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Programming Guide

Advanced 2D Image Scanner

This Programming Guide is intended for:

- **2D Image Handheld Scanner:** Z-3272 Plus

Revision History

Changes to the original manual are listed below:

Version	Date	Description of Version
1.0	2018/9/12	Initial release
1.1	2021/9/2	Added FNC1 GS Substitution Values
1.2	2021/9/11	Added new commands for FW210909
1.3	2021/10/19	Update according to FW211022 change: Customization Gain Level /Mobile phone support for auto scan mode default values changed; deleted Standby Time for Auto Scan Mode

Important Notice

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General Handling Precautions

Do not dispose the scanner in fire.
Do not put the scanner directly in the sun or by any heat source.
Do not use or store the scanner in a very humid place.
Do not drop the scanner or allow it to collide violently with other objects.
Do not take the scanner apart without authorization

Guidance for Printing

This manual is in A5 size. Please double check your printer setting before printing it out. When the barcodes are to be printed out for programming, the use of a high-resolution laser printer is strongly suggested for the best scan result.

Firmware Notice

To use all functions in this guide please update to the latest firmware.

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Using the Scanner

Beeper Indication

Beeps	Indication
3 beeps in a series from low to high pitch	Power up
1 short beep	A barcode has been successfully decoded
2 short beeps	The scanner has entered program mode
1 long beep	A setting has been programmed
3 beeps in a series from low to high pitch	The scanner has exited program mode
3 short beeps	Error setting the scanner

Settings and Programming

Scan selected barcodes in this manual to affect setup and programming of your 2D image barcode scanner. Decoding options and interface protocols can be tailored to a specific application.

Setup parameters are stored in non-volatile memory in the scanner and are retained even when power is off. Setup parameters change only when you reset them. You may need to hide adjacent code patches with your hand when scanning.

Program Set Up Flow

Scan "Set" to set up --> Scan selected barcode --> Scan "End" to confirm the setup.

User Preferences

Show Version

Scan this barcode to display firmware version.

Read device information

System Settings

Scan this barcode to return all parameters to the default values.

Set

Factory default settings

End

Customer's Factory Default

Scan barcodes below to set or delete customer’s factory default.

Set

Save customer's factory default

Delete customer's factory default

End

Scan Mode

Scan a barcodes below to set the scanner to different modes.

Trigger Mode: This scanner becomes inactive as soon as the data is transmitted by pressing the trigger button.

Auto Scan Mode: The scanner is still active after the data is transmitted but the successive transmission of the same code is not allowed.

Set

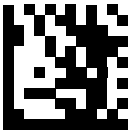
Trigger Mode (Default)

Auto Scan Mode

End

Customization Gain Level

Set gain level for captured image quality. When the light is low, the higher gain level can enhance the captured image quality for better scanning performance.



Set

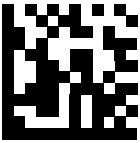
Level 1 (Low)

Level 2

Level 3

Level 4

Level 5



End

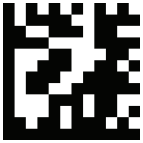
Set

Level 6

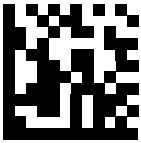
Level 7

Level 8 (Default)

Level 9



Level 10 (High)



End

Same Code Delay Time for Auto Scan Mode

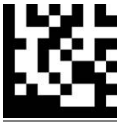
Scan a barcode below to select the duration of the delay time for Auto Scan Mode.

Set

500 msec (Default)

1 sec

1.5 sec



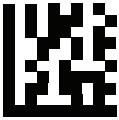
2 sec

End

Interface Switch

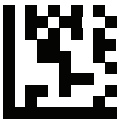
Your 2D Imager supports interfaces such as USB HID, RS232 serial, and USB virtual COM. To switch the interface, simply select the appropriate cable and configure the proper interface by following interface selection.

Set



RS-232

USB Keyboard



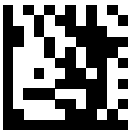
USB Virtual COM Port

*Driver required

End

Mobile Phone Scan Support for Auto Scan Mode

Enable or disable mobile phone scan support..



Set

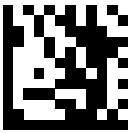
Enable (Default)

Disable

End

Power Up Beep On/ Off

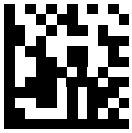
Scan a barcode below to turn on/off power up beep.



Set

On (Default)

Off



End

Good Read Beep On/ Off

Scan a barcode below to turn on/off good read beep.

Set

On (Default)

Off

End

Good Read Beep Length

Scan a barcode below to select the duration of the beep signal after a good decode.

Set

50 msec (Default)

100 msec

150 msec

200 msec

End

Good Read Beep Frequency

Scan a barcode below to select the beep tone of the beep signal after a good decode.

Set

Low

Medium (Default)

High

End

Aiming Pattern

Aiming pattern works as an aiming system to aid in barcode reading. Use the following settings to enable or disable this function. This function is for supporting models only.

Set

Auto (Default)

Always On

Always Off

End

Illumination

Set Illumination to aid in barcode reading. Use the following settings to configure this function.

Set

On (Default)

Always On

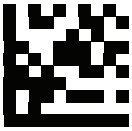
Off

End

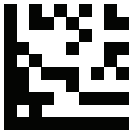
Terminal Character

Set

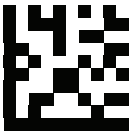
None



CR/LF
(V-COM & RS-232 Default)



CR
(HID Default)



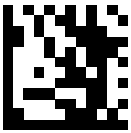
TAB

LF

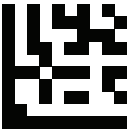
End

RS232 Baud Rate

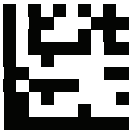
Baud rate is the number of bits of data transmitted per second. Set the imager's baud rate to match the baud rate setting of the host device. Otherwise, data may not reach the host device or may reach it in distorted form.



