Newland

SCANNING MADE SIMPLE

HR33

MARLIN CORDED

Handheld Scanners

Version: V1.0.0

User Guide

Disclaimer

Please read the manual carefully before using the product and operate it according to the manual. It is advised that you keep this manual for future reference.

Do not disassemble the device or remove the seal label from the device; doing so will void the product warranty provided by Newland Europe BV.

All pictures in this manual are for reference only, and the actual product may differ.

Regarding product modification and update, Newland Europe BV reserves the right to make changes to any software or hardware to improve reliability, function, or design at any time without notice. The information contained herein is subject to change without prior notice.

The products depicted in this manual may include software copyrighted by Newland Europe BV or a third party. The user, corporation or individual shall not duplicate, in whole or in part, distribute, modify, decompile, disassemble, decode, reverse engineer, rent, transfer, or sublicense such software without prior written consent from the copyright holders.

This manual is copyrighted. No part of this publication may be reproduced, distributed, or used in any form without Newland Europe BV's written permission.

Risk Warning Regarding Unauthorized System Updates:
You should use the Newland-provided tool to update this product's system. Modifying system files by installing a third-party ROM system or using any cracking method may result in product malfunction or data loss and void your warranty.

Newland Europe BV reserves the right to make a final interpretation of the statement above.

Newland Europe BV
Rolweg 25, 4104 AV, Culemborg,
The Netherlands
www.newland-id.com

Newland Europe BV is a subsidiary of Newland Digital Technology Co., Ltd. Our general conditions of Purchase, Sale and Delivery are filed with the Record Office of the Chamber of Commerce of Utrecht, The Netherlands.

K.v.K. H.R. Utrecht / Chamber of Commerce Utrecht:
Reg. nr. 17109876

Revision History

Version	Description	Date
1.0.0	Initial release.	July 5th, 2024

Table of Contents

Preface

Introduction

This manual provides detailed instructions for setting up and using the NLS-HR3300 handheld barcode scanner (hereinafter referred to as "**the HR3300**" or "**the scanner**").

Chapter Description

Chapter 1 Getting Started	*:* Gives a general description of HR3300 scanner.
Chapter 2 EasySet	*:* Introduces a useful tool you can use to set up HR3300 canner
Chapter 3 System Settings	*:* Introduces three configuration methods and describes how to configure general parameters of HR3300 scanner.
Chapter 4 RS-232 Interface	*:* Describes how to configure RS-232 communication parameters.
Chapter 5 USB Interface	*:* Describes how to configure USB communication parameters.
Chapter 6 Symbologies	*:* Lists all compatible symbologies and describes how to configure the relevant parameters.
Chapter 7 Prefix & Suffix	*:* Describes how to use prefix and suffix to customize scanned data.
Chapter 8 Batch Programming	*:* Explains how to integrate a complex programming task into a single barcode.
Chapter 9 Maintenance	*:* Explains how to clean and maintain the HR3300.
Appendix	*:* Provides factory defaults table and a bunch of frequently used programming barcodes.

Explanation of Icons

This icon indicates something relevant to this manual.

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.

Chapter 1 Getting Started

Introduction

HR3300 scanner reads a 1D or 2D barcode by capturing its image. Adopting the advanced technology independently developed by Newland Auto-ID Tech and 2d image embedding application barcode engine, it begins a new era of 2d image embedding application barcode engine.

Newland 2D decode IC combines advanced UIMG and IC designation and manufacturing technology, simplifying the difficulties of designation of 2d decode products, establishing remarks of high quality, high reliability and low consumption products.

NLS-HR3300 can read kinds of mainstream 1D barcodes, standard 2D barcodes (all versions of PDF417, QR Code M1/M2/Micro and Data Matrix) and GS1-DataBar™ (RSS) barcodes, including Limited, Stacked, Expanded and so on.

NLS-HR3300 can read barcodes in papers, plastic cards, LCD and other kinds of mediums of printing and displaying. It has great performance. All-in-one design is extremely light and only needs small operation space It can be embedded in varieties of application.

Chapter 2 Easyset

EasySet supports Windows operating systems. EasySet, developed by Fujian Newland Auto-ID Tech. Co., Ltd., is a configuration tool for Newland's 1D/2D handheld barcode scanner, fixed mount barcode scanners and OEM scan engines. Its main features includes vew device & configuration information of online device and send serial commands to online device and receive device response.

Enter Setup

Chapter 3 System Settings

Introduction

There are three ways to configure the scanner: barcode programming, command programming and EasySet programming.

Barcode Programming

The scanner can be configured by scanning programming barcodes. All user programmable features/options are described along with their programming barcodes/commands in the following sections.

This programming method is most straightforward. However, it requires manually scanning barcodes. As a result, errors are more likely to occur.

Command Programming

The scanner can also be configured by serial commands sent from the host device.

Users can design an application program to send those command strings to the scanners to perform device configuration.

EasySet Programming

Besides the two methods mentioned above, you can conveniently perform scanner configuration through EasySet too. EasySet is a Windows-based configuration tool particularly designed for Newland products, enabling users to gain access to decoded data and captured images and to configure scanners. For more information about this tool, refer to the *EasySet User Guide*.

#SETUPE1

Enter Setup

Programming Barcode/ Programming Command/Function

The figure above is an example that shows you the programming barcode and command for the Enter Setup function:

1. The **No Case Conversion** barcode.
2. The **No Case Conversion** command.
3. The description of feature/option.
4. ** indicates factory default setting

#SETUPE1

Enter Setup

Use of Programming Command

Besides the barcode programming method, the scanner can also be configured by serial commands (HEX) sent from the host device. **All commands must be entered in uppercase letters**.

Use of Programming Barcodes

Scanning the **Enter Setup** barcode can enable the scanner to enter the setup mode. Then you can scan a number of programming barcodes to configure your scanner. To exit the setup mode, scan the **Exit Setup** barcode or a non-programing barcode, or reboot the scanner.

@SETUPE0

**** Exit Setup**

@SETUPE1

Enter Setup

Programming barcode data (i.e. the characters under programming barcode) can be transmitted to the host device. You may scan the appropriate barcode below to enable or disable the transmission of programming barcode data to the host device.

#SETUPT0

**** Do Not Transmit Programming Barcode Data**

#SETUPT1

Transmit Programming Barcode Data

#SETUPE0

**** Exit Setup**


#SETUPE1
Enter Setup

Illumination


@ILLSCN1
**** On**


@ILLSCN0
Off

Aiming


@AMLENA1
**** On**


@AMLENA0
Off


@AMLENA2
Always lighting


#SETUPE0
**** Exit Setup**

Enter Setup

Good Read LED

The green LED can be programmed to be On or Off to indicate good read.

**** On**

Off

**** Exit Setup**


#SETUPE1
Enter Setup

Good Read LED Duration

This parameter sets the amount of time that the Good Read LED to remain on following a good read. It is programmable in 1ms increments from 1ms to 2,000ms.


@GRLDUR20
**** Short (20ms)**


@GRLDUR120
Medium (120ms)


@GRLDUR220
Long (220ms)


@GRLDUR320
Prolonged (320ms)


@GRLDUR
Custom (1 - 2,000ms)

Example

Set the Good Read LED duration to 800ms:

1. Scan the **Enter Setup** barcode.
2. Scan the **Custom** barcode.
3. Scan the numeric barcodes “8”, “0” and “0” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Exit Setup** barcode.


#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

@GRLDUR100

100ms

@GRLDUR200

200ms

@GRLDUR300

300ms

@GRLDUR400

400ms

@GRLDUR500

500ms

@GRLDUR600

600ms

@GRLDUR700

700ms

@GRLDUR800

800ms

#SETUPE0

**** Exit Setup**


#SETUPE1
Enter Setup


@GRLDUR900
900ms


@GRLDUR1000
1000ms


@GRLDUR1100
1100ms


@GRLDUR1200
1200ms


@GRLDUR1300
1300ms


@GRLDUR1400
1400ms


@GRLDUR1500
1500ms


@GRLDUR1600
1600ms


#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Beep

Power On Beep

The scanner can be programmed to beep when it is powered on. Scan the **Off** barcode if you do not want a power on beep.

@PWBENA1

**** On**

@PWBENA0

Off

Good Read Beep

Scanning the **Off** barcode can turn off the beep that indicates successful decode; scanning the **On** barcode can turn it back on.

@GRBENA1

**** On**

@GRBENA0

Off

#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup

Good Read Beep Duration

This parameter sets the length of the beep the scanner emits on a good read. It is programmable in 1ms increments from 20ms to 300ms.


@GRBDUR40

Short (40ms)


@GRBDUR80

**** Medium (80ms)**


@GRBDUR120

Long (120ms)


@GRBDUR

Custom (20 – 300ms)

Example

Set the Good Read Beep duration to 200ms:

1. Scan the **Enter Setup** barcode.
2. Scan the **Custom** barcode.
3. Scan the numeric barcodes “2”, “0” and “0” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Exit Setup** barcode.


#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup

Good Read Beep Frequency

This parameter is programmable in 1Hz increments from 20Hz to 20,000Hz


@GRBFRQ930

Extra Low (930Hz)


@GRBFRQ2700

**** Low (2700Hz)**


@GRBFRQ3940

Medium (3940Hz)


@GRBFRQ4800

High (4800Hz)


@GRBFRQ

Custom(20-20000Hz)

Example

Set the Good Read Beep frequency to 2,000Hz:

1. Scan the **Enter Setup** barcode.
2. Scan the **Custom** barcode.
3. Scan the numeric barcodes “2”, “0”, “0” and “0” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Exit Setup** barcode.


#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Good Read Beep Volume

This parameter is programmable in 1 increments from 1 to 20

@GRBVLL20
**** Loud**

@GRBVLL7
Medium

@GRBVLL2
Low

@GRBVLL
Custom(1-20)

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Reminder Beep Volume

This parameter is available for reminder beep volume of the following operations: power on (for all products), power off, batch transmission, pairing the scanner to a cradle, searching paired scanner, the scanner connects on the cradle, the scanner disconnects the cradle, bluetooth connection and transmission.

@SUCVLL20

**** Loud**

@SUCVLL12

Medium

@SUCVLL5

Low

@SUCVLL0

Mute

@SUCVLL

Custom (0-20)

Example

Set the above operations' beep volume to 10:

1. Scan the **Enter Setup** barcode.
2. Scan the **Beep Volume** barcode.
3. Scan the numeric barcodes "1", "0" and "0" from the "Digit Barcodes" section in Appendix.
4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
5. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Scan Mode

- **Level Mode:** A trigger pull activates a decode session. The decode session continues until a barcode is decoded or you release the trigger.
- **Sense Mode:** The scanner waits for the image stabilization timeout to expire before activating a decode session everytime it detects a change in ambient illumination. Decode session continues until a barcode is decoded or the decode session timeout expires. In this mode, a trigger pull can also activate a decode session. The decode session continues until a barcode is decoded or the trigger is released. When the session ends, the scanner continues to monitor ambient illumination. **Timeout between Decodes (Same Barcode)** can avoid undesired rereading of same barcode in a given period of time. **Sensitivity** can change the Sense Mode's sensibility to changes in ambient illumination.
- **Continuous Mode**: The scanner automatically starts one decode session after another. To suspend/resume barcode reading, simply press the trigger. **Timeout between Decodes (Same Barcode)** can avoid undesired rereading of same barcode in a given period of time.
- **Pulse Mode:** When the trigger is pulled and released, scanning is activated until a barcode is decoded or the decode session timeout expires (The decode session timeout begins when the trigger is released).
- **Batch Mode:** When the trigger is pulled and released, scanning is activated until the trigger is released. During pulling the trigger, good read barcodes will beep and output barcode information. As long as unrelease the trigger, it will continues decoding. During pulling the trigger, same code can be read only once.

@SCNMOD0

**** Level Mode**

@SCNMOD2

Sense Mode

@SCNMOD3

Continuous Mode

#SETUPE0

**** Exit Setup**

Enter Setup

Pulse Mode

Batch Mode

**** Exit Setup**

#SETUPE1

Enter Setup

Decode Session Timeout

This parameter sets the maximum time decode session continues during a scan attempt. It is programmable in 1ms increments from 1ms to 3,600,000ms. When it is set to 0, the timeout is infinite. The default setting is 3,000ms.

@ORTSET

Decode Session Timeout

Example

Set the decode session timeout to 1,500ms:

1. Scan the **Enter Setup** barcode.
2. Scan the **Decode Session Timeout** barcode.
3. Scan the numeric barcodes “1”, “5”, “0” and “0” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Image Stabilization Timeout (Sense Mode)

This parameter defines the amount of time the scanner will spend adapting to ambient environment after it decodes a barcode and “looks” for another. It is programmable in 1ms increments from 0ms to 3,000ms. The default setting is 200ms.

@SENIST

Image Stabilization Timeout

Example

Set the image stabilization timeout to 800ms:

1. Scan the **Enter Setup** barcode.
2. Scan the **Image Stabilization Timeout** barcode.
3. Scan the numeric barcodes “8”, “0” and “0” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Reread Timeout

Reread Timeout can avoid undesired rereading of same barcode in a given period of time. This feature is only applicable to the Sense and Continuous modes.

Enable Reread Timeout: Do not allow the scanner to reread same barcode before the reread timeout expires.

Disable Reread Timeout: Allow the scanner to reread same barcode.

@RRDENA1

Enable Reread Timeout

@RRDENA0

****Disable Reread Timeout**

The following parameter sets the timeout between decodes for same barcode. It is programmable in 1ms increments from 1ms to 3,600,000ms. When it is set to a value greater than 3,000, the timeout for rereading same programming barcode is limited to 3,000ms. The default setting is 1,000ms.

@RRDDUR

Set Reread Timeout

Example

Set the reread timeout to 1,000ms:

1. Scan the **Enter Setup** barcode.
2. Scan the **Timeout between Decodes (Same Barcode)** barcode.
3. Scan the numeric barcodes “1”, “0”, “0” and “0” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

You may wish to restart the reread timeout when the scanner encounters the same barcode that was decoded in the last scan session before the reread timeout expires. To enable this feature, scan the **Reread Timeout Reset On** barcode. This feature is only effective when **Reread Timeout** is enabled.

@RRDREN1

Reread Timeout Reset On

@RRDREN0

**** Reread Timeout Reset Off**

Image Decoding Timeout

Image Decoding Timeout specifies the maximum time the scanner will spend decoding an image. This parameter is programmable in 1ms increments from 1ms to 3,000ms. The default timeout is 500ms.

@DETSET

Image Decoding Timeout

Example

Set the image decoding timeout to 1,000ms:

1. Scan the **Enter Setup** barcode.
2. Scan the **Image Decoding Timeout** barcode.
3. Scan the numeric barcodes “1”, “0”, “0” and “0” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Scanning Preference

Normal Exposure Mode: Select this mode when reading barcodes on paper.

Mobile Mode: Select this mode when reading barcodes on the screen.

@EXPLVL0

**** Normal Exposure Mode**

@EXPLVL2

Mobile Mode

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Surround GS1 Application Identifiers (AIs) with Parentheses

When **Surround GS1 AIs with Parentheses** is selected, each application identifier (AI) contained in scanned data will be enclosed in parentheses in the output message.

@GS1AIP0

**** Do Not Surround GS1 AIs with Parentheses**

@GS1AIP1

Surround GS1 AIs with Parentheses

Example

(01) 0 0614141 99999 6 (10) 10ABCEDF123456

If **Surround GS1 AIs with Parentheses** is selected, the barcode above is output as (01)00614141999996(10)10ABCEDF123456.

If **Do Not Surround GS1 AIs with Parentheses** is selected, the barcode above is output as 0100614141999996 1010ABCEDF123456.

