

---

# Area Imager Bar Code Scanner

## 2D CONFIGURATION GUIDE



Copyright @ 2018

This manual is copyrighted, with all right reserved. Under the copyright laws, this manual may not, in whole or in part, be copied, photocopied, reproduced, translated or converted to any electronic medium or machine readable form without prior written consent of maker.

**Note:** Due to product improvement programs, specifications and features are subject to change without prior notice.

# Table of Contents

---

|   |           |
|---|-----------|
| <b>Table of Contents .....</b>                      | <b>3</b>  |
| <b>Chapter 1     General Description .....</b>      | <b>9</b>  |
| <b>Chapter 2     Introduction .....</b>             | <b>11</b> |
| <b>Chapter 3     Main Configuration.....</b>        | <b>13</b> |
| <i>A. Programming Flow chart.....</i>               | <i>13</i> |
| <i>B. Main Page of Configuration .....</i>          | <i>14</i> |
| <i>C. Imager Decoding Setting.....</i>              | <i>17</i> |
| <b>Chapter 4     Interface Selection.....</b>       | <b>18</b> |
| <b>Chapter 5     Reading Mode Selection .....</b>   | <b>21</b> |
| <b>Chapter 6     Reading Surface Selection.....</b> | <b>25</b> |
| <i>A. Reading Surface.....</i>                      | <i>26</i> |
| <b>Chapter 7     RS232 Parameters .....</b>         | <b>27</b> |
| <i>B. Setup Baud Rate .....</i>                     | <i>28</i> |
| <i>B. Setup Data Bits.....</i>                      | <i>30</i> |
| <i>C. Setup Stop Bits.....</i>                      | <i>31</i> |
| <i>D. Setup Parity .....</i>                        | <i>32</i> |
| <i>E. Handshaking.....</i>                          | <i>33</i> |
| <b>Chapter 8     Keyboard Parameters .....</b>      | <b>35</b> |
| <i>A. Upper/Lower Case .....</i>                    | <i>36</i> |
| <i>B. Caps Lock Detection .....</i>                 | <i>37</i> |
| <i>C. Send Character by ALT Method .....</i>        | <i>37</i> |
| <i>D. Select Numeric Pad.....</i>                   | <i>38</i> |
| <b>Chapter 9     Output Characters .....</b>        | <b>39</b> |
| <i>A. Select Terminator .....</i>                   | <i>40</i> |
| <i>B. Time-out Between Characters.....</i>          | <i>42</i> |
| <b>Chapter 10    Symbology Selection.....</b>       | <b>44</b> |

|   |           |
|---|-----------|
| A. 1D Symbology Selection .....           | 45        |
| B. 2D Symbology Selection .....           | 55        |
| <b>Chapter 11    UPC/EAN/JAN.....</b>     | <b>61</b> |
| A. Reading Type .....                     | 62        |
| B. Supplemental Setup.....                | 66        |
| C. Check digit Transmission .....         | 68        |
| <b>Chapter 12    Code 39 .....</b>        | <b>71</b> |
| A. Type of Code .....                     | 72        |
| B. Check Digit Transmission.....          | 73        |
| C. Output Start/Stop Character .....      | 74        |
| D. Decode Asterisk .....                  | 74        |
| E. Setup Code Length.....                 | 75        |
| <b>Chapter 13    Code 128.....</b>        | <b>77</b> |
| A. Reading Type .....                     | 78        |
| B. Check Digit Transmission.....          | 80        |
| C. Append FNC2.....                       | 81        |
| D. Setup Code Length.....                 | 82        |
| <b>Chapter 14    Interleaved 25 .....</b> | <b>84</b> |
| A. Check Digit Transmission.....          | 85        |
| B. Setup Number of Characters .....       | 86        |
| C. Brazillian Banking Code .....          | 87        |
| D. Setup Code Length.....                 | 88        |
| <b>Chapter 15    Industrial 25 .....</b>  | <b>90</b> |
| A. Reading Type .....                     | 91        |
| B. Check Digit Transmission.....          | 92        |
| C. Setup Code Length.....                 | 93        |
| <b>Chapter 16    Matrix 25 .....</b>      | <b>95</b> |
| A. Check Digit Transmission.....          | 96        |

|   |            |
|---|------------|
| <i>B. Setup Code Length</i> .....               | 97         |
| <b>Chapter 17 Codabar/NW7</b> .....             | <b>99</b>  |
| <i>A. Start/Stop Characters</i> .....           | 100        |
| <i>B. Transmission Type of Start/Stop</i> ..... | 101        |
| <i>C. Setup Code Length</i> .....               | 104        |
| <b>Chapter 18 Code 93</b> .....                 | <b>106</b> |
| <i>A. Check Digit Transmission</i> .....        | 107        |
| <i>B. Setup Code Length</i> .....               | 108        |
| <b>Chapter 19 Code 11</b> .....                 | <b>110</b> |
| <i>A. Check Digit Transmission</i> .....        | 111        |
| <i>B. Setup Code Length</i> .....               | 113        |
| <b>Chapter 20 MSI/PLESSEY</b> .....             | <b>115</b> |
| <i>A. Check Digit Transmission</i> .....        | 116        |
| <i>B. Setup Code Length</i> .....               | 117        |
| <b>Chapter 21 Telepen</b> .....                 | <b>119</b> |
| <i>A. Type of Code</i> .....                    | 120        |
| <i>B. Check Digit Transmission</i> .....        | 121        |
| <i>C. Setup Code Length</i> .....               | 122        |
| <b>Chapter 22 GS1 DataBar</b> .....             | <b>124</b> |
| <i>A. GS1 DataBar Omnidirectional</i> .....     | 125        |
| <i>B. GS1 DataBar Limited</i> .....             | 127        |
| <i>C. GS1 DataBar Expanded</i> .....            | 129        |
| <b>Chapter 23 Aztec</b> .....                   | <b>130</b> |
| <i>A. Setup Code Length</i> .....               | 131        |
| <b>Chapter 24 Data Matrix</b> .....             | <b>133</b> |
| <i>A. Setup Code Length</i> .....               | 134        |
| <i>B. Reading Type</i> .....                    | 136        |
| <b>Chapter 25 PDF417</b> .....                  | <b>138</b> |

|  |            |
|--|------------|
| A. Setup Code Length.....                                  | 139        |
| <b>Chapter 26    Micro PDF417 (Optional) .....</b>         | <b>141</b> |
| A. Setup Code Length.....                                  | 142        |
| <b>Chapter 27    QR Code.....</b>                          | <b>144</b> |
| A. Setup Code Length.....                                  | 145        |
| A. Reading Type .....                                      | 147        |
| <b>Chapter 28    Micro QR Code.....</b>                    | <b>149</b> |
| A. Setup Code Length.....                                  | 150        |
| <b>Chapter 29    Han Xin Code (Optional) .....</b>         | <b>152</b> |
| A. Setup Code Length.....                                  | 153        |
| <b>Chapter 30    Grid Matrix (Optional) .....</b>          | <b>155</b> |
| A. Setup Code Length.....                                  | 156        |
| <b>Chapter 31    Language Selection .....</b>              | <b>158</b> |
| <b>Chapter 32    Bar Code ID.....</b>                      | <b>165</b> |
| A. Identifier Format .....                                 | 166        |
| B. User Define Code ID.....                                | 167        |
| <b>Chapter 33    Accuracy .....</b>                        | <b>184</b> |
| <b>Chapter 34    Beep .....</b>                            | <b>186</b> |
| A. Beep Tone.....  | 187        |
| B. Beep Duration.....                                      | 188        |
| C. Silent Time Between Beeps.....                          | 189        |
| D. Beep Options .....                                      | 190        |
| <b>Chapter 35    Sensitivity of Continuous Reading ...</b> | <b>192</b> |
| A. Quick Setting .....                                     | 193        |
| B. Avoid Same Code Double Reading.....                     | 194        |
| C. Same Code Delay Interval.....                           | 195        |
| <b>Chapter 36    Indicator/Aimer/Illumination .....</b>    | <b>197</b> |
| A. Indicator .....   | 198        |

