BS8060 Piranha

Pocket Bluetooth Barcode Scanner

User Guide

Disclaimer

Please read through the manual carefully before using the product and operate it according to the manual. It is advised that you should 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 Fujian Newland Auto-ID Tech. Co., Ltd.

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Revision History

Version	Description	Date
V1.0	Initial release.	March 18, 2015
V1.1	Added the content concerning the 2D version.	May 19, 2015
V1.2	1. Added the Enable/Disable USB HID-KBW feature in Chapter 2. 2. Added barcode parameters in Chapter 3.	September 16, 2015
V1.3	Added the USB country keyboard types in Chapter 2. **Note:** Firmware version V1.00.006 or later is required for the new feature above.	October 13, 2015
V1.4	1. Added **Chapter 4 Prefix & Suffix**. 2. Added the "**Code ID Table (1D Scanner)**" and "**Code ID Table (2D Scanner)**" in Appendix. **Note:** Firmware version V1.00.011 or later is required for the new feature above.	January 21, 2016
V1.4.1	Updated the programming barcodes in the "**Digit Barcodes (1D Scanner)**" and "**Save/Cancel Barcodes (1D Scanner)**" sections in Appendix.	May 5, 2016
V2.0.0	User Guide V2.0.0 or higher is written for the NLS-BS8060 only.	September 26, 2016
V2.0.1	1. Modified the description of the **Product Serial Number** and **Time Stamp** features in Chapter 2. 2. Added the **EAN-13 Beginning with 290 Add-On Code Required**, **EAN-13 Beginning with 378/379 Add-On Code Required**, **EAN-13 Beginning with 414/419 Add-On Code Required**, **EAN-13 Beginning with 434/439 Add-On Code Required**, **EAN-13 Beginning with 977 Add-On Code Required**, **EAN-13 Beginning with 978 Add-On Code Required**, **EAN-13 Beginning with 979 Add-On Code Required**, **Code 32 (Italian Pharma Code)**, **Code 32 Prefix**, **Transmit Code 32 Check Digit** and **Transmit Code 32 Start/Stop Character** features for 1D & 2D scanners in Chapter 3. 3. Changed the default settings of the following parameter to: Time Stamp Disabled **Note:** Firmware version V3.00.002 or later is required for the new features above.	November 28, 2016

Table of Contents

Preface

Introduction

This manual provides detailed instructions for setting up and using the NLS-BS80 barcode scanner (hereinafter referred to as **"the BS80"** or **"the scanner"**).

Chapter Descriptions

- ✧ *Chapter 1, Getting Started* : This chapter provides information on getting the scanner up and running for the first time.
- ✧ *Chapter 2, System Settings* : This chapter describes the barcode programming procedure and shows you how to configure system parameters.
- ✧ *Chapter 3, Symbologies* : This chapter lists all compatible symbologies and describes how to configure the relevant parameters.
- ✧ *Chapter 4, Prefix & Suffix* : This chapter describes how to use prefix and suffix to customize scanned data.
- ✧ *Appendix* : This chapter offers factory defaults table and a bunch of frequently used programming barcodes.

Safety Instructions

Read the operating instructions carefully and especially observe the safety information. If you do not follow the safety instructions on proper handling in this manual, we assume no liability for any resulting personal injury or damage to property.

- ✧ Don't put the scanner in places with excessively high temperatures, such as exposure to direct sunlight.
- ✧ Don't use the scanner in extremely humid area or drastic temperature change.
- ✧ The rechargeable battery is permanently built into the scanner and cannot be replaced.
- ✧ Never damage the rechargeable battery. Damaging the casing of the rechargeable battery might cause an explosion or a fire!

Chapter 1 Getting Started

Introduction

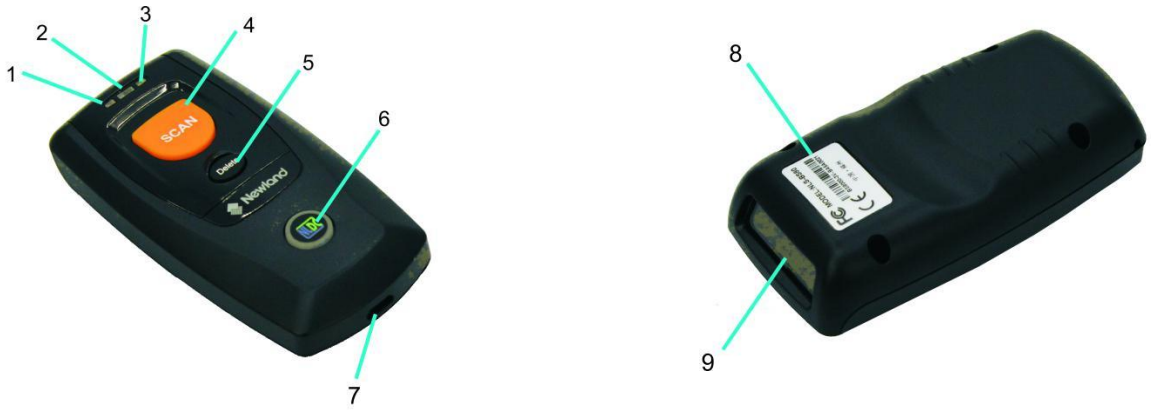
The BS80 is a wireless pocket barcode scanner equipped with 1D or 2D scan engine to meet different needs. It is a great space-saver for busy or limited workspaces. It also supports iOS, Android, and Windows devices through Bluetooth HID or SPP or BLE communication.

An illustrated introduction to the BS80 is included in this chapter. If you have the scanner at hand, make good use of it to develop a better understanding of this manual. This chapter is written for normal users, maintenance staff and software developers.

Unpacking

Open the package and take out the scanner and its accessories. Check to make sure everything on the packing list is present and intact. If any contents are damaged or missing, please keep the original package and contact your dealer immediately for after-sales service.

BS80 Scanner



1	Charging/Battery LED	**2**	Good Read LED
3	Data LED	**4**	Scan/Power Button
5	Delete/Reset Button	**6**	Function Button/Function LED
7	Micro USB Port	**8**	Product Label
9	Scan Window*		

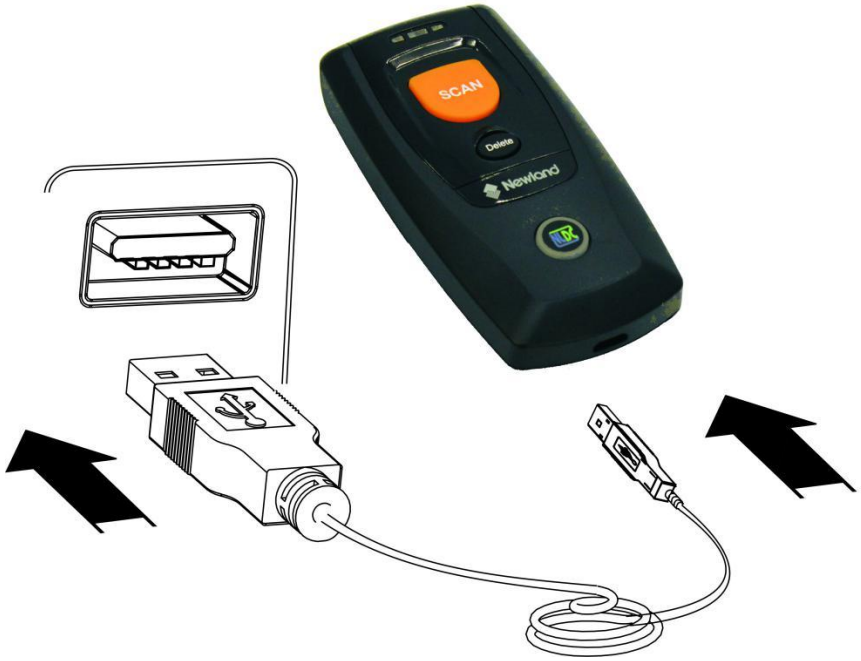
*Note: Please peel off the protective film from the scan window before reading barcodes.

Button Functions

Scan/Power Button
*Press the button to scan barcode. *Hold down the button for 3 seconds to power the scanner on.
Delete/Reset Button
*Press the button to remove the corresponding data from the flash memory in one of the following conditions before scanning the barcode to be deleted: (i) Bluetooth mode enabled but no Bluetooth connection established; (ii) Bluetooth mode & Batch Transmission enabled; (iii) USB mode enabled but no USB cable connection made; or (iv) USB mode & Batch Transmission enabled. *Hold down the button for 7 seconds to reset it.
Function Button
*Press the button to turn on or off the HID keyboard of the connected iOS device in the Bluetooth mode. *Hold down the button for 3s to start data transmission in either of the following conditions: (i) Bluetooth mode & Batch Transmission enabled; or (ii) USB mode enabled and the scanner connected to PC via USB cable.
Scan/Power Button + Function Button
*Hold down the two buttons at the same time for 3 seconds to toggle between the Bluetooth mode and USB mode.
Delete/Reset Button + Function Button
*Press the two buttons at the same time to unpair the paired Bluetooth device from the scanner in Bluetooth mode and to make the scanner discoverable by other Bluetooth device. *Hold down the two buttons at the same time for 7s (then the red and blue Function LEDs flash alternately to indicate the scanner enters the update status) to update the firmware after clicking the “Start” button of the firmware upgrade utility on PC that the scanner is connected to using the USB cable. Note: If the update fails or you accidentally enter the update status, you need to hold down the Delete/Reset button for 7s to reset the scanner.
Scan/Power Button + Delete/Reset Button
*Press the two buttons at the same time to check the battery level with the Charging/Battery LED. *Hold down the two buttons at the same time for 3s to delete all stored data in the flash memory in either of the conditions: (i) Bluetooth mode enabled, Bluetooth connection established, and Batch Transmission & Require Data Transmission Confirmation enabled; or (ii) USB mode enabled, the scanner connected to PC via USB cable and Require Data Transmission Confirmation enabled.

Charging the Battery

Charge the scanner by connecting it to a host device with Micro USB cable, as shown below.

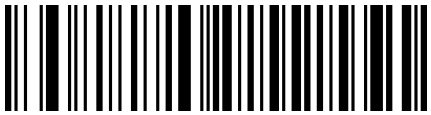


Note: Low battery may result in failure or misoperation of the scanner. Before your first use, charge the battery for 3-4 hours.

Connecting the BS80 to Smartphone/Tablet

1. Make sure your device has HID or SPP or BLE profile.
2. If the red Function LED on the scanner is on, hold down the Scan/Power button and Function button at the same time for 3 seconds or scan the **Bluetooth Mode** barcode to switch to the Bluetooth mode. Hold down the Delete/Reset button and Function button at the same time or scan the **Delete Bluetooth Pairing** barcode to remove existing pairing information from the scanner.

Bluetooth Mode



Delete Bluetooth Pairing

3. Turn off the Power-Saving mode on your smartphone/tablet.
4. Scan the appropriate barcode below to choose HID or SPP or BLE profile before connecting the scanner to smartphone/tablet. If you don't know what profile your device is using, please try HID profile first, then SPP, at last BLE profile.

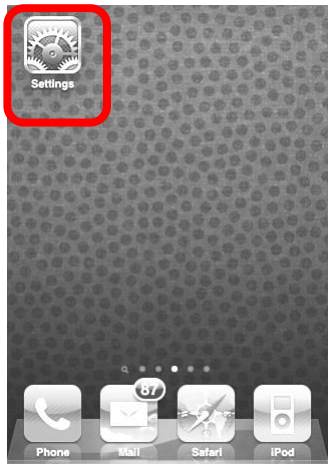
HID (default)

SPP

BLE

5. Complete the following connection procedure (example: pairing with iPhone).

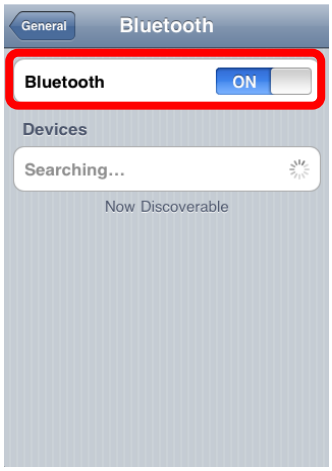
(1) Click “Settings”.



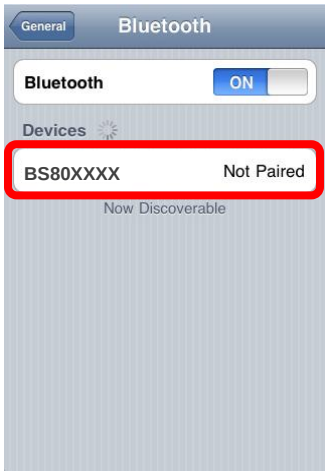
(2) Click “General”.

(3) Click “Bluetooth”.

(4) Turn it on and search the devices.



(5) Select “BS80XXXX” to connect.



(6) The “Connected” message means the connection is OK.