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Output GS1 Application Identifiers (AIs)

@GS1OAI0
Do Not Output GS1 AIs

@GS1OAI1
**** Output GS1 AIs**

Example

If **Output GS1 AIs** is selected, the barcode above is output as

0100614141999996101OABCEDF123456

If **Do Not Output GS1 AIs** is selected, the barcode above is output as

0061414199999610ABCEDF123456

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

GS1-128(UCC/EAN-13)

@GS1OA10

Do Not Output GS1 AIs

@GS1OA11

**** Output GS1 AIs**

GS1 Databar(RSS)

@GS1OAR0

Do Not Output GS1 AIs

@GS1OAR1

**** Output GS1 AIs**

GS1 QR

@GS1OAQ0

Do Not Output GS1 AIs

@GS1OAQ1

**** Output GS1 AIs**

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

GS1 Data Matrix

@GS1OAD0
Do Not Output GS1 AIs

@GS1OAD1
**** Output GS1 AIs**

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Transmit GS1 Check Character

@GS1OCK0

Do Not Transmit GS1 Check Character

@GS1OCK1

**** Transmit GS1 Check Character**

Example

(01) 0 0614141 99999 6 (10) 10ABCEDF123456

If **Transmit GS1 Check Character** is selected, the barcode above is output as

0100614141999961010ABCEDF123456

If **Do Not Transmit GS1 Check Character** is selected, the barcode above is output as

0100614141999991010ABCEDF123456

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

GS1-128(UCC/EAN-13)

@GS1OC10
Do Not Transmit GS1 Check Character

@GS1OC11
** **Transmit GS1 Check Character**

GS1 Databar(RSS)

@GS1OCR0
Do Not Transmit GS1 Check Character

@GS1OCR1
** **Transmit GS1 Check Character**

GS1 QR

@GS1OCQ0
Do Not Transmit GS1 Check Character

@GS1OCQ1
** **Transmit GS1 Check Character**

#SETUPE0
** **Exit Setup**

#SETUPE1

Enter Setup

GS1 Data Matrix

@GS1OCD0

Do Not Transmit GS1 Check Character

@GS1OCD1

** **Transmit GS1 Check Character**

#SETUPE0

** **Exit Setup**

#SETUPE1

Enter Setup

Sensitivity

Sensitivity specifies the degree of acuteness of the scanner's response to changes in images captured. The higher the sensitivity, the lower requirement in image change to trigger the scanner. You can select an appropriate degree of sensitivity that fits the application environment. The feature is only applicable to the Sense mode. It is programmable from 1 to 20. The default setting is Medium (5).

@SENLVL14

Low Sensitivity

@SENLVL11

**** Medium Sensitivity**

@SENLVL8

High Sensitivity

@SENLVL5

Enhanced Sensitivity

@SENLVL

Custom Sensitivity (1-20)

Example

Set the sensitivity to Level 10:

1. Scan the **Enter Setup** barcode.
2. Scan the **Custom Sensitivity** barcode.
3. Scan the numeric barcodes "1" and "0" from the "Digit Barcodes" section in Appendix.
4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
5. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Trigger Commands

When **Enable Trigger Commands** is selected, you can activate and deactivate the scanner in the Level mode with serial trigger commands. Sending the **Start Scanning** command (default: **<SOH> T <EOT>**, user-programmable) to the scanner in the Level mode activates a decode session. The decode session continues until a barcode is decoded or the decode session timeout or the scanner receives the **Stop Scanning** command (default: **<SOH> P <EOT>**, user-programmable).

@SCNTCE0

**** Disable Trigger Commands**

@SCNTCE1

Enable Trigger Commands

Modify Start Scanning Command

The Start Scanning Command can stimulate the trigger unreleased and consist of 1-10 characters (HEX values from 0x01 to 0xFF). In this command, the character "?" (HEX: 0x3F) cannot be the first character. The default **Start Scanning** command is **<SOH> T <EOT>**.

@SCNTCT

Modify Start Scanning Command

Example

Set the Start Scanning command to "*T":

1. Scan the **Enter Setup** barcode.
2. Scan the **Modify Start Scanning Command** barcode.
3. Scan the numeric barcodes "2", "A", "5" and "4" from the "Digit Barcodes" section in Appendix.
4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
5. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Modify Stop Scanning Command

The Stop Scanning Command can stimulate the trigger unreleased and consist of 1-10 characters (HEX values from 0x01 to 0xFF). In this command, the character “?” (HEX: 0x3F) cannot be the first character. The default **Stop Scanning** command is **<SOH> P <EOT>**.

@SCNTCP

Modify Stop Scanning Command

#SETUPE0

**** Exit Setup**

Enter Setup

Read Barcode On/Off

Sending the Read Barcode Off command **~<SOH>0000#SCNENA0;<ETX>** to the scanner can disable it from reading barcode, and the scanner is unable to scan barcode unless you send the Read Barcode On command **~<SOH>0000#SCNENA1;<ETX>** to it or power cycle it. By default, Read Barcode is On.

**** Exit Setup**

#SETUPE1
Enter Setup

USB Data Transmission Failure Notification

1. Beep: Sounds a beep when USB data transmission times out.
2. Vibration: Vibrates when USB data transmission times out.
3. Beep + Vibration: Sounds a beep and vibrates when USB data transmission times out.

@USBDFA1
Beep

@USBDFA0
** **Disable Notification**

#SETUPE0
** **Exit Setup**

#SETUPE1

Enter Setup

Decode Area

Whole Area Decoding: The scanner attempts to decode barcode(s) within its field of view, from the center to the periphery, and transmits the barcode that has been first decoded.

Specific Area Decoding: The scanner attempts to read barcode(s) within a specified decoding area and transmits the barcode that has been first decoded. This option allows the scanner to narrow its field of view to make sure it reads only those barcodes intended by the user. For instance, if multiple barcodes are placed closely together, specific area decoding in conjunction with appropriate pre-defined decoding area will insure that only the desired barcode is read.

Acuscan: The scanner only decodes the barcode aimed squarely by the aiming pattern. For those using a crosshair aiming pattern, only the barcode aimed by the center of crosshair will be decoded.

@CADENA0

**** Whole Area Decoding**

@CADENA1

Specific Area Decoding

@CADENA2

Acuscan

If **Specific Area Decoding** is enabled, the scanner only reads barcodes that intersect the predefined decoding area. The default decoding area is an area of 40% top, 60% bottom, 40% left and 60% right of the scanner's field of view

You can define the decoding area using the **Top of Decoding Area**, **Bottom of Decoding Area**, **Left of Decoding Area** and **Right of Decoding Area** barcodes as well as numeric barcode(s) that represent(s) a desired percentage (0-100). The value of Bottom must be greater than that of Top; the value of Right must be greater than that of Left.

@CADTOP

Top of Decoding Area

#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup


@CADBOT

Bottom of Decoding Area


@CADLEF

Left of Decoding Area


@CADRIG

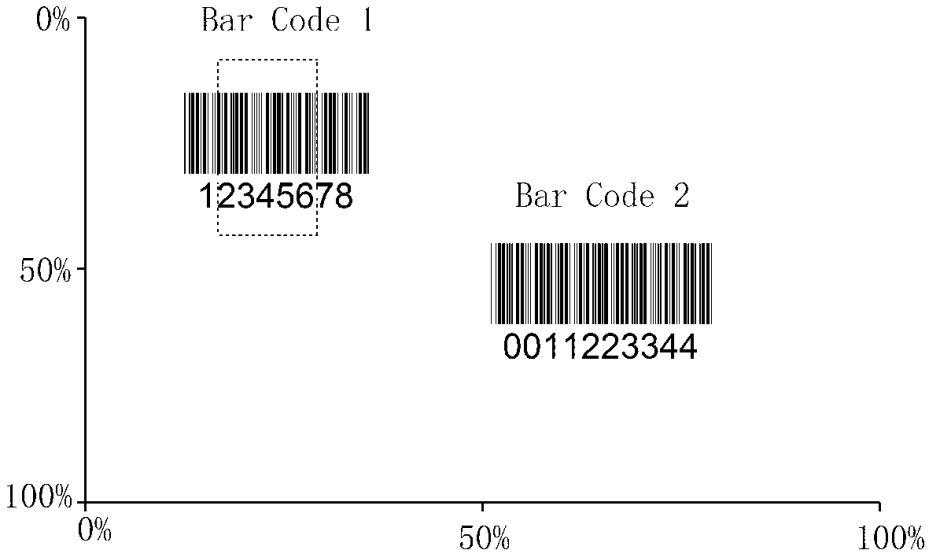
Right of Decoding Area


#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup



Example

Program the scanner to only read Barcode 1 in the figure above by setting the decoding area to 10% top, 45% bottom, 15% left and 30% right:

1. Scan the **Enter Setup** barcode.
2. Scan the **Top of Decoding Area** barcode.
3. Scan the numeric barcode “0” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Bottom of Decoding Area** barcode.
6. Scan the numeric barcodes “4” and “5” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Top of Decoding Area** barcode.
9. Scan the numeric barcodes “1” and “0” from the “Digit Barcodes” section in Appendix.
10. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
11. Scan the **Left of Decoding Area** barcode.
12. Scan the numeric barcode “0” from the “Digit Barcodes” section in Appendix.
13. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
14. Scan the **Right of Decoding Area** barcode.
15. Scan the numeric barcodes “3” and “0” from the “Digit Barcodes” section in Appendix.
16. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
17. Scan the **Left of Decoding Area** barcode.
18. Scan the numeric barcodes “1” and “5” from the “Digit Barcodes” section in Appendix.
19. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
20. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Image Flipping

@MIRROR0
**** Do Not Flip**

@MIRROR1
Flip Horizontally

@MIRROR2
Flip Vertically

@MIRROR3
Flip Horizontally & Vertically

Example of image not flipped

Example of image flipped horizontally

Example of image flipped vertically

Example of image flipped horizontally & vertically

#SETUPE0
**** Exit Setup**

Enter Setup

Smart Stand Mode

After this feature is turned on, the scanner will switch from its current scan mode to the Sense mode when it is inserted in the stand, and it will operate in its previous scan mode when it is removed from the stand.

Off

****On**

**** Exit Setup**

#SETUPE1

Enter Setup

Bad Read Message

Scan the appropriate barcode below to select whether or not to send a bad read message (user-programmable) when a good read does not occur before trigger release, or the decode session timeout expires, or the scanner receives the **Stop Scanning** command (For more information, see the “Serial Trigger Command” section in this chapter).

@NGRENA0

**** Bad Read Message OFF**

@NGRENA1

Bad Read Message ON

Set Bad Read Message

A bad read message can contain up to 7 characters (HEX values from 0x00 to 0xFF). To set a bad read message, scan the **Set Bad Read Message** barcode, the numeric barcodes representing the hexadecimal values of desired character(s) and the **Save** barcode. The default setting is “NG”.

@NGRSET

Set Bad Read Message

Example

Set the bad read message to “F” (HEX: 0x46):

1. Scan the **Enter Setup** barcode.
2. Scan the **Set Bad Read Message** barcode.
3. Scan the numeric barcodes “4” and “6” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Default Settings

Factory Defaults

Scanning the following barcode can restore the scanner to the factory defaults. You may need to reset all parameters to the factory defaults when:

1. The scanner is not properly configured so that it fails to decode barcodes.
2. You forget previous configuration and want to avoid its impact.

@FACDEF

****Restore All Factory Defaults**

Custom Defaults

Scanning the **Restore All Custom Defaults** barcode can reset all parameters to the custom defaults. Scanning the **Save as Custom Defaults** barcode can set the current settings as custom defaults.

Custom defaults are stored in the non-volatile memory.

@CUSSAV

Save as Custom Defaults

@CUSDEF

Restore All Custom Defaults

Restoring the scanner to the factory defaults will not remove the custom defaults from the scanner.

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Query Product Information

After scanning the barcode below, the product information (including product name, firmware version, decoder version, hardware version, product serial number, OEM serial number, manufacturing date and data formatter version) will be sent to the host device.

@QRYSYS
Query Product Information

Query Product Name

@QRYPDN
Query Product Name

Query Firmware Version

@QRYFWV
Query Firmware Version

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Query Decoder Version

@QRYDCV

Query Decoder Version

Query Hardware Version

@QRYHWV

Query Hardware Version

Query Product Serial Number

@QRYPSN

Query Product Serial Number

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Query OEM Serial Number

@QRYESN
Query OEM Serial Number

Query Manufacturing Date

@QRYDAT
Query Manufacturing Date

Query Data Formatter Version

@QRYDFM
Query Data Formatter Version

#SETUPE0
**** Exit Setup**

Chapter 4 RS23-232 Interface (Optional model)

Introduction

When the scanner is connected to the RS-232 port of a host device, the scanner will automatically enable RS-232 communication. However, you need to set communication parameters (including interface cables auto match, baud rate, parity check, data bit and stop bit) on the scanner to match the host device so that two devices can communicate with each other.

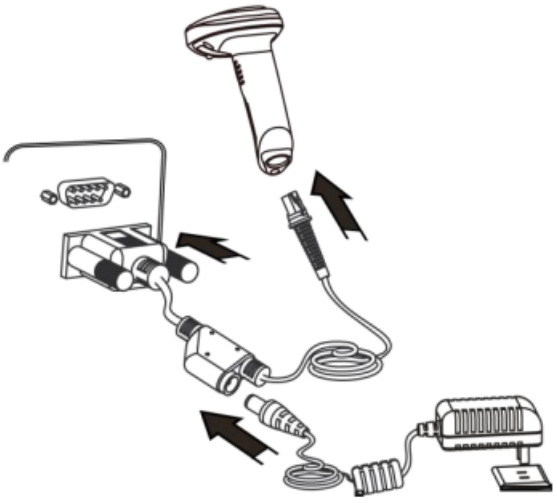

@INTERF0

RS-232

#SETUPE1
Enter Setup

Connect with RS-232 Cable

Using RS-232 Cable



1. Plug the power adapter into the power jack on the cable
2. Plug the RS-232 connector of the cable into the RS-232 port on the Host.
3. Plug the RJ50 connector of the cable into the data port on the scanner

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Interface Cables Auto Match (USB and RS-232 Interface Only)

Off: The scanner is connected to the host device according to communication parameters.

On: When the scanner is connected to the RS-232 port of a host device, the scanner will automatically enable RS-232 communication. When the scanner is connected to the USB port of a host device, the scanner will automatically enable USB communication.

This feature is only effective after rebooting the scanner

@AUTOUR0

Off

@AUTOUR1

**** On**

#SETUPE0

**** Exit Setup**


#SETUPE1
Enter Setup

Baud Rate

Baud rate is the number of bits of data transmitted per second. Set the baud rate to match the host requirements.


@232BAD8
115200


@232BAD7
57600


@232BAD6
38400


@232BAD5
19200


@232BAD4
14400


@232BAD3
**** 9600**


@232BAD2
4800


#SETUPE0
**** Exit Setup**


#SETUPE1

Enter Setup


@232BAD1

2400


@232BAD0

1200


#SETUPE0

**** Exit Setup**


#SETUPE1
Enter Setup

Parity Check

Set the parity type to match the host requirements.

1. Odd Parity: If the data contains an odd number of 1 bits, the parity bit value is set to 0.

2. Even Parity: If the data contains an even number of 1 bits, the parity bit value is set to 0.

3. None: Select this option when no parity bit is required.


@232PAR0
**** None**


@232PAR1
Even Parity


@232PAR2
Odd Parity


#SETUPE0
**** Exit Setup**

Enter Setup

Data Bit

Set the number of data bits to match the host requirements.

7 Data Bits

**** 8 Data Bits**

Stop Bit

The stop bit(s) at the end of each transmitted character marks the end of transmission of one character and prepares the receiving device for the next character in the serial data stream. Set the number of stop bits to match the host requirements.

**** 1 Stop Bit**

2 Stop Bits

**** Exit Setup**

Chapter 5 USB Interface

Introduction

There are four options for USB connection:

- USB HID Keyboard: The scanner's transmission is simulated as USB keyboard input with no need for command configuration or a driver. Barcode data could be entered by the virtual keyboard directly and it is also convenient for the host device to receive data.
- USB CDC: It is compliant with the standard USB CDC class specifications defined by the USB-IF and allows the host device to receive data in the way as a serial port does. A driver is needed when using this feature.
- HID POS (POS HID Barcode Scanner): It is based on the HID interface, with no need for a custom driver. It excels virtual keyboard and traditional RS-232 interface in transmission speed.
- IBM SurePOS: It conforms to IBM (now Toshiba Global Commerce Solutions) 4698 USB scanner interface specifications.

When the scanner is connected to both USB and RS-232 ports on a host device, it will select the USB connection by default.

#SETUPE1

Enter Setup

USB HID Keyboard

When the scanner is connected to the USB port on a host device, you can enable the USB HID Keyboard feature by scanning the barcode 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.

@INTERF3

**** USB HID Keyboard**

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

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Composite Mode (USB Keyboard)

When Composite Mode (USB Keyboard) is enabled, bidirectional communication with the host PC can occur without switching communication interfaces (e.g., when configuring scanners using Easyset). Some very old host PCs may fail to correctly recognize devices in composite mode, leading to abnormal operation. Disabling Composite Mode restores normal functionality.

@KBWCDM0

Disable Composite Mode

@KBWCDM1

** **Enable Composite Mode**

#SETUPE0

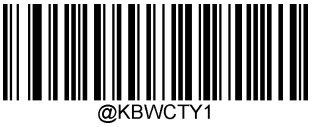
** **Exit Setup**

Enter Setup

USB Country Keyboard Types

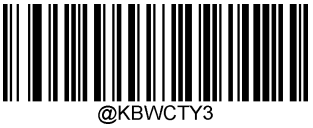
Keyboard layouts vary from country to country. The default setting is U.S. keyboard.

