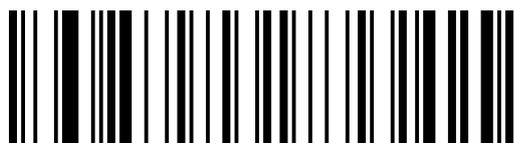
JdCcQdc

Russia (Russian MS)



JdCcVac

Japan (Japanese)



JdCcGdc

Ukrainia



JdCcVa

Arabic



JDCcNd

Thai

## Output Mode of Control Character

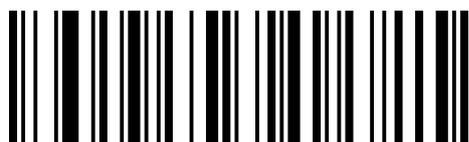
Output mode selection of control character (0x00-0x1F) in ASCII code:

**Output function key:** control characters are used as custom function keys. See "Appendix-Control Character List" for specific functions.

**Output Ctrl combination key** (this function is used with prefixes and suffixes): Ctrl combination key outputs control characters. See "Appendix-Control Character List" for specific functions.

**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, and 0x0D output Enter.



QbBbQa

Output function key \*\*



QbBbAb

Output Ctrl combination key (Escape 1)



QbBbEc

Output Ctrl combination key (Escape 2)



QbBbKb

ALT mode output control characters



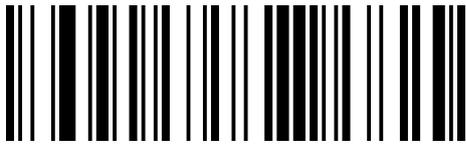
QbBbUb

Output Enter & DownArrow

## Output Method of Virtual Keyboard

Output mode of control character (0x20-0xFF) in ASCII code:

When the virtual keyboard is turned on, all characters between 0x20 and 0xFF will be output with virtual keyboard.



WaBbPa

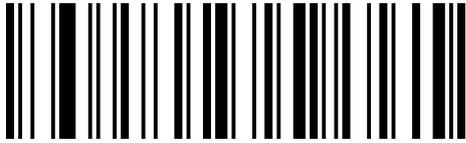
Turn off virtual keyboard \*\*



WaBbZa

Turn on virtual keyboard

## Case Conversion



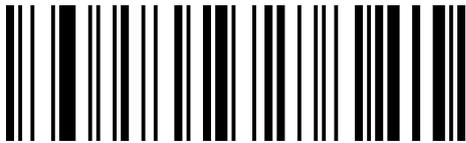
BbLdOa

Normal\*\*



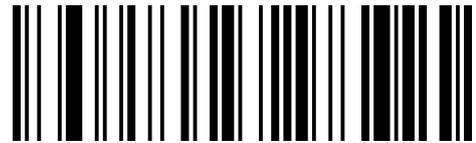
BbLdYa

Upper



BbLdlb

Lower



BbLdSb

Inverse

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

# USB Transmission Speed



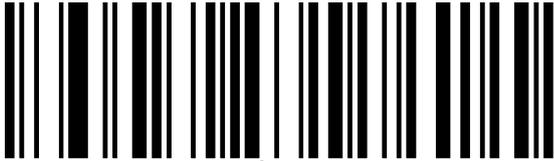
OdJcVac

\*\*10ms



OdJcJc

5ms



OdJcVa

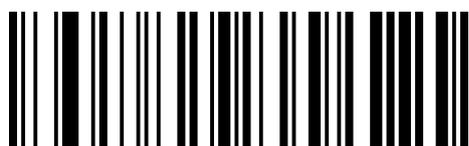
1ms

## Caps Lock Status Setting

**Automatically turn off the CapsLock:** If the keyboard CapsLock is on, turn off the CapsLock during data transfer to ensure that the case status of data is not changed. After the transfer is complete, the CapsLock is on again. If the keyboard CapsLock indicator is off, it remains unchanged.

**Automatically enable CapsLock:** If the CapsLock indicator on the keyboard is off, the CapsLock indicator is enabled during data transfer to ensure that the case status of data is not changed. After the transfer is complete, the CapsLock indicator is off, and the state is not affected by the input method. If the keyboard CapsLock light is on, it will not change.

**CapsLock Hold:** If the keyboard CapsLock is on, the transfer result is flipped. If the keyboard CapsLock indicator is off, it remains unchanged.



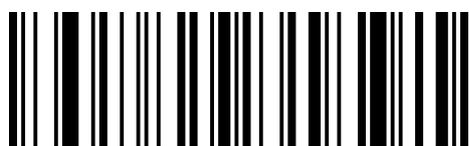
IbReQa



IbReAb

The Caps Lock is automatically disabled \*\*

Capa Lock is automatically enabled

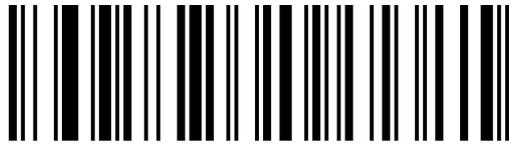


IbReKb

Capa Lock Hold

## USB-COM Virtual Serial Port (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 perspective of the host system interface, the scanner is connecting to the host through a serial port. This feature 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. You need to restart the scanner after setting the HID-POS.

Features:

#Based on 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): 1001

VID(HEX): E851

## HID-POS Message Format

The scanner will send message after scanning successfully.

| Byte | Bit                     |   |   |   |   |   |   |  |
|------|-------------------------|---|---|---|---|---|---|--|
|      | 7                       | 6 | 5 | 4 | 3 | 2 | 1 | 0  |
| 0    | message ID = 0x02       |   |   |   |   |   |   |  |
| 1    | Length of barcode data  |   |   |   |   |   |   |  |
| 2    | ]                       |   |   |   |   |   |   |  |
| 3    | AIM ID first character  |   |   |   |   |   |   |  |
| 4    | AIM ID second character |   |   |   |   |   |   |  |
| 5-60 | Barcode data (1-56)     |   |   |   |   |   |   |  |
| 61   | Code ID                 |   |   |   |   |   |   |  |
| 62   | reserve: 0x00           |   |   |   |   |   |   |  |
| 63   | -                       | - | - | - | - | - | - | 0: data has been sent<br>1: data has not been sent |

## TTL/RS232 Serial Port Interface

Serial communication interface is a common way to connect scanners and host devices. It can be used to connect host devices such as PC 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.

Default communication protocol of serial port interface: baud rate 9600, no check character.



VbZcNc

TTL/RS232

| Parameter                 | Default            |
|---------------------------|--------------------|
| Serial Communication Type | Standard TTL/RS232 |
| Baud Rate                 | 9600               |
| Parity Type               | None               |
| Data Bits                 | 8                  |
| Stop Bits                 | 1                  |

## 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

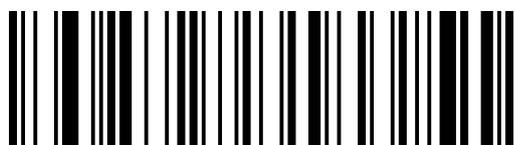


VbCdVac

115200bps

## 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 to improve the safety and integrity of the data output.



JdGeKbc

25ms



JdGeVac

10ms



JdGeVa

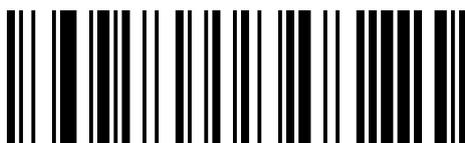
1ms\*\*

# Chapter 3 Scanning Mode

## Manual

You can set the scanning mode of the scanner according to your needs. The default scanning mode is manual scanning. In this mode, the scanner starts to scan the code after pressing the trigger button. It will stop after the code is scanned successfully or the trigger button is released.

The default scanning mode is "Manual".

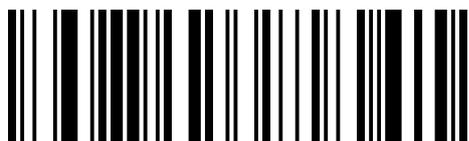


VbBeJb

Manual\*

## Manual - Trigger Timeout

When timeout is reached, the scanner stops scanning and waits for another trigger press.



UaZcCb

Infinite



MdZcAbc

3S\*\*



MdZcKbc

5S



MdZcJcc

10S



MdZcldc

15S



MdZcVaHa

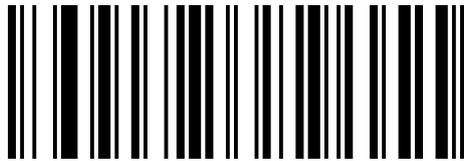
20S

## Manual - Custom Trigger Timeout

Custom trigger timeout is used to set a custom trigger timeout time.

Default: 3s; Tolerance: 200ms; Range: 0-50s.

Please refer to "Appendix-Customized Parameter Example" for setting steps.



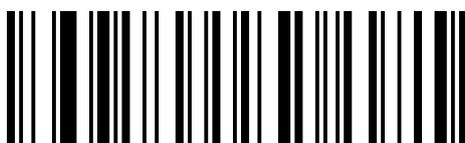
WdZcLa

~ Custom Trigger timeout

## Continuous

After setting, the scanner will be in continuous scanning state without triggering and the scanning engine starts to scan the code immediately. When the scanning is successful or the single scanning time is over, the scanning engine will wait for a period of time (settable) and it will start next scanning automatically.

If the following conditions do not occur, the scanning engine will work in cycles as described above: during the code scanning process, the user can also click the trigger button to manually pause the code scanning. The scanning engine will scan the code cyclically with clicking the trigger button.



VbBeZa

Continuous

## Continuous - Same Barcode Scanning Delay

Default: 400MS, continuous scanning mode only.



JdHeLa

No delay



JdHeVa

Delay 100MS



JdHeFb

Delay 200MS



JdHePb

Delay 300MS



JdHeZb

Delay 400MS\*\*



JdHeJc

Delay 500ms



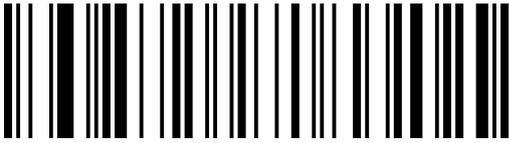
JdHeNd

Delay 800MS



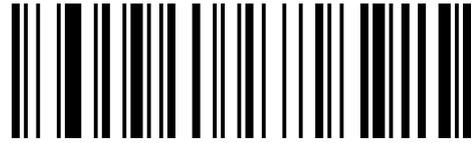
JdHeXac

Delay 1200MS



JdHeFbc

Delay 2000MS



RaHeCb

No timeout

## Continuous - Different Barcode Reading Delay

Different bar code reading interval means that after reading a bar code, it refuses to read another different bar code within a set period of time. It can be read and output only after the time exceeds or the power is restarted. Default: 300MS, different code delays are valid for continuous and inductive reading modes.



JdleLa

No delay



JdleVa

Delay 100MS



JdlePb

Delay 300MS\*\*



JdleJc

Delay 500ms



JdleTc

Delay 600MS



JdleNd

Delay 800MS



JdleVac

Delay 1000MS



JdleFbc

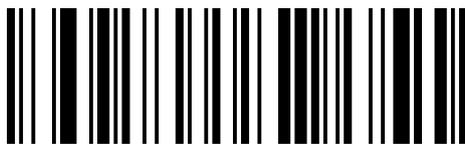
Delay 2000MS



JdleJcc

Delay 5000MS

## Induction



VbBePa

Induction

*Note: When the induction mode is used, the key can be triggered, and the barcode will automatically enter the induction mode after the key is triggered for 3S.*

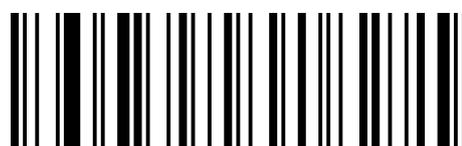
## Induction - Image Stabilization Time

In the induction mode, when the scanner stops scanning the barcode, it will enter a process of re-adapting to the changes in the scanning 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

100ms



OdCbFb

200ms



OdCbPb

300ms



OdCbZb

400ms



OdCbJc

500ms\*\*

## Induction - Sensitivity

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



AcDbVa

High \*\*



AcDbFb

Medium



AcDbPb

Low

---

# Chapter 4 Data Editing

## Introduction

Data editing format:

<Start characters> <Custom prefix> <AIM ID> <Code ID> <Barcode data> <Custom  
suffix> <Terminator>

## Code ID Prefix

In the process of using the scanner, you often need to know the type of barcode currently scanned, we can use the Code ID prefix to identify the barcode type. Code ID For the barcode type, see Appendix - Code ID & AIM ID.

The default is "Off"



WaFbRa

Off Code ID\*\*



WaFbBb

On Code ID

## AIM ID Prefix

AIM means Automatic Identification Manufacturers.

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



QaXdQa

Off AIM ID\*\*



QaXdAb

On AIM ID

## Start STX and End ETX Settings

The start and end symbols are used to mark the beginning or end of a complete piece of data information. The start/end character must be the first/last part of a piece of data when it is sent, and there will be no data before it. By default, there is no start or end character.



BbKdPa

No start and end characters \*\*



BbKdZa

End character is <ETX>



BbKdJb

Start character is <STX>

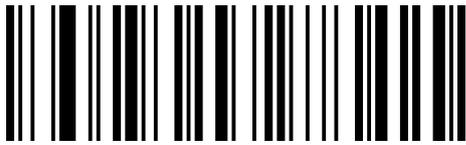


BbKdTb

Start and end characters are <STX+ETX>

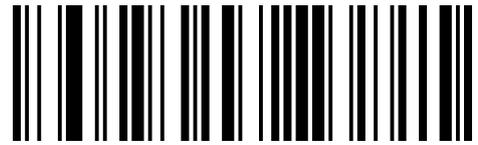
## Terminator

The terminator is used to mark the end of a complete data message. The terminator must be the last content when a piece of data is sent, and there will be no additional data after that.



LbKdGb

<CR>(0x0D)\*\*



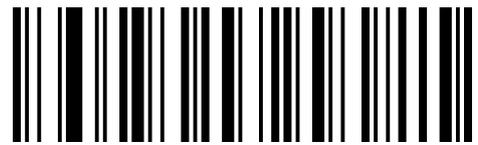
LbKdUc

<LF>(0x0A)



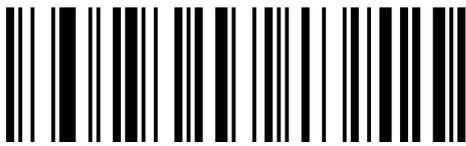
LbKdWa

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



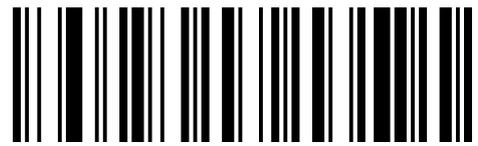
LbKdQb

<HT>(0x09)



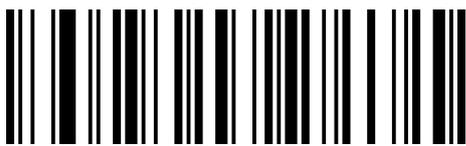
LbKdAc

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



LbKdKc

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



LbKdMa

NONE

## GS Character Substitution

GS control characters usually can not be displayed normally in USB mode, we can output the bar code with GS characters to the receiving device by character replacement.



McReLa

\*NONE



McReVa

Replace Ç



McReFb

Replace |



McRePb

Replace ^]



McReZb

Replace]



McReJc

Replace <GS>



McReTc

Replace [GS]

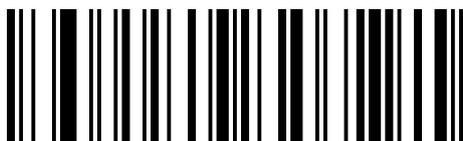
Note: When replacing with the output character " Ç ", the Eurobyte must be turned on first.

## Custom Prefix

### Setting for Custom Prefix

Add up to 10 characters for the custom prefix.

Reference: Appendix, Example - Add presuffix Settings.



BeReTd

~ Set custom prefix

### Clear Custom Prefix

Scan the "Clear custom prefix" barcode to clear all custom prefix characters.



BeReSd

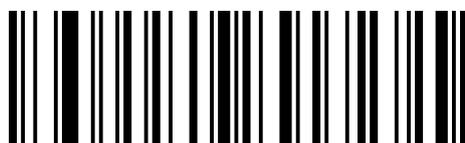
Clear custom prefix

## Custom Suffix

### Setting for Custom Suffix

Add up to 10 characters for the custom suffix.

Reference: Appendix, Example - Add presuffix Settings.

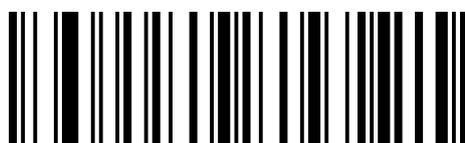


BeReWd

Set custom suffix

### Clear Custom Suffix

Scan the "Clear custom suffix" barcode to clear all set custom suffix characters.



BeReRd

Clear custom suffix

## Prefix and Suffix Are Added According to The Barcode Type

Support for some bar code type independent Settings add prefix and suffix set bar code.

### Setup Steps:

Reference: appendix, example - prefix and suffix are added according to the barcode type.



SdAdLa

UPC-A Prefix/Suffix



SdBdLa

UPC-E Prefix/Suffix



SdCdLa

EAN-8 Prefix/Suffix



SdDdLa

EAN-13 Prefix/Suffix



SdEdLa

Code 39 Prefix/Suffix



SdFdLa

Code 128 Prefix/Suffix



SdGdLa

Telepen Prefix/Suffix



SdHdLa

Code 93 Prefix/Suffix



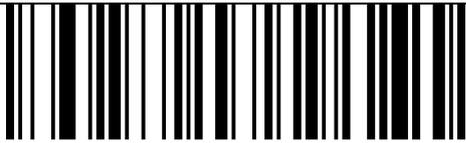
SdIdLa

CODE 11 Prefix/Suffix



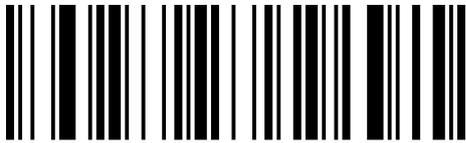
SdJdLa

MSI Plessey Prefix/Suffix



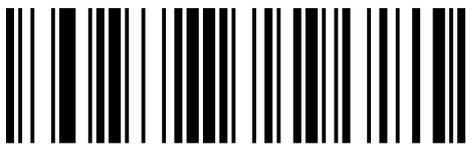
SdKdLa

Codabar Prefix/Suffix



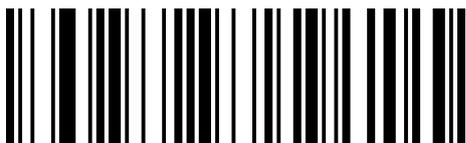
SdMdLa

Matrix25 Prefix/Suffix



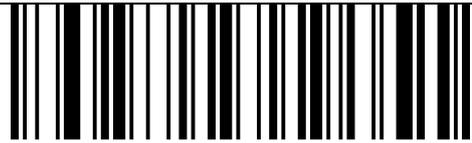
SdPdLa

Industrial 25 Prefix/Suffix



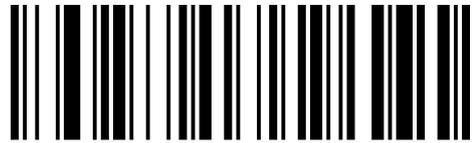
SdSdLa

QR Code Prefix/Suffix



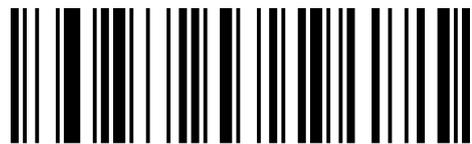
SdLdLa

ITF25 Prefix/Suffix



SdNdLa

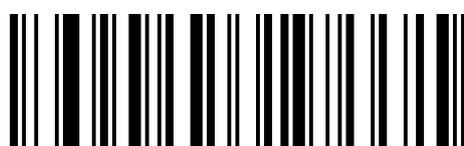
IATA 25 Prefix/Suffix



SdQdLa

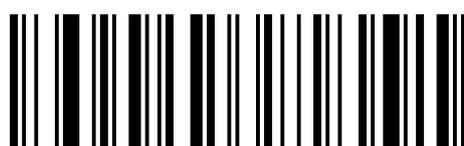
Triopic Prefix/Suffix

## Set Custom Characters to Appear as Prefixes or Suffixes



QaZcSa

Prefix \*\*



QaZcCb

Suffixe

Note: After setting the prefix and suffix after different code systems, it can be set to prefix or suffix display through the above setting code, and the default is prefix display. Valid for custom prefix and suffix of different barcode types.

## Clear All Barcode Type Prefixes and Suffixes

Scanning the Clear All Barcode Types Prefix Suffix bar code can clear all code system Settings custom suffix characters. Valid for special barcode types.



BeReQd

The prefix and suffix of all bar code types are cleared

## Hidden Character

The hidden character function can only display a certain section of data by controlling the different fields of the bar code content to achieve the function of hiding data. A bar code data, first of all, we divided into the head, middle and tail three sets of data, then set the head according to actual needs, middle, tail length, in according to the actual needs, set up to display field.

### Set The Hidden Head Characters

Decoding data for head data hiding, can be configured to hide any length, the configured length exceeds the bar code data length, it will hide the current bar code all content.



WaQbCb

On



WaQbSa

Off\*\*

## Set The Head Data Hiding Number

Set the head data hiding number, range 1-255. See Appendix - Examples of Custom Parameters for setup steps.



YdRbLa

~ Head data hiding bits

Setup steps:

See: Appendix, Example - Hidden character Settings.

## Set The Middle Characters

Decode the hiding of the middle part of the output data. Any starting position and length can be configured. If the starting position of the configuration exceeds the length of the barcode data, the current barcode is not hidden. If the length of the confs the remaining barcode data length, all barcode data after the starting position will be hidden.



WaQbBb

On



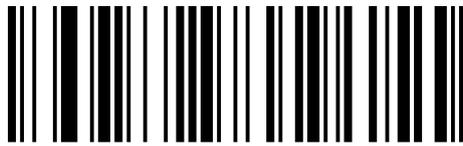
WaQbRa

Off\*\*

## Set the start bit for hiding intermediate data

Sets the start position of the hidden intermediate data in the range 1-255. To hide data after the third character (starting from the fourth), the numeric setting code decimal value is: "0", "0", "3".

Set the middle data hiding bits, range 1-255. See Appendix - Examples of Custom Parameters for setup steps.



YdSbLa

~ Intermediate data hides the start bit

---

**Sets the number of bits to hide the intermediate data**

The value ranges from 1 to 255. If 16 characters need to be hidden, the decimal value of the numeric setting code is 0, 1, and 6. For details, see Appendix - Data Code.



YdTbLa

~Intermediate data hiding bits

Setup steps:

Reference: Appendix, Example - Hidden character Settings.

## Set The Hidden Tail Characters

Decoded data tail data hiding, can be configured to hide any length, the configured length exceeds the bar code data length, to hide the current bar code all content.



WaQbAb

On



WaQbQa

Off\*\*

## Set the number of tail data hiding bits

Set the number of tail data hiding bits in the range 1-255. See Appendix - Examples of Custom Parameters for setup steps.



YdUbLa

~ Tail data hiding bits

## Setting steps:

See: Appendix, Example - Hidden character Settings.

*Note: When using the hidden character setting, the Chinese output is not used, which will lead to the wrong format of the Chinese data.*

## Hide The Head/Middle/Tail Characters Based on The Barcode Type

### Hide Header Data

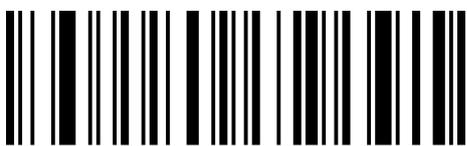
Decoding data for head data hiding, can be configured to hide any length, the configured length exceeds the bar code data length, it will hide the current bar code all content.

Set the head data hiding number, range 1-255. If 16 characters need to be hidden, the decimal value of the numeric setting code is 0, 1, 6.



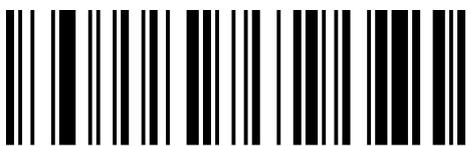
BeWaLa

~UPC-E head data hiding



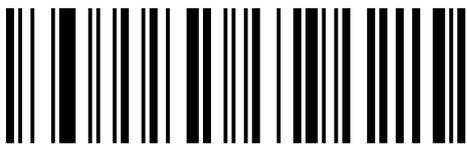
BeXaLa

~ EAN 8 head data hiding



BeYaLa

~UPC-A head data hiding



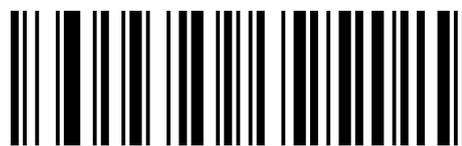
BeZaLa

~EAN 13 head data hiding



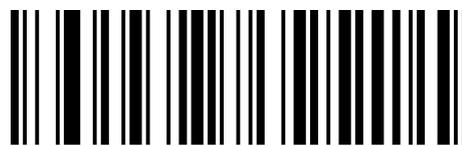
RdWa00

Clear UPC-E head data hiding



RdXa00

Clear EAN 8 head data hiding



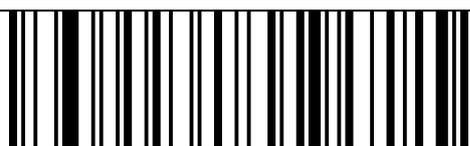
RdYa00

Clear UPC-A head data hiding



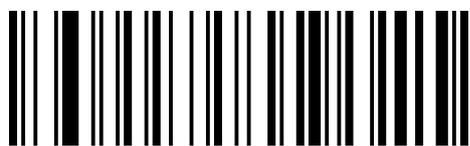
RdZa00

Clear EAN 13 head data hiding



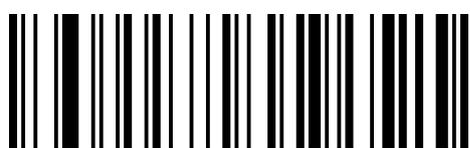
BeAbLa

~ Code 39 head data hiding



BeBbLa

~Codabar head data hiding



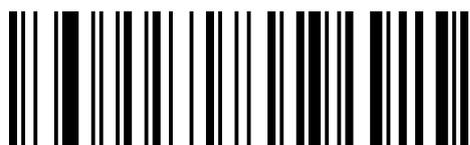
BeCbLa

~ I25 head data hiding



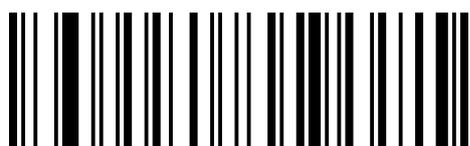
BeDbLa

~ Code 128 head data hiding



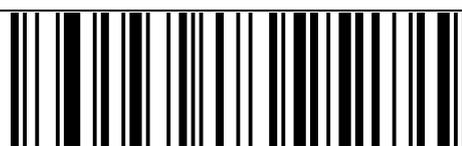
BeEbLa

~ Code 93 head data hiding



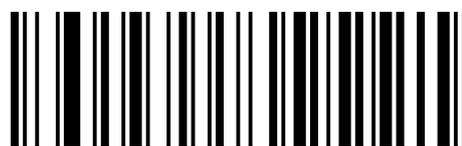
BeHbLa

~QR head data hiding



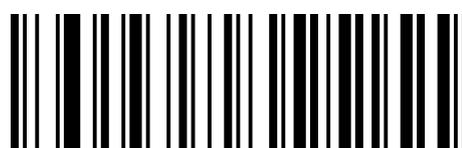
RdAb00

Clear Code 39 head data hiding



RdBb00

Clear Codabar head data hiding



RdCb00

Clear I25 head data hiding



RdDb00

Clear Code 128 head data hiding



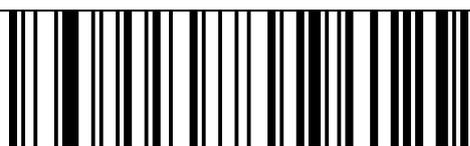
RdEb00

Clear Code 93 head data hiding



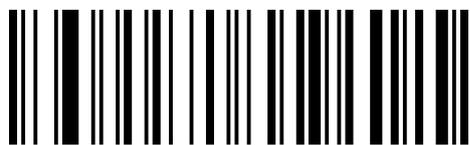
RdHb00

Clear QR head data hiding



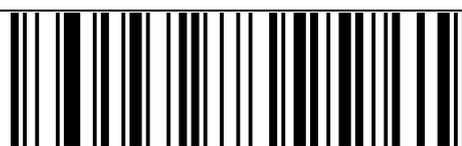
BeGbLa

~Data Matrix head data hiding



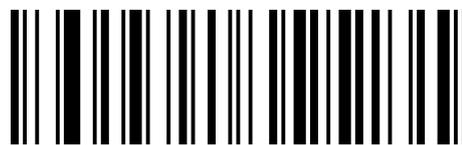
BeFbLa

~ PDF 417 head data hiding



RdGb00

Clear Data Matrix head data hiding



RdFb00

Clear PDF 417 head data hiding

## Hide Middle Data

Decode the hiding of the middle part of the output data. Any starting position and length can be configured. If the starting position of the configuration exceeds the length of the barcode data, the current barcode is not hidden. If the length of the confs the remaining barcode data length, all barcode data after the starting position will be hidden.

Set the middle data hiding bits

Set the middle data hiding bits, range 1-255. If 16 characters need to be hidden, the decimal value of the numeric setting code is 0, 1, 6.

Set the start bit for hiding intermediate data

Sets the start position of the hidden intermediate data in the range 1-255. To hide data after the third character (starting from the fourth), the numeric setting code decimal value is: "0", "0", "3".