6. After the connection is completed, the blue Function LED on the scanner will illuminate.

7. Before using WordPad file or relative APP, set keyboard language of the device to US English. Then, scan barcodes and the barcode data will show before current cursor position. If the data cannot be sent to smartphone/tablet, please scan the **Restore Factory Defaults** barcode (see Chapter 2).

Note: This product complies with Bluetooth standards. The device that communicates with this product must support the same SPP or HID or BLE. For other Bluetooth devices with other profiles, we cannot guarantee a connection before the product has been tested.

The communication speed and range of the product may vary due to obstacles and radio wave condition between the product and device to which it is connected. Condition on the host device may also affect the communication speed and range of the scanner.

LED Notifications

Charging/Battery LED	
Red LED on	Charging in progress.
Green LED on	Fully charged.
Red and green LEDs flash alternately	Battery not found.
Red LED flashes	Low battery alert.
When the scanner is on, pressing the Scan/Power button and Delete/Reset button at the same time for 3 seconds can display the battery level with the Charging/Battery LED.	
Green LED on	Battery level is high.
Red and green LEDs on	Battery level is medium.
Red LED on	Battery level is low.

When the battery voltage is too low, the scanner will beep with flashing red Charging/Battery LED. Please charge it immediately before the scanner shuts down mandatorily. When it shuts down, please charge it fully before turning it back on.

Good Read LED	
Green LED flashes	Good read.
Data LED	
Red LED flashes	There is data in flash memory.
Red LED on	Flash memory depleted.
Function LED	
Blue LED flashes slowly with long OFF state	Bluetooth mode enabled, but no Bluetooth connection established and the BS80 undiscoverable.
Blue LED flashes slowly with long ON state	Bluetooth mode enabled, but no Bluetooth connection established and the BS80 discoverable.
Blue LED on	Bluetooth connection established.
Blue LED flashes quickly	Data transmission via Bluetooth in progress.
Red LED on	USB mode enabled.
Red LED flashes quickly	Data transmission via USB in progress.

Turning the BS80 On/Off

Turn the scanner on: Press the Scan/Power button for 3 seconds.

Turn the scanner off: By default, the scanner automatically powers off if no operation is performed on the scanner for 30 minutes. You can adjust the auto power-off timer. You can also turn off the scanner by scanning the **Power Off** barcode. For more information, see ***Automatic/Manual Power-Off*** in Chapter 2.

Scanning Instructions

Scanning 1D Barcode

Adjust the scan angle (Do not read barcode at vertical degree) or the distance between barcode and the scanner to ensure that the length of the scan line is roughly 8mm greater than that of the barcode, as shown below.

Right	Wrong
	
	
	

Scanning 2D Barcode

Adjust the scan angle and the distance between barcode and the scanner to make them fall into the following ranges:

1. Aim the scan line across the center of the barcode.

2. Optimum scan distances: 5-20cm.

Chapter 2 System Settings

Introduction

This chapter describes how to configure the basic system parameters on the scanner.

Restore Factory Defaults

Restore Factory Defaults

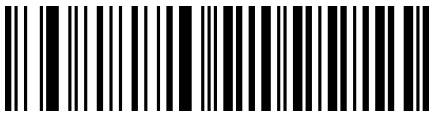
Operating Modes

The scanner provides two operating modes: Bluetooth mode and USB mode. To switch between these two modes, press the Scan/Power and Function buttons for 3 seconds at the same time or scan the **USB Mode** or **Bluetooth Mode** barcode.

Bluetooth Mode

Bluetooth Mode (default)

When the scanner is in the Bluetooth mode, you can select a desired profile by scanning the appropriate barcode below.



HID (default)

SPP

BLE

There are three types of data transmission via Bluetooth: Synchronous transmission, Asynchronous transmission and Batch transmission.

(1) **Synchronous transmission (default):** When you scan barcodes, the data will be sent to smartphone/tablet directly. If you are out of Bluetooth service range, scanned data will be lost.

(2) **Asynchronous transmission:** When you are out of Bluetooth service range, scanned data will be stored in the flash memory. Once you are back to service range, the data will be sent to smartphone/tablet automatically. The scanner will automatically remove it from the flash memory after smartphone/tablet receives the data.

(3) **Batch transmission:** Scanned data will be stored in the flash memory no matter whether you are in Bluetooth service range or not. You may send the stored data to smartphone/tablet in one of the following ways: (i) hold down the Function button on the scanner for 3 seconds (Note: To suspend/resume data transmission, press the Function button briefly.); (ii) scan the **Transmit Stored Data** barcode; or (iii) send the corresponding serial command to the scanner (See the ***Serial Programming Commands***).

Synchronous Transmission, Bluetooth (default)

Asynchronous Transmission, Bluetooth

Batch Transmission, Bluetooth

Transmit Stored Data

The following feature is enabled automatically when the scanner is in Bluetooth Batch mode.

Verify Receipt of Data: The scanner will keep all the stored data after transmission, which offers users the opportunity to verify if the data is properly received and to resend the data when needed. To delete all stored data in the flash memory, hold down the Scan/Power Button and Delete/Reset Button at the same time for 3 seconds or scan the **Clear All Stored Data** barcode or send the corresponding serial command to the scanner.

USB Mode

USB Mode

When the scanner is in the USB mode, you can select a desired protocol by scanning the appropriate barcode below.

USB HID-KBW (default)

USB COM Port Emulation

There are two types of data transmission via USB: Asynchronous transmission and Batch transmission.

(1) **Asynchronous transmission (default):** When the scanner is not connected to PC via USB cable, scanned data will be stored in the flash memory. When the scanner is connected to PC via USB cable, scanned data will be sent to PC directly.

(2) **Batch transmission:** Scanned data will be stored in the flash memory no matter whether the scanner is connected to PC or not.

You can sync the data from the flash memory to your PC via USB by following the procedure described below.

Step 1: Download CDC-Virtual COM Driver from Newland website at www.newlandaidc.com and Install it on your PC.

Step 2: Connect the scanner to your PC with USB cable. The scanner beeps when the connection between them is established.

Step 3: Open Notepad or Office Word on your PC and make sure that your cursor is always positioned in it. Hold down the Function button on the scanner for 3 seconds or scan the **Transmit Stored Data** barcode to start data transmission from the flash memory to your PC. The scanner beeps when the transmission is completed.

Batch Transmission, USB

Asynchronous Transmission, USB (default)

Transmit Stored Data

The following feature is enabled automatically when the scanner is in USB Batch mode. Moreover, you can scan the appropriate barcode below to enable or disable this feature for USB Asynchronous mode.

Verify Receipt of Data: The scanner will keep all the stored data after transmission, which offers users the opportunity to verify if the data is properly received and to resend the data when needed. To delete all stored data in the flash memory, hold down the Scan/Power Button and Delete/Reset Button at the same time for 3 seconds or scan the **Clear All Stored Data** barcode or send the corresponding serial command to the scanner.

Do Not Verify Receipt of Data: All the stored data will be automatically deleted after transmission.

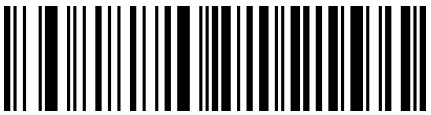
Do Not Verify Receipt of Data (default)

Verify Receipt of Data

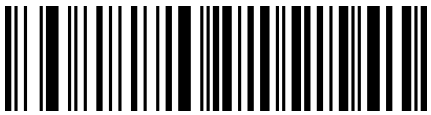
Notes:

1. When the scanner switches from one operating mode to the other, it beeps along with corresponding LED notification (For more information, see ***LED Notifications*** in Chapter 1)
2. Besides the method mentioned above, you can also hold down the Scan/Power button and Function button at the same time for 3 seconds to toggle between the Bluetooth mode and USB mode.

Query Product Information



Query the Firmware Version of Embedded Scan Engine



Query the Manufacture Date of Product

Query the Serial Number of Product

Query the Firmware & Hardware Versions of Product

Query/Delete Stored Data in Flash

Query the Number of Stored Barcodes

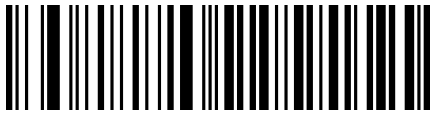
Clear All Stored Data

Sound Notifications

Turn sound notifications on or off by scanning the appropriate barcode below. After this feature is enabled, the scanner beeps when one of the following events occurs:

1. The scanner is turned on.
2. The scanner resets.
3. A barcode is decoded (including good read for removing barcode data from the flash memory).
4. The scanner switched to the Bluetooth mode or USB mode.
5. Transmitting data over Bluetooth failed.
6. iOS soft keyboard is turned on or off.
7. Batch data transmission via Bluetooth or USB starts.
8. Batch data transmission via Bluetooth or USB is interrupted.
9. Batch data transmission via Bluetooth or USB is completed.
10. The paired Bluetooth device is unpaired from the scanner.
11. The scanner is turned off.
12. USB connection between the scanner and the host device established.
13. USB connection between the scanner and the host device lost.
14. Bluetooth connection between the scanner and the host device established or lost.

Sound Notifications On (default)



Sound Notifications Off

Vibration Notifications

Turn vibration notifications on or off by scanning the appropriate barcode below. After this feature is enabled, the scanner vibrates when one of the following events occurs:

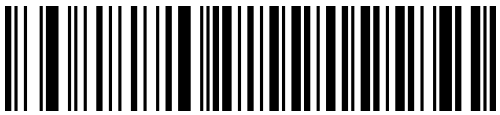
1. A barcode is decoded (including good read for removing barcode data from the flash memory).
2. The scanner switched to the Bluetooth mode or USB mode.
3. iOS soft keyboard is turned on or off.
4. The paired Bluetooth device is unpaired from the scanner.
5. Batch data transmission via Bluetooth or USB starts.
6. The scanner is turned off.

Vibration Notifications On

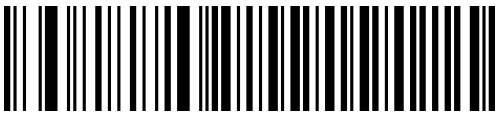
Vibration Notifications Off (default)

Inter-Character Delay for Bluetooth HID

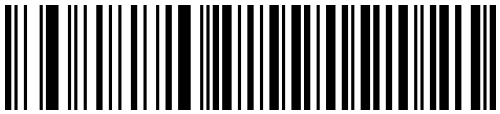
Select an appropriate inter-character delay to avoid data loss during transmission. This parameter is only valid in the Bluetooth HID mode.



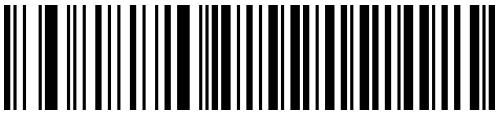
5ms



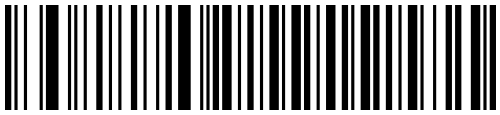
15ms (default)



25ms



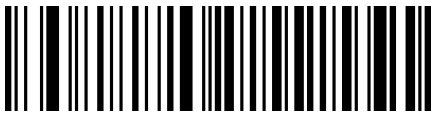
35ms



45ms

Query Inter-Character Delay

Delete Bluetooth Pairing



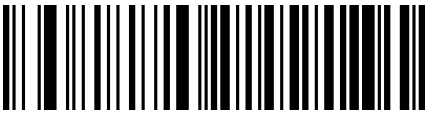
Delete Bluetooth Pairing

Automatic/Manual Power-Off

By default, the scanner automatically powers off if no operation is performed on the scanner for 30 minutes. This feature can help to extend battery life.

Query Auto Power-Off Timer

Set the auto power-off timer: Scan the **Set Auto Power-Off Timer** barcode then one of the timers listed below.



Set Auto Power-Off Timer

5 Minutes

10 Minutes

20 Minutes

30 Minutes (default)

60 Minutes

Permanent

You can power off your scanner manually by scanning the barcode below.

Power Off

Note: After the **Power Off** barcode is scanned, the scanner emits a long beep and then turns off.

Product Serial Number

You can select whether to send product serial number or not by enabling or disabling it.

Enable Product Serial Number

Disable Product Serial Number (default)

Time Stamp

You can select whether to send date & time or not by enabling or disabling time stamp.