**** U.S. (English)**



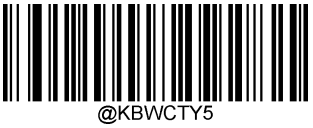
Belgium

Brazil

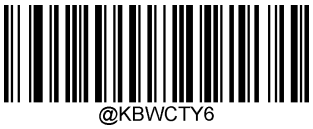


Canada (French)

Czechoslovakia



Denmark



Finland (Swedish)

**** Exit Setup**

#SETUPE1

Enter Setup

@KBWCTY7

France

@KBWCTY8

Germany / Austria

@KBWCTY9

Greece

@KBWCTY10

Hungary

@KBWCTY11

Israel (Hebrew)

@KBWCTY12

Italy

@KBWCTY13

Latin America/ South America

@KBWCTY14

Netherlands (Dutch)

#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup


@KBWCTY15

Norway


@KBWCTY16

Poland


@KBWCTY17

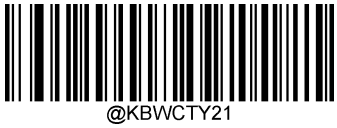
Portugal


@KBWCTY18

Romania


@KBWCTY19

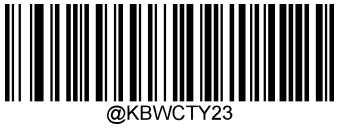
Russia


@KBWCTY21

Slovakia


@KBWCTY22

Spain


@KBWCTY23

Sweden


#SETUPE0

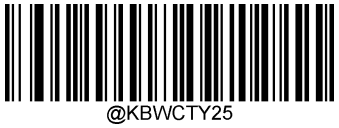
**** Exit Setup**


#SETUPE1

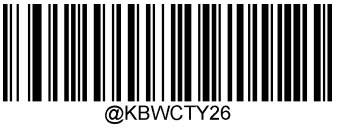
Enter Setup


@KBWCTY24

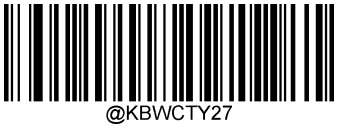
Switzerland (German)


@KBWCTY25

Turkey_F


@KBWCTY26

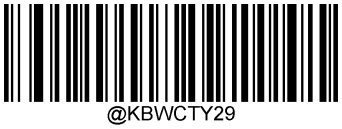
Turkey_Q


@KBWCTY27

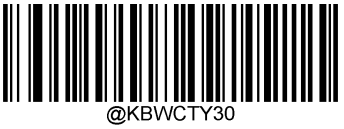
UK


@KBWCTY28

Japan


@KBWCTY29

Poland(Programmer)


@KBWCTY30

Czech(Programmer)


@KBWCTY31

German(No Dead Key)


#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Beep on Unknown Character

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

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

@KBWBUC0

**** Do Not Beep on Unknown Character**

@KBWBUC1

Beep on Unknown Character

Supposing French keyboard (Country Code: 7) is selected and barcode data ”AÐF” is being dealt with, the keyboard will fail to locate the “Ð” (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”.

If **Emulate ALT+Keypad ON** is selected, **Beep on Unknown Character** does not function.

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Emulate ALT+Keypad

When **Emulate ALT+Keypad** is turned on, any character is sent via the numeric keypad and overlook USB country keyboard type. This mode need to set **Code Page Option** and **Unicode Output. Code Page** determines the target language. **Unicode Output** determines the ASCII input to the host device.

@KBWALT0

**** Emulate ALT+Keypad OFF**

@KBWALT1

Emulate ALT+Keypad ON

ASCII characters between 0x00~0x1Fwill be input in way of Function Key Mapping Set.

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

Supposing **Emulate ALT+Keypad** is ON, **Unicode Encoding** is Off, and **Code Page 1252 (West European Latin)** is selected, barcode data ”AÐF” (65/208/70) is sent as below:

“A” – “ALT Make” + “065” + “ALT

Break” “Ð” -- “ALT Make” + “208”

+ “ALT Break”

“F” -- “ALT Make” + “070” + “ALT Break”

#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup

Code Page

Code pages define the mapping of character codes to characters. If the data received does not display with the proper characters, it may be because the barcode being scanned was created using a code page that is different from the one the host program is expecting. If this is the case, select the code page with which the barcodes were created by scanning the appropriate barcode below. For PDF417, QR Code, Aztec and Data Matrix, besides setting the code page, you also need to set the character encoding in the “Character Encoding” section in Chapter 6. This feature is only effective when **Emulate ALT+Keypad** is turned on. The default setting is Code Page 1252(West European, Latin)


@KBWCPG0

**** Code Page 1252 (West European Latin)**


@KBWCPG1

Code Page 1251 (Cyrillic)


@KBWCPG2

Code Page 1250

(Central and East European Latin)


@KBWCPG3

Code Page 1253 (Greek)


@KBWCPG4

Code Page 1254 (Turkish)


@KBWCPG5

Code Page 1255 (Hebrew)


#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup


@KBWCPG6

Code Page 1256 (Arabic)


@KBWCPG7

Code Page 1257 (Baltic)


@KBWCPG8

Code Page 1258 (Vietnamese)


@KBWCPG9

Code Page 936
(Simplified Chinese, GB2312,GBK)


@KBWCPG11

Code Page 874(Thai)


#SETUPE0

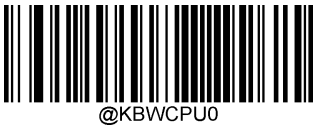
**** Exit Setup**


#SETUPE1

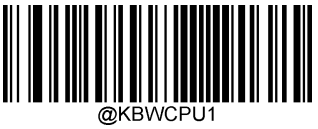
Enter Setup

Unicode Encoding

Different host program may use different character encodings for handling incoming barcode data. For instance, Microsoft Office Word uses Unicode encoding and therefore you should turn **Unicode Encoding** on, whereas Microsoft Office Excel or Notepad uses Code Page encoding and therefore you should turn **Unicode Encoding** off. This feature is only effective when **Emulate ALT+Keypad** is turned on. The default setting is Off


@KBWCPU0

**** Off**


@KBWCPU1

On

Emulate Keypad with Leading Zero

You may turn this feature on to send character sequences sent over the numeric keypad as ISO characters which have a leading zero. For example, ASCII A transmits as “ALT MAKE” 0065 “ALT BREAK”. This feature is only effective when **Emulate ALT+Keypad** is enabled.


@KBWALZ1

**** On**


@KBWALZ0

Off


#SETUPE0

**** Exit Setup**


#SETUPE1

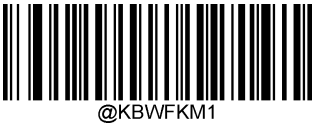
Enter Setup

Function Key Mapping

When **Ctrl+ASCII Mode** is selected, function characters (0x00 - 0x1F) are sent as ASCII sequences. The default setting is Off.


@KBWFKM0

**** Disable**


@KBWFKM1

Ctrl+ASCII Mode


@KBWFKM2

Alt+Keypad Mode

Example

If **Ctrl+ASCII Mode** is selected and other parameters of USB HID Keyboard adopt factory defaults, barcode data “A<HT> (i.e. Horizontal Tab) F” (0x41/0x09/0x46) is sent as below:

“A” - Keystroke “A”.

<HT> - “Ctrl Make” + Keystroke “I” + “Ctrl

Break” “F” - Keystroke “F”

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

If **Alt+Keypad Mode** is selected and other parameters of USB HID Keyboard adopt factory defaults, the data above is sent as below:

“A” - Keystroke “A”.

<HT> - “Alt Make” + Keystrokes “009” + “Alt

Break” “F” - Keystroke “F”


#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup

ASCII Function Key Mapping Table

ASCII Function	ASCII Value (HEX)	Function Key Mapping Disabled	Ctrl+ASCII
NUL	00	Null	Ctrl+@
SOH	01	Keypad Enter	Ctrl+A
STX	02	Caps Lock	Ctrl+B
ETX	03	ALT	Ctrl+C
EOT	04	Null	Ctrl+D
ENQ	05	CTRL	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	Delete	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	Backspace	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+-


#SETUPE0

**** Exit Setup**


#SETUPE1
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	Ctrl+ASCII					
United States	Ctrl+[	Ctrl+\	Ctrl+]	Ctrl+6	Ctrl+-	
Belgium	Ctrl+[	Ctrl+<	Ctrl+]	Ctrl+6	Ctrl+-	
Scandinavia	Ctrl+8	Ctrl+<	Ctrl+9	Ctrl+6	Ctrl+-	
France	Ctrl+^	Ctrl+8	Ctrl+$	Ctrl+6	Ctrl+=	
Germany		Ctrl+Ã	Ctrl++	Ctrl+6	Ctrl+-	
Italy		Ctrl+\	Ctrl++	Ctrl+6	Ctrl+-	
Switzerland		Ctrl+<	Ctrl+..	Ctrl+6	Ctrl+-	
United Kingdom	Ctrl+[	Ctrl+ ¢	Ctrl+]	Ctrl+6	Ctrl+-	
Denmark	Ctrl+8	Ctrl+\	Ctrl+9	Ctrl+6	Ctrl+-	
Norway	Ctrl+8	Ctrl+\	Ctrl+9	Ctrl+6	Ctrl+-	
Spain	Ctrl+[	Ctrl+\	Ctrl+]	Ctrl+6	Ctrl+-	


#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Inter-Keystroke Delay

This parameter specifies the delay between emulated keystrokes. Scanning below barcodes to delay longer when the host device needs slower data transmission. The default setting is No Delay.

@KBWDLY0

**** No Delay**

@KBWDLY40

Long Delay (40ms)

@KBWDLY20

Short Delay (20ms)

Caps Lock

The **Caps Lock ON** option can invert upper and lower case characters contained in barcode data. This inversion occurs regardless of the state of Caps Lock key on the host device's keyboard.

@KBWCAP0

**** Caps Lock OFF (Non-Japanese keyboard)**

@KBWCAP1

Caps Lock ON (Non-Japanese keyboard)

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

Example

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

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Convert Case

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

@KBWCAS0

**** No Case Conversion**

@KBWCAS1

Convert All to Upper Case

@KBWCAS2

Convert All to Lower Case

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

If **Emulate ALT+Keypad ON** is selected, **Convert All to Lower Case** and **Convert All to Upper Case** do not function.

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Emulate Numeric Keypad

Do Not Emulate Numeric Keypad 1: Sending a number (0-9) is emulated as keystroke(s) on main keyboard.

Emulate Numeric Keypad 1: Sending a number (0-9) is emulated as keystroke(s) on numeric keypad. The state of Num Lock on the simulated numeric keypad is determined by its equivalent on the host device. If Num Lock on the host device is turned off, the output of simulated numeric keypad is function key instead of number.

Do Not Emulate Numeric Keypad 2: Sending "+", "—", "*" and "/" is emulated as keystroke(s) on main keyboard.

Emulate Numeric Keypad 2: Sending "+", "—", "*" and "/" is emulated as keystroke(s) on numeric keypad.

@KBWNUM0

**** Do Not Emulate Numeric Keypad 1**

@KBWNUM1

Emulate Numeric Keypad 1

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

@KBWNCH0

**** Do Not Emulate Numeric Keypad 2**

@KBWNCH1

Emulate Numeric Keypad 2

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

Example

Supposing the **Emulate Numeric Keypad 1** and **Emulate Numeric Keypad 2** features are enabled: if Num Lock on the host device is ON, “A4.5” is transmitted as “A4.5”;

if Num Lock on the host device 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;
4. “5” is not sent as it does not correspond to any function key.

Finally the host device will get”.A”

#SETUPE0

**** Exit Setup**


#SETUPE1
Enter Setup

Character”+”,”-“,”*”,”/” Adopt Numeric Keypad


@KBWNCH0
** **Off**


@KBWNCH1
On


#SETUPE0
** **Exit Setup**


#SETUPE1

Enter Setup

Fast Mode

When **Fast Mode On** is selected, the scanner sends characters to the host faster. If the host drops characters, turn the Fast Mode off or change the polling rate to a bigger value.


@KBWFAS0

**** Fast Mode Off**


@KBWFAS1

Fast Mode On


#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Polling Rate

This parameter specifies the polling rate for a USB keyboard. The smaller value rate is, the faster characters transmission from scanner to the host. If the host drops characters, change the polling rate to a bigger value.

@KBWPOR0

**** 1ms**

@KBWPOR1

2ms

@KBWPOR2

3ms

@KBWPOR3

4ms

@KBWPOR4

5ms

@KBWPOR5

6ms

@KBWPOR6

7ms

#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup


@KBWPOR7

8ms


@KBWPOR8

9ms


@KBWPOR9

10ms


#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup

USB CDC

If your scanner is connected to the USB port on a host device, the USB CDC feature allows the host device to receive data in the way as a serial port does. A driver is needed when using this feature. You may download it from our website at www.newlandaidc.com.


@INTERF8

USB CDC


#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

HID POS (POS HID Barcode Scanner)

Introduction

The HID-POS interface is recommended for new application programs. It can send up to 56 characters in a single USB report and appears more efficient than keyboard emulation.

Features:

1. HID based, no custom driver required.
2. More efficient in communication than keyboard emulation and traditional RS-232 interface.

@INTERF5
USB HID-POS

Access the Scanner with Your Program

Use CreateFile to access the scanner as a HID device and then use ReadFile to deliver the scanned data to the application program. Use WriteFile to send data to the scanner.

For detailed information about USB and HID interfaces, go to www.USB.org.

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Acquire Scanned Data

After a barcode is decoded, the scanner sends an input report as below:

	Bit							
Byte	7	6	5	4	3	2	1	0
0	Report ID = 0x02							
1	Barcode Length							
2-57	Decoded Data (1-56)							
58-61	Reserved							
62	Newland Symbology Identifier or N/C: 0x00							
63	-	-	-	-	-	-	-	Decoded data continued

Send Command to the Scanner

This output report is used to send commands to the scanner. All programming commands can be used.

	Bit							
Byte	7	6	5	4	3	2	1	0
0	Report ID = 0x04							
1	Length of command							
2-63	Command (1-62)							

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

IBM SurePOS (Tabletop)

@INTERF6
IBM SurePOS (Tabletop)

IBM SurePOS (Handheld)

@INTERF7
IBM SurePOS (Handheld)

VID/PID

USB uses VID (Vendor ID) and PID (Product ID) to identify and locate a device. The VID is assigned by USB Implementers Forum. Newland's vendor ID is 1EAB (Hex). A range of PIDs are used for each Newland product family. Every PID contains a base number and interface type (keyboard, COM port, etc.).

Product	Interface	PID (Hex)	PID (Dec)
HR3000	USB HID Keyboard	3922	14626
	USB CDC	3906	14598
	HID POS	3910	14608
	IBM SurePOS (Tabletop)	3920	14624
	IBM SurePOS(Handheld)	3921	14625

#SETUPE0
**** Exit Setup**

Chapter 6 Symbologies

Introduction

Every symbology (barcode type) has its own unique attributes. This chapter provides programming barcodes for configuring the scanner so that it can identify various symbologies. It is recommended to disable those that are rarely used to increase the efficiency of the scanner.

Global Settings

Enable/Disable All Symbologies

If the **Disable All Symbologies** feature is enabled, the scanner will not be able to read any non-programming barcodes except the programming barcodes.

Enable All Symbologies

Disable All Symbologies

Enable/Disable 1D Symbologies

Enable 1D Symbologies

Disable 1D Symbologies

#SETUPE1

Enter Setup

Enable/Disable 2D Symbologies

@ALL2DC1

Enable 2D Symbologies

@ALL2DC0

Disable 2D Symbologies

Enable/Disable Postal Symbologies

@ALLPST1

Enable 2D Symbologies

@ALLPST0

Disable 2D Symbologies

1D Twin Code

1D twin code is two 1D barcodes of a symbology or of different symbologies paralleled vertically. Both barcodes must have similar specifications and be placed closely together.

There are 3 options for reading 1D twin code:

Single 1D Code Only: Read either 1D code.

Twin 1D Code Only: Read both 1D codes. Transmission sequence: upper 1D code followed by lower 1D code.

Both Single & Twin: Read both 1D codes. If successful, transmit as twin 1D code only. Otherwise, try single 1D code only.

#SETUPE0

Enter Setup

**** Single 1D Code Only**

Twin 1D Code Only

Both Single & Twin

**** Exit Setup**

#SETUPE1
Enter Setup

Code 128

Restore Factory Defaults

@128DEF
Restore the Factory Defaults of Code 128

Enable/Disable Code 128

@128ENA1
** **Enable Code 128**

@128ENA0
Disable Code 128

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

#SETUPE0


#SETUPE1

Enter Setup

Set Length Range for Code 128

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


@128MIN

Set the Minimum Length (Default: 1)


@128MAX

Set the Maximum Length (Default: 127)

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

Set the scanner to decode Code 128 barcodes containing between 8 and12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.