|   |            |
|---|------------|
| <i>B. Aimer</i> .....                                 | 198        |
| <i>C. Illumination</i> .....                          | 199        |
| <i>D. Automatic Illumination Brightness</i> .....     | 200        |
| <i>E. Illumination Brightness</i> .....               | 201        |
| <i>F. Indicator After Good Read</i> .....             | 202        |
| <i>G. Indicator Flashing</i> .....                    | 203        |
| <i>H. Illumination Flashing After Good Read</i> ..... | 204        |
| <i>I. Aimer Always On</i> .....                       | 205        |
| <b>Chapter 37 Image Type</b> .....                    | <b>206</b> |
| <i>J. Inversed Image</i> .....                        | 207        |
| <i>K. Mirrored Image</i> .....                        | 208        |
| <b>Chapter 38 Miscellaneous</b> .....                 | <b>209</b> |
| <i>A. Autosense Sensitivity</i> .....                 | 210        |
| <i>B. Reverse Output Characters</i> .....             | 211        |
| <i>C. Power Saving Mode</i> .....                     | 212        |
| <i>D. Time to Enter Power Saving</i> .....            | 212        |
| <i>E. Output Non-Printable Chars</i> .....            | 213        |
| <b>Chapter 39 Multi-Byte Character Output</b> .....   | <b>214</b> |
| <i>A. Codepages</i> .....                             | 215        |
| <b>Chapter 40 Bluetooth (For BT Scanner)</b> .....    | <b>218</b> |
| <i>A. Set BT Parameter Default</i> .....              | 219        |
| <i>B. Bluetooth Profile</i> .....                     | 219        |
| <i>C. Out of Range</i> .....                          | 222        |
| <i>D. Cradle ID Visibility</i> .....                  | 223        |
| <i>E. Auto Reconnect</i> .....                        | 224        |
| <i>F. Back to Range and Send Data</i> .....           | 225        |
| <i>G. Virtual Keyboard</i> .....                      | 226        |
| <i>H. Sleep Mode</i> .....                            | 227        |

|   |            |
|---|------------|
| <i>I. Batch Mode</i> .....                      | 228        |
| <i>J. Firmware Version</i> .....                | 230        |
| <i>K. MAC Address</i> .....                     | 231        |
| <b>Chapter 41 Data Editing</b> .....            | <b>232</b> |
| <i>A. IDC Composite Code</i> .....              | 233        |
| <b>Chapter 42 Customer Define Strings</b> ..... | <b>234</b> |
| <i>A. Read Strings</i> .....                    | 235        |
| <b>APPENDIX A: Default Parameters</b> .....     | <b>239</b> |
| <b>APPENDIX B: Code Identifiers</b> .....       | <b>245</b> |
| <b>APPENDIX C: Decimal Value Table</b> .....    | <b>248</b> |
| <b>APPENDIX D: ASCII Characters</b> .....       | <b>249</b> |
| <b>APPENDIX E: Numeric Keypad Table</b> .....   | <b>264</b> |



## Chapter 1 General Description

Thank you for purchasing this barcode scanner with an advanced and versatile decoder. The decoder works with variety of barcode types, reading devices, and computer interfaces. It discriminates over twenty different symbologies automatically.

This menu provides an easy way to configure the decoding options and interface selections by scanning bar codes listed in the menu.

**FCC Approval**



This device had been tested in accordance with the procedures and in compliance with Part 15 Subpart B of FCC Rules and keeps all requirements, according ANSI C63.4 & FCC Part 15 B Regulation and CISPR22 Class B.

**CE Standards**



The CE mark as shown here indicates this product had been tested in accordance with the procedures given in European Council Directive.

## **LEGISLATION AND WEEE SYMBOL**

This marking shown on the product or its literature, indicates that it should not be disposed with other households wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable re-use of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase.

## Chapter 2 Introduction

This document provides an easy way to program the decoding options and interface selections by scanning bar codes listed in this guide.

### Important Notice

1. This document is in A6 size. Please check your printing setting before printing it out.
2. When printing barcodes for programming, the use of a high-resolution laser printer is strongly suggested for the best scan result.
3. The settings shall be updated periodically without prior notice. For the latest version, please contact your authorized distributor.

### Factory Default Settings

The factory default settings are shown with **< >** and bold in the following sections.

By scanning “Set All Defaults” label, the settings will go back to the factory default settings which are shown as Appendix A.

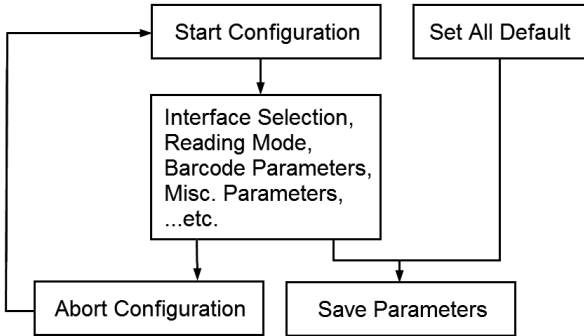
## **Settings and Programming**

Scan a series of selected barcode patches in this manual to affect setup and programming of 2D Image Reader. Decoding options and interface protocols can be tailored to a specific application.

***Note: It may need to hide adjacent code patches with hand when doing programming scanning.***

## Chapter 3 Main Configuration

### A. PROGRAMMING FLOW CHART



The programming flow is:

1. Scan "**Start Configuration**" to enter programming status.
2. Looping: Scan all necessary setting parameters that meet your application.
3. Scan "**Save Parameters**" to permanently save the programmed settings.
4. To exit programming status without saving the settings, scan "**Abort Configuration**".
5. To set all settings back default, scan "**Set All Default**" and "**Save Parameters**".

## **B. MAIN PAGE OF CONFIGURATION**

### **Start Configuration**

To enter program status, scan “Start Configuration”.

#### **Start Configuration**



%%\$+/3

### **Save Parameters**

All settings will be saved and taken effect immediately.  
The scanner exits programming status.

#### **Save Parameters**



%%\$+/0

## Abort Configuration

To terminate current programming status without saving the settings, scan “Abort Configuration”.

### Abort Configuration



%%\$+/6

## Set All Default

Restore factory-configured default (listed in Appendix A) by scanning “Set All Default” followed by “Save Parameters”.

### Set All Default



%%\$+/2





## C. IMAGER DECODING SETTING

### <Standard 1D & 2D Barcodes>



%%083

### 1D Barcodes Only



%%081

### 2D Barcodes Only



%%082

## Chapter 4 Interface Selection

# Configuration Guide

## Interface Selection

---

### RS232 Mode



%00U8

### USB Mode



%0X08

### Virtual COM Mode



%0088

## Configuration Guide

### Interface Selection

---

#### <USB HID Keyboard OFF>



%09H0

#### USB HID Keyboard ON



%09H1

## Chapter 5 Reading Mode Selection

### **Good Read OFF**

Feature: When press the trigger button, the illumination light turns on to read barcode. When the scanner reads barcode (good read), the illumination light turns off.

- If a barcode is read, the illumination light turns off immediately.
- If no barcode is read within a certain period, the illumination light turns off.

### **Trigger ON/OFF**

Feature: Trigger to turn on illumination light, release to turn off light.  
Normal Status: The illumination light is normally off. When press and hold the trigger button, the light turns on to read barcodes.

- If a barcode is read, the illumination light turns off immediately.
- If no barcode is read and the trigger button is released, the illumination light turns off.

### **Flash/Trigger OFF**

Feature: The illumination light is flashing.

Normal Status: The illumination light always keeps flashing for reading barcodes.

- If a barcode is read, the illumination light turns solid on for a period for another reading.
- If no barcode is read within the period, the illumination light returns flashing.
- When press the trigger button, the illumination light turns off. Press the trigger again, the light returns flashing.

### **Flash/Auto Power ON**

Feature: The illumination light is flashing. It is always auto powered on to flash.

Normal Status: The illumination light always keeps flashing.

- a. If a barcode is read, the illumination light turns solid on for a period for another reading.
- b. If no barcode is read within the period, the light returns flashing.
- c. The trigger button is disabled.

### **Auto Sense**

Feature: Automatically detects the existing of goods.

Normal Status: The illumination light is normally off. It will switch on the illumination to decode when detects a goods in front of it under normal light environment.

- a. When a barcode is detected in front of scanner, the illumination light turns on for a period for read barcodes.
- b. If a barcode is read within the period, the illumination light turns off immediately
- c. If no barcode is read within the period, the light turns off.
- d. If pressing the trigger button, the light turns on immediately for a period for read barcodes.

### **Auto Sense/Aimer Detection**

Feature: Automatically detects the existing of goods by Aimer.

Normal Status: The illumination light is normally off, but the Aimer keeps flushing for barcode detection under dimming or extremely low light environment.

- a. When a barcode is detected in front of scanner, the illumination light turns on for a period for read barcodes.
- b. If a barcode is read within the period, the illumination light turns off immediately
- c. If no barcode is read within the period, the light turns off.
- d. If pressing the trigger button, the light turns on immediately for a period for read barcodes.

