2D Barcode Reader User Guide

Table of Contents

1 Getting Started

1.1 About This Guide

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

1.2 Barcode Scanning

Powered by area-imaging technology and SuperLead 2D Barcoder Reader patented "Hercules" technology, the SuperLead 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 SuperLead 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 SuperLead 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.

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

Note: SuperLead scanners support ***Auto-Cable function*** which can be switched 232 interface automatically when connecting with 232cable.

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**

2.3 Data Bit & Parity Check & Stop Bit

***None Parity /8 Data Bits/1 Stop Bit**

Even Parity /7 Data Bits/1 Stop Bit

Odd Parity /7 Data Bits/1 Stop Bit

2.4 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)

***XON/XOFF Disable**

XON/XOFF Enable

2.5 Accepting RS-232 Commands

0609000.

***Disable**

0609001.

Enable

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

For the superlead 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.

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

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.**


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**


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 Transmission speed

If the terminal drops characters, change the speed to low.


060D041.

High


060D040.

*** Low**

2.10 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

2.11 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 (www.superlead.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 sets the scanner to work in presentation mode.


0E01003.
Presentation Mode

3.3 Read Mode


0411010.
***Printed-Reading Mode**


0411011.
Screen-Reading Mode

3.4 Illumination Lights


0501001.
ON


0501000.
Off

3.5 Illumination-Presentation


040102150.

***High**


04010250.

Low

3.6 Idle Illumination-Presentation


0E010E150.

High


0E010E100.

***Low**

3.7 LED Idle State-Presentation

This sets LED behavior when the scanner is idle.


0401031.

***Leds Off**


0401030.

Leds On

3.8 Continue-Scan Presentation Mode

This sets the scanner to work in ready all the time.

Continue-Scan Mode

3.9 Power-Up Beeper

***ON**

OFF

3.10 Good Read Beeper

***ON**

OFF

3.11 Good Read Beeper Volume


05021D1.
Low


05021D2.
Middle


05021D3.
***High**

3.12 Good Read Beeper Duration


0502160.
***Normal**


0502161.
Short

3.13 Good Read Beeper Tone


05020D500.
Low Frequency


05020D650.
***Medium Frequency**

05020D750.

Medium High Frequency

05020D2730.

High Frequency

3.9 Good-read Delay

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

080B080.

***No Delay**

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.

***Delay 500 MS**

Delay 750 MS

Delay 1000 MS

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

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

Set Custom Suffix

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

Clear All Prefix And Suffix

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

020A010.

Disable Code 128

Message Length for Code 128

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

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.

Set the Maximum Length

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

5.2.2 EAN-8

Enable/Disable EAN-8

Enable EAN-8

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

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

0214041.

Enable 5-Digit Add-On Code


0214040.
Disable 5-Digit Add-On Code

Add-On Code Required


0214051.
EAN-8 Add-On Code Required


0214050.
EAN-8 Add-On Code Not Required

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


0214060.
Disable ENA/JAN-8 Addenda Separator UPC

5.2.3 EAN-13

Enable/Disable EAN-13

0213011.

Enable EAN-13

0213010.

Disable EAN-13

Transmit Check Digit

0213021.

Transmit EAN-13 Check Digit

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

0213041.

Enable 5-Digit Add-On Code


0213040.
Disable 5-Digit Add-On Code

Add-On Code Required


0213051.
EAN-13 Add-On Code Required


0213050.
EAN-13 Add-On Code Not Required

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.

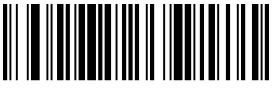

0213061.
Enable ENA/JAN-13 Addenda Separator


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

5.2.4 UPC-E

Enable/Disable UPC-E0/E1


0212011.
Enable UPC-E0


0212010.
Disable UPC-E0


0212021.
Enable UPC-E1


0212020.
Disable UPC-E1

UPC-E0 Check Digit


0212041.
Enable UPC-E0 Check Digit


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

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

UPC-E0 Addenda Separator


0212091.
Enable UPC-E0 Separator


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


0212050.

Disable UPC-E0 Number System

UPC-E0 Addenda


0212061.

Enable 2 Digit Addenda


0212060.

Disable 2 Digit Addenda


0212071.

Enable 5 Digit Addenda


0212070.

Disable 5 Digit Addenda

5.2.5 UPC-A

Enable/Disable UPC-A


0211011.
Enable UPC-A


0211010.
Disable UPC-A

UPC-A Check Digit


0211021.
Enable UPC-A Check Digit


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

UPC-A Addenda Separator


0211071.
Enable UPC-A Separator


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


0211030.
Disable UPC-A Number System

UPC-A: Addenda


0211041.
Enable 2 Digit Addenda


0211040.
Disable 2 Digit Addenda


0211051.
Enable 5 Digit Addenda


0211050.
Disable 5 Digit

5.2.6 Interleaved 2 of 5

Enable/Disable Interleaved 2 of 5

Enable Interleaved 2 of 5

Disable Interleaved 2 of 5

Message Length for Interleaved 2of 5

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

Interleaved 2 of 5 max length command: 020403. The parameter of this command can be set from min to 80.

Interleaved 2 of 5 min length command: 020402. The parameter of this command can be set from 2 to max.

