



# **HP Retail Jacket for Elitepad Barcode Scanner Programming Reference Guide**

**© Copyright 2013 Hewlett-Packard Development Company, L.P.**

The information contained herein is subject to change without notice.

Microsoft, Windows, and Windows Vista are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

This document contains proprietary information that is protected by copyright. No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of Hewlett-Packard Company.

HP Retail Jacket for Elitepad

Barcode Scanner Programming Reference Guide

First Edition: September 2013

Document part number: 745701-001

# Table of Contents

<b>Preface .....</b>	<b>1</b>
About this Manual .....	1
Overview .....	1
Manual Conventions .....	2
Technical Support .....	2
HP Website Support .....	2
Reseller Technical Support .....	2
Telephone Technical Support.....	2
<b>Chapter 1 Scanner Settings .....</b>	<b>1</b>
Introduction .....	1
Illumination.....	1
Aimer.....	1
Beep.....	2
Good Read Beep .....	2
Good Read Beep Volume .....	2
Good Read Beep Duration.....	3
Good Read Beep Pitch .....	4
Number of Good Read Beeps.....	5
Good Read Beep Interval Time.....	6
Bad Read Beep .....	7
Bad Read Beep Volume.....	7
Bad Read Beep Duration.....	8
Bad Read Beep Pitch.....	9
Number of Bad Read Beeps .....	10
Bad Read Beep Interval Time .....	11
Power On Beep .....	11
Good Read LED.....	12
Good Read LED Duration.....	13
Scan Mode.....	14
Reading Timeout and Reread Delay .....	15
Flash On/Flash Off Time .....	17
Sensitivity.....	18

Exposure Imaging Mode .....	18
Decode Area .....	19
Whole Area Decoding .....	19
Central Area Decoding.....	19
Default Settings.....	20
HP Defaults.....	20
<b>Chapter 2 USB Interface.....</b>	<b>21</b>
Introduction .....	21
USB HID Keyboard .....	22
USB Country Keyboard Types .....	23
Country Code Table .....	24
Beep on Unknown Character.....	25
Emulate ALT+Keypad .....	26
Function Key Mapping .....	27
ASCII Function Key Mapping Table .....	28
ASCII Function Key Mapping Table (Continued).....	29
Inter-Keystroke Delay .....	30
Caps Lock .....	31
Convert Case.....	32
Emulate Numeric Keypad .....	33
USB COM .....	34
<b>Chapter 3 Symbologies.....</b>	<b>35</b>
Introduction .....	35
Code 128 .....	35
Restore Factory Defaults .....	35
Enable/Disable Code 128 .....	35
Set Length Range for Code 128 .....	36
EAN-8 .....	37
Restore Factory Defaults .....	37
Enable/Disable EAN-8 .....	37
Transmit Check Digit.....	38
2-Digit Add-On Code.....	38
5-Digit Add-On Code.....	39
EAN-8 Extension.....	39
EAN-13 .....	40

Restore Factory Defaults .....	40
Enable/Disable EAN-13 .....	40
Transmit Check Digit.....	41
2-Digit Add-On Code.....	41
5-Digit Add-On Code.....	42
UPC-E.....	43
Restore Factory Defaults .....	43
Enable/Disable UPC-E.....	43
Transmit Check Digit.....	44
2-Digit Add-On Code.....	44
5-Digit Add-On Code.....	45
Transmit System Character “0” .....	46
UPC-E Extension.....	46
UPC-A.....	47
Restore Factory Defaults .....	47
Enable/Disable UPC-A.....	47
Transmit Check Digit.....	48
2-Digit Add-On Code.....	48
5-Digit Add-On Code.....	49
Transmit Preamble Character “0”.....	50
UPC-A/EAN-13 with Extended Coupon Code.....	51
Coupon GS1 DataBar Output .....	51
Interleaved 2 of 5 .....	52
Restore Factory Defaults .....	52
Enable/Disable Interleaved 2 of 5 .....	52
Set Length Range for Interleaved 2 of 5 .....	53
Parity Check .....	54
Set Discrete Lengths for Interleaved 2 of 5.....	55
ITF-14 .....	57
ITF-6 .....	58
Matrix 2 of 5 .....	59
Restore Factory Defaults .....	59
Enable/Disable Matrix 2 of 5 .....	59
Set Length Range for Matrix 2 of 5 .....	60
Parity Check .....	61
Code 39 .....	62

Restore Factory Defaults .....	62
Enable/Disable Code 39 .....	62
Transmit Start/Stop Character .....	63
Set Length Range for Code 39 .....	64
Parity Check .....	65
Enable/Disable Code 39 Full ASCII .....	66
Codabar .....	67
Restore Factory Defaults .....	67
Enable/Disable Codabar .....	67
Set Length Range for Codabar .....	68
Parity Check .....	69
Start/Stop Character .....	70
Code 93 .....	71
Restore Factory Defaults .....	71
Enable/Disable Code 93 .....	71
Set Length Range for Code 93 .....	72
Parity Check .....	73
UCC/EAN-128.....	74
Restore Factory Defaults .....	74
Enable/Disable UCC/EAN-128 .....	74
GS1 Databar .....	75
Restore Factory Defaults .....	75
Enable/Disable GS1 Databar.....	75
Transmit Application Identifier "01".....	76
EAN·UCC Composite.....	77
Restore Factory Defaults .....	77
Enable/Disable EAN·UCC Composite .....	77
Code 11.....	78
Restore Factory Defaults .....	78
Enable/Disable Code 11 .....	78
Set Length Range for Code 11.....	79
Parity Check .....	80
ISBN.....	82
Restore Factory Defaults .....	82
Enable/Disable ISBN .....	82
Set ISBN Format.....	83

Industrial 25 .....	84
Restore Factory Defaults .....	84
Enable/Disable Industrial 25 .....	84
Set Length Range for Industrial 25 .....	85
Parity Check .....	86
Standard 25 .....	87
Restore Factory Defaults .....	87
Enable/Disable Standard 25 .....	87
Set Length Range for Standard 25 .....	88
Parity Check .....	89
Plessey .....	90
Restore Factory Defaults .....	90
Enable/Disable Plessey .....	90
Set Length Range for Plessey .....	91
Parity Check .....	92
MSI-Plessey.....	93
Restore Factory Defaults .....	93
Enable/Disable MSI-Plessey.....	93
Set Length Range for MSI-Plessey.....	94
Parity Check .....	95
PDF417.....	96
Restore Factory Defaults .....	96
Enable/Disable PDF417.....	96
Set Length Range for PDF417.....	97
PDF417 Twin Code.....	98
PDF417 Inverse.....	99
QR Code.....	100
Restore Factory Defaults .....	100
Enable/Disable QR Code.....	100
Set Length Range for QR Code.....	101
QR Twin Code.....	102
Aztec.....	103
Restore Factory Defaults .....	103
Enable/Disable Aztec Code .....	103
Set Length Range for Aztec Code.....	104
Read Multi-barcodes on an Image.....	105

Set the Number of Bar Codes .....	106
Data Matrix.....	107
Restore Factory Defaults .....	107
Enable/Disable Data Matrix .....	107
Set Length Range for Data Matrix.....	108
Data Matrix Twin Code.....	109
Rectangular Bar Code .....	110
Data Matrix Inverse.....	110
Maxicode.....	111
Restore Factory Defaults .....	111
Enable/Disable Maxicode .....	111
Set Length Range for Maxicode .....	112
Chinese Sensible Code.....	113
Restore Factory Defaults .....	113
Enable/Disable Chinese Sensible Code .....	113
Set Length Range for Chinese Sensible Code .....	114
Chinese Sensible Twin Code .....	115
Chinese Sensible Code Inverse.....	116
Micro PDF417 .....	117
Restore Factory Defaults .....	117
Enable/Disable Micro PDF417 .....	117
Set Length Range for Micro PDF417 .....	118
USPS Postnet.....	119
Restore Factory Defaults .....	119
Enable/Disable USPS Postnet.....	119
Transmit Check Digit.....	119
USPS Intelligent Mail .....	120
Restore Factory Defaults .....	120
Enable/Disable USPS Intelligent Mail .....	120
Royal Mail .....	121
Restore Factory Defaults .....	121
Enable/Disable Royal Mail .....	121
USPS Planet.....	122
Restore Factory Defaults .....	122
Enable/Disable USPS Planet.....	122
Transmit Check Digit.....	122

KIX Post.....	123
Restore Factory Defaults .....	123
Enable/Disable KIX Post.....	123
Australian Postal .....	124
Restore Factory Defaults .....	124
Enable/Disable Australian Postal .....	124
<b>Chapter 4 Data Formatting.....</b>	<b>125</b>
Introduction .....	125
General Settings .....	126
Enable/Disable All Prefix/Suffix .....	126
Prefix Sequence.....	126
Custom Prefix .....	127
Enable/Disable Custom Prefix .....	127
Set Custom Prefix.....	127
AIM ID Prefix.....	128
Code ID Prefix.....	128
Restore All Default Code IDs .....	129
Modify Code ID .....	129
Custom Suffix.....	134
Enable/Disable Custom Suffix.....	134
Set Custom Suffix .....	134
Terminating Character Suffix.....	135
Enable/Disable Terminating Character Suffix.....	135
Set Terminating Character Suffix .....	136
<b>Appendix.....</b>	<b>137</b>
Digit Bar Codes.....	137
Save/Cancel Bar Codes.....	139
ASCII Table .....	140

# Preface

## About this Manual

This Programming Reference Guide (PRG) is provided for users seeking advanced technical information, including scanner settings, symbologies, and data formatting.

## Overview

1. *Chapter 1, Scanner Settings* Describes how to configure general parameters of the scanner.
2. *Chapter 2, USB Interface* Describes how to configure USB communication parameters.
3. *Chapter 3, Symbologies* Lists all compatible symbologies and describes how to configure the relevant parameters.
4. *Chapter 4, Data Formatting* Describes how to use prefix and suffix to customize scanned data.
5. *Appendix* Provides numeric bar codes and an SCII table.

---

## Manual Conventions

The following conventions are used in this document.

The symbols listed below are used in this manual to notify the reader of key issues or procedures that must be observed when using the scanner:

	This icon indicates this information requires extra attention from the reader.
	This icon indicates handy tips that can help you use or configure the scanner with ease.
	This icon indicates practical examples that can help you to acquaint yourself with operations.

## Technical Support

### HP Website Support

The HP website ([www.hp.com/support](http://www.hp.com/support)) is the complete source for technical support and information for HP products. The site offers product support, product registration, warranty information, product manuals, product tech notes, software updates, demos, and instructions for returning products for repair.

### Reseller Technical Support

An excellent source for technical assistance and information is an authorized HP reseller. A reseller is acquainted with specific types of businesses, application software, and computer systems and can provide individualized assistance.

### Telephone Technical Support

If you do not have internet or email access, you may contact HP technical support in your region using the telephone numbers document provided with your HP retail point of sale computer.



0006010

【Enter Setup】

## Chapter 1 Scanner Settings

### Introduction

Use the bar codes in this chapter to configure general parameters of the scanner.

### Illumination

If you want the illumination lights on while reading a bar code, scan the **Illumination On** bar code, below. However, if you want to turn just the lights off, scan the **Illumination Off** bar code. *Default = Illumination On.*



0200000

\*\* 【Illumination On】



0200020

【Illumination Off】

### Aimer

This feature allows you to turn the aimer on and off. When the **AIM ON** bar code is scanned, the aimer is interlaced with the illumination LEDs. *Default = AIM ON.*



0201000

\*\* 【AIM On】



0201020

【AIM Off】



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## Beep

### Good Read Beep

Scan the **Good Read Beep On** bar code to enable good read beep denotation in any scan mode; scan the **Good Read Beep Off** bar code to disable it. *Default = Good Read Beep On.*



0203010

\*\* 【Good Read Beep On】



0203000

【Good Read Beep Off】

### Good Read Beep Volume

*Default = Loud.*



0203030

\*\* 【Loud】



0203032

【Low】



0203031

【Medium】



0006000

\*\* 【Exit Setup】



**【Enter Setup】**

---

## Good Read Beep Duration

The Good Read Beep Duration codes modify the length of the beep that the scanner emits on a good read.

*Default = Medium.*



0203050  
\*\* 【Medium】



0203051  
【Short】



0203052  
【Custom (20-300ms)】



**To set the Good Read Beep Duration to 50ms:**

1. Scan the **Enter Setup** bar code.
2. Scan the **Custom (20-300ms)** bar code.
3. Scan the Digit Codes “5” and “0”. (See the “Digit Bar Codes” in Appendix)
4. Scan the **Save** bar code. (See the “Save/Cancel Bar Codes” in Appendix)
5. Scan the **Exit Setup** bar code.