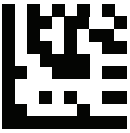
Set



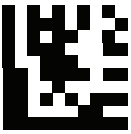
9600 (Default)



19200

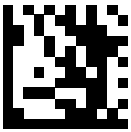


38400

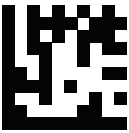


57600

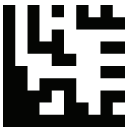
End



Set



115200

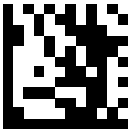


230400

End

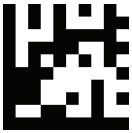
RS232 Parity Bit

Parity bit can be added to ensure the total number of the string is even or odd.

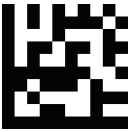


Set

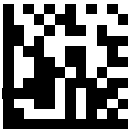
None (Default)



Even parity



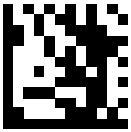
Odd parity



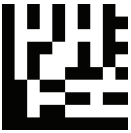
End

RS232 Stop Bit

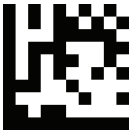
Stop bit is used to signal the end of a transmission.



Set



1 Stop Bit (Default)

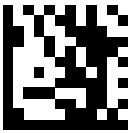


2 Stop Bit

End

RS232 Data Bit

Data bit sets the word length at 7 or 8 bits of data per character.



Set

CS7

CS8 (Default)

End

USB Speed

Scan a barcode below to set USB speed.

Set

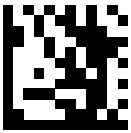
USB 2.0

USB 1.1 (Default)

End

USB Output Speed for USB 1.1

Scan a barcode below to set USB 1.1 output speed.



Set

1 (Fastest)

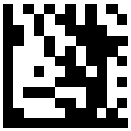
2

3

4

5

End


Set

6

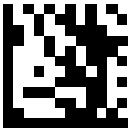
7

8

9

10 (Default)

End


Set

11

12

13

14

15

16 (Slowest)

End

Country Code

Scann the following settings to change the country code.

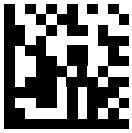
Set

US (Default)

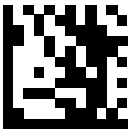
Belgium

Britain

Denmark



End


Set

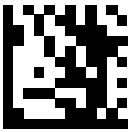
France

Germany

Italy

Norway

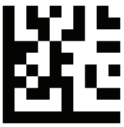
End



Set

Portugal

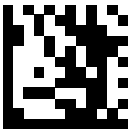
Spain



Sweden

Switzerland

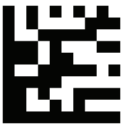
End



Set

Japan

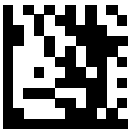
Hungary



Czech Republic

Slovakia

End



Set

Romania

Croatia

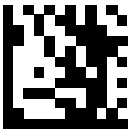
Poland

Finland

United Kingdom

Russia

End



Set

International Keyboard mode

(ALT mode)

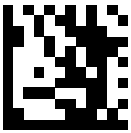
Turkey-Q

Turkey-F

End

Persian/Arabic Language Encoding Support

Scann the following settings to change the encoding options.

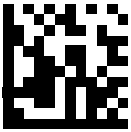


Set

UTF-8 (Default)

ISO 8859-6

CP1256 (WINDOWS-1256)



End

Readable Symbologies

This section provides the programming barcodes for enabling and disabling readable symbologies. If the default values suit requirements, programming is not necessary.

All Symbologies

Set

Enable All

Default

End

UPC-A

Set

Enable UPC-A (Default)

Disable UPC-A

End

UPC-E

Set

Enable UPC-E

Disable UPC-E (Default)

End

EAN-8

Set

Enable EAN 8 (Default)

Disable EAN 8

End

EAN 13

Set

Enable EAN 13 (Default)

Disable EAN 13

End

Code 128

Set

Enable Code 128 (Default)

Disable Code 128

End

Code 39

Set

Enable Code 39 (Default)

Disable Code 39

End

Code 93

Set

Enable Code 93 (Default)

Disable Code 93

End

Code 32

Set

Enable Code 32

Disable Code 32 (Default)

End

Code 11

Set

Enable Code 11

Disable Code 11 (Default)

End

Codabar

Set

Enable Codabar (Default)

Disable Codabar

End

Plessey

Set

Enable Plessey

Disable Plessey (Default)

End

MSI/Plessy

Set

Enable MSI/Plessy

Disable MSI/Plessy (Default)

End

Interleaved 2 of 5

Set

Enable Interleaved 2 of 5 (Default)

Disable Interleaved 2 of 5

End

IATA 2 of 5

Set

Enable IATA 2 of 5

Disable IATA 2 of 5 (Default)

End

Matrix 2 of 5

Set

Enable Matrix 2 of 5

Disable Matrix 2 of 5 (Default)

End

Straight 2 of 5

Set

Enable Straight 2 of 5

Disable Straight 2 of 5 (Default)

End

RSS 14 (GS1 DATABAR 14)

Set

Enable RSS 14 (Default)

Disable RSS 14

End

RSS Expanded (GS1 DATABAR Expanded)

Set

Enable RSS Expanded (Default)

Disable RSS Expanded

End

RSS Limited (GS1 DATABAR Limited)

Set

Enable RSS Limited (Default)

Disable RSS Limited

End

GS1 DataBar Expanded Stacked

Set

Enable

Disable (Default)

End

GS1 DataBar 14 Stacked

Set

Enable

Disable (Default)

End

Component CC-A

Set

Enable Component CC-A

Disable Component CC-A (Default)

End

Component CC-B

Set

Enable Component CC-B

Disable Component CC-B (Default)

End

Component CC-C

Set

Enable Component CC-C

Disable Component CC-C (Default)

End

PDF417

Set

Enable PDF417 (Default)

Disable PDF417

End

Micro PDF417

Set

Enable Micro PDF417 (Default)

Disable Micro PDF417

End

Data Matrix

Set

Enable Data Matrix (Default)

Disable Data Matrix

End

QR Code

Set

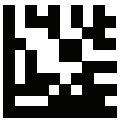
Enable QR Code (Default)

Disable QR Code

End

Micro QR Code

Set



Enable Micro QR Code (Default)

Disable Micro QR Code

End

Aztec

Set

Enable Aztec

Disable Aztec (Default)

End

MaxiCode

Set

Enable MaxiCode

Disable MaxiCode (Default)

End

JAPAN POST

Set

Enable

Disable(Default)

Check Digit Enable(Default)

Check Digit Disable

END

Symbology Features

This section provides the programming barcodes for selecting features available to different symbologies.

