Hamlet

2D BARCODE SCANNER

USB INDUSTRIAL BARCODE SCANNER
FOR QR CODES AND LINEAR BARCODES

USER MANUAL

HBCS2D300U

www.hamletcom.com

Dear Customer,
thanks for choosing an Hamlet product. Please carefully follow the instructions for its use and maintenance and, once this item has run its life span, we kindly ask You to dispose of it in an environmentally friendly way, by putting it in the separate bins for electrical/electronic waste, or to bring it back to your retailer who will collect it for free.

We inform You this product is manufactured with materials and components in compliance with RoHS Directive 2011/65/EU, WEEE Directive 2002/96/CE, 2003/108/CE Italian Legislative Decree 2005/151 and EMC Directive 2014/30/EU for the following standards:
EN 55032: 2015
EN 55024: 2010 + A1: 2015

CE

The complete CE declaration of conformity of the product can be obtained by contacting Hamlet at info@hamletcom.com.
Visit www.hamletcom.com for complete information on Hamlet products and to access downloads and technical support.
Imported by: CARECA ITALIA SPA - Scandiano (RE) . Italy

LED Devices
Hamlet products using led sources comply with IEC 60825-1, EN 60825-1: 2014. The led classification is marked on one of the labels on the product. Class 1 Led devices are not considered to be hazardous when used for their intended purpose.
The following statement is required to comply with US and international regulations:
Caution: Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous led light exposure.
Class 2 Led scanners use a low power, visible light diode. As with any very bright light source, such as the sun, the user should avoid staring directly into the light beam. Momentary exposure to a Class 2 Led is not known to be harmful.
In accordance with Clause 5, IEC 60825 and EN 60825, the following information is provided to the user:
CLASS 1: CLASS 1 LED PRODUCT
CLASS 2: VISIBLE LED RADIATION - DO NOT STARE INTO BEAM - CLASS 2 LED PRODUCT

Table of Contents

1 Getting Started

1.1 About This Guide

This guide provides programming instructions for the HAMLET 2D BARCODE SCANNER. Users can configure the HAMLET 2D BARCODE SCANNER by scanning the programming barcodes included in this manual.

1.2 Barcode Scanning

Powered by area-imaging technology the HAMLET 2D BARCODE SCANNER features fast scanning and decoding accuracy.
Barcodes rotated at any angle can still be read with ease. When scanning a barcode, simply center the aiming beam or pattern projected by the HAMLET 2D BARCODE SCANNER over the barcode.

1.3 Factory Defaults

Scanning the following barcode can restore the engine to the factory defaults.

Note: Use this feature with discretion.

Restore All Factory Defaults

2 Communication Interfaces

The HAMLET 2D BARCODE SCANNER provides a TTL-232 interface and a USB interface to communicate with the host device. The host device can receive scanned data and send commands to control the engine or to access/alter the configuration information of the engine via the TTL-232 or USB interface.

2.1 TTL-232 Cable Select (applicable to 3110)

Before using Serial Communication interface, scanner must be set as TTL-232 cable. Please reset the scanner after set 232-cable.

232 Cable

Reset

2.2 TTL-232 Interface

Serial communication interface is usually used when connecting the engine to a host device (like PC, POS). However, to ensure smooth communication and accuracy of data, you need to set communication parameters (including baud rate, parity check, data bit and stop bit) to match the host device.

The serial communication interface provided by the engine is based on TTL-level signals. TTL-232 can be used for most application architectures. For those requiring RS-232, an external conversion circuit is needed. The conversion circuit is available only to some models.

Default serial communication parameters are listed below. Make sure all parameters match the host requirements.

Parameter	Factory Default
Serial Communication	Standard TTL-232
Baud Rate	115200
Parity Check	None
Data Bits	8
Stop Bits	1
Hardware Flow Control	None

2.3 Baud Rate

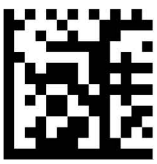
Baud rate is the number of bits of data transmitted per second. Set the baud rate to match the Host requirements.