\*\* 【Exit Setup】

---



0006010

**【Enter Setup】****Good Read Beep Pitch**

The Good Read Beep Pitch codes modify the pitch (frequency) of the beep the scanner emits on a good read.

*Default = Medium.*



0203060

**【Lowest (800Hz)】**

0203061

**【Low (1600Hz)】**

0203062

**\*\* 【Medium (2730Hz)】**

0203063

**【High (4200Hz)】**

0203064

**【Custom (20-20000Hz)】****To set the Good Read Beep Pitch to 1500Hz:**

1. Scan the **Enter Setup** bar code.
2. Scan the **Custom (20-20000Hz)** bar code.
3. Scan the Digit Codes “1”, “5”, “0” and “0”. (See the “**Digit Bar Codes**” in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” in **Appendix**)
5. Scan the **Exit Setup** bar code.



0006000

**\*\* 【Exit Setup】**



0006010

【Enter Setup】

## Number of Good Read Beeps

The number of beeps of a good read can be programmed from 1 - 9. To change the number of beeps, scan the bar code below and then scan a **Digit Bar Code** (1-9) and the **Save** bar code.

*Default = 1.*



0203070

【Number of Good Read Beeps】



### To set the Number of Good Read Beeps to 5:

1. Scan the **Enter Setup** bar code.
2. Scan the **Number Of Good Read Beeps** bar code.
3. Scan the Digit Code “5,” see the “**Digit Bar Codes**” in **Appendix**.
4. Scan the **Save** bar code, see the “**Save/Cancel Bar Codes**” in **Appendix**.
5. Scan the **Exit Setup** bar code.



0006000

\*\* 【Exit Setup】



0006010

**【Enter Setup】**

---

### Good Read Beep Interval Time

The Good Read Beep Interval Time codes modify the interval time between beeps, and it becomes effective when the Number of Good Read Beeps is greater than one.

*Default = Short.*



0203080

**\*\* 【Short】**

0203081

**【Medium】**

0006000

**\*\* 【Exit Setup】**



0006010

【Enter Setup】

## Bad Read Beep

Scan the **Bad Read Beep On** bar code to enable bad read beep denotation in any scan mode; scan the **Bad Read Beep Off** bar code to disable it.

*Default = Bad Read Beep On.*



【Bad Read Beep Off】



\*\* 【Bad Read Beep On】

## Bad Read Beep Volume

*Default = Loud.*



\*\* 【Loud】



【Medium】



【Low】



0006000

\*\* 【Exit Setup】



0006010

**【Enter Setup】**

---

**Bad Read Beep Duration**

The Bad Read Beep Duration codes modify the length of the beep that the scanner emits when it fails to read a bar code.

*Default = Medium.*



0207050

**\*\* 【Medium】**

0207051

**【Short】**

0207052

**【Custom (20-300ms)】****To set the Bad Read Beep Duration to 50ms:**

1. Scan the **Enter Setup** bar code.
2. Scan the **Custom (20-300ms)** bar code.
3. Scan the Digit Codes “5” and “0”. (See the “**Digit Bar Codes**” in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” in **Appendix**)
5. Scan the **Exit Setup** bar code.



0006000

**\*\* 【Exit Setup】**



【Enter Setup】

## Bad Read Beep Pitch

The Bad Read Beep Pitch codes modify the pitch (frequency) of the Bad Read beep. To learn how to program the custom pitch, see the “**Good Read Beep Pitch**” section.

*Default = Lowest.*



\*\* 【Lowest (800Hz)】



【Low (1600Hz)】



【Medium (2730Hz)】



【High (4200Hz)】



【Custom (20-20000Hz)】



To set the Bad Read Beep Pitch to 1500Hz:

1. Scan the **Enter Setup** bar code.
2. Scan the **Custom (20-20000Hz)** bar code.
3. Scan the Digit Codes “1”, “5”, “0” and “0”. (See the “**Digit Bar Codes**” in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” in **Appendix**)
5. Scan the **Exit Setup** bar code.



\*\* 【Exit Setup】



0006010

---

**【Enter Setup】****Number of Bad Read Beeps**

The number of beeps of a bad read can be programmed from 1 - 9. To change the number of beeps, scan the bar code below and then scan a **Digit Code** (1-9) and the **Save** bar code.

*Default = 1.*

**【Number Of Bad Read Beeps】****To set the Number of Bad Read Beeps to 5:**

1. Scan the **Enter Setup** bar code.
2. Scan the **Number Of Bad Read Beeps** bar code.
3. Scan the Digit Code "5," see the "**Digit Bar Codes**" in **Appendix**.
4. Scan the **Save** bar code, see the "**Save/Cancel Bar Codes**" in **Appendix**.
5. Scan the **Exit Setup** bar code.



0006000

---

**\*\* 【Exit Setup】**



【Enter Setup】

## Bad Read Beep Interval Time

The Bad Read Beep Interval Time codes modify the interval time between beeps, and it becomes effective when the Number of Bad Read Beeps is greater than one.

*Default = Short.*



0207080  
\*\* 【Short】



0207081  
【Medium】

## Power On Beep

The scanner can be programmed to beep when it's powered on. *Default = Power On Beep Off.*



0204001  
【Power On Beep On】



0204000  
\*\* 【Power On Beep Off】



0006000  
\*\* 【Exit Setup】



0006010

**【Enter Setup】**

---

## Good Read LED

The Good Read LED can be programmed On or Off in response to a good read. *Default = Good Read LED On.*



0206010

**【Good Read LED Off】**

0206011

**\*\* 【Good Read LED On】**

0006000

**\*\* 【Exit Setup】**



【Enter Setup】

## Good Read LED Duration

*Default = Short (20ms).*



0206020

\*\* 【Short (20ms)】



0206021

【Medium (120ms)】



0206022

【Long (220ms)】



0206023

【Prolonged (320ms)】



0206024

【Custom (1 - 10000ms)】



To set the Good Read LED Duration to 50ms:

1. Scan the **Enter Setup** bar code.
2. Scan the **Custom (1-10000ms)** bar code.
3. Scan the Digit Codes “5” and “0”. (See the “**Digit Bar Codes**” in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” in **Appendix**)
5. Scan the **Exit Setup** bar code.



\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## Scan Mode

- ✧ **Level Mode:** Lighting and decoding are on when the trigger is active and off otherwise.
- ✧ **Presentation Mode:** Lighting and decoding are on from power-on and lighting turns off after **One Reading Timeout** (See the “**Reading Timeout and Reread Delay**” section on Page 15). When a new bar code is presented lighting and decoding restart until timeout occurs again. **Reread Delay** (See the “**Reading Timeout and Reread Delay**” section on Page 15) can prevent undesired multiple reads of the same label while in this mode. **Sensitivity** (See the “**Sensitivity**” section on Page 18) can change the Presentation Mode’s sensitivity to light.
- ✧ **Continuous Mode:** The scanner is always active from power-on. Pull the trigger will change the scanner status. **Reread Delay** can prevent undesired multiple reads of the same label while in this mode.
- ✧ **Pulse Mode:** When the trigger is pulled, scanning is activated until a bar code is decoded or **One Reading Timeout** elapses.
- ✧ **Toggle Mode:** The aimer turns on when the trigger is activated and decoding begins when the trigger is released. The scanner will terminate scan status after **One Reading Timeout**.
- ✧ **Flashing Mode:** The scanner flashes on and off regardless of the trigger status. Flash rate is controlled by **Flash On Time** and **Flash Off Time** (See the “**Flash On/Flash Off Time**” section on Page 17). When Flash is ON the scanner reads continuously. When Flash is OFF scanning is deactivated. **Reread Delay** can prevent undesired multiple reads of the same label while in this mode.

*Default = Level Mode.*



0006000

\*\* 【Exit Setup】



【Enter Setup】



\*\* 【Level Mode】



【Presentation Mode】



【Continuos Mode】



【Pulse Mode】



【Toggle Mode】



【Flashing Mode】

## Reading Timeout and Reread Delay

**One Reading Timeout:** This parameter specifies the amount of time that the scanner stays in scan ON state once the state is entered. It is programmable in 1 millisecond increments from 500 to 3600000 milliseconds. *Default = 3000ms.*



【One Reading Timeout】

**Reread Delay:** To prevent a double read of the same label, the Reread Delay sets the minimum time allowed between reads of labels of the same symbology and data. If the scanner reads a label and sees the same label again within the Reread Delay, the second read of the label will be ignored. This parameter is programmable in 1 millisecond increments from 0 to 3600000 milliseconds. *Default = 1500ms.*

If **Reread Delay** is greater than 3000 milliseconds, the reread delay of a programming bar code will be limited to 3000 milliseconds.



\*\* 【Exit Setup】



0006010

**【Enter Setup】**

**Disable Reread Delay:** The Reread Delay is invalid. The scanner can double read a same label at any time.

**Enable Reread Delay:** If the scanner reads a label and sees the same label again within the Reread Delay, the second read of the label will be ignored.

*Default = Disable Reread Delay.*

**【Reread Delay】****\*\* 【Disable Reread Delay】****【Enable Reread Delay】****To set the One Reading Timeout to 1500ms:**

1. Scan the **Enter Setup** bar code.
2. Scan the **One Reading Timeout** bar code.
3. Scan the numeric bar codes “1”, “5”, “0” and “0”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Exit Setup** bar code.

**To set the Reread Delay to 1000ms:**

1. Scan the **Enter Setup** bar code.
2. Scan the **One Reading Timeout** bar code.
3. Scan the numeric bar codes “1”, “0”, “0” and “0”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Exit Setup** bar code.



0006000

**\*\* 【Exit Setup】**



0006010

【Enter Setup】

## Flash On/Flash Off Time

**Flash On Time:** This parameter specifies the ON time for the scanning activated while in Flash Mode. It is programmable in 1 millisecond increments from 100 to 10000 milliseconds. *Default = 1000ms.*

**Flash Off Time:** This parameter specifies the OFF time for the scanning deactivated while in Flash Mode. It is programmable in 1 millisecond increments from 100 to 10000 milliseconds. *Default = 600ms.*



0313150

【Flash On Time】



0313151

【Flash Off Time】



To set the Flash On Time to 1000ms:

1. Scan the **Enter Setup** bar code.
2. Scan the **Flash On Time** bar code.
3. Scan the numeric bar codes “1”, “0”, “0” and “0”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Exit Setup** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Sensitivity

Sensitivity specifies the degree of acuteness of the scanner's response to changes in ambient illumination. The higher the sensitivity, the lower requirement in illumination change to trigger the scanner. This Setting is only valid to **Presentation Mode**.

*Default = Medium Sensitivity (=11).*



0312020

【High Sensitivity (=8)】



0312030

【Enhanced Sensitivity (=5)】



0312010

\*\* 【Medium Sensitivity (=11)】



0312000

【Low Sensitivity (=14)】



0312040

【Custom Sensitivity (1-20)】

## Exposure Imaging Mode

*Default = Normal Exposure Mode.*



0321000

\*\* 【Normal Exposure Mode】



0321010

【Reflections Eliminating Mode】



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## Decode Area

### Whole Area Decoding

The scanner attempts to decode bar code(s) within its field of view and transmits the bar code that has been first decoded.

### Central Area Decoding

The scanner attempts to decode bar code(s) within a specified central area and transmits the bar code that has been first decoded. This feature allows the scanner to narrow its field of view to make sure the scanner reads only those bar codes intended by the user. For instance, if multiple bar codes are placed closely together, central area decoding will ensure that only the desired bar code is read.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## Default Settings

### HP Defaults

Scanning the following bar code can restore the scanner to the HP defaults.

You may need to reset all parameters to the HP defaults when:

- ◊ scanner is not properly configured so that it fails to decode bar codes.
- ◊ you forget previous configuration and want to avoid its impact.



\*\* 【Set All HP Defaults】



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Chapter 2 USB Interface

### Introduction

There are four options for USB connection, any of which can be set as the default option upon actual need.

- ✧ USB HID Keyboard: The scanner's transmission is simulated as USB keyboard input with no need of command configuration or a driver. The bar code data could be entered by the virtual keyboard directly and it is also convenient for the Host to receive data.
- ✧ USB COM: The USB port on the Host is emulated as a RS-232 port with the same data transmission and configuration as a real RS-232 port. This mode requires the USB-COM drivers to be installed.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## USB HID Keyboard

When the scanner is connected to the USB port on a Host, you can enable the USB HID Keyboard feature by scanning the bar code below. Then scanner's transmission will be simulated as USB keyboard input. The Host receives keystrokes on the virtual keyboard. It works on a Plug and Play basis and no driver is required.



1100020

【USB HID Keyboard】



If the Host allows keyboard input, then no extra software is needed for USB HID Keyboard input.