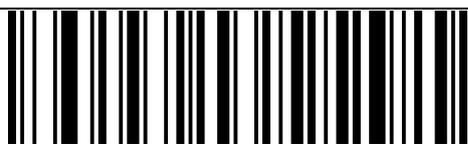
BeQbLa

~UPC-E hide the start bit



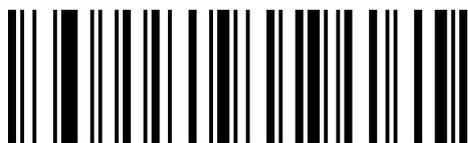
BeKcLa

~UPC-E number of hidden bits



RdKc00

Clear UPC-E middle data hiding



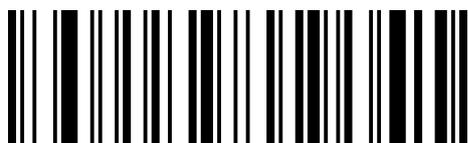
BeRbLa

~EAN-8 hide the start bit



RdLc00

Clear EAN-8 middle data hiding



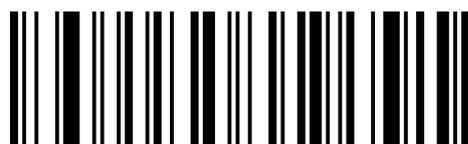
BeSbLa

~UPC-A hide the start bit



RdMc00

Clear UPC-A middle data hiding



BeTbLa

~ EAN-13 hide the start bit



BeLcLa

~ EAN-8 number of hidden bits



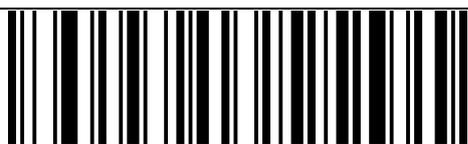
BeMcLa

~UPC-A number of hidden bits



BeNcLa

~EAN-13 number of hidden bits



RdNc00

Clear EAN-13 middle data hiding



BeUbLa

~ Code 39 hide the start bit



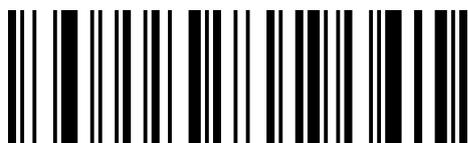
BeOcLa

~ Code 39 number of hidden bits



RdOc00

Clear Code 39 middle data hiding



BeVbLa

~ Codabar hide the start bit



BePcLa

~Codabar number of hidden bits



RdPc00

Clear Codabar middle data hiding



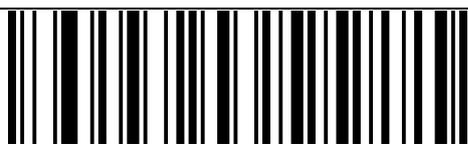
BeWbLa

~ 125 hide the start bit



BeQcLa

~ 125 number of hidden bits



RdQc00

Clear I25 middle data hiding



BeXbLa

~ Code 128 hide the start bit



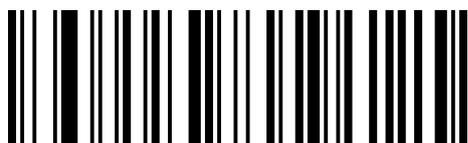
BeRcLa

~ Code 128 number of hidden bits



RdRc00

Clear Code 128 middle data hiding



BeYbLa

~ Code 93 hide the start bit



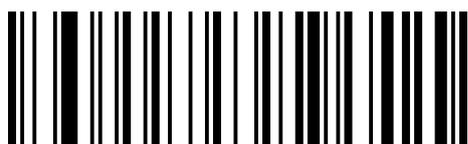
BeScLa

~ Code 93 number of hidden bits



RdSc00

Clear Code 93 middle data hiding



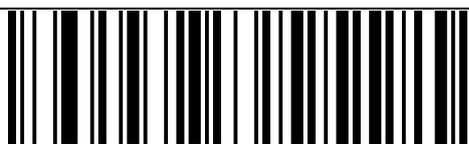
BeBcLa

~ QR hide the start bit



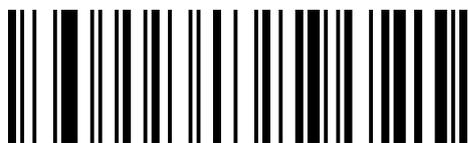
BeVcLa

~QR number of hidden bits



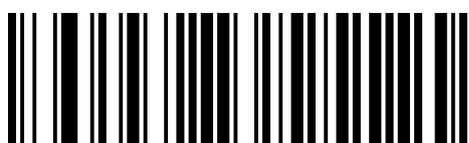
RdVc00

Clear QR middle data hiding



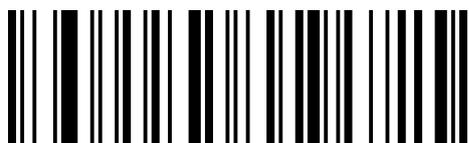
BeAcLa

~ Data Matrix hide the start bit



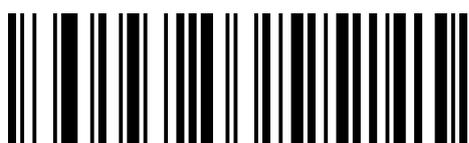
RdUc00

Clear Data Matrix middle data hiding



BeZbLa

~ PDF 417 hide the start bit



RdTc00

Clear PDF 417 middle data hiding



BeUcLa

~ Data Matrix number of hidden bits



BeTcLa

~ PDF 417 number of hidden bits

## Hide Tail Data

Decoded data tail data hiding, can be configured to hide any length, the configured length exceeds the bar code data length, to hide the current bar code all content.

Set the number of tail data hiding bits in the range 1-255. If 16 characters need to be hidden, the decimal value of the numeric setting code is 0, 1, 6.

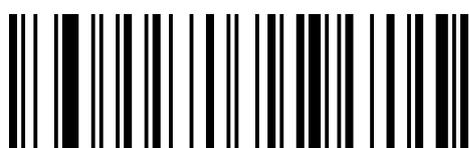


BeEdLa



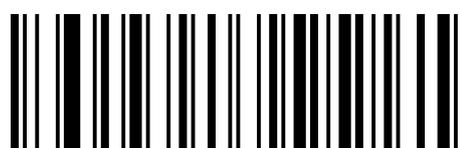
RdEd00

~UPC-E tail data hiding bits



BeFdLa

Clear UPC-E tail data hiding



RdFd00

~ EAN 8 tail data hiding bits



BeGdLa

Clear EAN 8 tail data hiding



RdGd00

~UPC-A tail data hiding bits



BeHdLa

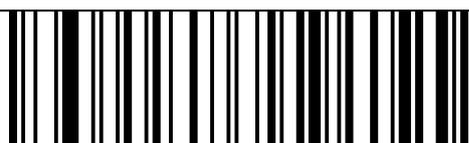
Clear UPC-A tail data hiding



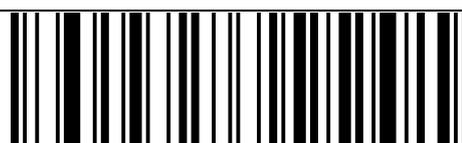
RdHd00

~EAN 13 tail data hiding bits

Clear EAN 13 tail data hiding



BeIdLa



RdId00

~ Code 39 tail data hiding bits

Clear Code 39 tail data hiding



BeJdLa



RdJd00

~Codabar tail data hiding bits

Clear Codabar tail data hiding



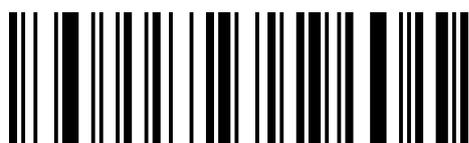
BeKdLa



RdKd00

~ I25 tail data hiding bits

Clear I25 tail data hiding



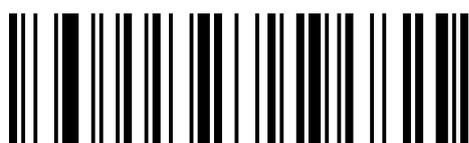
BeLdLa



RdLd00

~ Code 128 tail data hiding bits

Clear Code 128 tail data hiding



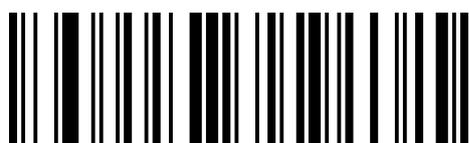
BeMdLa



RdMd00

~ Code 93 tail data hiding bits

Clear Code 93 tail data hiding



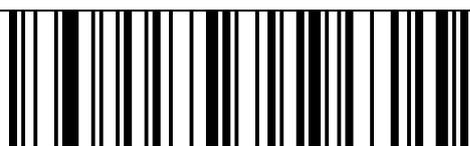
BePdLa



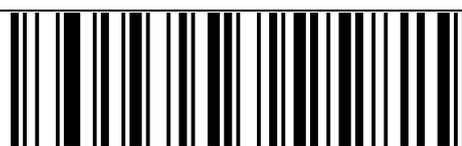
RdPd01

~QR tail data hiding bits

Clear QR tail data hiding



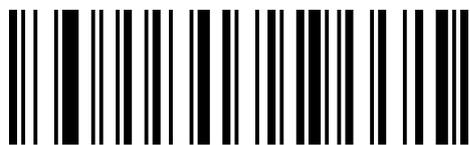
BeOdLa



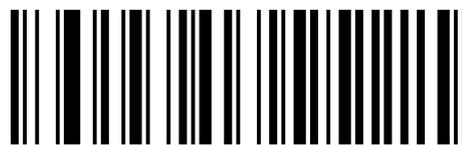
RdOd00

~Data Matrix tail data hiding bits

Clear Data Matrix tail data hiding



BeNdLa



RdNd00

~ PDF 417 tail data hiding bits

Clear PDF 417 tail data hiding

## Insert Custom Data

Support to insert custom data in any position of the bar code, the maximum support to insert 10 bytes.

Setting steps:

Reference: Appendix, Example - Insert custom data

## Sets The Position to Insert Custom Characters

Sets the position to insert custom characters in the range 1-255. If the position of the character to be inserted is 16 characters, the number set code decimal value is: 0 1 6. See Appendix - Data Codes. If the position is set to 0, it is the head to insert the decoded data. If the position is set to be larger than the decoded data length, the tail of the decoded data is inserted by default.



~ Sets where to insert custom characters

## Sets The Data Content for Inserting Custom Characters

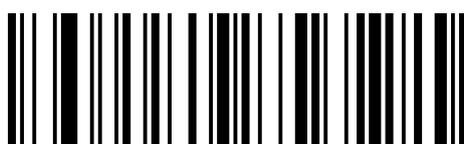
Setup Insert custom data, sweep custom data to be set, the setting steps are similar to custom prefix and suffix.



BeReYc

~ Sets he inserted data

## Clear Caret Characters



BeReOd

Clear the inserted character data

## Displays The Inserted Character Data



WaQbYa

Display custom characters: On

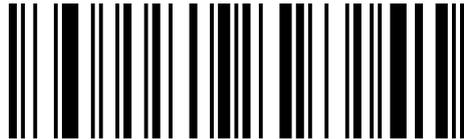


WaQbOa

Display custom characters: Off\*\*

## Sets The Inserted Custom Character

Set to insert custom characters and scan the custom characters to be set. The setting procedure is similar to the custom prefix and suffix. For details, see "Appendix - Example of Custom Parameters".



BeReYc

~ Sets the inserted custom character

## Character Substitution

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

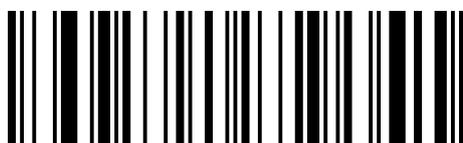
### Setting steps:

Reference: Appendix, Example - Character substitution Settings



VdEeLa

~ The character to be replaced



VdFeLa

~ Replace the new character

Note: To clear replacement characters, set "Character to be replaced" to NULL, that is, "000" in decimal.

## Ctrl-Shift-Alt Function Key Prefix Setting

### Function Key Prefix Enable/Disable



XaFeCb

On



XaFeSa

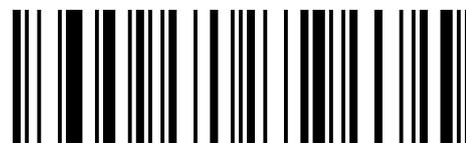
Off\*\*

### Ctrl Function Key



XaFeVa

Ctrl On



XaFeLa

Ctrl Off\*\*

### Shift Function Key



XaFeWa

Shift On



XaFeMa

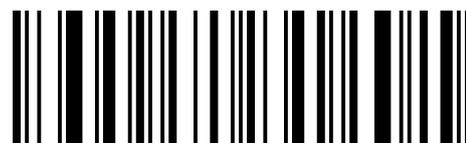
Shift Off\*\*

### Alt Function Key



XaFeXa

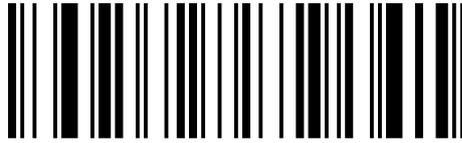
Alt On



XaFeNa

Alt Off\*\*

## Customize The Main Key



~ Customize the main key

For details, see "Example - Custom Function Key Prefix".

### Setting steps:

Reference: Appendix, Example - Customizing Intercharacter delay

# Chapter 5 Barcode Parameter Setting

## Introduction

Each type of barcode has its own unique attributes, and the scanner can be adjusted to adapt to these attribute changes through the setup codes in this chapter. The scanning speed will be faster with fewer barcode types are turned on. You can turn off the barcode types which are not necessary to improve the working performance.

## Global Setting



GbYaXa

All barcode types: On



GbYaZa

1D barcode: On



GbYaBb

2D barcode: On



GbYaHb

All barcode types: Off



GbYaJb

1D barcode: Off



GbYaLb

2D barcode: Off

Note: When all bar codes are closed, the setting code will not be closed, and the postal code will not be affected. Please do not open multiple postal codes when using them. When all barcode types are enabled, compound codes, two-dimensional postal codes and additional codes are not enabled.

## UPC-A



QaYaBb

On\*\*



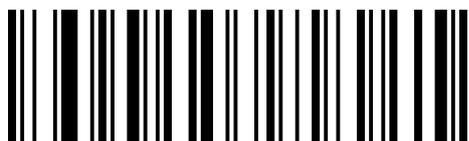
QaYaRa

Off

*Note: UPC-A is also known as UCC-12.*

### Transmit Check 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 transmitting check character.



QaTdCb

On\*\*

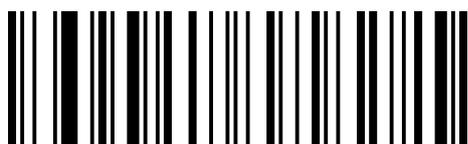


QaTdSa

Off

## 2/5 Additional Digits

Additional digits refer to the 2 or 5 digital barcodes appended to the normal barcode, as shown in the figure below. The blue wire frame on the left is the normal barcode, and the red wire frame on the right is the additional digit. The default is closing the additional digits.



QalbCb

2 additional digits: On



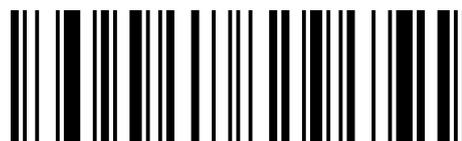
QalbSa

2 additional digits: Off \*\*



QalbBb

5 additional digits: On



QalbRa

5 additional digits: Off \*\*

## Mandatory Additional Digits

When scanning "mandatory additional digits", the scanner can only read barcodes with additional digits.



QalbYa  
On



QalbOa  
Off\*\*

## Additional Digit Separator

When this feature is enabled, there is a space between the barcode data and the additional data. When this feature is disabled, there are no spaces. Default is On.

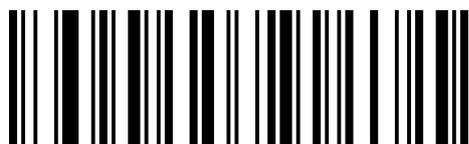


QalbXa  
On\*\*



QalbNa  
Off

## Transmit System Character



QaTdWa

On\*\*



QaTdMa

Off

## Convert to EAN-13

UPC-A barcode type supports the expansion setting. After opening the expansion, the barcode information is expanded to 13 bits, and the type is converted to EAN-13, which is not converted by default.



QaTdVa

On

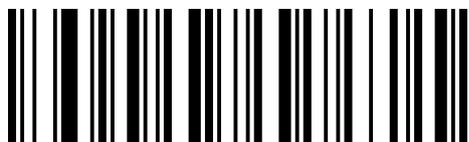


QaTdLa

Off\*\*

## UPC-E

### UPC-E0



QaYaVa

On\*\*



QaYaLa

Off

### UPC-E1



WaYaVa

On



WaYaLa

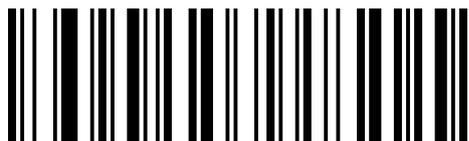
Off\*\*

*Note: UPC-E0 needs to be enabled to read UPC-E1*

## Transmit Check Character

The UPC-E barcode contains eight characters and the eighth bit is the verification character.

It is used to verify the correctness of all eight characters. By default, the transmission verification character is used.



QaTdBb

On\*\*

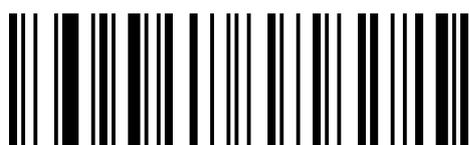


QaTdRa

Off

## 2/5 Additional Digits

Additional digits refer to the 2 or 5 digital barcodes appended to the normal barcode, as shown in the figure below. The blue wire frame on the left is the normal barcode, and the red wire frame on the right is the additional digit. The default is closing the additional digits.



QalbCb

2 additional digits: On



QalbBb

5 additional digits: On



QalbSa

2 additional digits: Off \*\*

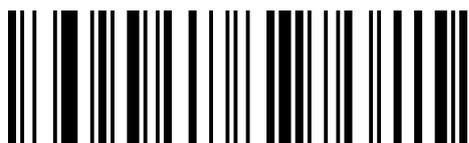


QalbRa

5 additional digits: Off \*\*

## Mandatory Additional Digits

When scanning "mandatory additional digits", the scanner can only read barcodes with additional digits.



QalbYa

On



QalbOa

Off\*\*

## Additional Digit Separator

When this feature is enabled, there is a space between the barcode data and the additional data. When this feature is disabled, there are no spaces. Default is On.



SaAeXa

On\*\*

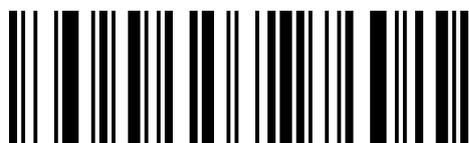


SaAeNa

Off

## Transmit System Character

The country code of the UPC-E bar code is a prefix character, which is usually not displayed in the identifiable characters at the bottom of the bar code. 0 indicates USA.



QaTdYa

On\*\*



QaTdOa

Off

## Convert to UPC-A

UPC-E barcode type supports conversion. After expansion is enabled, the bar code information is converted to 12 digits and the type is converted to UPC-A. The default is not to convert.



QaTdAb

On



QaTdQa

Off\*\*

## EAN/JAN 8



QaYaZa

On\*\*



QaYaPa

Off

*Note: EAN-8 also known as JAN-8, UCC-8*

## Transmit Check Character

EAN/JAN 8 barcode data is fixed to 8 characters, and the eighth bit is the check character, which is used to verify the correctness of all 8 characters, and the default is to transmit the check character.



QaXdVa

On\*\*



QaXdLa

Off

## 2/5 Additional Digits

Additional digits refer to the 2 or 5 digital barcodes appended to the normal barcode, as shown in the figure below. The blue wire frame on the left is the normal barcode, and the red wire frame on the right is the additional digit. The default is closing the additional digits.



QalbCb

2 additional digits: On



QalbBb

5 additional digits: On



QalbSa

2 additional digits: Off \*\*

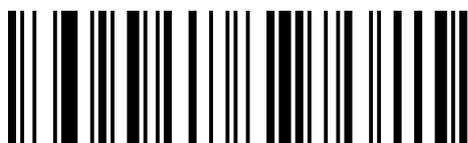


QalbRa

5 additional digits: Off \*\*

## Mandatory Additional Digits

When scanning "mandatory additional digits", the scanner can only read barcodes with additional digits.



QalbYa

On



QalbOa

Off\*\*

## Additional Digit Separator

When this feature is enabled, there is a space between the barcode data and the additional data. When this feature is disabled, there are no spaces. Default is On.



QalbXa

On\*\*



QalbNa

Off

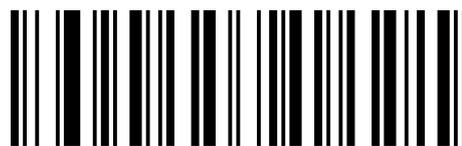
## Convert to EAN13

The EAN 8 barcode type supports conversion settings. After the extension is turned on, the barcode information is converted to 13 digits, and the type is converted to EAN13. The default is not to convert.



QaTdXa

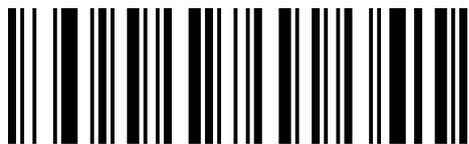
On



QaTdNa

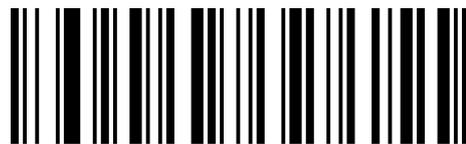
Off\*\*

## EAN/JAN 13



QaYaWa

On\*\*



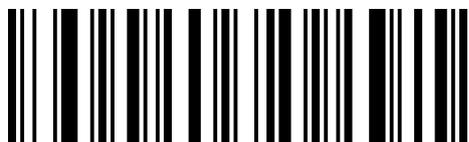
QaYaMa

Off

*Note: EAN-13 is also known as JAN-13, UCC-13*

### Transmit Check Character

EAN/JAN 13 Barcode data is fixed to 13 characters, and the 13th bit is the check character, which is used to verify the correctness of all 12 characters. The default is to transmit the check character.



QaXdXa

On\*\*



QaXdNa

Off

## 2/5 Additional Digits

Additional digits refer to the 2 or 5 digital barcodes appended to the normal barcode, as shown in the figure below. The blue wire frame on the left is the normal barcode, and the red wire frame on the right is the additional digit. The default is closing the additional digits.



QalbCb

2 additional digits: On



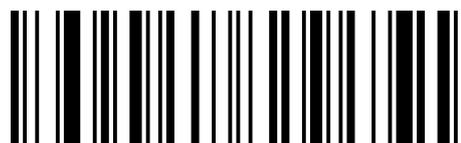
QalbBb

5 additional digits: On



QalbSa

2 additional digits: Off \*\*



QalbRa

5 additional digits: Off \*\*

## Mandatory Additional Digits

When scanning "mandatory additional digits", the scanner can only read barcodes with additional digits.



QalbYa

On



QalbOa

Off\*\*

## Additional Digit Separator

When this feature is enabled, there is a space between the barcode data and the additional data. When this feature is disabled, there are no spaces. Default is On.



QalbXa

On\*\*



QalbNa

Off

## ISBN

The ISBN is a 10-bit book code. If the ISBN is not enabled, the ISBN is output in EAN13 format. If the ISBN is enabled, the ISBN is output in 9-bit book code. The output 10 bits need to be verified.



QaJbCb

On



QaJbSa

Off\*\*

Note: ISBN is also called Bookland,ISBN-13

## Transmit Check Character



QaJbAb

On

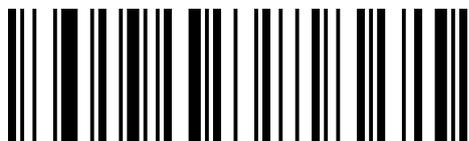


QaJbQa

Off\*\*

## ISSN

ISSN is 8-bit magazine code, when not opened, output in EAN13 format, when opened, output 7-bit book code, output 8-bit need to open verification.



RaVcCb

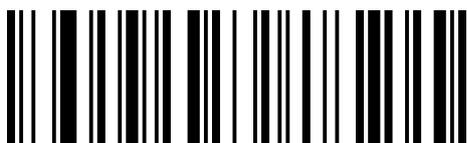
On



RaVcSa

Off\*\*

## Transmit Check Character



RaVcAb

On



RaVcQa

Off\*\*

## Code 128



QaXaYa

On\*\*



QaXaOa

Off

## Number of Recognized Characters

The default number of Code128 is 0-80, and the scanner can be configured to only scan Code 128 barcodes whose number is between (including) the minimum number (0-80) and the maximum number (0-80).



XdlbLa

Minimum



XdJbLa

Maximum

### Setting steps:

Reference: Appendix, Example - Set one-dimensional code read length.

## GS1-128(UCC/EAN 128)



RaYcVa

On\*\*



RaYcLa

Off

Note: GS1-128 also known as EAN-128, UCC-128, UCC/EAN-128

## Number of Recognized Characters

The default number is 0-80, and the scanner can be configured to only scan GS1-128 barcodes whose number is between (including) the minimum number (0-80) and the maximum number (0-80).



XdKbLa

Minimum



XdLbLa

Maximum

### Setting steps:

Reference: Appendix, Example - Set one-dimensional code read length.

## ISBT 128

### ISBT 128 Connect Function



TaCeCb

On



TaCeSa

Off\*\*

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 scan ISBT barcodes with additional digits. When the setting is enabled, ISBT 128 with or without additional digits can be scanned.

## Code 39



QaXaWa

On\*\*



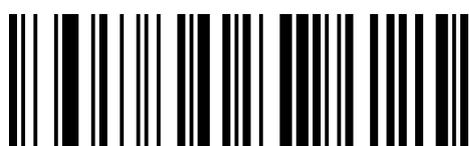
QaXaMa

Off

## Check Character

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.

The default is "No Check".



lbNePa

No Check \*\*



lbNeZa

Check and Transmit

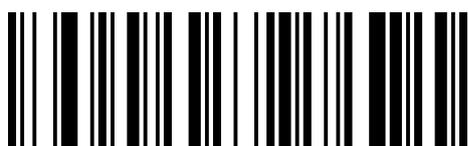


lbNeJb

Check but Not Transmit

## Start and End Characters

Code 39 barcode data has a character "\*" before and after it is used as the start character and end character. You can set whether to transmit the start character and end character together with the barcode data after the barcode is successfully read.



QaVdVa

On

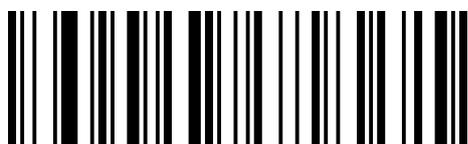


QaVdLa

Off\*\*

## Full ASCII Characters

Code 39 data can include all ASCII characters, but the scanner by default only read part of ASCII characters, by setting that can open to read a complete the function of the ASCII character defaults to "not identify all ASCII characters"



QaYaCb

On



QaYaSa

Off\*\*

## Number of Recognized Characters

The default number is 0-48, and the scanner can be configured to only scan Code 39 barcodes whose number is between (including) the minimum number (0-48) and the maximum number (0-48).



XdMbLa

Minimum



XdNbLa

Maximum

### Setting steps:

Reference: Appendix, Example - Set one-dimensional code read length.

## Code 32 Pharmaceutical (PARAF)

Code 32 is also named 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 check digit + \*.



QaYaAb

On



QaYaQa

Off \*\*

## Transmit Check Character



WaYaWa

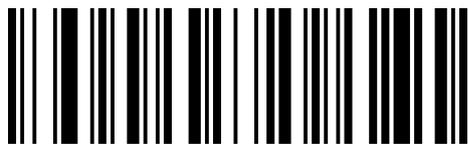
On\*\*



WaYaMa

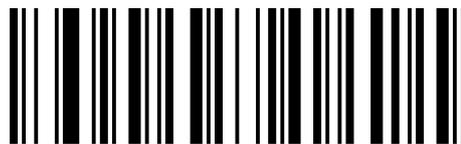
Off

## Code 32 Add Prefix "A"



QaVdXa

On



QaVdNa

Off \*\*

## Code 32 Failed Scan



QaZaCb

On\*\*



QaZaSa

Off

**Note:** Code 32 Pharmaceutical barcode is a subcategory of Code 39. When Code 32 is not turned on, it is an error to scan the output of Code 32, that is, the default Code 32 failed to scan is turned on. When Code 32 is turned off and failed to scan, it will be under the circumstances, it is not allowed to scan the Code 32 barcode, and at this time, it is not allowed to scan the normal Code 39 barcode.

## Code 93



QaXaXa

On\*\*

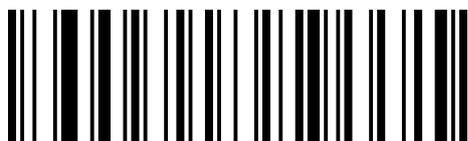


QaXaN

Off

## Number of Recognized Characters

The default number is 0-80, and the scanner can be configured to only scan Code 93 barcodes whose number is between (including) the minimum number (0-80) and the maximum number (0-80).



XdEcLa

Minimum



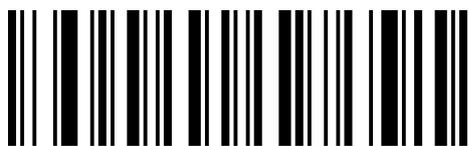
XdFcLa

Maximum

### Setting steps:

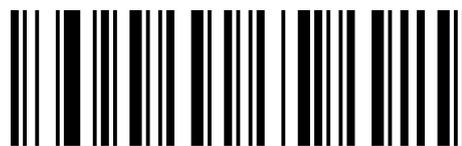
Reference: Appendix, Example - Set one-dimensional code read length.

## Code 11



QaWaYa

On



QaWaOa

Off\*\*

**Note: Code 11 is also known as USD-8**

## Check Character

Code 11 barcode data has check characters, which can be the last 1 or 2 characters of the data. The check character is a value calculated based on all data to check whether the data is correct.



SbOeXa

1 check character, On



SbOeNa

2 check characters, On\*\*



SbOeRb

1 check character, Off



SbOeHb

2 check characters, Off



SbOeBc

Off

## Number of Recognized Characters

The default number is 4-80, and the scanner can be configured to only scan Code 11 barcodes whose number is between (including) the minimum number (1-80) and the maximum number (1-80).



XdObLa

Minimum



XdPbLa

Maximum

### Setting steps:

Reference: Appendix, Example - Set one-dimensional code read length.

## Codabar (NW-7)



QaXaZa

On\*



QaXaPa

Off

## Check Character



IbNeRa

No Check \*\*



IbNeBb

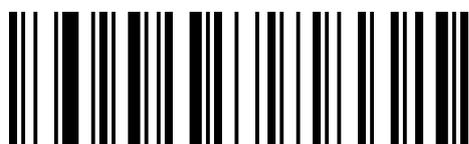
Check and Transmit



IbNeLb

Check but Not Transmit

## Start and End Characters



QaVdCb

On



QaVdSa

Off\*\*

## Start and End Characters Format

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



WaMbSa

ABCD/ABCD\*\*



WaMbCb

ABCD/TN\*E

## Number of Recognized Characters

The default number is 4-60, and the scanner can be configured to only scan Codabar barcodes whose number is between (including) the minimum number (2-60) and the maximum number (2-60).



XdGcLa

Minimum



XdHcLa

Maximum

### Setting steps:

Reference: Appendix, Example - Set one-dimensional code read length.

## Interleaved 2 of 5



QaXaAb

On\*\*



QaXaQa

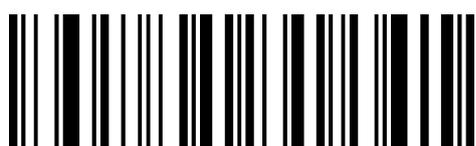
Off

## Check Character

Interleaved 2 of 5 barcode data is not mandatory to include a check character. If there is a check character, it will be 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 "No Check"



IbNeNa

No Check \*\*



IbNeXa

Check and Transmit

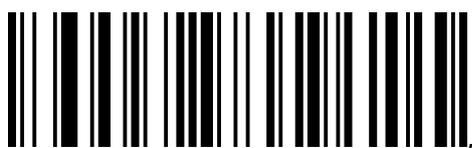


IbNeHb

Check but Not Transmit

## Number of Recognized Characters

The default number is 4-80, and the scanner can be configured to only scan Interleaved 2 of 5 barcodes whose number is between (including) the minimum number (2-80) and the maximum number (2-80).



XdSbLa

Minimum



XdTbLa

Maximum

### Setting steps:

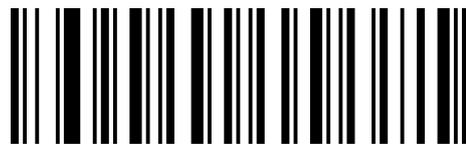
Reference: Appendix, Example - Set one-dimensional code read length.