#SETUPE1

**** Exit Setup**

#SETUPE1
Enter Setup

EAN-8

Restore Factory Defaults

@EA8DEF
Restore the Factory Defaults of EAN-8

Enable/Disable EAN-8

@EA8ENA1
**** Enable EAN-8**

@EA8ENA0
Disable EAN-8

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

Transmit Check Character

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

@EA8CHK2
**** Transmit EAN-8 Check Character**

@EA8CHK1
Do Not Transmit EAN-8 Check Character

#SETUPE0

#SETUPE1

Enter Setup

2-Digit Add-On Code

An EAN-8 barcode 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 barcode while the part circled by red dotted line is a two-digit add-on code.

@EA8AD20

**** Disable 2-Digit Add-On Code**

@EA8AD21

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 barcode. It can also decode EAN-8 barcodes without 2-digit add-on codes.

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

#SETUPE1

**** Exit Setup**

#SETUPE1

Enter Setup

5-Digit Add-On Code

An EAN-8 barcode 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 barcode while the part circled by red dotted line is a five-digit add-on code.

@EA8AD50

**** Disable 5-Digit Add-On Code**

@EA8AD51

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 barcode. It can also decode EAN-8 barcodes without 5-digit add-on codes.

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

#SETUPE0

Enter Setup

Add-On Code Required

When **EAN-8 Add-On Code Required** is selected, the scanner will only read EAN-8 barcodes that contain add-on codes.

** **EAN-8 Add-On Code Not Required**

EAN-8 Add-On Code Required

Convert EAN-8 to EAN-13

Convert EAN-8 to EAN-13: Convert EAN-8 decoded data to EAN-13 format before transmission. After conversion, the data follows EAN-13 format and is affected by EAN-13 programming selections (e.g., Check Character).

Do Not Convert EAN-8 to EAN-13: EAN-8 decoded data is transmitted as EAN-8 data, without conversion.

* **Do Not Convert EAN-8 to EAN-13**

Convert EAN-8 to EAN-13

** **Exit Setup**

#SETUPE1
Enter Setup

EAN-13

Restore Factory Defaults

@E13DEF
Restore the Factory Defaults of EAN-13

Enable/Disable EAN-13

@E13ENA1
**** Enable EAN-13**

@E13ENA0
Disable EAN-13

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

#SETUPE0

#SETUPE1

Enter Setup

Transmit Check Character

@E13CHK2

**** Transmit EAN-13 Check Character**

@E13CHK1

Do Not Transmit EAN-13 Check Character

2-Digit Add-On Code

An EAN-13 barcode 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 barcode while the part circled by red dotted line is a two-digit add-on code.

@E13AD20

**** Disable 2-Digit Add-On Code**

@E13AD21

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 barcode. It can also decode EAN-13 barcodes without 2- digit add-on codes.

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

#SETUPE1

**** Exit Setup**

#SETUPE1

Enter Setup

5-Digit Add-On Code

An EAN-13 barcode 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 barcode while the part circled by red dotted line is a five-digit add-on code.

@E13AD50

**** Disable 5-Digit Add-On Code**

@E13AD51

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 barcode. It can also decode EAN-13 barcodes without 5- digit add-on codes.

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

#SETUPE0

Enter Setup

EAN-13 Beginning with 290 Add-On Code Required

This setting programs the scanner to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with "290". The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with "290" must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled, depending on your selection for the "Add-On Code Required" feature.

** **Do Not Require Add-On Code**

Require Add-On Code

EAN-13 Beginning with 378/379 Add-On Code Required

This setting programs the scanner to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with a "378" or "379". The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with a "378" or "379" must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled, depending on your selection for the "Add-On Code Required" feature.

** **Do Not Require Add-On Code**

** **Exit Setup**

#SETUPE1

Enter Setup

Require Add-On Code

#SETUPE0

#SETUPE1

Enter Setup

EAN-13 Beginning with 414/419 Add-On Code Required

This setting programs the scanner to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with a “414” or “419”. The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with a “414” or “419” must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled, depending on your selection for the “Add-On Code Required” feature.

@E134140

**** Do Not Require Add-On Code**

@E134141

Require Add-On Code

EAN-13 Beginning with 434/439 Add-On Code Required

This setting programs the scanner to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with a “434” or “439”. The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with a “434” or “439” must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled, depending on your selection for the “Add-On Code Required” feature.

@E134340

**** Do Not Require Add-On Code**

@E134341

#SETUPE1

**** Exit Setup**

Enter Setup

**** Exit Setup**

#SETUPE1

Enter Setup

EAN-13 Beginning with 977 Add-On Code Required

This setting programs the scanner to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with “977”. The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with “977” must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled, depending on your selection for the “Add-On Code Required” feature.

@E139770

** **Do Not Require Add-On Code**

@E139771

Require Add-On Code

EAN-13 Beginning with 978 Add-On Code Required

This setting programs the scanner to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with “978”. The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with “978” must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled, depending on your selection for the “Add-On Code Required” feature.

@E139780

** **Do Not Require Add-On Code**

#SETUPE1

** **Exit Setup**

#SETUPE1

Enter Setup

@E139781

Require Add-On Code

#SETUPE0


#SETUPE1

Enter Setup

EAN-13 Beginning with 979 Add-On Code Required

This setting programs the scanner to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with “979”. The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with “979” must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled, depending on your selection for the “Add-On Code Required” feature.


@E139790

** **Do Not Require Add-On Code**


@E139791

Require Add-On Code


#SETUPE1

** **Exit Setup**

#SETUPE1
Enter Setup

UPC-E

Restore Factory Defaults

@UPEDEF
Restore the Factory Defaults of UPC-E

Enable/Disable UPC-E

@UPEENA1
**** Enable UPC-E**

@UPEENA0
Disable UPC-E

@UPEEN01
**** Enable UPC-E0**

@UPEEN00
Disable UPC-E0

@UPEEN11
Enable UPC-E1

@UPEEN10
****Disable UPC-E1**

If the scanner fails to identify **UPC-E/UPC-E0/UPC-E1** barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable UPC-E/UPC-E0/UPC-E1** barcode.

#SETUPE1
**** Exit Setup**

#SETUPE1

Enter Setup

Transmit Check Character

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

@UPECHK2

**** Transmit UPC-E Check Character**

@UPECHK1

Do Not Transmit UPC-E Check Character

2-Digit Add-On Code

A UPC-E barcode 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 barcode while the part circled by red dotted line is a two-digit add-on code.

@UPEAD20

**** Disable 2-Digit Add-On Code**

@UPEAD21

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 barcode. It can also decode UPC-E barcodes without 2-digit add-on codes.

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

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

5-Digit Add-On Code

A UPC-E barcode 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 barcode while the part circled by red dotted line is a five-digit add-on code.

@UPEAD50

**** Disable 5-Digit Add-On Code**

@UPEAD51

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 barcode. It can also decode UPC-E barcodes without 5-digit add-on codes.

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

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Add-On Code Required

When **UPC-E Add-On Code Required** is selected, the scanner will only read UPC-E barcodes that contain add-on codes.

@UPAREQ0

** **UPC-E Add-On Code Not Required**

@UPAREQ1

UPC-E Add-On Code Required

Transmit Preamble Character

Preamble characters (Country Code and System Character) can be transmitted as part of a UPC-E barcode. Select one of the following options for transmitting UPC-E preamble to the host device: transmit system character only, transmit system character and country code (“0” for USA), or transmit no preamble.

@UPEPRE1

** **System Character**

@UPEPRE0

No Preamble

@UPEPRE2

System Character & Country Code

#SETUPE0

** **Exit Setup**


#SETUPE1
Enter Setup

Convert UPC-E to UPC-A

Convert UPC-E to UPC-A: Convert UPC-E (zero suppressed) decoded data to UPC-A format before transmission. After conversion, the data follows UPC-A format and is affected by UPC-A programming selections (e.g., Preamble, Check Character).

Do Not Convert UPC-E to UPC-A: UPC-E decoded data is transmitted as UPC-E data, without conversion.


@UPEEXP0
**** Do Not Convert UPC-E to UPC-A**


@UPEEXP1
Convert UPC-E to UPC-A


#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

UPC-A

Restore Factory Defaults

@UPADEF

Restore the Factory Defaults of UPC-A

Enable/Disable UPC-A

@UPAENA1

**** Enable UPC-A**

@UPAENA0

Disable UPC-A

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

Transmit Check Character

UPC-A is 13 digits in length with the last one as its check character used to verify the integrity of the data.

@UPACHK2

**** Transmit UPC-A Check Character**

@UPACHK1

Do Not Transmit UPC-A Check Character

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

2-Digit Add-On Code

A UPC-A barcode 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 barcode while the part circled by red dotted line is a two-digit add-on code.

@UPAAD20
**** Disable 2-Digit Add-On Code**

@UPAAD21
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 barcode. It can also decode UPC-A barcodes without 2-digit add-on codes.

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

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

5-Digit Add-On Code

A UPC-A barcode 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 barcode while the part circled by red dotted line is a five-digit add-on code.

@UPAAD50

**** Disable 5-Digit Add-On Code**

@UPAAD51

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 barcode. It can also decode UPC-A barcodes without 5-digit add-on codes.

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

#SETUPE0

**** Exit Setup**


#SETUPE1
Enter Setup

Add-On Code Required

When **UPC-A Add-On Code Required** is selected, the scanner will only read UPC-A barcodes that contain add-on codes.


@UPAREQ0
** **UPC-A Add-On Code Not Required**


@UPAREQ1
UPC-A Add-On Code Required

Transmit Preamble Character

Preamble characters (Country Code and System Character) can be transmitted as part of a UPC-A barcode. Select one of the following options for transmitting UPC-A preamble to the host device: transmit system character only, transmit system character and country code (“0” for USA), or transmit no preamble.


@UPAPRE0
No Preamble


@UPAPRE1
** **System Character**


@UPAPRE2
System Character & Country Code


#SETUPE0
** **Exit Setup**


#SETUPE1

Enter Setup

Coupon

UPC-A/EAN-13 with Extended Coupon Code

The following three types of coupon code + extended coupon code are supported:

1. UPC-A (starting with “5”) + GS1-128
2. UPC-A (starting with “5”) + GS1 Databar
3. EAN-13 (starting with “99”) + GS1-128

Use the appropriate barcode below 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.


@CPNENA0

**** Off**


@CPNENA1

Allow Concatenation


@CPNENA2

Require Concatenation

When using the UPC-A Coupon feature, please ensure that **System Character** or **System Character & Country Code** is selected for the “Transmit UPC-A Preamble Character” feature.


#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

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** barcode below to scan and output only the GS1 Databar code data.

When **GS1 Output Off** is selected, coupons that have both UPC and GS1 Databar codes are transmitted depending on your selection for the “UPC-A/EAN-13 with Extended Coupon Code” feature.

@CPNGS10
**** GS1 Output Off**

@CPNGS11
GS1 Output On

When using the UPC-A Coupon feature, please ensure that **System Character** or **System Character & Country Code** is selected for the “Transmit UPC-A Preamble Character” feature.

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Interleaved 2 of 5

Restore Factory Defaults

@I25DEF

Restore the Factory Defaults of Interleaved 2 of 5

Enable/Disable Interleaved 2 of 5

@I25ENA1

**** Enable Interleaved 2 of 5**

@I25ENA0

Disable Interleaved 2 of 5

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

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Set Length Range for Interleaved 2 of 5

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

@I25MIN

Set the Minimum Length (Default: 6)

@I25MAX

Set the Maximum Length (Default: 127)

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

Set the scanner to decode Interleaved 2 of 5 barcodes containing between 8 and12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

Enter Setup

Check Character Verification

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

Disable: The scanner transmits Interleaved 2 of 5 barcodes as is.

Do Not Transmit Check Character After Verification: The scanner checks the integrity of all Interleaved 2 of 5 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

Transmit Check Character After Verification: The scanner checks the integrity of all Interleaved 2 of 5 barcodes to verify that the data complies with the check character algorithm. Barcodes 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 character is added. The check character is automatically generated when making Interleaved 2 of 5 barcodes.

Disable

**** Do Not Transmit Check Character After Verification**

Transmit Check Character After Verification

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

**** Exit Setup**

#SETUPE1
Enter Setup

Safety Level

Higher safety level. higher good read decoding rate and slower decoding speed

@I25SEC0
** **level 1**

@I25SEC1
level 2

@I25SEC2
level 3

@I25SEC3
level 4

安全级别越高解码误码率就越低，但读码成功的速度也会变慢慢；反之，则速度越快。

#SETUPE0
** **Exit Setup**

Enter Setup

Febraban

**** Disable Febraban**

Enable Febraban, Do Not Expand

Enable Febraban, Expand

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.

ITF-14 priority principle: For the Interleaved 2 of 5 barcodes 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.

Restore Factory Defaults

Restore the Factory Defaults of ITF-14

Enable/Disable ITF-14

**** Exit Setup**

#SETUPE1

Enter Setup

@I14ENA0

Disable ITF-14

@I14ENA1

**** Enable ITF-14 But Do Not Transmit Check Character**

@I14ENA2

Enable ITF-14 and Transmit Check Character

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 barcodes with a length of 14 characters and the last character as the check character.

#SETUPE0

**** Exit Setup**

#SETUPE1

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.

ITF-6 priority principle: For the Interleaved 2 of 5 barcodes 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.

Restore Factory Defaults

@IT6DEF

Restore the Factory Defaults of ITF-6

Enable/Disable ITF-6

@IT6ENA0

**** Disable ITF-6**

@IT6ENA1

Enable ITF-6 But Do Not Transmit Check Character

@IT6ENA2

Enable ITF-6 and Transmit Check Character

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 barcodes with a length of 6 characters and the last character as the check character.

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Matrix 2 of 5

Restore Factory Defaults

@M25DEF
Restore the Factory Defaults of Matrix 2 of 5

Enable/Disable Matrix 2 of 5

@M25ENA1
Enable Matrix 2 of 5

@M25ENA0
**** Disable Matrix 2 of 5**

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

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Set Length Range for Matrix 2 of 5

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

@M25MIN

Set the Minimum Length (Default: 4)

@M25MAX

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 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only Matrix 2 of 5 barcodes with that length are to be decoded.

Set the scanner to decode Matrix 2 of 5 barcodes containing between 8 and12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Check Character Verification

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

Disable: The scanner transmits Matrix 2 of 5 barcodes as is.

Do Not Transmit Check Character After Verification: The scanner checks the integrity of all Matrix 2 of 5 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

Transmit Check Character After Verification: The scanner checks the integrity of all Matrix 2 of 5 barcodes to verify that the data complies with the check character algorithm. Barcodes 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 character is added. The check character is automatically generated when making Matrix 2 of 5 barcodes.

@M25CHK0
**** Disable**

@M25CHK1
Do Not Transmit Check Character After Verification

@M25CHK2
Transmit Check Character After Verification

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

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Code 39

Restore Factory Defaults

@C39DEF

Restore the Factory Defaults of Code 39

Enable/Disable Code 39

@C39ENA1

**** Enable Code 39**

@C39ENA0

Disable Code 39

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

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Set Length Range for Code 39

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

@C39MIN

Set the Minimum Length (Default: 1)

@C39MAX

Set the Maximum Length (Default: 127)

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

Set the scanner to decode Code 39 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Check Character Verification

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

Disable: The scanner transmits Code 39 barcodes as is.

Do Not Transmit Check Character After Verification: The scanner checks the integrity of all Code 39 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

Transmit Check Character After Verification: The scanner checks the integrity of all Code 39 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted, whereas those failing it will not be transmitted.

@C39CHK0

**** Disable**

@C39CHK1

Do Not Transmit Check Character After Verification

@C39CHK2

Transmit Check Character After Verification

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

@SETUPE0

**** Exit Setup**

#SETUPE1

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 barcode below.

@C39TSC0

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

@C39TSC1

Transmit Start/Stop Character

Enable/Disable Code 39 Full ASCII

The scanner can be configured to identify all ASCII characters by scanning the appropriate barcode below.

@C39ASC0

Disable Code 39 Full ASCII

@C39ASC1

**** Enable Code 39 Full ASCII**

@SETUPE0

**** Exit Setup**

Enter Setup

Enable/Disable Code 32 (Italian Pharma Code)

Code 32 is a variant of Code 39 used by the Italian pharmaceutical industry. Scan the appropriate bar code below to enable or disable Code 32. Code 39 must be enabled and Code 39 check character verification must be disabled for this parameter to function.

**** Disable Code 32**

Enable Code 32

Code 32 Prefix

Scan the appropriate barcode below to enable or disable adding the prefix character “A” to all Code 32 barcodes. Code 32 must be enabled for this parameter to function.