0006000

\*\* 【Exit Setup】



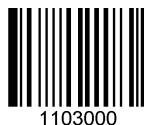
0006010

【Enter Setup】

## USB Country Keyboard Types

Keyboard layouts and country codes vary from country to country. The default setting is US keyboard type. Follow the steps below to program the keyboard type for your country or language.

1. Scan the **Enter Setup** bar code.
2. Scan the **Select Country Code** bar code.
3. Scan the code of your country. (See the “Country Code Table”)
4. Scan the **Save** bar code.
5. Scan the **Exit Setup** bar code.

1103000  
【Select Country Code】

Program the scanner to emulate Norwegian keyboard (Norway):

1. Scan the **Enter Setup** bar code.
2. Scan the **Select Country Code** bar code.
3. Scan the numeric bar codes “1” and “5”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Exit Setup** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Country Code Table

Country/Language	Code	Country/Language	Code
US	0	Netherlands (Dutch)	14
Belgium	1	Norway	15
Brazil	2	Poland	16
Canada (French)	3	Portugal	17
Czechoslovakia	4	Romania	18
Denmark	5	Russia	19
Finland (Swedish)	6	Slovakia	21
France	7	Spain	22
Germany/Austria	8	Sweden	23
Greece	9	Switzerland (German)	24
Hungary	10	Turkey F	25
Israel (Hebrew)	11	Turkey Q	26
Italy	12	UK	27
Latin-American	13	Japan	28



0006000

\*\* 【Exit Setup】



【Enter Setup】

---

## Beep on Unknown Character

Due to the differences in keyboard layouts, some characters contained in bar code data may be unavailable on the selected keyboard. As a result, the scanner fails to transmit the unknown characters.

Scan the appropriate bar code below to enable or disable the emission of beep when an unknown character is detected.

*Default = Do Not Beep on Unknown Character.*



\*\* 【Do Not Beep on Unknown Character】



【Beep on Unknown Character】



Supposing French keyboard (Country Code: 7) is selected and bar code data "ADF" is being dealt with, the keyboard will fail to locate the "Đ" (0xD0) character and the scanner will ignore the character and continue to process the next one.

**Do Not Beep on Unknown Character:** The scanner does not beep and the Host receives "AF".

**Beep on Unknown Character:** The scanner beeps and the Host still receives "AF".



\*\* 【Exit Setup】

---



0006010

【Enter Setup】

## Emulate ALT+Keypad

When Emulate ALT+Keypad is turned on, any ASCII character (0x00 - 0xff) is sent over the numeric keypad no matter which keyboard type is selected. *Default = Emulate ALT+Keypad OFF.*

1. ALT Make
2. Enter the number corresponding to a desired character on the keypad.
3. ALT Break



1103060

\*\* 【Emulate ALT+Keypad OFF】



1103061

【Emulate ALT+Keypad ON】



Since sending a character involves multiple keystroke emulations, this method appears less efficient.



Supposing French keyboard (Country Code: 7) is selected and **Emulate ALT+Keypad** is ON, bar code data "ADF" (65/208/70) is sent as below:

"A" -- "ALT Make" + "065" + "ALT Break"

"D" -- "ALT Make" + "208" + "ALT Break"

"F" -- "ALT Make" + "070" + "ALT Break"



0006000

\*\* 【Exit Setup】



【Enter Setup】

## Function Key Mapping

When **Function Key Mapping** is enabled, function characters (0x00 - 0x1F) are sent as ASCII sequences over the numeric keypad. *Default = Disable Function Key Mapping.*

1. CTRL Make
2. Press function key
3. CTRL Break



\*\* 【Disable Function Key Mapping】



【Enable Function Key Mapping】



Supposing the **Function Key Mapping** feature is enabled and other parameters of USB HID Keyboard adopt factory defaults, bar code data “A<HT>(i.e. Horizontal Tab)F” (0x41/0x09/0x46) is sent as below:

1. “A” - Keystroke “A”.
2. “ Ctrl I” - “Ctrl Make” + Keystroke “I” + “Ctrl Break”
3. “F” - Keystroke “F”

For some text editors, “Ctrl I” means italic convert. So the output may be “AF”.



**Emulate ALT+Keypad ON** prevails over **Enable Function Key Mapping**.



\*\* 【Exit Setup】



0006010

【Enter Setup】

## ASCII Function Key Mapping Table

ASCII Function	ASCII Value (HEX)	No Function Key Mapping	Function Key Mapping
NUL	00	Null	Ctrl+2
SOH	01	Keypad Enter	Ctrl+A
STX	02	Caps Lock	Ctrl+B
ETX	03	Null	Ctrl+C
EOT	04	Null	Ctrl+D
ENQ	05	Null	Ctrl+E
ACK	06	Null	Ctrl+F
BEL	07	Enter	Ctrl+G
BS	08	Left Arrow	Ctrl+H
HT	09	Horizontal Tab	Ctrl+I
LF	0A	Down Arrow	Ctrl+J
VT	0B	Vertical Tab	Ctrl+K
FF	0C	Backspace	Ctrl+L
CR	0D	Enter	Ctrl+M
SO	0E	Insert	Ctrl+N
SI	0F	Esc	Ctrl+O
DLE	10	F11	Ctrl+P
DC1	11	Home	Ctrl+Q
DC2	12	Print Screen	Ctrl+R
DC3	13	Delete	Ctrl+S
DC4	14	tab+shift	Ctrl+T
NAK	15	F12	Ctrl+U
SYN	16	F1	Ctrl+V
ETB	17	F2	Ctrl+W
CAN	18	F3	Ctrl+X
EM	19	F4	Ctrl+Y
SUB	1A	F5	Ctrl+Z
ESC	1B	F6	Ctrl+[
FS	1C	F7	Ctrl+\
GS	1D	F8	Ctrl+]
RS	1E	F9	Ctrl+6
US	1F	F10	Ctrl+-



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## ASCII Function Key Mapping Table (Continued)

The last five characters (0x1B~0x1F) in the table above apply to US keyboard layout only. The following chart provides the equivalents of these five characters for other countries.

Country	Code					
United	[	\	]	6	-	
Belgium	[	<	]	6	-	
Scandinavia	8	<	9	6	-	
France	^	8	\$	6	=	
Germany		Ã	+	6	-	
Italy		\	+	6	-	
Switzerland		<	..	6	-	
United Kingdom	[	¢	]	6	-	
Denmark	8	\	9	6	-	
Norway	8	\	9	6	-	
Spain	[	\	]	6	-	



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

### Inter-Keystroke Delay

This parameter specifies the delay between emulated keystrokes. Scan the appropriate bar code below to increase the delay when the Host requires a slower transmission of data. *Default = No Delay.*



1103050

\*\* 【No Delay】



1103052

【Long Delay (40ms)】



1103051

【Short Delay (20ms)】



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Caps Lock

The **Caps Lock ON** option can invert upper and lower case characters contained in bar code data. This inversion occurs regardless of the state of Caps Lock key on the Host's keyboard. *Default = Caps Lock OFF.*



1103010

\*\* 【Caps Lock OFF】



1103020

【Caps Lock ON】



Emulate ALT+Keypad ON/Convert All to Upper Case/ Convert All to Lower Case prevails over **Caps Lock ON**.



When the **Caps Lock ON** is selected, bar code data "AbC" is transmitted as "aBc".



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## Convert Case

Scan the appropriate bar code below to convert all bar code data to your desired case.



1103040

\*\* 【No Case Conversion】



1103042

【Convert All to Lower Case】



1103041

【Convert All to Upper Case】



When the **Convert All to Lower Case** feature is enabled, bar code data “AbC” is transmitted as “abc”.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Emulate Numeric Keypad



When this feature is disabled, sending bar code data is emulated as keystroke(s) on main keyboard.

To enable this feature, scan the **Emulate Numeric Keypad** bar code. Sending a number (0-9) is emulated as keystroke(s) on numeric keypad, whereas sending other character like "+", "-", "\*", "/", and "." is still emulated as keystrokes on main keyboard.

Numeric keypad is usually situated at the right of the main keyboard. The state of Num Lock on the simulated numeric keypad is determined by its equivalent on the Host. If Num Lock on the Host is turned off, the output of simulated numeric keypad is function key instead of number.

*Default = Do Not Emulate Numeric Keypad.*



1103110

\*\* 【Do Not Emulate Numeric Keypad】



1103120

【Emulate Numeric Keypad】



Make sure the Num Lock light of the Host is turned ON before enabling this feature.

**Emulate ALT+Keypad ON** prevails over **Emulate Numeric Keypad**.



0006000

\*\* 【Exit Setup】



0006010

**【Enter Setup】**

Supposing the **Emulate Numeric Keypad** feature is enabled:

if Num Lock on the Host is ON, “A4.5” is transmitted as “A4.5”;

if Num Lock on the Host is OFF, “A4.5” is transmitted as follows:

1. “A” is sent as is because it is not included in numeric keypad;
2. “4” is sent as the function key “Cursor Move to Left”;
3. “.” is sent as the function key “Delete After the Cursor”;
4. “5” is not sent as it does not correspond to any function key.

## USB COM

If your scanner is connected to the USB port on a Host, the USB COM feature allows the Host to receive data in the way as a serial port does. However, you need to set communication parameters on the scanner to match the Host requirements.



1100060

**【USB COM】**

0006000

**\*\* 【Exit Setup】**



【Enter Setup】

## Chapter 3 Symbologies

### Introduction

This chapter lists all the compatible symbologies and provides the programming bar codes to enable/disable them. The more symbologies you enable, the slower your scanner decodes. It is recommended to disable those that are rarely used to improve the performance of the scanner.

### Code 128

#### Restore Factory Defaults



\*\* 【Restore the Factory Defaults of Code 128】

#### Enable/Disable Code 128



\*\* 【Enable Code 128】



【Disable Code 128】



If the scanner fails to identify Code 128 bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Code 128** bar code.



\*\* 【Exit Setup】



0006010

【Enter Setup】

## Set Length Range for Code 128

The scanner can be configured to only decode Code 128 bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



0400030

【Set the Minimum Length (Default: 1)】



0400040

【Set the Maximum Length (Default: 48)】



If minimum length is set to be greater than maximum length, the scanner only decodes Code 128 bar codes with either the minimum or maximum length. If minimum length is same as maximum length, only Code 128 bar codes with that length are to be decoded.



To set the scanner to decode Code128 bar codes containing between 8 and12 characters:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## EAN-8

### Restore Factory Defaults



0401000

\*\* 【Restore the Factory Defaults of EAN-8】

### Enable/Disable EAN-8



0401020

\*\* 【Enable EAN-8】



0401010

【Disable EAN-8】



If the scanner fails to identify EAN-8 bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable EAN-8** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Transmit Check Digit

EAN-8 is 8 digits in length with the last one as its check digit used to verify the accuracy of the data.



0401040

\*\* 【Transmit EAN-8 Check Digit】



0401030

【Do Not Transmit EAN-8 Check Digit】

## 2-Digit Add-On Code

An EAN-8 bar code can be augmented with a two-digit add-on code to form a new one. In the example below, the part surrounded by blue dotted line is an EAN-8 bar code while the part circled by red dotted line is a two-digit add-on code.



0401050

\*\* 【Disable 2-Digit Add-On Code】



0401060

【Enable 2-Digit Add-On Code】



**Disable 2-Digit Add-On Code:** The scanner decodes EAN-8 and ignores the add-on code when presented with an EAN-8 plus 2-digit add-on bar code. It can also decode EAN-8 bar codes without 2-digit add-on codes.

**Enable 2-Digit Add-On Code:** The scanner decodes a mix of EAN-8 bar codes with and without 2-digit add-on codes.



0006000

\*\* 【Exit Setup】



【Enter Setup】

## 5-Digit Add-On Code

An EAN-8 bar code can be augmented with a five-digit add-on code to form a new one. In the example below, the part surrounded by blue dotted line is an EAN-8 bar code while the part circled by red dotted line is a five-digit add-on code.



\*\* 【Disable 5-Digit Add-On Code】



【Enable 5-Digit Add-On Code】



**Disable 5-Digit Add-On Code:** The scanner decodes EAN-8 and ignores the add-on code when presented with an EAN-8 plus 5-digit add-on bar code. It can also decode EAN-8 bar codes without 5-digit add-on codes.

**Enable 5-Digit Add-On Code:** The scanner decodes a mix of EAN-8 bar codes with and without 5-digit add-on codes.

## EAN-8 Extension

- ◊ **Disable EAN-8 Zero Extend:** Transmit EAN-8 bar codes as is.
- ◊ **Enable EAN-8 Zero Extend:** Add five leading zeros to decoded EAN-8 bar codes to extend to 13 digits.