UPC / EAN

Set

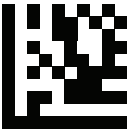
Enable decoding of 2/5-digit supplemental code for UPC-A, UPC-E, EAN-13, and EAN-8

Disable decoding of 2/5-digit supplemental code for UPC-A, UPC-E, EAN-13, and EAN-8 (Default)

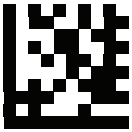
End

UPC-A

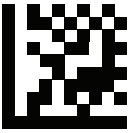
Set



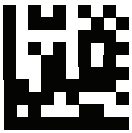
Enable UPC-A Number System digit (Default)



Disable UPC-A Number System digit



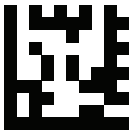
Enable UPC-A check digit (Default)



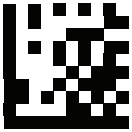
Disable UPC-A check digit

End

Set



Enable conversion of UPC-A to EAN13



Disable conversion of UPC-A to EAN13 (Default)

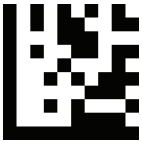
Enable Leading Character

Disable Leading Character (Default)

End

Set

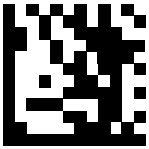
Enable UPC-A clear leading zero



Disable UPC-A clear leading zero (Default)

End

UPC-A Data Redundant Check



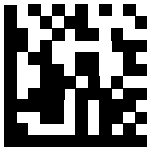
Set

Off (Default)

1

2

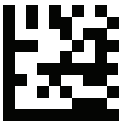
3



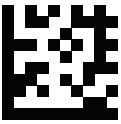
End

UPC-E

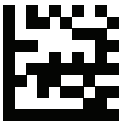
Set



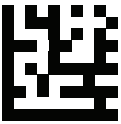
Enable UPC-E Number System digit (Default)



Disable UPC-E Number System digit



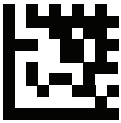
Enable UPC-E check digit (Default)



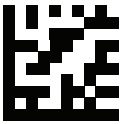
Disable UPC-E check digit

End

Set



Enable conversion of UPC-E to UPC-A



Disable conversion of UPC-E to UPC-A
(Default)

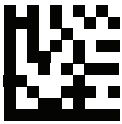
Enable UPC-E clear leading zero

Disable UPC-E clear leading zero
(Default)

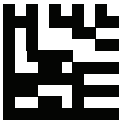
End

EAN 8

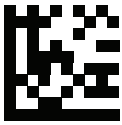
Set



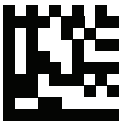
Enable EAN 8 check digit (Default)



Disable EAN 8 check digit



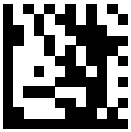
Enable conversion of EAN 8 to EAN 13



Disable conversion of EAN 8 to EAN 13 (Default)

End

EAN 8 Data Redundant Check



Set

Off (Default)

1

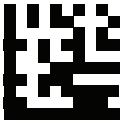
2

3

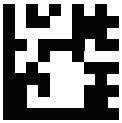
End

EAN 13

Set

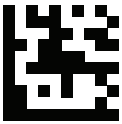


Enable EAN 13 check digit (Default)



Disable EAN 13 check digit

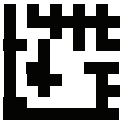
Enable conversion of EAN 13 to ISBN



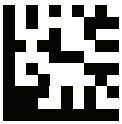
Disable conversion of EAN 13 to ISBN (Default)

End

Set



Enable conversion of EAN 13 to ISSN



Disable conversion of EAN 13 to ISSN
(Default)

End

Set

EAN 13 data redundant check = off

EAN 13 data redundant check = 1
(Default)

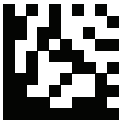
EAN 13 data redundant check = 2

EAN 13 data redundant check = 3

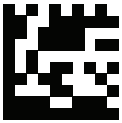
End

Code 39

Set

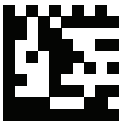


Enable Code 39 full ASCII mode



Disable Code 39 full ASCII mode (Default)

Enable Start and Stop characters

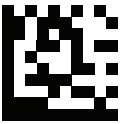


Disable Start and Stop characters (Default)

End

Set

Disable Checksum (Default)

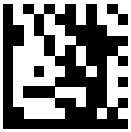


Enable checksum and send check character

Enable checksum and strip check character

End

Code 39 Data Redundant Check



Set

Off (Default)

1

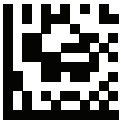
2

3

End

Codabar

Set



Disable Checksum (Default)

Enable checksum and send check character

Enable checksum and strip check character

End

Set

Enable stripping Start and Stop characters

Disable stripping Start and Stop characters
(Default)

End

Codabar Data Redundant Check

Set

Off

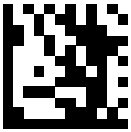
1

2 (Default)

3

End

Code 93 Data Redundant Check



Set

Off (Default)

1

2

3

End

Code 128 Data Redundant Check

Set

Off

1

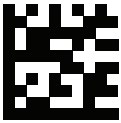
2 (Default)

3

End

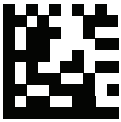
Interleaved 2 of 5

Set



Disable Checksum (Default)

Enable checksum and send check character



Enable checksum and strip check character

End

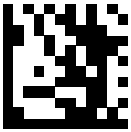
Set

Default quiet zone checking
No length checking performed (Default)

Smaller quiet zone allowed

End

Interleaved 2 of 5 Data Redundant Check



Set

Off (Default)

1

2

3

End

MSI / Plessey

Set

Disable MSI Plessey checksum

Mod 10 checksum (Default)

Mod 10/10 checksum

Mod 11/10 checksum

End

Set

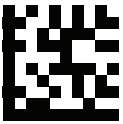
Output checksum character(s) (Default)

Strip checksum character(s)

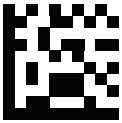
End

Code 11

Set



Output checksum character(s)