## Configuration Guide

### Reading Mode Selection

---

#### **Good Read OFF**

(Default for HandHeld Models)

(Inapplicable to AutoSense Models)



%0271

#### **Trigger ON/OFF**

(Inapplicable to AutoSense Models)



%0270

#### **Flash/Trigger OFF**



%0274

# Configuration Guide

## Reading Mode Selection

---

### Flash/Auto Power On



%0276

### Auto Sense

(Default for AutoSense Models)



%09F8

### Auto Sense/Aimer Detection



%09FC



## **Chapter 6 Reading Surface Selection**

## A. READING SURFACE

### <General>



%%3S0

### Screen



%%3S1

### Mixed



%%3S2

## Chapter 7 RS232 Parameters

## B. SETUP BAUD RATE

**9600**



%0Y77

**19200**



%0Y74

**38400**



%0Y75

## Configuration Guide

### RS232 Parameters

---

**57600**



%0Y78

**<115200>**



%0Y79

## B. SETUP DATA BITS

### 7 Data Bits



%0Y80

### <8 Data Bits>



0

%0Y88

## C. SETUP STOP BITS

<1 Bit>



%0Y08

2 Bits



%0Y00

## D. SETUP PARITY

**<None>**



%0YN7

**Even**



%0YN2

**Odd**



%0YN3



## E. HANDSHAKING

### RTS/CTS Enable



%0188

### <RTS/CTS Disable>



%0180

# Configuration Guide

## RS232 Parameters

---

### ACK/NAK Enable



%0144

### <ACK/NAK Disable>



%0140

### XON/XOFF Enable



%03K4

### <XON/XOFF Disable>



%03K0

## **Chapter 8 Keyboard Parameters**

## A. UPPER/LOWER CASE

**<Normal>**



%0330

**Upper Case**



%0331

**Lower Case**



%0332

## B. CAPS LOCK DETECTION

**Enable**



%0X88

**<Disable>**



%0X80

## C. SEND CHARACTER BY ALT METHOD

**Enable**



%0308

**<Disable>**



%0300

## D. SELECT NUMERIC PAD

ON



%01K4

<OFF>



%01K0

## Chapter 9 Output Characters

## A. SELECT TERMINATOR

**<CR+LF>**



%7S2+

**None**



%7S7+

**CR**



%7S0+



# Configuration Guide

## Output Characters

---

### LF



%7S1+

### Space



%7S4+

### HT (TAB)



%7S3+

### STX-ETX



%7S5+

# Configuration Guide

## Output Characters

---

### B. TIME-OUT BETWEEN CHARACTERS

**<0 ms>**



%0070

**5 ms**



%0071

**10 ms**



%0072

**25 ms**



%0073

# Configuration Guide

## Output Characters

---

**50 ms**



%0074

**100 ms**



%0075

**200 ms**



%0076

**300 ms**



%0077

## **Chapter 10 Symbology Selection**

## A. 1D SYMBOLOGY SELECTION

**<UPC-A ON>**



%0A44

**UPC-A OFF**



%0A40

# Configuration Guide

## Symbology Selection

---

### <UPC-E ON>



%0B08

### UPC-E OFF



%0B00

### <EAN-13/JAN-13/ISBN-13 ON>



%0A22

### EAN-13/JAN-13/ISBN-13 OFF



%0A20

# Configuration Guide

## Symbology Selection

---

### <EAN-8/JAN-8 ON>



%0A11

### EAN-8/JAN-8 OFF



%0A10

### <CODE 39 ON>



%0E08

### CODE 39 OFF



%0E00

# Configuration Guide

## Symbology Selection

---

### <CODE 128 ON>



%0F08

### CODE 128 OFF



%0F00

### <CODABAR/NW7 ON>



%0J08

### CODABAR/NW7 OFF



%0J00



# Configuration Guide

## Symbology Selection

---

### <Interleaved 25 ON>



%0GO8

### Interleaved 25 OFF



%0GO0

### Industrial 25 ON



%0HO8

### <Industrial 25 OFF>



%0HO0

# Configuration Guide

## Symbology Selection

---

### Matrix 25 ON



%0I08

### <Matrix 25 OFF>



%0I00

### CODE 93 ON



%0K08

### <CODE 93 OFF>



%0K00

# Configuration Guide

## Symbology Selection

---

### CODE 11 ON



%0LO8

### <CODE 11 OFF>



%0LO0

### China Post ON



%0MO8

### <China Post OFF>



%0MO0

# Configuration Guide

## Symbology Selection

---

### **MSI/PLESSEY ON**



%0NO8

### **<MSI/PLESSEY OFF>**



%0NO0

### **Telepen ON**



%0TO8

### **<Telepen OFF>**



%0TO0

# Configuration Guide

## Symbology Selection

---

### GS1 DataBar Omnidirectional ON



%0U08

### <GS1 DataBar Omnidirectional OFF>



%0U00

### GS1 DataBar Limited ON



%0V08

### <GS1 DataBar Limited OFF>



%0V00

# Configuration Guide

## Symbology Selection

---

### GS1 DataBar Expanded ON



%0W08

### <GS1 DataBar Expanded OFF>



%0W00

## B. 2D SYMBOLOGY SELECTION

### Select All Bar Codes



%1A/+

# Configuration Guide

## Symbology Selection

---

### Aztec ON



%%012

### <Aztec OFF>



%%022

### <Data Matrix ON>



%%016

### Data Matrix OFF



%%026



# Configuration Guide

## Symbology Selection

---

### MicroPDF417 ON (Optional)



%%01D

### <MicroPDF417 OFF>



%%02D

# Configuration Guide

## Symbology Selection

---

### <PDF417 ON>



%%01F

### PDF417 OFF



%%02F

### <QR Code ON>



%%01I

### QR Code OFF



%%02I

# Configuration Guide

## Symbology Selection

---

### Micro QR Code ON



%%01M

### <Micro QR OFF>



%%02M

### Han Xin Code ON (Optional)



%%01L

### <Han Xin Code OFF>



%%02L

# Configuration Guide

## Symbology Selection

---

### **Grid Matrix Code ON (Optional)**



%%01N

### **<Grid Matrix Code OFF>**



%%02N

## Chapter 11 UPC/EAN/JAN

## A. READING TYPE

### UPCA=EAN13 ON



%0AK4

### <UPCA=EAN13 OFF>



%0AK0

### ISBN-10 Enable



%0B88

### <ISBN-13 Enable>



%0B80

# Configuration Guide

## UPC/EAN/JAN

---

### ISSN Enable



%0B44

### <ISSN Disable>



%0B40

### Decode with Supplemental



%0100

### <Auto discriminate Supplemental>



%0108

# Configuration Guide

## UPC/EAN/JAN

---

### Expand UPC-E Enable



%0BH1

### <Expand UPC-E Disable>



%0BH0

### EAN8=EAN13 Enable



%0A08

### <EAN8=EAN13 Disable>



%0A00



# Configuration Guide

## UPC/EAN/JAN

---

### UCC Coupon Extended Code Enable



%0D12

### <UCC Coupon Extended Code Disable>



%0D10

### GTIN Format Enable



%0X44

### <GTIN Format Disable>



%0X40

## B. SUPPLEMENTAL SETUP

**<Not Transmit>**



%0B33

**Transmit Supplemental 2 Digits**



%0B31

**Transmit Supplemental 5 Digits**



%0B32

## Configuration Guide

### UPC/EAN/JAN

---

#### Transmit Supplemental 2&5 Digits



%0B30

## C. CHECK DIGIT TRANSMISSION

**<UPC-A Check Digit Transmission ON>**



%0A12

**UPC-A Check Digit Transmission OFF**



%0A10

# Configuration Guide

## UPC/EAN/JAN

---

### <UPC-E Check Digit Transmission ON >



%0B12

### UPC-E Check Digit Transmission OFF



%0B10

### <EAN-8 Check Digit Transmission ON>



%0A88

### EAN-8 Check Digit Transmission OFF



%0A80

# Configuration Guide

## UPC/EAN/JAN

---

### <EAN-13 Check Digit Transmission ON>



%0AH1

### EAN-13 Check Digit Transmission OFF



%0AH0

### ISSN Check Transmission ON



%0BK4

### <ISSN Check Transmission OFF>



%0BK0

## Chapter 12 Code 39

## A. TYPE OF CODE

### <Standard>



%0EH1

### Full ASCII



%0EH0

### <Italian Pharmacy/Code 32 OFF>



%0E80

### Italian Pharmacy/Code 32 ON



%0E88



## B. CHECK DIGIT TRANSMISSION

**<Do Not Calculate Check Digit>**



%0EM2

**Calculate Check Digit & Transmit**



%0EM6

**Calculate Check Digit & Not Transmit**



%0EM4

## C. OUTPUT START/STOP CHARACTER

**Enable**



%0E44

**<Disable>**



%0E40

## D. DECODE ASTERISK

**Enable**



%0E22

**<Disable>**



%0E20

## E. SETUP CODE LENGTH

**<Variable>**



%4E1+

### 1. Fix Length 1st Set Begin



%4E00

**2. Decimal Value**  
(Appendix C)

### 3. Fix Length 1st Set Complete



%4E01

# Configuration Guide

## Code 39

---

### 1. Fix Length 2nd Set Begin



%4E00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Set Complete



%4E02

### 1. Minimum Length Begin



%2+/-

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2C0+

## Chapter 13 Code 128

## A. READING TYPE

### UCC/EAN-128 Enable



%0F44

### <UCC/EAN-128 Disable>



%0F40

## Configuration Guide

### Code 128

---

#### Code ID ]C1 Enable



%0F22

#### <Code ID ]C1 Disable>



%0F20

#### Group Separators (GS) Enable



%0F11

#### <Group Separators (GS) Disable>



%0F10

## B. CHECK DIGIT TRANSMISSION

**<Do Not Calculate Check Digit>**



%0FN1

**Calculate Check Digit & Transmit**



%0FN7

**Calculate Check Digit & Not Transmit**



%0FN5



## C. APPEND FNC2

**ON**



%0F88

**<OFF>**



%0F80

## D. SETUP CODE LENGTH

<Variable>



%4F1+

### 1. Fix Length 1st Set Begin



%4F00