\*\* 【Disable EAN-8 Zero Extend】



【Enable EAN-8 Zero Extend】



\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## EAN-13

### Restore Factory Defaults



0402000

\*\* 【Restore the Factory Defaults of EAN-13】

### Enable/Disable EAN-13



0402020

\*\* 【Enable EAN-13】



0402010

【Disable EAN-13】



If the scanner fails to identify EAN-13 bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable EAN-13** bar code.



0006000

\*\* 【Exit Setup】



【Enter Setup】

## Transmit Check Digit



\*\* 【Transmit EAN-13 Check Digit】



【Do Not Transmit EAN-13 Check Digit】

## 2-Digit Add-On Code

An EAN-13 bar code can be augmented with a two-digit add-on code to form a new one. In the example below, the part surrounded by blue dotted line is an EAN-13 bar code while the part circled by red dotted line is a two-digit add-on code.



\*\* 【Disable 2-Digit Add-On Code】



【Enable 2-Digit Add-On Code】



**Disable 2-Digit Add-On Code:** The scanner decodes EAN-13 and ignores the add-on code when presented with an EAN-13 plus 2-digit add-on bar code. It can also decode EAN-13 bar codes without 2-digit add-on codes.

**Enable 2-Digit Add-On Code:** The scanner decodes a mix of EAN-13 bar codes with and without 2-digit add-on codes.



\*\* 【Exit Setup】



0006010

【Enter Setup】

## 5-Digit Add-On Code

An EAN-13 bar code can be augmented with a five-digit add-on code to form a new one. In the example below, the part surrounded by blue dotted line is an EAN-13 bar code while the part circled by red dotted line is a five-digit add-on code.



0402070

\*\* 【Disable 5-Digit Add-On Code】



0402080

【Enable 5-Digit Add-On Code】



**Disable 5-Digit Add-On Code:** The scanner decodes EAN-13 and ignores the add-on code when presented with an EAN-13 plus 5-digit add-on bar code. It can also decode EAN-13 bar codes without 5-digit add-on codes.

**Enable 5-Digit Add-On Code:** The scanner decodes a mix of EAN-13 bar codes with and without 5-digit add-on codes.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## UPC-E

### Restore Factory Defaults



0403000

\*\* 【Restore the Factory Defaults of UPC-E】

### Enable/Disable UPC-E



0403020

\*\* 【Enable UPC-E】



0403010

【Disable UPC-E】



If the scanner fails to identify UPC-E bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable UPC-E** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

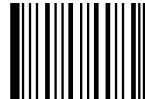
## Transmit Check Digit

UPC-E is 8 digits in length with the last one as its check digit used to verify the accuracy of the data.



0403040

\*\* 【Transmit UPC-E Check Digit】



0403030

【Do Not Transmit UPC-E Check Digit】

## 2-Digit Add-On Code

A UPC-E bar code can be augmented with a two-digit add-on code to form a new one. In the example below, the part surrounded by blue dotted line is a UPC-E bar code while the part circled by red dotted line is a two-digit add-on code.



0403050

\*\* 【Disable 2-Digit Add-On Code】



0403060

【Enable 2-Digit Add-On Code】



**Disable 2-Digit Add-On Code:** The scanner decodes UPC-E and ignores the add-on code when presented with a UPC-E plus 2-digit add-on bar code. It can also decode UPC-E bar codes without 2-digit add-on codes.

**Enable 2-Digit Add-On Code:** The scanner decodes a mix of UPC-E bar codes with and without 2-digit add-on codes.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## 5-Digit Add-On Code

A UPC-E bar code can be augmented with a five-digit add-on code to form a new one. In the example below, the part surrounded by blue dotted line is a UPC-E bar code while the part circled by red dotted line is a five-digit add-on code.



0403070

\*\* 【Disable 5-Digit Add-On Code】



0403080

【Enable 5-Digit Add-On Code】



**Disable 5-Digit Add-On Code:** The scanner decodes UPC-E and ignores the add-on code when presented with a UPC-E plus 5-digit add-on bar code. It can also decode UPC-E bar codes without 5-digit add-on codes.

**Enable 5-Digit Add-On Code:** The scanner decodes a mix of UPC-E bar codes with and without 5-digit add-on codes.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Transmit System Character “0”

The first character of UPC-E bar code is the system character “0”.



0403090

【Do Not Transmit System Character “0”】



0403100

\*\* 【Transmit System Character “0”】

## UPC-E Extension

- ✧ **Disable UPC-E Extend:** Transmit UPC-E bar codes as is.
- ✧ **Enable UPC-E Extend”:** Extend UPC-E bar codes to make them compatible in length to UPC-A.



0403110

\*\* 【Disable UPC-E Extend】



0403120

【Enable UPC-E Extend】



0006000

\*\* 【Exit Setup】



【Enter Setup】

---

## UPC-A

### Restore Factory Defaults



\*\* 【Restore the Factory Defaults of UPC-A】

### Enable/Disable UPC-A



\*\* 【Enable UPC-A】



【Disable UPC-A】



If the scanner fails to identify UPC-A bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable UPC-A** bar code.



\*\* 【Exit Setup】



0006010

【Enter Setup】

## Transmit Check Digit

UPC-A is 12 digits in length with the last one as its check digit used to verify the accuracy of the data.



0404040

\*\* 【Transmit UPC-A Check Digit】



0404030

【Do Not Transmit UPC-A Check Digit】

## 2-Digit Add-On Code

A UPC-A bar code can be augmented with a two-digit add-on code to form a new one. In the example below, the part surrounded by blue dotted line is a UPC-A bar code while the part circled by red dotted line is a two-digit add-on code.



0404050

\*\* 【Disable 2-Digit Add-On Code】



0404060

【Enable 2-Digit Add-On Code】



**Disable 2-Digit Add-On Code:** The scanner decodes UPC-A and ignores the add-on code when presented with a UPC-A plus 2-digit add-on bar code. It can also decode UPC-A bar codes without 2-digit add-on codes.

**Enable 2-Digit Add-On Code:** The scanner decodes a mix of UPC-A bar codes with and without 2-digit add-on codes.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## 5-Digit Add-On Code

A UPC-A bar code can be augmented with a five-digit add-on code to form a new one. In the example below, the part surrounded by blue dotted line is a UPC-A bar code while the part circled by red dotted line is a five-digit add-on code.



0404070

\*\* 【Disable 5-Digit Add-On Code】



0404080

【Enable 5-Digit Add-On Code】



**Disable 5-Digit Add-On Code:** The scanner decodes UPC-A and ignores the add-on code when presented with a UPC-A plus 5-digit add-on bar code. It can also decode UPC-A bar codes without 5-digit add-on codes.

**Enable 5-Digit Add-On Code:** The scanner decodes a mix of UPC-A bar codes with and without 5-digit add-on codes.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

### Transmit Preamble Character “0”

The preamble character “0” is part of the UPC-A bar code.



0404090

\*\* 【Do not Transmit Preamble Character “0”】



0404100

【Transmit Preamble Character “0”】



The preamble character “0” usually does not appear in printed UPC-A bar codes.



0006000

\*\* 【Exit Setup】

---



【Enter Setup】

## UPC-A/EAN-13 with Extended Coupon Code

Use the following codes to enable or disable UPC-A/EAN-13 with Extended Coupon Code. When left on the default setting (**Off**), the scanner treats Coupon Codes and Extended Coupon Codes as single bar codes.

If you scan the **Allow Concatenation** code, when the scanner sees the coupon code and the extended coupon code in a single scan, it transmits both as separate symbologies. Otherwise, it transmits the first coupon code it reads.

If you scan the **Require Concatenation** code, the scanner must see and read the coupon code and extended coupon code in a single read to transmit the data. No data is output unless both codes are read.

*Default = Off.*



0404130  
\*\* 【Off】



0404140

【Allow Concatenation】



0404150

【Require Concatenation】

## Coupon GS1 DataBar Output

If you scan coupons that have both UPC and GS1 DataBar codes, you may wish to scan and output only the data from the GS1 DataBar code. Scan the **GS1 Output On** code below to scan and output only the GS1 DataBar code data.

*Default = GS1 Output Off.*



0404160  
\*\* 【GS1 Output Off】



0404170

【GS1 Output On】



\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## Interleaved 2 of 5

Restore Factory Defaults



0405000

\*\* 【Restore the Factory Defaults of Interleaved 2 of 5】

Enable/Disable Interleaved 2 of 5



0405020

【Enable Interleaved 2 of 5】



0405010

\*\* 【Disable Interleaved 2 of 5】



If the scanner fails to identify Interleaved 2 of 5 bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Interleaved 2 of 5** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Set Length Range for Interleaved 2 of 5

The scanner can be configured to only decode Interleaved 2 of 5 bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



0405030

【Set the Minimum Length (Default: 6)】



0405040

【Set the Maximum Length (Default: 80)】



If minimum length is set to be greater than maximum length, the scanner only decodes Interleaved 2 of 5 bar codes with either the minimum or maximum length. If minimum length is same as maximum length, only Interleaved 2 of 5 bar codes with that length are to be decoded.



### To set the scanner to decode Interleaved 2 of 5 bar codes containing between 8 and12 characters:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Parity Check

A check digit is optional for Interleaved 2 of 5 and can be added as the last digit. It is a calculated value used to verify the accuracy of the data.

- ❖ **No Parity Check:** The scanner transmits Interleaved 2 of 5 bar codes as is.
- ❖ **Do Not Transmit Check Digit After Parity Check:** The scanner will run a parity check using the last digit of Interleaved 2 of 5 bar code as check digit. Bar codes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.
- ❖ **Transmit Check Digit After Parity Check:** The scanner will run a parity check using the last digit of Interleaved 2 of 5 bar code as check digit. Bar codes passing the check will be transmitted, whereas those failing it will not be transmitted.

Since Interleaved 2 of 5 must always have an even number of digits, a zero may need to be added as the first digit when the check digit is added. The check digit is automatically generated when making Interleaved 2 of 5 bar codes.



0405050

\*\* 【No Parity Check】



0405060

【Do Not Transmit Check Digit After Parity Check】



0405070

【Transmit Check Digit After Parity Check】



If the **Do Not Transmit Check Digit After Parity Check** option is enabled, Interleaved 2 of 5 bar codes with a length that is less than the configured minimum length after having the check digit excluded will not be decoded. (For example, when the **Do Not Transmit Check Digit After Parity Check** option is enabled and the minimum length is set to 4, Interleaved 2 of 5 bar codes with a total length of 4 characters including the check digit cannot be read.)



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Set Discrete Lengths for Interleaved 2 of 5

The scanner can be configured to only decode Interleaved 2 of 5 bar codes within a specific length range or with a couple of discrete lengths. The length must be an even number not greater than 64 and consist of three digits (a leading zero or zeros may need to be added to meet the length requirement).

The discrete lengths become effective only when the **Enable the Discrete Lengths** option is enabled.



0405140

\*\* 【Disable the Discrete Lengths】



0405160

【Set the Discrete Length】



0405150

【Enable the Discrete Lengths】



0405170

【Delete the Discrete Length】



To set the scanner to decode Interleaved 2 of 5 bar codes containing either 12 or 24 characters:

1. Scan the **Enter Setup** bar code.
2. Scan the **Enable the Discrete Lengths** bar code.
3. Scan the **Set the Discrete Length** bar code.
4. Scan the numeric bar codes “0”, “1” and “2”. (See the “Digit Bar Codes” section in **Appendix**)
5. Scan the **Save** bar code. (See the “Save/Cancel Bar Codes” section in **Appendix**)
6. Scan the **Set the Discrete Length** bar code.
7. Scan the numeric bar codes “0”, “2” and “4”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000

\*\* 【Exit Setup】



0006010

## 【Enter Setup】

---

**To set the scanner to decode Interleaved 2 of 5 bar codes containing between 12 and 24 characters:**

1. Scan the **Enter Setup** bar code.
2. Scan the **Enable the Discrete Lengths** bar code.
3. Scan the **Set the Discrete Length** bar code.
4. Scan the numeric bar codes “0”, “1” and “2”.
5. Scan the numeric bar codes “0”, “2” and “4”.
6. Scan the **Save** bar code.
7. Scan the **Exit Setup** bar code.



0006000

## \*\* 【Exit Setup】

---



0006010

【Enter Setup】

## ITF-14

ITF-14 is a special kind of Interleaved 2 of 5 with a length of 14 characters and the last character as the check character. By default, ITF-14 is disabled.

ITF-14 priority principle: For the Interleaved 2 of 5 bar codes with a length of 14 characters and the last character as the check character, the ITF-14 configurations shall take precedence over the Interleaved 2 of 5 settings.