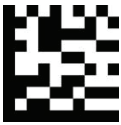
Strip checksum character(s) (Default)

End

Set

Disable checksum checking

Enable 1-digit checksum checking



Enable 2-digit checksum checking
(Default)

End

Data Matrix

Set

Enable mirror decoding (Default)

Disable mirror decoding

End

Set

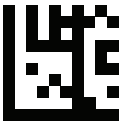
Enable rectangular Data Matrix decoding

Disable rectangular Data Matrix decoding
(Default)

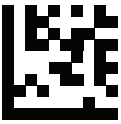
End

QR / Micro QR

Set



Enable mirror decoding (Default)



Disable mirror decoding

End

Set

UTF8 conversion for word only

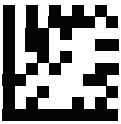
Universal UTF8 conversion (Default)

End

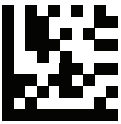
Note: Please install QR_UTF8_Conversion executable file before using this function.

Aztec

Set



Enable mirror decoding (Default)



Disable mirror decoding

End

Code 32 (Italian Pharmacode)

Set

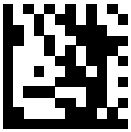
Transmit

Alphabet “A” char

Disable Transmit
Alphabet “A” char
(Default)

End

PDF-417 Data Redundant Check



Set

Off (Default)

1

2

3

End

Matrix 2 of 5

Set

Disable Checksum (Default)

Enable checksum and send check character

Enable checksum and strip check character

End

Straight 2 of 5

Set

Disable Checksum (Default)

Enable checksum and send check character

Enable checksum and strip check character

End

Japanese Language Encoding Support

Set

Enable

Disable (Default)

End

JAN code for Books Separator

Set

[TAB] key x 2

[SPACE] key x 3

Others char Separator
For parameters requiring specific numeric values, scan the [PROGRAMMING GUIDE\ASCII Code] appropriately numbered barcode(s).

End

Set

None (Default)

End

Data Editing (Prefix)

Prefix is additional characters that can be sent before the scanned data. Please scan the barcodes in the selection below to set your prefix.

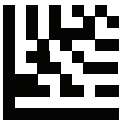
Prefix Set Up Flow

1. Scan Set.
2. Enable barcode type.
3. Scan prefix you would like to add characters within ASCII Table. Up to 4 digits can be added.
4. Scan End.

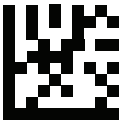
Ex. If we wish to add “3” as prefix for all barcode type, then follow procedure as below, Scan [Set] to enter setup. Then we select barcode by scanning [Enable All], then we scan [3] as 3 of ASCII HEX. At the end, we scan [End] to completed setup.

All Prefix

Set



Enable All

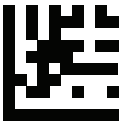


Disable All (Default)

End

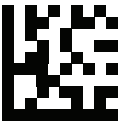
UPC / EAN Prefix

Set


Enable UPC-A

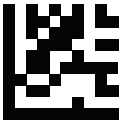
Disable UPC-A

Enable UPC-E


Disable UPC-E

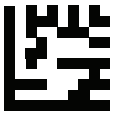
End

Set



Enable EAN 8

Disable EAN 8



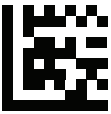
Enable EAN 13

Disable EAN 13

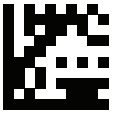
End

Code 128 Prefix

Set



Enable Code 128



Disable Code 128

End

Code 39 Prefix

Set

Enable Code 39

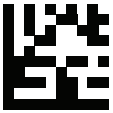
Disable Code 39

End

Code 93 Prefix

Set

Enable Code 93



Disable Code 93

End

Code 32 Prefix

Set

Enable Code 32

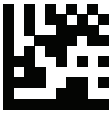
Disable Code 32

End

Code 11 Prefix

Set

Enable Code 11



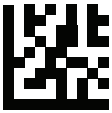
Disable Code 11

End

Codabar Prefix

Set

Enable Codabar



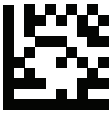
Disable Codabar

End

Plessey Prefix

Set

Enable Plessey



Disable Plessey

End

MSI Prefix

Set

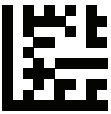
Enable MSI

Disable MSI

End

Interleaved 2 of 5Prefix

Set



Enable Interleaved 2 of 5

Disable Interleaved 2 of 5

End

IATA 2 of 5 Prefix

Set

Enable IATA 2 of 5

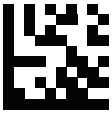
Disable IATA 2 of 5

End

Matrix 2 of 5 Prefix

Set

Enable Matrix 2 of 5



Disable Matrix 2 of 5

End

Straight 2 of 5 Prefix

Set

Enable Straight 2 of 5

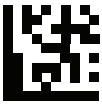
Disable Straight 2 of 5

End

RSS 14 Prefix

Set

Enable RSS 14


Disable RSS 14

End

RSS Expanded Prefix

Set

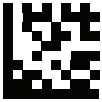
Enable RSS Expanded

Disable RSS Expanded

End

RSS Limited Prefix

Set



Enable RSS Limited

Disable RSS Limited

End

Component CC-A Prefix

Set

Enable Component CC-A

Disable Component CC-A

End

Component CC-B Prefix

Set

Enable Component CC-B

Disable Component CC-B

End

Component CC-C Prefix

Set

Enable Component CC-C

Disable Component CC-C

End

PDF 417 Prefix

Set

Enable PDF 417

Disable PDF 417

End

Micro PDF 417 Prefix

Set

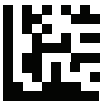
Enable Micro PDF 417

Disable Micro PDF 417

End

Data Matrix Prefix

Set



Enable Data Matrix

Disable Data Matrix

End

QR Prefix

Set

Enable QR Code

Disable QR Code

End

Micro QR Prefix

Set

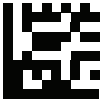
Enable Micro QR

Disable Micro QR

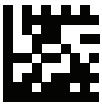
End

Aztec Prefix

Set



Enable Aztec



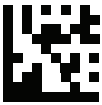
Disable Aztec

End

MaxiCode Prefix

Set

Enable MaxiCode


Disable MaxiCode

End

Data Editing (Suffix)

Suffix is additional characters that can be sent after the scanned data. Please scan the barcodes in the selection below to set your suffix.