2. Decimal Value  
(Appendix C)

### 3. Fix Length 1st Set Complete



%4F01

# Configuration Guide

## Code 128

---

### 1. Fix Length 2nd Set Begin



%4F00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Set Complete



%4F02

### 1. Minimum Length Begin



%2+ -/

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2C1+

## Chapter 14 Interleaved 25

## A. CHECK DIGIT TRANSMISSION

**<Do Not Calculate Check Digit>**



%0GN3

**Calculate Check Digit & Transmit**



%0GN7

**Calculate Check Digit & Not Transmit**



%0GN5

## B. SETUP NUMBER OF CHARACTERS

<Even>



%0G88

Odd



%0G80

## C. BRAZILLIAN BANKING CODE

**<Disable>**



%0G40

**Enable**



%0G44

## D. SETUP CODE LENGTH

<Variable>



%4G1+

### 1. Fix Length 1st Begin



%4G00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%4G01



# Configuration Guide

## Interleaved 25

---

### 1. Fix Length 2nd Begin



%4G00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%4G02

### 1. Minimum Length Begin



%2+/-

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2C2+

## **Chapter 15 Industrial 25**

## A. READING TYPE

### IATA25 ENABLE



%0H44

### <IATA25 DISABLE>



%0H40

## B. CHECK DIGIT TRANSMISSION

<Do Not Calculate Check Digit>



%0HN3

Calculate Check Digit & Transmit



%0HN7

Calculate Check Digit & Not Transmit



%0HN5

## C. SETUP CODE LENGTH

<Variable>



%4H1+

### 1. Fix Length 1st Begin



%4H00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%4H01

# Configuration Guide

## Industrial 25

---

### 1. Fix Length 2nd Begin



%4H00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%4H02

### 1. Minimum Length Begin



%2+/-

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2C3+

## Chapter 16 Matrix 25

## A. CHECK DIGIT TRANSMISSION

**<Do Not Calculate Check Digit>**



%0IN3

**Calculate Check Digit & Transmit**



%0IN7

**Calculate Check Digit & Not Transmit**



%0IN5



## B. SETUP CODE LENGTH

<Variable>



%411+

### 1. Fix Length 1st Begin



%4100

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%4101

# Configuration Guide

## Matrix 25

---

### 1. Fix Length 2nd Begin



%4I00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%4I02

### 1. Minimum Length Begin



%2+ -/

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2C4+

## Chapter 17 Codabar/NW7

## A. START/STOP CHARACTERS

**ON**



%0JH1

**<OFF>**



%0JH0

## B. TRANSMISSION TYPE OF START/STOP

**<A/B/C/D Start>**



%04VF

**<A/B/C/D Stop>**



%04FF

# Configuration Guide

## Codabar/NW7

---

### A Start



%04V1

### A Stop



%04F1

### B Start



%04V2

### B Stop



%04F2

# Configuration Guide

## Codabar/NW7

---

### C Start



%04V4

### C Stop



%04F4

### D Start



%04V8

### D Stop



%04F8

## C. SETUP CODE LENGTH

<Variable>



%4J1+

### 1. Fix Length 1st Begin



%4J00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%4J01



# Configuration Guide

## Codabar/NW7

---

### 1. Fix Length 2nd Begin



%4J00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%4J02

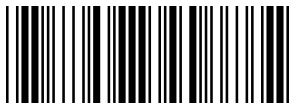
### 1. Minimum Length Begin



%2+/-

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2C5+

## Chapter 18 Code 93

## A. CHECK DIGIT TRANSMISSION

### Do Not Calculate Check Digit



%0KN3

### <Calculate 2 Check Digits & Not Transmit>



%0KN4

## B. SETUP CODE LENGTH

**<Variable>**



%4K1+

### 1. Fix Length 1st Begin



%4K00

2. Decimal Value  
(Appendix C)

### 3. Fix Length 1st Complete



%4K01

# Configuration Guide

## Code 93

---

### 1 .Fix Length 2nd Begin



%4K00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%4K02

### 1. Minimum Length Begin



%2+ -/

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2C6+

## Chapter 19 Code 11

## A. CHECK DIGIT TRANSMISSION

**<Do Not Calculate Check Digit>**



%0LN3

**Calculate 1 Check Digit & Transmit**



%0LN7

**Calculate 1 Check Digit & Not Transmit**



%0LN5

## Configuration Guide

### Code 11

---

#### Calculate 2 Check Digit & Transmit



%0LN6

#### Calculate 2 Check Digit & Not Transmit



%0LN4



## B. SETUP CODE LENGTH

<Variable>



%4L1+

### 1. Fix Length 1st Begin



%4L00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%4L01

# Configuration Guide

## Code 11

---

### 1. Fix Length 2nd Begin



%4L00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%4L02

### 1. Minimum Length Begin



%2+ -/

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2C7+

## Chapter 20 MSI/PLESSEY

## A. CHECK DIGIT TRANSMISSION

**<Do Not Calculate Check Digit>**



%0NN3

**Calculate Check Digit & Transmit**



%0NN7

**Calculate Check Digit & Not Transmit**



%0NN5

## B. SETUP CODE LENGTH

<Variable>



%4N1+

### 1. Fix Length 1st Begin



%4N00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%4N01

# Configuration Guide

## MSI/PLESSEY

---

### 1. Fix Length 2nd Begin



%4N00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%4N02

### 1. Minimum Length Begin



%2+/-

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2C9+

## Chapter 21 Telepen

## A. TYPE OF CODE

### <Full ASCII Mode>



%0T80

### Compressed Numeric Mode



%0T88



## B. CHECK DIGIT TRANSMISSION

**<Do Not Calculate Check Digit>**



%0TN3

**Calculate Check Digit & Transmit**



%0TN7

**Calculate Check Digit & Not Transmit**



%0TN5

## C. SETUP CODE LENGTH

<Variable>



%4T1+

### 1. Fix Length 1st Begin



%4T00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%4T01

# Configuration Guide

## Telepen

---

### 1. Fix Length 2nd Begin



%4T00

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%4T02

### 1. Minimum Length Begin



%2+/-

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2CF+

## Chapter 22 GS1 DataBar

## A. GS1 DATABAR OMNIDIRECTIONAL

**<Transmit Check Digit>**



%0UN7

**Don't Transmit Check Digit**



%0UN5

## Configuration Guide

### GS1 DataBar> DataBar Omnidirectional

---

#### <Transmit Application ID>



%0U88

#### Don't Transmit Application ID



%0U80

#### <Transmit Symbology ID>



%0U44

#### Don't Transmit Symbology ID



%0U40

## **B. GS1 DATABAR LIMITED**

**<Transmit Check Digit>**



%0VN7

**Don't Transmit Check Digit**



%0VN5

## Configuration Guide

### GS1 DataBar > GS1 DataBar LIMITED

---

#### <Transmit Application ID>



%0V88

#### Don't Transmit Application ID



%0V80

#### <Transmit SymbologyID>



%0V44

#### Don't Transmit Symbology ID



%0V40



## C. GS1 DATABAR EXPANDED

< Transmit Symbology ID>



%0W44

Don't Transmit Symbology ID



%0W40

## Chapter 23 Aztec

## A. SETUP CODE LENGTH

**<Variable>**



%%22+

### 1. Fix Length 1st Begin



%%22L

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%%22Y

# Configuration Guide

## Aztec

---

### 1. Fix Length 2nd Begin



%%22L

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%%22Z

### 1. Minimum Length Begin



%%2+/-

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%%2CA+

## Chapter 24 Data Matrix

## A. SETUP CODE LENGTH

<Variable>



%%26+

### 1. Fix Length 1st Begin



%%26L

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%%26Y

# Configuration Guide

## Data Matrix

---

### 1. Fix Length 2nd Begin



%%26L

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%%26Z

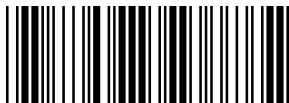
### 1. Minimum Length Begin



%2+/-

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2CC+

## B. READING TYPE

### GS1-Data Matrix Enable



%%3R1

<GS1-Data Matrix Disable>



%%3R0

### Code ID Jd2 Enable



%%3R3

<Code ID Jd2 Disable>



%%3R2



## Configuration Guide

### Data Matrix

---

#### Group Separator (GS) Enable



%%3R5

#### <Group Separators (GS) Disable>



%%3R4

## Chapter 25 PDF417

## A. SETUP CODE LENGTH

<Variable>



%%2F+

### 1. Fix Length 1st Begin



%%2FL

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%%2FY