2400

4800

9600

19200



38400

57600

115200 (default)

2.4 Data Bit & Parity Check& Stop Bit

None Parity /8 Data Bits/1 Stop Bit(default)

None Parity /7 Data Bits/1 Stop Bit

None Parity /7 Data Bits/2 Stop Bits

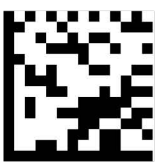
Even Parity /8 Data Bits/1 Stop Bit

Even Parity /7 Data Bits/1 Stop Bit

Even Parity /7 Data Bits/2 Stop Bits

Odd Parity /8 Data Bits/1 Stop Bit

Odd Parity /7 Data Bits/1 Stop Bit

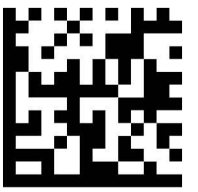


Odd Parity /7 Data Bits/2 Stop Bit

2.5 USB Interface (applicable to 3110)

Before using USB Communication interface, scanner must be set as USB cable. Please reset the scanner after set USB cable.

USB Cable



Reset

2.6 USB HID-KB

When you connect the engine to the Host via a USB connection, you can enable the **USB HID-KB** feature by scanning the barcode below. Then engine's transmission will be simulated as USB keyboard input. The Host receives keystrokes on the virtual keyboard. It works on a Plug and Play basis and no driver is required.

USB HID-KB(default)

2.7 USB Country Keyboard Types

Keyboard layouts vary from country to country. The default setting is 1-U.S. keyboard.

1 - U.S. (default)

2 – UK

3 - Denmark

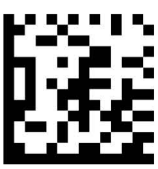
4 - France

5 - Finland

6 - Turkey_F

7 - Italy

8 - Norway



9 - Albania

10 - Belgium

11 – Bosnia

12 – Brazil

13 – Croatia

14 – Czech

15 –Dutch

16 – Estonia

17 – Germany

18 – Greek

19 – Hungary

20 – Irish

21 – Latvia

22-Lithunnia

23 – Macedonia

24 – Spain

25 – Poland

26 –Portugal

27 –Romania

28 –Russia

29 – Japan

2.8 Convert Case

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

No Case Conversion (default)

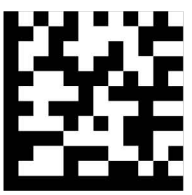
Convert All to Upper Case

Convert All to Lower Case

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

2.9 USB COM Port Emulation

If you connect the engine to the Host via a USB connection, the **USB COM Port Emulation** feature allows the Host to receive data in the way as a serial port does. A driver is required for this feature.

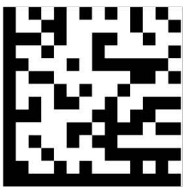


USB COM Port Emulation

3 General Configuration

3.1 Trigger Mode (applicable to 31/41/51/81XX series)

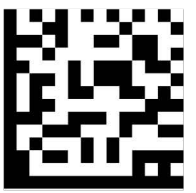
If the Trigger Mode is enabled, you could activate the scanner by providing an external hardware trigger, or using a serial trigger command. When in manual trigger mode, the scanner scans until a barcode is read, or until the hardware trigger is released. When in serial mode, the scanner scans until a barcode has been read or until the deactivate command is sent.



Trigger Mode(default)

3.2 Continue Mode (applicable to 31/41/51/81XX series)

This set the scanner to work in Continue mode.

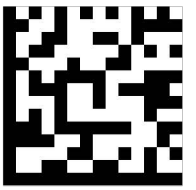


Continue Mode

3.3 Cellphone Mode (applicable to 31/41/51/81XX series)

If the Cellphone Mode is enabled, the engine activates a special capturing image and illumination session. Every 3 frame open one illumination.

When the backlight of cellphone is weak and the reflection is strong, please scan mode 1



Cellphone Mode 1

When the backlight of cellphone is not weak and the reflection is strong, please scan mode 2

Cellphone Mode 2

3.4 Inverse color

Off(default)

Only Inverse On

Inverse and Normal Both On

3.5 Illumination

Illumination setting for 71/81XX series

High Level Illumination(default)

Mid Level Illumination

Low Level Illumination

Illumination OFF

Illumination setting for 51/41/31XX series

Illumination level 4 (default)

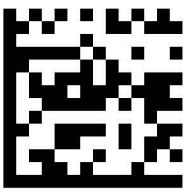
Illumination level 3

Illumination level 2

Illumination level 1

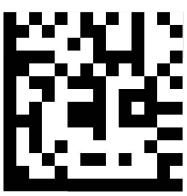
3.6 Beeper - Good Read

On (default)