Suffix Set Up Flow

1. Scan Set.
2. Enable barcode type.
3. Scan suffix you would like to add characters within ASCII Table. Up to 4 digits can be added.
4. Scan End.

Ex. If we wish to add “36” as suffix for all barcode type, then follow procedure as below. Scan [Set] to enter setup. Then we select barcode by scanning [Enable All], then we scan [3] as 3 of ASCII HEX and [6] as 6.

All Suffix

Set

Enable All

Disable All (Default)

End

UPC-A Suffix

Set

Enable UPC-A

Disable UPC-A

End

UPC-E Suffix

Set

Enable UPC-E

Disable UPC-E

End

EAN 8 Suffix

Set

Enable EAN 8

Disable EAN 8

End

EAN 13 Suffix

Set

Enable EAN 13

Disable EAN 13

End

Code 128 Suffix

Set

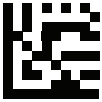
Enable Code 128

Disable Code 128

End

Code 39 Suffix

Set



Enable Code 39

Disable Code 39

End

Code 93 Suffix

Set

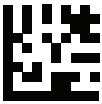
Enable Code 93

Disable Code 93

End

Code 32 Suffix

Set



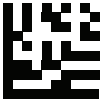
Enable Code 32

Disable Code 32

End

Code 11 Suffix

Set



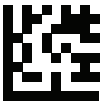
Enable Code 11

Disable Code 11

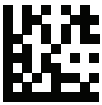
End

Codabar Suffix

Set



Enable Codabar



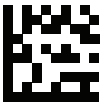
Disable Codabar

End

Plessey Suffix

Set

Enable Plessey

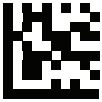


Disable Plessey

End

MSI Suffix

Set

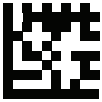

Enable MSI

Disable MSI

End

Interleaved 2 of 5 Suffix

Set



Enable Interleaved 2 of 5

Disable Interleaved 2 of 5

End

IATA 2 of 5 Suffix

Set

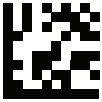
Enable IATA 2 of 5

Disable IATA 2 of 5

End

Matrix 2 of 5 Suffix

Set



Enable Matrix 2 of 5

Disable Matrix 2 of 5

End

Straight 2 of 5 Suffix

Set

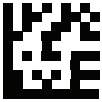
Enable Straight 2 of 5

Disable Straight 2 of 5

End

RSS 14 Suffix

Set



Enable RSS 14

Disable RSS 14

End

RSS Expanded Suffix

Set

Enable RSS Expanded

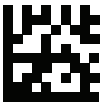
Disable RSS Expanded

End

RSS Limited Suffix

Set

Enable RSS Limited

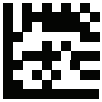


Disable RSS Limited

End

Component CC-A Suffix

Set



Enable Component CC-A

Disable Component CC-A

End

Component CC-B Suffix

Set

Enable Component CC-B

Disable Component CC-B

End

Component CC-C Suffix

Set

Enable Component CC-C

Disable Component CC-C

End

PDF-417 Suffix

Set

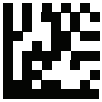
Enable PDF417

Disable PDF417

End

Micro PDF-417 Suffix

Set



Enable Micro PDF417

Disable Micro PDF417

End

Data Matrix Suffix

Set

Data Matrix Enable

Data Matrix Disable

End

QR Code Suffix

Set

QR Code Enable

QR Code Disable

End

Micro QR Suffix

Set

Micro QR Enable

Micro QR Disable

End

Aztec Suffix

Set

Aztec Enable

Aztec Disable

End

MaxiCode Suffix

Set

MaxiCode Enable

MaxiCode Disable

End

Data Editing (Truncate/Return)

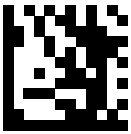
Truncate/Return Commands

- Return the leftmost characters: Specify the number of leftmost characters you want returned.
- Truncate the leftmost characters: Specify the number of leftmost characters you want deleted.
- Return the Rightmost characters: Specify the number of rightmost characters you want returned.
- Truncate the Rightmost characters: Specify the number of rightmost characters you want deleted.
- Return the Middle characters: Returns the middle characters. The middle is found by scanning from left to right, and parameters determine where the middle begins and ends
- Truncate the Middle characters: Delete the middle characters. The middle is found by scanning from left to right, and parameters determine where the middle begins and ends

Set Up Flow

1. Scan Set to set up
2. Enable barcode type
3. Scan one of Truncate/Return Command
4. Select lengths using the numeric bar codes in ASCII Code Table
5. Scan End

Set All Symbologies Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

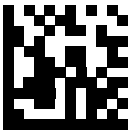
End

Set

Return middle

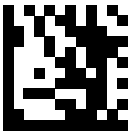
Truncate middle

Disable All (Default)



End

Set UPC-A Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

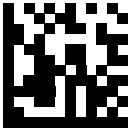
End

Set

Return middle

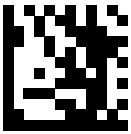
Truncate middle

Disable (Default)



End

Set UPC-E Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

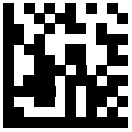
End

Set

Return middle

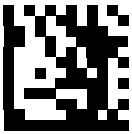
Truncate middle

Disable (Default)



End

Set EAN-8 Truncate/Return



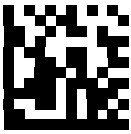
Set

Return leftmost

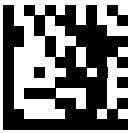
Truncate leftmost

Return rightmost

Truncate rightmost



End



Set

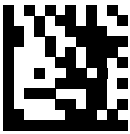
Return middle

Truncate middle

Disable (Default)

End

Set EAN 13 Truncate/Return



Set

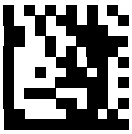
Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End



Set

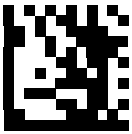
Return middle

Truncate middle

Disable (Default)