Enable Time Stamp

Disable Time Stamp (default)

Set Date Format

Format 1: mm/dd/yyyy
(example: 01/23/2011)

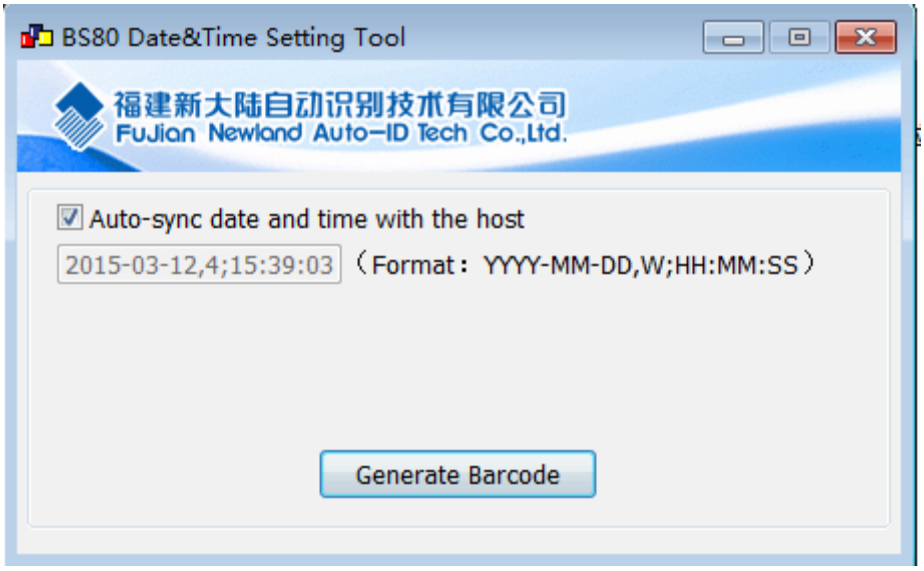
Format 2: dd/mm/yyyy
(example: 23/01/2011)

Format 3: yyyy/mm/dd (default)
(example: 2011/01/23)

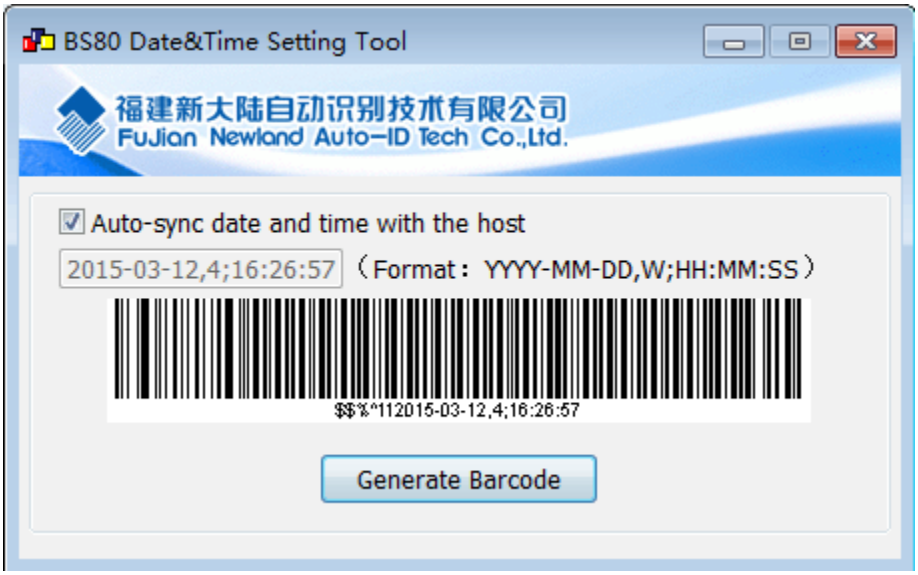
Query Current Date & Time

Set Date & Time

Step 1: Double click on BS80Setting.exe to run BS80 Date&Time Setting Tool. Then check the “Auto-sync date and time with the host” item on it.



Step 2: After the time in the box is in sync with the system clock, click the “Generate Barcode” button.



Step 3: Scan the barcode generated to set the date and time on the scanner.

Note: You need to run this tool on the Windows XP or WIN7 operating system.

Parameters of USB HID-KBW

USB Country Keyboard Types

US English (default)

Belgium

Brazil

Canada

Czech

Danmark

Finland

France

Germany, Austria

Greece

Hungary

Israel

Italy

Latin America, South America

Netherland

Norway

Poland

Portugal

Romania

Russia

Slovakia

Spain

Sweden

Switzerland

Turkey_F

Turkey_Q

UK

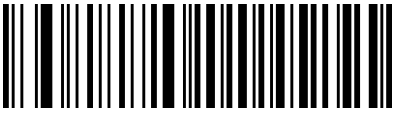
Japan

Character Encoding

ISO-8859-1 (default)

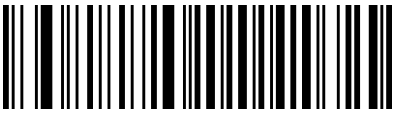
UTF-8

Convert Case



No Case Conversion (default)

Convert All to Upper Case



Convert All to Lower Case

Invert Upper and Lower Case Characters

Emulate ALT+Keypad

This feature allows any ASCII character (0x00 - 0xFF) to be sent over the numeric keypad no matter which keyboard type is selected. Since sending a character involves multiple keystroke emulations, this method appears less efficient.

The following options are available:

- **Disable:** No ASCII character is sent in the ALT+Keypad way.
- **Mode 1:** ASCII characters not supported by the selected keyboard type but falling into 0x20~0xFF are sent in the ALT+Keypad way.
- **Mode 2:** ASCII characters falling into 0x20~0xFF are sent in the ALT+Keypad way.
- **Mode 3:** ASCII characters falling into 0x00~0xFF are sent in the ALT+Keypad way.

Note: In the event of a conflict between **Function Key Mapping** and **Mode 3**, **Function Key Mapping** shall govern.

Disable (default)

Mode 1

Mode 2

Mode 3

Example: Supposing US keyboard is selected, barcode data ”AĐF” (65/208/70) is sent as below:
(1) **Mode 1** is enabled:
“A” -- Keystroke “A”
“Đ” -- “ALT Make” + “208” + “ALT Break”
“F” -- Keystroke “F”
(2) **Mode 3** is enabled:
“A” – “ALT Make” + “065” + “ALT Break”
“Đ” -- “ALT Make” + “208” + “ALT Break”
“F” -- “ALT Make” + “070” + “ALT Break”

Function Key Mapping

When Function Key Mapping is enabled, function characters (0x00 - 0x1F) are sent as ASCII sequences over the keypad. For more information, see **ASCII Function Key Mapping Table** in Appendix.

Enable Function Key Mapping

Disable Function Key Mapping (default)

Example: Barcode data 0x16

 T	Enable Function Key Mapping	Ctrl+V
	Disable Function Key Mapping	F1

Emulate Numeric Keypad

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

To enable this feature, scan the **Emulate Numeric Keypad** barcode. Sending a number (0-9) is emulated as keystroke(s) on numeric keypad, whereas sending other characters like “+”, “_”, “*” , “/” and “.” is still emulated as keystrokes on main keyboard.

Emulate Numeric Keypad

Do Not Emulate Numeric Keypad (default)

Code Page

The **Code Page** programming feature is provided to support more international characters. This feature is only effective when ASCII characters are sent in the ALT+Keypad way.

Windows 1252 (Latin I) (default)

Windows 1251 (Cyrillic)

Example 1: Set the scanner to get proper output for Russian encoded with ISO-8859-1

1. Scan the **Windows 1251 (Cyrillic)** barcode.
2. Scan the **Mode 3** barcode from ***Emulate ALT+Keypad*** in this chapter.
3. Scan the **ISO-8859-1** barcode from ***Character Encoding*** in this chapter.

Example 2: Set the scanner to get proper output for Russian encoded with UTF-8

1. Scan the **Windows 1251 (Cyrillic)** barcode.
2. Scan the **Mode 3** barcode from ***Emulate ALT+Keypad*** in this chapter.
3. Scan the **UTF-8** barcode from ***Character Encoding*** in this chapter.

Inter-Keystroke Delay for KBW

To set the inter-keystroke delay, scan the **Set Inter-Keystroke Delay** barcode and a desired value barcode below.

Set Inter-Keystroke Delay

3ms (default)

8ms

13ms

18ms

23ms

28ms

33ms

38ms

43ms

48ms

53ms

58ms

63ms

68ms

73ms

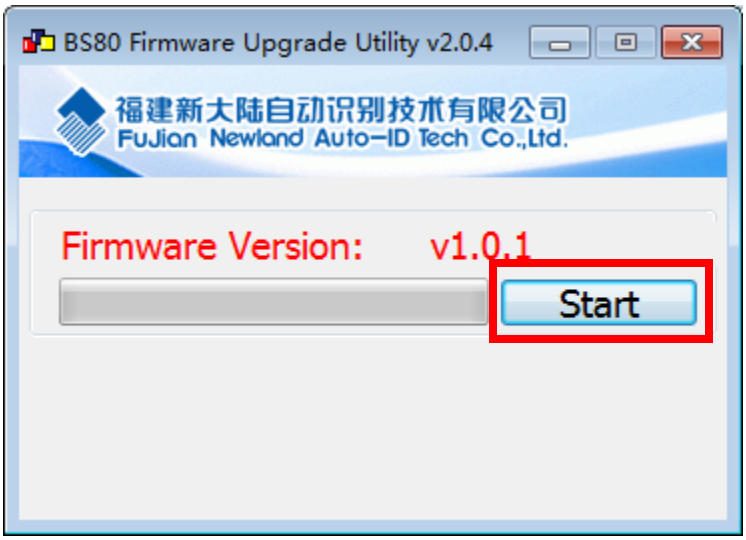
78ms

Upgrade the Firmware

Step 1: Contact the technical support to get the BS80 Firmware Upgrade Utility and the latest firmware.

Step 2: Download CDC-Virtual COM Driver from the Newland website at www.newlandaidc.com. Install it on PC by following the on-screen instructions. (Skip this step if it is already installed on your PC.) Make sure that the driver is properly installed. You cannot upgrade the firmware without it.

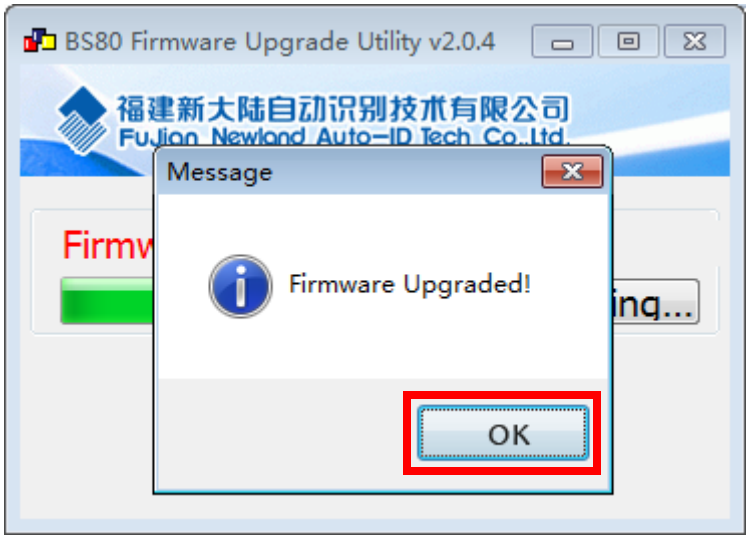
Step 3: Run the BS80Update program. Then click “Start”.



Step 4: Turn on the scanner and connect it to your PC with the USB cable.

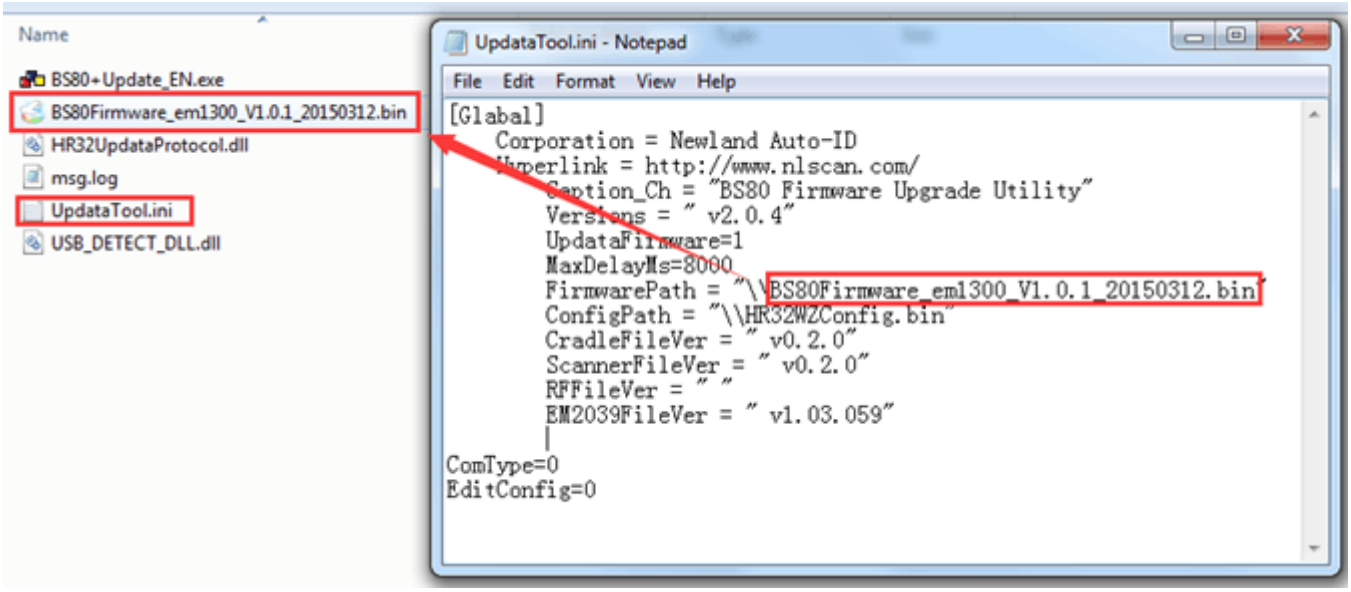
Step 5: Hold down the Function button and the Delete/Reset button on the scanner at the same time for 7 seconds to upgrade the firmware. The red and blue Function LEDs flash alternately during the updating process.