## Matrix 2 of 5



QaWaAb

On\*\*



QaWaQa

Off

## Check Character

Matrix 2 of 5 barcode data is not mandatory to include a check character. If there is a check character, it will 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 "No Check".



AbBbRa

No Check \*\*



AbBbBb

Check and Transmit

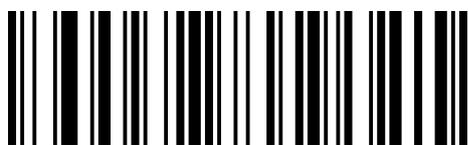


AbBbLb

Check but Not Transmit

## Number of Recognized Characters

The default number is 4-80, and the scanner can be configured to only scan Matrix 2 of 5 barcodes whose number is between (including) the minimum number (1-80) and the maximum number (1-80).



XdYbLa

Minimum



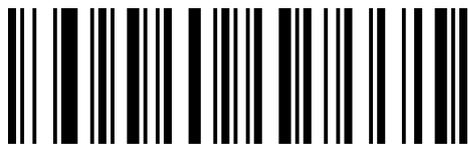
XdZbLa

Maximum

### Setting steps:

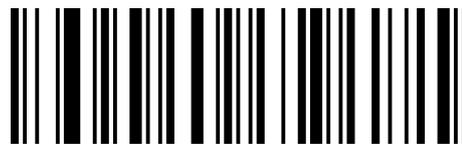
Reference: Appendix, Example - Set one-dimensional code read length.

## Industrial 2 of 5



QaXaVa

On\*\*



QaXaLa

Off

*Note: Also known as Straight 2 of 5*

## Number of Recognized Characters

The default number is 4-48, and the scanner can be configured to only scan Industrial 2 of 5 barcodes whose number is between (including) the minimum number (1-48) and the maximum number (1-48).



XdUbLa

Minimum



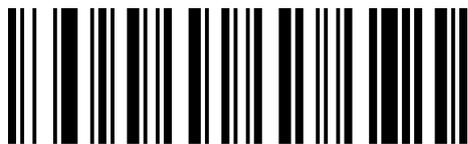
XdVbLa

Maximum

### Setting steps:

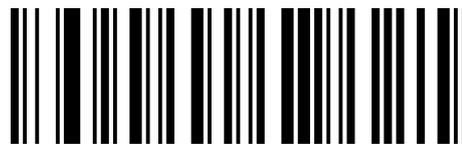
Reference: Appendix, Example - Set one-dimensional code read length.

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



QaWaZa

On



QaWaPa

Off\*\*

## Number of Recognized Characters

The default number is 4-48, and the scanner can be configured to only scan Standard 2 of 5 barcodes whose number is between (including) the minimum number (1-48) and the maximum number (1-48).



XdWbLa

Minimum



XdXbLa

Maximum

### Setting steps:

Reference: Appendix, Example - Set one-dimensional code read length.

## NEC 2 of 5



SaYdWa

On



SaYdMa

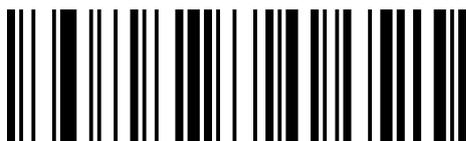
Off \*\*

Note: NEC 2 of 5 is also called Discrete 2 of 5

## Check Character

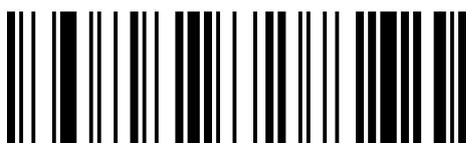
Matrix 2 of 5 barcode data is not mandatory to include a check character. If there is a check character, it will be the last byte of the data. The check character is a value calculated from all data except the check character to check whether the data is correct.

The default is "No Check".



CbYdNa

No Check \*\*



CbYdHb

Check and Transmit



CbYdXa

Check but Not Transmit

## Number of Recognized Characters

The default number is 4-80, and the scanner can be configured to only scan Matrix 2 of 5 barcodes whose number is between (including) the minimum number (2-80) and the maximum number (2-80).



XdAcLa

Minimum



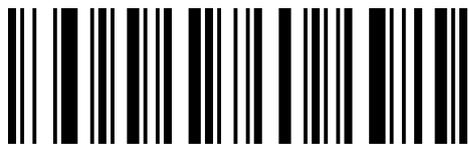
XdBcLa

Maximum

### Setting steps:

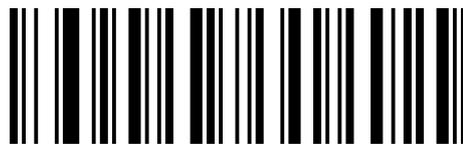
Reference: Appendix, Example - Set one-dimensional code read length.

## MSI Plessey



QaYaXa

On



QaYaNa

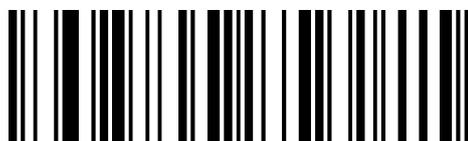
Off\*\*

## Check Character [22.01.21 with this barcode]



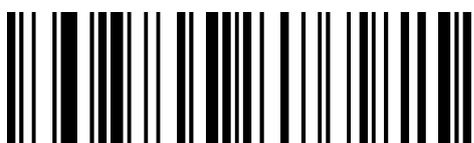
SbOeQa

No Check \*\*



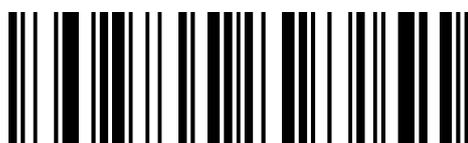
SbOeOc

Mode10 Check but Not Transmit



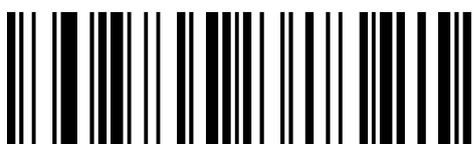
SbOeld

Two Mode10 Check but Not Transmit



SbOeYc

Mode10&Mode11 Check but Not Transmit



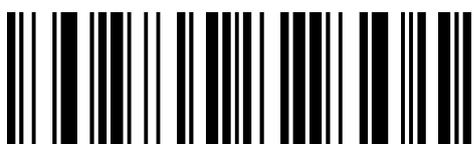
SbOeAb

Mode10 Check and Transmit



SbOeKb

Mode10&Mode11 Check and Transmit



SbOeUb

Two Mode10 Check and Transmit

## Number of Recognized Characters

The default number is 4-48, and the scanner can be configured to only scan MSI Plessey barcodes whose number is between (including) the minimum number (4-48) and the maximum number (4-48).



XdCcLa

Minimum



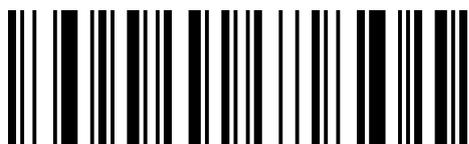
XdDcLa

Minimum

### Setting steps:

Reference: Appendix, Example - Set one-dimensional code read length.

## Telepen



QaWaCb

On



QaWaSa

Off\*\*

## Telepen Character Format



QaWaBb

Number Format



QaWaRa

Number + Letter Format\*\*\*\*

## Number of Recognized Characters

The default number is 1-60, and the scanner can be configured to only scan Telepen barcodes whose number is between (including) the minimum number (1-60) and the maximum number (1-60).



XdQbLa

Minimum



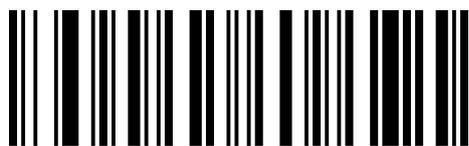
XdRbLa

Maximum

### Setting steps:

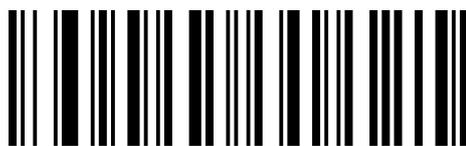
Reference: Appendix, Example - Set one-dimensional code read length.

## Trioptic Code



QaZaXa

On



QaZaNn

Off\*\*

## BC412



WaMbVa

On



WaMbLa

Off\*\*

## Number of Recognized Characters

The default number is 4-48, and the scanner can be configured to only scan BC412 barcodes whose number is between (including) the minimum number (4-48) and the maximum number (4-48).



YdWcLa

Minimum



YdXcLa

Maximum

### Setting steps:

Reference: Appendix, Example - Set one-dimensional code read length.

## Febraban



WaNbVa

On



WaNbLa

Off \*\*

## Code 128 Type



WaNbWa

On



WaNbMa

Off \*\*

## Check Character



WaNbXa

On



WaNbNa

Off \*\*

## Coupon

UPC-A and EAN-13 codes can carry the Coupon extension code.

There are two types of Coupon:

UPC-A + GS1-128 starting with 5 (opened through Coupon On. After the UPC code starting with 5 is not recognized, and GS1-128 starting with 810 or 8110 is not recognized).

EAN-13 + GS1-128 starting with 99 (after Coupon On, also need to be opened with EAN99 Coupon On. After the UPC code starting with 99 is not recognized, and the UPC code starting with 810 or 8110 is not recognized.)

### UPC-A Coupon



QaZaAb

On



QaZaQa

Off \*\*

### EAN-13(99) Coupon



QaGbAb

On

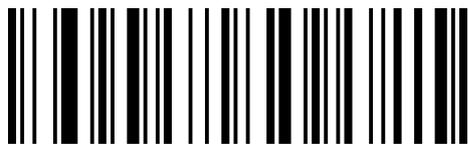


QaGbQa

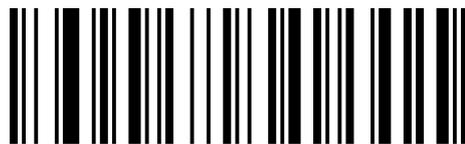
Off \*\*

UPC-A Coupon. Note: UPC-A Coupon must be enabled before using EAN-13(99) Coupon.

## QR Code



QaCbXa  
On \*\*



QaCbNa  
Off

## QR Code Normal/Reverse

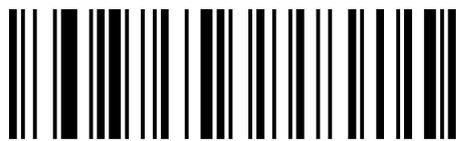


QaCbOa  
Normal only \*\*



QaCbYa  
Normal + Reverse

## QR Code Append



SaOcBb

On



SaOcRa

Off \*\*

Note: The QR code append function can read 2-3 QR codes with connection function at the same time.

## Number of Recognized Characters

The default number is 1-7089, and the scanner can be configured to only scan QR Code whose number is between (including) the minimum number (1-7089) and the maximum number (1-7089).

Minimum Number = Minimum Number high byte \* 256 + Minimum Number low byte

Maximum Number = Maximum Number high byte \* 256 + Maximum Number low byte



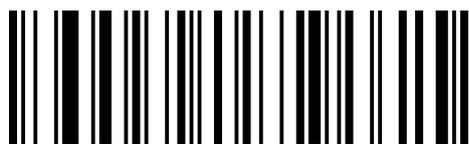
XdYdLa

Minimum Number (Low Byte)



XdZdLa

Minimum Number (High Byte)



XdAeLa

Maximum Number (Low Byte)



XdBeLa

Maximum Number (High Byte)

### Setting steps:

Reference: Appendix, Example - Set two-dimensional code read length.

### Micro QR Code



QaCbAb

On\*\*



QaCbQa

Off

### Micro QR Code Normal/Reverse



QaCbRa

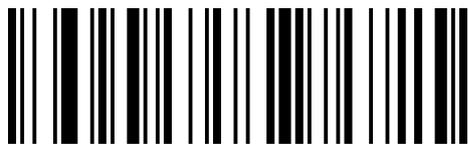
Normal only \*\*



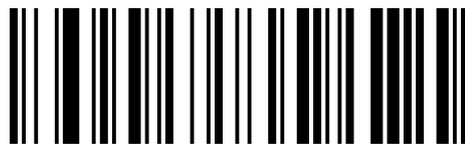
QaCbBb

Normal + Reverse

## Data Matrix



QaBbYa  
On\*\*



QaBbOa  
Off

## Data Matrix Rectangular Code

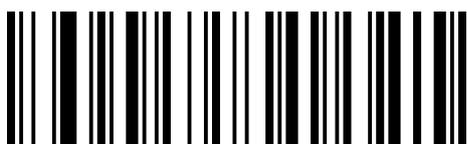


QaBbWa  
On



QaBbMa  
Off \*\*

## Data Matrix Normal/Reverse



QaBbNa  
Normal only \*\*



QaBbXa  
Normal + Reverse

## Number of Recognized Characters

The default number is 1-3116, and the scanner can be configured to only scan DataMatrix whose number is between (including) the minimum number (1-3116) and the maximum number (1-3116).

Minimum Number = Minimum Number high byte \* 256 + Minimum Number low byte

Maximum Number = Maximum Number high byte \* 256 + Maximum Number low byte



XdUdLa

Minimum Number (Low Byte)



XdWdLa

Maximum Number (Low Byte)



XdVdLa

Minimum Number (High Byte)



XdXdLa

Maximum Number (High Byte)

### Setting steps:

Reference: Appendix, Example - Set two-dimensional code read length.

## PDF 417



QaWaVa

On\*\*



QaWaLa

Off

### Number of Recognized Characters

The default number is 1-2750, and the scanner can be configured to only scan PDF 417 whose number is between (including) the minimum number (1-2750) and the maximum number (1-2750).

Minimum Number = Minimum Number high byte \* 256 + Minimum Number low byte

Maximum Number = Maximum Number high byte \* 256 + Maximum Number low byte



XdGdLa

Minimum Number (Low Byte)



XdHdLa

Minimum Number (High Byte)



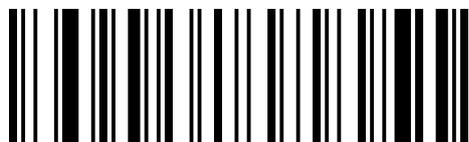
XdIdLa



XdJdLa

Maximum Number (Low Byte)

Maximum Number (High Byte)

**Micro PDF 417**

QaAbCb

On



QaAbSa

Off \*\*

**Number of Recognized Characters**

The default number is 1-366, and the scanner can be configured to only scan Micro PDF 417 whose number is between (including) the minimum number (1-366) and the maximum number (1-366).

Minimum Number = Minimum Number high byte \* 256 + Minimum Number low byte

Maximum Number = Maximum Number high byte \* 256 + Maximum Number low byte



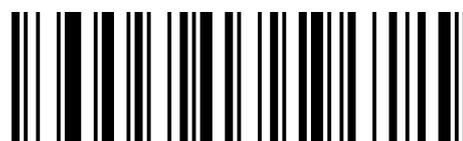
XdKdLa

Minimum Number (Low Byte)



XdLdLa

Minimum Number (High Byte)



XdMdLa

XdNdLa

Maximum Number (Low Byte)

Maximum Number (High Byte)

**Setting steps:**

Reference: Appendix, Example - Set two-dimensional code read length.

**MaxiCode**

QaCbZa

On

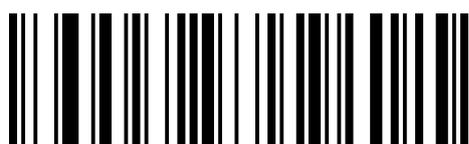


QaCbPa

Off \*\*

**Number of Recognized Characters**

The default number is 1-150, and the scanner can be configured to only scan MaxiCode whose number is between (including) the minimum number (1-150) and the maximum number (1-150).



XdSdLa

Minimum



XdTdLa

Maximum

## Setting steps:

Reference: Appendix, Example - Set one-dimensional code read length.

## Aztec Code

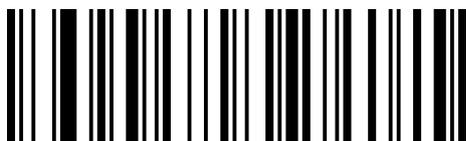


QaCbVa  
On



QaCbLa  
Off \*\*

## Aztec Code Normal/Reverse



QaCbMa  
Normal only \*\*



QaCbWa  
Normal + Reverse

## Number of Recognized Characters

The default number is 1-3832, and the scanner can be configured to only scan Aztec Code whose number is between (including) the minimum number (1-3832) and the maximum number (1-3832).

Minimum Number = Minimum Number high byte \* 256 + Minimum Number low byte

Maximum Number = Maximum Number high byte \* 256 + Maximum Number low byte



XdOdLa

Minimum Number (Low Byte)



XdQdLa

Maximum Number (Low Byte)



XdPdLa

Minimum Number (High Byte)



XdRdLa

Maximum Number (High Byte)

## HanXin Code



SaRdWa  
On



SaRdMa  
Off \*\*

Note: HanXin Code is also known as Chinese Sensible.

## Number of Recognized Characters

The default number is 1-7883, and the scanner can be configured to only scan HanXin Code whose number is between (including) the minimum number (1-7883) and the maximum number (1-7883).

Minimum Number = Minimum Number high byte \* 256 + Minimum Number low byte

Maximum Number = Maximum Number high byte \* 256 + Maximum Number low byte



XdCeLa

Minimum Number (Low Byte)



XdEeLa

Maximum Number (Low Byte)



XdDeLa

Minimum Number (High Byte)



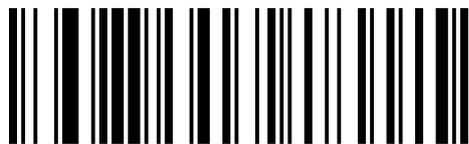
XdFeLa

Maximum Number (High Byte)

**Setting steps:**

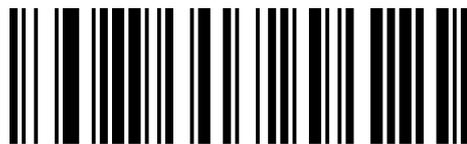
Reference: Appendix, Example - Set two-dimensional code read length.

## Pharma Code (One-Track)



UaNdAb

On



UaNdQa

Off \*\*

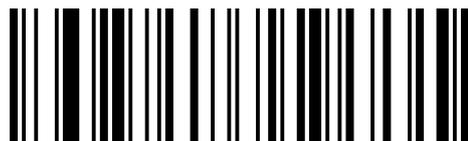
Note: Support One-Track

## Codablock A Code



SaldVa

On

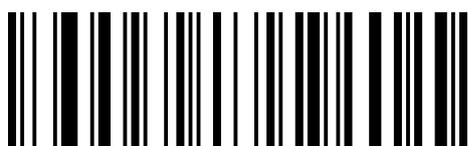


SaldLa

Off\*\*

## Number of Recognized Characters

The default number is 1-255, and the scanner can be configured to only scan Codablock A whose number is between (including) the minimum number (1-255) and the maximum number (1-255).



XdAdLa

Minimum



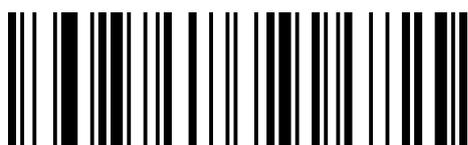
XdBdLa

Maximum

### Setting steps:

Reference: Appendix, Example - Set one-dimensional code read length.

## Codablock F Code



SaldWa

On



SaldMa

Off \*\*

## Number of Recognized Characters

The default number is 1-2048, and the scanner can be configured to only scan Codablock F whose number is between (including) the minimum number (1-2048) and the maximum number (1-2048).

Minimum Number = Minimum Number high byte \* 256 + Minimum Number low byte

Maximum Number = Maximum Number high byte \* 256 + Maximum Number low byte



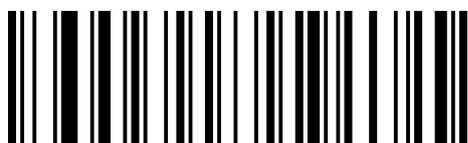
XdCdLa

Minimum Number (Low Byte)



XdDdLa

Minimum Number (High Byte)



XdEdLa

Maximum Number (Low Byte)



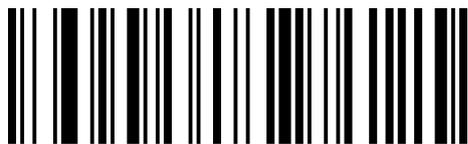
XdFdLa

Maximum Number (High Byte)

### Setting steps:

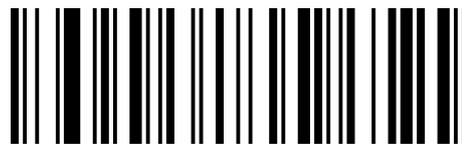
Reference: Appendix, Example - Set two-dimensional code read length.

## GS1 DataBar 14 (RSS-14)



QaAbYa

On

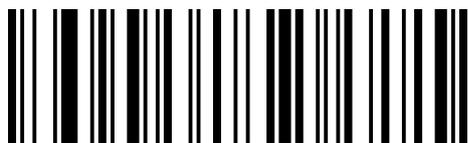


QaAbOa

Off

Note: GS1 Databar14 is also known as GS1 DataBar Omnidirectional, RSS-14. After opening the GS1 Databar14, GS1 DataBar Omnidirectional, GS1 DataBar Truncated, GS1 DataBar Stacked, GS1 DataBar Stacked Omnidirectional bar codes can be read.

## GS1 DataBar Limited (RSS-Limited)



QaAbZa

On\*\*



QaAbPa

Off

Note: GS1 DataBar Limited is also known as RSS-Limited

## GS1 DataBar Expanded(RSS-Expanded)



QaAbAb

\*\*On



QaAbQa

Off

Note: GS1 DataBar Expanded is also called RSS-Expanded. After you enable GS1 DataBar Expanded, GS1 DataBar Expanded and GS1 DataBar Expanded Stacked (Expanded Stacked needs to be enabled at the same time as RSS-14)

## Number of Recognized Characters

The default number is 4-74, and the scanner can be configured to only scan GS1 Databar Expanded barcodes whose number is between (including) the minimum number (4-74) and the maximum number (4-74).



XdlcLa

Minimum



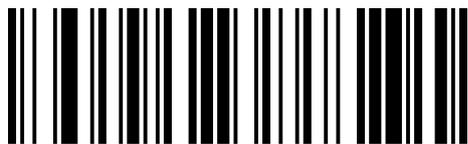
XdJcLa

Maximum

### Setting steps:

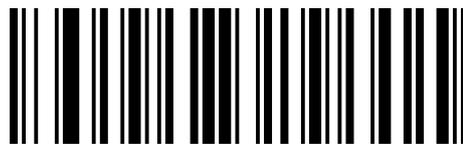
Reference: Appendix, Example - Set one-dimensional code read length.

## GS1 Composite Code



RaUcBb

On



RaUcRa

Off \*\*

Note: GS1 Composite Code supports multiple types of composite codes. Contains Omnidirectional, Truncated, Stacked, Stacked Omnidirectional, limited, Expanded, Expanded Stacked, GS1-128, UPC, EAN.

## GS1-128 Composite



RaUcAb

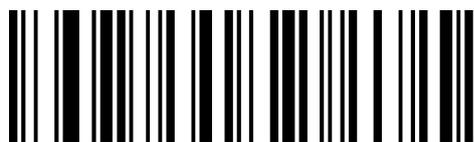
GS1-128 Composite ON



RaUcQa

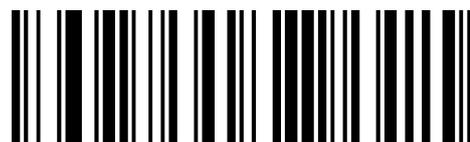
GS1-128 Composite OFF\*\*

## UPC Composite



YaNbZa

UPC Composite ON



YaNbPa

UPC Composite OFF

Note: UPC Composite bar Code is a category of GS1 Composite Code. UPC Composite and UPC (EAN/UPC) bar codes are mutually exclusive. EAN/UPC code is automatically disabled when UPC Composite bar code is enabled.

## Number of Recognized Characters

The default number is 1-2435, and the scanner can be configured to only scan GS1 Composite Code whose number is between (including) the minimum number (1-2435) and the maximum number (1-2435).

Minimum Number = Minimum Number high byte \* 256 + Minimum Number low byte

Maximum Number = Maximum Number high byte \* 256 + Maximum Number low byte



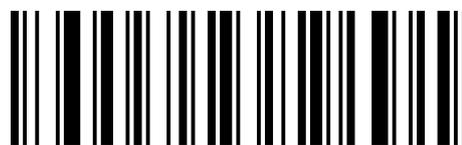
XdKcLa

Minimum Number (Low Byte)



XdMcLa

Maximum Number (Low Byte)



XdLcLa

Minimum Number (High Byte)



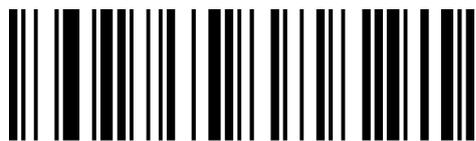
XdNcLa

Maximum Number (High Byte)

### Setting steps:

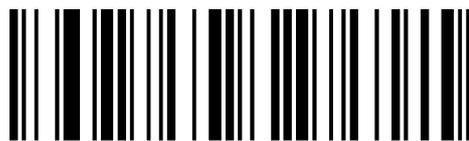
Reference: Appendix, Example - Set two-dimensional code read length.

## TLC 39 Code



Ya0bCb

On



Ya0bSa

Off\*\*

Note: TLC39 is TCIF Linked Code 39

## TLC39 Mandatory Attached



XaWdYa

On

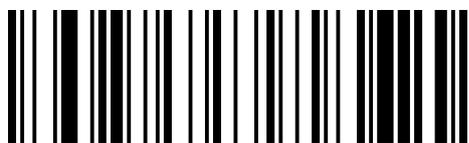


XaWdOa

Off\*\*

*Note: Read only TLC39 code, do not read Code39 code, otherwise Code39 part may be output.*

## OCR



SaBdCb

On

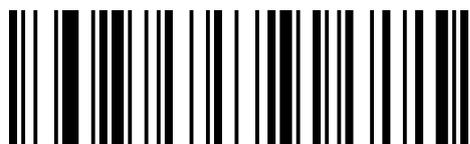


SaBdSa

Off \*\*

Note: After this OCR is enabled, the Chinese Mainland ID number can be read by default. If you need other configuration, please contact the supplier.

## ID/Passport OCR



SaBdWa

On



SaBdMa

Off \*\*

Note: The ID Card OCR is automatically turned off when the Passport OCR is turned on, and the ID Card OCR is automatically turned on when the Passport OCR is turned off.

## OCR Check



TaDeBb

OCR Passport Checksum Ignore Enable



TaDeRa

OCR Passport Checksum Ignore Disable \*\*

## Postal Code – 1D

### China Post Code



QaZaBb

On



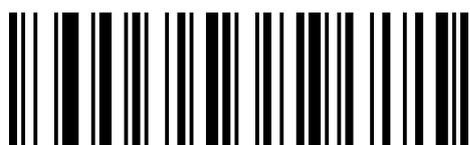
QaZaRa

Off \*\*

Note: China Post Code is also known as Hong Kong 2 of 5, Datalogic 2 of 5.

### Number of Recognized Characters

The default number is 2-80, and the scanner can be configured to only scan China Post whose number is between (including) the minimum number (2-80) and the maximum number (2-80).



XdOcla

Minimum



XdPcla

Maximum

#### Setting steps:

Reference: Appendix, Example - Set one-dimensional code read length.

## Korea Post



SaFdVa

On



SaFdLa

Off \*\*

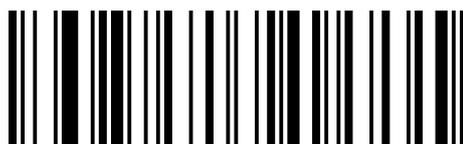
Note: Korea Post is also known as Korean Postal Authority.

## Korea Post Reverse Output



SaFdXa

Positive sequence output\*\*



SaFdNa

Reverse output

## Korea Post Check Character

Korea Post barcode data is not mandatory to include a check character, if there is a check character, it is the first 1 character of the data. The check character is a value calculated from all the data and is used to verify that the data is correct. You can open or close calibration according to the demand, the default is "closed Chesapeake Post check".



SaFdAb

On



SaFdQa

Off \*\*

## Number of Recognized Characters

The default number is 2-80, and the scanner can be configured to only scan Korea Post whose number is between (including) the minimum number (2-80) and the maximum number (2-80).



XdQcLa

Minimum



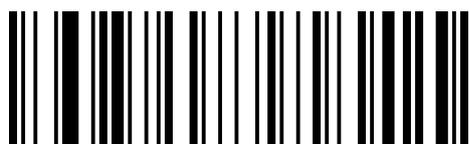
XdRcLa

Maximum

## Postal Code – 2D

When two-dimensional postal codes are used, other postal codes need to be turned off when one postal code is read.

### Australian Post



SaGdCb

On



SaGdSa

Off \*\*

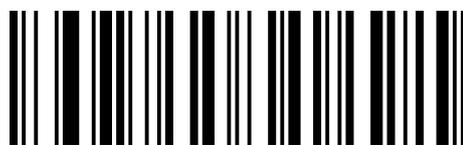
Note: i.e Australia Post 4-State Customer Code

### Australian Error Correction Bit



YaTbXa

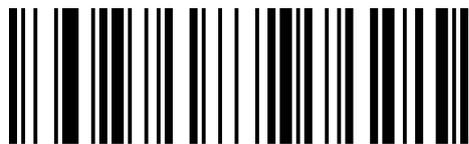
Send error correction bits



YaTbNa

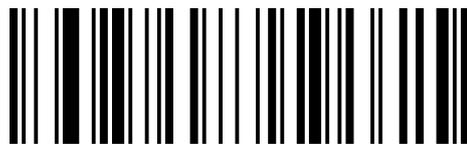
No send error correction bits \*\*

## British Post



SaGdVa

On

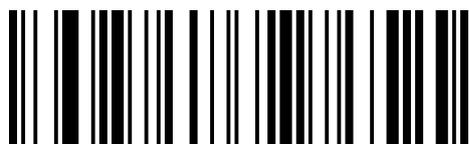


SaGdLa

Off \*\*

Note: British Post is also known as Royal Mail, CBC(Customer Bar Code), RM4SCC(Royal Mail 4-State Customer Code), UK Postal Code

## USPS Intelligent Mail



SaldYa

On



SaldOa

Off \*\*

Note: USPS Intelligent Mail is also known as OneCode, USPS 4-State Customer Barcode.

