2D Barcode Reader User Guide

Table of Contents

1 Getting Started

1.1 About This Guide

This guide provides programming instructions for the TEEMI 2D Barcoder Reader. Users can configure the TEEMI 2D Barcoder Reader by scanning the programming barcodes included in this manual.

1.2 Barcode Scanning

TEEMI 2D Barcoder Reader 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 TEEMI 2D Barcoder Reader 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.


0D0100.
Restore All Factory Defaults

1.4 Firmware Version Number

Scanning the barcode below can display the firmware version number.


0D1302?.
Display The Firmware Version Number

2 Communication Interfaces

The TEEMI 2D Barcoder Reader provides a RS-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 RS-232 or USB interface.

2.1 RS-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 RS-level signals. RS-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 RS-232
Baud Rate	115200
Parity Check	None
Data Bits	8
Stop Bits	1
Hardware Flow Control	None

2.2 Baud Rate

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

0607023.

2400

0607024.

4800

0607025.

9600

0607026.

19200

0607027.

38400

0607028.

57600

0607029.

115200 (Default)

2.3 Data Bit & Parity Check & Stop Bit

0607032.

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

0607030.

None Parity /7 Data Bits/1 Stop Bit

0607031.

None Parity /7 Data Bits/2 Stop Bits

0607035.

Even Parity /8 Data Bits/1 Stop Bit

0607033.

Even Parity /7 Data Bits/1 Stop Bit

0607034.

Even Parity /7 Data Bits/2 Stop Bits

0607038.

Odd Parity /8 Data Bits/1 Stop Bit

0607036.

Odd Parity /7 Data Bits/1 Stop Bit

0607037.

Odd Parity /7 Data Bits/2 Stop Bit

2.4 RS-232 Hardsharing

Flow Control: The scanner asserts RTS before transmission, and will wait for CTS to be asserted by the host

Two-Direction Flow Control: The scanner asserts RTS before transmission. The host asserts CTS before transmission

0607040.

RS-232 Hardware Contol Disable(Default)

0607041.

Enable Flow Control

0607042.

Enable Two-Direction Flow Control

2.5 XON/XOFF

The scanner stops sending data when the host sends the XOFF character (hex 13) to it.

To resume transmission, the host sends the XON character (hex 11)

0607050.

XON/XOFF Disable(Default)

0607051.

XON/XOFF Enable

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.

090500.

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.

060E000.

1 – U.S. (Default)

060E007.

2 – UK

060E008.

3 – Denmark

060E003.

4 – France

060E002.

5 – Finland

060E0027.

6 – Turkey_F

060E005.

7 – Italy

060E009.

8 – Norway

060E0035.

9 – Albania

060E001.

10 – Belgium

060E0033.

11 – Bosnia

060E0016.

12 – Brazil

060E0032.

13 – Croatia

060E0015.

14 – Czech

060E0011.

15 – Dutch

060E0041.

16 – Estonia

060E004.

17 – Germany

060E0017.

18 – Greek

060E0019.

19 – Hungary

060E0073.

20 – Irish

060E0042.

21 – Latvia

060E0044.

22 – Lithuania

060E0034.

23 – Macedonia

060E0010.

24 – Spain

060E0020.

25 – Poland

060E0013.

26 – Portugal

060E0025.

27 – Romania

060E0026.

28 – Russia

060E0028.

29 – Japan

2.8 Convert Case

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

060D020.

No Case Conversion (Default)

060D021.

Convert All To Upper Case

060D022.

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, visit the official website (http://www.teemistore.com) to download and install.

090400.

USB COM Port Emulation

3 General Configuration

3.1 Trigger Mode

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.

Manual Trigger Mode – Normal

Serial Trigger Command:

Command Trigger:	[0x02][0xF4][0x03]
Command Untrigger:	[0x02][0xF5][0x03]

3.2 Presentation Mode

This set the scanner to work in presentation mode.

0E01003.

Presentation Mode – Normal

0E01008.

Presentation Mode – Continue Scan

3.3 Read Mode

0411010.

Printed-Reading Mode (Default)

0411011.