Step 6: Wait for the “Firmware upgraded!” window to pop up and click “OK” to exit the program.



Notes:

1. If this utility does not operate normally, check to see if the FirmwarePath in the UpdataTool.ini file is correct (its value should be identical with the name of the .bin file). If there is a higher version of firmware, replace the .bin file.



2. If the update fails or you accidentally enter the update status, you need to hold down the Delete/Reset button for 7s to reset the scanner.

Chapter 3 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 barcode symbologies. It is recommended to disable those that are rarely used to increase the efficiency of the scanner.

Note: Maximum barcode length supported by the scanner is 3072 bytes.

1D Scanner

Enable/Disable All Symbologies

Enable All Symbologies

Disable All Symbologies

Code 128

Restore Factory Defaults

Restore the Factory Defaults of Code 128

Enable/Disable Code 128

Enable Code 128 (default)

Disable Code 128

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

UCC/EAN-128

Restore Factory Defaults

Restore the Factory Defaults of UCC/EAN-128

Enable/Disable UCC/EAN-128

Enable UCC/EAN-128 (default)

Disable UCC/EAN-128

Set Length Range for UCC/EAN-128

The scanner can be configured to only decode UCC/EAN-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.

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

Set the Minimum Length

Set the Maximum Length

Example: Set the scanner to decode UCC/EAN-128 barcodes containing between 8 and 12 characters

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

AIM 128

Restore Factory Defaults

Restore the Factory Defaults of AIM 128

Enable/Disable AIM 128

Enable AIM 128

Disable AIM 128 (default)

Set Length Range for AIM 128

The scanner can be configured to only decode AIM128 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.

If minimum length is set to be greater than maximum length, the scanner only decodes AIM128 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only AIM128 barcodes with that length are to be decoded.

Set the Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

EAN-8

Restore Factory Defaults

Restore the Factory Defaults of EAN-8

Enable/Disable EAN-8

Enable EAN-8 (default)

Disable EAN-8

2-Digit Add-On Code

An EAN-8 barcode can be augmented with a two-digit add-on code to form a new one.

- **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.
- **Decode EAN-8 + 2-Digit Add-On Code Only:** The scanner only decodes EAN-8 barcodes that contain 2-digit add-on codes.

Disable 2-Digit Add-On Code (default)

Enable 2-Digit Add-On Code

Decode EAN-8 + 2-Digit Add-On Code Only

5-Digit Add-On Code

An EAN-8 barcode can be augmented with a five-digit add-on code to form a new one.

- **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.
- **Decode EAN-8 + 5-Digit Add-On Code Only:** The scanner only decodes EAN-8 barcodes that contain 5-digit add-on codes.

Disable 5-Digit Add-On Code (default)

Enable 5-Digit Add-On Code

Decode EAN-8 + 5-Digit Add-On Code Only

EAN-8 Extension

- ✧ **Disable EAN-8 Zero Extend:** Transmit EAN-8 barcodes as is.
- ✧ **Enable EAN-8 Zero Extend:** Add five leading zeros to decoded EAN-8 barcodes to extend to13 digits.
- ✧ **Convert EAN-8 to EAN-13:** Add five leading zeros to decoded EAN-8 barcodes to make them compatible in format to EAN-13 barcodes.

Disable EAN-8 Zero Extend (default)

Enable EAN-8 Zero Extend

Convert EAN-8 to EAN-13

Transmit Check Digit

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

Transmit EAN-8 Check Digit (default)

Do Not Transmit EAN-8 Check Digit

EAN-13

Restore Factory Defaults

Restore the Factory Defaults of EAN-13

Enable/Disable EAN-13

Enable EAN-13 (default)

Disable EAN-13

Transmit Check Digit

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

Transmit EAN-13 Check Digit (default)

Do Not Transmit EAN-13 Check Digit

2-Digit Add-On Code

An EAN-13 barcode can be augmented with a two-digit add-on code to form a new one.

- **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.
- **Decode EAN-13 + 2-Digit Add-On Code Only:** The scanner only decodes EAN-13 barcodes that contain 2-digit add-on codes.

Disable 2-Digit Add-On Code (default)

Enable 2-Digit Add-On Code

Decode EAN-13 + 2-Digit Add-On Code Only

5-Digit Add-On Code

An EAN-13 barcode can be augmented with a five-digit add-on code to form a new one.

- **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.
- **Decode EAN-13 + 5-Digit Add-On Code Only:** The scanner only decodes EAN-13 barcodes that contain 5-digit add-on codes.

Disable 5-Digit Add-On Code (default)

Enable 5-Digit Add-On Code

Decode EAN-13 + 5-Digit Add-On Code Only

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 “2 or 5-Digit Add-On Code” feature.

Do Not Require Add-On Code (default)

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 “2 or 5-Digit Add-On Code” feature.

Do Not Require Add-On Code (default)

Require Add-On Code

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 “2 or 5-Digit Add-On Code” feature.

Do Not Require Add-On Code (default)

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 “2 or 5-Digit Add-On Code” feature.

Do Not Require Add-On Code (default)

Require Add-On Code

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 “2 or 5-Digit Add-On Code” feature.

Do Not Require Add-On Code (default)

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 “2 or 5-Digit Add-On Code” feature.

Do Not Require Add-On Code (default)

Require Add-On Code

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 “2 or 5-Digit Add-On Code” feature.

Do Not Require Add-On Code (default)

Require Add-On Code

ISSN

Restore Factory Defaults

Restore the Factory Defaults of ISSN

Enable/Disable ISSN

Enable ISSN

Disable ISSN (default)

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ISBN

Restore Factory Defaults

Restore the Factory Defaults of ISBN

Enable/Disable ISBN

Enable ISBN

Disable ISBN (default)

Set ISBN Format

ISBN-13 (default)

ISBN-10

UPC-E

Restore Factory Defaults

Restore the Factory Defaults of UPC-E

Enable/Disable UPC-E

Enable UPC-E (default)

Disable UPC-E

Transmit Check Digit

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

Transmit UPC-E Check Digit (default)

Do Not Transmit UPC-E Check Digit

2-Digit Add-On Code

A UPC-E barcode can be augmented with a two-digit add-on code to form a new one.

- **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.
- **Decode UPC-E + 2-Digit Add-On Code Only:** The scanner only decodes UPC-E barcodes that contain 2-digit add-on codes.

Disable 2-Digit Add-On Code (default)

Enable 2-Digit Add-On Code

Decode UPC-E + 2-Digit Add-On Code Only

5-Digit Add-On Code

A UPC-E barcode can be augmented with a five-digit add-on code to form a new one.

- **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.
- **Decode UPC-E + 5-Digit Add-On Code Only:** The scanner only decodes UPC-E barcodes that contain 5-digit add-on codes.

Disable 5-Digit Add-On Code (default)

Enable 5-Digit Add-On Code

Decode UPC-E + 5-Digit Add-On Code Only

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.

No Preamble (default)

System Character

System Character & Country Code

UPC-E Extension

- ✧ **Disable UPC-E Extend:** Transmit UPC-E barcodes as is.
- ✧ **Enable UPC-E Extend:** Extend UPC-E barcodes to make them compatible in length to UPC-A.
- ✧ **Convert UPC-E to UPC-A:** Extend UPC-E barcodes to make them compatible in format to UPC-A.

Disable UPC-E Extend (default)

Enable UPC-E Extend

Convert UPC-E to UPC-A

UPC-A

Restore Factory Defaults

Restore the Factory Defaults of UPC-A

Enable/Disable UPC-A

Enable UPC-A (default)

Disable UPC-A

Transmit Check Digit

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

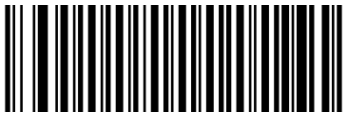
Transmit UPC-A Check Digit (default)

Do Not Transmit UPC-A Check Digit

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.

No Preamble



System Character (default)

System Character & Country Code

2-Digit Add-On Code

A UPC-A barcode can be augmented with a two-digit add-on code to form a new one.

- **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.
- **Decode UPC-A + 2-Digit Add-On Code Only:** The scanner only decodes UPC-A barcodes that contain 2-digit add-on codes.

Disable 2-Digit Add-On Code (default)

Enable 2-Digit Add-On Code

Decode UPC-A + 2-Digit Add-On Code Only

5-Digit Add-On Code

A UPC-A barcode can be augmented with a five-digit add-on code to form a new one.

- **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.
- **Decode UPC-A + 5-Digit Add-On Code Only:** The scanner only decodes UPC-A barcodes that contain 5-digit add-on codes.

Disable 5-Digit Add-On Code (default)

Enable 5-Digit Add-On Code

Decode UPC-A + 5-Digit Add-On Code Only

Interleaved 2 of 5

Restore Factory Defaults

Restore the Factory Defaults of Interleaved 2 of 5

Enable/Disable Interleaved 2 of 5

Enable Interleaved 2 of 5 (default)

Disable Interleaved 2 of 5

Check Digit Verification

Disable

Do Not Transmit Check Digit After Verification (default)

Transmit Check Digit After Verification

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.

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 Minimum Length

Set the Maximum Length

Example: Set the scanner to decode Interleaved 2 of 5 barcodes containing between 8 and 12 characters

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

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.

Restore the Factory Defaults of ITF-6

Disable ITF-6 (default)

Enable ITF-6, Do Not Transmit Check Digit

Enable ITF-6, Transmit Check Digit

Note: It is advisable not to enable ITF-6 and Interleaved 2 of 5 at the same time.

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.

Restore the Factory Defaults of ITF-14

Enable ITF-14, Do Not Transmit Check Digit

Disable ITF-14 (default)

Enable ITF-14, Transmit Check Digit

Note: It is advisable not to enable ITF-14 and Interleaved 2 of 5 at the same time.

Deutsche 14

Restore Factory Defaults

Restore the Factory Defaults of Deutsche 14

Enable/Disable Deutsche 14

Enable Deutsche 14, Do Not Transmit Check Digit

Disable Deutsche 14 (default)

Enable Deutsche 14, Transmit Check Digit

Note: It is advised not to enable Deutsche 14 unless necessary, because Deutsche 14, ITF-14 and Interleaved 2 of 5 use the same encoding method and enabling them at the same time can easily cause confusion with each other when decoding.

Deutsche 12

Restore Factory Defaults

Restore the Factory Defaults of Deutsche 12

Enable/Disable Deutsche 12

Enable Deutsche 12, Do Not Transmit Check Digit

Disable Deutsche 12 (default)

Enable Deutsche 12, Transmit Check Digit

Note: It is advised not to enable Deutsche 12 unless necessary, because Deutsche 12, ITF-12 and Interleaved 2 of 5 use the same encoding method and enabling them at the same time can easily cause confusion with each other when decoding.

COOP 25 (Japanese Matrix 2 of 5)

Restore Factory Defaults

Restore the Factory Defaults of COOP 25

Enable/Disable COOP 25

Enable COOP 25

Disable COOP 25 (default)

Check Digit Verification

Disable (default)

Transmit Check Digit After Verification

Do Not Transmit Check Digit After Verification

Set Length Range for COOP 25

The scanner can be configured to only decode COOP 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.

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

Set the Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

Matrix 2 of 5 (European Matrix 2 of 5)

Restore Factory Defaults

Restore the Factory Defaults of Matrix 2 of 5

Enable/Disable Matrix 2 of 5

Enable Matrix 2 of 5 (default)

Disable Matrix 2 of 5

Check Digit Verification

Disable (default)

Transmit Check Digit After Verification

Do Not Transmit Check Digit After Verification

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.

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 Minimum Length

Set the Maximum Length

Example: Set the scanner to decode Matrix 2 of 5 barcodes containing between 8 and 12 characters

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

Industrial 25

Restore Factory Defaults

Restore the Factory Defaults of Industrial 25

Enable/Disable Industrial 25

Enable Industrial 25 (default)

Disable Industrial 25

Check Digit Verification

Disable (default)

Transmit Check Digit After Verification

Do Not Transmit Check Digit After Verification

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

Standard 25

Restore Factory Defaults

Restore the Factory Defaults of Standard 25

Enable/Disable Standard 25

Enable Standard 25 (default)

Disable Standard 25

Check Digit Verification

Disable (default)

Transmit Check Digit After Verification

Do Not Transmit Check Digit After Verification

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

Code 39

Restore Factory Defaults

Restore the Factory Defaults of Code 39

Enable/Disable Code 39

Enable Code 39 (default)

Disable Code 39

Check Digit Verification

Disable (default)

Transmit Check Digit After Verification

Do Not Transmit Check Digit After Verification

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.