**** Disable Code 32 Prefix**

Enable Code 32 Prefix

**** Exit Setup**

#SETUPE1

Enter Setup

Transmit Code 32 Start/Stop Character

Code 32 must be enabled for this parameter to function.

@C39T320

**** Do Not Transmit Code 32 Start/Stop Character**

@C39T321

Transmit Code 32 Start/Stop Character

Transmit Code 32 Check Character

Code 32 must be enabled for this parameter to function.

@C39C320

**** Do Not Transmit Code 32 Check Character**

@C39C321

Transmit Code 32 Check Character

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Codabar

Restore Factory Defaults

@CBADEF

Restore the Factory Defaults of Codabar

Enable/Disable Codabar

@CBAENA1

**** Enable Codabar**

@CBAENA0

Disable Codabar

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

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Set Length Range for Codabar

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

@CBAMIN
Set the Minimum Length (Default: 1)

@CBAMAX
Set the Maximum Length (Default: 127)

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

Set the scanner to decode Codabar barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0
**** Exit Setup**


#SETUPE1

Enter Setup

Check Character Verification

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

Disable: The scanner transmits Codabar barcodes as is.

Do Not Transmit Check Character After Verification: The scanner checks the integrity of all Codabar barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

Transmit Check Character After Verification: The scanner checks the integrity of all Codabar barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted, whereas those failing it will not be transmitted.


@CBACHK0

**** Disable**


@CBACHK1

Do Not Transmit Check Character After Verification


@CBACHK2

Transmit Check Character After Verification

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


#SETUPE0

**** Exit Setup**


#SETUPE1

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 barcode below.


@CBATSC0

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


@CBATSC1

Transmit Start/Stop Character


@CBASCF0

**** ABCD/ABCD as the Start/Stop Character**


@CBASCF1

ABCD/TN*E as the Start/Stop Character


@CBASCF2

abcd/abcd as the Start/Stop Character


@CBASCF3

abcd/tn*e as the Start/Stop Character


#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Code 93

Restore Factory Defaults

@C93DEF

Restore the Factory Defaults of Code 93

Enable/Disable Code 93

@C93ENA1

**** Enable Code 93**

@C93ENA0

Disable Code 93

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

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Set Length Range for Code 93

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

@C93MIN
Set the Minimum Length (Default: 1)

@C93MAX
Set the Maximum Length (Default: 127)

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

Set the scanner to decode Code 93 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Check Character Verification

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

Disable: The scanner transmits Code 93 barcodes as is.

Do Not Transmit Check Character After Verification: The scanner checks the integrity of all Code 93 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the checks will be transmitted except the last two digits, whereas those failing them will not be transmitted.

Transmit Check Character After Verification: The scanner checks the integrity of all Code 93 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the checks will be transmitted, whereas those failing them will not be transmitted.

@C93CHK0

Disable

@C93CHK1

**** Do Not Transmit Check Character After Verification**

@C93CHK2

Transmit Check Character After Verification

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

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

China Post 25

Restore Factory Defaults

@CHPDEF
Restore the Factory Defaults of China Post 25

Enable/Disable China Post 25

@CHPENA1
Enable China Post 25

@CHPENA0
**** Disable China Post 25**

If the scanner fails to identify China Post 25 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable China Post 25** barcode.

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Set Length Range for China Post 25

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

@CHPMIN

Set the Minimum Length (Default: 1)

@CHPMAX

Set the Maximum Length (Default: 127)

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

Set the scanner to decode China Post 25 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Check Character Verification

A check character is optional for China Post 25 and can be added as the last character. It is a calculated value used to verify the integrity of the data.

Disable: The scanner transmits China Post 25 barcodes as is.

Do Not Transmit Check Character After Verification: The scanner checks the integrity of all China Post 25 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

Transmit Check Character After Verification: The scanner checks the integrity of all China Post 25 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted, whereas those failing it will not be transmitted.

@CHPCHK0
**** Disable**

@CHPCHK1
Do Not Transmit Check Character After Verification

@CHPCHK2
Transmit Check Character After Verification

If the **Do Not Transmit Check Character After Verification** option is enabled, China Post 25 barcodes with a length that is less than the configured minimum length after having the check character excluded will not be decoded. (For example, when the **Do Not Transmit Check Character After Verification** option is enabled and the minimum length is set to 4, China Post 25 barcodes with a total length of 4 characters including the check character cannot be read.)

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

GS1-128 (UCC/EAN-128)

Restore Factory Defaults

@GS1DEF

Restore the Factory Defaults of GS1-128

Enable/Disable GS1-128

@GS1ENA1

**** Enable GS1-128**

@GS1ENA0

Disable GS1-128

If the scanner fails to identify GS1-128 barcodes, you may first try this solution by scanning the **EnterSetup** barcode and then **Enable GS1-128** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Set Length Range for GS1-128

The scanner can be configured to only decode GS1-128 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.

@GS1MIN
Set the Minimum Length (Default: 1)

@GS1MAX
Set the Maximum Length (Default: 127)

If minimum length is set to be greater than maximum length, the scanner only decodes GS1-128 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only GS1-128 barcodes with that length are to be decoded.

Set the scanner to decode GS1-128 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

GS1 Databar (RSS)

Restore Factory Defaults

@RSSDEF

Restore the Factory Defaults of GS1 Databar

Enable/Disable GS1 Databar

@RSSENA1

**** Enable GS1 Databar**

@RSSENA0

Disable GS1 Databar

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

Transmit Application Identifier “01”

@RSSTAI1

**** Transmit Application Identifier “01”**

@RSSTAI0

Do Not Transmit Application Identifier “01”

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

GS1 Composite (EAN·UCC Composite)

Restore Factory Defaults

@CPTDEF
Restore the Factory Defaults of GS1 Composite

Enable/Disable GS1 Composite

@CPTENA1
Enable GS1 Composite

@CPTENA0
**** Disable GS1 Composite**

If the scanner fails to identify GS1 Composite barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable GS1 Composite** barcode.

Enable/Disable UPC/EAN Composite

@CPTUPC1
Enable UPC/EAN Composite

@CPTUPC0
**** Disable UPC/EAN Composite**

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Code 11

Restore Factory Defaults

@C11DEF

Restore the Factory Defaults of Code 11

Enable/Disable Code 11

@C11ENA1

Enable Code 11

@C11ENA0

**** Disable Code 11**

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

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Set Length Range for Code 11

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

@C11MIN
Set the Minimum Length (Default: 1)

@C11MAX
Set the Maximum Length (Default: 127)

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

Set the scanner to decode Code 11 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Check Character Verification

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

If the **Disable** option is enabled, the scanner transmits Code 11 barcodes as is.

@C11CHK0

Disable

@C11CHK1

**** One Check Character, MOD11**

@C11CHK2

Two Check Characters, MOD11/MOD11

@C11CHK3

Two Check Characters, MOD11/MOD9

@C11CHK4

One Check Character, MOD11 (Len<=10)

Two Check Characters, MOD11/MOD11(Len>10)

@C11CHK5

One Check Character, MOD11 (Len<=10)

Two Check Characters, MOD11/MOD9 (Len>10)

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Transmit Check Character

@C11TCK0
** **Do Not Transmit Code 11 Check Character**

@C11TCK1
Transmit Code 11 Check Character

If you select a check character algorithm and the **Do Not Transmit Check Character** option, Code 11 barcodes with a length that is less than the configured minimum length after having the check character(s) excluded will not be decoded. (For example, when the **One Check Character, MOD11** and **Do Not Transmit Check Character** options are enabled and the minimum length is set to 4, Code 11 barcodes with a total length of 4 characters including the check character cannot be read.)

#SETUPE0
** **Exit Setup**

#SETUPE1

Enter Setup

ISBN

Restore Factory Defaults

@ISBDEF

Restore the Factory Defaults of ISBN

Enable/Disable ISBN

@ISBENA1

**** Enable ISBN**

@ISBENA0

Disable ISBN

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

#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup

Set ISBN Format


@ISBT101

ISBN-10


@ISBT100

**** ISBN-13**


#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

ISSN

Restore Factory Defaults

@ISSDEF

Restore the Factory Defaults of ISSN

Enable/Disable ISSN

@ISSENA1

Enable ISSN

@ISSENA0

**** Disable ISSN**

If the scanner fails to identify ISSN barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable ISSN** barcode.

@SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Industrial 25

Restore Factory Defaults

@L25DEF
Restore the Factory Defaults of Industrial 25

Enable/Disable Industrial 25

@L25ENA1
Enable Industrial 25

@L25ENA0
**** Disable Industrial 25**

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

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Set Length Range for Industrial 25

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

@L25MIN

Set the Minimum Length (Default: 1)

@L25MAX

Set the Maximum Length (Default: 127)

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

Set the scanner to decode Industrial 25 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Check Character Verification

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

Disable: The scanner transmits Industrial 25 barcodes as is.

Do Not Transmit Check Character After Verification: The scanner checks the integrity of all Industrial 25 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

Transmit Check Character After Verification: The scanner checks the integrity of all Industrial 25 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted, whereas those failing it will not be transmitted.

@L25CHK0
**** Disable**

@L25CHK1
Do Not Transmit Check Character After Verification

@L25CHK2
Transmit Check Character After Verification

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

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Standard 25

Restore Factory Defaults

@S25DEF

Restore the Factory Defaults of Standard 25

Enable/Disable Standard 25

@S25ENA1

**** Enable Standard 25**

@S25ENA0

Disable Standard 25

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

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Set Length Range for Standard 25

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

@S25MIN
Set the Minimum Length (Default: 1)

@S25MAX
Set the Maximum Length (Default: 127)

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

Set the scanner to decode Standard 25 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Check Character Verification

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

Disable: The scanner transmits Standard 25 barcodes as is.

Do Not Transmit Check Character After Verification: The scanner checks the integrity of all Standard 25 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

Transmit Check Character After Verification: The scanner checks the integrity of all Standard 25 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted, whereas those failing it will not be transmitted.

@S25CHK0

Disable

@S25CHK1

**** Do Not Transmit Check Character After Verification**

@S25CHK2

Transmit Check Character After Verification

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

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Plessey

Restore Factory Defaults

@PLYDEF
Restore the Factory Defaults of Plessey

Enable/Disable Plessey

@PLYENA1
****Enable Plessey**

@PLYENA0
Disable Plessey

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

#SETUPE0
**** Exit Setup**


#SETUPE1

Enter Setup

Set Length Range for Plessey

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


@PLYMIN

Set the Minimum Length (Default: 1)


@PLYMAX

Set the Maximum Length (Default: 127)

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

Set the scanner to decode Plessey barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.


#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Check Character Verification

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

Disable: The scanner transmits Plessey barcodes as is.

Do Not Transmit Check Character After Verification: The scanner checks the integrity of all Plessey barcodes to verify that the data complies with the check character algorithm. Barcodes passing the checks will be transmitted except the last two digits, whereas those failing them will not be transmitted.

Transmit Check Character After Verification: The scanner checks the integrity of all Plessey barcodes to verify that the data complies with the check character algorithm. Barcodes passing the checks will be transmitted, whereas those failing them will not be transmitted.

@PLYCHK0
Disable

@PLYCHK1
**** Do Not Transmit Check Character After Verification**

@PLYCHK2
Transmit Check Character After Verification

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

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

MSI-Plessey

Restore Factory Defaults

@MSIDEF

Restore the Factory Defaults of MSI-Plessey

Enable/Disable MSI-Plessey

@MSIENA1

**** Enable MSI-Plessey**

@MSIENA0

Disable MSI-Plessey

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

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Set Length Range for MSI-Plessey

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

@MSIMIN
Set the Minimum Length (Default: 1)

@MSIMAX
Set the Maximum Length (Default: 127)

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

Set the scanner to decode MSI-Plessey barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0
**** Exit Setup**


#SETUPE1

Enter Setup

Check Character Verification

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

If the **Disable** option is enabled, the scanner transmits MSI-Plessey barcodes as is.


@MSICHK0

Disable


@MSICHK1

**** One Check Character, MOD10**


@MSICHK2

Two Check Characters, MOD10/MOD10


@MSICHK3

Two Check Characters, MOD10/MOD11


#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Transmit Check Character

@MSITCK1
Transmit MSI-Plessey Check Character

@MSITCK0
**** Do Not Transmit MSI-Plessey Check Character**

If you select a check character algorithm and the **Do Not Transmit Check Character** option, MSI-Plessey barcodes with a length that is less than the configured minimum length after having the check character(s) excluded will not be decoded. (For example, when the **One Check Character, MOD10** and **Do Not Transmit Check Character** options are enabled and the minimum length is set to 4, MSI-Plessey barcodes with a total length of 4 characters including the check character cannot be read.)

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

AIM 128

Restore Factory Defaults

@AIMDEF

Restore the Factory Defaults of AIM 128

Enable/Disable AIM 128

@AIMENA1

**** Enable AIM 128**

@AIMENA0

Disable AIM 128

If the scanner fails to identify AIM 128 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable AIM 128** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Set Length Range for AIM 128

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

@AIMMIN
Set the Minimum Length (Default: 1)

@AIMMAX
Set the Maximum Length (Default: 127)

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

Set the scanner to decode AIM 128 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

ISBT 128

Restore Factory Defaults

@IBTDEF

Restore the Factory Defaults of ISBT 128

Enable/Disable ISBT 128

@IBTENA1

Enable ISBT 128

@IBTENA0

**** Disable ISBT 128**

If the scanner fails to identify ISBT 128 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable ISBT 128** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Code 49

Restore Factory Defaults

@C49DEF
Restore the Factory Defaults of AIM 49

Enable/Disable AIM 49

@C49ENA1
**** Enable AIM 49**

@C49ENA0
Disable AIM 49

If the scanner fails to identify Code 49 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable AIM 49** barcode.

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Set Length Range for Code 49

The scanner can be configured to only decode Code 49 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.

@C49MIN

Set the Minimum Length (Default: 1)

@C49MAX

Set the Maximum Length (Default: 80)

If minimum length is set to be greater than maximum length, the scanner only decodes Code 49 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only Code 49 barcodes with that length are to be decoded.

Set the scanner to decode Code 49 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Code 16K

Restore Factory Defaults

@16KDEF
Restore the Factory Defaults of Code 16K

Enable/Disable AIM 49

@16KENA1
**** Enable Code 16K**

@16KENA0
Disable Code 16K

If the scanner fails to identify Code 16K barcodes, you may first try this solution by scanning the **Enter Setup**

barcode and then **Enable Code 16K** barcode.

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Set Length Range for Code 16K

The scanner can be configured to only decode Code 16K barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.

@16KMIN

Set the Minimum Length (Default: 1)

@16KMAX

Set the Maximum Length (Default: 80)

If minimum length is set to be greater than maximum length, the scanner only decodes Code 16K barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only Code 16K barcodes with that length are to be decoded.

Set the scanner to decode Code 16K barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

@SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

PDF417

Restore Factory Defaults

@PDFDEF
Restore the Factory Defaults of PDF417

Enable/Disable PDF417

@PDFENA1
**** Enable PDF417**

@PDFENA0
Disable PDF417

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

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Set Length Range for PDF417

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

@PDFMIN

Set the Minimum Length (Default: 1)

@PDFMAX

Set the Maximum Length (Default: 2710)

Minimum length is not allowed to be greater than maximum length. If you only want to read PDF417 barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the scanner to decode PDF417 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

PDF417 Twin Code

PDF417 twin code is 2 PDF417 barcodes paralleled vertically or horizontally. They must both be either regular or inverse barcodes. They must have 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.
- **Both Single & Twin:** Read both PDF417 codes. If successful, transmit as twin PDF417 only. Otherwise, try single PDF417 only.

@PDFDOU0
**** Single PDF417 Only**

@PDFDOU1
Twin PDF417 Only

@PDFDOU2
Both Single & Twin

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

PDF417 Inverse

Regular barcode: Dark bars on a bright background. Inverse barcode: Bright bars on a dark background.

@PDFINV0

**** Decode Regular PDF417 Barcodes Only**

@PDFINV1

Decode Inverse PDF417 Barcodes Only

@PDFINV2

Decode Both

Character Encoding

@PDFENC0

**** Default Character Encoding**

@PDFENC1

UTF-8

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

PDF417 ECI Output

@PDFECI0
**** Disable PDF417 ECI Output**

@PDFECI1
Enable PDF417 ECI Output

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Micro PDF417

Restore Factory Defaults

@MPDDEF

Restore the Factory Defaults of Micro PDF417

Enable/Disable Micro PDF417

@MPDENA1

Enable Micro PDF417

@MPDENA0

**** Disable Micro PDF417**

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

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Set Length Range for Micro PDF417

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

@MPDMIN
Set the Minimum Length (Default: 1)

@MPDMAX
Set the Maximum Length (Default: 366)

Minimum length is not allowed to be greater than maximum length. If you only want to read Micro PDF417 barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the scanner to decode Micro PDF417 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

QR Code

Restore Factory Defaults

@QRCDEF

Restore the Factory Defaults of QR Code

Enable/Disable QR Code

@QRCENA1

**** Enable QR Code**

@QRCENA0

Disable QR Code

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

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Set Length Range for QR Code

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

@QRCMIN

Set the Minimum Length (Default: 1)

@QRCMAX

Set the Maximum Length (Default: 7089)

Minimum length is not allowed to be greater than maximum length. If you only want to read QR Code barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the scanner to decode QR Code barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup

QR Twin Code

QR twin code is 2 QR barcodes paralleled vertically or horizontally. They must both be either regular or inverse barcodes. They must have 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.