Screen-Reading Mode

3.4 Illumination Lights

0501001.

ON (Default)

0501000.

Off

3.5 Illumination Level

Illumination Level 4 (Default)

Illumination Level 3

Illumination Level 2

Illumination Level 1

3.6 Power-Up Beeper

ON (Default)

OFF

3.7 Auto Sense

Scan the follow barcode can configure the Auto sense, if Auto sense enable, then putting barcode reader on the Cradle is Presentation mode and taking it off is Trigger mode.

0E06041.

Enable

0E06040.

Disable (default)

3.8 Good Read Beeper

0502101.

ON (Default)

0502100.

OFF

3.9 Good Read Beeper Volume

05021D1.

Low

05021D2.

Middle

05021D3.

High (Default)

3.10 Good Read Beeper Duration


0502160.
Normal (Default)


0502161.
Short

3.11 Good Read Beeper Tone


05020D500.
Low Frequency


05020D650.
Medium Frequency (Default)


05020D750.
Medium High Frequency


05020D2730.
High Frequency

3.12 Vibrate-Good Read

0505010.

Vibrate-Good Read Off

0505011.

Vibrate-Good Read On

3.9 Good-read Delay

This sets a re-read delay time between decodes of different symbols.

080B080.

No Delay (Default)

080B08500.

Delay 500 MS

080B082000.

Delay 2000 MS

3.10 Reread Delay

This sets a re-read delay time between decodes of the same symbol.

080B06500.

Delay 500 MS (Default)

Delay 750 MS

Delay 1000 MS

3.11 Accepting RS-232 Commands

Disable (Default)

Enable

Commands	ASCII	HEX
Disable Scanner	D	0x44
Enable Scanner	E	0x45

For the TEEMI scanner, it can accept serial host commands. If you wish to enable/disable scanner by using commands, scan the enable barcode. Host commands for other interfaces are also available.
Default =Disable

4 Data Formatting

4.1 General Configuration

090200.

Add CR

090202.

Add LF

090300.

Add CRLF

090201.

Add TAB

4.2 Add Prefix

080400.

Set Custom Prefix

0D0400.

Save

0D0500.

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 3 .
4. Scan the **Save** barcode.

Note: 99 *indicates all symbollogies*

4.3 Add Suffix

080500.

Set Custom Suffix

0D0400.

Save

0D0500.

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 2: 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 3 .
4. Scan the **Save** barcode.

Note: 99 *indicates all symbollogies*

4.4 Clear All Prefix and Suffix

080404.

Clear All Prefix And Suffix (Default)

4.5 Function Code Transmit

All ASCII control characters are translated into CTRL+X functions if you enable Function Code Transmit. Otherwise, they are translated into predefined keystrokes.

Refer to Appendix2: ASCII Table for hexadecimal values of characters.

060D070.

Ctrl+X functions Disable

060D071.

Ctrl+X functions Enable

5 Symbologies

5.1 General Setting

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

0201001.

Enable All Symbologies

0201000.

Disable All Symbologies

5.2 1D Symbologies

5.2.1 Code 128

Enable/Disable Code 128

020A011.

Enable Code 128 (Default)

020A010.

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

Enable/Disable EAN-8

0214011.

Enable EAN-8 (Default)

0214010.

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**.**

0214021.

Transmit EAN-8 Check Digit (Default)

0214020.

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.

0214031.

Enable 2-Digit Add-On Code

0214030.

Disable 2-Digit Add-On Code (Default)

0214041.

Enable 5-Digit Add-On Code

0214040.

Disable 5-Digit Add-On Code (Default)

Add-On Code Required

0214051.

EAN-8 Add-On Code Required


0214050.

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.


0214061.

Enable ENA/JAN-8 Addenda Separator (Default)


0214060.

Disable ENA/JAN-8 Addenda Separator UPC

5.2.3 EAN-13

Enable/Disable EAN-13


0213011.

Enable EAN-13 (Default)


0213010.

Disable EAN-13

Transmit Check Digit


0213021.

Transmit EAN-13 Check Digit (Default)


0213020.

Do Not Transmit EAN-13 Check Digit

Add-On Code

0213031.