### 1. Fix Length 2nd Begin



%%2FL

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%%2FZ

### 1. Mimum Length Begin



%2+/-

### 2. Decimal Value (Appendix C)

### 3. Mimum Length Complete



%2CJ+

## **Chapter 26 Micro PDF417 (Optional)**

## A. SETUP CODE LENGTH

<Variable>



%%2D+

### 1. Fix Length 1st Begin



%%2DL

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%%2DY

### 1. Fix Length 2nd Begin



%%2DL

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%%2DZ

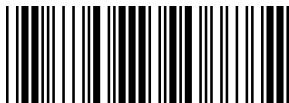
### 1. Minimum Length Begin



%%2+/-

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%%2CE+

## Chapter 27 QR Code



## A. SETUP CODE LENGTH

<Variable>



%%2I+

### 1. Fix Length 1st Begin



%%2IL

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%%2IY

# Configuration Guide

## QR Code

---

### 1. Fix Length 2nd Begin



%%2IL

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%%2IZ

### 1. Minimum Length Begin



%%2+/-

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%%2CG+

## A. READING TYPE

### GS1-QR Code Enable



%%3Q1

<GS1-QR Code Disable>



%%3Q0

### Code ID ]Q3 Enable



%%3Q3

<Code ID ]Q3 Disable>



%%3Q2

## Configuration Guide

### QR Code

---

#### Group Separator (GS) Enable



%%3Q5

#### <Group Separator (GS) Disable>



%%3Q4

## Chapter 28 Micro QR Code

## A. SETUP CODE LENGTH

<Variable>



%%2N+

### 1. Fix Length 1st Begin



%%2NL

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%%2NY

# Configuration Guide

## Micro QR Code

---

### 1. Fix Length 2nd Begin



%%2NL

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%%2NZ

### 1. Minimum Length Begin



%2+/-

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2CH+

## **Chapter 29 Han Xin Code (Optional)**



## A. SETUP CODE LENGTH

<Variable>



%%2L+

### 1. Fix Length 1st Begin



%%2LL

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%%2LY

# Configuration Guide

## Han Xin Code

---

### 1. Fix Length 2nd Begin



%%2LL

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%%2LZ

### 1. Minimum Length Begin



%2+/-

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2CI+

## **Chapter 30 Grid Matrix (Optional)**

## A. SETUP CODE LENGTH

<Variable>



%%20+

### 1. Fix Length 1st Begin



%%20L

### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



%%20Y

# Configuration Guide

## Grid Matrix

---

### 1. Fix Length 2nd Begin



%%2OL

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%%2OZ

### 1. Minimum Length Begin



%2+/-

### 2. Decimal Value (Appendix C)

### 3. Minimum Length Complete



%2CK+

## Chapter 31 Language Selection

## Configuration Guide

### Language Selection

---

This language selection applies only to the USB HID (Human Interface Device Keyboard Emulation) devices.

#### <US English Keyboard >



%0ZV0

#### UK English Keyboard



%0ZV1

#### Italian Keyboard



%0ZV2

## Configuration Guide

### Language Selection

---

#### Spanish Keyboard



%0ZV3

#### French Keyboard



%0ZV4

#### German Keyboard



%0ZV5



## Configuration Guide

### Language Selection

---

#### Swedish Keyboard



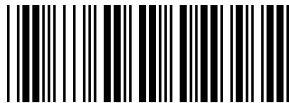
%0ZV6

#### Swiss Keyboard



%0ZV7

#### Hungarian Keyboard



%0ZV8

## Configuration Guide

### Language Selection

---

#### Japanese Keyboard



%0ZV9

#### Belgian Keyboard



%0ZVA

#### Portuguese Keyboard



%0ZVB

## Configuration Guide

### Language Selection

---

#### Danish Keyboard



%0ZVC

#### Dutch Keyboard



%0ZVD

#### Turkish Keyboard



%0ZVE

## Configuration Guide

### Language Selection

---

#### Reserved



%0ZVF

## Chapter 32 Bar Code ID

Code ID identifies the code type of a scanned bar code. This is useful when the decoder is decoding more than one code type. In addition to any single prefix already added, the code ID characters are inserted between the prefix and the decoded data.

Select no Code ID, default Code ID, AIM Code ID, or user defined Code ID to meet required application.

For default Code Identifiers and AIM Code Identifiers, see Appendix B.

## A. IDENTIFIER FORMAT

ON



%00H1

<OFF>



%00H0

<Default Code Identifiers>



%913+

AIM Code Identifiers



%00H2

# Configuration Guide

## Bar Code ID

---

### B. USER DEFINE CODE ID

To set the user define code ID:

1. Scan symbology “Begin”.
2. Go to ASCII Characters in Appendix D. Scan the barcode(s) that represents the desired code ID.
3. Scan symbology “Complete”.

**Note:** The maximum defined characters for Code ID are 3.

#### 1. UPC-A Begin



%91A+

#### 2. ASCII Characters (Appendix D)

#### 3. UPC-A Complete



%91A0

# Configuration Guide

## Bar Code ID

---

### 1. UPC-E Begin



%91B+

### 2. ASCII Characters (Appendix D)

### 3. UPC-E Complete



%91B0



# Configuration Guide

## Bar Code ID

---

### 1. EAN-13/JAN-13 Begin



%91Y+

### 2. ASCII Characters (Appendix D)

### 3. EAN-13/JAN-13 Complete



%91Y0

### 1. EAN-8/JAN-8 Begin



%91Z+

### 2. ASCII Characters (Appendix D)

### 3. EAN-8/JAN-8 Complete



%91Z0

# Configuration Guide

## Bar Code ID

---

### 1. CODE 39 Begin



%91E+

### 2. ASCII Characters (Appendix D)

### 3. CODE 39 Complete



%91E0

### 1. CODE 128 Begin



%91F+

### 2. ASCII Characters (Appendix D)

### 3. CODE 128 Complete



%91F0

# Configuration Guide

## Bar Code ID

---

### 1. CODABAR/NW7 Begin



%91J+

### 2. ASCII Characters (Appendix D)

### 3. CODABAR/NW7 Complete



%91J0

### 1. Interleaved 25 Begin



%91G+

### 2. ASCII Characters (Appendix D)

### 3. Interleaved 25 Complete



%91G0

# Configuration Guide

## Bar Code ID

---

### 1. Industrial 25 Begin



%91H+

### 2. ASCII Characters (Appendix D)

### 3. Industrial 25 Complete



%91H0

### 1. Matrix 25 Begin



%91I+

### 2. ASCII Characters (Appendix D)

### 3. Matrix 25 Complete



%91I0

# Configuration Guide

## Bar Code ID

---

### 1. CODE 93 Begin



%91K+

### 2. ASCII Characters (Appendix D)

### 3. CODE 93 Complete



%91K0

### 1. CODE 11 Begin



%91L+

### 2. ASCII Characters (Appendix D)

### 3. CODE 11 Complete



%91L0

# Configuration Guide

## Bar Code ID

---

### 1. China Post Begin



%91M+

### 2. ASCII Characters (Appendix D)

### 3. China Post Complete



%91M0

### 1. MSI/PLESSEY Begin



%91N+

### 2. ASCII Characters (Appendix D)

### 3. MSI/PLESSEY Complete



%91N0

# Configuration Guide

## Bar Code ID

---

### 1. Telepen Begin



%91T+

### 2. ASCII Characters (Appendix D)

### 3. Telepen Complete



%91T0

# Configuration Guide

## Bar Code ID

---

### 1. GS1 Databar Omnidirectional Begin



%91U+

### 2. ASCII Characters (Appendix D)

### 3. GS1 Databar Omnidirectional Complete



%91U0

### 1. GS1 Databar Limited Begin



%91V+

### 2. ASCII Characters (Appendix D)

### 3. GS1 Databar Limited Complete



%91V0



# Configuration Guide

## Bar Code ID

---

### 1. GS1 Databar Expanded Begin



%91W+

### 2. ASCII Characters (Appendix D)

### 3. GS1 Databar Expanded Complete



%91W0

# Configuration Guide

## Bar Code ID

---

### 1. UCC/EAN-128 Begin



%91R+

### 2. ASCII Characters (Appendix D)

### 3. UCC/EAN-128 Complete



%91R0

### 1. Reserved Begin



%91S+

### 2. ASCII Characters (Appendix D)

### 3. Reserved Complete



%91S0

# Configuration Guide

## Bar Code ID

---

### 1. Aztec Begin



%%03A

### 2. ASCII Characters (Appendix D)

### 3. Aztec Complete



%%03N

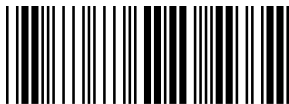
### 1. Data Matrix Begin



%%03C

### 2. ASCII Characters (Appendix D)

### 3. Data Matrix Complete



%%03P

# Configuration Guide

## Bar Code ID

---

### 1. PDF417 Begin



%%03F

### 2. ASCII Characters (Appendix D)

### 3. PDF417 Complete



%%03S

# Configuration Guide

## Bar Code ID

---

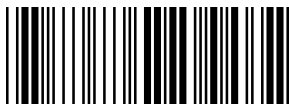
### 1. Micro PDF417 Begin (Optional)