Set the Maximum Length

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

Interleaved 2 of 5 Check Digit


0204020.
No Check Char


0204022.
Validate And Transmit


0204021.
Validate Not Transmit

5.2.7 Matrix 2 of 5

Enable/Disable Matrix 2 of 5


0208011.
Enable Matrix 2 of 5

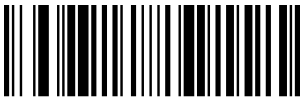

0208010.
Disable Matrix 2 of 5

Message Length for Matrix 2 of 5

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

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.


020803.

Set the Maximum Length


020802.

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

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

Message Length for Industrial 2 of 5

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

Industrial 2 of 5 max length command: 020603. The parameter of this command can be set from min to 80.

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


020603.

Set the Maximum Length


020602.

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

5.2.9 Code 39

Enable/Disable Code 39


0203011.

Enable Code 39


0203010.

Disable Code 39

Transmit Start/Stop Character


0203051.

Transmit Start/Stop Character


0203050.

Do Not Transmit Start/Stop Character

Code 39 Check Character

0203040.

No Check Char

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

Code 39 Full ASCII


0203021.

Enable Code 39 Full ASCII


0203020.

Disable Code 39 Full ASCII

Message Length for Code 39

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

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 1 to max.


020308.

Set the Maximum Length


020307.

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

5.2.10 Coda Bar

Enable/Disable Coda Bar


0202011.

Enable Coda Bar


0202010.

Disable Coda Bar

Message Length for Code Bar

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

Code 39 max length command: 020206. The parameter of this command can be set from min to 60.

Code 39 min length command: 020205. The parameter of this command can be set from 2 to max.


020206.

Set the Maximum Length


020205.

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

Transmit Start/Stop Character

0202021.

Transmit Start/Stop Character

0202020.

Do Not Transmit Start/Stop Character

Coda bar Check Character

0202030.

No Check Char

0202032.

Validate And Transmit

0202031.

Validate No Transmit

5.2.11 Code 93

Enable/Disable Code 93

020D011.

Enable Code 93

020D010.

Disable Code 93

Message Length for Code 93

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

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 1 to max.

020D03.

Set the Maximum Length

020D02.

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

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.

020D051.
Enable Code 93 Append

020D050.
Disable Code 93 Append

5.2.12 GS1-128

Enable/Disable GS1-128

020B001.
Enable GS1-128

020B000.
Disable GS1-128

Message Length for GS1-128

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

020B03.

Set the Maximum Length

020B02.

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

5.2.13 MSI

Enable/Disable MSI

020E011.

Enable MSI

020E010.

Disable MSI

Message Length for MSI

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

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.

020E04.

Set the Maximum Length

020E03.

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

5.2.14 Code 11

Enable/Disable Code 11

0209011.

Enable Code 11

0209010.

Disable Code 11

Code11 Check Digit(s)


0209040.
One Check Digit


0209041.
Two Check Digits

5.2.15 Telepen

Enable/Disable Telepen


0210011.
Enable China Telepen


0210010.
Disable China Telepen

5.3 2D Symbologies

5.3.1 PDF 417

Enable/Disable PDF 417

021F011.

Enable PDF 417

021F010.

Disable PDF 417

Enable/Disable Micro PDF 417

0220011.

Enable Micro PDF 417

0220010.

Disable Micro PDF 417

Message Length for PDF417

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

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.

021F06.

Set the Maximum Length

021F05.

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

5.3.2 QR Code

Enable/Disable QR Code


0237011.

Enable QR Code


0237010.

Disable QR Code

Message Length for QR

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

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.


023703.

Set the Maximum Length


023702.

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

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


0237080.
Disable QR Code Append

5.3.3 QR Code URL Link


0806021.
***QR Code URL Link Disable**


0806020.
QR Code URL Link Enable

5.3.4 Data Matrix

Enable/Disable Data Matrix


0236011.
Enable Data Matrix


0236010.
Disable Data Matrix

Message Length for Data Matrix

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

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.


023603.
Set the Maximum Length


023602.
Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

5.3.5 Maxi code

Enable/Disable Maxi code


0234011.

Enable Maxi Code


0234010.

Disable Maxi Code

Message Length for Maxi Code

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

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.


023403.

Set the Maximum Length


023402.

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

5.3.6 Aztec

Enable/Disable Aztec


0233011.

Enable Aztec


0233010.

Disable Aztec

Message Length for Aztec

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

Maxi Code max length command: 023306. The parameter of this command can be set from min to 3282.

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


023306.

Set the Maximum Length


023305.

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

5.3.7 Hanxin

Enable/Disable Hanxin


0238011.

Enable Hanxin


0238010.

Disable Hanxin

Message Length for Hanxin

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

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.


023803.

Set the Maximum Length


023802.

Set the Minimum Length

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

1. Scan the **Set the Maximum Length** barcode.
2. Scan the numeric barcodes" 2" and" 5" in Appendix 3 .
3. Scan the **Set the Minimum Length** barcode.
4. Scan the numeric barcodes" 1" and" 0" in Appendix 3 .

6 Appendix

6.1 Appendix 1: AIM ID Table

Symbology	AIM ID	Remark	SuperLead (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