Enable 2-Digit Add-On Code

0213030.

Disable 2-Digit Add-On Code (Default)

0213041.

Enable 5-Digit Add-On Code

0213040.

Disable 5-Digit Add-On Code (Default)

Add-On Code Required

0213051.

EAN-13 Add-On Code Required

0213050.

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.

0213061.

Enable ENA/JAN-13 Addenda Separator (Default)

0213060.

Disable ENA/JAN-13 Addenda Separator

ISBN Translate

When enable this feature and is scanned, EAN-13 Book land symbols are translated into their equivalent ISBN number format.


0213071.
Enable ISBN Translate


0213070.
Disable ISBN Translate (Default)

5.2.4 UPC-E

Enable/Disable UPC-E0/E1


0212011.
Enable UPC-E0 (Default)


0212010.
Disable UPC-E0


0212021.
Enable UPC-E1


0212020.
Disable UPC-E1 (Default)

UPC-E0 Check Digit

0212041.

Enable UPC-E0 Check Digit (Default)

0212040.

Disable UPC-E0 Check Digit

UPC-E0 Expand

UPC-E0 expand expands the UPC-E code to the 12 digits, UPC-A format.

0212031.

Enable UPC-E0 Expand

0212030.

Disable UPC-E0 Expand (Default)

UPC-E0 Addenda Required

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

0212081.

Enable UPC-E0 Required

0212080.

Disable UPC-E0 Required (Default)

UPC-E0 Addenda Separator

0212091.

Enable UPC-E0 Separator (Default)

0212090.

Disable UPC-E0 Separator

UPC-E0 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.

0212051.

Enable UPC-E0 Number System (Default)

0212050.

Disable UPC-E0 Number System

UPC-E0 Addenda

0212061.

Enable 2 Digit Addenda

0212060.

Disable 2 Digit Addenda (Default)


0212071.

Enable 5 Digit Addenda


0212070.

Disable 5 Digit Addenda (Default)

5.2.5 UPC-A

Enable/Disable UPC-A

0211011.

Enable UPC-A (Default)

0211010.

Disable UPC-A

UPC-A Check Digit

0211021.

Enable UPC-A Check Digit (Default)

0211020.

Disable UPC-A Check Digit

UPC-A Addenda Required

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

0211061.

Enable UPC-A Required

0211060.

Disable UPC-A Required (Default)

UPC-A Addenda Separator

0211071.

Enable UPC-A Separator (Default)

0211070.

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.

0211031.

Enable UPC-A Number System (Default)

0211030.

Disable UPC-A Number System

UPC-A: Addenda

0211041.
Enable 2 Digit Addenda

0211040.
Disable 2 Digit Addenda (Default)

0211051.
Enable 5 Digit Addenda

0211050.
Disable 5 Digit (Default)

5.2.6 Interleaved 2 Of 5

Enable/Disable Interleaved 2 Of 5

0204011.

Enable Interleaved 2 Of 5 (Default)

0204010.

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

0204020.

No Check Char (Default)

0204022.

Validate And Transmit

0204021.

Validate Not Transmit

5.2.7 Matrix 2 Of 5

Enable/Disable Matrix 2 Of 5

Enable Matrix 2 Of 5

Disable Matrix 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.

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

Enable/Disable Industrial 2 Of 5


0206011.

Enable Industrial 2 Of 5


0206010.

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

Enable/Disable Code 39

0203011.

Enable Code 39 (Default)

0203010.

Disable Code 39

Transmit Start/Stop Character

0203051.

Transmit Start/Stop Character

0203050.

Do Not Transmit Start/Stop Character (Default)

Code 39 Check Character

0203040.

No Check Char (Default)

0203042.

Validate And Transmit

0203041.

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.

0203031.

Enable Append

0203030.

Disable Append (Default)

Code 39 Full ASCII

0203021.

Enable Code 39 Full ASCII

0203020.

Disable Code 39 Full ASCII (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

Enable/Disable Coda Bar

0202011.

Enable Coda Bar (Default)

0202010.

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

0202021.

Transmit Start/Stop Character

0202020.