@QRCDOU0

**** Single QR Only**


@QRCDOU1

Twin QR Only


@QRCDOU2

Both Single & Twin


#SETUPE0

**** Exit Setup**


#SETUPE1
Enter Setup

QR Inverse

Regular barcode: Dark bars on a bright background. Inverse barcode: Bright bars on a dark background.


@QRCINV0
**** Decode Regular QR Barcodes Only**


@QRCINV1
Decode Inverse QR Barcodes Only


@QRCINV2
Decode Both

Character Encoding


@QRCENC0
**** Default Character Encoding**


@QRCENC1
UTF-8


#SETUPE0
**** Exit Setup**

Enter Setup

KOI8-R

Auto Select UTF-8 or Code Page

QR ECI Output

****Disable QR ECI Output**

Enable QR ECI Output

**** Exit Setup**

#SETUPE1

Enter Setup

URL QR Code

@QRCURL0

Disable URL QR Code

@QRCURL1

**** Enable URL QR Code**

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Micro QR Code

Restore Factory Defaults

@MQRDEF

Restore the Factory Defaults of Micro QR

Enable/Disable Micro QR

@MQRENA1

**** Enable Micro QR**

@MQRENA0

Disable Micro QR

If the scanner fails to identify Micro QR barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable Micro QR** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Set Length Range for Micro QR

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

@MQRMIN
Set the Minimum Length (Default: 1)

@MQRMAX
Set the Maximum Length (Default: 35)

Minimum length is not allowed to be greater than maximum length. If you only want to read Micro QR barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the scanner to decode Micro QR Code barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Aztec

Restore Factory Defaults

@AZTDEF

Restore the Factory Defaults of Aztec Code

Enable/Disable Aztec Code

@AZTENA1

Enable Aztec Code

@AZTENA0

**** Disable Aztec Code**

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

#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Set Length Range for Aztec Code

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

@AZTMIN
Set the Minimum Length (Default: 1)

@AZTMAX
Set the Maximum Length (Default: 3832)

Minimum length is not allowed to be greater than maximum length. If you only want to read Aztec barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the scanner to decode Aztec barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0
**** Exit Setup**


#SETUPE1

Enter Setup

Read Multi-barcodes on an Image

There are three options:

Mode 1: Read one barcode only.

Mode 2: Read fixed number of barcodes only.

Mode 3: Composite Reading. Read fixed number of barcodes first. If unsuccessful, read one barcode only.


@AZTMOD1

**** Mode 1**


@AZTMOD2

Mode 2


@AZTMOD3

Mode 3


#SETUPE0

**** Exit Setup**

#SETUPE1
Enter Setup

Set the Number of Barcodes

@AZTMUL1
** 1

@AZTMUL2
2

@AZTMUL3
3

@AZTMUL4
4

@AZTMUL5
5

@AZTMUL6
6

@AZTMUL7
7

@AZTMUL8
8

#SETUPE0
** Exit Setup

Enter Setup

Aztec Inverse

Regular barcode: Dark bars on a bright background. Inverse barcode: Bright bars on a dark background.

**** Decode Regular Aztec Barcodes Only**

Decode Inverse Aztec Barcodes Only

Decode Both

**** Exit Setup**

#SETUPE1
Enter Setup

Character Encoding

@AZTENC0
**** Default Character Encoding**

@AZTENC1
UTF-8

@AZTENC2
Auto Select UTF-8 Or Code Page

Aztec ECI Output

@AZTECI0
****Disable Aztec ECI Output**

@AZTECI1
**** Enable Aztec ECI Output**

#SETUPE0
**** Exit Setup**

#SETUPE1

Enter Setup

Data Matrix

Restore Factory Defaults

@DMCDEF

Restore the Factory Defaults of Data Matrix

Enable/Disable Data Matrix

@DMCENA1

**** Enable Data Matrix**

@DMCENA0

Disable Data Matrix

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

#SETUPE0

#SETUPE1
Enter Setup

Set Length Range for Data Matrix

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

@DMCMIN
Set the Minimum Length (Default: 1)

@DMCMAX
Set the Maximum Length (Default: 3116)

Minimum length is not allowed to be greater than maximum length. If you only want to read Data Matrix barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the scanner to decode Data Matrix barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0
**** Exit Setup**

Enter Setup

Data Matrix Twin Code

Data Matrix twin code is 2 Data Matrix barcodes paralleled vertically or horizontally. They must both be either regular or inverse barcodes. They must have 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**

Twin Data Matrix Only

Both Single & Twin

**** Exit Setup**

#SETUPE1

Enter Setup

Rectangular Barcode

Data Matrix has two formats:

Square barcodes having the same amount of modules in length and width: 10*10, 12*12....

144*144. Rectangular barcodes having different amounts of models in length and width: 6*16,

@DMCREC1

6*14...14*22.

**** Enable Rectangular Barcode**

@DMCREC0

Disable Rectangular Barcode

Data Matrix Inverse

Regular barcode: Dark bars on a bright

background. Inverse barcode: Bright bars on a

@DMCINV0

dark background.

**** Decode Regular Data Matrix Barcodes Only**

@DMCINV1

Decode Inverse Data Matrix Barcodes Only

@DMCINV2

Decode Both

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Character Encoding

@DMCENC0

**** Default Character Encoding**

@DMCENC1

UTF-8

Data Matrix ECI Output

@DMCECI0

Disable Data Matrix ECI Output

@DMCECI1

**** Enable Data Matrix ECI Output**

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Maxicode

Restore Factory Defaults

@MXCDEF

Restore the Factory Defaults of Maxicode

Enable/Disable Maxicode

@MXCENA1

Enable Maxicode

@MXCENA0

**** Disable Maxicode**

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

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Set Length Range for Maxicode

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

@MXCMIN

Set the Minimum Length (Default: 1)

@MXCMAX

Set the Maximum Length (Default:150)

Minimum length is not allowed to be greater than maximum length. If you only want to read Maxicode barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the scanner to decode Maxicode barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Chinese Sensible Code

Restore Factory Defaults

@CSCDEF

Restore the Factory Defaults of Chinese Sensible Code

Enable/Disable Chinese Sensible Code

@CSCENA1

Enable Chinese Sensible Code

@CSCENA0

**** Disable Chinese Sensible Code**

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

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Set Length Range for Chinese Sensible Code

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

@CSCMIN

Set the Minimum Length (Default: 1)

@CSCMAX

Set the Maximum Length (Default: 7827)

Minimum length is not allowed to be greater than maximum length. If you only want to read Chinese Sensible Code barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the scanner to decode Chinese Sensible Code barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

@SETUPE0

**** Exit Setup**

Enter Setup

Chinese Sensible Twin Code

Chinese Sensible twin code is 2 Chinese Sensible barcodes paralleled vertically or horizontally. They must both be either regular or inverse barcodes. They must have 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.

**** Single Chinese Sensible Code Only**

Twin Chinese Sensible Code Only

Both Single & Twin

**** Exit Setup**

#SETUPE1

Enter Setup

Chinese Sensible Code Inverse

Regular barcode: Dark bars on a bright background.

Inverse barcode: Bright bars on a dark background.

@CSCINV0

**** Decode Regular Chinese Sensible Barcodes Only**

@CSCINV1

Decode Inverse Chinese Sensible Barcodes Only

@CSCINV2

Decode Both

ECI Output

@CSCECI0

Disable ECI Output

@CSCECI1

**** Enable ECI Output**

@SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

GM Code

Restore Factory Defaults

@GMCDEF

Restore the Factory Defaults of GM

Enable/Disable GM

@GMCENA1

Enable GM

@GMCENA0

**** Disable GM**

If the scanner fails to identify GM barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable GM** barcode.

@SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Set Length Range for GM

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

@GMCMIN

Set the Minimum Length (Default: 1)

@GMCMAX

Set the Maximum Length (Default: 2751)

Minimum length is not allowed to be greater than maximum length. If you only want to read GM barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the scanner to decode GM barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE1

Enter Setup

Code One

Restore Factory Defaults

@ONEDEF

Restore the Factory Defaults of Code One

Enable/Disable Code One

@ONEENA1

Enable Code One

@ONEENA0

**** Disable Code One**

If the scanner fails to identify Code One barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable Code One** barcode.

@SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Set Length Range for Code One

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

@ONEMIN

Set the Minimum Length (Default: 1)

@ONEMAX

Set the Maximum Length (Default: 3550)

Minimum length is not allowed to be greater than maximum length. If you only want to read Code One barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the scanner to decode Code One barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** barcode.
3. Scan the numeric barcode “8” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Set the Maximum Length** barcode.
6. Scan the numeric barcodes “1” and “2” from the “Digit Barcodes” section in Appendix.
7. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
8. Scan the **Exit Setup** barcode.

#SETUPE1

Enter Setup

DotCode

Restore Factory Defaults

@DOTDEF

Restore the Factory Defaults of DotCode

Enable/Disable DotCode

@DOTENA1

Enable DotCode

@DOTENA0

** **Disable DotCode**

If the scanner fails to identify DotCode barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable DotCode** barcode.

@SETUPE0

** **Exit Setup**

#SETUPE1

Enter Setup

USPS Postnet

Restore Factory Defaults

@PNTDEF

Restore the Factory Defaults of USPS Postnet

Enable/Disable USPS Postnet

@PNTENA1

Enable USPS Postnet

@PNTENA0

**** Disable USPS Postnet**

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

Transmit Check Character

@PNTCHK1

Do Not Transmit USPS Postnet Check Character

@PNTCHK2

**** Transmit USPS Postnet Check Character**

@SETUPE0

**** Exit Setup**

Enter Setup

USPS Intelligent Mail

Restore Factory Defaults

Restore the Factory Defaults of USPS Intelligent Mail

Enable/Disable USPS Intelligent Mail

Enable USPS Intelligent Mail

**** Disable USPS Intelligent Mail**

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

**** Exit Setup**

#SETUPE1

Enter Setup

Royal Mail

Restore Factory Defaults

@ROYDEF

Restore the Factory Defaults of Royal Mail

Enable/Disable Royal Mail

@ROYENA1

Enable Royal Mail

@ROYENA0

**** Disable Royal Mail**

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

@SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

USPS Planet

Restore Factory Defaults

@PLADEF

Restore the Factory Defaults of USPS Planet

Enable/Disable USPS Planet

@PLAENA1

Enable USPS Planet

@PLAENA0

**** Disable USPS Planet**

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

Transmit Check Character

@PLACHK1

Do Not Transmit USPS Planet Check Character

@PLACHK2

**** Transmit USPS Planet Check Character**

@SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

KIX Post

Restore Factory Defaults

@KIXDEF

Restore the Factory Defaults of KIX Post

Enable/Disable KIX Post

@KIXENA1

Enable KIX Post

@KIXENA0

**** Disable KIX Post**

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

Enter Setup

Australian Postal

Restore Factory Defaults

Restore the Factory Defaults of Australian Postal

Enable/Disable Australian Postal

Enable Australian Postal

**** Disable Australian Postal**

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

**** Exit Setup**

#SETUPE1

Enter Setup

Japan Post

Restore Factory Defaults

@JPPDEF

Restore the Factory Defaults of Japan Post

Enable/Disable Specific Japan Post

@JPPENA1

Enable Japan Post

@JPPENA0

**** Disable Japan Post**

If the scanner fails to identify Specific Japan Post barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable Japan Post** barcode.

#SETUPE1

Enter Setup

Passport OCR

Restore Factory Defaults

@PASDEF

Restore the Factory Defaults of Passport OCR

Enable/Disable Passport OCR

@PASENA1

Enable Passport OCR

@PASENA0

**** Disable Passport OCR**

If the scanner fails to identify Passport OCR barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable Passport OCR** barcode.

@SETUPE0

**** Exit Setup**

Enter Setup

Chinese ID Card OCR

Restore Factory Defaults

** **Restore the Factory Defaults of Chinese ID Card OCR**

Enable/Disable Chinese ID Card OCR

Enable Chinese ID Card OCR

** **Disable Chinese ID Card OCR**

** **Exit Setup**

#SETUPE1

Enter Setup

China Travel Permit OCR

Restore Factory Defaults

@CTPDEF

** **Restore the Factory Defaults of China Travel Permit OCR**

Enable/Disable Chinese Travel Permit OCR

@CTPENA1

Enable Chinese Travel Permit OCR

@CTPENA0

** **Disable Chinese Travel Permit OCR**

@SETUPE0

** **Exit Setup**

#SETUPE1

Enter Setup

Chapter 7 Prefix & Suffix

Introduction

A 1D barcode could contain digits, letters, symbols, etc. A 2D barcode 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 barcode type, data acquisition time and delimiter, in order to keep the barcodes short and flexible.

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

Barcode processing procedure:

1. Edit data with Data Formatter
2. Append prefix/suffix
3. Pack data
4. Append terminating character

@SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Global Settings

Enable/Disable All Prefixes/Suffixes

Disable All Prefixes/Suffixes: Transmit barcode data with no prefix/suffix.

Enable All Prefixes/Suffixes: Allow to append Code ID prefix, AIM ID prefix, custom prefix/suffix and terminating character to the barcode data before the transmission.

@APSENA0

**** Disable All Prefixes/Suffixes**

@APSENA1

Enable All Prefixes/Suffixes

Prefix Sequence

@PRESEQ0

**** Code ID+ Custom +AIM ID**

@PRESEQ1

Custom + Code ID + AIM ID

@SETUPE0

**** Exit Setup**

#SETUPE1

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 barcode data is “123”, the Host will receive “AB123”.

@CPRENA0

**** Disable Custom Prefix**

@CPRENA1

Enable Custom Prefix

Set Custom Prefix

To set a custom prefix, scan the **Set Custom Prefix** barcode then the numeric barcodes corresponding to the hexadecimal value of a desired prefix then the **Save** barcode.

Note: A custom prefix cannot exceed 10 characters.

@CPRSET

Set Custom Prefix

Example

Set the custom prefix to “CODE” (HEX: 0x43/0x4F/0x44/0x45):

1. Scan the **Enter Setup** barcode.
2. Scan the **Set Custom Prefix** barcode.
3. Scan the numeric barcodes “4”, “3”, “4”, “F”, “4”, “4”, “4” and “5” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Enable Custom Prefix** barcode.
6. Scan the **Exit Setup** barcode.

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

AIM ID Prefix

AIM (Automatic Identification Manufacturers) ID defines symbology identifier (For the details, see the “AIM ID Table” section in Appendix). If AIM ID prefix is enabled, the scanner will add the symbology identifier before the scanned data after decoding.

@AIDENA0

**** Disable AIM ID Prefix**

@AIDENA1

Enable AIM ID Prefix

AIM ID is not user programmable.

#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup

Code ID Prefix

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


@CIDENA0

**** Disable Code ID Prefix**


@CIDENA1

Enable Code ID Prefix

Restore All Default Code IDs

For the information of default Code IDs, see the “Code ID Table” section in Appendix.


@CIDDEF

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.


#SETUPE0

**** Exit Setup**

Modify PDF417 Code ID to be “p” (HEX: 0x70):

Example

1. Scan the **Enter Setup** barcode.
2. Scan the **Modify PDF417 Code ID** barcode.
3. Scan the numeric barcodes “7” and “0” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Exit Setup** barcode.