## Japanese Post



SaGdBb

On

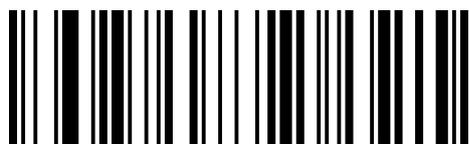


SaGdRa

Off \*\*

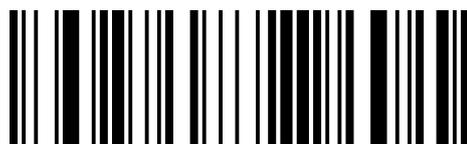
Note: Also known as Japan Post 4 State Customer Code

## Planet Code



SaGdZa

On

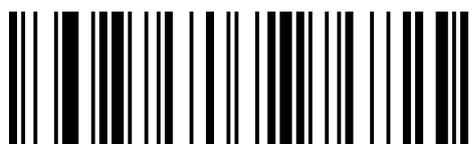


SaGdPa

Off \*\*

Note: Also known as USPS Planet

## Planet Code Check Character



SaFdYa

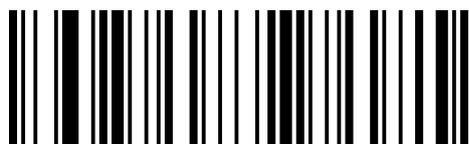
On



SaFdOa

Off \*\*

## Postnet



SaGdYa

On



SaGdOa

Off \*\*

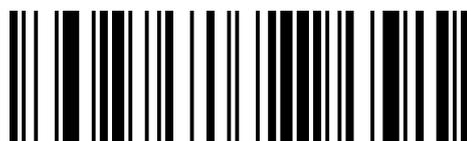
Note: Also called USPS Postnet, Zip

## Postnet Check Character



SaFdZa

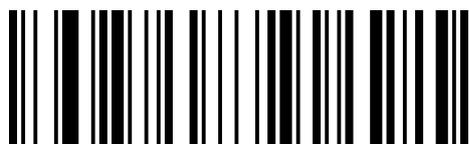
On



SaFdPa

Off \*\*

## UPU 4-State



SaGdWa

On



SaGdMa

Off \*\*

Note: Namely UPU ID-Tag, also known as Postal-4i.

## KIX Code



SaGdAb

On



SaGdQa

Off \*\*

Note: KIX Code is also known as Dutch Post, Netherlands.

# Chapter 6 Communication Instructions

## Introduction

Scanner can be setted with serial port. The parameters are: baud rate 9600bps, no check, 8 data bits, 1 stop bit, and no flow control.

## Command Feedback Value

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

**Successfully returned:** 0x06

**Failure returned:** 0x15

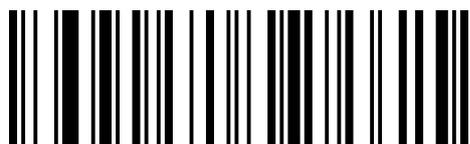
## Trigger Instruction

Turn on (Hexadecimal) : 16 42 65 52 65 51 62 2E

Turn off (Hexadecimal) : 16 42 65 52 65 52 62 2E

Note: Please refer to "Appendix - Instruction Set" for detailed instructions, instruction triggering is applicable to manual mode.

## ACK/NAK



WaFbMa

On \*\*



WaFbWa

Off

## Instruction Sending Example

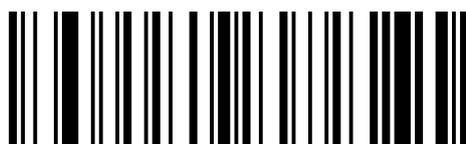
Send hexadecimal instructions to control scanning, use open decoding instructions to send, confirm the serial port protocol Settings, input the corresponding instructions in the instruction send input box to send.

Note: Please refer to Appendix - Instruction Set for detailed instructions.

# Chapter 7 Appendix

## Appendix-Enter/Exit Data Code Setting Mode

When the user configures the prefix and suffix, you need to scan the "enter/exit data code setting mode" setup code first to enter the setting data code mode. After entering the data code configuration mode, only scanning the variable-number configuration code is valid. To set other configuration codes, you need to exit the data code setting mode first.

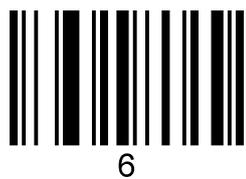


BeReGe

Enter/Exit Data Code Setting Mode

## Appendix-Data Code

The data code is used to configure the prefix and suffix. When using the data code, it needs to be used in conjunction with "Appendix-Enter/Exit Data Code Setting Mode".



## Appendix - Default Settings Table

| Parameter Name                        | Default Setting                                 | Description         |
|---------------------------------------|---|---------------------|
| <b>Integrated Setup</b>               |   |                     |
| Set Code function                     | ON  | Enabled by Default  |
| Setup code sending                    | OFF   | Disabled by Default |
| Enable all beeps                      | ON  |                     |
| Enable the startup prompt tone        | ON  |                     |
| Enable the setting code prompt tone   | ON  |                     |
| Enable the decoding success tone      | ON  |                     |
| Decoding successful beep duration     | Ordinary  |                     |
| Decoding success tone frequency       | 2.0KHZ  |                     |
| Decoding success tone volume          | High  |                     |
| Error alarm tone                      | LF  |                     |
| Turn on the fill light lamp           | ON  | middle              |
| Fill light status                     | Pattern of change                               |                     |
| TPIAL                                 | ON  |                     |
| Turn on the reading success indicator | ON  |                     |
| Indicates how the light works         | Wait for the captain to turn<br>off, work light |                     |
| Low power mode                        | ON  |                     |

|   |                                |                                  |
|---|--------------------------------|----------------------------------|
| Text output by country (input format)                               | UTF-8/GB2312 encoding          |                                  |
| Data output format  | Codepage                       |                                  |
| Different operating systems output languages of different countries | Windows                        |                                  |
| Image recognition Settings  | Normal phase image recognition |                                  |
| Decoding locale   | Full area decoding             |                                  |
| Default center area size  | 60%                            |                                  |
| Failed to read code   | OFF                            |                                  |
| QR URL code Settings  | ON                             | Platform movement default<br>OFF |
| Invoice function  | OFF                            |                                  |
| <b>Communication Setting</b>  |                                |                                  |
| Interface pattern   | USB keyboard interface         |                                  |
| Keyboard mode   | American English               |                                  |
| ASCII function key Settings   | Output function key            |                                  |
| Virtual keyboard output mode  | OFF                            |                                  |
| Toggle case   | OFF                            | Normal                           |
| USB transfer speed  | Low                            |                                  |
| CapsLock Status setting   | OFF                            |                                  |
| Baud rate   | 9600                           |                                  |

|  |       |  |
|--|-------|--|
| Serial port verification                           | NONE  |  |
| Data bits  | 8 bit |  |
| Stop bit   | 1 bit |  |
| Serial port transmission speed                     | High  |  |
| <b>Reading Model</b>                               |       |  |
| Manual reading mode                                | ON    | The module defaults to manual mode                   |
| Manual mode - Key timeout                          | 3S    |  |
| Continuous reading mode                            | OFF   | The platform and movement default to continuous mode |
| Continuous mode - same bar code reading delay      | ON    | 400MS  |
| Continuous mode - Different bar code reading delay | ON    | 300MS  |
| Inductive reading mode                             | OFF   |  |
| Induction mode - Duration of image stabilization   | 500ms |  |
| Induction mode - Induction sensitivity             | High  |  |
| <b>Data Edition</b>                                |       |  |
| Send Code ID                                       | OFF   |  |
| Send AIM ID  | OFF   |  |

|  |     |
|--|-----|
| Start-stopcharacter                          | OFF |
| End character                                | CR  |
| GS character substitution                    | OFF |
| Custom prefixes                              | OFF |
| Custom suffix                                | OFF |
| Hide header character                        | OFF |
| Hide middle character                        | OFF |
| Hide trailing character                      | OFF |
| Insert a custom character                    | OFF |
| Substitute character                         | OFF |
| Function key prefix                          | OFF |
| <b>Barcode Parameter Setting</b>             |     |
| Open All Barcodes                            | OFF |
| <b>UPC-A</b>                                 |     |
| UPC-A  | ON  |
| UPC-A Check character                        | ON  |
| UPC-A Read 2 additional bits                 | OFF |
| UPC-A Read 5 additional bits                 | OFF |
| UPC-A Force the inclusion of additional bits | OFF |
| UPC-A Enable separators                      | ON  |

|  |     |      |
|--|-----|------|
| UPC-A Transport system character             | ON  |      |
| UPC-A Convert to EAN-13                      | OFF |      |
| <b>UPC-E</b>                                 |     |      |
| UPC-E Enable separators                      | ON  |      |
| UPC-E0                                       | ON  |      |
| UPC-E1                                       | OFF |      |
| UPC-E Check character                        | ON  |      |
| UPC-E Read 2 additional bits                 | OFF |      |
| UPC-E Read 5 additional bits                 | OFF |      |
| UPC-E Force the inclusion of additional bits | OFF |      |
| UPC-E Enable separators                      | ON  |      |
| UPC-E Check character                        | ON  | 系统字符 |
| UPC-E Convert to UPC-A                       | OFF |      |
| <b>EAN-8</b>                                 |     |      |
| EAN-8  | ON  |      |
| EAN-8 Check character                        | ON  |      |
| EAN-8 Read 2 additional bits                 | OFF |      |
| EAN-8 Read 5 additional bits                 | OFF |      |
| EAN-8 Force the inclusion of additional bits | OFF |      |

|   |      |
|---|------|
| EAN-8 Enable separators                       | ON   |
| EAN-8 Convert to EAN-13                       | OFF  |
| <b>EAN-13</b>                                 |      |
| EAN-13  | ON   |
| EAN-13 Check character                        | ON   |
| EAN-13 Read 2 additional bits                 | OFF  |
| EAN-13 Read 5 additional bits                 | OFF  |
| EAN-13 Force the inclusion of additional bits | OFF  |
| EAN-13 Enable separators                      | ON   |
| <b>ISBN</b>                                   |      |
| ISBN  | OFF  |
| ISBN Check character                          | OFF  |
| <b>ISSN</b>                                   |      |
| ISSN  | OFF  |
| ISSN Check character                          | OFF  |
| <b>Code 128</b>                               |      |
| Code 128                                      | ON   |
| Code 128 Default read length                  | 0-80 |
| <b>GS 1-128</b>                               |      |
| GS1-128                                       | ON   |

|  |      |      |
|--|------|------|
| GS1-128 Default read length                | 0-80 |      |
| <b>ISBT 128</b>                            |      |      |
| ISBT128                                    | ON   |      |
| ISBT128 connect                            | OFF  |      |
| <b>Code 39</b>                             |      |      |
| Code 39                                    | ON   |      |
| Code 39 Check character                    | OFF  | NONE |
| Code 39 Transfer start and end             | OFF  |      |
| Code 39 Recognize Full ASCII               | OFF  |      |
| Code 39 Default read length                | 0-48 |      |
| <b>Code 32</b>                             |      |      |
| Code 32                                    | OFF  |      |
| Code 32 Check character                    | ON   |      |
| Code 32 Add A before enabling the bar code | OFF  |      |
| Code32 Open fail read                      | ON   |      |
| <b>Code 93</b>                             |      |      |
| Code 93                                    | ON   |      |
| Code 93 Default read length                | 0-80 |      |
| <b>Code 11</b>                             |      |      |
| Code 11                                    | OFF  |      |

|  |           |             |
|--|-----------|-------------|
| Code 11 Check character                          | ON        | 2 bit check |
| Code 11 Check character                          | ON        |             |
| Code 11 Default read length                      | 4-80      |             |
| <b>Codabar</b>                                   |           |             |
| Codabar  | ON        |             |
| Codabar Check character                          | OFF       |             |
| Codabar Transfer start and end                   | OFF       |             |
| Codabar Start character and end character format | ABCD/ABCD |             |
| Codabar Default read length                      | 4-60      |             |
| <b>Interleaved 2 of 5</b>                        |           |             |
| Interleaved 2 of 5                               | ON        |             |
| Interleaved 2 of 5 Check character               | NONE      |             |
| Interleaved 2 of 5 Default read length           | 4-80      |             |
| <b>Matrix 2 of 5</b>                             |           |             |
| Matrix 2 of 5                                    | ON        |             |
| Matrix 2 of 5 Check character                    | OFF       |             |
| Matrix 2 of 5 Default read length                | 4-80      |             |
| <b>Industrial 2 of 5</b>                         |           |             |
| Industrial 2 of 5                                | ON        |             |
| Industrial 2 of 5 Default read length            | 4-48      |             |

|                                     |                   |
|-------------------------------------|-------------------|
| <b>NEC 2 of 5</b>                   |                   |
| NEC 2 of 5                          | OFF               |
| NEC 2 of 5 Check character          | OFF               |
| NEC 2 of 5 Default read length      | 4-80              |
| <b>Standard 2 of 5</b>              |                   |
| Standard 2 of 5                     | OFF               |
| Standard 2 of 5 Default read length | 4-48              |
| <b>MSI Plessey</b>                  |                   |
| MSI Plessey                         | OFF               |
| MSI Plessey Check character         | OFF               |
| MSI Plessey Default read length     | 4-48              |
| <b>Telepen</b>                      |                   |
| Telepen                             | OFF               |
| Telepen Character type              | Alphanumeric type |
| Telepen Default read length         | 1-60              |
| <b>Trioptic Code</b>                |                   |
| Trioptic Code                       | OFF               |
| <b>BC412</b>                        |                   |
| BC412                               | OFF               |
| BC412 Default read length           | 4-48              |
| <b>Febraban</b>                     |                   |

|   |        |
|---|--------|
| Febraban (ITF25)                                | OFF    |
| Febraban (Code128)                              | OFF    |
| Febraban Check character                        | OFF    |
| <b>Coupon</b>                                   |        |
| UPC-A Coupon                                    | OFF    |
| EAN-13(99) Coupon                               | OFF    |
| <b>QR Code</b>                                  |        |
| QR Code   | ON     |
| QR Code Reverse reading                         | OFF    |
| QR Code Append                                  | OFF    |
| QR Code Default read length                     | 1-7089 |
| <b>Micro QR Code</b>                            |        |
| Micro QR Code                                   | ON     |
| Micro QR Code Reverse reading                   | OFF    |
| <b>Data Matrix</b>                              |        |
| Data Matrix                                     | ON     |
| Data Matrix Allows reading of rectangular codes | OFF    |
| Data Matrix Reverse reading                     | OFF    |
| Data Matrix Default read length                 | 1-3116 |
| <b>PDF 417</b>                                  |        |

|                                   |        |
|-----------------------------------|--------|
| PDF 417                           | ON     |
| PDF 417 Default read length       | 1-2750 |
| <b>Micro PDF 417</b>              |        |
| Micro PDF 417                     | OFF    |
| Micro PDF 417 Default read length | 1-366  |
| <b>MaxiCode</b>                   |        |
| MaxiCode                          | OFF    |
| MaxiCode Default read length      | 1-150  |
| <b>Aztec</b>                      |        |
| Aztec                             | OFF    |
| Aztec Reverse reading             | OFF    |
| Aztec Default read length         | 1-3832 |
| <b>HanXin Code</b>                |        |
| HanXin                            | OFF    |
| HanXin Default read length        | 1-7883 |
| <b>Pharma Code</b>                |        |
| Pharma                            | OFF    |
| <b>Codablock A</b>                |        |
| Codablock A                       | OFF    |
| Codablock A Default read length   | 1-255  |
| <b>Codablock F</b>                |        |

|                                   |        |
|-----------------------------------|--------|
| Codablock F                       | OFF    |
| Codablock F Default read length   | 1-2048 |
| <b>RSS-14</b>                     |        |
| RSS-14                            | ON     |
| <b>RSS-Limited</b>                |        |
| RSS-Limited                       | ON     |
| <b>RSS-Expanded</b>               |        |
| RSS-Expanded                      | ON     |
| RSS-Expanded Default read length  | 4-74   |
| <b>GS1 Composite Code</b>         |        |
| GS1 Composite                     | OFF    |
| GS1-128 Composite                 | OFF    |
| UPC Composite                     | OFF    |
| GS1 Composite Default read length | 1-2435 |
| <b>TLC39 Code</b>                 |        |
| TLC39 Code                        | OFF    |
| TLC39 Code Default read length    | 2-80   |
| <b>OCR</b>                        |        |
| Chinese ID Card OCR               | OFF    |
| Passport OCR                      | OFF    |
| Passport OCR Check ignore         | OFF    |

|   |                          |
|---|--------------------------|
| <b>China Post Code</b>                      |                          |
| China Post                                  | OFF                      |
| China Post Default read length              | 2-80                     |
| <b>Korea Post Code</b>                      |                          |
| Korea Post                                  | OFF                      |
| Korea Post Output Settings in reverse order | Positive sequence output |
| Korea Post Check character                  | OFF                      |
| Korea Post Default read length              | 2-80                     |
| <b>Australian Post</b>                      |                          |
| Australian Post                             | OFF                      |
| Australian Error correction bit             | OFF                      |
| <b>British Post</b>                         |                          |
| British Post                                | OFF                      |
| <b>USPS Intelligent Mail</b>                |                          |
| USPS Intelligent Mail                       | OFF                      |
| <b>Japanese Post</b>                        |                          |
| Japanese Post                               | OFF                      |
| <b>Planet Code</b>                          |                          |
| Planet Code                                 | OFF                      |
| Planet Code Check character                 | OFF                      |

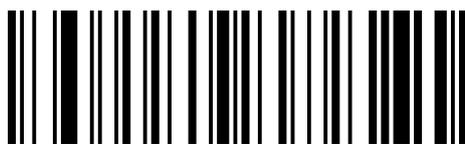
|                              |     |
|------------------------------|-----|
| <b>Planet Code</b>           |     |
| Planet Code                  | OFF |
| Planet Code Check character  | OFF |
| <b>Postnet Code</b>          |     |
| Postnet Code                 | OFF |
| Postnet Code Check character | OFF |
| <b>UPU 4-State</b>           |     |
| UPU 4-State                  | OFF |
| UPU 4-State Check character  | OFF |
| <b>KIX Code</b>              |     |
| KIX Code                     | OFF |
| KIX Code Check character     | OFF |

## Appendix - Custom Parameter Examples

**For example, set the low power mode to 10S.**

Check that 10S are two 5S units, that is, the data code is 2 and the three-digit decimal value is 002.

Step 1: Scan the "Enter/Exit Data code setting mode" setting code in the appendix (The buzzer rings three times);



BeReGe

Enter or exit data code setting mode

Step 2: Scan the "Custom Low power mode time" setting code;



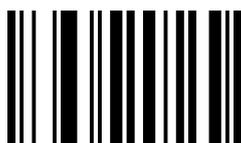
ZdYdLa

~ Customize the time to enter low power mode

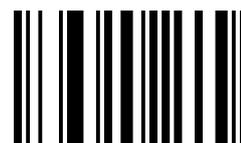
Step 3: Scan "0", "0" and "2" of "Appendix - Data Code" in turn to set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0



0



2

Step 4: Scan the "Enter/Exit Data code setting mode" setting code in the appendix to complete the setting (The buzzer rings three times).

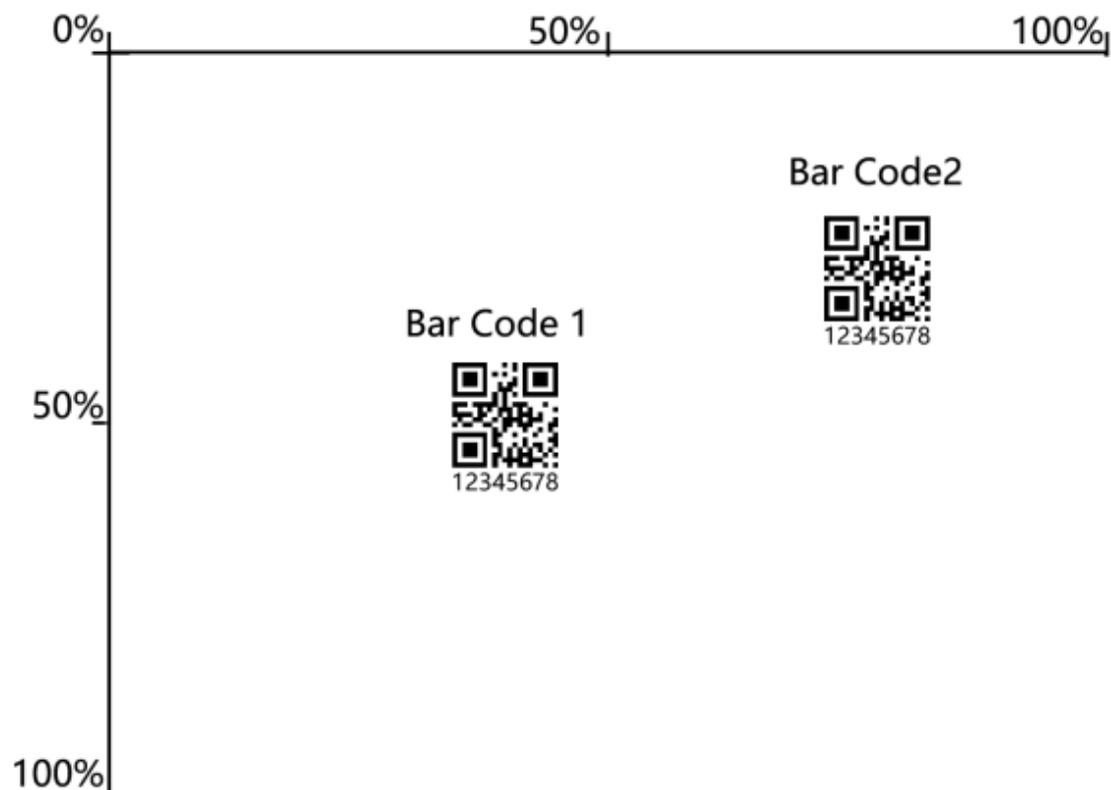


BeReGe

Enter or exit data code setting mode



## Example - Customize The Center Area Size



**For example, if you want to read only, Bar Code1 is displayed in the figure above. The center area is 30% on the left, 50% on the right, 30% on the top, and 60% on the bottom**

The setting procedure is as follows:

Step 1: Scan the setting code of "Enter/exit data code setting mode" in the appendix (3 buzzer sounds);

Step 2: Scan the "~ left start percentage" setting code;

Step 3: Scan 0, 3, and 0 of Addendum - Data Code and set the code. (Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).

Step 4: Scan the "~ right start percentage" setting code;

---

Step 5: Scan "Addendum - Data Code" "0" "5" "0", set the code. (Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).

Step 6: Scan the "~ top start percentage" setting code;

Step 7: Scan 0, 3, and 0 of Addendum - Data Code to set the code.( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).

Step 8: Scan the "~ bottom start percentage" setting code;

Step 9: Scan "Addendum - Data code" "0" "6" "0", set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).

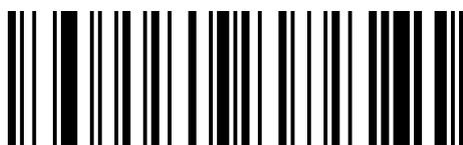
Step 10: Scan the "Enter/exit data code setting mode" setting code in the appendix to complete the setting, (The buzzer rings three times) .

## Example - Customize Key Timeout

**For example, set the timeout period of a manual key to 10S.**

Ensure that 10S are 50 200MS units, that is, the data code is 50 and the three-digit decimal value is 050.

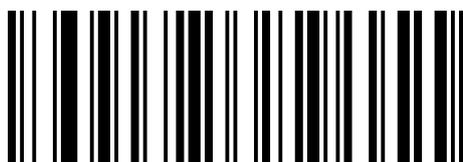
Step 1: Scan the "Enter/Exit Data code setting mode" setting code in the appendix (The buzzer rings three times) ;



BeReGe

Enter or exit data code setting mode

Step 2: Scan the "~ Custom key timeout" setting code;



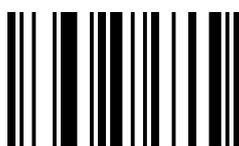
WdZcLa

~ Custom key timeout

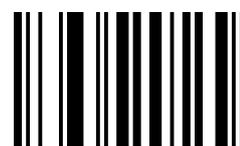
Step 3: Scan 0, 5, and 0 of Addendum - Data Code to set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0

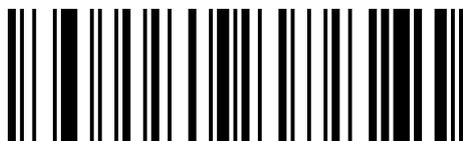


5



0

Step 4: Scan the appendix "Enter or exit data code setting mode" setting code, complete  
The setting, (The buzzer rings three times) .



BeReGe

Enter or exit data code setting mode

**For example, set the same bar code reading delay in continuous mode.**

First, make sure that 5S is 50 100MS units, which means that the data code should be set to 50 and the three-digit decimal value is 050.

Step 1: Scan The Enter or exit data code setting mode setting code (The buzzer rings three times) in the appendix.



BeReGe

Enter or exit data code setting mode

Step 2: Scan the setting code of "~ Customize the same barcode reading delay";



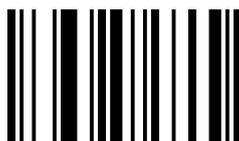
TdHeLa

~ Customize the same barcode reading delay

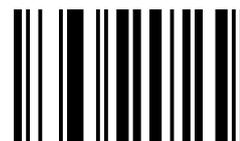
Step 3: Scan 0, 5, and 0 of Addendum - Data Code to set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0

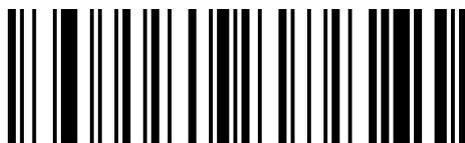


5



0

Step 4: Scan The Enter or exit data code setting mode setting code in the appendix to complete the setting (The buzzer rings three times).



BeReGe

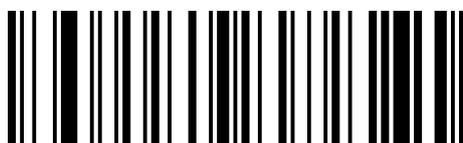
Enter or exit data code setting mode

## Example - Customize Image Stabilization Duration

**For example, set the image stabilization duration to 5S in sensing mode.**

First, make sure that 5S is 50 100MS units, which means that the data code should be set to 50 and the three-digit decimal value is 050.

Step 1: Scan The Enter or exit data code setting mode setting code (The buzzer rings three times) in the appendix.



BeReGe

Enter or exit data code setting mode

Step 2: Scan the " Customize image stabilization duration" setting code;



YdCbLa

~ Customize image stabilization duration

Step 3: Scan 0, 5, and 0 of Addendum - Data Code to set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



Step 4: Scan The Enter or exit data code setting mode setting code in the appendix to complete the setting (The buzzer rings three times).



BeReGe

Enter or exit data code setting mode

## Example - Adding Prefix and Suffix Settings

For example, add a custom XY prefix to all bar code types

First, check the three-digit decimal values of XY corresponding to the character to be prefixed in Appendix-ASCII Code Table: 088,089.

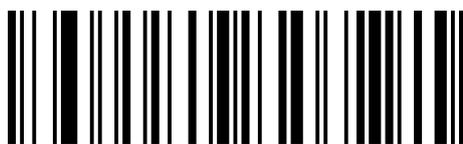
Step 1: Scan The Enter or exit data code setting mode setting code (The buzzer rings three times) in the appendix.



BeReGe

Enter or exit data code setting mode

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



BeReTd

~ Set custom prefix

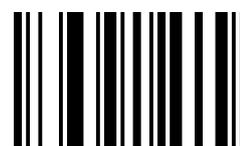
Step 3: Scan "Addendum - Data Code" in sequence of "0", "8", "8", set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0

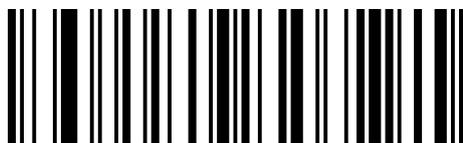


8



8

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



BeReTd

~ Set custom prefix

Step 5: Scan "Addendum - Data Code" "0" "8" "9", set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0



8



9

Step 5: Scan The Enter or exit data code setting mode setting code in the appendix to complete the setting (The buzzer rings three times).



BeReGe

Enter or exit data code setting mode

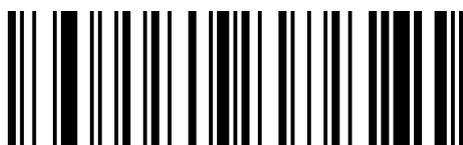
Note: You can set up to 10 custom prefixes, repeat steps 2 and 3, you can set multiple prefixes, after each prefix is set automatically switch to the next prefix Settings (from left to right 1-10), after setting the 10th automatically jump to the first prefix Settings.

## Example -Adding Prefixes and Suffixes According to Barcode Type

**For example: add a custom suffix of X to the Code 128 barcode type**

First, look at the Appendix-ASCII Code Table to see that the character X that needs to be suffixed has a three-digit decimal value of 088.

Step 1: Scan The Enter or exit data code setting mode setting code (The buzzer rings three times) in the appendix.



BeReGe

Enter or exit data code setting mode

Step 2: Scan the "setting Code128 before/after" setting code;



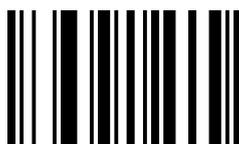
SdFdLa

setting Code128 before/after

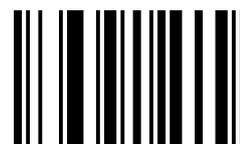
Step 3: Scan "Addendum - Data Code" in sequence of "0", "8", "8", set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0



8



8

Note: If the number is set to 0,0,0, then the prefix/suffix is not set. You can also clear the prefix/suffix by setting it to 0,0,0. In groups of three (Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively)

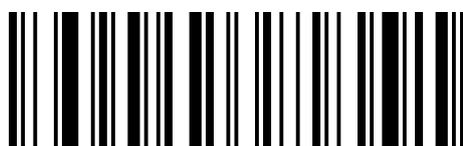
Step 4: Scan The Enter or exit data code setting mode setting code in the appendix to complete the setting (The buzzer rings three times).



BeReGe

Enter or exit data code setting mode

Step 5: Set custom characters to suffixes



QaZcCb

Set to the suffix

## Example - Hiding Character Settings

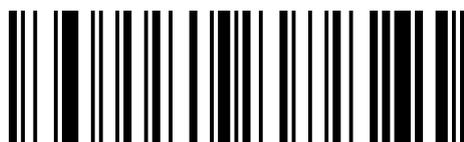
For example, hide the first three characters of the bar code.

Example barcode: 1616abcd



The original bar code content is 1616abcd, and 6abcd is output after the first three characters are hidden.

Step 1: Scan The Enter or exit data code setting mode setting code (The buzzer rings three times) in the appendix.



BeReGe

Enter or exit data code setting mode

Step 2: Scan the "~ head data hidden bits" setting code



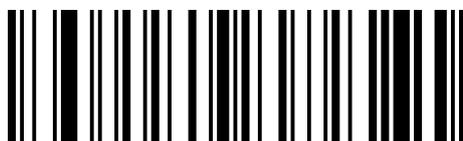
YdRbLa

~ head data hidden bits

Step 3: Scan 0, 0, and 3 of Addendum - Data Code to set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



Step 4: Scan The Enter or exit data code setting mode setting code in the appendix to complete the setting (The buzzer rings three times).



BeReGe

Enter or exit data code setting mode

Step 5: Scan the "Enable hidden header character" setting code;



WaQbCb

Enable hidden header character

## Example - Inserting Custom Data

**For example: insert the character X after the fourth digit of the sample barcode.**

First, check the "Appendix -ASCII Code Table" to see that the three-digit decimal value corresponding to the insertion position "4" is 004, and the three-digit decimal value corresponding to the insertion character "X" is 088.



The original bar code content is 1616abcd. After the setting is complete, 1616Xabcd is output.

Step 1: Scan The Enter or exit data code setting mode setting code (The buzzer rings three times) in the appendix.