Transmit Start/Stop Character (default)

Do Not 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.

Disable Code 39 Full ASCII

Enable Code 39 Full ASCII (default)

Enable/Disable Code 32

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 digit verification must be disabled for this parameter to function.

Disable Code 32 (default)

Enable Code 32

Code 32 Prefix

Scan the appropriate bar code 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 (default)

Enable Code 32 Prefix

Transmit Code 32 Check Digit

Code 32 must be enabled for this parameter to function.

Do Not Transmit Code 32 Check Digit (default)

Transmit Code 32 Check Digit

Transmit Code 32 Start/Stop Character

Code 32 must be enabled for this parameter to function.

Do Not Transmit Code 32 Start/Stop Character (default)

Transmit Code 32 Start/Stop Character

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

Codabar

Restore Factory Defaults

Restore the Factory Defaults of Codabar

Enable/Disable Codabar

Enable Codabar (default)

Disable Codabar

Check Digit Verification

Disable (default)

Transmit Check Digit After Verification

Do Not Transmit Check Digit After Verification

Transmit Start/Stop Character

Do Not Transmit Start/Stop Character

Transmit Start/Stop Character (default)

ABCD/ABCD as the Start/Stop Character (default)

ABCD/TN*E as the Start/Stop Character

abcd/abcd as the Start/Stop Character

abcd/tn*e as the Start/Stop Character

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

Code 93

Restore Factory Defaults

Restore the Factory Defaults of Code 93

Enable/Disable Code 93

Enable Code 93 (default)

Disable Code 93

Check Digit Verification

Disable

Transmit Check Digit After Verification

Do Not Transmit Check Digit After Verification (default)

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

Code 11

Restore Factory Defaults

Restore the Factory Defaults of Code 11

Enable/Disable Code 11

Enable Code 11

Disable Code 11 (default)

Check Digit Verification

Disable

One Check Digit, MOD11 (default)

Two Check Digits, MOD11/MOD11

Two Check Digits, MOD11/MOD9

One Check Digit, MOD11 (Len <= 10)
Two Check Digits, MOD11/MOD11 (Len > 10)

One Check Digit, MOD11 (Len <= 10)
Two Check Digits, MOD11/MOD9 (Len > 10)

Do Not Transmit Check Digit (default)

Transmit Check Digit

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

Plessey

Restore Factory Defaults

Restore the Factory Defaults of Plessey

Enable/Disable Plessey

Enable Plessey

Disable Plessey (default)

Check Digit Verification

Disable

Transmit Check Digit After Verification

Do Not Transmit Check Digit After Verification (default)

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

MSI-Plessey

Restore Factory Defaults

Restore the Factory Defaults of MSI-Plessey

Enable/Disable MSI-Plessey

Enable MSI-Plessey

Disable MSI-Plessey (default)

Check Digit Verification

Disable

One Check Digit, MOD10 (default)

Two Check Digits, MOD10/MOD10

Two Check Digits, MOD10/MOD11

Do Not Transmit Check Digit (default)

Transmit Check Digit

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (1D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

GS1 Databar

Restore Factory Defaults

Restore the Factory Defaults of GS1 Databar

Enable/Disable GS1 Databar

Enable GS1 Databar (default)

Disable GS1 Databar

2D 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

If the **Disable 1D Symbologies** feature is enabled, the scanner will not be able to read any 1D barcodes.

Enable 1D Symbologies

Disable 1D Symbologies

Enable/Disable 2D Symbologies

If the **Disable 2D Symbologies** feature is enabled, the scanner will not be able to read any 2D barcodes.

Enable 2D Symbologies

Disable 2D Symbologies

Video Reverse

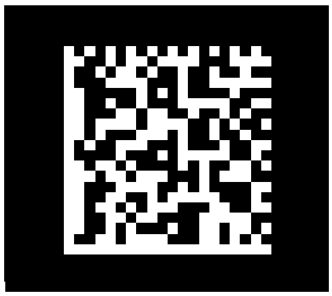
The **Video Reverse** feature only applies to 2D barcodes.

Regular barcode: Dark image on a bright background.

Inverse barcode: Bright image on a dark background.

The examples of regular barcode and inverse barcode are shown below.

Regular Barcode



Inverse Barcode

Video Reverse allows the scanner to read barcodes that are inverted.

Video Reverse ON: Read both regular barcodes and inverse barcodes.

Video Reverse OFF: Read regular barcodes only.

The scanner shows a slight decrease in scanning speed when Video Reverse is ON.

Video Reverse ON

Video Reverse OFF (default)

Code 128

Restore Factory Defaults

Restore the Factory Defaults of Code 128

Enable/Disable Code 128

Enable Code 128 (default)

Disable Code 128

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

GS1-128 (UCC/EAN-128)

Restore Factory Defaults

Restore the Factory Defaults of GS1-128

Enable/Disable GS1-128

Enable GS1-128 (default)

Disable GS1-128

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

AIM-128

Restore Factory Defaults

Restore the Factory Defaults of AIM-128

Enable/Disable AIM-128

Enable AIM-128 (default)

Disable AIM-128

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

EAN-8

Restore Factory Defaults

Restore the Factory Defaults of EAN-8

Enable/Disable EAN-8

Enable EAN-8 (default)

Disable EAN-8

Transmit Check Digit

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

Transmit EAN-8 Check Digit (default)

Do Not Transmit EAN-8 Check Digit

Add-On Code

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

Enable 2-Digit Add-On Code

Disable 2-Digit Add-On Code (default)

Enable 5-Digit Add-On Code

Disable 5-Digit Add-On Code (default)

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner decodes a mix of EAN-8 barcodes with and without 2-digit/5-digit add-on codes.

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

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 Required

EAN-8 Add-On Code Not Required (default)

EAN-8 Extension

Disable EAN-8 Zero Extend: Transmit EAN-8 barcodes as is.

Enable EAN-8 Zero Extend: Add five leading zeros to decoded EAN-8 barcodes to extend to13 digits.

Enable EAN-8 Zero Extend

Disable EAN-8 Zero Extend (default)

EAN-13

Restore Factory Defaults

Restore the Factory Defaults of EAN-13

Enable/Disable EAN-13

Enable EAN-13 (default)

Disable EAN-13

Transmit Check Digit

Transmit EAN-13 Check Digit (default)

Do Not Transmit EAN-13 Check Digit

Add-On Code

An EAN-13 barcode can be augmented with a two-digit or five-digit add-on code to form a new one.

Enable 2-Digit Add-On Code

Disable 2-Digit Add-On Code (default)

Enable 5-Digit Add-On Code

Disable 5-Digit Add-On Code (default)

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner decodes a mix of EAN-13 barcodes with and without 2-digit/5-digit add-on codes.

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

Add-On Code Required

When **EAN-13 Add-On Code Required** is selected, the scanner will only read EAN-13 barcodes that contain add-on codes.

EAN-13 Add-On Code Required

EAN-13 Add-On Code Not Required (default)

EAN-13 Beginning with 290 Add-On Code Required (For BS8060-2T)

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 (default)

Require Add-On Code

EAN-13 Beginning with 378/379 Add-On Code Required (For BS8060-2T)

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 (default)

Require Add-On Code

EAN-13 Beginning with 414/419 Add-On Code Required (For BS8060-2T)

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.

Do Not Require Add-On Code (default)

Require Add-On Code

EAN-13 Beginning with 434/439 Add-On Code Required (For BS8060-2T)

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.

Do Not Require Add-On Code (default)

Require Add-On Code

EAN-13 Beginning with 977 Add-On Code Required (For BS8060-2T)

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.

Do Not Require Add-On Code (default)

Require Add-On Code

EAN-13 Beginning with 978 Add-On Code Required (For BS8060-2T)

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.

Do Not Require Add-On Code (default)

Require Add-On Code

EAN-13 Beginning with 979 Add-On Code Required (For BS8060-2T)

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.

Do Not Require Add-On Code (default)

Require Add-On Code

ISSN

Restore Factory Defaults

Restore the Factory Defaults of ISSN

Enable/Disable ISSN

Enable ISSN

Disable ISSN (default)

Add-On Code

An ISSN barcode can be augmented with a two-digit or five-digit add-on code to form a new one.

Enable 2-Digit Add-On Code

Disable 2-Digit Add-On Code (default)

Enable 5-Digit Add-On Code

Disable 5-Digit Add-On Code (default)

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner decodes a mix of ISSN barcodes with and without 2-digit/5-digit add-on codes.

Disable 2-Digit Add-On Code/ Disable 5-Digit Add-On Code: The scanner decodes ISSN and ignores the add-on code when presented with an ISSN plus add-on barcode. It can also decode ISSN barcodes without add-on codes.

Add-On Code Required

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

ISSN Add-On Code Required

ISSN Add-On Code Not Required (default)

ISBN

Restore Factory Default

Restore the Factory Defaults of ISBN

Enable/Disable ISBN

Enable ISBN (default)

Disable ISBN

Set ISBN Format

ISBN-13 (default)

ISBN-10

Add-On Code

An ISBN barcode can be augmented with a two-digit or five-digit add-on code to form a new one.

Enable 2-Digit Add-On Code

Disable 2-Digit Add-On Code (default)

Enable 5-Digit Add-On Code

Disable 5-Digit Add-On Code (default)

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner decodes a mix of ISBN barcodes with and without 2-digit/5-digit add-on codes.

Disable 2-Digit Add-On Code/ Disable 5-Digit Add-On Code: The scanner decodes ISBN and ignores the add-on code when presented with an ISBN plus add-on barcode. It can also decode ISBN barcodes without add-on codes.

Add-On Code Required

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

ISBN Add-On Code Required

ISBN Add-On Code Not Required (default)

UPC-E

Restore Factory Defaults

Restore the Factory Defaults of UPC-E

Enable/Disable UPC-E

Enable UPC-E (default)

Disable UPC-E

Transmit Check Digit

Transmit UPC-E Check Digit (default)

Do Not Transmit UPC-E Check Digit

Add-On Code

A UPC-E barcode can be augmented with a two-digit or five-digit add-on code to form a new one.

Enable 2-Digit Add-On Code

Disable 2-Digit Add-On Code (default)

Enable 5-Digit Add-On Code

Disable 5-Digit Add-On Code (default)

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner decodes a mix of UPC-E barcodes with and without 2-digit/5-digit add-on codes.

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

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.

UPC-E Add-On Code Required

UPC-E Add-On Code Not Required (default)

Transmit System Character “0”

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

Transmit System Character “0” (default)

Do Not Transmit System Character “0”

UPC-E Extension

Disable UPC-E Extend: Transmit UPC-E barcodes as is.

Enable UPC-E Extend: Extend UPC-E barcodes to make them compatible in length to UPC-A.

Enable UPC-E Extend

Disable UPC-E Extend (default)

UPC-A

Restore Factory Defaults

Restore the Factory Defaults of UPC-A

Enable/Disable UPC-A

Enable UPC-A (default)

Disable UPC-A

Transmit Check Digit

Transmit UPC-A Check Digit (default)

Do Not Transmit UPC-A Check Digit

Add-On Code

A UPC-A barcode can be augmented with a two-digit or five-digit add-on code to form a new one.

Enable 2-Digit Add-On Code

Disable 2-Digit Add-On Code (default)

Enable 5-Digit Add-On Code

Disable 5-Digit Add-On Code (default)

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner decodes a mix of UPC-A barcodes with and without 2-digit/5-digit add-on codes.

Disable 2-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 add-on barcode. It can also decode UPC-A barcodes without add-on codes.

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.

UPC-A Add-On Code Required

UPC-A Add-On Code Not Required (default)

Transmit Preamble Character “0”

Transmit Preamble Character “0”

Do not Transmit Preamble Character “0” (default)

Note: The preamble character “0” usually does not appear in printed UPC-A barcodes.

Interleaved 2 of 5

Restore Factory Defaults

Restore the Factory Defaults of Interleaved 2 of 5

Enable/Disable Interleaved 2 of 5

Enable Interleaved 2 of 5 (default)

Disable Interleaved 2 of 5

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.

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 Minimum Length

Set the Maximum Length

Example: Set the scanner to decode Interleaved 2 of 5 barcodes containing between 8 and 12 characters

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

Check Digit Verification

A check digit is optional for Interleaved 2 o 5 and can be added as the last digit. 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 Digit After Verification: The scanner checks the integrity of all Interleaved 2 of 5 barcodes to verify that the data complies with the check digit algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

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

Disable (default)

Do Not Transmit Check Digit After Verification

Transmit Check Digit After Verification

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 digit.