End

Set Code 128 Truncate/Return



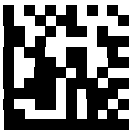
Set

Return leftmost

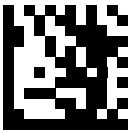
Truncate leftmost

Return rightmost

Truncate rightmost



End



Set

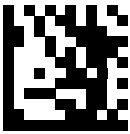
Return middle

Truncate middle

Disable (Default)

End

Set Code 39 Truncate/Return



Set

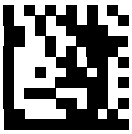
Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End



Set

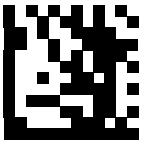
Return middle

Truncate middle

Disable (Default)

End

Set Code 93 Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End

Set

Return middle

Truncate middle

Disable (Default)

End

Set Code 32 Truncate/Return

Set

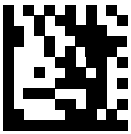
Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End



Set

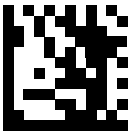
Return middle

Truncate middle

Disable (Default)

End

Set Code 11 Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End

Set

Return middle

Truncate middle

Disable (Default)

End

Set Codabar Truncate/Return

Set

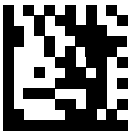
Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End



Set

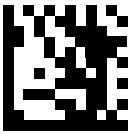
Return middle

Truncate middle

Disable (Default)

End

Set Plessey Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End

Set

Return middle

Truncate middle

Disable (Default)

End

Set MSI (Modified Plessy) Truncate/Return

Set

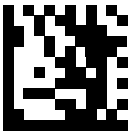
Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End



Set

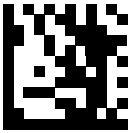
Return middle

Truncate middle

Disable (Default)

End

Set Interleaved 2 of 5 Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End

Set

Return middle

Truncate middle

Disable (Default)

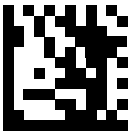
End

Interleaved 2 of 5 (ITF).ReturnLeft.4

Disable (default)

Enable

Set IATA 2 of 5 Truncate/Return



Set

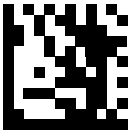
Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End



Set

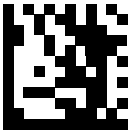
Return middle

Truncate middle

Disable (Default)

End

Set Matrix 2 of 5 Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End

Set

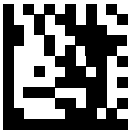
Return middle

Truncate middle

Disable (Default)

End

Set Straight 2 of 5 Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

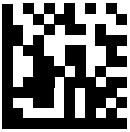
End

Set

Return middle

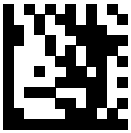
Truncate middle

Disable (Default)



End

Set RSS 14 (GS1 DataBar) Truncate/Return



Set

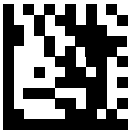
Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End



Set

Return middle

Truncate middle

Disable (Default)

End

Set RSS Expanded (GS1 DataBar Expanded) Truncate/Return

Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

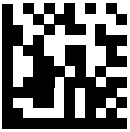
End

Set

Return middle

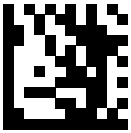
Truncate middle

Disable (Default)



End

Set RSS Limited (GS1 DataBar Limited) Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End

Set

Return middle

Truncate middle

Disable (Default)

End

Set Component CC-A Truncate/Return

Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

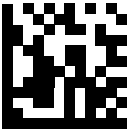
End

Set

Return middle

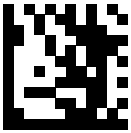
Truncate middle

Disable (Default)



End

Set Component CC-B Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End

Set

Return middle

Truncate middle

Disable (Default)

End

Set Component CC-C Truncate/Return

Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

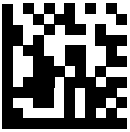
End

Set

Return middle

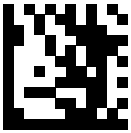
Truncate middle

Disable (Default)



End

Set PDF 417 Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End

Set

Return middle

Truncate middle

Disable (Default)

End

Set Micro PDF 417 Truncate/Return

Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End

Set

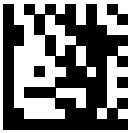
Return middle

Truncate middle

Disable (Default)

End

Set Data Martrix Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End

Set

Return middle

Truncate middle

Disable (Default)

End

Set QR Truncate/Return

Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

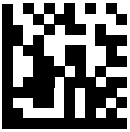
End

Set

Return middle

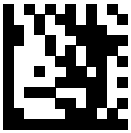
Truncate middle

Disable (Default)



End

Set Micro QR Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End

Set

Return middle

Truncate middle

Disable (Default)

End

Set Aztec Truncate/Return

Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End

Set

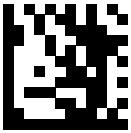
Return middle

Truncate middle

Disable (Default)

End

Set MaxiCode Truncate/Return



Set

Return leftmost

Truncate leftmost

Return rightmost

Truncate rightmost

End

Set

Return middle

Truncate middle

Disable (Default)

End

Code Settings

Set Lengths for Codes

- One Discrete Length

  Select this option to decode the symbol containing a selected length.
  Select the length using the numeric bar codes in ASCII Code Table.

  Example 1:
  To decode Interleaved 2 of 5 symbols with 8 characters:
  a. scan Set to set up
  b. scan Interleaved 2 of 5 One Discrete Length
  c. scan 8 in ASCII Code Table
  d. scan End to confirm the setup

  Example 2:
  To decode Interleaved 2 of 5 symbols with 12 characters:
  a. scan Set to set up
  b. scan Interleaved 2 of 5 One Discrete Length
  c. scan scan 1 followed by 2 in ASCII Code Table
  d. scan End to confirm the setup

- Two Discrete Lengths

  Select this option to decode the symbol containing either of two selected lengths.
  Select lengths using the numeric bar codes in ASCII Code Table.

  Example:
  To decode Code 128 symbols containing either 8 or 14 characters
  a. scan Set to set up
  b. scan Code 128 Two Discrete Length
  c. scan 0, 8, 1, and then 4 in ASCII Code Table
  d. scan End to confirm the setup

- Length Within Range

  Select this option to decode the symbol with a specific length range.
  Select lengths using numeric bar codes in ASCII Code Table.