Enter or exit data code setting mode

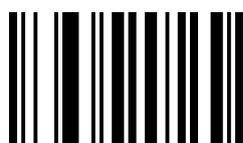
Step 2: Scan the "~ set the position where the custom character is inserted" setting code;



YdFCLa

~设置插入自定义字符的位置

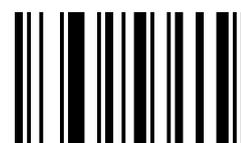
第三步：依次扫描“附录-数据码”的“0” “0” “4”，设置码。( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0

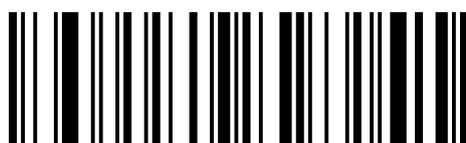


0



4

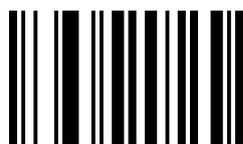
第四步：扫描“~设置插入的自定义字符”设置码；



BeReYc

~设置插入的自定义字符

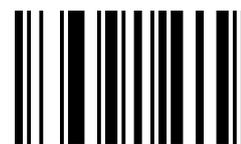
第五步：依次扫描“附录-数据码”的“0” “8” “8”，设置码。( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0



8



8

第五步：扫描附录中“Enter or exit data code setting mode”设置码，完成设置，(The buzzer rings three times)。



BeReGe

Enter or exit data code setting mode

第六步: 设置显示插入的自定义字符。



WaQbYb

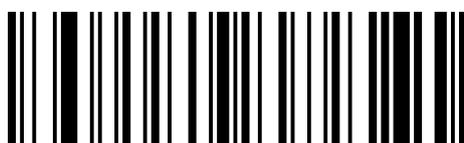
open 显示自定义字符

## Example - Hide Prefix Characters by Barcode Type: Hide the First Three

### UPC-E Characters

First, check in Appendix -ASCII Code Table to see that the character you want to hide has a three-digit decimal value of 003.

Step 1: Scan The Enter or exit data code setting mode setting code (The buzzer rings three times) in the appendix.



BeReGe

Enter or exit data code setting mode

Step 2: Scan the setting code of "UPC-E head data Hidden Bits";



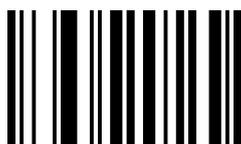
BeWaLa

UPC-E head data Hidden Bits

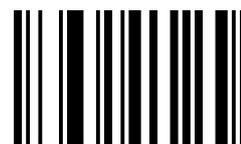
Step 3: Scan 0, 0, and 3 of Addendum - Data Code to set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0



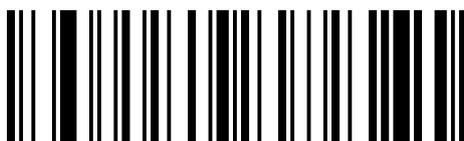
0



3

Note: If the number is set to 0,0,0, it means that the character is not hidden, and it is also possible to clear the hidden setting by setting to 0,0,0. Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively.

Step 4: Scan The Enter or exit data code setting mode setting code in the appendix to complete the setting (The buzzer rings three times).



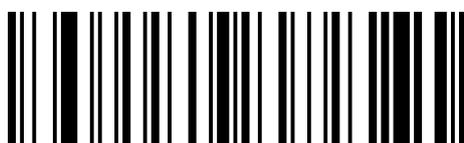
BeReGe

Enter or exit data code setting mode

## Example -Hide Middle Characters According to Barcode Type: Hide UPC-E Middle 2-bit Characters Starting From the 3rd bit

First, check the "Appendix -ASCII Code Table" to see that the corresponding decimal value from the third digit is 003; The three-digit decimal value corresponding to the hidden 2-bit character is 002.

Step 1: Scan The Enter or exit data code setting mode setting code (The buzzer rings three times) in the appendix.



BeReGe

Enter or exit data code setting mode

Step 2: Scan the "UPC-E middle Data hide start bit" setting code;



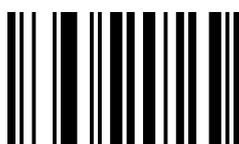
BeQbLa

UPC-E middle Data hide start bit

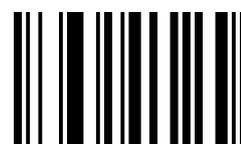
Step 3: Scan 0, 0, and 3 of Addendum - Data Code to set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0



0



3

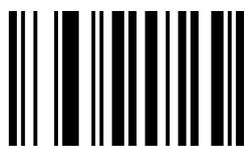
Step 4: Scan the setting code of "UPC-E Middle Data Hidden Bits" :



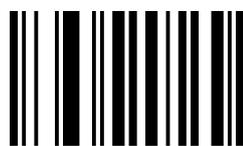
BeKcLa

UPC-E Middle Data Hidden Bits

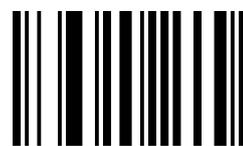
Step 5: Scan "Addendum - Data Code" "0" "0" "2", set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0

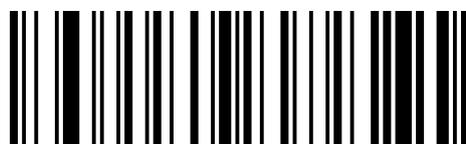


0



2

Step 6: Scan The Enter or exit data code setting mode setting code in the appendix to complete the setting (The buzzer rings three times).



BeReGe

Enter or exit data code setting mode

## Example -Hide Postcharacter According to Barcode Type: Hide the Last 3 bits of UPC-E Character

First, check in Appendix -ASCII Code Table to see that the character you want to hide has a three-digit decimal value of 003.

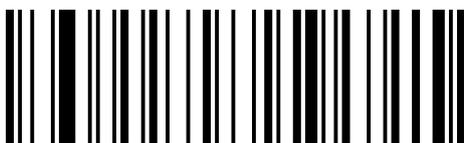
Step 1: Scan The Enter or exit data code setting mode setting code (The buzzer rings three times) in the appendix.



BeReGe

Enter or exit data code setting mode

Step 2: Scan the setting code of "UPC-E tail data Hidden Bits";



BeEdLa

UPC-E tail data Hidden Bits

Step 3: Scan 0, 0, and 3 of Addendum - Data Code to set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0



0



3

Note: If the number is set to 0,0,0, it means that the character is not hidden, and you can also clear the hidden setting by setting it to 0,0,0. Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively.

Step 4: Scan The Enter or exit data code setting mode setting code in the appendix to complete the setting (The buzzer rings three times).



BeReGe

Enter or exit data code setting mode

## Example - Character substitution Settings

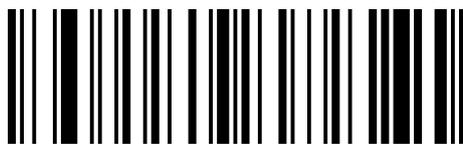
**For example: Replace the 6 in the example barcode with the letter X.**

First, check the Appendix-ASCII Code Table to see that the substituted character "6" has a three-digit decimal value of 054, and the substituted character "X" has a three-digit decimal value of 088.



The original bar code content is 1616abcd. After the setting is complete, 1X1Xabcd is output.

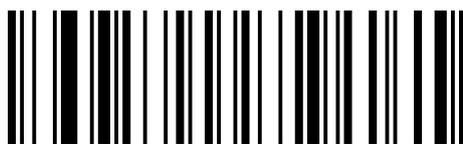
Step 1: Scan The Enter or exit data code setting mode setting code (The buzzer rings three times) in the appendix.



BeReGe

Enter or exit data code setting mode

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



VdEeLa

~ character to be replaced

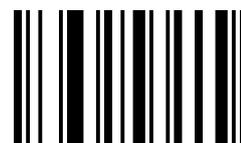
Step 3: Scan "Addendum - Data Code" 0, 5, 4, and set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0



5



4

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



VdFeLa

~ Replace new character

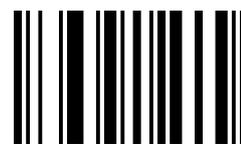
Step 5: Scan "Addendum - Data Code" "0" "8" "8", set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0

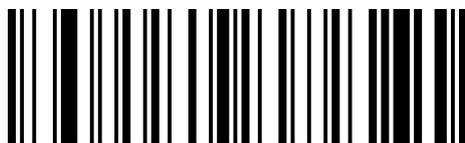


8



8

Step 5: Scan The Enter or exit data code setting mode setting code in the appendix to complete the setting (The buzzer rings three times).



BeReGe

Enter or exit data code setting mode

## Example - Custom Function Key Prefixes

**For example: set Ctrl+Shift+Alt+E prefix.**

First, through "Appendix -ASCII Code Table", the main key E corresponds to the three-digit decimal value 069.

Step 1: Set the function key prefix to set the function open

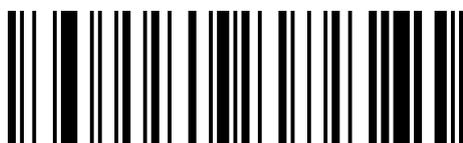


Step 2: Set the function key on and off.



### Step 3: Customize the main button

3.1 Scan The "Enter or exit data code setting mode" in the appendix (The buzzer rings three times);



BeReGe

Enter or exit data code setting mode

3.2: Scan the "~ Custom Main key" setting code;



ZdGeLa

~ Custom Main key

3.3: Scan 0, 6, and 9 of Appendix - Data Code successively to set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0

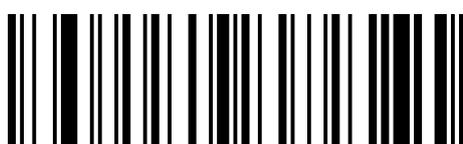


6



9

3.4: Scan The "Enter or exit data code setting mode" setting code in the appendix to complete the setting (The buzzer rings three times).



## BeReGe

Enter or exit data code setting mode

## Example - Set One-dimensional Code Read Length

Note: 1, if you want to set the code system: minimum length &gt; Maximum length, then the code system can be decoded at any length.

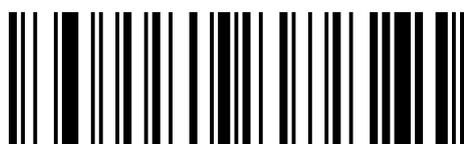
2, if the code system to be set: minimum length = maximum length, the decodable length of the code system is fixed to the set value.

3, some QR codes do not have high or low byte Settings, you can also refer to this step.

**For example, set the read length of Code 128 to 6 to 15 characters.**

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

Step 1: Scan The Enter or exit data code setting mode setting code (The buzzer rings three times) in the appendix.



BeReGe

Enter or exit data code setting mode

Step 2: Scan the "~ minimum length" setting Code of Code 128;



XdlbLa

~ minimum length

Step 3: Scan 0, 0, and 6 of Addendum - Data Code and set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0



0



6

Step 4: Scan the "~ Maximum length" setting Code of Code 128;



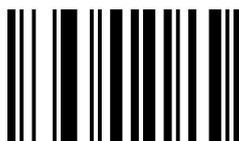
XdJbLa

~ Maximum length

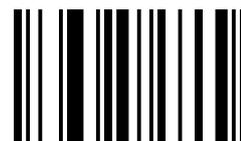
Step 5: Scan "Addendum - Data Code" "0" "1" "5", set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



0

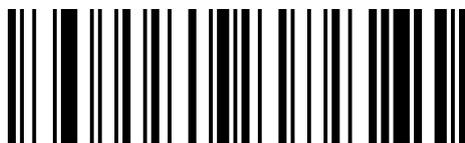


1



5

Step 6: Scan The Enter or exit data code setting mode setting code in the appendix to complete the setting (The buzzer rings three times).



BeReGe

Enter or exit data code setting mode

## Example - Set Two-dimensional Code Read Length

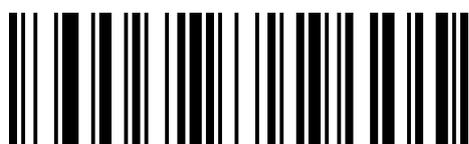
Note: 1, if the code system to be set: minimum length > maximum length, the code system can be decoded in any length.

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 QR Code read length to 20-300 characters.**

The two-dimensional code length setting is essentially the same as the one-dimensional code length setting, except that 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, the maximum length value needs to be simply decomposed before setting, and 300 is divided into high bytes and low bytes, then the high byte is  $300/256 = 1$  (integral division), and the low byte is  $300\%256=44$  (remainder). If the maximum length  $\leq 256$ , then the high byte is 0.



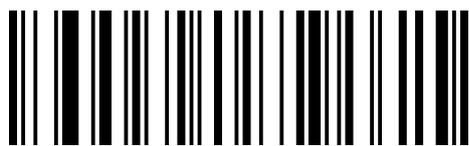
XdYdLa

Minimum Number (Low Byte)



XdZdLa

Minimum Number (High Byte)



XdAeLa

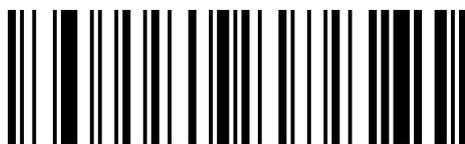
Maximum Number (Low Byte)



XdBeLa

Maximum Number (High Byte)

Step 1: Scan The Enter or exit data code setting mode setting code (The buzzer rings three times) in the appendix.



BeReGe

Enter or exit data code setting mode

Step 2: Scan the "~ Minimum length (high byte)" setting Code of the QR Code;



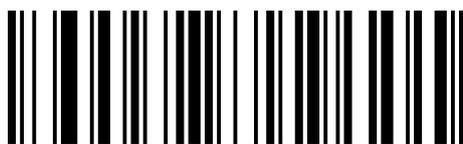
XdZdLa

~ Minimum length (high byte)

Step 3: Scan 0, 0, and 0 of Addendum - Data Code and set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



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



XdYdLa

~ Minimum length (low byte)

Step 5: Scan "Addendum - Data Code" "0" "2" "0", set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



Step 4: Scan the "~ Maximum length (high byte)" setting Code of the QR Code;



XdBeLa

~ Maximum length (high byte)

Step 5: Scan "Addendum - Data Code" "0" "0" "1", set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



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



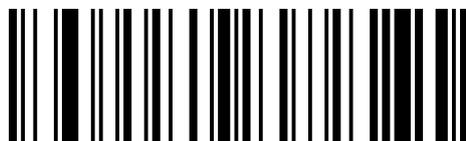
XdAeLa

~ Maximum length (low byte)

Step 5: Scan "Addendum - Data Code" "0" "4" "4", set the code. ( Each set of three codes is in a group, and the buzzer emits 1, 2, and 3 sounds respectively).



Step 6: Scan The Enter or exit data code setting mode setting code in the appendix to complete the setting (The buzzer rings three times).



BeReGe

Enter or exit data code setting mode

## Appendix-Code ID & AIM ID

| Number | Barcode Type       | Code ID | AIM ID | Description    |
|--------|--------------------|---------|--------|----------------|
| 1      | UPC-A              | F       | JE0    |                |
| 2      | UPC-A with Add-on  | F       | JE3    |                |
| 3      | UPC-E0             | E       | JE0    |                |
| 4      | UPC-E1             | E       | JX0    |                |
| 5      | UPC-E with Add-on  | E       | JE3    |                |
| 6      | EAN-8              | C       | JE4    |                |
| 7      | EAN-8 with Add-on  | C       | JE3    |                |
| 8      | EAN-13             | D       | JE0    |                |
| 9      | EAN-13 with Add-on | D       | JE3    |                |
| 10     | ISBN               | d       | JE0    |                |
| 11     | Code 128           | A       | JC0    |                |
| 12     | GS1 128            | B       | JC1    |                |
| 13     | Code 39            | I       | JAm    | m: 0,1,3,4,5,7 |
| 14     | Code39 Base32      | f       | JX0    |                |
| 15     | Code 93            | L       | JG0    |                |
| 16     | Code11             | 1       | JHm    | m: 0,1,3       |
| 17     | Codabar            | J       | JFm    | m: 0,2,4       |
| 18     | Interleaved 2 of 5 | G       | JIm    | m: 0,1,3       |
| 19     | Matrix 2 of 5      | Q       | JX0    |                |
| 20     | Industrial 2 of 5  | h       | JS0    |                |
| 21     | Standard 2 of 5    | H       | JR0    |                |
| 22     | NEC 2 of 5         | y       | JX0    |                |
| 23     | MSI Plessey        | K       | JMm    | 0,1,2,3,5,6,7  |

|    |                                |             |     |                |
|----|--------------------------------|-------------|-----|----------------|
| 24 | Telepen                        | 8           | ]Bm | m: 0,1,2,4     |
| 25 | Trioptic                       | e           | ]X0 |                |
| 26 | BC412                          | }           | ]X0 |                |
| 27 | QR code                        | U           | ]Qm | m: 0-6         |
| 28 | Micro QR                       | U           | ]Qm | m: 0-6         |
| 29 | Data Matrix                    | V           | ]dm | m: 0-6         |
| 30 | PDF417                         | N           | ]Lm | m: 0,1,2       |
| 31 | Micro PDF417                   | O           | ]Lm | m: 0,1,2,3,4,5 |
| 32 | Maxi Code                      | W           | ]Um | m: 0-3         |
| 33 | GS1 Composite Code             | M/B/F/E/C/D | ]e0 |                |
| 33 | AztecCode                      | T           | ]zm | m: 0-9,A-C     |
| 34 | Hanxin                         | S           | ]X0 |                |
| 35 | Pharma                         | s           | ]X0 |                |
| 36 | Codablock A                    | v           | ]Om | 0,1,4,5,6      |
| 37 | Codablock F                    | 7           | ]Om | 0,1,4,5,6      |
| 38 | GS1 Databar<br>Omnidirectional | M           | ]e0 |                |
| 39 | GS1 Databar Limited            | M           | ]e0 |                |
| 40 | GS1 Databar Expanded           | M           | ]e0 |                |
| 41 | GS1 Composite Code             | M/B/F/E/C/D | ]e0 |                |
| 42 | TLC 39                         | t           | ]L2 |                |
| 43 | OCR                            | X           | ]om | m: 0-3         |
| 44 | HongKong 2 of 5(China<br>Post) | P           | ]X0 |                |
| 45 | Korea Post                     | R           | ]X0 |                |
| 46 | Australian Post                | i           | ]X0 |                |

|    |                       |   |     |
|----|-----------------------|---|-----|
| 47 | British Post          | j | ]X0 |
| 48 | USPS Intelligent Mail | o | ]X0 |
| 49 | Japanese Post         | l | ]X0 |
| 50 | Planet Code           | n | ]X0 |
| 51 | Postnet Code          | q | ]X0 |
| 52 | UPU 4-State           | p | ]X0 |
| 53 | KIX Code              | m | ]X0 |

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

## Appendix - Control Character Table

Note: ASCII code table 0-31 is used to control that characters behave differently in different interface modes. The scanner can achieve the following functions by using relevant Settings.

| Hexadecimal | ASCII | Corresponding<br>key value<br>(function key<br>operation) | Corresponding<br>key value (Ctrl<br>escape 1) | Corresponding<br>key value (Ctrl<br>escape 2) |
|-------------|-------|---|---|---|
| 00          | 00    | Null  | Ctrl+2  | Ctrl+@  |
| 01          | 01    | Keypad Enter  | Ctrl+A  | Ctrl+A  |
| 02          | 02    | Caps lock   | Ctrl+B  | Ctrl+B  |
| 03          | 03    | Right Arrow   | Ctrl+C  | Ctrl+C  |
| 04          | 04    | Up Arrow  | Ctrl+D  | Ctrl+D  |
| 05          | 05    | Null  | Ctrl+E  | Ctrl+E  |
| 06          | 06    | Null  | Ctrl+F  | Ctrl+F  |
| 07          | 07    | Enter   | Ctrl+G  | Ctrl+G  |
| 08          | 08    | Left Arrow  | Ctrl+H  | Backspace                                     |
| 09          | 09    | Horizontal Tab  | Ctrl+I  | Tab   |
| 0A          | 10    | Down Arrow  | Ctrl+J  | Enter   |
| 0B          | 11    | Vertical Tab  | Ctrl+K  | Ctrl+K  |
| 0C          | 12    | Backspace   | Ctrl+L  | Ctrl+L  |
| 0D          | 13    | Enter   | Ctrl+M  | Enter   |

|    |    |              |        |        |
|----|----|--------------|--------|--------|
| 0E | 14 | Insert       | Ctrl+N | Ctrl+N |
| 0F | 15 | Esc          | Ctrl+O | Ctrl+O |
| 10 | 16 | F11          | Ctrl+P | Ctrl+P |
| 11 | 17 | Home         | Ctrl+Q | Ctrl+Q |
| 12 | 18 | Print Screen | Ctrl+R | Ctrl+R |
| 13 | 19 | Delete       | Ctrl+S | Ctrl+S |
| 14 | 20 | tab+shift    | Ctrl+T | Ctrl+T |
| 15 | 21 | F12          | Ctrl+U | Ctrl+U |
| 16 | 22 | F1           | Ctrl+V | Ctrl+V |
| 17 | 23 | F2           | Ctrl+W | Ctrl+W |
| 18 | 24 | F3           | Ctrl+X | Ctrl+X |
| 19 | 25 | F4           | Ctrl+Y | Ctrl+Y |
| 1A | 26 | F5           | Ctrl+Z | Ctrl+Z |
| 1B | 27 | F6           | Ctrl+[ | Ctrl+[ |
| 1C | 28 | F7           | Ctrl+\ | Ctrl+\ |
| 1D | 29 | F8           | Ctrl+] | Ctrl+] |
| 1E | 30 | F9           | Ctrl+6 | Ctrl+^ |
| 1F | 31 | F10          | Ctrl+- | Ctrl+_ |

## Appendix -ASCII Code Table

Note: ASCII code table 0-31 for invisible characters for control characters, 32-127 for visible characters

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

|    |    |                               |
|----|----|-------------------------------|
| 11 | 17 | DC1 (XON) (Device Control 1)  |
| 12 | 18 | DC2 (Device Control 2)        |
| 13 | 19 | DC3 (XOFF) (Device Control 3) |
| 14 | 20 | DC4 (Device Control 4)        |
| 15 | 21 | NAK (Negative Acknowledgment) |
| 16 | 22 | SYN (Synchronous Idle)        |
| 17 | 23 | ETB (End of Trans. Block)     |
| 18 | 24 | CAN (Cancel)                  |
| 19 | 25 | EM (End of Medium)            |
| 1A | 26 | SUB (Substitute)              |
| 1B | 27 | ESC (Escape)                  |
| 1C | 28 | FS (File Separator)           |
| 1D | 29 | GS (Group Separator)          |
| 1E | 30 | RS (Request to Send)          |
| 1F | 31 | US (Unit Separator)           |
| 20 | 32 | SP (Space)                    |
| 21 | 33 | ! (Exclamation Mark)          |
| 22 | 34 | " (Double Quote)              |
| 23 | 35 | # (Number Sign)               |
| 24 | 36 | \$ (Dollar Sign)              |
| 25 | 37 | % (Percent)                   |

|    |    |                                 |
|----|----|---------------------------------|
| 26 | 38 | & (Ampersand)                   |
| 27 | 39 | ` (Single Quote)                |
| 28 | 40 | ( (Right / Closing Parenthesis) |
| 29 | 41 | ) (Right / Closing Parenthesis) |
| 2A | 42 | * (Asterisk)                    |
| 2B | 43 | + (Plus)                        |
| 2C | 44 | , (Comma)                       |
| 2D | 45 | - (Minus / Dash)                |
| 2E | 46 | . (Dot)                         |
| 2F | 47 | / (Forward Slash)               |
| 30 | 48 | 0                               |
| 31 | 49 | 1                               |
| 32 | 50 | 2                               |
| 33 | 51 | 3                               |
| 34 | 52 | 4                               |
| 35 | 53 | 5                               |
| 36 | 54 | 6                               |
| 37 | 55 | 7                               |
| 38 | 56 | 8                               |
| 39 | 57 | 9                               |
| 3A | 58 | : (Colon)                       |

|    |    |                   |
|----|----|-------------------|
| 3B | 59 | ; (Semi-colon)    |
| 3C | 60 | < (Less Than)     |
| 3D | 61 | = (Equal Sign)    |
| 3E | 62 | > (Greater Than)  |
| 3F | 63 | ? (Question Mark) |
| 40 | 64 | @ (AT Symbol)     |
| 41 | 65 | A                 |
| 42 | 66 | B                 |
| 43 | 67 | C                 |
| 44 | 68 | D                 |
| 45 | 69 | E                 |
| 46 | 70 | F                 |
| 47 | 71 | G                 |
| 48 | 72 | H                 |
| 49 | 73 | I                 |
| 4A | 74 | J                 |
| 4B | 75 | K                 |
| 4C | 76 | L                 |
| 4D | 77 | M                 |
| 4E | 78 | N                 |
| 4F | 79 | O                 |

|    |     |                             |
|----|-----|-----------------------------|
| 50 | 80  | P                           |
| 51 | 81  | Q                           |
| 52 | 82  | R                           |
| 53 | 83  | S                           |
| 54 | 84  | T                           |
| 55 | 85  | U                           |
| 56 | 86  | V                           |
| 57 | 87  | W                           |
| 58 | 88  | X                           |
| 59 | 89  | Y                           |
| 5A | 90  | Z                           |
| 5B | 91  | [ (Left / Opening Bracket)  |
| 5C | 92  | \ (Back Slash)              |
| 5D | 93  | ] (Right / Closing Bracket) |
| 5E | 94  | ^ (Caret / Circumflex)      |
| 5F | 95  | _ (Underscore)              |
| 60 | 96  | ' (Grave Accent)            |
| 61 | 97  | a                           |
| 62 | 98  | b                           |
| 63 | 99  | c                           |
| 64 | 100 | d                           |

|    |     |   |
|----|-----|---|
| 65 | 101 | e |
| 66 | 102 | f |
| 67 | 103 | g |
| 68 | 104 | h |
| 69 | 105 | i |
| 6A | 106 | j |
| 6B | 107 | k |
| 6C | 108 | l |
| 6D | 109 | m |
| 6E | 110 | n |
| 6F | 111 | o |
| 70 | 112 | p |
| 71 | 113 | q |
| 72 | 114 | r |
| 73 | 115 | s |
| 74 | 116 | t |
| 75 | 117 | u |
| 76 | 118 | v |
| 77 | 119 | w |
| 78 | 120 | x |
| 79 | 121 | y |

|    |     |                         |
|----|-----|-------------------------|
| 7A | 122 | z                       |
| 7B | 123 | { (Left/ Opening Brace) |
| 7C | 124 | (Vertical Bar)          |
| 7D | 125 | } (Right/Closing Brace) |
| 7E | 126 | ~ (Tilde)               |
| 7F | 127 | DEL (Delete)            |