Restore the Factory Defaults of ITF-14

Disable ITF-14

Enable ITF-14 But Do Not Transmit Check Digit (default)

Enable ITF-14 and Transmit Check Digit

Note: It is advisable not to enable ITF-14 and Interleaved 2 of 5 at the same time.

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 digit.

Restore the Factory Defaults of ITF-6

Disable ITF-6 (default)

Enable ITF-6 But Do Not Transmit Check Digit

Enable ITF-6 and Transmit Check Digit

Note: It is advisable not to enable ITF-6 and Interleaved 2 of 5 at the same time.

Matrix 2 of 5

Restore Factory Defaults

Restore the Factory Defaults of Matrix 2 of 5

Enable/Disable Matrix 2 of 5

Enable Matrix 2 of 5

Disable Matrix 2 of 5 (default)

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.

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 Minimum Length

Set the Maximum Length

Example: Set the scanner to decode Matrix 2 of 5 barcodes containing between 8 and 12 characters

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

Check Digit Verification

Disable

Do Not Transmit Check Digit After Verification (default)

Transmit Check Digit After Verification

Industrial 2 of 5

Restore Factory Defaults

Restore the Factory Defaults of Industrial 2 of 5

Enable/Disable Industrial 2 of 5

Enable Industrial 2 of 5 (default)

Disable Industrial 2 of 5

Set Length Range for Industrial 2 of 5

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

Check Digit Verification

Disable (default)

Transmit Check Digit After Verification

Do Not Transmit Check Digit After Verification

Standard 25 (IATA 2 of 5)

Restore Factory Defaults

Restore the Factory Defaults of Standard 25

Enable/Disable Standard 25

Enable Standard 25 (default)

Disable Standard 25

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

Check Digit Verification

Disable (default)

Transmit Check Digit After Verification

Do Not Transmit Check Digit After Verification

Code 39

Restore Factory Defaults

Restore the Factory Defaults of Code 39

Enable/Disable Code 39

Enable Code 39 (default)

Disable Code 39

Transmit Start/Stop Character

Transmit Start/Stop Character

Do not Transmit Start/Stop Character (default)

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

Check Digit Verification

Disable (default)

Transmit Check Digit After Verification

Do Not Transmit Check Digit After Verification

Enable/Disable Code 39 Full ASCII

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

Enable Code 39 Full ASCII (default)

Disable Code 39 Full ASCII

Enable/Disable Code 32 (For BS8060-2T)

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 digit verification must be disabled for this parameter to function.

Disable Code 32 (default)

Enable Code 32

Code 32 Prefix (For BS8060-2T)

Scan the appropriate bar code 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 (default)

Enable Code 32 Prefix

Transmit Code 32 Check Digit (For BS8060-2T)

Code 32 must be enabled for this parameter to function.

Do Not Transmit Code 32 Check Digit (default)

Transmit Code 32 Check Digit

Transmit Code 32 Start/Stop Character (For BS8060-2T)

Code 32 must be enabled for this parameter to function.

Do Not Transmit Code 32 Start/Stop Character (default)

Transmit Code 32 Start/Stop Character

Codabar

Restore Factory Defaults

Restore the Factory Defaults of Codabar

Enable/Disable Codabar

Enable Codabar (default)

Disable Codabar

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

Check Digit Verification

Disable (default)

Transmit Check Digit After Verification

Do Not Transmit Check Digit After Verification

Transmit Start/Stop Character

Transmit Start/Stop Character

Do not Transmit Start/Stop Character (default)

Start/Stop Character Format

You can choose your desired start/stop character format by scanning the appropriate barcode below.

ABCD/ABCD as the Start/Stop Character (default)

ABCD/TN*E as the Start/Stop Character

Start/Stop Character in Uppercase

Start/Stop Character in Lowercase

Code 93

Restore Factory Defaults

Restore the Factory Defaults of Code 93

Enable/Disable Code 93

Enable Code 93 (default)

Disable Code 93

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from **Save/Cancel Barcodes (2D Scanner)** in Appendix.

Check Digit Verification

Disable

Do Not Transmit Check Digit After Verification (default)

Transmit Check Digit After Verification

GS1-Databar (RSS)

Restore Factory Defaults

Restore the Factory Defaults of GS1-Databar

Enable/Disable GS1 Databar

Enable GS1-DataBar (default)

Disable GS1-DataBar

Transmit Application Identifier “01”

Transmit Application Identifier “01” (default)

Do Not Transmit Application Identifier “01”

Code 11

Restore Factory Defaults

Restore the Factory Defaults of Code 11

Enable/Disable Code 11

Enable Code 11 (default)

Disable Code 11

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

Transmit Check Digit

Transmit Check Digit

Do Not Transmit Check Digit (default)

Check Digit Verification

Disable

One Check Digit, MOD11 (default)

Two Check Digits, MOD11/MOD11

Two Check Digits, MOD11/MOD9

One Check Digit, MOD11 (Len<=10)

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

One Check Digit, MOD11 (Len<=10)

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

Plessey

Restore Factory Defaults

Restore the Factory Defaults of Plessey

Enable/Disable Plessey

Enable Plessey (default)

Disable Plessey

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from **Save/Cancel Barcodes (2D Scanner)** in Appendix.

Check Digit Verification

Disable

Do Not Transmit Check Digit After Verification (default)

Transmit Check Digit After Verification

MSI-Plessey

Restore Factory Defaults

Restore the Factory Defaults of MSI-Plessey

Enable/Disable MSI-Plessey

Enable MSI-Plessey (default)

Disable MSI-Plessey

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.

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 Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

Transmit Check Digit

Transmit Check Digit

Do Not Transmit Check Digit (default)

Check Digit Verification

Disable

One Check Digit, MOD10 (default)

Two Check Digits, MOD10/MOD10

Two Check Digits, MOD10/MOD11

PDF 417

Restore Factory Defaults

Restore the Factory Defaults of PDF 417

Enable/Disable PDF 417

Enable PDF 417 (default)

Disable PDF 417

Set Length Range for PDF 417

The scanner can be configured to only decode PDF 417 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish it, you need to set the minimum and maximum lengths.

If minimum length is set to be greater than maximum length, the scanner only decodes PDF 417 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only PDF 417 barcodes with that length are to be decoded.

Set the Minimum Length

Set the Maximum Length

Example: Set the scanner to decode PDF 417 barcodes containing between 8 and 12 characters

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

PDF 417 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.

Single PDF417 Only (default)

Twin PDF417 Only

Both Single & Twin

QR Code

Restore Factory Defaults

Restore the Factory Defaults of QR Code

Enable/Disable QR Code

Enable QR Code (default)

Disable QR Code

Micro QR

Enable Micro QR (default)

Disable Micro QR

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.

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

Set the Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

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.

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

Single QR Only (default)

Twin QR Only

Both Single & Twin

Data Matrix

Restore Factory Defaults

Restore the Factory Defaults of Data Matrix

Enable/Disable Data Matrix

Enable Data Matrix (default)

Disable Data Matrix

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.

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

Set the Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

Rectangular Barcode

Enable Rectangular Barcode (default)

Disable Rectangular Barcode

Mirror Image

Decode Mirror Images (default)

Do Not Decode Mirror Images

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 order: Data Matrix code on the left (in the upper position) followed by the one on the right (in the lower position).

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 (default)

Twin Data Matrix Only

Both Single & Twin

Chinese Sensible Code

Restore Factory Defaults

Restore the Factory Defaults of Chinese Sensible Code

Enable/Disable Chinese Sensible Code

Enable Chinese Sensible Code

Disable Chinese Sensible Code (default)

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.

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

Set the Minimum Length

Set the Maximum Length

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

1. Scan the **Set the Minimum Length** barcode.
2. Scan the numeric barcode “8” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Set the Maximum Length** barcode.
5. Scan the numeric barcodes “1” and “2” from ***Digit Barcodes (2D Scanner)*** in Appendix.
6. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

Chapter 4 Prefix & Suffix

1D Scanner

After a successful barcode reading, a string containing numbers, letters or symbols will be returned.

In real applications, barcode data may be found insufficient for your needs. You may wish to include additional information such as barcode type, data acquisition time or delimiter in data being scanned.

Adding extra information to printed barcodes does not seem like a sensible solution since that will increase the barcode size and make them inflexible. Instead, we come up with the idea of appending prefix and suffix to the data without making any change to barcodes. We will show you how to conduct the configuration in the following sections.

The scanner can be configured to transmit barcode data in the following format:

[Code ID] + [Custom Prefix] + [DATA] + [Custom Suffix] + [Terminating Character]

Note: [DATA] must be transmitted while user can decide whether to transmit any of the rest parts.

Prefix Sequence

Code ID+Custom+AIM ID (default)

Custom+Code ID+AIM ID

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 11 characters.

For example, if barcode data is “123” and custom prefix is “AB”, the host device will receive “AB123”.

Disable Custom Prefix (default)

Enable Custom Prefix

Set Custom Prefix

To set a custom prefix, scan the **Set Custom Prefix** barcode, the numeric barcodes that represent the hexadecimal value of desired prefix(es) and the **Save** barcode.

Note: A custom prefix cannot exceed 11 characters.

Set Custom Prefix

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

1. Scan the **Set Custom Prefix** barcode.
2. Scan the numeric barcodes “4”,“3”,“4”,“F”,“4”,“4”,“4” and “5” from ***Digit Barcodes (1D Scanner)*** section in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

AIM ID Prefix

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

Enable AIM ID Prefix

Disable AIM ID Prefix(default)

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.

Disable Code ID Prefix (default)

Enable Code ID Prefix

Restore All Default Code IDs

For the information of default Code IDs, see ***Code ID Table (1D Scanner)*** in Appendix.

Restore Default Code IDs

Modify Code ID

Code ID of each symbology can be programmed separately. See the following example to learn how to program a Code ID.

Example: Set the Code ID of Code 128 to “p”

1. Check the hex value of “p” in the ASCII Table. (“p”: 70)
2. Scan the **Modify Code 128 Code ID** barcode.
3. Scan the numeric barcodes “7” and “0” from ***Digit Barcodes (1D Scanner*** in Appendix..
4. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix..

Modify Code 128 Code ID

Modify UCC/EAN 128 Code ID

Modify AIM 128 Code ID

Modify EAN-8 Code ID

Modify EAN-13 Code ID

Modify ISSN Code ID

Modify ISBN Code ID

Modify UPC-E Code ID

Modify UPC-A Code ID

Modify Interleaved 2 of 5 Code ID

Modify ITF-6 Code ID

Modify ITF-14 Code ID

Modify Deutsche 14 Code ID

Modify Deutsche 12 Code ID

Modify COOP25 Code ID

Modify Matrix 2 of 5 Code ID

Modify Industrial 25 Code ID

Modify Standard 25 Code ID

Modify Code 39 Code ID

Modify Codabar Code ID

Modify Code 93 Code ID

Modify Code 11 Code ID

Modify Plessey Code ID

Modify MSI-Plessey Code ID

Modify GS1 Databar Code ID

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 11 characters.

For example, if barcode data is “123” and custom suffix is “AB”, the host device will receive “123AB”.

Disable Custom Suffix (default)

Enable Custom Suffix

Set Custom Suffix

To set a custom suffix, scan the **Set Custom Suffix** barcode, the numeric barcodes that represent the hexadecimal value of desired suffix(es) and the **Save** barcode.

Note: A custom suffix cannot exceed 11 characters.

Set Custom Suffix

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

1. Scan the **Set Custom Suffix** barcode.
2. Scan the numeric barcodes “4”,“3”,“4”,“F”,“4”,“4”,“4” and “5” from the “**Digit Barcodes (1D Scanner)**” section in Appendix.
3. Scan the **Save** barcode from the “**Save/Cancel Barcodes (1D Scanner)**” section in Appendix.

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. A terminating character suffix cannot exceed 7 characters.

Disable Terminating Character Suffix

Enable Terminating Character Suffix (default)

Set Terminating Character Suffix

To set a terminating character suffix, scan the **Set Terminating Character Suffix** barcode, the numeric barcodes that represent the hexadecimal value of desired terminating character(s) and the **Save** barcode.

You can also quickly set the terminating character suffix to 0x0D (CR) or 0x0D,0x0A (CRLF) and enable the transmission of it by scanning the **Terminating Character 0x0D (CR)** or **Terminating Character 0x0D,0x0A (CRLF)** barcode below.

Terminating Character 0x0D (CR)

Terminating Character 0x0D,0x0A (CRLF) (default)

Set Terminating Character Suffix

Example: Set the terminating character to "0x0A" (LF)

1. Scan the **Set Terminating Character Suffix** barcode.
2. Scan the numeric barcodes "0" and "A" from ***Digit Barcodes (1D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (1D Scanner)*** in Appendix.

2D Scanner

In many applications, barcode data needs to be edited and distinguished from one another.

Usually AIM ID and Code ID can be used as identifiers, but in some special cases customized prefix and terminating character suffix like Carriage Return or Line Feed can also be the alternatives.