0405080

\*\* 【Disable ITF-14】



0405090

【Enable ITF-14 But Do Not Transmit Check Digit】



0405100

【Enable ITF-14 and Transmit Check Digit】



An example of the ITF-14 priority principle: when ITF-14 is enabled and Interleaved 2 of 5 is disabled, the scanner only decodes Interleaved 2 of 5 bar codes with a length of 14 characters and the last character as the check character.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## ITF-6

ITF-6 is a special kind of Interleaved 2 of 5 with a length of 6 characters and the last character as the check character. By default, ITF-6 is disabled.

ITF-6 priority principle: For the Interleaved 2 of 5 bar codes with a length of 6 characters and the last character as the check character, the ITF-6 configurations shall take precedence over the Interleaved 2 of 5 settings.



0405110

\*\* 【Disable ITF-6】



0405120

【Enable ITF-6 But Do Not Transmit Check Digit】



0405130

【Enable ITF-6 and Transmit Check Digit】



An example of the ITF-6 priority principle: when ITF-6 is enabled and Interleaved 2 of 5 is disabled, the scanner only decodes Interleaved 2 of 5 bar codes with a length of 6 characters and the last character as the check character.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Matrix 2 of 5

### Restore Factory Defaults



0406000

\*\* 【Restore the Factory Defaults of Matrix 2 of 5】

### Enable/Disable Matrix 2 of 5



0406020

【Enable Matrix 2 of 5】



0406010

\*\* 【Disable Matrix 2 of 5】



If the scanner fails to identify Matrix 2 of 5 bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Matrix 2 of 5** bar code.



0006000

\*\* 【Exit Setup】



0006010

**【Enter Setup】****Set Length Range for Matrix 2 of 5**

The scanner can be configured to only decode Matrix 2 of 5 bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.

**【Set the Minimum Length (Default: 4)】****【Set the Maximum Length (Default: 80)】**

If minimum length is set to be greater than maximum length, the scanner only decodes Matrix 2 of 5 bar codes with either the minimum or maximum length. If minimum length is same as maximum length, only Matrix 2 of 5 bar codes with that length are to be decoded.

**To set the scanner to decode Matrix 2 of 5 bar codes containing between 8 and 12 characters:**

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000

**\*\* 【Exit Setup】**



【Enter Setup】

---

## Parity Check

A check digit is optional for Matrix 2 of 5 and can be added as the last digit. It is a calculated value used to verify the accuracy of the data.

- ✧ **No Parity Check:** The scanner transmits Matrix 2 of 5 bar codes as is.
- ✧ **Do Not Transmit Check Digit After Parity Check:** The scanner will run a parity check using the last digit of Matrix 2 of 5 bar code as check digit. Bar codes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.
- ✧ **Transmit Check Digit After Parity Check:** The scanner will run a parity check using the last digit of Matrix 2 of 5 bar code as check digit. Bar codes passing the check will be transmitted, whereas those failing it will not be transmitted.

Since Matrix 2 of 5 must always have an even number of digits, a zero may need to be added as the first digit when the check digit is added. The check digit is automatically generated when making Matrix 2 of 5 bar codes.



\*\* 【No Parity Check】



【Do Not Transmit Check Digit After Parity Check】



【Transmit Check Digit After Parity Check】



If the **Do Not Transmit Check Digit After Parity Check** option is enabled, Matrix 2 of 5 bar codes with a length that is less than the configured minimum length after having the check digit excluded will not be decoded. (For example, when the **Do Not Transmit Check Digit After Parity Check** option is enabled and the minimum length is set to 4, Matrix 2 of 5 bar codes with a total length of 4 characters including the check digit cannot be read.)



\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## Code 39

### Restore Factory Defaults



0408000

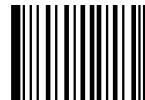
\*\* 【Restore the Factory Defaults of Code 39】

### Enable/Disable Code 39



0408020

\*\* 【Enable Code 39】



0408010

【Disable Code 39】



If the scanner fails to identify Code 39 bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Code 39** bar code.



0006000

\*\* 【Exit Setup】

---



0006010

【Enter Setup】

## Transmit Start/Stop Character

Code 39 uses an asterisk (\*) for both the start and the stop characters. You can choose whether or not to transmit the start/stop characters by scanning the appropriate bar code below.



0408090

【Transmit Start/Stop Character】



0408080

\*\* 【Do Not Transmit Start/Stop Character】



0006000

\*\* 【Exit Setup】



0006010

## 【Enter Setup】

---

### Set Length Range for Code 39

The scanner can be configured to only decode Code 39 bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



【Set the Minimum Length (Default: 4)】



【Set the Maximum Length (Default: 48)】



If minimum length is set to be greater than maximum length, the scanner only decodes Code 39 bar codes with either the minimum or maximum length. If minimum length is same as maximum length, only Code 39 bar codes with that length are to be decoded.



#### To set the scanner to decode Code 39 bar codes containing between 8 and 12 characters:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000



0006010

【Enter Setup】

## Parity Check

A check digit is optional for Code 39 and can be added as the last digit. It is a calculated value used to verify the accuracy of the data.

- ✧ **No Parity Check:** The scanner transmits Code 39 bar codes as is.
- ✧ **Do Not Transmit Check Digit After Parity Check:** The scanner will run a parity check using the last digit of Code 39 bar code as check digit. Bar codes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.
- ✧ **Transmit Check Digit After Parity Check:** The scanner will run a parity check using the last digit of Code 39 bar code as check digit. Bar codes passing the check will be transmitted, whereas those failing it will not be transmitted.



0408050

\*\* 【No Parity Check】



0408060

【Do Not Transmit Check Digit After Parity Check】



0408070

【Transmit Check Digit After Parity Check】



If the **Do Not Transmit Check Digit After Parity Check** option is enabled, Code 39 bar codes with a length that is less than the configured minimum length after having the check digit excluded will not be decoded. (For example, when the **Do Not Transmit Check Digit After Parity Check** option is enabled and the minimum length is set to 4, Code 39 bar codes with a total length of 4 characters including the check digit cannot be read.)



0006000

\*\* 【Exit Setup】



0006010

**【Enter Setup】**

---

## **Enable/Disable Code 39 Full ASCII**

By default, the scanner is only able to read some ASCII characters. You can configure your scanner to identify all ASCII characters by scanning the appropriate bar code below.



0408100

**\*\* 【Disable Code 39 Full ASCII】**

0408110

**【Enable Code 39 Full ASCII】**

0006000

**\*\* 【Exit Setup】**



0006010

【Enter Setup】

## Codabar

### Restore Factory Defaults



0409000

\*\* 【Restore the Factory Defaults of Codabar】

### Enable/Disable Codabar



0409020

【Enable Codabar】



0409010

\*\* 【Disable Codabar】



If the scanner fails to identify Codabar bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Codabar** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## Set Length Range for Codabar

The scanner can be configured to only decode Codabar bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



0409030

【Set the Minimum Length (Default: 2)】



0409040

【Set the Maximum Length (Default: 60)】



If minimum length is set to be greater than maximum length, the scanner only decodes Codabar bar codes with either the minimum or maximum length. If minimum length is same as maximum length, only Codabar bar codes with that length are to be decoded.



0006000

\*\* 【Exit Setup】



【Enter Setup】

## Parity Check

A check digit is optional for Codabar and can be added as the last digit. It is a calculated value used to verify the accuracy of the data.

- ✧ **No Parity Check:** The scanner transmits Codabar bar codes as is.
- ✧ **Do Not Transmit Check Digit After Parity Check:** The scanner will run a parity check using the last digit of Codabar bar code as check digit. Bar codes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.
- ✧ **Transmit Check Digit After Parity Check:** The scanner will run a parity check using the last digit of Codabar bar code as check digit. Bar codes passing the check will be transmitted, whereas those failing it will not be transmitted.



\*\* 【No Parity Check】



【Do Not Transmit Check Digit After Parity Check】



【Transmit Check Digit After Parity Check】



If the **Do Not Transmit Check Digit After Parity Check** option is enabled, Codabar bar codes with a length that is less than the configured minimum length after having the check digit excluded will not be decoded. (For example, when the **Do Not Transmit Check Digit After Parity Check** option is enabled and the minimum length is set to 4, Codabar bar codes with a total length of 4 characters including the check digit cannot be read.)



\*\* 【Exit Setup】



0006010

**【Enter Setup】**

---

## Start/Stop Character

You can set the start/stop characters and choose whether or not to transmit the start/stop characters by scanning the appropriate bar code below.



0409090

**\*\* 【Transmit Start/Stop Character】**

0409080

**【Do Not Transmit Start/Stop Character】**

0409100

**\*\* 【ABCD/ABCD as the Start/Stop Character】**

0409120

**\*\* 【Start/Stop Character in Uppercase】**

0409110

**【ABCD/TN\*E as the Start/Stop Character】**

0409130

**【Start/Stop Character in Lowercase】**

0006000

**\*\* 【Exit Setup】**



0006010

【Enter Setup】

---

## Code 93

### Restore Factory Defaults



0410000

\*\* 【Restore the Factory Defaults of Code 93】

### Enable/Disable Code 93



0410020

\*\* 【Enable Code 93】



0410010

【Disable Code 93】



If the scanner fails to identify Code 93 bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Code 93** bar code.



0006000

\*\* 【Exit Setup】



0006010

## 【Enter Setup】

---

### Set Length Range for Code 93

The scanner can be configured to only decode Code 93 bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



【Set the Minimum Length (Default: 1)】



【Set the Maximum Length (Default: 48)】



If minimum length is set to be greater than maximum length, the scanner only decodes Code 93 bar codes with either the minimum or maximum length. If minimum length is same as maximum length, only Code 93 bar codes with that length are to be decoded.



#### To set the scanner to decode Code 93 bar codes containing between 8 and 12 characters:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000



0006010

【Enter Setup】

## Parity Check

Check digits are optional for Code 93 and can be added as the last two digits, which are calculated values used to verify the accuracy of the data.

- ✧ **No Parity Check:** The scanner transmits Code 93 bar codes as is.
- ✧ **Do Not Transmit Check Digit After Parity Check:** The scanner will run parity checks using the last two digits of Code 93 bar code as check digits. Bar codes passing the checks will be transmitted except the last two digits, whereas those failing them will not be transmitted.
- ✧ **Transmit Check Digit After Parity Check:** The scanner will run parity checks using the last two digits of Code 93 bar code as check digits. Bar codes passing the checks will be transmitted, whereas those failing them will not be transmitted.



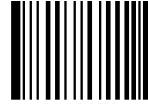
0410050

【No Parity Check】



0410060

\*\* 【Do Not Transmit Check Digit After Parity Check】



0410070

【Transmit Check Digit After Parity Check】



If the **Do Not Transmit Check Digit After Parity Check** option is enabled, Code 93 bar codes with a length that is less than the configured minimum length after having the two check digits excluded will not be decoded. (For example, when the **Do Not Transmit Check Digit After Parity Check** option is enabled and the minimum length is set to 4, Code 93 bar codes with a total length of 4 characters including the two check digits cannot be read.)



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## UCC/EAN-128

**Restore Factory Defaults**



0412000

\*\* 【Restore the Factory Defaults of UCC/EAN-128】

**Enable/Disable UCC/EAN-128**



0412020

\*\* 【Enable UCC/EAN-128】



0412010

【Disable UCC/EAN-128】



If the scanner fails to identify UCC/EAN-128 bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable UCC/EAN-128** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## GS1 Databar

### Restore Factory Defaults



0413000

\*\* 【Restore the Factory Defaults of GS1 Databar】

### Enable/Disable GS1 Databar



0413020

\*\* 【Enable GS1 Databar】



0413010

【Disable GS1 Databar】



If the scanner fails to identify GS1 Databar bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable GS1 Databar** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

**Transmit Application Identifier “01”**



0413060

\*\* 【Transmit Application Identifier “01”】



0413050

【Do Not Transmit Application Identifier “01”】



0006000

\*\* 【Exit Setup】

---



**【Enter Setup】**

## EAN-UCC Composite

### Restore Factory Defaults



**\*\* 【Restore the Factory Defaults of EAN-UCC Composite】**

### Enable/Disable EAN-UCC Composite



**【Enable EAN-UCC Composite】**



**\*\* 【Disable EAN-UCC Composite】**



**【Enable UPC/EAN Composite】**



**\*\* 【Disable UPC/EAN Composite】**



If the scanner fails to identify EAN-UCC Composite bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable EAN-UCC Composite** bar code.



**\*\* 【Exit Setup】**



0006010

【Enter Setup】

---

## Code 11

### Restore Factory Defaults



0415000

\*\* 【Restore the Factory Defaults of Code 11】

### Enable/Disable Code 11



0415020

【Enable Code 11】



0415010

\*\* 【Disable Code 11】



If the scanner fails to identify Code 11 bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Code 11** bar code.