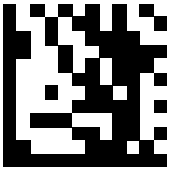
  Example:
  To decode Codabar symbols containing between 7 and 8 characters,
  a. scan Set to set up
  b. scan Codabar Length Within Range
  c. scan 0, 7, 0, and then 8 in ASCII Code Table
  d. scan End to confirm the setup

- Any Length

  Select this option to decode the symbol containing any number of characters within the digital scanner's capability.

  Example:
  a. scan Set to set up
  b. scan Matrix 2 of 5 Any Length
  c. scan End to confirm the setup

Set Lengths for Code 128



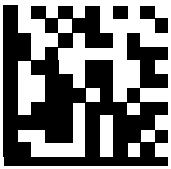
Set

One Discrete Length

Two Discrete Lengths

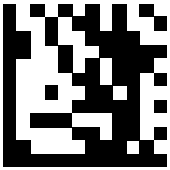
Length Within Range

Any Length (Default)



End

Set Lengths for Code 39



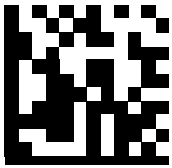
Set

One Discrete Length

Two Discrete Lengths

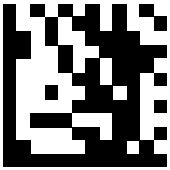
Length Within Range

Any Length (Default)



End

Set Lengths for Code 93



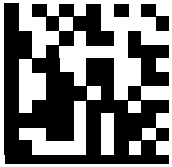
Set

One Discrete Length

Two Discrete Lengths

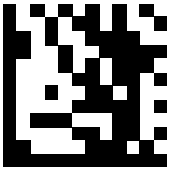
Length Within Range

Any Length (Default)



End

Set Lengths for Codabar



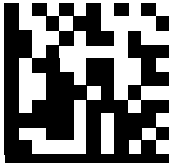
Set

One Discrete Length

Two Discrete Lengths

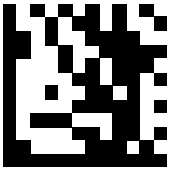
Length Within Range

Any Length (Default)



End

Set Lengths for Interleaved 2 of 5



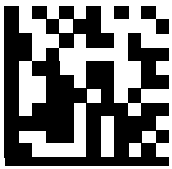
Set

One Discrete Length

Two Discrete Lengths

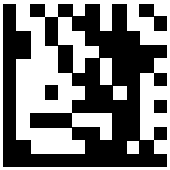
Length Within Range

Any Length (Default)



End

Set Lengths for Code 11



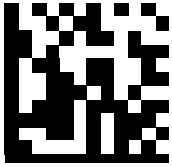
Set

One Discrete Length

Two Discrete Lengths

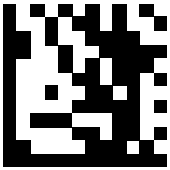
Length Within Range

Any Length (Default)

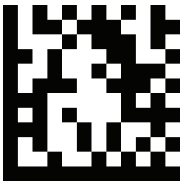


End

Set Lengths for MSI



Set

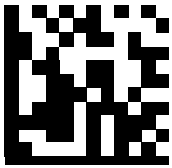


One Discrete Length

Two Discrete Lengths

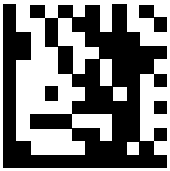
Length Within Range

Any Length (Default)



End

Set Lengths for Matrix 2 of 5



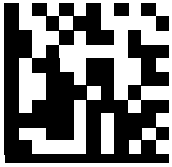
Set

One Discrete Length

Two Discrete Lengths

Length Within Range

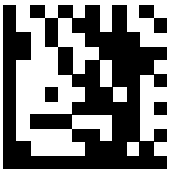
Any Length (Default)



End

Code Identifiers

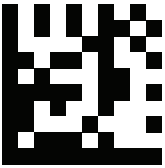
Scan the following barcodes to set symbology Identifiers.



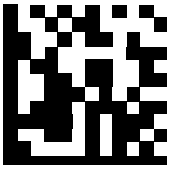
Set

Disable Code ID (Default)

Enable factory standard ID



Enable AIM ID



End

GS1-2D AIM ID

GS1 2D barcodes (GS1 DataMatrix, GS1 QR Code) output AIM ID Setting.

Set

Enable

Disable (Default)

End

GS1-128 AIM ID

GS1-128 output AIM ID Setting.

Set

Enable

Disable (Default)

End

Code Identifiers Table

Symbology	Factory Standard	AIM
UPC-A	A	]E
UPC-E	E	]E
EAN 8	FF	]E
EAN 13	F	]E
Code 128	K	]C
Code 39	M	]A
Code 93	L	]G
Code 32	M	]X
Code 11	O	]H
Codabar	N	]F
Plessey	P	]P
MSI / Plessey	a	]M
Interleaved 2 of 5	I	]I
IATA 2 of 5	Z	]R
Matrix 2 of 5	G	]X
Straight 2 of 5	S	]S
Pharmacode	H	]X
RSS 14 (GS1 DATABAR 14)	RS	]e
RSS Expanded (GS1 DataBar Expanded)	RX	]e
RSS Limited (GS1 DataBar Limited)	RL	]e
Component CC-A	m	]e
Component CC-B	n	]e
Component CC-C	i	]e
PDF417	r	]L
Micro PDF417	s	]L
Data Matrix	t	]d
QR	u	]Q
Micro QR	j	]Q
Aztec	e	]z
MaxiCode	v	]U
RSS 14	RS	]e
RSS Expanded	RX	]e

Keyboard Caps Lock State

Scan a barcode below to turn Caps on or off.

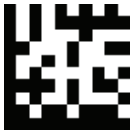
Set

Caps Lock Off (Default)

Caps Lock On

End

Set



Alphabet always upper case

Alphabet always Lower case

Override

End

FNC1 GS Substitution Values

Set

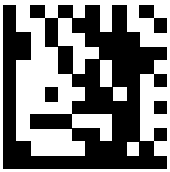
“Ctrl+]” (Default)

“Alt+29(KP)”
(nmvs)

End

Function Key Mapping

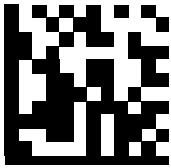
Scan the following barcodes to enable or disable Function Key Mapping.