%%03E

### 2. ASCII Characters (Appendix D)

### 3. Micro PDF417 Complete



%%03R

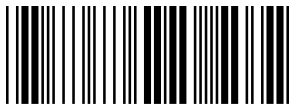
### 1. QR Code Begin



%%03G

### 2. ASCII Characters (Appendix D)

### 3. QR Code Complete



%%03T

# Configuration Guide

## Bar Code ID

---

### 1. Micro QR code Begin



%%03H

### 2. ASCII Characters (Appendix D)

### 3. Micro QR code Complete



%%03U

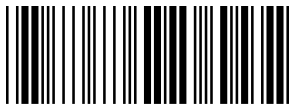
### 1. Han Xin Code Begin (Optional)



%%03I

### 2. ASCII Characters (Appendix D)

### 3. Han Xin Code Complete



%%03V

# Configuration Guide

## Bar Code ID

---

### 1. Grid Matrix Code Begin (Optional)



%%03J

### 2. ASCII Characters (Appendix D)

### 3. Grid Matrix Code Complete



%%03W

## Chapter 33 Accuracy



### ACCURACY

<1 Time>



%0130

**2 Times**



%0131

**3 Times**



%0132

**4 Times**



%0133

## Chapter 34 Beep

# Configuration Guide

## Beep

---

### A. BEEP TONE

<High>



%01J3

Medium



%01J2

Low



%01J1

Off



%01J0

### B. BEEP DURATION

The value is from 1 - 255. (Default is 10). Each level=10ms, e.g. 1=10ms, 2=20ms, 10=100ms..., 255=2550ms=2.55sec.

To configure beep duration, scan:

1. Scan "Begin".
2. Go to Decimal Value Table in Appendix C. Scan barcode(s) that represents the duration value.
3. Scan "Complete".

#### 1. Begin



%%371

#### 2. Decimal Value (1-255) (Appendix C)

#### 3. Complete



%%372

## Configuration Guide

### Beep

---

## C. SILENT TIME BETWEEN BEEPS

The value is from 1 - 255. (Default is 3). Each level=10ms, e.g. 1=10ms, 2=20, 3=30ms..., 255==2550ms=2.55sec.

To configure the value, scan:

1. Scan "Begin".
2. Go to Decimal Value Table in Appendix C. Scan barcode(s) that represents the value.
3. Scan "Complete"

### 1. Begin



%%381

### 2. Decimal Value (1-255) (Appendix C)

### 3. Complete



%%382

## D. BEEP OPTIONS

### <Good Read Beep ON>



%%391

### Good Read Beep OFF



%%39A

### <Error Beep ON>



%%392

### Error Beep OFF



%%39B

# Configuration Guide

## Beep

---

### <Power up Beep ON>



%0C44

### Power up Beep OFF



%0C40

### <Configure Beep ON>



%%393

### Configure Beep OFF



%%39C

## **Chapter 35 Sensitivity of Continuous Reading**



## Configuration Guide

### Sensitivity of Continuous Reading

---

#### A. QUICK SETTING

**<Fast>**



%0388

**Slow**



%0380

## Configuration Guide

### Sensitivity of Continuous Reading

---

## B. AVOID SAME CODE DOUBLE READING

### Enable



%0244

### <Disable>



%0240

## **C. SAME CODE DELAY INTERVAL**

This is to configure the length of delay time prior to an identical barcode can be rescanned. The value is defined from 1 - 50 that represents 100ms - 5 seconds in 100ms interval. The default value is 5 (0.5 seconds). This setting is only applicable to continuous and flash reading modes.

To setup same code delay reading interval:

1. Scan "Begin".
2. Go to Decimal Value Table in Appendix C. Scan barcode(s) that represents the delay reading interval. The range is from 1 to 50. An interval represents 0.1 second. Therefore, the available range is from 0.1 to 5 seconds.
3. Scan "Complete".

# Configuration Guide

## Sensitivity of Continuous Reading

---

### 1. Begin



%3000

### 2. Decimal Value (1-50) (Appendix C)

### 3. Complete



%3001

## **Chapter 36 Indicator/Aimer/Illumination**

## Configuration Guide

### Indicator/Aimer/Illumination

---

#### A. INDICATOR

<Enable>



%0208

Disable



%0200

#### B. AIMER

<Enable>



%02K4

Disable



%02K0

## C. ILLUMINATION

<Enable>



%0212

**Disable**



%0210

## D. AUTOMATIC ILLUMINATION BRIGHTNESS

**<Enable>**



%02H1

**Disable**



%02H0



## Configuration Guide

### Indicator/Aimer/Illumination

---

## E. ILLUMINATION BRIGHTNESS

This setting is activated when 'Automatic Illumination Brightness' is disabled. The brightness value is from 1 - 100. (Default is 50)

To configure fixed brightness, scan:

1. Scan "Begin".
2. Go to Decimal Value Table in Appendix C. Scan barcode(s) that represents the brightness value.
3. Scan "Complete"

### 1. Begin



%%3E1

### 2. Decimal Value (1-100) (Appendix C)

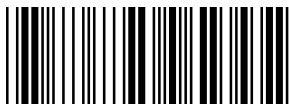
### 3. Complete



%%3E2

## F. INDICATOR AFTER GOOD READ

**<Normal OFF>**



%%3K1

**Normal ON**



%%3K0

## G. INDICATOR FLASHING

### Enable



%%311

### <Disable>



%%310

## H. ILLUMINATION FLASHING AFTER GOOD READ

**Enable**



%%3J1

**<Disable>**



%%3J0

## I. AIMER ALWAYS ON

### Enable



%%3L1

### <Disable>



%%3L0

## Chapter 37 Image Type

## J. INVERSED IMAGE

**<Disable>**



%%3B0

**Inversed Image Only**



%%3B1

**Both**



%%3B2

## K. MIRRORED IMAGE

**<Disable>**



%%3B3

**Mirrored Image Only**



%%3B4

**Both**



%%3B5



## **Chapter 38 Miscellaneous**

### **A. AUTOSENSE SENSITIVITY**

The sensitivity value is from 80 to 90. (Default is 85.)

To configure sensitivity, scan:

1. Scan "Begin".
2. Go to Decimal Value Table in Appendix C. Scan barcode(s) that represents the sensitivity value.
3. Scan "Complete"

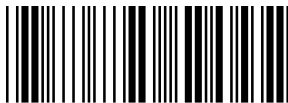
#### **1.Begin**



%%301

2. **Decimal Value (80-90)**  
(Appendix C)

#### **3. Complete**



%%302

## B. REVERSE OUTPUT CHARACTERS

**<Disable>**



%03H0

**Enable**



%03H1

### C. POWER SAVING MODE

<Disable>



%%3D0

Enable

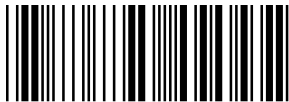


%%3D1

### D. TIME TO ENTER POWER SAVING

The value is from 1 to 120. (Default is 20). Each level=0.5min, e.g. 1=0.5min, 2=1min, 20=10min..., 120=60min.

#### 1. Begin



%%3D2

2. Decimal Value (1-120)  
(Appendix C)

#### 3. Complete



%%3D3

## E. OUTPUT NON-PRINTABLE CHARS

**<Disable>**



%0310

**Enable**



%0312

## **Chapter 39 Multi-Byte Character Output**

## A. CODEPAGES

Scan corresponding codepage to read multi-byte encoded barcodes. Only **ONE codepage** is activated at a time. “Send Character by ALT Methods” should be enabled simultaneously.

Scan: “Send Character by ALT Method -> (codepage)”

<None>



%3C0

**BIG-5 Traditional Chinese**



%3C1

**GB2312 Simplified Chinese**



%3C2

# Configuration Guide

## Multi-Byte Character Output

---

### Shift-JIS Japanese



%%3C3

### KSC5601 Korean



%%3C4

### UTF8 Traditional Chinese



%%3C5

### UTF8 Simplified Chinese



%%3C6



# Configuration Guide

## Multi-Byte Character Output

---

### UTF8 Japanese



%%3C7

### UTF8 Korean



%%3C8

### UTF8 Cyrillic



%%3C9

### UTF8 Central European



%%3CA

## **Chapter 40 Bluetooth (For BT Scanner)**

### A. SET BT PARAMETER DEFAULT

#### BT Parameter Default.



%+\$000C\$

Scan: "BT Parameter Default -> Save Parameters"

### B. BLUETOOTH PROFILE

When connected via Bluetooth, select one of the following Bluetooth predefined profiles.