0006000

\*\* 【Exit Setup】



【Enter Setup】

## Set Length Range for Code 11

The scanner can be configured to only decode Code 11 bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



【Set the Minimum Length (Default: 4)】



【Set the Maximum Length (Default: 48)】



If minimum length is set to be greater than maximum length, the scanner only decodes Code 11 bar codes with either the minimum or maximum length. If minimum length is same as maximum length, only Code 11 bar codes with that length are to be decoded.



### To set the scanner to decode Code 11 bar codes containing between 8 and 12 characters:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



\*\* 【Exit Setup】



0006010

【Enter Setup】

## Parity Check

Check digits are optional for Code 11 and can be added as the last one or two digits, which are calculated values used to verify the accuracy of the data.

If the **No Parity Check** option is enabled, the scanner transmits Code 11 bar codes as is.



0415050

【No Parity Check】



0415090

【One Check Digit, MOD11 (Len&lt;=10)】

【Two Check Digits, MOD11/MOD11(Len&gt;10)】



0415060

\*\* 【One Check Digit, MOD11】



0415100

【One Check Digit, MOD11 (Len&lt;=10)】

【Two Check Digits, MOD11/MOD9 (Len&gt;10)】



0415070

【Two Check Digits, MOD11/MOD11】



0415110

【Do Not Transmit Check Digit】



0415080

【Two Check Digits, MOD11/MOD9】



0415120

\*\* 【Transmit Check Digit】



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】



If the scanner enables one type of parity check and the **Do Not Transmit Check Digit** option, Code 11 bar codes with a length that is less than the configured minimum length after having the check digit(s) excluded will not be decoded. (For example, when the **One Check Digit, MOD11** and **Do Not Transmit Check Digit** options are enabled and the minimum length is set to 4, Code 11 bar codes with a total length of 4 characters including the check digit cannot be read.)



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## ISBN

**Restore Factory Defaults**



0416000

\*\* 【Restore the Factory Defaults of ISBN】

**Enable/Disable ISBN**



0416020

【Enable ISBN】



0416010

\*\* 【Disable ISBN】



If the scanner fails to identify ISBN bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable ISBN** bar code.



0006000

\*\* 【Exit Setup】



0006010

**【Enter Setup】**

---

## **Set ISBN Format**



0416030

**\*\* 【ISBN-13】**



0416040

**【ISBN-10】**



0006000

**\*\* 【Exit Setup】**



0006010

**【Enter Setup】**

## Industrial 25

### Restore Factory Defaults



0417000

**\*\* 【Restore the Factory Defaults of Industrial 25】**

### Enable/Disable Industrial 25



0417020

**【Enable Industrial 25】**

0417010

**\*\* 【Disable Industrial 25】**

If the scanner fails to identify Industrial 25 bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Industrial 25** bar code.



0006000

**\*\* 【Exit Setup】**



【Enter Setup】

## Set Length Range for Industrial 25

The scanner can be configured to only decode Industrial 25 bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



【Set the Minimum Length (Default: 6)】



【Set the Maximum Length (Default: 48)】



If minimum length is set to be greater than maximum length, the scanner only decodes Industrial 25 bar codes with either the minimum or maximum length. If minimum length is same as maximum length, only Industrial 25 bar codes with that length are to be decoded.



### To set the scanner to decode Industrial 25 bar codes containing between 8 and 12 characters:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



\*\* 【Exit Setup】



0006010

【Enter Setup】

## Parity Check

A check digit is optional for Industrial 25 and can be added as the last digit. It is a calculated value used to verify the accuracy of the data.

- ✧ **No Parity Check:** The scanner transmits Industrial 25 bar codes as is.
- ✧ **Do Not Transmit Check Digit After Parity Check:** The scanner will run a parity check using the last digit of Industrial 25 bar code as check digit. Bar codes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.
- ✧ **Transmit Check Digit After Parity Check:** The scanner will run a parity check using the last digit of Industrial 25 bar code as check digit. Bar codes passing the check will be transmitted, whereas those failing it will not be transmitted.



0417050

\*\* 【No Parity Check】



0417060

【Do Not Transmit Check Digit After Parity Check】



0417070

【Transmit Check Digit After Parity Check】



If the **Do Not Transmit Check Digit After Parity Check** option is enabled, Industrial 25 bar codes with a length that is less than the configured minimum length after having the check digit excluded will not be decoded. (For example, when the **Do Not Transmit Check Digit After Parity Check** option is enabled and the minimum length is set to 4, Industrial 25 bar codes with a total length of 4 characters including the check digit cannot be read.)



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## Standard 25

### Restore Factory Defaults



0418000

\*\* 【Restore the Factory Defaults of Standard 25】

### Enable/Disable Standard 25



0418020

【Enable Standard 25】



0418010

\*\* 【Disable Standard 25】



If the scanner fails to identify Standard 25 bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Standard 25** bar code.



0006000

\*\* 【Exit Setup】



0006010

**【Enter Setup】**

## Set Length Range for Standard 25

The scanner can be configured to only decode Standard 25 bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



【Set the Minimum Length (Default: 6)】



【Set the Maximum Length (Default: 48)】



If minimum length is set to be greater than maximum length, the scanner only decodes Standard 25 bar codes with either the minimum or maximum length. If minimum length is same as maximum length, only Standard 25 bar codes with that length are to be decoded.



### To set the scanner to decode Standard 25 bar codes containing between 8 and 12 characters:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000



【Enter Setup】

## Parity Check

A check digit is optional for Standard 25 and can be added as the last digit. It is a calculated value used to verify the accuracy of the data.

- ✧ **No Parity Check:** The scanner transmits Standard 25 bar codes as is.
- ✧ **Do Not Transmit Check Digit After Parity Check:** The scanner will run a parity check using the last digit of Standard 25 bar code as check digit. Bar codes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.
- ✧ **Transmit Check Digit After Parity Check:** The scanner will run a parity check using the last digit of Standard 25 bar code as check digit. Bar codes passing the check will be transmitted, whereas those failing it will not be transmitted.



\*\* 【No Parity Check】



【Do Not Transmit Check Digit After Parity Check】



【Transmit Check Digit After Parity Check】



If the **Do Not Transmit Check Digit After Parity Check** option is enabled, Standard 25 bar codes with a length that is less than the configured minimum length after having the check digit excluded will not be decoded. (For example, when the **Do Not Transmit Check Digit After Parity Check** option is enabled and the minimum length is set to 4, Standard 25 bar codes with a total length of 4 characters including the check digit cannot be read.)



\*\* 【Exit Setup】



0006010

**【Enter Setup】**

## Plessey

### Restore Factory Defaults



0419000

**\*\* 【Restore the Factory Defaults of Plessey】**

### Enable/Disable Plessey



0419020

**【Enable Plessey】**

0419010

**\*\* 【Disable Plessey】**

If the scanner fails to identify Plessey bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Plessey** bar code.



0006000

**\*\* 【Exit Setup】**



【Enter Setup】

## Set Length Range for Plessey

The scanner can be configured to only decode Plessey bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



【Set the Minimum Length (Default: 4)】



【Set the Maximum Length (Default: 48)】



If minimum length is set to be greater than maximum length, the scanner only decodes Plessey bar codes with either the minimum or maximum length. If minimum length is same as maximum length, only Plessey bar codes with that length are to be decoded.



### To set the scanner to decode Plessey bar codes containing between 8 and 12 characters:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



\*\* 【Exit Setup】



0006010

**【Enter Setup】**

## Parity Check

Check digits are optional for Plessey and can be added as the last two digits, which are calculated values used to verify the accuracy of the data.

- ✧ **No Parity Check:** The scanner transmits Plessey bar codes as is.
- ✧ **Do Not Transmit Check Digit After Parity Check:** The scanner will run parity checks using the last two digits of Plessey bar code as check digits. Bar codes passing the checks will be transmitted except the last two digits, whereas those failing them will not be transmitted.
- ✧ **Transmit Check Digit After Parity Check:** The scanner will run parity checks using the last two digits of Plessey bar code as check digits. Bar codes passing the checks will be transmitted, whereas those failing them will not be transmitted.



0419050

**【No Parity Check】**

0419060

**【Do Not Transmit Check Digit After Parity Check】**

0419070

**\*\* 【Transmit Check Digit After Parity Check】**

If the **Do Not Transmit Check Digit After Parity Check** option is enabled, Plessey bar codes with a length that is less than the configured minimum length after having the check digits excluded will not be decoded. (For example, when the **Do Not Transmit Check Digit After Parity Check** option is enabled and the minimum length is set to 4, Plessey bar codes with a total length of 4 characters including the check digits cannot be read.)



0006000

**\*\* 【Exit Setup】**



**【Enter Setup】**

---

## **MSI-Plessey**

### **Restore Factory Defaults**



**\*\* 【Restore the Factory Defaults of MSI-Plessey】**

### **Enable/Disable MSI-Plessey**



**【Enable MSI-Plessey】**



**\*\* 【Disable MSI-Plessey】**



If the scanner fails to identify MSI-Plessey bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable MSI-Plessey** bar code.



**\*\* 【Exit Setup】**

---



0006010

**【Enter Setup】****Set Length Range for MSI-Plessey**

The scanner can be configured to only decode MSI-Plessey bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



0420030

**【Set the Minimum Length (Default: 4)】**

0420040

**【Set the Maximum Length (Default: 48)】**

If minimum length is set to be greater than maximum length, the scanner only decodes MSI-Plessey bar codes with either the minimum or maximum length. If minimum length is same as maximum length, only MSI-Plessey bar codes with that length are to be decoded.

**To set the scanner to decode MSI-Plessey bar codes containing between 8 and 12 characters:**

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000

**\*\* 【Exit Setup】**



【Enter Setup】

## Parity Check

Check digits are optional for MSI-Plessey and can be added as the last one or two digits, which are calculated values used to verify the accuracy of the data.

If the **No Parity Check** option is enabled, the scanner transmits MSI-Plessey bar codes as is.



【No Parity Check】



【Two Check Digits, MOD10/MOD11】



\*\* 【One Check Digit, MOD10】



【Do Not Transmit Check Digit】



【Two Check Digits, MOD10/MOD10】



\*\* 【Transmit Check Digit】



If the scanner enables one type of parity check and the **Do Not Transmit Check Digit** option, MSI-Plessey bar codes with a length that is less than the configured minimum length after having the check digit(s) excluded will not be decoded. (For example, when the **One Check Digit, MOD11** and **Do Not Transmit Check Digit** options are enabled and the minimum length is set to 4, MSI-Plessey bar codes with a total length of 4 characters including the check digit cannot be read.)



\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## PDF417

### Restore Factory Defaults



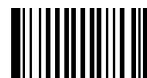
0501000

\*\* 【Restore the Factory Defaults of PDF417】



0501020

\*\* 【Enable PDF417】



0501010

【Disable PDF417】



If the scanner fails to identify PDF417 bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable PDF417** bar code.



0006000

\*\* 【Exit Setup】

---



0006010

【Enter Setup】

## Set Length Range for PDF417

The scanner can be configured to only decode PDF417 bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



0501030

【Set the Minimum Length (Default: 1)】



0501040

【Set the Maximum Length (Default: 2710)】



If minimum length is set to be greater than maximum length, the scanner only decodes PDF417 bar codes with either the minimum or maximum length. If you only want to read PDF417 bar codes with a specific length, set both minimum and maximum lengths to be that desired length.



### Set the scanner to decode PDF417 bar codes containing between 8 and 12 bytes:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## PDF417 Twin Code

PDF417 twin code is 2 PDF417 bar codes paralleled vertically or horizontally. Two of them must have the same direction and similar specifications and be placed closely together.

There are 3 options for reading PDF417 twin codes:

- ◊ **Single PDF417 Only:** Read either PDF417 code.
- ◊ **Twin PDF417 Only:** Read both PDF417 codes. Transmission sequence: left (upper) PDF417 code followed by right (lower) PDF417 code.
- ◊ **Both Single & Twin:** Read both PDF417 codes. If successful, transmit as twin PDF417 only. Otherwise, try single PDF417 only.

0501070  
\*\* 【Single PDF417 Only】0501080  
【Twin PDF417 Only】0501090  
【Both Single & Twin】

0006000

\*\* 【Exit Setup】



0006010

**【Enter Setup】**

---

## **PDF417 Inverse**

Regular bar code: Dark bars on a bright background.

Inverse bar code: Bright bars on a dark background.



0501320

**\*\* 【Decode Regular PDF417 Bar Codes Only】**



0501321

**【Decode Inverse PDF417 Bar Codes Only】**



0501322

**【Decode Both】**



0006000

**\*\* 【Exit Setup】**



0006010

【Enter Setup】

---

## QR Code

### Restore Factory Defaults



0502000

\*\* 【Restore the Factory Defaults of QR Code】

### Enable/Disable QR Code



0502020

\*\* 【Enable QR Code】



0502010

【Disable QR Code】



If the scanner fails to identify QR Code bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable QR Code** bar code.