## Appendix - Instruction Sets

Note: Serial commands need to be used in serial mode

| Function                                 | Setting Code | Instruct (HEX)          |
|--|--------------|-------------------------|
| 1. Scan Control-Open Scan                | N/A          | 16 42 65 52 65 51 62 2E |
| 2. Scan control-Close Scan               | N/A          | 16 42 65 52 65 52 62 2E |
| 3. Turn on the setup code                | RaZdNa       | 16 52 61 5A 64 4E 61 2E |
| 4. Turn off the setup code               | RaZdXa       | 16 52 61 5A 64 58 61 2E |
| 5. Send setup code                       | WaZaBb       | 16 57 61 5A 61 42 62 2E |
| 6. Do not send setup code                | WaZaRa       | 16 57 61 5A 61 52 61 2E |
| 7. Restore factory default               | BeQeCe       | 16 42 65 51 65 43 65 2E |
| 8. Save user default settings            | UaQdWa       | 16 55 61 51 64 57 61 2E |
| 9. Restore user default settings         | BeQeEe       | 16 42 65 51 65 45 65 2E |
| 10. Read version                         | BeReCd       | 16 42 65 52 65 43 64 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 boot sound              | RaOdXa       | 16 52 61 4F 64 58 61 2E |
| 15. Turn on the setup code prompt sound  | WaZaZa       | 16 57 61 5A 61 5A 61 2E |
| 16. Turn off the setup code prompt sound | 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-very low 1.6KHZ    | LbDeUb | 16 4C 62 44 65 55 62 2E |
| 22. Decoding successful prompt audio frequency-low 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-high 4.2KHZ        | 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 decoding success prompt tone is high        | BbDeLa | 16 42 62 44 65 4C 61 2E |
| 29. Error warning tone-low frequency                              | GbZaNa | 16 47 62 5A 61 4E 61 2E |
| 30. Error warning tone-medium                                     | GbZaXa | 16 47 62 5A 61 58 61 2E |

|   |        |                         |
|---|--------|-------------------------|
| frequency   |        |                         |
| 31. Error warning tone-high frequency                           | GbZaHb | 16 47 62 5A 61 48 62 2E |
| 32. Fill light - high brightness                                | GbWaRb | 16 47 62 57 61 52 62 2E |
| 33. Fill light - medium brightness                              | GbWaHb | 16 47 62 57 61 48 62 2E |
| 34. Fill light - low brightness                                 | GbWaXa | 16 47 62 57 61 58 61 2E |
| 35. Fill light - off  | GbWaNa | 16 47 62 57 61 4E 61 2E |
| 36. Illumination state - Change mode                            | XaEeRa | 16 58 61 45 65 52 61 2E |
| 37. Light State - Continuous light mode                         | XaEeBb | 16 58 61 45 65 42 62 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 changliang                                 | GbWaJb | 16 47 62 57 61 4A 62 2E |
| 41. The aiming light flicker                                    | GbWaTb | 16 47 62 57 61 54 62 2E |
| 42. Turn on the indicator light for successful barcode reading  | RaBeYa | 16 52 61 42 65 59 61 2E |
| 43. Turn off the indicator light for successful barcode reading | RaBeOa | 16 52 61 42 65 4F 61 2E |
| 44. Reminder light-standby, long off, working on                | WaAbRa | 16 57 61 41 62 52 61 2E |
| 45. Reminder Light-Standby is always on and work is off         | WaAbBb | 16 57 61 41 62 42 62 2E |
| 46. Enable low power mode                                       | WaQbWa | 16 57 61 51 62 57 61 2E |

|   |         |                               |
|---|---------|-------------------------------|
| 47. Disable low power mode                    | WaQbMa  | 16 57 61 51 62 4D 61 2E       |
| 48. Chinese System-Simplified<br>Chinese      | OdPbLa  | 16 4F 64 50 62 4C 61 2E       |
| 49. Chinese System-Traditional<br>Chinese     | OdPbIbc | 16 4F 64 50 62 49 62 63 2E    |
| 50. Traditional System-Traditional<br>Chinese | OdPbPb  | 16 4F 64 50 62 50 62 2E       |
| 51. Chinese System-Shift-JIS                  | OdPbJbc | 16 4F 64 50 62 4A 62 63 2E    |
| 52. Japanese System - UTF-8/GB2312            | OdPbKbc | 16 4F 64 50 62 4B 62 63 2E    |
| 53. Japanese System-Shift-JIS                 | OdPbVa  | 16 4F 64 50 62 56 61 2E       |
| 54. Korean System-CP949                       | OdPbFb  | 16 4F 64 50 62 46 62 2E       |
| 55. Thai Language System -CP874               | OdPbGbc | 16 4F 64 50 62 47 62 63 2E    |
| 56. Russian system -KOI8-R                    | OdPbHbc | 16 4F 64 50 62 48 62 63 2E    |
| 57. Russian system -CP1251                    | OdPbRbc | 16 4F 64 50 62 11 52 62 63 2E |
| 58. European single byte characters           | OdPbYac | 16 4F 64 50 62 59 61 63 2E    |
| 59. European double byte character            | OdPbNbc | 16 4F 64 50 62 4E 62 63 2E    |
| 60. Data output format -Codepage              | GbBbVa  | 16 47 62 42 62 56 61 2E       |
| 61. Data output format -Unicode               | GbBbFb  | 16 47 62 42 62 46 62 2E       |
| 62. Data output format -UTF-8                 | GbBbPb  | 16 47 62 42 62 50 62 2E       |
| 63. Data output format - Original data        | GbBbLa  | 16 47 62 42 62 4C 61 2E       |
| 64. Window system output                      | GbAbNa  | 16 47 62 41 62 4E 61 2E       |
| 65. Linux1 system output                      | GbAbXa  | 16 47 62 41 62 58 61 2E       |

|  |         |                            |
|--|---------|----------------------------|
| 66. Linux2 system output                 | GbAbHb  | 16 47 62 41 62 48 62 2E    |
| 67. Normal image recognition             | CbQdRa  | 16 43 62 51 64 52 61 2E    |
| 68. Inverted image recognition           | CbQdLb  | 16 43 62 51 64 4C 62 2E    |
| 69. Normal and reverse image recognition | CbQdBb  | 16 43 62 51 64 42 62 2E    |
| 70. Global area decoding                 | ObCcLa  | 16 4F 62 43 63 4C 61 2E    |
| 71. Center area decoding                 | ObCcPb  | 16 4F 62 43 63 50 62 2E    |
| 72. Center mode decoding                 | ObCcZb  | 16 4F 62 43 63 5A 62 2E    |
| 73. 40% central area                     | BeReTb  | 16 42 65 52 65 54 62 2E    |
| 74. 50% central area                     | BeReUb  | 16 42 65 52 65 55 62 2E    |
| 75. 60% central area                     | BeReVb  | 16 42 65 52 65 56 62 2E    |
| 76. 80% central area                     | BeReWb  | 16 42 65 52 65 57 62 2E    |
| 77. Open NR                              | SaCbCb  | 16 53 61 43 62 43 62 2E    |
| 78. Close NR                             | SaCbSa  | 16 53 61 43 62 53 61 2E    |
| 79. Allow reading QR URL                 | WaQbPa  | 16 57 61 51 62 50 61 2E    |
| 80. Prohibit reading QR URL              | WaQbZa  | 16 57 61 51 62 5A 61 2E    |
| 81. Enable invoice function              | WaBbXa  | 16 57 61 42 62 58 61 2E    |
| 82. Disable invoice function             | WaBbNa  | 16 57 61 42 62 4E 61 2E    |
| 83. USB-KBW Interface                    | VbZcWag | 16 56 62 5A 63 57 61 67 2E |
| 84. American English                     | JdCcTc  | 16 4A 64 43 63 54 63 2E    |
| 85. Greece                               | JdCcLbc | 16 4A 64 43 63 4C 62 63 2E |

|                          |         |                            |
|--------------------------|---------|----------------------------|
| 86. Netherlands          | JdCcGbc | 16 4A 64 43 63 47 62 63 2E |
| 87. Spain                | JdCcJc  | 16 4A 64 43 63 4A 63 2E    |
| 88. Swiss German         | JdCcCbc | 16 4A 64 43 63 43 62 63 2E |
| 89. Brazil               | JdCcLa  | 16 4A 64 43 63 4C 61 2E    |
| 90. Denmark              | JdCcEbc | 16 4A 64 43 63 45 62 63 2E |
| 91. British English      | JdCcDbc | 16 4A 64 43 63 44 62 63 2E |
| 92. Italy                | JdCcZb  | 16 4A 64 43 63 5A 62 2E    |
| 93. France               | JdCcFb  | 16 4A 64 43 63 46 62 2E    |
| 94. German               | JdCcBbc | 16 4A 64 43 63 42 62 63 2E |
| 95. Hungary              | JdCcNbc | 16 4A 64 43 63 4E 62 63 2E |
| 96. Sweden               | JdCcRbc | 16 4A 64 43 63 52 62 63 2E |
| 97. Slovakia             | JdCcQbc | 16 4A 64 43 63 51 62 63 2E |
| 98. Portugal             | JdCcIbc | 16 4A 64 43 63 49 62 63 2E |
| 99. Romania              | JdCcSbc | 16 4A 64 43 63 53 62 63 2E |
| 100. Belgium             | JdCcZac | 16 4A 64 43 63 5A 61 63 2E |
| 101. Turkish -F          | JdCcTbc | 16 4A 64 43 63 54 62 63 2E |
| 102. Turkish -Q          | JdCcXac | 16 4A 64 43 63 58 61 63 2E |
| 103. Poland              | JdCcObc | 16 4A 64 43 63 4F 62 63 2E |
| 104. Russian language MS | JdCcQdc | 16 4A 64 43 63 51 64 63 2E |
| 105. Japan               | JdCcVac | 16 4A 64 43 63 56 61 63 2E |
| 106. Ukraine             | JdCcGdc | 16 4A 64 43 63 47 64 63 2E |

|      |  |         |                            |
|------|--|---------|----------------------------|
| 107. | Arabic   | JdCcVa  | 16 4A 64 43 63 56 61 2E    |
| 108. | Thai language                                    | JDCcNd  | 16 4A 44 43 63 4E 64 2E    |
| 109. | USB keyboard- Output function keys               | QbBbQa  | 16 51 62 42 62 51 61 2E    |
| 110. | USB keyboard - Output Ctrl1 key combination      | QbBbAb  | 16 51 62 42 62 41 62 2E    |
| 111. | USB keyboard - Output Ctrl2 key combination      | QbBbEc  | 16 51 62 42 62 45 63 2E    |
| 112. | USB keyboard- ALT mode output control characters | QbBbKb  | 16 51 62 42 62 4B 62 2E    |
| 113. | USB keyboard-output Enter&DownArrow              | QbBbUb  | 16 51 62 42 62 55 62 2E    |
| 114. | Close the virtual keyboard                       | W aBbPa | 16 57 61 42 62 50 61 2E    |
| 115. | Open the virtual keyboard                        | WaBbZa  | 16 57 61 42 62 5A 61 2E    |
| 116. | Character conversion-no conversion               | BbLdOa  | 16 42 62 4C 64 4F 61 2E    |
| 117. | Character conversion-All Upper                   | BbLdYa  | 16 42 62 4C 64 59 61 2E    |
| 118. | Character conversion-All Lower                   | BbLdlb  | 16 42 62 4C 64 49 62 2E    |
| 119. | Character conversion-reverse case                | BbLdSb  | 16 42 62 4C 64 53 62 2E    |
| 120. | USB transfer speed-Low                           | OdJcVac | 16 4F 64 4A 63 56 61 63 2E |
| 121. | USB transfer speed-Middle                        | OdJcJc  | 16 4F 64 4A 63 4A 63 2E    |

|      |   |         |                            |
|------|---|---------|----------------------------|
| 122. | USBtransfer speed-High                      | OdJcVa  | 16 4F 64 4A 63 56 61 2E    |
| 123. | Caps Lock auto off                          | IbReQa  | 16 49 62 52 65 51 61 2E    |
| 124. | Caps Lock auto off                          | IbReAb  | 16 49 62 52 65 41 62 2E    |
| 125. | Caps Lock keep                              | IbReKb  | 16 49 62 52 65 4B 62 2E    |
| 126. | USB-COM Virtual serial port                 | VbZcXag | 16 56 62 5A 63 58 61 67 2E |
| 127. | HID-POS                                     | VbZcYag | 16 56 62 5A 63 59 61 67 2E |
| 128. | TTL/RS232serial port                        | VbZcNc  | 16 56 62 5A 63 4E 63 2E    |
| 129. | Baud rate -4800                             | VbCdRdc | 16 56 62 43 64 52 64 63 2E |
| 130. | Baud rate -9600                             | VbCdSdc | 16 56 62 43 64 53 64 63 2E |
| 131. | Baud rate -19200                            | VbCdUdc | 16 56 62 43 64 55 64 63 2E |
| 132. | Baud rate -38400                            | VbCdVdc | 16 56 62 43 64 56 64 63 2E |
| 133. | Baud rate -57600                            | VbCdWdc | 16 56 62 43 64 57 64 63 2E |
| 134. | Baud rate -115200                           | VbCdVac | 16 56 62 43 64 56 61 63 2E |
| 135. | Serial port transmission speed-low          | JdGeKbc | 16 4A 64 47 65 4B 62 63 2E |
| 136. | Serial port transmission speed-medium       | JdGeVac | 16 4A 64 47 65 56 61 63 2E |
| 137. | Serial port transmission speed-high         | JdGeVa  | 16 4A 64 47 65 56 61 2E    |
| 138. | Customize the delay time between characters | TdGeLa  | 16 4A 64 47 65 XX XX XX 2E |
| 139. | Scan Mode-Manual Mode                       | VbBeJb  | 16 56 62 42 65 4A 62 2E    |

|      |  |          |                               |
|------|--|----------|-------------------------------|
| 140. | Key-press timeout-unlimited              | UaZcCb   | 16 55 61 5A 63 43 62 2E       |
| 141. | Key timeout -3S                          | MdZcAbc  | 16 4D 64 5A 63 41 62 63 2E    |
| 142. | Key timeout -5S                          | MdZcKbc  | 16 4D 64 5A 63 4B 62 63 2E    |
| 143. | Key timeout -10S                         | MdZcJcc  | 16 4D 64 5A 63 4A 63 63 2E    |
| 144. | Key timeout -15S                         | MdZcldc  | 16 4D 64 5A 63 49 64 63 2E    |
| 145. | Key timeout -20S                         | MdZcVaHa | 16 4D 64 5A 63 56 61 48 61 2E |
| 146. | ~ Custom key timeout                     | WdZcLa   | 16 4D 64 5A 63 XX XX XX 2E    |
| 147. | Continuous reading mode                  | VbBeZa   | 16 56 62 42 65 5A 61 2E       |
| 148. | Continuous mode same code delay-no delay | JdHeLa   | 16 4A 64 48 65 4C 61 2E       |
| 149. | Continuous mode same code delay -100ms   | JdHeVa   | 16 4A 64 48 65 56 61 2E       |
| 150. | Continuous mode same code delay -200ms   | JdHeFb   | 16 4A 64 48 65 46 62 2E       |
| 151. | Continuous mode same code delay -300ms   | JdHePb   | 16 4A 64 48 65 50 62 2E       |
| 152. | Continuous mode same code delay -400ms   | JdHeZb   | 16 4A 64 48 65 5A 62 2E       |
| 153. | Continuous mode same code delay -500ms   | JdHeJc   | 16 4A 64 48 65 4A 63 2E       |
| 154. | Continuous mode same code delay -800ms   | JdHeNd   | 16 4A 64 48 65 4E 64 2E       |
| 155. | Continuous mode same code delay -1200ms  | JdHeXac  | 16 4A 64 48 65 58 61 63 2E    |

|   |         |                            |
|---|---------|----------------------------|
| 156. Continuous mode same code delay -2000ms        | JdHeFbc | 16 4A 64 48 65 46 62 63 2E |
| 157. Continuous mode same code delay - No Timeout   | RaHeCb  | 16 52 61 48 65 43 62 2E    |
| 158. Continuous mode different code delay -no delay | JdleLa  | 16 4A 64 49 65 4C 61 2E    |
| 159. Continuous mode different code delay -100ms    | JdleVa  | 16 4A 64 49 65 56 61 2E    |
| 160. Continuous mode different code delay -300ms    | JdlePb  | 16 4A 64 49 65 50 62 2E    |
| 161. Continuous mode different code delay -500ms    | JdleJc  | 16 4A 64 49 65 4A 63 2E    |
| 162. Continuous mode different code delay -600ms    | JdleTc  | 16 4A 64 49 65 54 63 2E    |
| 163. Continuous mode different code delay -800ms    | JdleNd  | 16 4A 64 49 65 4E 64 2E    |
| 164. Continuous mode different code delay -1000ms   | JdleVac | 16 4A 64 49 65 56 61 63 2E |
| 165. Continuous mode different code delay -2000ms   | JdleFbc | 16 4A 64 49 65 46 62 63 2E |
| 166. Continuous mode different code delay -5000ms   | JdleJcc | 16 4A 64 49 65 4A 63 63 2E |
| 167. Scan Mode-Induction Mode                       | VbBePa  | 16 56 62 42 65 50 61 2E    |
| 168. Induction mode-image stabilization time 100ms  | OdCbVa  | 16 4F 64 43 62 56 61 2E    |

|      |  |        |                         |
|------|--|--------|-------------------------|
| 169. | Induction mode-image<br>stabilization time 200ms | OdCbFb | 16 4F 64 43 62 46 62 2E |
| 170. | Induction mode-image<br>stabilization time 300ms | OdCbPb | 16 4F 64 43 62 50 62 2E |
| 171. | Induction mode-image<br>stabilization time 400ms | OdCbZb | 16 4F 64 43 62 5A 62 2E |
| 172. | Induction mode-image<br>stabilization time 500ms | OdCbJc | 16 4F 64 43 62 4A 63 2E |
| 173. | Induction Mode-High<br>Sensitivity               | AcDbVa | 16 41 63 44 62 56 61 2E |
| 174. | Induction Mode-Medium<br>Sensitivity             | AcDbFb | 16 41 63 44 62 46 62 2E |
| 175. | Induction Mode-Low<br>Sensitivity                | AcDbPb | 16 41 63 44 62 50 62 2E |
| 176. | Code ID-close                                    | WaFbRa | 16 57 61 46 62 52 61 2E |
| 177. | Code ID-open                                     | WaFbBb | 16 57 61 46 62 42 62 2E |
| 178. | AIM ID-close                                     | QaXdQa | 16 51 61 58 64 51 61 2E |
| 179. | AIM ID-open                                      | QaXdAb | 16 51 61 58 64 41 62 2E |
| 180. | Start Character-None                             | BbKdPa | 16 42 62 4B 64 50 61 2E |
| 181. | Start Character-STX                              | BbKdJb | 16 42 62 4B 64 4A 62 2E |
| 182. | End Character-ETX                                | BbKdZa | 16 42 62 4B 64 5A 61 2E |
| 183. | Start and end<br>character-STX+ETX               | BbKdTb | 16 42 62 4B 64 54 62 2E |
| 184. | Terminator-carriage return                       | LbKdGb | 16 4C 62 4B 64 47 62 2E |

|  |        |                            |
|--|--------|----------------------------|
| (0x0D)   |        |                            |
| 185. Terminator-Line Feed (0x0A)                     | LbKdUc | 16 4C 62 4B 64 55 63 2E    |
| 186. Terminator-CR + LF (0x0D0A)                     | LbKdWa | 16 4C 62 4B 64 57 61 2E    |
| 187. Terminator-Tab HT (0x09)                        | LbKdQb | 16 4C 62 4B 64 51 62 2E    |
| 188. Terminator-CR CR (0x0D0D)                       | LbKdAc | 16 4C 62 4B 64 41 63 2E    |
| 189. Terminator-CR LF CR LF<br>(0x0D0A0D0A)          | LbKdKc | 16 4C 62 4B 64 4B 63 2E    |
| 190. Terminator- None                                | LbKdMa | 16 4C 62 4B 64 4D 61 2E    |
| 191. GS substitution -No<br>substitution             | McReLa | 16 4D 63 52 65 4C 61 2E    |
| 192. GS substitution -Substitution<br>by Ç           | McReVa | 16 4D 63 52 65 56 61 2E    |
| 193. GS substitution -Substitution<br>by             | McReFb | 16 4D 63 52 65 46 62 2E    |
| 194. GS substitution -Substitution<br>by ^]          | McRePb | 16 4D 63 52 65 50 62 2E    |
| 195. GS substitution -Substitution<br>by]            | McReZb | 16 4D 63 52 65 5A 62 2E    |
| 196. GS substitution -Substitution<br>by <GS>        | McReJc | 16 4D 63 52 65 4A 63 2E    |
| 197. GS substitution -Substitution<br>by [GS]        | McReTc | 16 4D 63 52 65 54 63 2E    |
| 198. ~Customize the first character<br>of the prefix | N/A    | 16 49 64 46 63 XX XX XX 2E |

|  |        |                            |
|--|--------|----------------------------|
| 199. ~ Customize the second character of the prefix  | N/A    | 16 49 64 47 63 XX XX XX 2E |
| 200. ~ Customize the third character of the prefix   | N/A    | 16 49 64 48 63 XX XX XX 2E |
| 201. ~ Customize the fourth character of the prefix  | N/A    | 16 49 64 49 63 XX XX XX 2E |
| 202. ~ Customize the fifth character of the prefix   | N/A    | 16 49 64 4A 63 XX XX XX 2E |
| 203. ~ Customize the sixth character of the prefix   | N/A    | 16 49 64 4B 63 XX XX XX 2E |
| 204. ~ Customize the seventh character of the prefix | N/A    | 16 49 64 4C 63 XX XX XX 2E |
| 205. ~ Customize the eighth character of the prefix  | N/A    | 16 49 64 4D 63 XX XX XX 2E |
| 206. ~ Customize the ninth character of the prefix   | N/A    | 16 49 64 4E 63 XX XX XX 2E |
| 207. ~ Customize the tenth character of the prefix   | N/A    | 16 49 64 4F 63 XX XX XX 2E |
| 208. Clear custom prefixes                           | BeReSd | 16 42 65 52 65 53 64 2E    |
| 209. ~ Customize the first character of the suffix   | N/A    | 16 49 64 50 63 XX XX XX 2E |
| 210. ~ Customize the second character of the suffix  | N/A    | 16 49 64 51 63 XX XX XX 2E |
| 211. ~ Customize the third character of the suffix   | N/A    | 16 49 64 52 63 XX XX XX 2E |

|  |        |                            |
|--|--------|----------------------------|
| 212. ~ Customize the fourth character of the suffix  | N/A    | 16 49 64 53 63 XX XX XX 2E |
| 213. ~ Customize the fifth character of the suffix   | N/A    | 16 49 64 54 63 XX XX XX 2E |
| 214. ~ Customize the sixth character of the suffix   | N/A    | 16 49 64 55 63 XX XX XX 2E |
| 215. ~ Customize the seventh character of the suffix | N/A    | 16 49 64 56 63 XX XX XX 2E |
| 216. ~ Customize the eighth character of the suffix  | N/A    | 16 49 64 57 63 XX XX XX 2E |
| 217. ~ Customize the ninth character of the suffix   | N/A    | 16 49 64 58 63 XX XX XX 2E |
| 218. ~ Customize the tenth character of the suffix   | N/A    | 16 49 64 59 63 XX XX XX 2E |
| 219. Clear custom suffixes                           | BeReRd | 16 42 65 52 65 52 64 2E    |
| 220. Set UPC-A prefix/suffix                         | SdAdLa | 16 53 64 41 64 4C 61 2E    |
| 221. Set UPC-E prefix/suffix                         | SdBdLa | 16 53 64 42 64 4C 61 2E    |
| 222. Set EAN-8 prefix/suffix                         | SdCdLa | 16 53 64 43 64 4C 61 2E    |
| 223. Set EAN-13 prefix/suffix                        | SdDdLa | 16 53 64 44 64 4C 61 2E    |
| 224. Set Code 39 prefix/suffix                       | SdEdLa | 16 53 64 45 64 4C 61 2E    |
| 225. Set Code 128 prefix/suffix                      | SdFdLa | 16 53 64 46 64 4C 61 2E    |
| 226. Set Telepen prefix/suffix                       | SdGdLa | 16 53 64 47 64 4C 61 2E    |
| 227. Set Code 93 prefix/suffix                       | SdHdLa | 16 53 64 48 64 4C 61 2E    |

|      |  |        |                            |
|------|--|--------|----------------------------|
| 228. | Set Code 11 prefix/suffix  | SdIdLa | 16 53 64 49 64 4C 61 2E    |
| 229. | Set MSI Plessey prefix/suffix  | SdJdLa | 16 53 64 4A 64 4C 61 2E    |
| 230. | Set Codabar prefix/suffix  | SdKdLa | 16 53 64 4B 64 4C 61 2E    |
| 231. | Set ITF25 prefix/suffix  | SdLdLa | 16 53 64 4C 64 4C 61 2E    |
| 232. | Set Matrix 25 prefix/suffix  | SdMdLa | 16 53 64 4D 64 4C 61 2E    |
| 233. | Set IATA 25 prefix/suffix  | SdNdLa | 16 53 64 4E 64 4C 61 2E    |
| 234. | Set Industrial 25 prefix/suffix  | SdPdLa | 16 53 64 50 64 4C 61 2E    |
| 235. | Set Triopic 25 prefix/suffix   | SdQdLa | 16 53 64 51 64 4C 61 2E    |
| 236. | Set 2D Barcode prefix/suffix   | SdSdLa | 16 53 64 53 64 4C 61 2E    |
| 237. | Different code system prefix<br>suffix - set to prefix                     | QaZcSa | 16 51 61 5A 63 53 61 2E    |
| 238. | Different code system prefix<br>suffix - set to suffix                     | QaZcCb | 16 51 61 5A 63 43 62 2E    |
| 239. | Prefix and suffix of different<br>code system - Clear prefix and<br>suffix | BeReQd | 16 42 65 52 65 51 64 2E    |
| 240. | Turn on hiding head<br>characters  | WaQbCb | 16 57 61 51 62 43 62 2E    |
| 241. | Turn off hiding head<br>characters   | WaQbSa | 16 57 61 51 62 53 62 2E    |
| 242. | ~ Number of hidden bits in<br>header data                                  | YdRbLa | 16 4F 64 52 62 XX XX XX 2E |
| 243. | Turn on hiding middle<br>characters  | WaQbBb | 16 57 61 51 62 42 62 2E    |

|   |        |                            |
|---|--------|----------------------------|
| 244. Turn off the hidden middle character         | WaQbRb | 16 57 61 51 62 52 62 2E    |
| 245. ~ Intermediate data hiding start bit         | YdSbLa | 16 4F 64 53 62 XX XX XX 2E |
| 246. ~ Hidden bits of intermediate data           | YdTbLa | 16 4F 64 54 62 XX XX XX 2E |
| 247. Turn on hiding tail characters               | WaQbAb | 16 57 61 51 62 41 61 2E    |
| 248. Turn off hiding tail characters              | WaQbQa | 16 57 61 51 62 51 61 2E    |
| 249. ~ The number of hidden bits in the tail data | YdUbLa | 16 4F 64 55 62 XX XX XX 2E |
| 250. ~ UPC-E head data hiding bits                | N/A    | 16 52 64 57 61 XX XX XX 2E |
| 251. UPC-E head data hiding clearing              | RdWa00 | 16 52 64 57 61 30 30 2E    |
| 252. ~ EAN-8 head data hiding bits                | N/A    | 16 52 64 58 61 XX XX XX 2E |
| 253. EAN-8 head data hiding clearing              | RdXa00 | 16 52 64 58 61 30 30 2E    |
| 254. ~ UPC-A head data hiding bits                | N/A    | 16 52 64 59 61 XX XX XX 2E |
| 255. UPC-A head data hiding clearing              | RdYa00 | 16 52 64 59 61 30 30 2E    |
| 256. ~ EAN-13 head data hiding bits               | N/A    | 16 52 64 5A 61 XX XX XX 2E |
| 257. EAN-13 head data hiding clearing             | RdZa00 | 16 52 64 5A 61 30 30 2E    |

|   |        |                            |
|---|--------|----------------------------|
| 258. ~ Code 39 head data hiding bits    | N/A    | 16 52 64 41 62 XX XX XX 2E |
| 259. Code 39 head data hiding clearing  | RdAb00 | 16 52 64 41 62 30 30 2E    |
| 260. ~ Codabar head data hiding bits    | N/A    | 16 52 64 42 62 XX XX XX 2E |
| 261. Codabar head data hiding clearing  | RdBb00 | 16 52 64 42 62 30 30 2E    |
| 262. ~ I25 head data hiding bits        | N/A    | 16 52 64 43 62 XX XX XX 2E |
| 263. I25 head data hiding clearing      | RdCb00 | 16 52 64 43 62 30 30 2E    |
| 264. ~ Code128 head data hiding bits    | N/A    | 16 52 64 44 62 XX XX XX 2E |
| 265. Code128 head data hiding clearing  | RdDb00 | 16 52 64 44 62 30 30 2E    |
| 266. ~ Code93 head data hiding bits     | N/A    | 16 52 64 45 62 XX XX XX 2E |
| 267. Code93 head data hiding clearing   | RdEb00 | 16 52 64 45 62 30 30 2E    |
| 268. ~ PDF417 head data hiding bits     | N/A    | 16 52 64 46 62 XX XX XX 2E |
| 269. PDF417 head data hiding clearing   | RdFb00 | 16 52 64 46 62 30 30 2E    |
| 270. ~ Datamatrix head data hiding bits | N/A    | 16 52 64 47 62 XX XX XX 2E |

|  |        |                            |
|--|--------|----------------------------|
| 271. Datamatrix head data hiding clearing  | RdGb00 | 16 52 64 47 62 30 30 2E    |
| 272. ~ QR head data hiding bits            | N/A    | 16 52 64 48 62 XX XX XX 2E |
| 273. QR head data hiding clearing          | RdHb00 | 16 52 64 48 62 30 30 2E    |
| 274. ~ UPC-E intermediate data hiding bits | N/A    | 16 52 64 4B 63 XX XX XX 2E |
| 275. ~UPC-E central data hiding start bit  | N/A    | 16 52 64 51 62 XX XX XX 2E |
| 276. UPC-E central data hiding clear       | RdKc00 | 16 52 64 4B 63 30 30 2E    |
| 277. ~ EAN-8 intermediate data hiding bits | N/A    | 16 52 64 4C 63 XX XX XX 2E |
| 278. ~EAN-8 central data hiding start bit  | N/A    | 16 52 64 52 62 XX XX XX 2E |
| 279. EAN-8 central data hiding clear       | RdLc00 | 16 52 64 4C 63 30 30 2E    |
| 280. ~ UPC-A intermediate data hiding bits | N/A    | 16 52 64 4D 63 XX XX XX 2E |
| 281. ~UPC-A central data hiding start bit  | N/A    | 16 52 64 53 62 XX XX XX 2E |
| 282. UPC-A central data hiding clear       | RdMc00 | 16 52 64 4D 63 30 30 2E    |
| 283. ~EAN13 intermediate data hiding bits  | N/A    | 16 52 64 4E 63 XX XX XX 2E |

|   |        |                            |
|---|--------|----------------------------|
| 284. ~EAN13 central data hiding start bit   | N/A    | 16 52 64 54 62 XX XX XX 2E |
| 285. EAN13 central data hiding clear        | RdNc00 | 16 52 64 4E 63 30 30 2E    |
| 286. ~Code39 intermediate data hiding bits  | N/A    | 16 52 64 4F 63 XX XX XX 2E |
| 287. ~Code39 central data hiding start bit  | N/A    | 16 52 64 55 62 XX XX XX 2E |
| 288. Code39 central data hiding clear       | RdOc00 | 16 52 64 4F 63 30 30 2E    |
| 289. ~Codabar intermediate data hiding bits | N/A    | 16 52 64 50 63 XX XX XX 2E |
| 290. ~Codabar central data hiding start bit | N/A    | 16 52 64 56 62 XX XX XX 2E |
| 291. Codabar central data hiding clear      | RdPc00 | 16 52 64 50 63 30 30 2E    |
| 292. ~I25 intermediate data hiding bits     | N/A    | 16 52 64 51 63 XX XX XX 2E |
| 293. ~I25 central data hiding start bit     | N/A    | 16 52 64 57 62 XX XX XX 2E |
| 294. I25 central data hiding clear          | RdQc00 | 16 52 64 51 63 30 30 2E    |
| 295. ~Code128 intermediate data hiding bits | N/A    | 16 52 64 52 63 XX XX XX 2E |
| 296. ~Code128 central data hiding start bit | N/A    | 16 52 64 58 62 XX XX XX 2E |

|   |        |                            |
|---|--------|----------------------------|
| 297. Code128 central data hiding clear          | RdRc00 | 16 52 64 52 63 30 30 2E    |
| 298. ~Code93 intermediate data hiding bits      | N/A    | 16 52 64 53 63 XX XX XX 2E |
| 299. ~Code93 central data hiding start bit      | N/A    | 16 52 64 59 62 XX XX XX 2E |
| 300. Code93 central data hiding clear           | RdSc00 | 16 52 64 53 63 30 30 2E    |
| 301. ~QR Code intermediate data hiding bits     | N/A    | 16 52 64 56 63 XX XX XX 2E |
| 302. ~QR Code central data hiding start bit     | N/A    | 16 52 64 42 63 XX XX XX 2E |
| 303. QR Code central data hiding clear          | RdVc00 | 16 52 64 56 63 30 30 2E    |
| 304. ~Data matrix intermediate data hiding bits | N/A    | 16 52 64 55 63 XX XX XX 2E |
| 305. ~Data matrix central data hiding start bit | N/A    | 16 52 64 41 63 XX XX XX 2E |
| 306. Data matrix central data hiding clear      | RdUc00 | 16 52 64 55 63 30 30 2E    |
| 307. ~PDF417 intermediate data hiding bits      | N/A    | 16 52 64 54 63 XX XX XX 2E |
| 308. ~PDF417 central data hiding start bit      | N/A    | 16 52 64 5A 62 XX XX XX 2E |
| 309. PDF417 central data hiding clear           | RdTc00 | 16 52 64 54 63 30 30 2E    |

|  |        |                            |
|--|--------|----------------------------|
| 310. ~ UPC-E number of tail data hiding bits   | N/A    | 16 52 64 57 61 XX XX XX 2E |
| 311. UPC-E Tail data hiding is cleared         | RdWa00 | 16 52 64 57 61 30 30 2E    |
| 312. ~ EAN-8 number of tail data hiding bits   | N/A    | 16 52 64 58 61 XX XX XX 2E |
| 313. EAN-8 Tail data hiding is cleared         | RdXa00 | 16 52 64 58 61 30 30 2E    |
| 314. ~ UPC-A number of tail data hiding bits   | N/A    | 16 52 64 59 61 XX XX XX 2E |
| 315. UPC-A Tail data hiding is cleared         | RdYa00 | 16 52 64 59 61 30 30 2E    |
| 316. ~ EAN-13 number of tail data hiding bits  | N/A    | 16 52 64 5A 61 XX XX XX 2E |
| 317. EAN-13 Tail data hiding is cleared        | RdZa00 | 16 52 64 5A 61 30 30 2E    |
| 318. ~ Code 39 number of tail data hiding bits | N/A    | 16 52 64 41 62 XX XX XX 2E |
| 319. Code 39 Tail data hiding is cleared       | RdAb00 | 16 52 64 41 62 30 30 2E    |
| 320. ~ Codabar number of tail data hiding bits | N/A    | 16 52 64 42 62 XX XX XX 2E |
| 321. Codabar Tail data hiding is cleared       | RdBb00 | 16 52 64 42 62 30 30 2E    |
| 322. ~ I25 number of tail data hiding bits     | N/A    | 16 52 64 43 62 XX XX XX 2E |