#### <SPP Master Mode>



%A1J3

Follow the steps below to setup the connection between scanner and cradle in SPP Master Mode.

- 1) Scan "**SPP Master Mode**".
- 2) Scan the Bluetooth **MAC address barcode** located on the bottom of cradle.
- 3) When the Bluetooth MAC address barcode is successfully scanned, the scanner sounds 3 short beeps with green LED flash once.
- 4) Wait approximately 20 seconds for BT pairing process.
- 5) When the connection is successful, the scanner sounds an ascending tone and with blue LED flashes slowly, and the cradle blue LED is continuous on.

## SPP Slave Mode



%A1J2

Follow the steps below to setup the connection between scanner and host in SPP Slave Mode.

- 1) Scan "**SPP Slave Mode**".
- 2) Search the scanner by host. Enter the pin codes (default 00:00:00) to setup the pairing when prompt.
- 3) When paired, build up the connection by application program on host.
- 4) When the connection is successful, the scanner sounds an ascending tone with blue LED flashes slowly.

## HID Slave Mode



%A1J0

Follow the steps below to setup the connection between scanner and host in HID Slave Mode.

- 1) Scan “**HID Slave Mode**”.
- 2) Search the scanner by host. Enter the pin codes to setup the pairing when prompt. Go to NUMERIC KEYPAD TABLE in **Appendix E** to scan number 0-9 for pin codes.
- 3) When connection is successful, the scanner sounds an ascending tone with blue LED flashes slowly

### C. OUT OF RANGE

When BT signal is out of transmission range, the BT connection will be lost. While “Out of Range” is enabled, the scanned data will be stored in out-of-range memory. All the stored data will be transmitted to host upon the BT is reconnected, and the data stored in out-of-range memory will be cleared. While “Out of Range” is disabled and the BT signal is out of transmission range, the scanned data will be discarded.

**<Enable>**



%A144

**Disable**



%A140

## D. CRADLE ID VISIBILITY

**<Enable>**



%A280

**Disable**



%A281

### E. AUTO RECONNECT

When scanner is back from out-of-BT-connection distance to BT-connection range, the scanner automatically resumes BT connection to host.

**<Enable>**



%A188

**Disable**



%A180



### F. BACK TO RANGE AND SEND DATA

When scanner is back to BT connection range, it automatically resumes connection and the stored data will be sent to host. Ensure the connection quality is secured and press trigger to start sending data by setting “Trigger to Send”. The scanner automatically sends data upon the connection is resumed by setting “Auto Send”.

#### <Trigger to Send>



%A4K0

#### Auto Send



%A4K4

### G. VIRTUAL KEYBOARD

When connect to iOS in HID Slave Mode, double click trigger button to pop up/dismiss the virtual keyboard.

**<Enable>**



%A408

**Disable**



%A400

## H. SLEEP MODE

The scanner is equipped with sleep mode function to save battery energy when the scanner is not used for 1 minute or 10 minutes. During sleep mode, all the functions and connection will be halted until pressing the trigger button. The communication with cradle or host will be reconnected.

### 1 min



%A272

### 10 min



%A273

### <OFF >



%A270

## I. BATCH MODE

**ON**



%A108

**<OFF>**



%A100

## Configuration Guide

### Bluetooth

---

“\*\*\*\*” indicates “Quick Setting Barcode”.

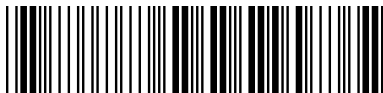
The function can be executed directly by scanning barcode instead of doing the general programming process.

\*\*\*Delete Last Data



%+\$0000\$

\*\*\*Batch Data Read



%+\$000H\$

\*\*\*Batch Data Clear



%+\$000I\$

### J. FIRMWARE VERSION

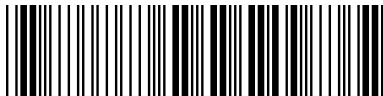
Display the firmware version of scanner. Scan below barcodes directly without general programming process.

#### Scanner



#+\$000K\$

#### Cradle



#+\$000Y\$

### **K. MAC ADDRESS**

Display the firmware version of scanner. Scan below barcodes directly without general programming process.

#### Scanner MAC Address



#+\$000L\$

#### Cradle MAC Address



#+\$001P\$

## Chapter 41 Data Editing



## A. IDC COMPOSITE CODE

The scanned data can be edited by Intelligent Data Composer (IDC) as required output format. The data editing rules can be generated by IDC as a composite QR code. Simply scan this QR code to apply all editing rules to output data.

**<Disable>**



%%3A0

**Enable**



%%3A1

## **Chapter 42 Customer Define Strings**

## A. READ STRINGS

The customers can define their own strings and simply read the following barcodes to directly output the pre-defined strings. The strings should be pre-configured by software. 10 strings are available.

### Read String 0



### Read String 1



### Read String 2



# Configuration Guide

## Customer Define Strings

---

### Read String 3



%%063

### Read String 4



%%064

### Read String 5



%%065

# Configuration Guide

## Customer Define Strings

---

### Read String 6



%%066

### Read String 7



%%067

### Read String 8



%%068

# Configuration Guide

## Customer Define Strings

---

### Read String 9



%%069

## APPENDIX A: Default Parameters

|                               |                  |
|-------------------------------|------------------|
| <b>Interface Selection</b>    |                  |
| USB HID Keyboard Mode         | Disable          |
| <b>Reading Surface</b>        | General          |
| <b>RS232 Parameter</b>        |                  |
| BAUD Rate                     | 115200           |
| Data Bits                     | 8 Data Bits      |
| Stop Bits                     | 1 Bit            |
| Parity                        | None             |
| Handshaking                   | RTS/CTS Disable  |
|                               | ACK/NAK Disable  |
|                               | XON/XOFF Disable |
| <b>Keyboard Parameter</b>     |                  |
| Upper/Lower Case              | Normal           |
| Caps Lock Detection           | Disable          |
| Send Character By ALT Method  | Disable          |
| Select Numerical Pad          | OFF              |
| <b>Output Characters</b>      |                  |
| Terminator                    | CR + LF          |
| Time-out Between Characters   | 0 ms             |
| <b>Symbologies</b>            |                  |
| <b>1D Symbology Selection</b> |                  |
| UPC-A                         | ON               |
| UPC-E                         | ON               |
| EAN-13/JAN-13/ISBN-13         | ON               |
| EAN-8/JAN-8                   | ON               |
| Code 39                       | ON               |
| Code 128                      | ON               |
| Codabar/NW7                   | ON               |
| Interleaved 25                | ON               |
| Industrial 25                 | OFF              |

|                                 |              |
|---------------------------------|--------------|
| Matrix 25                       | OFF          |
| CODE 93                         | OFF          |
| CODE 11                         | OFF          |
| China Post                      | OFF          |
| MSI/PLESSEY                     | OFF          |
| Telepen                         | OFF          |
| GS1 DataBar Omnidirectional     | OFF          |
| GS2 DataBar Limited             | OFF          |
| GS2 DataBar Expanded            | OFF          |
| <b>2D Symbology Selection</b>   |              |
| Aztec                           | OFF          |
| Data Matrix                     | ON           |
| PDF417                          | ON           |
| MicroPDF417 (Optional)          | OFF          |
| QR Code                         | ON           |
| Micro QR Code                   | OFF          |
| Han Xin Code (Optional)         | OFF          |
| Grid Matrix (Optional)          | OFF          |
| <b>UPC/EAN/JAN</b>              |              |
| UPCA=EAN13                      | Disable      |
| ISBN-10                         | Disable      |
| ISBN-13                         | Enable       |
| ISSN                            | Disable      |
| Auto discriminate Supplemental  | Enable       |
| Expand UPC-E                    | Disable      |
| EAN8=EAN13                      | Disable      |
| UCC Coupon Extended Code        | Disable      |
| GTIN Format                     | Disable      |
| Supplemental                    | Not Transmit |
| <b>Check Digit Transmission</b> |              |
| UPC-A Check Digit Transmission  | ON           |
| UPC-E Check Digit Transmission  | ON           |
| EAN-8 Check Digit Transmission  | ON           |



|                                 |   |
|---------------------------------|---|
| EAN-13 Check Digit Transmission | ON                                      |
| ISSN Check Transmission         | OFF                                     |
| <b>Code 39</b>                  |   |
| Italian Pharmacy/Code 32        | OFF                                     |
| Check Digit Transmission        | Not Calculate Check Digit               |
| Output Start/Stop Character     | Disable                                 |
| Decode Asterisk                 | Disable                                 |
| <b>Code 128</b>                 |   |
| UCC/EAN-128                     | Disable                                 |
| 'JCI' Code                      | Disable                                 |
| Group Separators (GS)           | Disable                                 |
| Check Digit Transmission        | Not Calculate Check Digit               |
| Append FNC2                     | OFF                                     |
| <b>Interleaved 25</b>           |   |
| Check Digit Transmission        | Not Calculate Check Digit               |
| Number of Character             | Even                                    |
| Brazilian Banking Code          | Disable                                 |
| <b>Industrial 25</b>            |   |
| IATA25                          | Disable                                 |
| Check Digit Transmission        | Not Calculate Check Digit               |
| <b>Matrix 25</b>                |   |
| Check Digit Transmission        | Not Calculate Check Digit               |
| <b>CODABAR/NW7</b>              |   |
| Start/Stop Characters           | OFF                                     |
| Start/Stop Transmission Type    | A/B/C/D Start                           |
|                                 | A/B/C/D Stop                            |
| <b>Code 93</b>                  |   |
| Check Digit Transmission        | Calculate 2 Check Digits & Not Transmit |
| <b>CODE 11</b>                  |   |
| Check Digit Transmission        | Not Calculate Check Digit               |
| <b>MSI/PLESSEY</b>              |   |
| Check Digit Transmission        | Not Calculate Check Digit               |