0006000

\*\* 【Exit Setup】

---



【Enter Setup】

---

## Set Length Range for QR Code

The scanner can be configured to only decode QR Code bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



【Set the Minimum Length (Default: 1)】



【Set the Maximum Length (Default: 7089)】



If minimum length is set to be greater than maximum length, the scanner only decodes QR Code bar codes with either the minimum or maximum length. If you only want to read QR Code bar codes with a specific length, set both minimum and maximum lengths to be that desired length.



### To set the scanner to decode QR Code bar codes containing between 8 and 12 bytes:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Exit Setup** bar code.
9. Scan the **Exit Setup** bar code.



\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## QR Twin Code

QR twin code is 2 QR bar codes paralleled vertically or horizontally. Two of them must have the same direction and similar specifications and be placed closely together.

There are 3 options for reading QR twin codes:

- ✧ **Single QR Only:** Read either QR code.
- ✧ **Twin QR Only:** Read both QR codes. Transmission sequence: left (upper) QR code followed by right (lower) QR code.
- ✧ **Both Single & Twin:** Read both QR codes. If successful, transmit as twin QR only. Otherwise, try single QR only.



0502070

\*\* 【Single QR Only】



0502090

【Both Single &amp; Twin】



0502080

【Twin QR Only】



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Aztec

### Restore Factory Defaults



0503000

\*\* 【Restore the Factory Defaults of Aztec Code】

### Enable/Disable Aztec Code



0503020

【Enable Aztec Code】



0503010

\*\* 【Disable Aztec Code】



If the scanner fails to identify Aztec bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Aztec Code** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Set Length Range for Aztec Code

The scanner can be configured to only decode Aztec bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



【Set the Minimum Length (Default: 1)】



【Set the Maximum Length (Default: 3832)】



If minimum length is set to be greater than maximum length, the scanner only decodes Aztec bar codes with either the minimum or maximum length. If you only want to read Aztec bar codes with a specific length, set both minimum and maximum lengths to be that desired length.



### To set the scanner to decode Aztec bar codes containing between 8 and 12 bytes:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000

\*\* 【Exit Setup】



【Enter Setup】

## Read Multi-barcodes on an Image

There are three modes:

- ✧ **Mode 1:** Read one bar code only.
- ✧ **Mode 2:** Read fixed number of bar codes only.
- ✧ **Mode 3:** Composite Reading. Read fixed number of bar codes first. If unsuccessful, read one bar code only.



\*\* 【Mode 1】



【Mode 2】



【Mode 3】



\*\* 【Exit Setup】



0006010

【Enter Setup】

---

### Set the Number of Bar Codes



0503060

\*\* 【1】



0503064

【5】



0503061

【2】



0503065

【6】



0503062

【3】



0503066

【7】



0503063

【4】



0503067

【8】



0006000

\*\* 【Exit Setup】

---



0006010

【Enter Setup】

---

## Data Matrix

### Restore Factory Defaults



0504000

\*\* 【Restore the Factory Defaults of Data Matrix】

### Enable/Disable Data Matrix



0504020

\*\* 【Enable Data Matrix】



0504010

【Disable Data Matrix】



If the scanner fails to identify Data Matrix bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Data Matrix** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Set Length Range for Data Matrix

The scanner can be configured to only decode Data Matrix bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



【Set the Minimum Length (Default: 1)】



【Set the Maximum Length (Default: 3116)】



If minimum length is set to be greater than maximum length, the scanner only decodes Data Matrix bar codes with either the minimum or maximum length. If you only want to read Data Matrix bar codes with a specific length, set both minimum and maximum lengths to be that desired length.



### To set the scanner to decode Data Matrix bar codes containing between 8 and 12 bytes:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000

\*\* 【Exit Setup】



【Enter Setup】

## Data Matrix Twin Code

Data Matrix twin code is 2 Data Matrix bar codes paralleled vertically or horizontally. Two of them must have the same direction and similar specifications and be placed closely together.

There are 3 options for reading Data Matrix twin codes:

- ✧ **Single Data Matrix Only:** Read either Data Matrix code.
- ✧ **Twin Data Matrix Only:** Read both Data Matrix codes. Transmission sequence: left (upper) Data Matrix code followed by right (lower) Data Matrix code.
- ✧ **Both Single & Twin:** Read both Data Matrix codes. If successful, transmit as twin Data Matrix only. Otherwise, try single Data Matrix only.



\*\* 【Single Data Matrix Only】



【Both Single & Twin】



【Twin Data Matrix Only】



\*\* 【Exit Setup】



0006010

【Enter Setup】

## Rectangular Bar Code

Data Matrix has two formats:

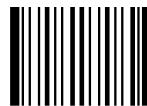
Square bar codes having the same amount of modules in length and width: 10\*10, 12\*12.... 144\*144.

Rectangular bar codes having different amounts of models in length and width: 6\*16;6\*14...14\*22.



0504110

\*\* 【Enable Rectangular Bar Code】



0504100

【Disable Rectangular Bar Code】

## Data Matrix Inverse

Regular bar code: Dark bars on a bright background.

Inverse bar code: Bright bars on a dark background.



0504320

\*\* 【Decode Regular Data Matrix Bar Codes Only】



0504321

【Decode Inverse DataMatrix Bar Codes Only】



0504322

【Decode Both】



0006000

\*\* 【Exit Setup】



【Enter Setup】

## Maxicode

### Restore Factory Defaults



\*\* 【Restore the Factory Defaults of Maxicode】

### Enable/Disable Maxicode



【Enable Maxicode】



\*\* 【Disable Maxicode】



If the scanner fails to identify Maxicode bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Maxicode** bar code.



\*\* 【Exit Setup】



0006010

## 【Enter Setup】

---

### Set Length Range for Maxicode

The scanner can be configured to only decode Maxicode bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



0505030

【Set the Minimum Length (Default: 1)】



0505040

【Set the Maximum Length (Default:150)】



If minimum length is set to be greater than maximum length, the scanner only decodes Maxicode bar codes with either the minimum or maximum length. If you only want to read Maxicode bar codes with a specific length, set both minimum and maximum lengths to be that desired length.



#### To set the scanner to decode Maxicode bar codes containing between 8 and 12 bytes:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000



【Enter Setup】

---

## Chinese Sensible Code

### Restore Factory Defaults



\*\* 【Restore the Factory Defaults of Chinese Sensible Code】

### Enable/Disable Chinese Sensible Code



【Enable Chinese Sensible Code】



\*\* 【Disable Chinese Sensible Code】



If the scanner fails to identify Chinese Sensible Code bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Chinese Sensible Code** bar code.



\*\* 【Exit Setup】



0006010

【Enter Setup】

## Set Length Range for Chinese Sensible Code

The scanner can be configured to only decode Chinese Sensible bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



【Set the Minimum Length (Default: 1)】



【Set the Maximum Length (Default: 7827)】



If minimum length is set to be greater than maximum length, the scanner only decodes Chinese Sensible bar codes with either the minimum or maximum length. If you only want to read Chinese Sensible bar codes with a specific length, set both minimum and maximum lengths to be that desired length.



### To set the scanner to decode Chinese Sensible bar codes containing between 8 and 12 bytes:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code “8”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code “1”.
7. Scan the numeric bar code “2”.
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Chinese Sensible Twin Code

Chinese Sensible twin code is 2 Chinese Sensible bar codes paralleled vertically or horizontally. Two of them must have the same direction and similar specifications and be placed closely together.

There are 3 options for reading Chinese Sensible twin codes:

- ✧ **Single Chinese Sensible Code Only:** Read either Chinese Sensible code.
- ✧ **Twin Chinese Sensible Code Only:** Read both Chinese Sensible codes. Transmission sequence: left (upper) Chinese Sensible code followed by right (lower) Chinese Sensible code.
- ✧ **Both Single & Twin:** Read both Chinese Sensible codes. If successful, transmit as twin Chinese Sensible Code only. Otherwise, try single Chinese Sensible Code only.



0508050

\*\* 【Single Chinese Sensible Code Only】



0508060

【Twin Chinese Sensible Code Only】



0508070

【Both Single &amp; Twin】



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## Chinese Sensible Code Inverse

Regular bar code: Dark bars on a bright background.

Inverse bar code: Bright bars on a dark background.



0508080



0508081

\* 【Decode Regular Chinese Sensible Bar Codes Only】

【Decode Inverse Chinese Sensible Bar Codes Only】



0508082

【Decode Both】



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Micro PDF417

### Restore Factory Defaults



0511000

\*\* 【Restore the Factory Defaults of Micro PDF417】

### Enable/Disable Micro PDF417



0511020

【Enable Micro PDF417】



0511010

\*\* 【Disable Micro PDF417】



If the scanner fails to identify Micro PDF417 bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Micro PDF417** bar code.



0006000

\*\* 【Exit Setup】



0006010

**【Enter Setup】**

## Set Length Range for Micro PDF417

The scanner can be configured to only decode Micro PDF417 bar codes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.



【Set the Minimum Length (Default: 1)】



【Set the Maximum Length (Default: 366)】



If minimum length is set to be greater than maximum length, the scanner only decodes Micro PDF417 bar codes with either the minimum or maximum length. If you only want to read Micro PDF417 bar codes with a specific length, set both minimum and maximum lengths to be that desired length.



### Set the scanner to decode Micro PDF417 bar codes containing between 8 and 12 bytes:

1. Scan the **Enter Setup** bar code.
2. Scan the **Set the Minimum Length** bar code.
3. Scan the numeric bar code "8". (See the "Digit Bar Codes" section in **Appendix**)
4. Scan the **Save** bar code. (See the "Save/Cancel Bar Codes" section in **Appendix**)
5. Scan the **Set the Maximum Length** bar code.
6. Scan the numeric bar code "1".
7. Scan the numeric bar code "2".
8. Scan the **Save** bar code.
9. Scan the **Exit Setup** bar code.



0006000



**【Enter Setup】**

---

## USPS Postnet

### Restore Factory Defaults



**\*\* 【Restore the Factory Defaults of USPS Postnet】**

### Enable/Disable USPS Postnet



**【Enable USPS Postnet】**



**\*\* 【Disable USPS Postnet】**



If the scanner fails to identify USPS Postnet bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable USPS Postnet** bar code.

### Transmit Check Digit



**\*\* 【Transmit USPS Postnet Check Digit】**



**【Do Not Transmit USPS Postnet Check Digit】**

---



**\*\* 【Exit Setup】**



0006010

**【Enter Setup】**

---

## **USPS Intelligent Mail**

**Restore Factory Defaults**



0641000

**\*\* 【Restore the Factory Defaults of USPS Intelligent Mail】**

**Enable/Disable USPS Intelligent Mail**



0641020

**【Enable USPS Intelligent Mail】**



0641010

**\*\* 【Disable USPS Intelligent Mail】**



If the scanner fails to identify USPS Intelligent Mail bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable USPS Intelligent Mail** bar code.



0006000

**\*\* 【Exit Setup】**



0006010

【Enter Setup】

## Royal Mail

### Restore Factory Defaults



0642000

\*\* 【Restore the Factory Defaults of Royal Mail】

### Enable/Disable Royal Mail



0642020

【Enable Royal Mail】



0642010

\*\* 【Disable Royal Mail】



If the scanner fails to identify Royal Mail bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Royal Mail** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## USPS Planet

### Restore Factory Defaults



0643000

\*\* 【Restore the Factory Defaults of USPS Planet】

### Enable/Disable USPS Planet



0643020

【Enable USPS Planet】



0643010

\*\* 【Disable USPS Planet】



If the scanner fails to identify USPS Planet bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable USPS Planet** bar code.

### Transmit Check Digit



0643040

\*\* 【Transmit USPS Planet Check Digit】



0643030

【Do Not Transmit USPS Planet Check Digit】



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## KIX Post

### Restore Factory Defaults



0644000

\*\* 【Restore the Factory Defaults of KIX Post】

### Enable/Disable KIX Post



0644020

【Enable KIX Post】



0644010

\*\* 【Disable KIX Post】



If the scanner fails to identify KIX Post bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable KIX Post** bar code.



0006000

\*\* 【Exit Setup】



0006010

**【Enter Setup】**

## Australian Postal

### Restore Factory Defaults



0645000

**\*\* 【Restore the Factory Defaults of Australian Postal】**

### Enable/Disable Australian Postal



0645020

**【Enable Australian Postal】**

0645010

**\*\* 【Disable Australian Postal】**

If the scanner fails to identify Australian Postal bar codes, you may first try this solution by scanning the **Enter Setup** bar code and then **Enable Australian Postal** bar code.