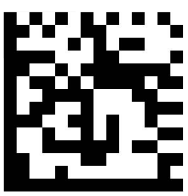


Off

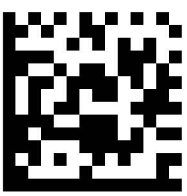
3.7 Beeper Tone - Good Read



Low



Middle



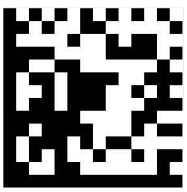
High (default)

3.8 Beeper Duration - Good Read

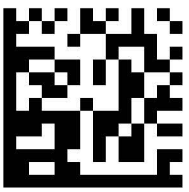
Normal (default)

Short

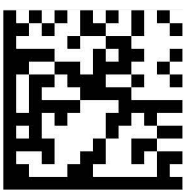
3.9 Beeper Number - Good Read



1 (default)

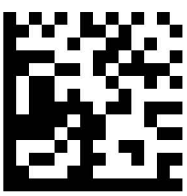


2

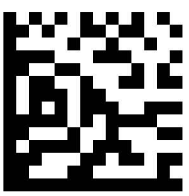


3

4



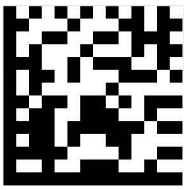
5



6

3.10 Barcode Scanning Delay

No Delay (default)



Delay 500MS

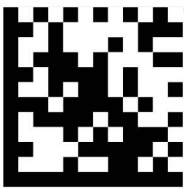
Delay 2000ms

3.11 Ship Image

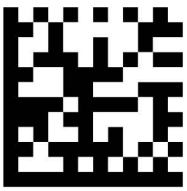
Ship Image

4 Data Formatting

4.1 General Configuration

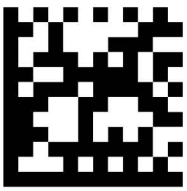


Add CR



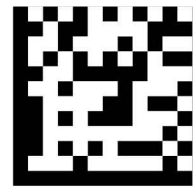
Add LF

Add CRLF

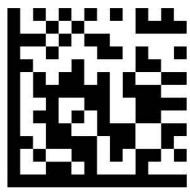


Add TAB

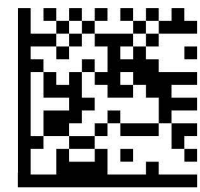
4.2 Add Prefix



Set Custom Prefix



Save



Not Save

To set a customer prefix, scan the “Set Custom Prefix” barcode and the numeric barcodes which representing the hexadecimal values of a desired prefix, and then scan the “Save” barcode. Refer to Appendix 2: ASCII Table for hexadecimal values of characters.

Example: Set the custom Prefix to “ODE”

1. Check the hex values of “ODE” in the ASCII Table. (“ODE”: 4F, 44, 45)
2. Scan the **Set Custom Prefix** barcode.
3. Scan the numeric barcodes”9”,”9”, “4”, “F”, “4”, “4”, “4” and “5”in Appendix 5 .
4. Scan the **Save** barcode.

4.3 Add Suffix

Set Custom Suffix

Save

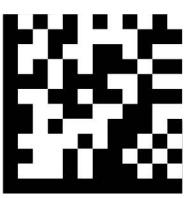
Not Save

To set a customer suffix, scan the “Set Custom Suffix” barcode and the numeric barcodes which representing the hexadecimal values of a desired suffix, and then scan the “Save” barcode. Refer to Appendix 4: ASCII Table for hexadecimal values of characters.

Example: Set the custom Suffix to “ODE”

1. Check the hex values of “ODE” in the ASCII Table. (“ODE”: 4F, 44, 45)
2. Scan the **Set Custom Suffix** barcode.
3. Scan the numeric barcodes”9”,”9”, “4”, “F”, “4”, “4”, “4” and “5”in Appendix 5 .
4. Scan the **Save** barcode.

4.4 Clear All Prefix and Suffix



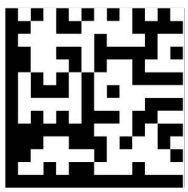
Clear all prefix and suffix (default)

5 Symbologies

5.1 General Settings

Enable/Disable All Symbologies

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



Enable All Symbologies

Disable All Symbologies

5.2 1D Symbologies

5.2.1 Code 128

Restore Factory Defaults

Restore the Factory Defaults of Code 128 (default)

Enable/Disable Code 128

Enable Code 128 (default)

Disable Code 128

Message Length

Message length can be set to the maximum value or minimum value. The value between the maximum and the minimum is valid.