|      |  |        |                            |
|------|--|--------|----------------------------|
| 323. | I25 Tail data hiding is cleared                | RdCb00 | 16 52 64 43 62 30 30 2E    |
| 324. | ~ Code128 number of tail data hiding bits      | N/A    | 16 52 64 44 62 XX XX XX 2E |
| 325. | Code128 Tail data hiding is cleared            | RdDb00 | 16 52 64 44 62 30 30 2E    |
| 326. | ~ Code93 number of tail data hiding bits       | N/A    | 16 52 64 45 62 XX XX XX 2E |
| 327. | Code93 Tail data hiding is cleared             | RdEb00 | 16 52 64 45 62 30 30 2E    |
| 328. | ~ QR number of tail data hiding bits           | N/A    | 16 52 64 48 62 XX XX XX 2E |
| 329. | QR Tail data hiding is cleared                 | RdHb00 | 16 52 64 48 62 30 30 2E    |
| 330. | ~ Datamatrix number of tail data hiding bits   | N/A    | 16 52 64 47 62 XX XX XX 2E |
| 331. | Datamatrix Tail data hiding is cleared         | RdGb00 | 16 52 64 47 62 30 30 2E    |
| 332. | ~ PDF417 number of tail data hiding bits       | N/A    | 16 52 64 46 62 XX XX XX 2E |
| 333. | PDF417 Tail data hiding is cleared             | RdFb00 | 16 52 64 46 62 30 30 2E    |
| 334. | ~ Set the position to insert custom characters | N/A    | 16 4F 64 46 63 XX XX XX 2E |
| 335. | ~ Insert the first character                   | N/A    | 16 4F 64 56 62 XX XX XX 2E |
| 336. | ~ Insert the second character                  | N/A    | 16 4F 64 57 62 XX XX XX 2E |

|      |  |        |                            |
|------|--|--------|----------------------------|
| 337. | ~ Insert the third character           | N/A    | 16 4F 64 58 62 XX XX XX 2E |
| 338. | ~ Insert the 4th character             | N/A    | 16 4F 64 59 62 XX XX XX 2E |
| 339. | ~ Insert the 5th character             | N/A    | 16 4F 64 5A 62 XX XX XX 2E |
| 340. | ~ Insert the 6th character             | N/A    | 16 4F 64 41 63 XX XX XX 2E |
| 341. | ~ Insert the 7th character             | N/A    | 16 4F 64 42 63 XX XX XX 2E |
| 342. | ~ Insert the 8th character             | N/A    | 16 4F 64 43 63 XX XX XX 2E |
| 343. | ~ Insert the 9th character             | N/A    | 16 4F 64 44 63 XX XX XX 2E |
| 344. | ~ Insert the 10th character            | N/A    | 16 4F 64 45 63 XX XX XX 2E |
| 345. | Clear the inserted character data      | BeReOd | 16 42 65 52 65 4F 64 2E    |
| 346. | Enable display of custom characters    | WaQbYa | 16 57 61 51 62 59 61 2E    |
| 347. | Turns off display of custom characters | WaQbOa | 16 57 61 51 62 4F 61 2E    |
| 348. | ~ Character to be replaced             | VdEeLa | 16 4C 64 45 65 XX XX XX 2E |
| 349. | ~ Replacement character                | VdFeLa | 16 4C 64 46 65 XX XX XX 2E |
| 350. | CTRL-SHIFT-ALT prefix enabled          | XaFeCb | 16 58 61 46 65 43 62 2E    |
| 351. | CTRL-SHIFT-ALT prefix is forbidden     | XaFeSa | 16 58 61 46 65 53 61 2E    |
| 352. | CTRL On                                | XaFeVa | 16 58 61 46 65 56 61 2E    |
| 353. | CTRL Off                               | XaFeLa | 16 58 61 46 65 4C 61 2E    |
| 354. | SHIFT On                               | XaFeWa | 16 58 61 46 65 57 61 2E    |

|      |                                   |        |                            |
|------|-----------------------------------|--------|----------------------------|
| 355. | SHIFT Off                         | XaFeMa | 16 58 61 46 65 4D 61 2E    |
| 356. | ALT On                            | XaFeXa | 58 61 46 65 58 61 2E       |
| 357. | ALT Off                           | XaFeNa | 16 58 61 46 65 4E 61 2E    |
| 358. | ~Main Code                        | ZdGeLa | 16 50 64 47 65 XX XX XX 2E |
| 359. | Open all types of barcode         | GbYaXa | 16 47 62 59 61 58 61 2E    |
| 360. | Close all types of barcode        | GbYaHb | 16 47 62 59 61 48 62 2E    |
| 361. | Open all 1D barcodes              | GbYaZa | 16 47 62 59 61 5A 61 2E    |
| 362. | Close all 1D barcodes             | GbYaJb | 16 47 62 59 61 4A 62 2E    |
| 363. | Open all 2D barcodes              | GbYaBb | 16 47 62 59 61 42 62 2E    |
| 364. | Close all 2D barcodes             | GbYaLb | 16 47 62 59 61 4C 62 2E    |
| 365. | UPC-A-open                        | QaYaBb | 16 51 61 59 61 42 62 2E    |
| 366. | UPC-A-close                       | QaYaRa | 16 51 61 59 61 52 61 2E    |
| 367. | UPC-A-send check character        | QaTdCb | 16 51 61 54 64 43 62 2E    |
| 368. | UPC-A-do not send check character | QaTdSa | 16 51 61 54 64 53 61 2E    |
| 369. | UPC-A-open 2 additional digits    | QalbCb | 16 51 61 49 62 43 62 2E    |
| 370. | UPC-A-close 2 additional digits   | QalbSa | 16 51 61 49 62 53 61 2E    |
| 371. | UPC-A-open 5 additional digits    | QalbBb | 16 51 61 49 62 42 62 2E    |
| 372. | UPC-A-close 5 additional digits   | QalbRa | 16 51 61 49 62 52 61 2E    |

|  |        |                         |
|--|--------|-------------------------|
| 373. UPC-A- Mandatory to include additional bits           | QalbYa | 16 51 61 49 62 59 61 2E |
| 374. UPC-A- It is not mandatory to include additional bits | QalbOa | 16 51 61 49 62 4F 61 2E |
| 375. UPC-A-Turn on extra bit separator                     | QalbXa | 16 51 61 49 62 58 61 2E |
| 376. UPC-A-Turn off extra bit separator                    | QalbNa | 16 51 61 49 62 4E 61 2E |
| 377. UPC-A-send system character                           | QaTdWa | 16 51 61 54 64 57 61 2E |
| 378. UPC-A-do not send system character                    | QaTdMa | 16 51 61 54 64 4D 61 2E |
| 379. UPC-A-convert to EAN-13                               | QaTdVa | 16 51 61 54 64 5A 61 2E |
| 380. UPC-A-do not convert to EAN-13                        | QaTdLa | 16 51 61 54 64 50 61 2E |
| 381. UPC-E0-open   | QaYaVa | 16 51 61 59 61 56 61 2E |
| 382. UPC-E0-close  | QaYaLa | 16 51 61 59 61 4C 61 2E |
| 383. UPC-E1-open   | WaYaVa | 16 57 61 59 61 56 61 2E |
| 384. UPC-E1-close  | WaYaLa | 16 57 61 59 61 4C 61 2E |
| 385. UPC-E-send check character                            | QaTdBb | 16 51 61 54 64 42 62 2E |
| 386. UPC-E-do not send check character                     | QaTdRa | 16 51 61 54 64 52 61 2E |
| 387. UPC-E-open 2 additional digits                        | QalbCb | 16 51 61 49 62 43 62 2E |
| 388. UPC-E-close 2 additional                              | QalbSa | 16 51 61 49 62 53 61 2E |

|  |        |                         |
|--|--------|-------------------------|
| digits   |        |                         |
| 389. UPC-E-open 5 additional digits                        | QalbBb | 16 51 61 49 62 42 62 2E |
| 390. UPC-E-close 5 additional digits                       | QalbRa | 16 51 61 49 62 52 61 2E |
| 391. UPC-E- Mandatory to include additional bits           | QalbYa | 16 51 61 49 62 59 61 2E |
| 392. UPC-E- it is not mandatory to include additional bits | QalbOa | 16 51 61 49 62 4F 61 2E |
| 393. UPC-E- Turn on extra bit separator                    | SaAeXa | 16 53 61 41 65 58 61 2E |
| 394. UPC-E- Turn off extra bit separator                   | SaAeNa | 16 53 61 41 65 4E 61 2E |
| 395. UPC-E-send system character                           | QaTdYa | 16 51 61 54 64 59 61 2E |
| 396. UPC-E-do not send system character                    | QaTdOa | 16 51 61 54 64 4F 61 2E |
| 397. UPC-E-convert to UPC-A                                | QaTdAb | 16 51 61 54 64 41 62 2E |
| 398. UPC-E-do not convert to UPC-A                         | QaTdQa | 16 51 61 54 64 51 61 2E |
| 399. EAN/JAN-8-open  | QaYaZa | 16 51 61 59 61 5A 61 2E |
| 400. EAN/JAN-8-close                                       | QaYaPa | 16 51 61 59 61 50 61 2E |
| 401. EAN/JAN-8-send check character                        | QaXdVa | 16 51 61 58 64 56 61 2E |
| 402. EAN/JAN-8-do not send                                 | QaXdLa | 16 51 61 58 64 4C 61 2E |

|   |        |                         |
|---|--------|-------------------------|
| check character   |        |                         |
| 403. EAN/JAN-8-open 2 additional digits                       | QalbCb | 16 51 61 49 62 43 62 2E |
| 404. EAN/JAN-8-close2 additional digits                       | QalbSa | 16 51 61 49 62 53 61 2E |
| 405. EAN/JAN-8-open 5 additional digits                       | QalbBb | 16 51 61 49 62 42 62 2E |
| 406. EAN/JAN-8-close 5 additional digits                      | QalbRa | 16 51 61 49 62 52 61 2E |
| 407. EAN/JAN-8 Mandatory to include additional bits           | QalbYa | 16 51 61 49 62 59 61 2E |
| 408. EAN/JAN-8 it is not mandatory to include additional bits | QalbOa | 16 51 61 49 62 4F 61 2E |
| 409. EAN/JAN-8 Turn on extra bit separator                    | QalbXa | 16 51 61 49 62 58 61 2E |
| 410. EAN/JAN-8 Turn off extra bit separator                   | QalbNa | 16 51 61 49 62 4E 61 2E |
| 411. EAN/JAN-8-convert to EAN-13                              | QaTdXa | 16 51 61 54 64 58 61 2E |
| 412. EAN/JAN-8-it is not convert to EAN-13                    | QaTdNa | 16 51 61 54 64 4E 61 2E |
| 413. EAN/JAN -13-open   | QaYaWa | 16 51 61 59 61 57 61 2E |
| 414. EAN/JAN -13-close  | QaYaMa | 16 51 61 59 61 4D 61 2E |
| 415. EAN/JAN-13-send check                                    | QaXdXa | 16 51 61 58 64 58 61 2E |

|  |        |                         |
|--|--------|-------------------------|
| character  |        |                         |
| 416. EAN/JAN-13-do not send check character                    | QaXdNa | 16 51 61 58 64 4E 61 2E |
| 417. EAN/JAN-13-open additional digits 2                       | QalbCb | 16 51 61 49 62 43 62 2E |
| 418. EAN/JAN-13-close additional digits 2                      | QalbSa | 16 51 61 49 62 53 61 2E |
| 419. EAN/JAN-13-open additional digits 5                       | QalbBb | 16 51 61 49 62 42 62 2E |
| 420. EAN/JAN-13-close additional digits 5                      | QalbRa | 16 51 61 49 62 52 61 2E |
| 421. EAN/JAN-13 Mandatory to include additional bits           | QalbYa | 16 51 61 49 62 59 61 2E |
| 422. EAN/JAN-13 it is not mandatory to include additional bits | QalbOa | 16 51 61 49 62 4F 61 2E |
| 423. EAN/JAN-13 Turn on extra bit separator                    | QalbXa | 16 51 61 49 62 58 61 2E |
| 424. EAN/JAN-13 Turn off extra bit separator                   | QalbNa | 16 51 61 49 62 4E 61 2E |
| 425. EAN/JAN -13-open ISBN conversion                          | QaJbCb | 16 51 61 4A 62 43 62 2E |
| 426. EAN/JAN -13-close ISBN conversion                         | QaJbSa | 16 51 61 4A 62 53 61 2E |
| 427. Send ISBN check character                                 | QaJbAb | 16 51 61 4A 62 41 62 2E |

|      |                                  |        |                            |
|------|----------------------------------|--------|----------------------------|
| 428. | Donjot send ISBN check character | QaJbQa | 16 51 61 4A 62 51 61 2E    |
| 429. | ISSN-open                        | RaVcCb | 16 52 61 56 63 43 62 2E    |
| 430. | ISSN –close                      | RaVcSa | 16 52 61 56 63 53 61 2E    |
| 431. | ISSN send check character        | RaVcAb | 16 52 61 56 63 41 62 2E    |
| 432. | ISSN do not send check character | RaVcQa | 16 52 61 56 63 51 61 2E    |
| 433. | Code 128-open                    | QaXaYa | 16 51 61 58 61 59 61 2E    |
| 434. | Code 128-close                   | QaXaOa | 16 51 61 58 61 4F 61 2E    |
| 435. | ~Code 128-minimum length         | N/A    | 16 4E 64 49 62 XX XX XX 2E |
| 436. | ~Code 128-maximum length         | N/A    | 16 4E 64 4A 62 XX XX XX 2E |
| 437. | GS1-128-open                     | RaYcVa | 16 52 61 59 63 56 61 2E    |
| 438. | GS1-128-close                    | RaYcLa | 16 52 61 59 63 4C 61 2E    |
| 439. | ~GS1-128-minimum length          | N/A    | 16 4E 64 4B 62 XX XX XX 2E |
| 440. | ~GS1-128-maximum length          | N/A    | 16 4E 64 4C 62 XX XX XX 2E |
| 441. | ISBT 128-turn on connection      | TaCeCb | 16 54 61 43 65 43 62 2E    |
| 442. | ISBT 128-turn off connection     | TaCeSa | 16 54 61 43 65 53 61 2E    |
| 443. | Code 39-open                     | QaXaWa | 16 51 61 58 61 57 61 2E    |
| 444. | Code 39-close                    | QaXaMa | 16 51 61 58 61 4D 61 2E    |
| 445. | Code 39-close check              | IbNePa | 16 49 62 4E 65 50 61 2E    |
| 446. | Code 39-send check character     | IbNeZa | 16 49 62 4E 65 5A 61 2E    |
| 447. | Code 39-do not send check        | IbNeJb | 16 49 62 4E 65 4A 62 2E    |

|   |        |                            |
|---|--------|----------------------------|
| character   |        |                            |
| 448. Code 39-send start and end characters        | QaVdVa | 16 51 61 56 64 56 61 2E    |
| 449. Code 39-do not send start and end character  | QaVdLa | 16 51 61 56 64 4C 61 2E    |
| 450. Code 39-open FullASCII                       | QaYaCb | 16 51 61 59 61 43 62 2E    |
| 451. Code 39-close FullASCII                      | QaYaSa | 16 51 61 59 61 53 61 2E    |
| 452. ~Code 39-minimum length                      | N/A    | 16 4E 64 4D 62 XX XX XX 2E |
| 453. ~Code 39-maximum length                      | N/A    | 16 4E 64 4E 62 XX XX XX 2E |
| 454. Code 32 –open                                | QaYaAb | 16 51 61 59 61 41 62 2E    |
| 455. Code 32 –close                               | QaYaQa | 16 51 61 59 61 51 61 2E    |
| 456. Code 32 –Turn on verification transmission   | WaYaWa | 16 57 61 59 61 57 61 2E    |
| 457. Code 32 - Turn off verification transmission | WaYaMa | 16 57 61 59 61 4D 61 2E    |
| 458. Code 32-add A before the barcode             | QaVdXA | 16 51 61 56 64 58 61 2E    |
| 459. Code 32-do not add A before the barcode      | QaVdNa | 16 51 61 56 64 4E 61 2E    |
| 460. Open Code 32 failure reading                 | QaZaCb | 16 51 61 5A 61 43 62 2E    |
| 461. Close Code 32 failure reading                | QaZaSa | 16 51 61 5A 61 53 61 2E    |
| 462. Code 93-open                                 | QaXaXa | 16 51 61 58 61 58 61 2E    |
| 463. Code 93-close                                | QaXaN  | 16 51 61 58 61 4E 61 2E    |

|      |  |        |                            |
|------|--|--------|----------------------------|
| 464. | ~Code 93-minimum length                          | N/A    | 16 4E 64 45 63 XX XX XX 2E |
| 465. | ~Code 93-maximum length                          | N/A    | 16 4E 64 46 63 XX XX XX 2E |
| 466. | Code 11-open                                     | QaWaYa | 16 51 61 57 61 59 61 2E    |
| 467. | Code 11-close                                    | QaWaOa | 16 51 61 57 61 4F 61 2E    |
| 468. | Code 11-1 bits are validated and transmitted     | SbOeXa | 16 53 62 4F 65 58 61 2E    |
| 469. | Code 11-2 bits are validated and transmitted     | SbOeNa | 16 53 62 4F 65 4E 61 2E    |
| 470. | Code 11-1 bits are validated and not transmitted | SbOeRb | 16 53 62 4F 65 52 62 2E    |
| 471. | Code 11-2 bits are validated and not transmitted | SbOeHb | 16 53 62 4F 65 48 62 2E    |
| 472. | Code 11- No validation                           | SbOeBc | 16 53 62 4F 65 42 63 2E    |
| 473. | ~Code 11-minimum length                          | N/A    | 16 4E 64 4F 62 XX XX XX 2E |
| 474. | ~Code 11-maximum length                          | N/A    | 16 4E 64 50 62 XX XX XX 2E |
| 475. | Codabar-open                                     | QaXaZa | 16 51 61 58 61 5A 61 2E    |
| 476. | Codabar-close                                    | QaXaPa | 16 51 61 58 61 50 61 2E    |
| 477. | Codabar-no check                                 | IbNeRa | 16 49 62 4E 65 52 61 2E    |
| 478. | Codabar- Open and Check character                | IbNeBb | 16 49 62 4E 65 42 62 2E    |
| 479. | Codabar- Open and does not Check character       | IbNeLb | 16 49 62 4E 65 4C 62 2E    |
| 480. | Codabar-send start and end                       | QaVdCb | 16 51 61 56 64 43 62 2E    |

|  |        |                            |
|--|--------|----------------------------|
| characters   |        |                            |
| 481. Codabar-do not need start and end characters        | QaVdSa | 16 51 61 56 64 53 61 2E    |
| 482. Codabar- ABCD/ABCD                                  | WaMbSa | 16 57 61 4D 62 53 61 2E    |
| 483. Codabar- ABCD/TN*E                                  | WaMbCb | 16 57 61 4D 62 43 62 2E    |
| 484. ~Codabar –minimum length                            | N/A    | 16 4E 64 47 63 XX XX XX 2E |
| 485. ~Codabar –maximum length                            | N/A    | 16 4E 64 48 63 XX XX XX 2E |
| 486. Interleaved 2 of 5-open                             | QaXaAb | 16 51 61 58 61 41 62 2E    |
| 487. Interleaved 2 of 5-close                            | QaXaQa | 16 51 61 58 61 51 61 2E    |
| 488. Interleaved 2 of 5-close check                      | IbNeNa | 16 49 62 4E 65 4E 61 2E    |
| 489. Interleaved 2 of 5- Open and Check character        | IbNeXa | 16 49 62 4E 65 58 61 2E    |
| 490. Interleaved 2 of 5- Open without checking character | IbNeHb | 16 49 62 4E 65 48 62 2E    |
| 491. ~Interleaved 2 of 5 –minimum length                 | N/A    | 16 4E 64 53 62 XX XX XX 2E |
| 492. ~Interleaved 2 of 5 –maximum length                 | N/A    | 16 4E 64 54 62 XX XX XX 2E |
| 493. Matrix 2 of 5-open                                  | QaWaAb | 16 51 61 57 61 41 62 2E    |
| 494. Matrix 2 of 5-close                                 | QaWaQa | 16 51 61 57 61 51 61 2E    |
| 495. Matrix 2 of 5-close check                           | AbBbRa | 16 41 62 42 62 52 61 2E    |
| 496. Matrix 2 of 5- Open and transmit                    | AbBbBb | 16 41 62 42 62 42 62 2E    |

|   |        |                            |
|---|--------|----------------------------|
| 497. Matrix 2 of 5 -Open and do not Check character | AbBbLb | 16 41 62 42 62 4C 62 2E    |
| 498. ~Matrix 2 of 5 -minimum length                 | N/A    | 16 4E 64 59 62 XX XX XX 2E |
| 499. ~Matrix 2 of 5 -maximum length                 | N/A    | 16 4E 64 5A 62 XX XX XX 2E |
| 500. Industrial 2 of 5-open                         | QaXaVa | 16 51 61 58 61 56 61 2E    |
| 501. Industrial 2 of 5-close                        | QaXaLa | 16 51 61 58 61 4C 61 2E    |
| 502. ~Industrial 2 of 5 -minimum length             | N/A    | 16 4E 64 55 62 XX XX XX 2E |
| 503. ~Industrial 2 of 5 -maximum length             | N/A    | 16 4E 64 56 62 XX XX XX 2E |
| 504. Standard 2 of 5-open                           | QaWaZa | 16 51 61 57 61 5A 61 2E    |
| 505. Standard 2 of 5-close                          | QaWaPa | 16 51 61 57 61 50 61 2E    |
| 506. ~Standard 2 of 5 -minimum length               | N/A    | 16 4E 64 57 62 XX XX XX 2E |
| 507. ~Standard 2 of 5 -maximum length               | N/A    | 16 4E 64 58 62 XX XX XX 2E |
| 508. MSI-open                                       | SaYdWa | 16 53 61 59 64 57 61 2E    |
| 509. MSI-close                                      | SaYdMa | 16 53 61 59 64 4D 61 2E    |
| 510. MSI-no check                                   | CbYdNa | 16 43 62 59 64 4E 61 2E    |
| 511. NEC 2 of 5- Open and transmit                  | CbYdHb | 16 43 62 59 64 48 62 2E    |
| 512. NEC 2 of 5- Open and do not                    | CbYdXa | 16 43 62 59 64 58 61 2E    |

| Check character                                   |        |                            |
|---|--------|----------------------------|
| 513. ~ NEC 2 of 5 -minimum length                 | N/A    | 16 4E 64 41 63 XX XX XX 2E |
| 514. ~ NEC 2 of 5 -maximum length                 | N/A    | 16 4E 64 42 63 XX XX XX 2E |
| 515. MSI-open                                     | QaYaXa | 16 51 61 59 61 58 61 2E    |
| 516. MSI-close                                    | QaYaNa | 16 51 61 59 61 4E 61 2E    |
| 517. MSI-no check                                 | SbOeQa | 16 53 62 4F 65 51 61 2E    |
| 518. MSI-Mode10 checks and does not transmit      | SbOeOc | 16 53 62 4F 65 51 63 2E    |
| 519. MSI- Two Mode10 check and do not transmit    | SbOeld | 16 53 62 4F 65 49 64 2E    |
| 520. MSI-Mode10 &Mode11 check and do not transmit | SbOeYc | 16 53 62 4F 65 59 63 2E    |
| 521. MSI-Mode10 checks and transmits              | SbOeAb | 16 53 62 4F 65 41 62 2E    |
| 522. MSI-Mode10 &Mode11 check and transmit        | SbOeKb | 16 53 62 4F 65 4B 62 2E    |
| 523. MSI- Two Mode10 check and transmit           | SbOeUb | 16 53 62 4F 65 55 62 2E    |
| 524. ~MSI -minimum length                         | N/A    | 16 4E 64 43 63 XX XX XX 2E |
| 525. ~MSI -maximum length                         | N/A    | 16 4E 64 44 63 XX XX XX 2E |
| 526. Telepen-open                                 | QaWaCb | 16 51 61 57 61 43 62 2E    |
| 527. Telepen -close                               | QaWaSa | 16 51 61 57 61 53 61 2E    |

|      |                            |        |                            |
|------|----------------------------|--------|----------------------------|
| 528. | Telepen- Numeric type      | QaWaBb | 16 51 61 57 61 42 61 2E    |
| 529. | Telepen- Alphanumeric type | QaWaRa | 16 51 61 57 61 52 62 2E    |
| 530. | ~Telepen -minimum length   | N/A    | 16 4E 64 51 62 XX XX XX 2E |
| 531. | ~Telepen -maximum length   | N/A    | 16 4E 64 52 62 XX XX XX 2E |
| 532. | Trioptic -open             | QaZaXa | 16 51 61 5A 61 58 61 2E    |
| 533. | Trioptic -close            | QaXaN  | 16 51 61 58 61 4E 61 2E    |
| 534. | BC412-open                 | WaMbVa | 16 57 61 4D 62 4C 61 2E    |
| 535. | BC412-close                | WaMbLa | 16 57 61 4D 62 56 61 2E    |
| 536. | ~BC412 -minimum length     | N/A    | 16 4F 64 57 63 XX XX XX 2E |
| 537. | ~BC412-maximum length      | N/A    | 16 4F 64 58 63 XX XX XX 2E |
| 538. | Febraban-open(ITF25)       | WaNbVa | 16 57 61 4E 62 56 61 2E    |
| 539. | Febraban -close(ITF25)     | WaNbLa | 16 57 61 4E 62 4C 61 2E    |
| 540. | Febraban-open(Code128)     | WaNbWa | 16 57 61 4E 62 57 61 2E    |
| 541. | Febraban -close(Code128)   | WaNbMa | 16 57 61 4E 62 4D 61 2E    |
| 542. | Febraban- Check character  | WaNbXa | 16 57 61 4E 62 58 61 2E    |
| 543. | Febraban- close check      | WaNbNa | 16 57 61 4E 62 4E 61 2E    |
| 544. | UPC-A Coupon-open          | QaZaAb | 16 51 61 5A 61 41 62 2E    |
| 545. | UPC-A Coupon-close         | QaZaQa | 16 51 61 5A 61 51 61 2E    |
| 546. | EAN-13(99) Coupon-open     | QaGbAb | 16 51 61 47 62 41 62 2E    |
| 547. | EAN-13(99) Coupon-close    | QaGbAa | 16 51 61 47 62 41 61 2E    |
| 548. | QR Code-open               | QaCbXa | 16 51 61 43 62 58 61 2E    |

|      |  |        |                            |
|------|--|--------|----------------------------|
| 549. | QR Code-close                                | QaCbNa | 16 51 61 43 62 4E 61 2E    |
| 550. | QR Code-normal only                          | QaCbOa | 16 51 61 43 62 4F 61 2E    |
| 551. | QR Code-normal + reverse                     | AbCbYa | 16 51 61 43 62 59 61 2E    |
| 552. | QR Code –Appendopen                          | SaOcBb | 16 53 61 4F 63 42 62 2E    |
| 553. | QR Code –Appendclose                         | SaOcRa | 16 53 61 4F 63 52 61 2E    |
| 554. | ~QR Code-minimum length(low byte)            | N/A    | 16 4E 64 59 64 XX XX XX 2E |
| 555. | ~QR Code-minimum length(high byte)           | N/A    | 16 4E 64 5A 64 XX XX XX 2E |
| 556. | ~QR Code-maximum length(low byte)            | N/A    | 16 4E 64 41 65 XX XX XX 2E |
| 557. | ~QR Code-maximum length(high byte)           | N/A    | 16 4E 64 42 65 XX XX XX 2E |
| 558. | Micro QR Code-open                           | QaCbAb | 16 51 61 43 62 41 62 2E    |
| 559. | Micro QR Code-close                          | QaCbQa | 16 51 61 43 62 51 61 2E    |
| 560. | Micro QR Code-normal only                    | QaCbRa | 16 51 61 43 62 52 61 2E    |
| 561. | Micro QR Code-normal + reverse               | QaCbBb | 16 51 61 43 62 42 62 2E    |
| 562. | Data Matrix-open                             | QaBbYa | 16 51 61 42 62 59 61 2E    |
| 563. | Data Matrix-close                            | QaBbOa | 16 51 61 42 62 4F 61 2E    |
| 564. | Data Matrix- Allow reading rectangular codes | QaBbWa | 16 51 61 42 62 57 61 2E    |
| 565. | Data Matrix- prohibit reading                | QaBbMa | 16 51 61 42 62 4D 61 2E    |

|  |        |                            |
|--|--------|----------------------------|
| rectangular codes                            |        |                            |
| 566. Data Matrix -normal only                | QaBbNa | 16 51 61 42 62 4E 61 2E    |
| 567. Data Matrix -normal + reverse           | QaBbXa | 16 51 61 42 62 58 61 2E    |
| 568. ~Data Matrix -minimum length(low byte)  | N/A    | 16 4E 64 55 64 XX XX XX 2E |
| 569. ~Data Matrix -minimum length(high byte) | N/A    | 16 4E 64 56 64 XX XX XX 2E |
| 570. ~Data Matrix -maximum length(low byte)  | N/A    | 16 4E 64 57 64 XX XX XX 2E |
| 571. ~Data Matrix -maximum length(high byte) | N/A    | 16 4E 64 58 64 XX XX XX 2E |
| 572. PDF 417-open                            | QaWaVa | 16 51 61 57 61 56 61 2E    |
| 573. PDF 417-close                           | QaWaLa | 16 51 61 57 61 4C 61 2E    |
| 574. ~PDF 417 -minimum length(low byte)      | N/A    | 16 4E 64 47 64 XX XX XX 2E |
| 575. ~PDF 417 -minimum length(high byte)     | N/A    | 16 4E 64 48 64 XX XX XX 2E |
| 576. ~PDF 417 -maximum length(low byte)      | N/A    | 16 4E 64 49 64 XX XX XX 2E |
| 577. ~PDF 417 -maximum length(high byte)     | N/A    | 16 4E 64 4A 64 XX XX XX 2E |
| 578. Micro PDF 417-open                      | QaAbCb | 16 51 61 41 62 43 62 2E    |
| 579. Micro PDF 417-close                     | QaAbSa | 16 51 61 41 62 53 61 2E    |
| 580. ~Micro PDF 417 -minimum                 | N/A    | 16 4E 64 4B 64 XX XX XX 2E |

|  |        |                            |
|--|--------|----------------------------|
| length(low byte)                               |        |                            |
| 581. ~Micro PDF 417 -minimum length(high byte) | N/A    | 16 4E 64 4C 64 XX XX XX 2E |
| 582. ~Micro PDF 417 -maximum length(low byte)  | N/A    | 16 4E 64 4D 64 XX XX XX 2E |
| 583. ~Micro PDF 417 -maximum length(high byte) | N/A    | 16 4E 64 4E 64 XX XX XX 2E |
| 584. MaxiCode-open                             | QaCbZa | 16 51 61 43 62 5A 61 2E    |
| 585. MaxiCode-close                            | QaCbPa | 16 51 61 43 62 50 61 2E    |
| 586. ~MaxiCode -minimum length                 | N/A    | 16 4E 64 53 64 XX XX XX 2E |
| 587. ~MaxiCode -maximum length                 | N/A    | 16 4E 64 54 64 XX XX XX 2E |
| 588. Aztec -open                               | QaCbVa | 16 51 61 43 62 56 61 2E    |
| 589. Aztec-close                               | QaCbLa | 16 51 61 43 62 4C 61 2E    |
| 590. Aztec -normal only                        | QaCbMa | 16 51 61 43 62 4D 61 2E    |
| 591. Aztec -normal + reverse                   | QaCbWa | 16 51 61 43 62 57 61 2E    |
| 592. ~Aztec -minimum length(low byte)          | N/A    | 16 4E 64 4F 64 XX XX XX 2E |
| 593. ~Aztec -minimum length(high byte)         | N/A    | 16 4E 64 50 64 XX XX XX 2E |
| 594. ~Aztec -maximum length(low byte)          | N/A    | 16 4E 64 51 64 XX XX XX 2E |
| 595. ~Aztec -maximum length(high byte)         | N/A    | 16 4E 64 52 64 XX XX XX 2E |