Do Not Transmit Start/Stop Character (Default)

Coda bar Check Character

0202030.

No Check Char (Default)

0202032.

Validate And Transmit

0202031.

Validate No Transmit

5.2.11 Code 93

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)

5.2.12 GS1-128

Enable/Disable GS1-128


020B001.

Enable GS1-128 (Default)


020B000.

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

Enable/Disable MSI

020E011.

Enable MSI

020E010.

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.

5.2.14 Code 11

Enable/Disable Code 11


0209011.
Enable Code 11


0209010.
Disable Code 11 (Default)

Code11 Check Digit(s)


0209040.
One Check Digit


0209041.
Two Check Digits (Default)

5.3 2D Symbologies

5.3.1 PDF 417

Enable/Disable PDF 417

021F011.

Enable PDF 417 (Default)

021F010.

Disable PDF 417

Enable/Disable Micro PDF 417

0220011.

Enable Micro PDF 417

0220010.

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

Enable/Disable QR Code

0237011.

Enable QR Code (Default)

0237010.

Disable QR Code

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.

0237081.

Enable QR Code Append (Default)

0237080.

Disable QR Code Append

5.3.3 Data Matrix

Enable/Disable Data Matrix

0236011.

Enable Data Matrix (Default)

0236010.

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.

5.3.4 Maxi code

Enable/Disable Maxi code


0234011.

Enable Maxi Code


0234010.

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

Enable/Disable Aztec

0233011.

Enable Aztec (Default)

0233010.

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

0233081.

Enable Aztec Append (Default)

0233080.

Disable Aztec Append

5.3.6 Hanxin

Enable/Disable Hanxin

0238011.

Enable Hanxin

0238010.

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

Enable/Disable China Postal Code


0218011.
Enable China Postal Code


0218010.
Disable China Postal Code (Default)

5.4.2 Telepen

Enable/Disable Telepen


0210011.
Enable China Telepen


0210010.
Disable China Telepen (Default)

6 Appendix

6.1 Appendix 1: AIM ID Table

Symbology	AIM ID	Remark	TEEMI (Hex)
All Symbologies			99
EAN-13	]E0	Standard EAN-13	64
	]E3	EAN-13 + 2/5-Digit Add-On Code	64
EAN-8	]E4	Standard EAN-8	44
	]E4...]E1...	EAN-8 + 2-Digit Add-On Code	44
	]E4...]E2...	EAN-8 + 5-Digit Add-On Code	44
UPC-E	]E0	Standard UPC-E	45
	]E3	UPC-E + 2/5-Digit Add-On Code	45
UPC-A	]E0	Standard UPC-A	63
	]E3	UPC-A + 2/5-Digit Add-On Code	63
Code 128	]C0	Standard Code 128	6A
GS1-128	]C1	FNC1 is the character right after the start character	49
Interleaved 2 of 5	]I0	No parity check	65
	]I1	Transmit check digit after parity check	65
	]I3	Do not transmit check digit after parity check	65
Industrial 2 of 5	]S0	Not specified	66
Standard 2 of 5	]R0	No parity check	66
	]R8	One check digit, MOD10; do not transmit check digit	66
	]R9	One check digit, MOD10; transmit check digit	66
Code 39	]A0	Transmit barcodes as is; Full ASCII disabled; no parity check	62
	]A1	One check digit, MOD43; transmit check digit	62
	]A3	One check digit, MOD43; do not transmit check digit	62
	]A4	Full ASCII enabled; no parity check	62
	]A5	Full ASCII enabled; transmit check digit	62
	]A7	Full ASCII enabled; do not transmit check digit	62
Codebar	]F0	Standard Codebar	61
	]F2	Transmit check digit after parity check	61
	]F4	Do not transmit check digit after parity check	61
Code 93	]G0	Standard Code 93	69