The maximum value and minimum value can be set using “Programming Command”. Please check the programming command guide for the detail.

Code 128 max length command: 020A03. The parameter of this command can be set from min to 90.

Code 128 min length command: 020A02. The parameter of this command can be set from 0 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command:

Max: 020A0325.

Min: 020A0210.

5.2.2 EAN-8

Restore Factory Defaults

Restore the Factory Defaults of EAN-8 (default)

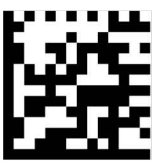
Enable/Disable EAN-8

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 accuracy of the data.

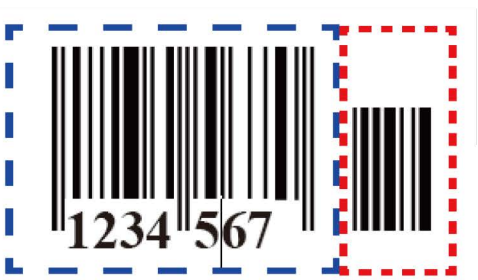


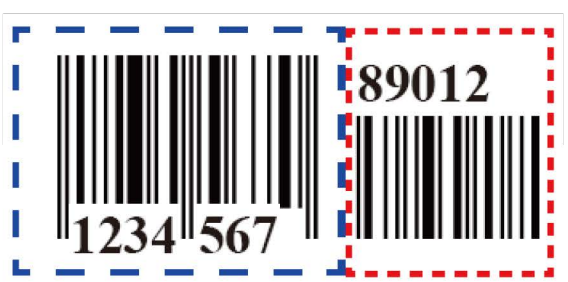
Transmit EAN-8 Check Digit (default)

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 on code 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)

Add-On Code Required

EAN-8 Add-On Code Required

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

ENA/JAN-8 Addenda Separator

When this feature is enabled, there is a space between barcode and addenda. When this feature is disabled, there is no space.

Enable ENA/JAN-8 Addenda Separator (default)

Disable ENA/JAN-8 Addenda Separator UPC

5.2.3 EAN-13

Restore Factory Defaults

Restore the Factory Defaults of EAN-13 (default)

Enable/Disable EAN-13

Enable EAN-13 (default)

Disable EAN-13

Transmit Check Digit

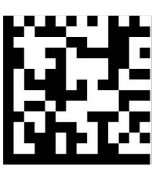
Transmit EAN-13 Check Digit (default)

Do Not Transmit EAN-13 Check Digit

Add-On Code

Enable 2-Digit Add-On Code

Disable 2-Digit Add-On Code (default)

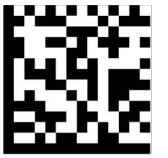


Enable 5-Digit Add-On Code

Disable 5-Digit Add-On Code (default)

Add-On Code Required

EAN-13 Add-On Code Required

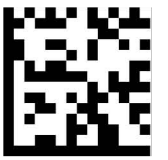


EAN-13 Add-On Code Not Required (default)

ENA/JAN-13 Addenda Separator

When this feature is enabled, there is a space between barcode and addenda. When this feature is disabled, there is no space.

Enable ENA/JAN-13 Addenda Separator (default)



Disable ENA/JAN-13 Addenda Separator

ISBN Translate

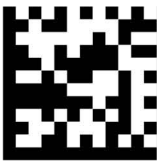
When enable this feature and is scanned, ENA13 Book land symbols are translated into their equivalent ISBN number format.

Enable ISBN Translate

Disable ISBN Translate (default)

5.2.4 UPC-E

Restore Factory Defaults



Restore the Factory Defaults of UPC-E (default)

Enable/Disable UPC-E0/E1

Enable UPC-E0 (default)

Disable UPC-E0

Enable UPC-E1

Disable UPC-E1 (default)

UPCE0 Check Digit

Enable UPC-E0 Check Digit (default)

Disable UPC-E0 Check Digit

UPCE0 Expand

UPCE0 expand expands the UPCE code to the 12 digits, UPC-A format.