|                                    |                           |
|------------------------------------|---------------------------|
| <b>Telepen</b>                     |                           |
| Type of Code                       | Full ASCII Mode           |
| Check Digit Transmission           | Not Calculate Check Digit |
| <b>GS1 DataBar</b>                 |                           |
| <b>GS1 Databar Omnidirectional</b> |                           |
| Transmit Check Digit               | Enable                    |
| Transmit Application ID            | Enable                    |
| Transmit Symbology ID              | Enable                    |
| <b>GS1 Databar Limited</b>         |                           |
| Transmit Check Digit               | Enable                    |
| Transmit Application ID            | Enable                    |
| Transmit Symbology ID              | Enable                    |
| <b>GS1 Databar Expanded</b>        |                           |
| Transmit Symbology ID              | Enable                    |
| <b>Aztec</b>                       |                           |
| <b>Data Matrix</b>                 |                           |
| GS1-Data Matrix                    | Disable                   |
| Code ID ]d2                        | Disable                   |
| Group Separator (GS)               | Disable                   |
| <b>PDF417</b>                      |                           |
| <b>Micro PDF417 (Optional)</b>     |                           |
| <b>QR Code</b>                     |                           |
| GS1-QR Code                        | Disable                   |
| Code ID ]Q3                        | Disable                   |
| Group Separator (GS)               | Disable                   |
| <b>Micro QR Code</b>               |                           |
| <b>Han Xin (Optional)</b>          |                           |
| <b>Grid Matrix (Optional)</b>      |                           |
| Code Length for All Symbologies    | Variable                  |
| <b>Language Selection</b>          | US English Keyboard       |
| <b>Bar Code ID</b>                 |                           |
| Identifier Format                  | OFF                       |
| Code Identifiers-Default/AIM       | Default                   |

|                                       |                 |
|---------------------------------------|-----------------|
| <b>Accuracy</b>                       | 1 Time          |
| <b>Beep</b>                           |                 |
| Beep Tone                             | High            |
| Beep Duration                         | 10=100ms        |
| Silent Time Between Beeps             | 3=30ms          |
| Good Read Beep                        | ON              |
| Error Beep                            | ON              |
| Power up Beep                         | ON              |
| Configure Command Beep                | ON              |
| <b>INDICATOR/AIMER/ILLUMINATION</b>   |                 |
| Indicator                             | Enable          |
| Aimer                                 | Enable          |
| Illumination                          | Enable          |
| Automatic illumination Brightness     | Enable          |
| Illumination Brightness               | Default 50      |
| Indicator After Good Read             | Normal OFF      |
| Indicator Flashing                    | Disable         |
| Illumination Flashing After Good Read | Disable         |
| Aimer Always ON                       | Disable         |
| <b>Image Type</b>                     |                 |
| Inversed image                        | Disable         |
| Mirrored image                        | Disable         |
| <b>Miscellaneous</b>                  |                 |
| Autosense Sensitivity                 | 85              |
| Reverse Output Characters             | Disable         |
| Power Saving Mode                     | Disable         |
| Time to Enter Power Saving            | 20=10min        |
| Output Non-Printable Chars            | Disable         |
| <b>Multi-Byte Character Output</b>    | None            |
| <b>Bluetooth (For BT Scanner)</b>     |                 |
| Bluetooth Profile                     | SPP Master Mode |
| Out of Range                          | Enable          |

|                             |                 |
|-----------------------------|-----------------|
| Cradle ID Visibility        | Enable          |
| Auto Reconnect              | Enable          |
| Back to Range and Send Data | Trigger to Send |
| Virtual Keyboard            | Enable          |
| Sleep Mode                  | OFF             |
| Batch Mode                  | OFF             |

## APPENDIX B: Code Identifiers

### 1. Default Code Identifiers

| Code ID | Bar Code Type               |
|---------|-----------------------------|
| A       | UPC-A                       |
| B       | UPC-E                       |
| C       | EAN8/JAN8                   |
| D       | EAN13/JAN13                 |
| E       | Code 39                     |
| F       | Code 128                    |
| G       | Interleaved 25              |
| H       | Industrial 25               |
| I       | Matrix 25                   |
| J       | Codabar                     |
| K       | Code 93                     |
| M       | China Post                  |
| N       | MSI/Plessey                 |
| T       | Telepen                     |
| U       | GS1-Databar Omnidirectional |

|    |                      |
|----|----------------------|
| V  | GS1-Databar Limited  |
| W  | GS1-Databar Expanded |
| R  | UCC/EAN128           |
| XA | Aztec                |
| XB | Aztec Mesas          |
| XC | Data Matrix          |
| XD | Maxicode             |
| XE | Micro PDF417         |
| XF | PDF417               |
| XG | QR Code              |
| XH | Micro QR Code        |
| XI | Han Xin Code         |

## 2. AIM Code Identifiers

Each AIM Code Identifier contains the three-character string ]cm where:

] = Flag Character (ASCII 93)

c = Code Character

m = Modifier Character

## AIM Code Character

| Code Character | Bar Code Type   |
|----------------|---|
| A              | Code 39, Code 39 Full ASCII, Code 32  |
| C              | Code 128  |
| d              | Data Matrix   |
| E              | UPC/EAN   |
| e              | RSS Family  |
| F              | Codabar   |
| G              | Code 93   |
| H              | Code 11   |
| I              | Interleaved 2 of 5  |
| L              | PDF417, Micro PDF417, Micro PDF417  |
| M              | MSI   |
| Q              | QR Code   |
| S              | Discrete 2 of 5, IATA 2 of 5  |
| X              | Bookland EAN, Trioptic Code 39, US Postnet, US Planet, UK Postal, Japan Postal, Australian Postal, Dutch Postal |

## APPENDIX C: Decimal Value Table

0



1



2



3



4



5



6



7



8



9





## APPENDIX D: ASCII Characters

NULL



00

SOH



01

STX



02

ETX



03

EOT



04

ENQ



05

ACK



06

BEL



07

BS



08

HT



09

LF



0A

VT



0B

FF



0C

CR



0D

SO



0E

SI



0F

DLE



10

DC1



11

DC2



12

DC3



13

DC4



14

NAK



15

SYN



16

ETB



17

CAN



18

EM



19

SUB



1A

ESC



1B

FS



1C

GS



1D

RS



1E

US



1F

SPACE



20

!



21

“



22

#



23

\$



24

%



25

&



26

‘



27

(



28

)



29

\*



2A

+



2B

,



2C

-



2D

.



2E

/



2F

0



30

1



31

2



32

3



33

4



34

5



35

6



36

7



37

8



38

9



39

:



3A

;



3B

<



3C

=



3D

>



3E

?



3F

@



40

A



41

B



42

C



43

D



44

E



45

F



46

G



47



H



48

I



49

J



4A

K



4B

L



4C

M



4D

N



4E

O



4F

P



50

Q



51

R



52

S



53

T



54

U



55

V



56

W



57

X



58

Y



59

Z



5A

[



5B

\



5C

]



5D

^



5E

\_



5F

,



60

a



61

b



62

c



63

d



64

e



65

f



66

g



67

h



68

i



69

j



6A

k



6B

l



6C

m



6D

n



6E

o



6F

p



70

q



71

r



72

s



73

t



74

u



75

v



76

w



77

x



78

y



79

z



7A

{



7B

|



7C

}



7D

~



7E












DEL



7F

## APPENDIX E: Numeric Keypad Table

The table is for Bluetooth PIN code input.

|              |   |          |   |
|--------------|---|----------|---|
| <b>0</b>     |    | <b>1</b> |    |
| <b>2</b>     |    | <b>3</b> |    |
| <b>4</b>     |    | <b>5</b> |    |
| <b>6</b>     |    | <b>7</b> |    |
| <b>8</b>     |  | <b>9</b> |  |
| <b>Enter</b> |  |          |   |



## Start Configuration



%%\$+/3

## Save Parameters



%%\$+/0

## Abort Configuration



%%\$+/6

## Set All Default



%%\$+/2

## Version Information



%%\$+/5

2018 Sep

0145-88ER00R1 V3.0