Code 11	]H0	One check digit MOD11; transmit check digit	68
	]H1	Two check digits, MOD11/MOD11; transmit check digit	68
	]H3	Do not transmit check digit after parity check	68
	]H9	No parity check	68
GS1-DataBar (RSS)	]e0	Standard GS1-DataBar	79
Matrix 2 of 5	]X0	Specified by the manufacturer	6D
	]X1	No parity check	6D
	]X2	One check digit, MOD10; transmit check digit	6D
	]X3	One check digit, MOD11; do not transmit check digit	6D
PDF417	]L0	Comply with 1994 PDF417 specifications	72
Data Matrix	]d0	ECC000 - ECC140	77
	]d1	ECC200	77
	]d2	ECC200, FNC1 is the 1st or 5th character after the start character	77
	]d3	ECC200, FNC1 is the 2nd or 6th character after the start character	77
	]d4	ECC200, ECI included	77
	]d5	ECC200, FNC1 is the 1st or 5th character after the start character,ECI included	77
	]d6	ECC200, FNC1 is the 2nd or 6th character after the start character,ECI included	77
QR Code	]Q0	QR1	73
	]Q1	2005 version, ECI excluded	73
	]Q2	2005 version, ECI included	73
	]Q3	QR Code 2005, ECI excluded, FNC1 is the 1st character after the start character	73
	]Q4	QR Code 2005, ECI included, FNC1 is the 1st character after the start character	73
	]Q5	QR Code 2005,ECI excluded,FNC1 is the 2nd character after the start character	73
	]Q6	QR Code 2005, ECI included, FNC1 is the 2nd character after the start character	73

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		Predefined keystrokes	CTRL+X functions
00	0	NUL	(Null char.)	Reserved	CTRL+@
01	1	SOH	(Start of Header)	Enter	CTRL+A
02	2	STX	(Start of Text)	Caps Lock	CTRL+B
03	3	ETX	(End of Text)	ALT Make	CTRL+C
04	4	EOT	(End of Transmission)	ALT Break	CTRL+D
05	5	ENQ	(Enquiry)	CTRL Make	CTRL+E
06	6	ACK	(Acknowledgment)	CTRL Break	CTRL+F
07	7	BEL	(Bell)	Enter	CTRL+G
08	8	BS	(Backspace)	N/A	CTRL+H
09	9	HT	(Horizontal Tab)	Tab	CTRL+I
0A	10	LF	(Line Feed)	N/A	CTRL+J
0B	11	VT	(Vertical Tab)	Tab	CTRL+K
0C	12	FF	(Form Feed)	Delete	CTRL+L
0D	13	CR	(Carriage Return)	Enter	CTRL+M
0E	14	SO	(Shift Out)	Insert	CTRL+N
0F	15	SI	(Shift In)	ESC	CTRL+O
10	16	DLE	(Data Link Escape)	F11	CTRL+P
11	17	DC1	(XON) (Device Control 1)	Home	CTRL+Q
12	18	DC2	(Device Control 2)	PrtScn	CTRL+R
13	19	DC3	(XOFF) (Device Control 3)	Backspace	CTRL+S
14	20	DC4	(Device Control 4)	Back Tab	CTRL+T
15	21	NAK	(Negative Acknowledgment)	F12	CTRL+U
16	22	SYN	(Synchronous Idle)	F1	CTRL+V
17	23	ETB	(End of Trans. Block)	F2	CTRL+W
18	24	CAN	(Cancel)	F3	CTRL+X
19	25	EM	(End of Medium)	F4	CTRL+Y
1A	26	SUB	(Substitute)	F5	CTRL+Z
1B	27	ESC	(Escape)	F6	CTRL+[
1C	28	FS	(File Separator)	F7	CTRL+\
1D	29	GS	(Group Separator)	F8	CTRL+]
1E	30	RS	(Request to Send)	F9	CTRL+^
1F	31	US	(Unit Separator)	F10	CTRL+-

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)
40	64	@	(AT Symbol)
41	65	A	
42	66	B	
43	67	C	

Hex	Dec	Char
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 / Circumfl ex)
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

Hex	Dec	Char
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

0	1	2	3
Y0Y	Y1Y	Y2Y	Y3Y

4	5	6	7
Y4Y	Y5Y	Y6Y	Y7Y

8	9	A	B
Y8Y	Y9Y	YAY	YBY

C	D	E	F
YCY	YDY	YEY	YFY