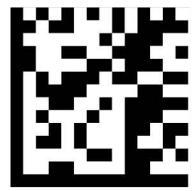
Enable UPC-E0 Expand

Disable UPC-E0 Expand (default)

UPCE0 Addenda Required

When required is scanned, the scanner will only read UPC-E barcodes that have addenda.

Enable UPC-E0 Required



Disable UPC-E0 Required (default)

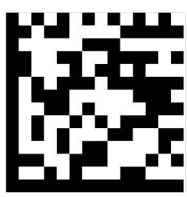
UPCE0 Addenda Separator

Enable UPC-E0 Separator (default)

Disable UPC-E0 Separator

UPCE0 Number System

The number system digit of UPC symbol is normally transmitted at the beginning of the scanned data, but the unit can be programmed so it will be not transmitted.



Enable UPC-E0 Number System (default)

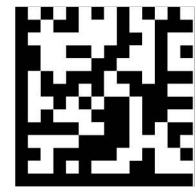
Disable UPC-E0 Number System

UPCE0 Addenda

Enable 2 Digit Addenda

Disable 2 Digit Addenda (default)

Enable 5 Digit Addenda



Disable 5 Digit Addenda (default)

5.2.5 UPC-A

Restore Factory Defaults

Restore the Factory Defaults of UPC-A (default)

Enable/Disable UPC-A

Enable UPC-A (default)

Disable UPC-A

UPC-A Check Digit

Enable UPC-A Check Digit (default)

Disable UPC-A Check Digit

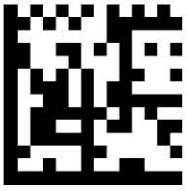
UPC-A Addenda Required

When required is scanned, the scanner will only read UPC-E barcodes that have addenda.

Enable UPC-A Required

Disable UPC-A Required (default)

UPC-A Addenda Separator



Enable UPC-A Separator (default)

Disable UPC-A Separator

UPC-A: Number System

The number system digit of UPC symbol is normally transmitted at the beginning of the scanned data, but the unit can be programmed so it will be not transmitted.

Enable UPC-A Number System (default)

Disable UPC-A Number System

UPC-A: Addenda

Enable 2 Digit Addenda

Disable 2 Digit Addenda (default)

Enable 5 Digit Addenda

Disable 5 Digit (default)

5.2.6 Interleaved 2 of 5

Restore Factory Defaults

Restore the Factory Defaults of Interleaved 2 of 5 (default)

Enable/Disable Interleaved 2 of 5

Enable Interleaved 2 of 5 (default)

Disable Interleaved 2 of 5

Message Length

Message length can be set to the maximum value, minimum value. The data between the maximum and the minimum is valid.

The maximum value and minimum value can be set using Programming Command. Please check the programming command guide for the detail.

Interleaved 2 of 5 max length command: 020404. The parameter of this command can be set from min to 80.

Interleaved 2 of 5 min length command: 020403. The parameter of this command can be set from 2 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command

Max: 02040425.

Min: 02040310.

Interleaved 2 of 5 Check Digit

No check Char (default)

Validate and Transmit

Validate not Transmit

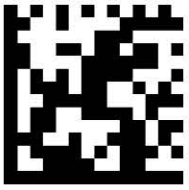
5.2.7 Matrix 2 of 5

Restore Factory Defaults

Restore the Factory Defaults of Matrix 2 of 5 (default)

Enable/Disable Matrix 2 of 5

Enable Matrix 2 of 5



Disable Matrix 2 of 5 (default)

Message length can be set to the maximum value, minimum value. The value is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the programming command guide for the detail.

Matrix 2 of 5 max length command: 020803. The parameter of this command can be set from min to 80.

Matrix 2 of 5 min length command: 020802. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command

Max: 02080325.

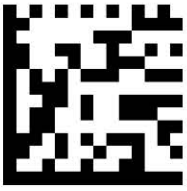
Min: 02080210.

5.2.8 Industrial 2 of 5

Restore Factory Defaults

Restore the Factory Defaults of Industrial 2 of 5 (default)

Enable/Disable Industrial 2 of 5



Enable Industrial 2 of 5

Disable Industrial 2 of 5 (default)

Message Length

Message length can be set to the maximum value, minimum value. The value is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the programming command guide for the detail.

Industrial 2 of 5 max length command: 020603. The parameter of this command can be set from min to 48.