Restore the default Code IDs of all symbologies:

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

#SETUPE1

Enter Setup

Modify 1D symbologies

@CID002

Modify Code 128 Code ID

@CID003

Modify GS1-128 Code ID

@CID004

Modify EAN-8 Code ID

@CID005

Modify EAN-13 Code ID

@CID006

Modify UPC-E Code ID

@CID007

Modify UPC-A Code ID

@CID008

Modify Interleaved 2 of 5 Code ID

#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup


@CID009

Modify ITF-14 Code ID


@CID010

Modify ITF-6 Code ID


@CID011

Modify Matrix 2 of 5 Code ID


@CID013

Modify Code 39


@CID015

Modify Codabar Code ID


@CID017

Modify Code 93 Code ID


@CID019

Modify China Post 25 Code ID


@CID020

Modify AIM 128 Code ID


#SETUPE0

**** Exit Setup**


#SETUPE1
Enter Setup


@CID021
Modify ISBT 128 Code ID


@CID023
Modify ISSN Code ID


@CID024
Modify ISBN Code ID


@CID025
Modify Industrial 25 Code ID


@CID026
Modify Standard 25 Code ID


@CID027
Modify Plessey Code ID


@CID028
Modify Code 11 Code ID


@CID029
Modify MSI Plessy Code ID


#SETUPE0
**** Exit Setup**


#SETUPE1

Enter Setup


@CID030

Modify GS1 Composite Code ID


@CID031

Modify GS1 Databar (RSS) Code ID


@CID132

Modify Code 49 Code ID


@CID133

Modify 16K Code ID


#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Modify 2D symbologies

@CID035

Modify Data Matrix Code ID

@CID033

Modify QR Code ID

@CID032

Modify PDF417 Code ID

@CID042

Modify Micro PDF417 Code ID

@CID043

Modify Micro QR Code ID

#SETUPE0

**** Exit Setup**


#SETUPE1

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 barcode data is “123”, the Host will receive “123AB”.


@CSUENA0

**** Disable Custom Suffix**


@CSUENA1

Enable Custom Suffix

Set Custom Suffix

To set a custom suffix, scan the **Set Custom Suffix** barcode then the numeric barcodes corresponding to the hexadecimal value of a desired suffix then the **Save** barcode.

Note: A custom suffix cannot exceed 10 characters.


@CSUSET

Set Custom Suffix

Example

Set the custom suffix to “CODE” (HEX: 0x43/0x4F/0x44/0x45):

1. Scan the **Enter Setup** barcode.
2. Scan the **Set Custom Suffix** barcode.
3. Scan the numeric barcodes “4”, “3”, “4”, “F”, “4”, “4”, “4” and “5” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Enable Custom Suffix** barcode.
6. Scan the **Exit Setup** barcode.


#SETUPE0

**** Exit Setup**


#SETUPE1
Enter Setup

Data Packing

Introduction

Data packing is designed for a specific group of users who want to have the data packed before transmission. Data packing influences data format, so it is advised to disable this feature when it is not required.

Data Packing Options

Disable Data Packing: Transmit decoded data in raw format (unpacketed).

Enable Data Packing, Format 1: Transmit decoded data with the packet format 1 defined below.

Packet format 1: [STX + ATTR + LEN] + [AL_TYPE + DATA] +

[LRC] STX: 0x02

ATTR: 0x00

LEN: Barcode data length is expressed in 2 bytes ranging from 0x0000 (0) to 0xFFFF

(65535). AL_TYPE: 0x36

DATA: Raw barcode data.

LRC: Check digit.
LRC calculation algorithm: computation sequence: 0xFF+LEN+AL_TYPE+DATA; computation method is XOR, byte by byte.

Enable Data Packing, Format 2: Transmit decoded data with the packet format 2 defined below.

Packet format 2: [STX + ATTR + LEN] + [AL_TYPE] + [Symbology_ID + DATA] +

[LRC] STX: 0x02

ATTR: 0x00

LEN: Barcode data length is expressed in 2 bytes ranging from 0x0000 (0) to 0xFFFF

(65535). AL_TYPE: 0x3B

Symbology_ID: The ID number of symbology, 1

byte. DATA: Raw barcode data.

LRC: Check digit.
LRC calculation algorithm: computation sequence: 0xFF+LEN+AL_TYPE+Symbology_ID+DATA; computation method is XOR, byte by byte.


#SETUPE0
**** Exit Setup**

Enter Setup

**** Disable Data Packing**

Enable Data Packing, Format 1

Enable Data Packing, Format 2

**** Exit Setup**

#SETUPE1

Enter Setup

Terminating Character Suffix

Enable/Disable Terminating Character Suffix

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

@TSUENA0

Disable Terminating Character Suffix

@TSUENA1

****Enable Terminating Character Suffix**

Set Terminating Character Suffix

To set a terminating character suffix, scan the **Set Terminating Character Suffix** barcode then the numeric barcodes corresponding to the hexadecimal value of a desired terminating character then the **Save** barcode.

Note: A terminating character suffix cannot exceed 2 characters.

@TSUSET

Set Terminating Character Suffix

@TSUSET0D

**** Set Terminating Character to CR (0x0D)**

@TSUSET0D0A

Set Terminating Character to CRLF (0x0D,0x0A)

#SETUPE0

**** Exit Setup**


#SETUPE1

Enter Setup

Example

Set the terminating character suffix to 0x0A:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set Terminating Character Suffix** barcode.
3. Scan the numeric barcodes “0” and “A” from the “Digit Barcodes” section in Appendix.
4. Scan the **Save** barcode from the “Save/Cancel Barcodes” section in Appendix.
5. Scan the **Enable Terminating Character Suffix** barcode.
6. Scan the **Exit Setup** barcode.


#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Chapter 8 Batch Programming

Introduction

Batch programming enables users to integrate a batch of commands into a single batch

barcode. Listed below are batch programming rules:

1. Command format: Command + Parameter Value.

2. Each command is terminated by a semicolon (;). Note that there is no space between a command and its terminator semicolon.

3. Use the barcode generator software to generate a 2D batch barcode.

Example: Create a batch barcode for **Illumination On**, **Sense Mode**, **Decode Session Timeout** = 2s:

1. Input the commands:

   @ILLSCN1;SCNMOD2;ORTSET

   2000;

2. Generate a batch barcode.

When setting up a scanner with the above configuration, scan the **Enable Batch Barcode** barcode and then the batch barcode generated.

@BATCHS

Enable Batch Barcode

#SETUPE0

**** Exit Setup**

#SETUPE1

Enter Setup

Create a Batch Command

A batch command may contain a number of individual commands each of which is terminated by a semicolon (;). For more information, refer to the “Use of Programming Command” section in Chapter 3.

Create a Batch Barcode

Batch barcodes can be produced in the format of PDF417, QR Code or Data Matrix.

Example: Create a batch barcode for **Illumination On**, **Sense Mode**, **Decode Session Timeout** = 2s:

1. Input the following commands:

   @ILLSCN1;SCNMOD2;ORTSET

   2000;

2. Generate a PDF417 batch barcode.

#SETUPE0

**** Exit Setup**

Enter Setup

Use Batch Barcode

To put a batch barcode into use, scan the following barcodes. (Use the example above.)

Enter Setup

Enable Batch Barcode

Batch Barcode

Exit Setup

**** Exit Setup**

#SETUPE1

Enter Setup

Chapter 9 Maintenance

Important Safety &Handling Information

1. Do not attempt to disassemble or retrofit the terminal yourself. Unauthorized disassembly or retrofit will void the warranty.
2. The device ensures reliable and efficient operation with minimal care and regular inspections.

Cleaning Instructions

1. If the scanner window becomes dirty, scanning performance may decrease. Use a soft cloth or lens paper dampened with water (or a mild detergent-water solution) to clean the scanner window. The shell of the scanner and its cradle can also be cleaned using the same method.
2. The scanner's shell is not waterproof; do not immerse the scanner in water.
3. Avoid using abrasive wet wipes or tissues on the scanner, as they can scratch the scanner window.

#SETUPE0

**** Exit Setup**

@SETUPE1

Enter Setup

Appendix

Digit Barcodes

0~9

@DIGIT0

0

@DIGIT1

1

@DIGIT2

2

@DIGIT3

3

@DIGIT4

4

@DIGIT5

5

6

7

8

9

A~F

A

B

C

D

E

F

Save/Cancel Barcodes

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

For instance, after reading the **Maximum Length** barcode and numeric barcodes “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 cancelled. And the scanner is still in the setup mode.

Save

Cancel

Delete the Last Digit

Delete All Digits

Factory Defaults Table

Parameters	Factory Default	Remark
System Settings		
Hardware Settings		
Good Read LED	On	
Good Read LED Duration	Medium (120ms)	1-2,000ms
Illumination	On	
Aiming	On	
Good Read Vibration	On	
Good Read Vibration Duration	100	1-2,000ms
Image Flipping	Do Not Flip	
Beep		
Power On Beep	On	
Good Read Beep	On	
Good Read Beep Volume	High(20)	1-20
Good Read Beep Duration	Medium (80ms)	20-300ms
Good Read Beep Frequency	Medium (2730Hz)	
Scan Settings		
Barcode Programming	Disabled (Exit Setup)	
Programming Barcode Data	Do not transmit	
Scan Mode	Level Mode	
Smart Stand Mode	Enabled	
Trigger Commands	Disabled	
Image Stabilization Timeout (Sense Mode)	200ms	0-3,000ms
Decode Session Timeout	3,000ms.	0-3,600,000ms
Reread Timeout	Disabled	
	1500ms	1-3600000ms
Reset Reread Timeout	Off	
Image Decoding Timeout	500ms	1-3,000ms
Sensitivity	Medium (11)	1-20
Scanning Preference	Normal	
Read Barcode	On	
Image Luminance Limit	Disabled	
Custom Image Luminance	116	1-255
Exposure parameter Limit	Enabled	
Minimum Exposure Time	50μs	50-14,000μs
Maximum Exposure Time	2000μs	50-14,000μs
Gain Parameter Limit	Disabled	
Maximum Gain	1	1-64
Minimum Gain	33	1-64
Decode Area	Whole Area Decoding	
Transmit Bad Read Message	Disabled	

Modified Bad Read Message	NG	
Transmit Delay per Character for Febraban	Disabled	
Custom Transmit Delay per Character for Febraban	70ms	
Transmit Delay per 12 Characters for Febraban	Disabled	
Custom Transmit Delay per 12 Characters for Febraban	500ms	
USB Data Transmission Failure Notification	Disabled	
Transmit GS1 Check Character	Enabled	
GS1-128(UCC/EAN-13)	Transmit GS1 Check Character	
GS1 Databar(RSS)	Transmit GS1 Check Character	
GS1 QR	Transmit GS1 Check Character	
GS1 Data Matrix	Transmit GS1 Check Character	
Interface		
Interface	USB HID Keyboard	
Interface Cables Auto Match	On	
RS-232		
Baud Rate	9600	
Parity Check	None	
Data Bits	8	
Stop Bits	1	
Hardware Flow Control	Disabled	
Keyboard		
USB Country Keyboard	US keyboard	USB HID Keyboard
Emulate ALT+Keypad	Off	USB HID Keyboard
Control Characters Output	Disabled	USB HID Keyboard
Inter-Keystroke Delay	No Delay	USB HID Keyboard
Caps Lock	Off(Non Japanese Keypad)	USB HID Keyboard
Convert Case	No Case Conversion	USB HID Keyboard
Emulate Numeric Keypad 1	Off	USB HID Keyboard
Emulate Numeric Keypad 2	Off	USB HID Keyboard
Fast Mode	Off	USB HID Keyboard
Polling Rate	4ms	USB HID Keyboard
Unicode Encoding	Off	USB HID Keyboard
Beep on Unknown Character	Off	USB HID Keyboard
Emulate Keypad with Leading Zero	On	USB HID Keyboard

Code Page	Code Page 1252 (Latin, Western European)	USB HID Keyboard
Symbologies		
1D Barcode		
1D Twin Code	Single 1D Code Only	
Parentheses Surround GS1 Application Identifiers	Disabled	
Output GS1 Application Identifiers	Enabled	
GS1-128(UCC/EAN-13)	Output GS1 Application Identifiers	
GS1 Databar(RSS)	Output GS1 Application Identifiers	
GS1 QR	Output GS1 Application Identifiers	
GS1 Data Matrix	Output GS1 Application Identifiers	
Code 11		
Code 11	Enabled	
Maximum Length	127	
Minimum Length	1	
Check Character Verification	One Check Character, MOD11	
Check Character	Transmit	
Code 128		
Code 128	Enabled	
Maximum Length	127	
Minimum Length	1	
Code 39		
Code 39	Enabled	
Maximum Length	127	
Minimum Length	1	
Check Character Verification	Disabled	
Start/Stop Character	Do not transmit	
Code 39 Full ASCII	Enabled	
Code 32 Pharmaceutical (PARAF)	Disabled	
Code 32 Prefix	Disabled	
Code 32 Start/Stop Character	Do not transmit	
Code 32 Check Character	Do not transmit	
GS1-128(UCC/EAN-128)		
UCC/EAN-128	Enabled	
Maximum Length	127	
Minimum Length	1	
AIM 128		
AIM 128	Enabled	
Maximum Length	127	
Minimum Length	1	
ISBT 128		

ISBT 128	Disabled	
Codabar		
Codabar	Enabled	
Maximum Length	127	
Minimum Length	1	
Check Character Verification	Disabled	
Start/Stop Character	Do not transmit	
	ABCD/ABCD	All capital
Code 93		
Code 93	Enabled	
Maximum Length	127	
Minimum Length	1	
UPC-A		
UPC-A	Enabled	
Check Character	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code Required	Not Required	
Transmit Preamble Character	System Character	
UPC-E		
UPC-E	Enabled	
UPC-E0	Enabled	
UPC-E1	Disabled	
Check Character	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code Required	Not Required	
Transmit Preamble Character	System Character	
Convert UPC-E to UPC-A	Disable UPC-E Extend	
Coupon		
UPC-A/EAN-13 with Extended Coupon Code	Off	
Coupon GS1 DataBar Output	Off	
GS1 Composite		
GS1 Composite	Disabled	
UPC/EAN Composite	Disabled	
EAN-13		
EAN-13	Enabled	
Check Character	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code Required	Disabled	
EAN-13 Beginning with 290 Add-On Code		

Required	Do Not Require Add-On Code	
EAN-13 Beginning with 378/379 Add-On Code Required	Do Not Require Add-On Code	
EAN-13 Beginning with 414/419 Add-On Code Required	Do Not Require Add-On Code	
EAN-13 Beginning with 434/439 Add-On Code Required	Do Not Require Add-On Code	
EAN-13 Beginning with 977 Add-On Code Required	Do Not Require Add-On Code	
EAN-13 Beginning with 978 Add-On Code Required	Do Not Require Add-On Code	
EAN-13 Beginning with 979 Add-On Code Required	Do Not Require Add-On Code	
Japanese Magazine Code	Disabled	
EAN-8		
EAN-8	Enabled	
Check Character	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code Required	Not Required	
ISBN		
ISBN	Enabled	
Set ISBN Format	ISBN-10	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code Required	Not Required	
Japanese Book Code	Disabled	
Japanese Book Code Separator	Disable Japanese Book Code Separator	
ISSN		
ISSN	Disabled	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code Required	Not Required	
Interleaved 2 of 5		
Interleaved 2 of 5	Enabled	
Maximum Length	127	
Minimum Length	1	
Check Character Verification	Enable, But Do Not Transmit Check Character	
Febraban	Febraban Disabled	
Safety Level	Safety Level of Interleaved 2 of 5 is one.	
Matrix 2 of 5		

Matrix 2 of 5	Disabled	
Maximum Length	127	
Minimum Length	1	
Check Character Verification	Enable, But Do Not Transmit Check Character	
Industrial 25		
Industrial 25	Enabled	
Maximum Length	127	
Minimum Length	1	
Check Character Verification	Disabled	
ITF-14		
ITF-14	Disabled	
ITF-6		
ITF-6	Disabled	
Standard 25		
Standard 25	Enabled	
Maximum Length	127	
Minimum Length	1	
Check Character Verification	Do Not Transmit Check Character After Verification	
China Post 25		
China Post 25	Disabled	
Maximum Length	127	
Minimum Length	1	
Check Character Verification	Disabled	
Deutsche 14		
Deutsche 14	Disabled	
Deutsche 12		
Deutsche 12	Disabled	
MSI-Plessey		
MSI-Plessey	Enabled	
Maximum Length	127	
Minimum Length	1	
Check Character Verification	One Check Character, MOD10	
Check Character	Disable	
Plessey		
Plessey	Enabled	
Maximum Length	127	
Minimum Length	1	
Check Character Verification	Disabled	
GS1 Databar		
GS1 Databar	Enabled	
Application Identifier “01”	Transmit	
Code 49		