0006000

**\*\* 【Exit Setup】**



【Enter Setup】

## Chapter 4 Data Formatting

### Introduction

A 1D bar code could contain digits, letters, symbols, etc. A 2D bar code could contain more data, such as Chinese characters and other multi-byte characters. However, in real applications, they do not and should not have all information we need, such as bar code type, data acquisition time and delimiter, in order to keep the bar codes short and flexible.

Prefix and suffix are how to fulfill the needs mentioned above. They can be added, removed and modified while the original bar code data remains intact.

Bar code processing procedure:



1. Extract bar code data
2. Append prefix/suffix
3. Pack data
4. Append terminating character and transmit data



\*\* 【Exit Setup】



0006010

【Enter Setup】

## General Settings

### Enable/Disable All Prefix/Suffix

**Disable All Prefix/Suffix:** Transmit bar code data with no prefix/suffix.

**Enable All Prefix/Suffix:** Allow to append Code ID prefix, AIM ID prefix, custom prefix/suffix and terminating character to the bar code data before the transmission.



0311000

\*\* 【Disable All Prefix/Suffix】



0311010

【Enable All Prefix/Suffix】

## Prefix Sequence

2 prefix sequence options:



0317010

\*\* 【Code ID+ Custom +AIM ID】



0317040

【Custom + Code ID + AIM ID】



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Custom Prefix

### Enable/Disable Custom Prefix

If custom prefix is enabled, you are allowed to append to the data a user-defined prefix that cannot exceed 10 characters. For example, if the custom prefix is "AB" and the bar code data is "123", the Host will receive "AB123".



0305000

\*\* 【Disable Custom Prefix】



0305010

【Enable Custom Prefix】

### Set Custom Prefix

To set a custom prefix, scan the **Set Custom Prefix** bar code and then the numeric bar codes corresponding to the hexadecimal value of a desired prefix. To save the settings, scan the **Save** bar code.

**Note:** A custom prefix cannot exceed 10 characters.



0300000

【Set Custom Prefix】



**To set the custom prefix to "CODE" (0x43/0x4F/0x44/0x45):**

1. Scan the **Enter Setup** bar code.
2. Scan the **Set Custom Prefix** bar code.
3. Scan the numeric bar codes "4", "3", "4", "F", "4", "4", "4" and "5". (See the "**Digit Bar Codes**" section in **Appendix**)
4. Scan the **Save** bar code. (See the "**Save/Cancel Bar Codes**" section in **Appendix**)
5. Scan the **Enable Custom Prefix** bar code.
6. Scan the **Exit Setup** bar code.



0006000

\*\* 【Exit Setup】



0006010

**【Enter Setup】**

## AIM ID Prefix

AIM (Automatic Identification Manufacturers) ID defines symbology identifier. If AIM ID prefix is enabled, the scanner will add the symbology identifier before the scanned data after decoding.



0308000

**\*\* 【Disable AIM ID Prefix】**

0308030

**【Enable AIM ID Prefix】**

AIM ID is not user programmable.

## Code ID Prefix

Code ID can also be used to identify bar code type. Unlike AIM ID, Code ID is user programmable. Code ID can only consist of one or two English letters.



0307000

**\*\* 【Disable Code ID Prefix】**

0307010

**【Enable Code ID Prefix】**

0006000

**\*\* 【Exit Setup】**



【Enter Setup】

---

## Restore All Default Code IDs



【Restore All Default Code IDs】

## Modify Code ID

See the examples below to learn how to modify a Code ID and restore the default Code IDs of all symbologies.



### To set PDF417 Code ID to “p” (0x70):

1. Scan the **Enter Setup** bar code.
2. Scan the **Modify PDF417 Code ID** bar code.
3. Scan the numeric bar codes “7” and “0”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Exit Setup** bar code.

### To restore the default Code IDs of all symbologies:

1. Scan the **Enter Setup** bar code.
2. Scan the **Restore All Default Code IDs** bar code.
3. Scan the **Exit Setup** bar code.



\*\* 【Exit Setup】



0006010

【Enter Setup】

---



0005000

【Modify PDF417 Code ID】



0005030

【Modify Data Matrix Code ID】



0005010

【Modify QR Code ID】



0005040

【Modify Maxicode Code ID】



0005020

【Modify Aztec Code ID】



0005070

【Modify Chinese Sensible Code ID】



0004040

【Modify EAN-8 Code ID】



0004100

【Modify ITF-6 Code ID】



0004050

【Modify EAN-13 Code ID】



0004130

【Modify Code 39 Code ID】

---



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---



0004060

【Modify UPC-E Code ID】



0004150

【Modify Codabar Code ID】



0004070

【Modify UPC-A Code ID】



0004170

【Modify Code 93 Code ID】



0004080

【Modify Interleaved 2 of 5 Code ID】



0004020

【Modify Code 128 Code ID】



0004090

【Modify ITF-14 Code ID】



0004240

【Modify ISBN Code ID】



0004030

【Modify UCC/EAN-128 Code ID】



0004250

【Modify Industrial 25 Code ID】

---



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---



0004280

【Modify Code 11 Code ID】



0004260

【Modify Standard 25 Code ID】



0004300

【Modify EAN•UCC Composite Code ID】



0004270

【Modify Plessey Code ID】



0004310

【Modify GS1 Databar Code ID】



0004290

【Modify MSI-Plessey Code ID】



0005100

【Modify Micro PDF417 Code ID】



0004110

【Modify Matrix 2 of 5 Code ID】



0005400

【Modify USPS Postnet Code ID】



0005410

【Modify USPS Intelligent Mail Code ID】



0006000

\*\* 【Exit Setup】



0006010

**【Enter Setup】**

---



0005420

**【Modify Royal Mail Code ID】**



0005430

**【Modify USPS Planet Code ID】**



0005440

**【Modify KIX Post Code ID】**



0005450

**【Modify Australian Postal Code ID】**



0006000

**\*\* 【Exit Setup】**



0006010

【Enter Setup】

## Custom Suffix

### Enable/Disable Custom Suffix

If custom suffix is enabled, you are allowed to append to the data a user-defined suffix that cannot exceed 10 characters. For example, if the custom suffix is “AB” and the bar code data is “123”, the Host will receive “123AB”.



0306000

\*\* 【Disable Custom Suffix】



0306010

【Enable Custom Suffix】

### Set Custom Suffix

To set a custom suffix, scan the **Set Custom Suffix** bar code and then the numeric bar codes corresponding to the hexadecimal value of a desired suffix. To save the settings, scan the **Save** bar code.

**Note:** A custom suffix cannot exceed 10 characters.



0301000

【Set Custom Suffix】



**To set the custom suffix to “CODE” (0x43/0x4F/0x44/0x45):**

1. Scan the **Enter Setup** bar code.
2. Scan the **Set Custom Suffix** bar code.
3. Scan the numeric bar codes “4”, “3”, “4”, “F”, “4”, “4”, “4” and “5”. (See the “**Digit Bar Codes**” section in **Appendix**)
4. Scan the **Save** bar code. (See the “**Save/Cancel Bar Codes**” section in **Appendix**)
5. Scan the **Enable Custom Suffix** bar code.
6. Scan the **Exit Setup** bar code.



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

## Terminating Character Suffix

### Enable/Disable Terminating Character Suffix

A terminating character, such as carriage return (CR) and carriage return/line feed pair (CRLF), can only be used to mark the end of data, which means nothing can be added after it.

A terminating character suffix cannot be formatted or packed as a custom suffix does.



0309000

\*\* 【Disable Terminating Character Suffix】



0309010

【Enable Terminating Character Suffix】



0006000

\*\* 【Exit Setup】



0006010

【Enter Setup】

---

## Set Terminating Character Suffix

To set a terminating character suffix, scan the **Set Terminating Character Suffix** bar code and then the numeric bar codes corresponding to the hexadecimal value of a desired terminating character. To save the settings, scan the **Save** bar code.

**Note:** A terminating character suffix cannot exceed 2 characters.



【Set Terminating Character Suffix】



0310010

【Terminating Character 0x0D】



0310020

【Terminating Character 0x0D,0x0A】



0006000

\*\* 【Exit Setup】

## Appendix

### Digit Bar Codes

After scanning numeric bar code(s), you need to scan the **Save** bar code to save the data.

0~9



【0】



【1】



【2】



【3】



【4】



【5】



【6】



【7】



【8】



【9】

---

**A~F**



0000100

**【A】**



0000110

**【B】**



0000120

**【C】**



0000130

**【D】**



0000140

**【E】**



0000150

**【F】**

---

---

## Save/Cancel Bar Codes

After reading numeric bar code(s), you need to scan the **Save** bar code to save the data. If you scan the wrong digit(s), you can either scan the **Cancel** bar code and then start the configuration all over again, or scan the **Delete the Last Digit** bar code and then the correct digit, or scan the **Delete All digits** bar code and then the digits you want.

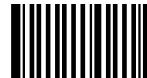
For instance, after reading the **Maximum Length** bar code and numeric bar codes “1”, “2” and “3”, you scan:

- ◊ **Delete the Last Digit:** The last digit “3” will be removed.
- ◊ **Delete All Digits:** All digits “123” will be removed.
- ◊ **Cancel:** The maximum length configuration will be canceled. And the scanner still remains ready to read programming bar code.



0000160

【Save】



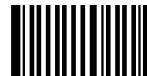
0000190

【Cancel】



0000170

【Delete the Last Digit】



0000180

【Delete All Digits】

---

## ASCII Table

Hex	Dec	Char
00	0	NUL (Null char.)
01	1	SOH (Start of Header)
02	2	STX (Start of Text)
03	3	ETX (End of Text)
04	4	EOT (End of Transmission)
05	5	ENQ (Enquiry)
06	6	ACK (Acknowledgment)
07	7	BEL (Bell)
08	8	BS (Backspace)
09	9	HT (Horizontal Tab)
0a	10	LF (Line Feed)
0b	11	VT (Vertical Tab)
0c	12	FF (Form Feed)
0d	13	CR (Carriage Return)
0e	14	SO (Shift Out)
0f	15	SI (Shift In)
10	16	DLE (Data Link Escape)
11	17	DC1 (XON)(Device Control 1)
12	18	DC2 (Device Control 2)
13	19	DC3 (XOFF)(Device Control 3)
14	20	DC4 (Device Control 4)
15	21	NAK (Negative Acknowledgement)
16	22	SYN (Synchronous Idle)

---

Hex	Dec	Char
17	23	ETB (End of Trans. Block)
18	24	CAN (Cancel)
19	25	EM (End of Medium)
1a	26	SUB (Substitute)
1b	27	ESC (Escape)
1c	28	FS (File Separator)
1d	29	GS (Group Separator)
1e	30	RS (Request to Send)
1f	31	US (Unit Separator)
20	32	SP (Space)
21	33	! (Exclamation Mark)
22	34	" (Double Quote)
23	35	# (Number Sign)
24	36	\$ (Dollar Sign)
25	37	% (Percent)
26	38	& (Ampersand)
27	39	' (Single Quote)
28	40	( (Right / Closing Parenthesis)
29	41	) (Right / Closing Parenthesis)
2a	42	* (Asterisk)
2b	43	+ (Plus)
2c	44	, (Comma)
2d	45	- (Minus / Dash)
2e	46	. (Dot)
2f	47	/ (Forward Slash)

Hex	Dec	Char
30	48	0
31	49	1
32	50	2
33	51	3
34	52	4
35	53	5
36	54	6
37	55	7
38	56	8
39	57	9
3a	58	:
3b	59	;
3c	60	<
3d	61	=
3e	62	>
3f	63	?
40	64	@
41	65	A
42	66	B
43	67	C
44	68	D
45	69	E
46	70	F
47	71	G
48	72	H

Hex	Dec	Char
49	73	I
4a	74	J
4b	75	K
4c	76	L
4d	77	M
4e	78	N
4f	79	O
50	80	P
51	81	Q
52	82	R
53	83	S
54	84	T
55	85	U
56	86	V
57	87	W
58	88	X
59	89	Y
5a	90	Z
5b	91	[ (Left / Opening Bracket)
5c	92	\ (Back Slash)
5d	93	] (Right / Closing Bracket)
5e	94	^ (Caret / Circumflex)
5f	95	_ (Underscore)
60	96	' (Grave Accent)
61	97	a

Hex	Dec	Char
62	98	b
63	99	c
64	100	d
65	101	e
66	102	f
67	103	g
68	104	h
69	105	i
6a	106	j
6b	107	k
6c	108	l
6d	109	m
6e	110	n
6f	111	o
70	112	p
71	113	q
72	114	r
73	115	s
74	116	t
75	117	u
76	118	v
77	119	w
78	120	x
79	121	y
7a	122	z

Hex	Dec	Char	
7b	123	{	(Left/ Opening Brace)
7c	124		(Vertical Bar)
7d	125	}	(Right/Closing Brace)
7e	126	~	(Tilde)
7f	127	DEL	(Delete)