Industrial 2 of 5 min length command: 020602. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

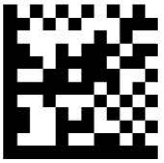
Programming command

Max: 02060325.

Min: 02060210.

5.2.9 Code 39

Restore Factory Defaults



Restore the Factory Defaults of Code 39 (default)

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)

Code 39 Check Character

No Check Char (default)

Validate and Transmit

Validate no Transmit

Code 39 Append

This function allows the scanner to append several Code 39 barcode data together before transmitting to host. When the scanner encounters a Code 39 barcode with append character (ex. Space character), it buffers the data until it reads a Code 39 barcode which does not have append character. Then the data is transmitted in the order that the barcodes were read.

Enable Append

Disable Append (default)

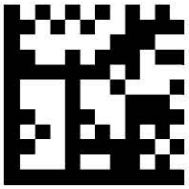
Code 39 Full ASCII

Enable Code 39 Full ASCII

Disable Code 39 Full ASCII (default)

Code 39 Code Page

Code 39 code pages define the mapping of character codes to characters.



Code 39 Code page (default)

Message Length

Message length can be set to the maximum value, minimum value. The value is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the programming command guide for the detail.

Code 39 max length command: 020308. The parameter of this command can be set from min to 48.

Code 39 min length command: 020307. The parameter of this command can be set from 0 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command

Max: 02030825.

Min: 02030710.

5.2.10 Coda bar

Restore Factory Defaults

Restore the Factory Defaults of Coda bar (default)

Enable/Disable Codabar

Enable Coda bar (default)

Disable Coda bar

Message Length

Message length can be set to the maximum value, minimum value. The data between the maximum and the minimum is valid.

The maximum value and minimum value can be set using Programming command. Please check the programming command guide for the detail.

Coda bar max length command: 020206. The parameter of this command can be set from min to 60.

Coda bar min length command: 020205. The parameter of this command can be set from 2 to max.

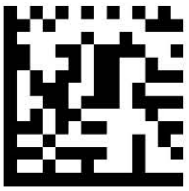
Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command

Max: 02020625.

Min: 02020510.

Transmit Start/Stop Character



Transmit Start/Stop Character

Do not Transmit Start/Stop Character (default)

Coda bar Check Character

No Check Char (default)

Validate and Transmit

Validate no Transmit

5.2.11 Code 93

Restore Factory Defaults

Restore the Factory Defaults of Code 93 (default)

Enable/Disable Code 93

Enable Code 93 (default)

Disable Code 93

Message Length

Message length can be set to the maximum value, minimum value. The data between the maximum and the minimum is valid.

The maximum value and minimum value can be set using Programming command. Please check the programming command guide for the detail.

Code 93 max length command: 020D03. The parameter of this command can be set from min to 80.

Code 93 min length command: 020D02. The parameter of this command can be set from 0 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command

Max: 020D0325.

Min: 020D0210.

Code 93 Append

This function allows the scanner to append several Code 93 barcode data together before transmitting to host. When the scanner encounters a Code 93 barcode with append character (ex. Space character), it buffers the data until it reads a Code 93 barcode which does not have append character. Then the data is transmitted in the order that the barcodes were read.

Enable Code 93 Append

Disable Code 93 Append (default)

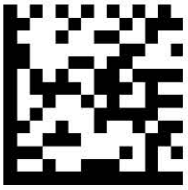
Code 93 Code Page

Code 39 code pages define the mapping of character codes to characters.

Code93 Code page (default)

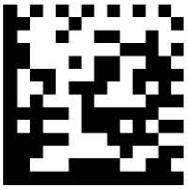
5.2.12 GS1-128

Restore Factory Defaults



Restore the Factory Defaults of GS1-128 (default)

Enable/Disable GS1-128



Enable GS1-128 (default)

Disable GS1-128

Message Length

Message length can be set to the maximum value, minimum value. The data between the maximum and the minimum is valid.

The maximum value and minimum value can be set using Programming command. Please check the programming command guide for the detail.

GS1-128 max length command: 020B03. The parameter of this command can be set from min to 80.

GS1-128 min length command: 020B02. The parameter of this command can be set from 0 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

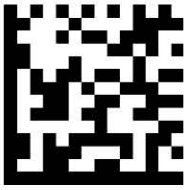
Programming command

Max: 020B0325.

Min: 020B0210.