Data formatting may include:

- ✧ Append AIM ID/Code ID/custom prefix before the decoded data
- ✧ Append custom suffix after the decoded data
- ✧ Append terminating character to the end of the data

The following formats can be used when editing barcode data:

- ✧ [Code ID] + [Custom Prefix] + [AIM ID] + [DATA] + [Custom Suffix] + [Terminating Character]
- ✧ [Custom Prefix] + [Code ID] + [AIM ID] + [DATA] + [Custom Suffix] + [Terminating Character]

Prefix Sequences

Code ID+Custom Prefix+AIM ID

Custom Prefix+Code ID+AIM ID (default)

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 11 characters.

Enable Custom Prefix

Disable Custom Prefix (default)

Set Custom Prefix

To set a custom prefix, scan the **Set Custom Prefix** barcode and the numeric barcodes representing the hexadecimal values of a desired prefix and then scan the **Save** barcode. Refer to ***ASCII Table*** in Appendix for hexadecimal values of characters.

Note: A custom prefix cannot exceed 11 characters.

Set Custom Prefix

Example: Set the custom prefix to "CODE"

1. Check the hex values of "CODE" in the ASCII Table. ("CODE": 43, 4F, 44, 45)
2. Scan the **Set Custom Prefix** barcode.
3. Scan the numeric barcodes "4", "3", "4", "F", "4", "4", "4" and "5" from ***Digit Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

AIM ID Prefix

AIM (Automatic Identification Manufacturers) IDs and ISO/IEC 15424 standards define symbology identifiers and data carrier identifiers. (For the details, see ***AIM ID Table (2D Scanner)*** in Appendix. If AIM ID prefix is enabled, the engine will add the symbology identifier before the scanned data after decoding.

Enable AIM ID Prefix

Disable AIM ID Prefix(default)

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.

Enable Code ID Prefix

Disable Code ID Prefix (default)

Restore All Default Code IDs

For the information of default Code IDs, see ***Code ID Table (2D Scanner)*** in Appendix.

Restore All Default Code IDs

Modify Code ID

Code ID of each symbology can be programmed separately. See the following example to learn how to program a Code ID.

Example: Set the Code ID of PDF417 to "p"

1. Check the hex value of "p" in the ASCII Table. ("p": 70)
2. Scan the **Modify PDF417 Code ID** barcode.
3. Scan the numeric barcodes "7" and "0" from ***Digit Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

Modify PDF417 Code ID

Modify Data Matrix Code ID

Modify QR Code ID

Modify Chinese Sensible Code ID

Modify Code 128 Code ID

Modify GS1-128 Code ID

Modify AIM-128 Code ID

Modify EAN-8 Code ID

Modify EAN-13 Code ID

Modify UPC-E Code ID

Modify UPC-A Code ID

Modify ISBN Code ID

Modify ISSN Code ID

Modify Code 39 Code ID

Modify Code 93 Code ID

Modify Interleaved 2 of 5 Code ID

Modify ITF-14 Code ID

Modify ITF-6 Code ID

Modify Codabar Code ID

Modify Industrial 25 Code ID

Modify Standard 25 Code ID

Modify Matrix 25 Code ID

Modify COOP 25 Code ID

Modify Code 11 Code ID

Modify Plessey Code ID

Modify MSI/Plessey Code ID

Modify GS1 Databar Code ID

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 11 characters.

Enable Custom Suffix

Disable Custom Suffix (default)

Set Custom Suffix

To set a custom suffix, scan the **Set Custom Suffix** barcode and the numeric barcodes representing the hexadecimal values of a desired suffix and then scan the **Save** barcode. Refer to ***ASCII Table*** in Appendix for hexadecimal values of characters.

Note: A custom suffix cannot exceed 11 characters.

Set Custom Suffix

Example: Set the custom suffix to "CODE"

1. Check the hex values of "CODE" in the ASCII Table. ("CODE": 43, 4F, 44, 45)
2. Scan the **Set Custom Suffix** barcode.
3. Scan the numeric barcodes "4", "3", "4", "F", "4", "4", "4" and "5" from ***Digit Barcodes (2D Scanner)*** in Appendix.
4. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

Terminating Character Suffix

A terminating character can be used to mark the end of data, which means nothing can be added after it.

A terminating character suffix can contain 1-7 characters.

Enable/Disable Terminating Character Suffix

To enable/disable terminating character suffix, scan the appropriate barcode below.

Enable Terminating Character Suffix (default)

Disable Terminating Character Suffix

Set Terminating Character Suffix

The engine provides a shortcut for setting the terminating character suffix to CR (0x0D) or CRLF (0x0D,0x0A) and enabling it by scanning the appropriate barcode below.

Terminating Character CR (0x0D) (default)

Terminating Character CRLF (0x0D,0x0A)

To set a terminating character suffix, scan the **Set Terminating Character Suffix** barcode and the numeric barcodes representing the hexadecimal value of a desired terminating character and then scan the **Save** barcode. Refer to ***ASCII Table*** in Appendix for hexadecimal values of terminating characters.

Note: A terminating character suffix cannot exceed 7 characters.

Set Terminating Character Suffix

Example: Set the terminating character suffix to 0x0A

1. Scan the **Set Terminating Character Suffix** barcode.
2. Scan the numeric barcodes “0” and “A” from ***Digit Barcodes (2D Scanner)*** in Appendix.
3. Scan the **Save** barcode from ***Save/Cancel Barcodes (2D Scanner)*** in Appendix.

Appendix

Factory Defaults Table

Parameter	Factory Default	Remark
System Settings		
Operating Mode	Bluetooth mode	
Bluetooth Profile	HID	
Data Transmission via Bluetooth	Synchronous transmission	
USB Interface Type	USB HID-KBW	
Data Transmission via USB	Asynchronous transmission	
Verify Receipt of Data	Disabled	
Sound Notifications	Enabled	
Vibration Notifications	Disabled	
Inter-Character Delay for Bluetooth HID	15ms	
Auto Power-Off Timer	30 minutes	
Product Serial Number	Disabled	
Time Stamp	Disabled	
Date Format	Format 3: yyyy/mm/dd	
USB Country Keyboard Types	US English	USB HID-KBW
Character Encoding	ISO-8859-1	USB HID-KBW
Convert Case	No case conversion	USB HID-KBW
Emulate ALT + Keypad	Disabled	USB HID-KBW
Function Key Mapping	Disabled	USB HID-KBW
Emulate Numeric Keypad	Disabled	USB HID-KBW
Code Page	Windows 1252 (Latin I)	USB HID-KBW
Inter-Keystroke Delay for KBW	3ms	USB HID-KBW

Parameter	Factory Default	Remark
Prefix & Suffix		
1D Scanner		
Prefix Sequence	Code ID+Custom Prefix+AIM ID	
AIM ID Prefix	Disabled	
Code ID Prefix	Disabled	1 or 2 English letters
Custom Prefix	Disabled	Max: 11 characters
	None	
Custom Suffix	Disabled	Max: 11 characters
	None	
Terminating Character Suffix	Enabled	Max: 7 characters
	0x0D,0x0A (CRLF)	
2D Scanner		
Prefix Sequence	Custom Prefix+Code ID+AIM ID	
Custom Prefix	Disabled	Max: 11 characters
	None	
AIM ID Prefix	Disabled	
Code ID Prefix	Disabled	1 or 2 English letters
Custom Suffix	Disabled	Max: 11 characters
	None	
Terminating Character Suffix	Enabled	Max: 7 characters
	0x0D (CR)	

Parameter	Factory Default	Remark
Symbologies		
1D Scanner		
Code 128		
Code 128	Enabled	
Maximum Length	255	
Minimum Length	1	
UCC/EAN-128		
UCC/EAN-128	Enabled	
Maximum Length	255	
Minimum Length	1	
AIM 128		
AIM 128	Disabled	
Maximum Length	255	
Minimum Length	1	
EAN-8		
EAN-8	Enabled	
Check Digit	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Decode EAN-8 + 2-digit Add-On Code Only	Disabled	
Decode EAN-8 + 5-digit Add-On Code Only	Disabled	
Extend to EAN-13	Disabled	
Convert to EAN-13	Disabled	
EAN-13		
EAN-13	Enabled	
Check Digit	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Decode EAN-13 + 2-digit Add-On Code Only	Disabled	
Decode EAN-13 + 5-digit Add-On Code Only	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	
ISSN		
ISSN	Disabled	
ISBN		
ISBN	Disabled	
ISBN Format	ISBN-13	
UPC-E		
UPC-E	Enabled	
Check Digit	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Decode UPC-A + 2-digit Add-On Code Only	Disabled	
Decode UPC-A + 5-digit Add-On Code Only	Disabled	
Extend to UPC-A	Disabled	
Convert to UPC-A	Disabled	
System Character	Do not transmit	
Country Code	Do not transmit	
UPC-A		
UPC-A	Enabled	
Check Digit	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Decode UPC-A + 2-digit Add-On Code Only	Disabled	
Decode UPC-A + 5-digit Add-On Code Only	Disabled	

System Character	Transmit	
Country Code	Do not transmit	
Interleaved 2 of 5		
Interleaved 2 of 5	Enabled	
Check Digit Verification	Enabled	
Check Digit	Do not transmit	
Maximum Length	255	
Minimum Length	6	No less than 2
ITF-6		
ITF-6	Disabled	
Check Digit	Do not transmit	
ITF-14		
ITF-14	Disabled	
Check Digit	Do not transmit	
Deutshe 14		
Deutshe 14	Disabled	
Check Digit	Do not transmit	
Deutshe 12		
Deutshe 12	Disabled	
Check Digit	Do not transmit	
COOP 25 (Japanese Matrix 2 of 5)		
COOP 25	Disabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Maximum Length	255	
Minimum Length	6	No less than 3
Matrix 25 (European Matrix 2 of 5)		
Matrix 25	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Maximum Length	255	
Minimum Length	6	No less than 3
Industrial 25		
Industrial 25	Enabled	

Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Maximum Length	255	
Minimum Length	6	No less than 4
Standard 25		
Standard 25	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Maximum Length	255	
Minimum Length	6	No less than 4
Code 39		
Code 39	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Start/Stop Character	Transmit	
Code 39 Full ASCII	Enabled	
Code 32	Disabled	
Code 32 Prefix	Disabled	
Code 32 Check Digit	Do not transmit	
Code 32 Start/Stop Character	Do not transmit	
Maximum Length	255	
Minimum Length	4	No less than 1
Codabar		
Codabar	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Start/Stop Character	ABCD/ABCD format Transmit	
Maximum Length	255	
Minimum Length	4	No less than 2
Code 93		
Code 93	Enabled	
Check Digit Verification	Enabled	
Check Digit	Do not transmit	
Maximum Length	255	

Minimum Length	2	No less than 1
Code 11		
Code 11	Disabled	
Check Digit	Do not transmit	
Check Digit Verification	Enabled 1 Check Digit, MOD11	
Maximum Length	255	
Minimum Length	4	No less than 3
Plessey		
Plessey	Disabled	
Check Digit Verification	Enabled	
Check Digit	Do not transmit	
Maximum Length	255	
Minimum Length	4	No less than 4
MSI-Plessey		
MSI-Plessey	Disabled	
Check Digit	Do not transmit	
Check Digit Verification	Enabled 1 Check Digit, MOD10	
Maximum Length	255	
Minimum Length	4	No less than 4
GS1 Databar (RSS)		
GS1 Databar	Enabled	
Maximum Length	255	
Minimum Length	1	

Parameter	Factory Default	Remark
2D Scanner		
Video Reverse	Disabled	Applicable to all symbologies.
Code 128		
Code 128	Enabled	
Maximum Length	127	
Minimum Length	1	
GS1-128 (UCC/EAN-128)		
GS1-128	Enabled	
Maximum Length	127	
Minimum Length	1	
AIM 128		
AIM 128	Enabled	
Maximum Length	127	
Minimum Length	1	
EAN-8		
EAN-8	Enabled	
Check Digit	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code	Not required	
Extend to EAN-13	Disabled	
EAN-13		
EAN-13	Enabled	
Check Digit	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code	Not required	
EAN-13 Beginning with 290 Add-On Code Required	Do Not Require Add-On Code	For BS8060-2T
EAN-13 Beginning with 378/379 Add-On Code Required	Do Not Require Add-On Code	For BS8060-2T
EAN-13 Beginning with 414/419 Add-On Code Required	Do Not Require Add-On Code	For BS8060-2T
EAN-13 Beginning with 434/439 Add-On Code Required	Do Not Require Add-On Code	For BS8060-2T

EAN-13 Beginning with 977 Add-On Code Required	Do Not Require Add-On Code	For BS8060-2T
EAN-13 Beginning with 978 Add-On Code Required	Do Not Require Add-On Code	For BS8060-2T
EAN-13 Beginning with 979 Add-On Code Required	Do Not Require Add-On Code	For BS8060-2T
ISSN		
ISSN	Disabled	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code	Not required	
ISBN		
ISBN	Enabled	
ISBN Format	ISBN-13	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code	Not required	
UPC-E		
UPC-E	Enabled	
Check Digit	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code	Not required	
Extend to UPC-A	Disabled	
System Character “0”	Do not transmit	
UPC-A		
UPC-A	Enabled	
Check Digit	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code	Not required	
Preamble Character “0”	Do not transmit	
Interleaved 2 of 5		
Interleaved 2 of 5	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	