Code 49	Disabled	
Maximum Length	80	
Minimum Length	1	
Code 16K		
Code 16K	Disabled	
Maximum Length	80	
Minimum Length	1	
2D Barcode		
PDF417		
PDF417	Enabled	
Maximum Length	2710	
Minimum Length	1	
PDF417 Twin Code	Single PDF417 Only	
PDF417 Inverse	Decode Regular PDF417 Barcodes Only	
Character Encoding	Default Character Encoding	
PDF417 ECI Output	Disabled	
QR Code		
QR Code	Enabled	
Maximum Length	7089	
Minimum Length	1	
QR Twin Code	Single QR Only	
QR Inverse	Decode Regular QR Barcodes Only	
Character Encoding	Default Character Encoding	
QR ECI Output	Enabled	
URL QR Code	Enabled	
Aztec Code		
Aztec Code	Disabled	
Maximum Length	3832	
Minimum Length	1	
Set the Number of Barcodes	1	
Read Multi-barcodes on an Image	Mode 1	
Character Encoding	Default Character Encoding	
Aztec ECI Output	Disabled	
Data Matrix		
Data Matrix	Enabled	
Maximum Length	3116	
Minimum Length	1	
Data Matrix Twin Code	Single Data Matrix Only	
Rectangular Barcode	Enabled	
Data Matrix Inverse	Decode Regular Data Matrix Barcodes Only	
Character Encoding	Default Character Encoding	
Data Matrix ECI Output		

Maxi Code		
Maxi Code	Disabled	
Maximum Length	150	
Minimum Length	1	
Chinese Sensible Code		
Chinese Sensible Code	Disabled	
Maximum Length	7827	
Minimum Length	1	
Chinese Sensible Code Twin Code	Single Chinese Sensible Code Only	
Chinese Sensible Code Inverse	Decode Regular Chinese Sensible Bar Codes Only	
GM Code		
GM Code	Disabled	
Maximum Length	2751	
Minimum Length	1	
Micro PDF417		
Micro PDF417	Disabled	
Maximum Length	366	
Minimum Length	1	
Micro QR Code		
Micro QR Code	Enabled	
Maximum Length	35	
Minimum Length	1	
Code One		
Code One	Disabled	
Maximum Length	3550	
Minimum Length	1	
Dot Code		
Dot Code	Disabled	
Maximum Length	7089	
Minimum Length	1	
Dot Code Inverse	Dot Code Both	
OCR		
Passport OCR		
Passport OCR	Disabled	
Chinese ID Card		
Chinese ID Card	Disabled	
China Travel Permit OCR		
China Travel Permit OCR	Disabled	
Postal		
USPS Postnet		
USPS Postnet	Disabled	
Transmit Check Character	Transimit	
USPS Intelligent Mail		

USPS Intelligent Mail	Disabled	
Royal Mail		
Royal Mail	Disabled	
USPS Planet		
USPS Planet	Disabled	
Transmit Check Character	Transimit	
KIX Post		
KIX Post	Disabled	
Australian Postal		
Australian Postal	Disabled	
Japan Post		
Japan Post	Disabled	
Code ID Prefix	Disabled	
Prefix & Suffix		
Prefix Sequence	Code ID+ Custom +AIM ID	
Custom Prefix	Disabled	
AIM ID Prefix	Disabled	
Custom Suffix	Disabled	
Terminating Character Suffix	Enabled	
Modify Terminating Character Suffix	0D	
Data Formatter		
Data Format	Disabled Data Format	
Change Data Format	Data Format 0	
Non-Match Error Beep	Enabled	
Data Packing	Disabled	
Driver License Decoding		
Advanced Formatting/Label Editing Scripts	Disabled	
Extract Elements	Disabled	

AIM ID Table

Symbology	AIM ID	Possible AIM ID Modifiers (m)
Code128	]C0	
GS1-128 (UCC/EAN-128)	]C1	
EAN-8	]E4	
EAN-8 with Addon	]E3	
EAN-13	]E0	
EAN-13 with Addon	]E3	
UPC-E	]E0	
UPC-E with Addon	]E3	
UPC-A	]E0	
UPC-A with Addon	]E3	
Interleaved 2 of 5	]Im	0，1，3
ITF-14	]Im	1，3
ITF-6	]Im	1，3
Matrix 2 of 5	]X0	
Code 39	]Am	0，1，3，4，5，7
Codabar	]Fm	0，2，4
Code 93	]G0	
China Post 25	]X0	
AIM 128	]C2	
ISBT 128	]C4	
ISSN	]X0	
ISBN	]X0	
Industrial 25	]S0	
Standard 25	]R0	
Plessey	]P0	
Code 11	]Hm	0，1，3
MSI Plessey	]Mm	0，1
GS1 Composite	]em	0-3
GS1 Databar （RSS）	]e0	
Code 49	]T0	
Code 16K	]K0	
COOP 25	]X0	
PDF417	]Lm	0-2
QR Code	]Qm	0-6
Aztec	]zm	0-9，A-C
Data Matrix	]dm	0-6
Maxicode	]Um	0-3
Chinese Sensible Code	]X0	
GM	]gm	(0~9)
Micro PDF417	]L0	
Micro QR	]Q1	
Code One	]X0	
DotCode	]Jm	0~5

USPS Postnet	]X0	
USPS Inteligent Mail	]X0	
Royal Mail	]X0	
USPS Planet	]X0	
KIX Post	]X0	
Australian Postal	]X0	
Japan Post	]X0	
Specific OCR-B	]o2	
Passport OCR	]o2	
Chinese ID Card	]o2	
China Travel Permit OCR	]o2	

Note: “m” represents the AIM modifier character. Refer to ISO/IEC 15424:2008 Information technology – Automatic identification and data capture techniques – Data Carrier Identifiers (including Symbology Identifiers) for AIM modifier character details.

Code ID Table

Symbology	Code ID
Code128	j
GS1-128 (UCC/EAN-128)	j
EAN-8	d
EAN-13	d
UPC-E	c
UPC-A	c
Interleaved 2 of 5	e
ITF-14	e
ITF-6	e
Matrix 2 of 5	v
Code 39	b
Codabar	a
Code 93	i
China Post 25	X
AIM 128	X
ISBT 128	X
ISSN	g
ISBN	B
Industrial 25	I
Standard 25	f
Plessey	n
Code 11	H
MSI Plessey	m
GS1 Composite	y
GS1 Databar (RSS)	R
Code 49	X
Code 16K	X
COOP 25	X
PDF417	r
QR Code	s
Aztec	z
Data Matrix	u
MaxiCode	x
Chinese Sensible Code	h
GM Code	x
Micro PDF417	R
Micro QR	X
Code One	X
DotCode	X
USPS Postnet	P

USPS Intelligent Mail	M
Royal Mail	x
USPS Planet	L
KIX Post	K
Australian Postal	A
Japan Post	J
Specific OCR-B	S
Passport OCR	O
Chinese ID Card	S
China Travel Permit OCR	S

Symbology ID Number

Symbology	ID Number
Code 128	002
GS1-128 (UCC/EAN-128)	003
EAN-8	004
EAN-13	005
UPC-E	006
UPC-A	007
Interleaved 2 OF 5	008
ITF-14	009
ITF-6	010
Matrix 2 of 5	011
Code 39	013
Codabar	015
Code 93	017
China Post 25	019
AIM 128	020
ISBT 128	021
COOP 25	022
ISSN	023
ISBN	024
Industrial25	025
Standard25	026
Plessey	027
Code11	028
MSI-Plessey	029
GS1 Composite	030
GS1 Databar (RSS)	031
PDF417	032
QR Code	033
Aztec	034
Data Matrix	035
Maxicode	036
Chinese Sensible Code	039
GM Code	040
Micro PDF417	042
Micro QR	043
Code One	048
DotCode	050
Specific OCR-B	064
Chinese ID Card	065
Passport OCR	066
China Travel Permit OCR	068

USPS Postnet	096
USPS Inteligent Mail	097
Royal Mail	098
USPS Planet	099
KIX Post	100
Australian Postal	101
Japan Post	102
Code 49	132
Code 16K	133

ASCII Table

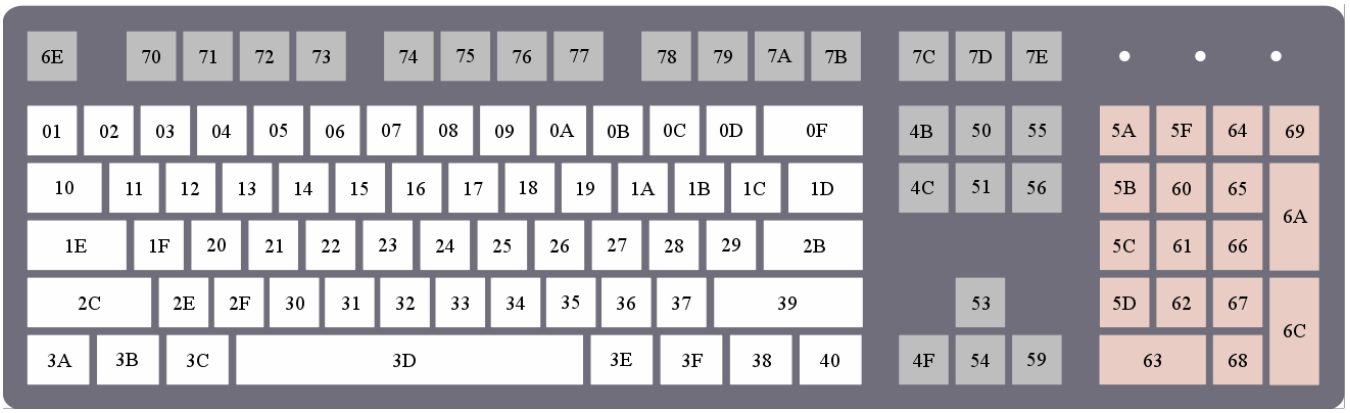
Hex	Decimal	Value
00	0	NUL （Null char.）
01	1	SOH （Start of Header）
02	2	STX （Start of Text）
03	3	ETX （End of Text）
04	4	EOT （End of Transmission）
05	5	ENQ （Enquiry）
06	6	ACK （Acknowledgment）
07	7	BEL （Bell）
08	8	BS （Backspace）
09	9	HT （Horizontal Tab）
0a	10	LF （Line Feed）
0b	11	VT （Vertical Tab）
0c	12	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 Acknowledgment）
16	22	SYN （Synchronous Idle）
17	23	ETB （End of Trans. Block）
18	24	CAN （Cancel）
19	25	EM （End of Medium）
1a	26	SUB （Substitute）
1b	27	ESC （Escape）
1c	28	FS （File Separator）
1d	29	GS （Group Separator）
1e	30	RS （Request to Send）
1f	31	US （Unit Separator）
20	32	SP （Space）
21	33	! （Exclamation Mark）
22	34	" （Double Quote）
23	35	# （Number Sign）
24	36	$ （Dollar Sign）

25	37	% （Percent）
26	38	& （Ampersand）
27	39	` （Single Quote）
28	40	(（Right / Closing Parenthesis）
29	41	) （Right / Closing Parenthesis）
2a	42	* （Asterisk）
2b	43	+ （Plus）
2c	44	, （Comma）
2d	45	- （Minus / Dash）
2e	46	. （Dot）
2f	47	/ （Forward Slash）
30	48	0
31	49	1
32	50	2
33	51	3
34	52	4
35	53	5
36	54	6
37	55	7
38	56	8
39	57	9
3a	58	: （Colon）
3b	59	; （Semi-colon）
3c	60	< （Less Than）
3d	61	= （Equal Sign）
3e	62	> （Greater Than）
3f	63	? （Question Mark）
40	64	@ （AT Symbol）
41	65	A
42	66	B
43	67	C
44	68	D
45	69	E
46	70	F
47	71	G
48	72	H
49	73	I
4a	74	J
4b	75	K
4c	76	L
4d	77	M
4e	78	N
4f	79	O

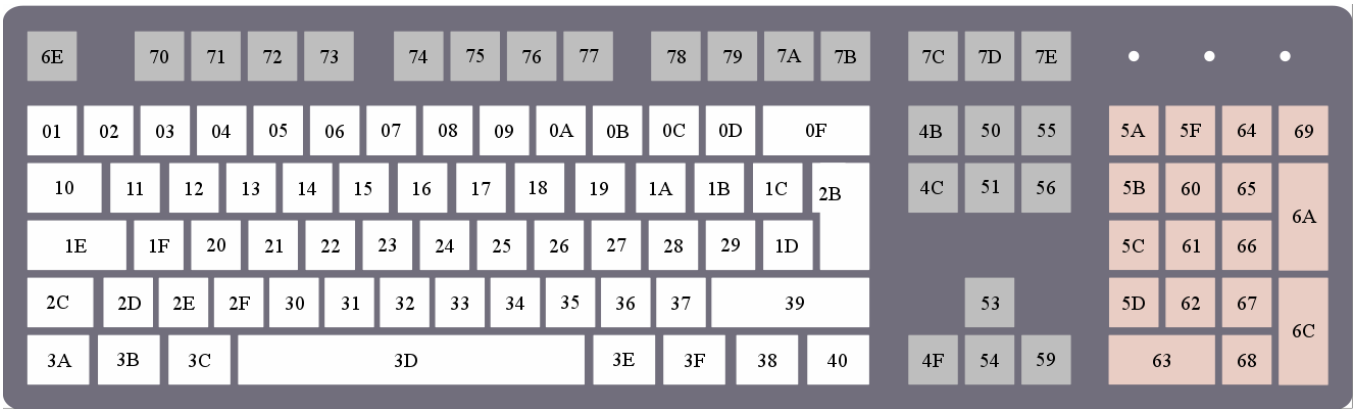
50	80	P
51	81	Q
52	82	R
53	83	S
54	84	T
55	85	U
56	86	V
57	87	W
58	88	X
59	89	Y
5a	90	Z
5b	91	[（Left / Opening Bracket）
5c	92	\ （Back Slash）
5d	93	] （Right / Closing Bracket）
5e	94	^ （Caret / Circumflex）
5f	95	_ （Underscore）
60	96	' （Grave Accent）
61	97	a
62	98	b
63	99	c
64	100	d
65	101	e
66	102	f
67	103	g
68	104	h
69	105	i
6a	106	j
6b	107	k
6c	108	l
6d	109	m
6e	110	n
6f	111	o
70	112	p
71	113	q
72	114	r
73	115	s
74	116	t
75	117	u
76	118	v
77	119	w
78	120	x
79	121	y
7a	122	z
7b	123	{ （Left/ Opening Brace）

7c	124	| （Vertical Bar）
7d	125	} （Right/Closing Brace）
7e	126	~ （Tilde）
7f	127	DEL （Delete）

Unicode Key Maps



104 Key U.S. Style Keyboard



105 Key European Style Keyboard

Stay Connect with us @Newland AIDC

Newland AIDC

No.1 Rujiang West Rd., Mawei, Fuzhou, Fujian 350015, China

+86-591-83979500 info@newlandaidc.com www.newlandaidc.com

Asia Pacific

Add: 6 Raffles Quay #14-06 Singapore 048582
Email:info@newlandaidc.com

Taiwan:
Add: 7F-6, No. 268, Liancheng Rd., Jhonghe Dist. 235, New Taipei City, Taiwan
Tel: +886 2 7731 5388
Email: info@newlandaidc.com

Japan:
住所: 〒108-0075
東京都港区港南 1 丁目 9-3 6
アレア品川ビル 13 階 407
電話: +84 03 4405 3222
メール: info@newlandaidc.com

Korea:
Add: Biz. Center Best-one, Jang-eun Medical Plaza 6F, Bojeong-dong 1261-4, Kihung-gu, Yongin-City, Kyunggi-do, South Korea
Tel: +82 10 8990 4838
Email: info@newlandaidc.com

Indonesia:
Add: Eightyeight@kasablanka Tower A 12th Floor Unit A&H, Jl. Casablanca Raya Kav. 88, Jakarta Selatan 12870
Tel:+62 8161157247
Email:info@newlandaidc.com

Vietnam:
Tel:+84 909 345 375
Email:info@newlandaidc.com

India:
Add: Office no. 309-311, 3rd Floor, Tower B, NOIDA ONE business park B 8, Block B, Industrial Area, Sector 62, Noida, Uttar Pradesh 201309
Phone no: +91-120-3201449 /50 /51 /52
Email: info@newlandaidc.com

Europe & Middle East & Africa

Add: Rolweg 25, 4104 AV Culemborg, The Netherlands
Tel: +31 (0) 345 87 00 33 Web: www.newland-id.com
Email: sales@newland-id.com Tech Support: tech-support@newland-id.com

North America

Add: 46559 Fremont Blvd., Fremont, CA 94538, USA
Tel: +1 510 490 3888
Email: info@newlandaidc..com

North America Channel:
Tel: +1 408 838 3703
Email: info@newlandaidc..com

Latin America

Tel: +1 239 598 0068
Email: info@newlandaidc..com

Brazil:
Tel: +55 35 9767 6078

Chile:
Tel: +56 9 9337 3177

Colombia:
Tel: +57 319 387 4484

Mexico, Central America & Caribbean:
Tel: +52 155 5432 9079

Newland AIDC
Scanning Made Simple

SCANNING MADE SIMPLE

Newland EMEA
+31 (0) 345 87 00 33
info@newland-id.com

Rolweg 25
4104 AV Culemborg
The Netherlands

@NewlandEMEA