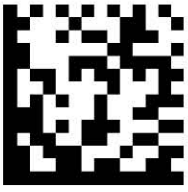
5.2.13 MSI

Restore Factory Defaults



Restore the Factory Defaults of MSI (default)

Enable/Disable MSI



Enable MSI

Disable MSI (default)

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the programming command guide for the detail.

MSI max length command: 020E04. The parameter of this command can be set from min to 48.

MSI min length command: 020E03. The parameter of this command can be set from 4 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command

Max: 020E0425.

Min: 020E0310.

MSI Check Character

ValidateType10Transmit

ValidateType10 ThenType11CharTransmit

ValidateType10 ThenType11CharNoTransmit

ValidateType10NoTransmit

Validate2Type10NoTransmit (default)

Validate2Type10CharTransmit

Validate2Type10CharNoTransmit

DisableMSICheck

5.3 2D Symbologies

5.3.1 PDF 417

Restore Factory Defaults

Restore the Factory Defaults of PDF 417 (default)

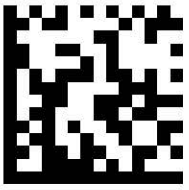
Enable/Disable PDF 417

Enable PDF 417 (default)

Disable PDF 417

Enable/Disable Micro PDF 417

Enable Micro PDF 417



Disable Micro PDF 417 (default)

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the programming command guide for the detail.

PDF417 max length command: 021F06. The parameter of this command can be set from min to 2750.

PDF417 min length command: 021F05. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command

Max: 021F0625

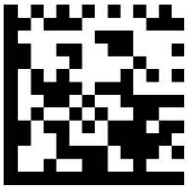
Min: 021F0510.

5.3.2 QR Code

Restore Factory Defaults

Restore the Factory Defaults of QR Code (default)

Enable/Disable QR Code



Enable QR Code (default)

Disable QR C

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum is valid.

The maximum value and minimum value can be set using Programming command. Please check the programming command guide for the detail.

QR max length command: 023703. The parameter of this command can be set from min to 7089.

QR min length command: 023702. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command

Max: 02370325.

Min: 02370210.

QR Code Append

This function allows the scanner to append several QR barcode data together before transmitting to host. When the scanner encounters a QR barcode with append character (ex. Space character), it buffers the data until it reads a QR barcode which does not have append character. Then the data is transmitted in the order that the barcodes were read.

Enable QR code Append (default)

Disable QR code Append

QR Code Page

QR code pages define the mapping of character codes to characters.

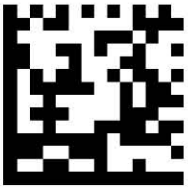
QR Code Page (default)

5.3.3 Data Matrix

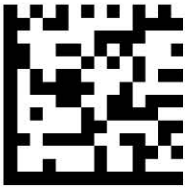
Restore Factory Defaults

Restore the Factory Defaults of Data Matrix (default)

Enable/Disable Data Matrix



Enable Data Matrix (default)



Disable Data Matrix

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the programming command guide for the detail.

Data Matrix max length command: 023603. The parameter of this command can be set from min to 3116.

Data Matrix min length command: 023602. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command

Max: 02360325.

Min: 02360210.

Data Matrix Code Page (default)

5.3.4 Maxi code

Restore Factory Defaults

Restore the Factory Defaults of Maxi code (default)

Enable/Disable Maxi code

Enable Maxi code

Disable Maxi code (default)

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the programming command guide for the detail.

Maxi Code max length command: 023403. The parameter of this command can be set from min to 150.

Maxi Code min length command: 023402. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command

Max: 02340325.

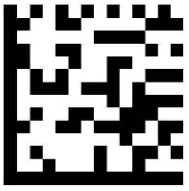
Min: 02340210.

5.3.5 Aztec

Restore Factory Defaults

Restore the Factory Defaults of Aztec (default)

Enable/Disable Aztec



Enable Aztec (default)

Disable Aztec

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the programming command guide for the detail.

Aztec max length command: 023306. The parameter of this command can be set from min to 3832.

Aztec min length command: 023305. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command

Max: 02330625.

Min: 02330510.

Aztec Append

Enable Aztec Append (default)

Disable Aztec Append

5.3.6 Hanxin

Restore Factory Defaults

Restore the Factory Defaults of Hanxin (default)

Enable/Disable Hanxin

Enable Hanxin

Disable Hanxin (default)

Message Length

Message length can be set to the maximum value, minimum value. The data is valid between the maximum and the minimum.