Maximum Length	100	
Minimum Length	6	
ITF-6		
ITF-6	Disabled	
Check Digit	Do not transmit	
ITF-14		
ITF-14	Enabled	
Check Digit	Do not transmit	
Matrix 2 of 5		
Matrix 2 of 5	Disabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Maximum Length	127	
Minimum Length	6	
Industrial 25		
Industrial 25	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Maximum Length	127	
Minimum Length	6	
Standard 25		
Standard 25	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Maximum Length	127	
Minimum Length	6	
Code 39		
Code 39	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Start/Stop Character	Do not transmit	
Code 39 Full ASCII	Enabled	
Code 32	Disabled	For BS8060-2T
Code 32 Prefix	Disabled	For BS8060-2T
Code 32 Check Digit	Do not transmit	For BS8060-2T

Code 32 Start/Stop Character	Do not transmit	For BS8060-2T
Maximum Length	127	
Minimum Length	2	
Codabar		
Codabar	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Start/Stop Character	Do not transmit	
Start/Stop Character Format	ABCD/ABCD	
Maximum Length	127	
Minimum Length	2	
Code 93		
Code 93	Enabled	
Check Digit Verification	Enabled	
Check Digit	Do not transmit	
Maximum Length	127	
Minimum Length	3	
Code 11		
Code 11	Enabled	
Check Digit Verification	Enabled One check digit, MOD11	
Check Digit	Do not transmit	
Maximum Length	127	
Minimum Length	2	
Plessey		
Plessey	Enabled	
Check Digit Verification	Enabled	
Check Digit	Do not transmit	
Maximum Length	127	
Minimum Length	1	
MSI-Plessey		
MSI-Plessey	Enabled	
Check Digit Verification	Enabled One check digit, MOD10	
Check Digit	Do not transmit	
Maximum Length	127	

Minimum Length	2	
PDF417		
PDF417	Enabled	
Maximum Length	2710	
Minimum Length	1	
PDF 417 Twin Code	Read single PDF417 only	
QR Code		
QR Code	Enabled	
Micro QR	Enabled	
Maximum Length	7089	
Minimum Length	1	
QR Twin Code	Read single QR only	
Data Matrix		
Data Matrix	Enabled	
Rectangular Barcodes	Enabled	
Mirror Images	Decode	
Maximum Length	3116	
Minimum Length	1	
DM Twin Code	Read single DM only	
Chinese Sensible Code		
Chinese Sensible Code	Disabled	
Maximum Length	7827	
Minimum Length	1	

Digit Barcodes (1D Scanner)

0 ~ 9

0

1

2

3

4

5

6

7

8

9

A ~ F

A

B

C

D

E

F

Digit Barcodes (2D Scanner)

0 ~ 9

0

5

1

6

2

7

3

8

4

9

A ~ F

A

B

C

D

E

F

Save/Cancel Barcodes (1D Scanner)

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 **Cancel the Last Digit** barcode and then the correct digit, or scan the **Cancel All Digits** barcode and then the digits you want.

For instance, after reading the **Set the Maximum Length** barcode and numeric barcodes “1”, “2” and “3”, you scan:

- **Cancel the Last Digit:** The last digit “3” will be removed.
- **Cancel All Digits:** All digits “123” will be removed.
- **Cancel:** The maximum length configuration will be canceled.

Save

Cancel

Cancel the Last Digit

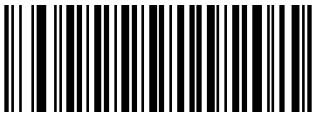
Cancel All Digits

Save/Cancel Barcodes (2D Scanner)

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.

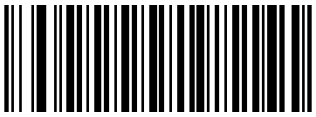
For instance, after reading the **Maximum Length** barcode and numeric barcodes “1”, “2” and “3”, you scan:

- **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 engine is still in the setup mode.



Save

Delete the Last Digit



Delete All Digits

Cancel

AIM ID Table (1D Scanner)

Symbology	AIM ID	Possible AIM ID Parameters
Code 128	]C0	
UCC/EAN-128	]C1	
AIM 128	]C2	
ISBT 128	]C4	
EAN-8	]E4	
EAN-13	]E0	
EAN-13 with Addon	]E3	
ISSN	]X0	
ISBN	]X0	
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-6	]Im	1,3
ITF-14	]Im	1,3
Deutsche 14	]X0	
Deutsche 12	]X0	
COOP 25 (Japanese Matrix 2 of 5)	]X0	
Matrix 2 of 5(European Matrix 2 of 5)	]X0	
Industrial 25	]S0	
Standard 25	]R0	
Code 39	]Am	0,1,3,4,5,7
Codabar	]Fm	0,2,4
Code 93	]G0	
Code 11	]Hm	0,1,3
Plessey	]P0	
MSI-Plessey	]Mm	0,1
GS1 Databar	]e0	
PDF417	]Lm	0,1,2
MicroPDF417	]Lm	3,4,5

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.

AIM ID Table (2D Scanner)

Symbology	AIM ID	Remark
EAN-13	]E0	Standard EAN-13
	]E3	EAN-13 + 2/5-Digit Add-On Code
EAN-8	]E4	Standard EAN-8
	]E4…]E1…	EAN-8 + 2-Digit Add-On Code
	]E4…]E2…	EAN-8 + 5-Digit Add-On Code
UPC-E	]E0	Standard UPC-E
	]E3	UPC-E + 2/5-Digit Add-On Code
UPC-A	]E0	Standard UPC-A
	]E3	UPC-A + 2/5-Digit Add-On Code
Code 128	]C0	Standard Code 128
GS1-128 (UCC/EAN-128)	]C1	FNC1 is the character right after the start character
AIM-128	]C2	FNC1 is the 2nd character after the start character
ISBT-128	]C4	
Interleaved 2 of 5	]I0	No check digit verification
	]I1	Transmit check digit after verification
	]I3	Do not transmit check digit after verification
ITF-6	]I1	Transmit check digit
	]I3	Do not transmit check digit
ITF-14	]I1	Transmit check digit
	]I3	Do not transmit check digit
Industrial 2 of 5	]S0	Not specified
Standard 2 of 5	]R0	No check digit verification
	]R8	MOD10; do not transmit check digit
	]R9	MOD10; transmit check digit
Code 39	]A0	Transmit barcodes as is; Full ASCII disabled; no check digit verification
	]A1	MOD43; transmit check digit
	]A3	MOD43; do not transmit check digit
	]A4	Full ASCII enabled; no check digit verification
	]A5	Full ASCII enabled; transmit check digit
	]A7	Full ASCII enabled; do not transmit check digit
Codabar	]F0	Standard Codabar
	]F2	Transmit check digit after verification
	]F4	Do not transmit check digit after verification
Code 93	]G0	Standard Code 93

Symbology	AIM ID	Remark
Code 11	]H0	MOD11; transmit check digit
	]H1	MOD11/MOD11; transmit check digit
	]H3	Do not transmit check digit after verification
	]H9	No check digit verification
GS1-DataBar (RSS)	]e0	Standard GS1-DataBar
Plessey	]P0	Standard Plessey
MSI-Plessey	]M0	MOD10; transmit check digit
	]M1	MOD10; do not transmit check digit
	]M7	MOD10/ MOD11; do not transmit check digit
	]M8	MOD10/ MOD11; transmit check digit
	]M9	No check digit verification
Matrix 2 of 5	]X0	Specified by the manufacturer
	]X1	No check digit verification
	]X2	MOD10; transmit check digit
	]X3	MOD11; do not transmit check digit
ISBN	]X4	Standard ISBN
ISSN	]X5	Standard ISSN
PDF417	]L0	Comply with 1994 PDF417 specifications
Data Matrix	]d0	ECC000 - ECC140
	]d1	ECC200
	]d2	ECC200, FNC1 is the 1st or 5th character after the start character
	]d3	ECC200, FNC1 is the 2nd or 6th character after the start character
	]d4	ECC200, ECI included
	]d5	ECC200, FNC1 is the 1st or 5th character after the start character,ECI included
	]d6	ECC200, FNC1 is the 2nd or 6th character after the start character,ECI included
QR Code	]Q0	QR1
	]Q1	2005 version, ECI excluded
	]Q2	2005 version, ECI included
	]Q3	QR Code 2005, ECI excluded, FNC1 is the 1st character after the start character
	]Q4	QR Code 2005, ECI included, FNC1 is the 1st character after the start character
	]Q5	QR Code 2005,ECI excluded,FNC1 is the 2nd character after the start character
	]Q6	QR Code 2005, ECI included, FNC1 is the 2nd character after the start character
Chinese Sensible Code	]X0	

Reference: ISO/IEC 15424:2008 Information technology – Automatic identification and data capture techniques – Data Carrier Identifiers (including Symbology Identifiers).

Code ID Table (1D Scanner)

Barcode	Code ID
Code 128	j
UCC/EAN-128	u
AIM 128	f
EAN-8	g
EAN-13	d
ISSN	n
ISBN	B
UPC-E	h
UPC-A	c
Interleaved 2 of 5	e
ITF-6	r
ITF-14	q
Deutsche 14	w
Deutsche 12	l
COOP 25（Japanese Matrix 2 of 5）	o
Matrix 2 of 5(European Matrix 2 of 5)	v
Industrial 25	i
Standard 25	s
Code 39	b
Codabar	a
Code 93	y
Code 11	z
Plessey	p
MSI-Plessey	m
GS1 Databar	R

Code ID Table (2D Scanner)

Symbology	Code ID
Code 128	j
GS1-128(UCC/EAN-128)	j
AIM-128	f
EAN-8	d
EAN-13	d
ISSN	n
ISBN	B
UPC-E	c
UPC-A	c
Interleaved 2 of 5	e
ITF-6	e
ITF-14	e
Matrix 2 of 5	v
Industrial 2 of 5	D
Standard 2 of 5	s
Code 39	b
Codabar	a
Code 93	i
Code 11	H
Plessey	p
MSI-Plessey	m
GS1 Databar	R
PDF417	r
QR Code	Q
Data Matrix	u
Chinese Sensible Code	h

ASCII Table

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

Hex	Dec	Char
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	((Left/ Opening 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)

Hex	Dec	Char
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)

Hex	Dec	Char
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)

ASCII Function Key Mapping Table

ASCII Function	ASCII Value (HEX)	No Function Key Mapping	Function Key Mapping
NUL (Null char.)	00	Null	Ctrl+2
SOH (Start of Header)	01	Keypad Enter	Ctrl+A
STX (Start of Text)	02	Caps Lock	Ctrl+B
ETX (End of Text)	03	Null	Ctrl+C
EOT (End of Transmission)	04	Null	Ctrl+D
ENQ (Enquiry)	05	Null	Ctrl+E
ACK (Acknowledgment)	06	Null	Ctrl+F
BEL (Bell)	07	Enter	Ctrl+G
BS (Backspace)	08	Left Arrow	Ctrl+H
HT (Horizontal Tab)	09	Horizontal Tab	Ctrl+I
LF (Line Feed)	0A	Down Arrow	Ctrl+J
VT (Vertical Tab)	0B	Vertical Tab	Ctrl+K
FF (Form Feed)	0C	Delete	Ctrl+L
CR (Carriage Return)	0D	Enter	Ctrl+M
SO (Shift Out)	0E	Insert	Ctrl+N
SI (Shift In)	0F	Esc	Ctrl+O
DLE (Data Link Escape)	10	F11	Ctrl+P
DC1 (XON) (Device Control 1)	11	Home	Ctrl+Q
DC2 (Device Control 2)	12	Print Screen	Ctrl+R
DC3 (XOFF) (Device Control 3)	13	Backspace	Ctrl+S
DC4 (Device Control 4)	14	tab+shift	Ctrl+T
NAK (Negative Acknowledgment)	15	F12	Ctrl+U
SYN (Synchronous Idle)	16	F1	Ctrl+V
ETB (End of Trans. Block)	17	F2	Ctrl+W
CAN (Cancel)	18	F3	Ctrl+X
EM (End of Medium)	19	F4	Ctrl+Y
SUB (Substitute)	1A	F5	Ctrl+Z
ESC (Escape)	1B	F6	See the following table
FS (File Separator)	1C	F7	
GS (Group Separator)	1D	F8	
RS (Request to Send)	1E	F9	
US (Unit Separator)	1F	F10	

ASCII Function Key Mapping Table (Continued)

The function key mappings of the last five characters in the previous table differ from one keyboard layout to another.

Country/ Keyboard Layout	Function Key Mapping				
	1B	1C	1D	1E	1F
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+-

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