

# **Area Imager Bar Code Scanner**

## **2D CONFIGURATION GUIDE**

### **SYMBOLGY PROGRAMMING *for* POCKET SCANNERS**

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

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## 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 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 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.

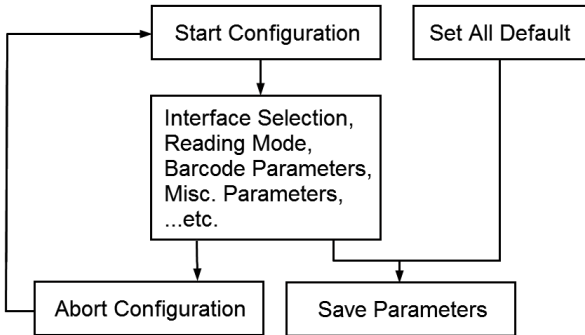
## **Settings and Programming**

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 6 Reading Surface Selection**

## A. READING SURFACE

<General>



%%3S0

Screen



%%3S1

Mixed



%%3S2



## **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>



%0G08

### Interleaved 25 OFF



%0G00

### Industrial 25 ON



%0H08

### <Industrial 25 OFF>



%0H00

# Configuration Guide

## Symbology Selection

---

### Matrix 25 ON



%0IO8

### <Matrix 25 OFF>



%0IO0

### CODE 93 ON



%0KO8

### <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

# Configuration Guide

## 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>**



**Calculate Check Digit & Transmit**



**Calculate Check Digit & Not Transmit**



## C. OUTPUT START/STOP CHARACTER

Enable



%0E44

<Disable>



%0E40

## D. DECODE ASTERISK

Enable



%0E22

<Disable>

## 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

### 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

### 1. Fix Length 2nd Begin



%4I00

### 2. Decimal Value (Appendix C)

### 1. Minimum Length Begin



%2+/-

### 3. Fix Length 2nd Complete



%4I02

### 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

# 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>



### 1. Fix Length 1st Begin



### 2. Decimal Value (Appendix C)

### 3. Fix Length 1st Complete



# 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

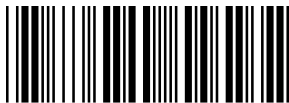
## C. GS1 DATABAR EXPANDED

< 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. Mnimum Length Begin



%2+/'

### 2. Decimal Value (Appendix C)

### 3. Mnimum 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

### 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 JQ3 Enable



%%3Q3

### <Code ID JQ3 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



%2C+

## **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)

### 1. Minimum Length Begin



%2+/-

### 2. Decimal Value (Appendix C)

### 3. Fix Length 2nd Complete



%%2OZ

### 3. Minimum Length Complete



%2CK+

## 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

### 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



%91L0

# 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

# 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



# 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

# 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



%%03T

# Configuration Guide

## Bar Code ID

---

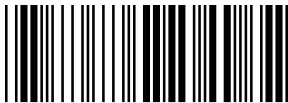
### 1. Grid Matrix Code Begin (Optional)



%%03J

### 2. ASCII Characters (Appendix D)

### 3. Grid Matrix Code Complete



%%03W

Configuration Guide

Accuracy

---

### ACCURACY

<1 Time>



%0130

**2 Times**



%0131

**3 Times**



%0132

**4 Times**



%0133

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



## Configuration Guide

### Sensitivity of Continuous Reading

---

#### A. QUICK SETTING

<Fast>



%0388

**Slow**



%0380

## 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



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

#### 3. Complete



## F. INDICATOR AFTER GOOD READ

**<Normal OFF>**



%%3K1

**Normal ON**



%%3K0

## G. INDICATOR FLASHING

### Enable



%%311

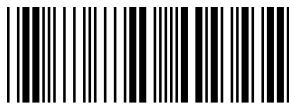
### <Disable>



%%310

## H. ILLUMINATION FLASHING AFTER GOOD READ

### Enable



%%3J1

### <Disable>



%%3J0

## I. AIMER ALWAYS ON

### Enable



%%3L1

### <Disable>



%%3L0

## Chapter 37 Image Type

## A. INVERSED IMAGE

**<Disable>**



%%3B0

**Inversed Image Only**



%%3B1

**Both**



%%3B2

## B. 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**

## Configuration Guide

### 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



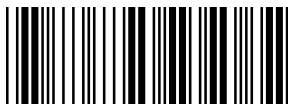
%3C2

# 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

## APPENDIX A: Default Parameters

<b>Reading Surface</b>	General
<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
'JC1' 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>Bar Code ID</b>	
Identifier Format	OFF
Code Identifiers-Default/AIM	Default

<b>Accuracy</b>	1 Time
<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

## 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

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6B

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6C

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6D

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6E

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6F

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72

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v



76

w



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x



78

y



79

z



7A

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7B

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7C

}



7D



~



7E

DEL



7F

## Start Configuration



%%\$+/3

## Save Parameters



%%\$+/0

## Abort Configuration



%%\$+/6

## Set All Default



0145-88ER00R1

2019 Sep

0145-88ER00R1 V4.0