|      |                                      |                 |                            |
|------|--------------------------------------|-----------------|----------------------------|
| 596. | HanXin-open                          | SaRdWa          | 16 53 61 52 64 57 61 2E    |
| 597. | HanXin-close                         | SaRdMa          | 16 53 61 52 64 4D 61 2E    |
| 598. | ~HanXin<br>length(low byte)          | -minimum<br>N/A | 16 4E 64 43 65 XX XX XX 2E |
| 599. | ~HanXin<br>length(high byte)         | -minimum<br>N/A | 16 4E 64 44 65 XX XX XX 2E |
| 600. | ~HanXin<br>length(low byte)          | -maximum<br>N/A | 16 4E 64 45 65 XX XX XX 2E |
| 601. | ~HanXin<br>length(high byte)         | -maximum<br>N/A | 16 4E 64 46 65 XX XX XX 2E |
| 602. | Pharma Code-open                     | UaNdAb          | 16 55 61 4E 64 41 62 2E    |
| 603. | Pharma Code-close                    | UaNdQa          | 16 55 61 4E 64 51 61 2E    |
| 604. | Codablock A-open                     | SaldVa          | 16 53 61 49 64 56 61 2E    |
| 605. | Codablock A-close                    | SaldLa          | 16 53 61 49 64 4C 61 2E    |
| 606. | ~ Codablock A<br>length              | -minimum<br>N/A | 16 4E 64 41 64 XX XX XX 2E |
| 607. | ~ Codablock A<br>length              | -maximum<br>N/A | 16 4E 64 42 64 XX XX XX 2E |
| 608. | Codablock F-open                     | SaldWa          | 16 53 61 49 64 57 61 2E    |
| 609. | Codablock F-close                    | SaldMa          | 16 53 61 49 64 4D 61 2E    |
| 610. | ~ Codablock F--<br>length(low byte)  | -minimum<br>N/A | 16 4E 64 43 64 XX XX XX 2E |
| 611. | ~ Codablock F--<br>length(high byte) | -minimum<br>N/A | 16 4E 64 44 64 XX XX XX 2E |

|      |  |        |                            |
|------|--|--------|----------------------------|
| 612. | ~ Codablock F--maximum length(low byte)      | N/A    | 16 4E 64 45 64 XX XX XX 2E |
| 613. | ~ Codablock F--maximum length(high byte)     | N/A    | 16 4E 64 46 64 XX XX XX 2E |
| 614. | GS1 DataBar 14-open                          | QaAbYa | 16 51 61 41 62 59 61 2E    |
| 615. | GS1 DataBar 14-close                         | QaAbOa | 16 51 61 41 62 4F 61 2E    |
| 616. | GS1 DataBar Limited-open                     | QaAbZa | 16 51 61 41 62 5A 61 2E    |
| 617. | GS1 DataBar Limited-close                    | QaAbPa | 16 51 61 41 62 50 61 2E    |
| 618. | GS1 DataBar Expanded-open                    | QaAbAb | 16 51 61 41 62 41 62 2E    |
| 619. | GS1 DataBar Expanded-close                   | QaAbQa | 16 51 61 41 62 51 61 2E    |
| 620. | ~GS1 DataBar Expanded-minimum length         | N/A    | 16 4E 64 49 63 XX XX XX 2E |
| 621. | GS1 DataBar Expanded-maximum length          | N/A    | 16 4E 64 4A 63 XX XX XX 2E |
| 622. | GS1 Composte Code-open                       | RaUcBb | 16 52 61 55 63 42 62 2E    |
| 623. | GS1 Composte Code-close                      | RaUcRa | 16 52 61 55 63 52 61 2E    |
| 624. | GS1-128 Composite-open                       | RaUcAb | 16 52 61 55 63 41 62 2E    |
| 625. | GS1-128 Composite-close                      | RaUcQa | 16 52 61 55 63 51 61 2E    |
| 626. | UPC Composite-open                           | YaNbZa | 16 59 61 4E 62 5A 61 2E    |
| 627. | UPC Composite-close                          | YaNbPa | 16 59 61 4E 62 50 61 2E    |
| 628. | ~GS1 Composte Code -minimum length(low byte) | N/A    | 16 4E 64 4B 63 XX XX XX 2E |
| 629. | ~GS1 Composte Code                           | N/A    | 16 4E 64 4C 63 XX XX XX 2E |

|   |        |                            |
|---|--------|----------------------------|
| -minimum length(high byte)                            |        |                            |
| 630. ~GS1 Composte Code<br>-maximum length(low byte)  | N/A    | 16 4E 64 4D 63 XX XX XX 2E |
| 631. ~GS1 Composte Code<br>-maximum length(high byte) | N/A    | 16 4E 64 4E 63 XX XX XX 2E |
| 632. TLC 39 Code-open                                 | YaObCb | 16 59 61 4F 62 43 62 2E    |
| 633. TLC 39 Code-close                                | YaObSa | 16 59 61 4F 62 53 61 2E    |
| 634. TLC39 enforces the<br>append-open                | XaWdYa | 16 58 61 57 64 59 61 2E    |
| 635. TLC 39 enforces the append<br>-close             | XaWdOa | 16 58 61 57 64 4F 61 2E    |
| 636. OCR-open   | SaBdCb | 16 53 61 42 64 43 62 2E    |
| 637. OCR-close  | SaBdSa | 16 53 61 42 64 53 61 2E    |
| 638. Passport OCR –open                               | SaBdWa | 16 53 61 42 64 57 61 2E    |
| 639. Passport OCR –close                              | SaBdMa | 16 53 61 42 64 4D 61 2E    |
| 640. OCR checksums ignore-open                        | TaDeBb | 16 54 61 44 65 42 62 2E    |
| 641. OCR checksums ignore -close                      | TaDeRa | 16 54 61 44 65 52 61 2E    |
| 642. China Post-open                                  | QaZaBb | 16 51 61 5A 61 42 62 2E    |
| 643. China Post-close                                 | QaZaRa | 16 51 61 5A 61 52 61 2E    |
| 644. ~China Post -minimum length                      | N/A    | 16 4E 64 4F 63 XX XX XX 2E |
| 645. ~China Post -maximum<br>length                   | N/A    | 16 4E 64 50 63 XX XX XX 2E |
| 646. Korea Post-open                                  | SaFdVa | 16 53 61 46 64 56 61 2E    |

|      |  |        |                            |
|------|--|--------|----------------------------|
| 647. | Korea Post-close                               | SaFdLa | 16 53 61 46 64 4C 61 2E    |
| 648. | Korea Post- Positive sequence output           | SaFdXa | 16 53 61 46 64 58 61 2E    |
| 649. | Korea Post- Output in reverse order            | SaFdNa | 16 53 61 46 64 4E 61 2E    |
| 650. | Korea Post- Check character                    | SaFdAb | 16 53 61 46 64 41 62 2E    |
| 651. | Korea Post-close check                         | SaFdQa | 16 53 61 46 64 51 61 2E    |
| 652. | ~Korea Post-minimum length                     | N/A    | 16 4E 64 51 63 XX XX XX 2E |
| 653. | ~Korea Post-maximum length                     | N/A    | 16 4E 64 52 63 XX XX XX 2E |
| 654. | Australian Post-open                           | SaGdCb | 16 53 61 47 64 43 62 2E    |
| 655. | Australian Post-close                          | SaGdSa | 16 53 61 47 64 53 61 2E    |
| 656. | Australian Post- Transmit error correction     | YaTbXa | 16 59 61 54 62 58 61 2E    |
| 657. | Australian Post- Not transmit error correction | YaTbNa | 16 59 61 54 62 4E 61 2E    |
| 658. | British Post-open                              | SaGdVa | 16 53 61 47 64 56 61 2E    |
| 659. | British Post-close                             | SaGdLa | 16 53 61 47 64 4C 61 2E    |
| 660. | USPS Intelligent Mail-open                     | SaldYa | 16 53 61 49 64 59 61 2E    |
| 661. | USPS Intelligent Mail-close                    | SaldOa | 16 53 61 49 64 4F 61 2E    |
| 662. | Japanese Post-open                             | SaGdBb | 16 53 61 47 64 42 62 2E    |
| 663. | Japanese Post-close                            | SaGdRa | 16 53 61 47 64 52 61 2E    |
| 664. | Planet Code-open                               | SaGdZa | 16 53 61 47 64 5A 61 2E    |

|      |                                      |        |                         |
|------|--------------------------------------|--------|-------------------------|
| 665. | Planet Code-close                    | SaGdPa | 16 53 61 47 64 50 61 2E |
| 666. | Planet Code- Check character         | SaFdYa | 16 53 61 46 64 59 61 2E |
| 667. | Planet Code-no Check character       | SaFdOa | 16 53 61 46 64 4F 61 2E |
| 668. | Postnete-open                        | SaGdYa | 16 53 61 47 64 59 61 2E |
| 669. | Postnet-close                        | SaGdOa | 16 53 61 47 64 4F 61 2E |
| 670. | Postnet- Check character             | SaFdZa | 16 53 61 46 64 5A 61 2E |
| 671. | Postnet-no Check character           | SaFdPa | 16 53 61 46 64 50 61 2E |
| 672. | UPU 4-State-open                     | SaGdWa | 16 53 61 47 64 57 61 2E |
| 673. | UPU 4-State-close                    | SaGdMa | 16 53 61 47 64 4D 61 2E |
| 674. | KIX Code-open                        | SaGdAb | 16 53 61 47 64 41 62 2E |
| 675. | KIX Code-close                       | SaGdQa | 16 53 61 47 64 51 61 2E |
| 676. | openACK/NAK                          | WaFbMa | 16 57 61 46 62 4D 61 2E |
| 677. | closeACK/NAK                         | WaFbWa | 16 57 61 46 62 57 61 2E |
| 678. | Enter or exit data code setting mode | BeReGe | 16 42 65 52 65 47 65 2E |
| 679. | restart                              | BeReBd | 16 42 65 52 65 42 64 2E |

## Appendix - Instructions for using variadic directives

Take Code 128minimum length10 and maximum length30 as an example.

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

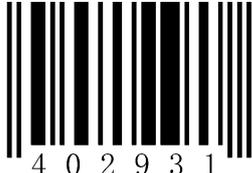
Therefore, the ASCII value for 10 is 30 31 30, and the ASCII value for 30 is 30 33 30.

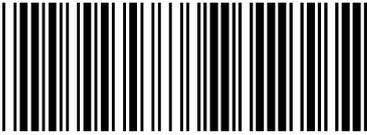
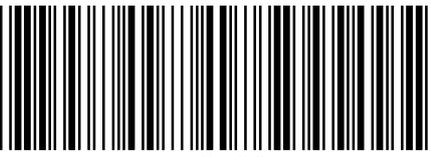
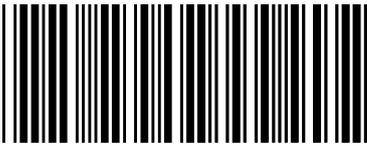
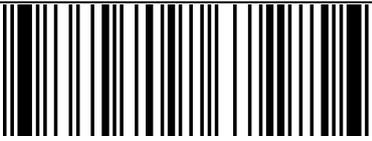
Finally, the corresponding directive to be set is --

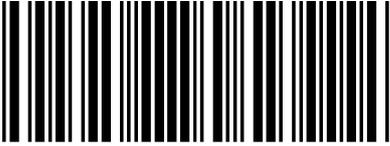
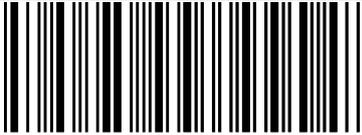
|                          |                            |
|--------------------------|----------------------------|
| ~ Code128 minimum length | 16 4E 64 49 62 30 31 30 2E |
| ~ Code 128maximum length | 16 4E 64 4A 62 30 33 30 2E |

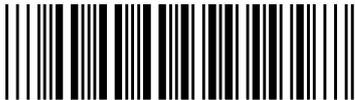
## Appendix - Reference Barcode Examples

### 1D Barcode

|   |  |
|---|--|
|  <p>6 1414199996 6</p> <p>Barcode type: UPC-A</p> <p>Barcode content: 61414199996</p>      |  <p>0 402931 1</p> <p>Barcode type: UPC-E0</p> <p>Barcode content: 04029311</p>   |
|  <p>1 042093 6</p> <p>Barcode type: UPC-E1</p> <p>Barcode content: 10420936</p>           |  <p>2 1 2 3 4 5 6 9</p> <p>Barcode type: EAN-8</p> <p>Barcode content: 21234569</p>  |
|  <p>2 112345678917</p> <p>Barcode type: EAN-13</p> <p>Barcode content: 2112345678917</p> | <p>ISBN 978-0-618-26030-0</p>  <p>9 780618 260300</p> <p>Barcode type: ISBN</p> <p>Barcode content[no check]: 061826030</p> <p>Barcode content[有校验]: 0618260307</p> |
|  <p>9 771234 567898</p>  |  <p>AB12@#56ef</p>   |

|   |  |
|---|--|
| <p>Barcode type: ISSN</p> <p>Barcode content[no check]: 1234567</p> <p>Barcode content[check]: 12345679</p>   | <p>Barcode type: Code 128</p> <p>Barcode content: AB12@#56ef</p>   |
|  <p>(01)00000123000017</p> <p>Barcode type: GS1-128</p> <p>Barcode content: 0100000123000017</p>   |  <p>X6000 22 123456 8 7</p> <p>Barcode type: ISBT-128</p> <p>Barcode content: =X60002212345667</p>  |
| <p style="text-align: center;">ISBT 128</p>   <p style="text-align: center;"><b>W1234 95 123456 8 8</b> 5100</p> <p style="text-align: center;">=W12349512345600=%5100</p> <p style="text-align: center;">Barcode type: ISBT connection</p> <p style="text-align: center;">Barcode content: =W12349512345600=%5100</p> |  |
|  <p>AB+-78</p> <p>Barcode type: Code 39</p> <p>Barcode content: AB+-78</p>   |  <p>Ad?#89</p> <p>Barcode type: Code 39 Full ASCII</p> <p>Barcode content[需 open 识别全 ASCII]:</p> <p style="text-align: center;">Ad?#89</p> |
|  <p>A123456788</p> <p>Barcode type: Code 32</p>  |  <p>12Ab78</p> <p>Barcode type: Code 93</p>  |

|  |  |
|--|--|
| <p>Barcode content[The prefix A needs to be open]: 123456788</p>   | <p>Barcode content: 12Ab78</p>   |
| <p><br/>12345678-1</p> <p>Barcode type: Code11</p> <p>Barcode content[2-bit check]: 12345678-1</p>        | <p><br/>12345678</p> <p>Barcode type: Codabar</p> <p>Barcode content: 12345678</p>       |
| <p><br/>12345678901234</p> <p>Barcode type: Interleaved 2 of 5</p> <p>Barcode content: 12345678901234</p> | <p><br/>12345678</p> <p>Barcode type: Matrix 2 of 5</p> <p>Barcode content: 12345678</p> |
| <p><br/>56785678</p> <p>Barcode type: Industrial 2 of 5</p> <p>Barcode content: 56785678</p>            |  |
| <p><br/>87654321</p> <p>Barcode type: Standard 2 of 5</p> <p>Barcode content: 87654321</p>              | <p><br/>11223344</p> <p>Barcode type: NEC 2 of 5</p> <p>Barcode content: 11223344</p>  |
| <p><br/>55667788</p> <p>Barcode type: MSI Plessey</p>   | <p><br/>123ab678</p> <p>Barcode type: Telepen</p>                                      |

|  |  |
|--|--|
| Barcode content: 55667788  | Barcode content: 123ab678  |
|  <p>666888</p> <p>Barcode type: Trioptic</p> <p>Barcode content: 888666</p>   |  <p>34567890</p> <p>Barcode type: BC412</p> <p>Barcode content: 34567890</p>   |
| <p>83640000054.0.12870053107.1. 87484396111.9. 10126258556.1</p>  <p>Barcode type: Febraban</p> <p>Barcode content: 836400000540128700531071874843961119101262585561</p> |  |
|  <p>5 14141 81175 8 (8102) 05</p> <p>Barcode type: UPC-A Coupon</p> <p>Barcode content: 514141811758810205</p>   |  <p>9 914141 811757 (8100) 612345</p> <p>Barcode type: EAN-13(99) Coupon</p> <p>Barcode content:</p> <p>99141418117578100612345</p> |

## 2D Barcode



12345678ABCDefgh!@#+-=

Barcode type: QR Code

Barcode content: 12345678ABCDefgh!@#+-=



123456ABCdef+-=

Barcode type: Micro QR Code

Barcode content: 123456ABCdef+-=



Barcode type: QR Code Append

Barcode content: 2/- /184320009/230916/2009/DLA-ZVW52/0086/- /- /0067/28/-  
/2/0/1/0001/- /200319/14



5678ABCDefgh!@#+-=

Barcode type: Data Matrix

Barcode content: 5678ABCDefgh!@#+-=



5678ABCDefgh!@#+-=

Barcode type: Rectangular Data Matrix

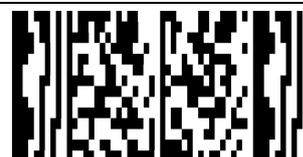
Barcode content: 5678ABCDefgh!@#+-=



5678ABCDefgh!@#+-=

Barcode type: PDF 417

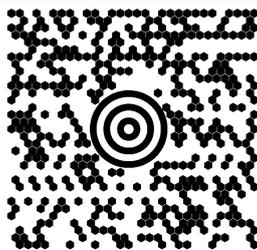
Barcode content: 5678ABCDefgh!@#+-=



5678ABCDefgh!@#+-=

Barcode type: Micro PDF 417

Barcode content: 5678ABCDefgh!@#+-=



Barcode type: Maxicode

Barcode type[No hidden characters]:

] > 0196511478400011Z00004951UPSN06X6103141/110NSEATTLEWA

Barcode content[Hidden character]:

[ ] > RS01 GS9651147 GS840 GS001 GS1Z00004951 GSUPSN GS06X610 GS314 GS GS1/1 GS10 GSN GS GS SEATTLE GS WA RS EOT



5566!@+=ABcd

Barcode type: Aztec Code

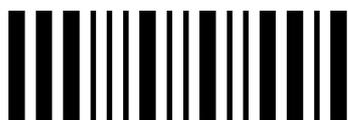
Barcode content: 5566!@+=ABcd



7788!@+=ABcd

Barcode type: HanXin Code

Barcode content: 7788!@+=ABcd



123468

Barcode type: Pharma Code(One-Track)

Barcode content: 123468



Barcode type: Codablock A

Barcode content: Codablock A

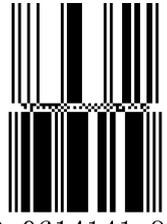


AAbb6688

Barcode type: Codablock F

Barcode content: AAbb6688

## Composite Code and OCR

|   |   |
|---|---|
|  <p>(01) 0 0614141 99999 6</p> <p>Barcode type: GS1 Databar Omnidirectional</p> <p>Barcode content: 0100614141999996</p>                             |  <p>(01) 0 0614141 99999 6</p> <p>Barcode type: GS1 Databar Truncated</p> <p>Barcode content: 0100614141999996</p>                   |
|  <p>(01) 0 0614141 99999 6</p> <p>Barcode type: GS1 Databar Stacked</p> <p>Barcode content: 0100614141999996</p>                                     |  <p>(01) 0 0614141 99999 6</p> <p>Barcode type: GS1 Databar Stacked<br/>Omnidirectional</p> <p>Barcode content: 0100614141999996</p> |
|  <p>(01) 0 0614141 99999 6</p> <p>Barcode type: GS1 Databar Limited</p> <p>Barcode content: 0100614141999996</p>                                   |  <p>(00) 6 1414199 99968</p> <p>Barcode type: GS1 Databar Expanded<br/>Stacked</p> <p>Barcode content: 006141419999968</p>         |
|  <p>(01) 0 0614141 99999 6 (10) AB56 (21) 65BA</p> <p>Barcode type: GS1 Databar Expanded</p> <p>Barcode content: 010061414199999610AB562165BA</p> |   |



(01) 0 0614141 99999 6  
(90) 123456789012345678901234567890

Barcode type: RSS-14 Composite

Barcode content: 010061414199999690123456789012345678901234567890



(01) 0 0614141 99999 6  
(90) 123456789012345678901234567890

Barcode type: RSS-14 Truncated Composite

Barcode content: 010061414199999690123456789012345678901234567890



(01) 0 0614141 99999 6  
(90) 123456789012345678901234567890

Barcode type: RSS-14 Stacked Composite

Barcode content: 010061414199999690123456789012345678901234567890



(01) 0 0614141 99999 6  
(90) 123456789012345678901234567890

Barcode type: RSS-14 Stacked Omnidirectional Composite

Barcode content: 010061414199999690123456789012345678901234567890



(01) 0 0614141 99999 6  
(90) 123456789012345678901234567890

Barcode type: RSS Limited Composite

Barcode content: 010061414199999690123456789012345678901234567890



(01) 6 1414199 99968  
(90) 123456789012345678901234567890

Barcode type: RSS Expanded Composite

Barcode content: 01614141999996890123456789012345678901234567890



(01) 0 0614141 99999 6 (10) ABCDEF123456 (21) 654321FEDCBA  
(90) 123456789012345678901234567890

Barcode type: RSS Expanded Stacked Composite

Barcode content:

010061414199999610ABCDEF12345621654321FEDCBA90123456789012345678901234567

890



(01) 0 0614141 99999 6  
(90) 123456789012345678901234567890

Barcode type: RSS GS1-128 Composite

Barcode content: 010061414199999690123456789012345678901234567890



614141999996

(90) 123456789012345678901234567890

Barcode type: RSS UPC-A Composite

Barcode content: 61414199999690123456789012345678901234567890



04029311

(90) 123456789012345678901234567890

Barcode type: RSS UPC-E Composite

Barcode content: 0402931190123456789012345678901234567890



21234569

(90) 123456789012345678901234567890

Barcode type: RSS EAN-8 Composite

Barcode content: 2123456990123456789012345678901234567890



2112345678917

(90) 123456789012345678901234567890

Barcode type: RSS EAN-13 Composite

Barcode content: 211234567891790123456789012345678901234567890



[><sup>R</sup>s06<sup>G</sup>s  
6P236383<sup>R</sup>s  
SABCDTESTAG09150007<sup>R</sup>s<sup>EoT</sup>

Barcode type: TLC39 Code

Barcode content: [>066P236383SABCDTESTAG09150007

411528190012016685

Barcode type: Chinese ID Card

Barcode content: 411528190012016685

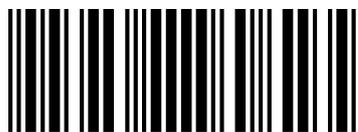
IDJORSZF61056<49861021970<<<<<  
8602031M2911102JOR<<<<<<<<<<<<<5  
AHMAD<<AHMAD<ADNAN<HAFAZ<<<<<<

Barcode type: Passport

Barcode content:

IDJORSZF61056<49861021970<<<<<8602031M2911102JOR<<<<<<<<<<<<5AHMAD<  
<AHMAD<ADNAN<HAFAZ<<<<<<

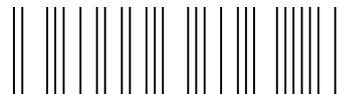
## 1D Postal Code



12345678

Barcode type: China Post

Barcode content: 123456



123-456

Barcode type: Korea Post

Barcode content: 123456

## 2D Postal Code

|  |   |
|--|---|
|  <p>1112345678</p> <p>Barcode type: Australian Post</p> <p>Barcode content: 11,12345678</p>   |  <p>050LU178XE2B</p> <p>Barcode type: British Post</p> <p>Barcode content: 050LU178XE2B</p>       |
|  <p>1070012345612345678912345678901</p> <p>Barcode type: USPS Intelligent Mail</p> <p>Barcode content:</p> <p>1070012345612345678912345678901</p> |  <p>15400233-16-4</p> <p>Barcode type: Japanese Post</p> <p>Barcode content: 15400233-16-4</p>    |
|  <p>4 0 1 2 3 4 5 6 7 8 9 1</p> <p>Barcode type: Planet Code</p> <p>Barcode content: 40123456789</p>  |  <p>098295123452</p> <p>Barcode type: Postnet Code</p> <p>Barcode content: 09829512345</p>      |
|  <p>J18CUSA8E6N062315014880T</p> <p>Barcode type: UPU 4-State</p> <p>Barcode content:</p> <p>J18CUSA8E6N062315014880T</p>                       |  <p>1230AA12345XHUIS</p> <p>Barcode type: KIX Code</p> <p>Barcode content: 1230AA12345XHUIS</p> |

## Appendix - Multilingual Text Output

### Example - Simplified Chinese Text Output

**Test environment: Windows 10 Chinese system, English input method**

Test sample code 1: GB2312 coding



天行健，君子以自强不息。

Test sample code 2: Unicode coding



地势坤，君子以厚德载物。

**Barcode content:** 天行健，君子以自强不息。地势坤，君子以厚德载物。

#### Notepad /excel output Settings

1. Enter UTF-8/GB2312 encoding (default) :



OdPbLa

2. Output Codepage coding (default) :



GbBbVa

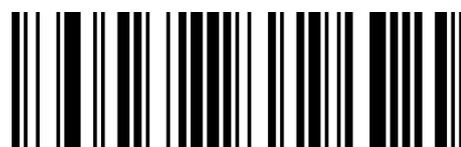
3. Set English keyboard (default) :



JdCcTc

#### WORD output Settings

1. Enter UTF-8/GB2312 encoding (default) :



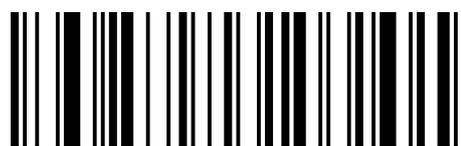
OdPbLa

2, Output Unicode coding (default) :



GbBbFb

3. Set English keyboard (default) :



JdCcTc

## Example - Simplified Chinese Text Output (Linux system)

Test environment: Ubuntu 20.10 Chinese system, English input method/Deepin 20.2.4

Chinese system, English input method

Test sample code 1: GB2312 coding



天行健，君子以自强不息。

Test sample code 2: Unicode coding



地势坤，君子以厚德载物。

**Barcode content:** 天行健，君子以自强不息。地势坤，君子以厚德载物。

Ubuntu 20.10 Notepad /excel/Word

output Settings

1. Enter UTF-8/GB2312 encoding (default) :



OdPbLa

2. Output Codepage coding (default) :



GbBbFb

3. Set English keyboard (default) :



Deepin 20.2.4 Notepad /excel/Word

Output Settings

1. Enter UTF-8/GB2312 encoding (default) :



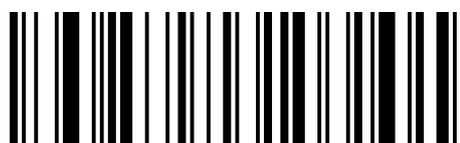
OdPbLa

2. Output Codepage coding (default) :



GbBbFb

3. Set English keyboard (default) :



JdCcTc

4. Set the output system



GbAbXa

Linux1

JdCcTc

4. Set the output system



GbAbHb

Linux2

## Example - Traditional Chinese Text Output

Test environment: Windows 7 traditional Chinese system, English input method

Test sample code 1: BIG5 encoding



Test sample code 2: Unicode encoding



Barcode content: 落霞與孤鶩齊飛，秋水共長天一色。

### Notepad /excel output Settings

1. Enter the BIG 5 code:



0dPbPb

2. Output Codepage coding (default) :



GbBbVa

3. Set English keyboard (default) :



JdCcTc

### WORD output Settings

1. Enter the BIG 5 code:



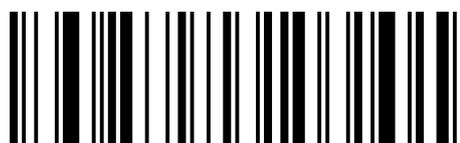
0dPbPb

2. Output Codepage coding (default) :



GbBbFb

3. Set English keyboard (default) :



JdCcTc

## Example - Japanese Text Output

Test environment: Windows 10 Japanese system, Japanese input method

Test sample code 1: SHIFT-JIS code



Test sample code 2: Unicode code



Barcode content: 123456 アイエマネークリップ株式会社(ﾌﾟﾀﾞﾞ外購買)

### Notepad /excel output Settings

1. Input Shift-JIS encoding:



OdPbVa

2. Output Codepage coding (default) :



GbBbVa

3. Set up Japanese keyboard:



JdCcVac

### WORD output Settings

1. Input Shift-JIS encoding:



OdPbVa

2. Output Codepage coding (default) :



GbBbFb

3. Set up Japanese keyboard:



JdCcVac

## Example - German Output

Test environment: Windows 10 Chinese system, German keyboard

Test sample code 1: ANSI,1252 code



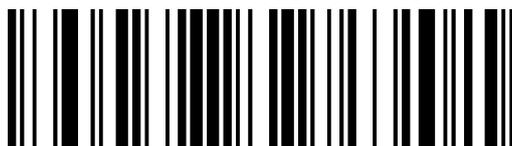
Test sample code 2: Unicode code



Barcode content: ABC!\$ßÄÖÜäüö123

### Notepad /excel/WORD output Settings

1. Enter the single-byte encoding:



OdPbYac

2. Set up German keyboard:



JdCcBbc

## Example - French Output

Test environment: Windows 10 Chinese system, French keyboard

Test sample code 1: ANSI,1252 code



Test sample code 2: Unicode code



Barcode content: françaisâtêchère

Notepad /excel/WORD output Settings

1. Enter the single-byte encoding:



0dPbYac

2. Set the French keyboard:



JdCcBbc

## Example - Spanish Output

**Test environment: Windows 10 Chinese system, Spanish keyboard**

**Test sample code 1: ANSI,1252 code**



á é í ó ú ü ñ Á Ñ É Ó Í Ú Ñ Ü

**Test sample code 2: Unicode code**



á é í ó ú ü ñ Á Ñ É Ó Í Ú Ñ Ü

**Barcode content: á é í ó ú ü ñ Á Ñ É Ó Í Ú Ñ Ü**

**Notepad /excel/WORD output Settings**

1. Enter the single-byte encoding:



0dPbYac

2. Set the French Spanish keyboard:



JdCcJc

## Example - Italian Output

Test environment: Windows 10 Chinese system, Italian keyboard

Test sample code 1: ANSI,1252 code



ò à è ì ù é

Test sample code 2: Unicode code



ò à è ì ù é

Barcode content: ò à è ì ù é

### Notepad /excel/WORD output Settings

1. Enter the single-byte encoding:



OdPbYac

2. Set the French-Italian keyboard:



JdCcZb