The maximum value and minimum value can be set using Programming command. Please check the programming command guide for the detail.

Hanxin max length command: 023803. The parameter of this command can be set from min to 7833.

Hanxin min length command: 023802. The parameter of this command can be set from 1 to max.

Example: Set the Barcode Message length of the minimum value is 10; the maximum value is 25.

Programming command

Max: 02380325.

Min: 02380210

5.4 Postal Symbologies

5.4.1 China Postal Code

Restore Factory Defaults

Restore the Factory Defaults of China Postal Code (default)

Enable/Disable China Postal Code

Enable China Postal Code

Disable China Postal Code (default)

5.4.2 Telepen

Restore Factory Defaults

Restore the Factory Defaults of Telepen (default)

Enable/Disable Telepen

Enable China Telepen

Disable China Telepen (default)

6 Appendix

6.1 Appendix 1: AIM ID Table

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 parity check
	]I1	Transmit check digit after parity check
	]I3	Do not transmit check digit after parity check
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 parity check
	]R8	One check digit, MOD10; do not transmit check digit
	]R9	One check digit, MOD10; transmit check digit
Code 39	]A0	Transmit barcodes as is; Full ASCII disabled; no parity check
	]A1	One check digit, MOD43; transmit check digit
	]A3	One check digit, MOD43; do not transmit check digit
	]A4	Full ASCII enabled; no parity check
	]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 parity check
	]F4	Do not transmit check digit after parity check

Symbology	AIM ID	Remark
Code 93	]G0	Standard Code 93
Code 11	]H0	One check digit MOD11; transmit check digit
	]H1	Two check digits, MOD11/MOD11; transmit check digit
	]H3	Do not transmit check digit after parity check
	]H9	No parity check
GS1-DataBar (RSS)	]e0	Standard GS1-DataBar
Plessey	]P0	Standard Plessey
MSI-Plessey	]M0	One check digit, MOD10; transmit check digit
	]M1	One check digit, MOD10; do not transmit check digit
	]M8	Two check digits
	]M9	No parity check
Matrix 2 of 5	]X0	Specified by the manufacturer
	]X1	No parity check
	]X2	One check digit, MOD10; transmit check digit
	]X3	One check digit, 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

Reference: ISO/IEC 15424:2008 Information technology – Automatic identification and data capture techniques – Data Carrier

Identifiers (including Symbology Identifiers).

6.2 Appendix 2: 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)
1e	30	RS (Request to Send)
1f	31	US (Unit Separator)

Hex	Dec	Char
20	32	SP (Space)
21	33	! (Exclamation Mark)
22	34	" (Double Quote)
23	35	# (Number Sign)
24	36	$ (Dollar Sign)
25	37	% (Percent)
26	38	& (Ampersand)
27	39	` (Single Quote)
28	40	((Right / Closing Parenthesis)
29	41	) (Right / Closing Parenthesis)
2a	42	* (Asterisk)
2b	43	+ (Plus)
2c	44	, (Comma)
2d	45	- (Minus / Dash)
2e	46	. (Dot)
2f	47	/ (Forward Slash)
30	48	0
31	49	1
32	50	2
33	51	3
34	52	4
35	53	5
36	54	6
37	55	7
38	56	8
39	57	9
3a	58	: (Colon)
3b	59	; (Semi-colon)
3c	60	< (Less Than)
3d	61	= (Equal Sign)
3e	62	> (Greater Than)
3f	63	? (Question Mark)

Hex	Dec	Char
40	64	@ (AT Symbol)
41	65	A
42	66	B
43	67	C
44	68	D
45	69	E
46	70	F
47	71	G
48	72	H
49	73	I
4a	74	J
4b	75	K
4c	76	L
4d	77	M
4e	78	N
4f	79	O
50	80	P
51	81	Q
52	82	R
53	83	S
54	84	T
55	85	U
56	86	V
57	87	W
58	88	X
59	89	Y
5a	90	Z
5b	91	[(Left / Opening Bracket)
5c	92	\ (Back Slash)
5d	93	] (Right / Closing Bracket)
5e	94	^ (Caret / Circumflex)
5f	95	_ (Underscore)

Hex	Dec	Char
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)

6.3 Appendix 3: Digit Barcodes

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3

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A

B

C

D

E

F