Set

Disable Function Key Mapping (Default)

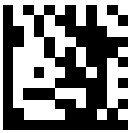
Enable Function Key Mapping



End

Function Key Extended

Scan the following barcodes to enable or disable Function Key Extended. Enable Function Key Extended change the Function Key from [Left-CTRL] to [Right-CTRL].



Set

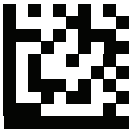
Disable Function Key Extended (Default)

Enable Function Key Extended

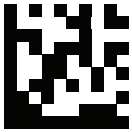
End

ASCII Code

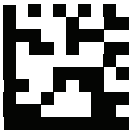
For parameters requiring specific numeric values, scan the appropriately numbered barcode(s).



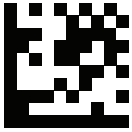
Space



!



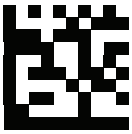
"



#

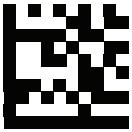
$

%



&

'



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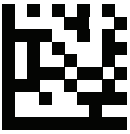
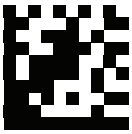
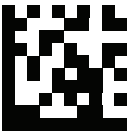


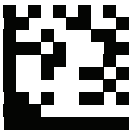
)



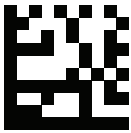
*



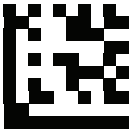
+



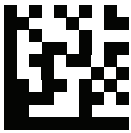
,



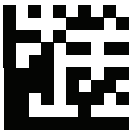
-



.



/



:

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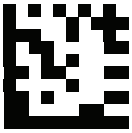

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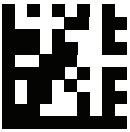

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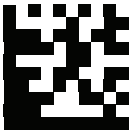
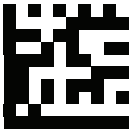


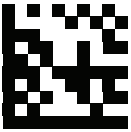
@

Enter



0

1



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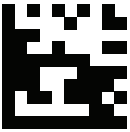

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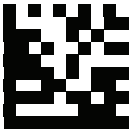

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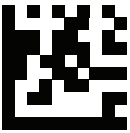

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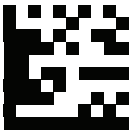

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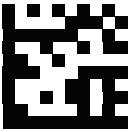

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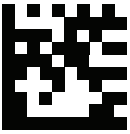

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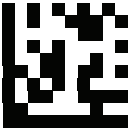

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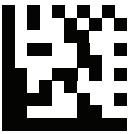

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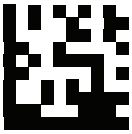

C
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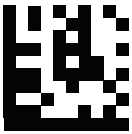

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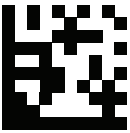

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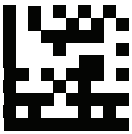

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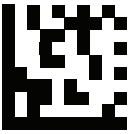

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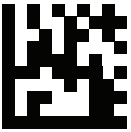

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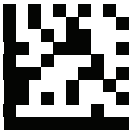

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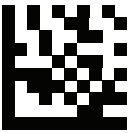

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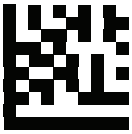

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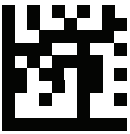

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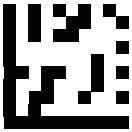

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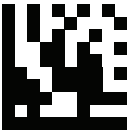

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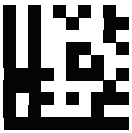

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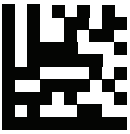

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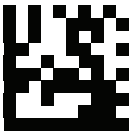

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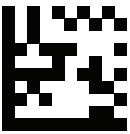

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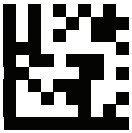

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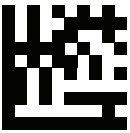

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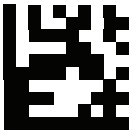

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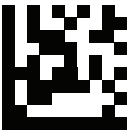

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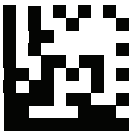

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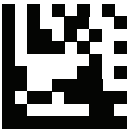

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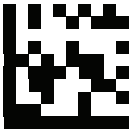

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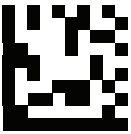

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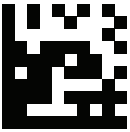

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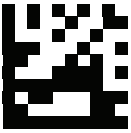

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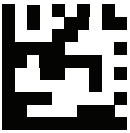

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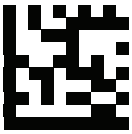

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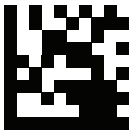

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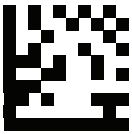

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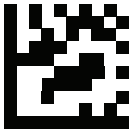

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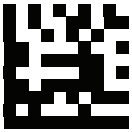

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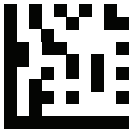

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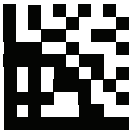

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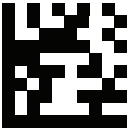

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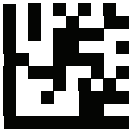

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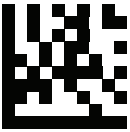

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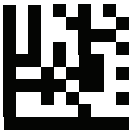

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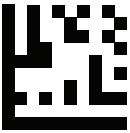

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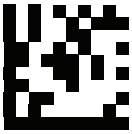

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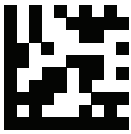

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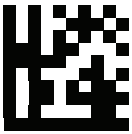

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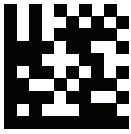

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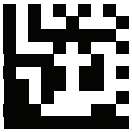

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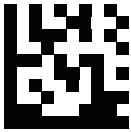
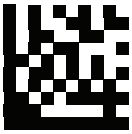
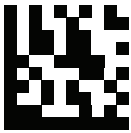


x



y



z

Insert

Delete

Home

End

Up arrow

Down arrow

Left arrow

Right arrow

Tab

Backspace

Shift

ESC

Page up

Page down

Ctrl

Alt

SOH

ETX

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

F11

F12

USB Virtual COM Driver Installing

If you use virtual COM port emulation, follow the steps below to start using the scanner.

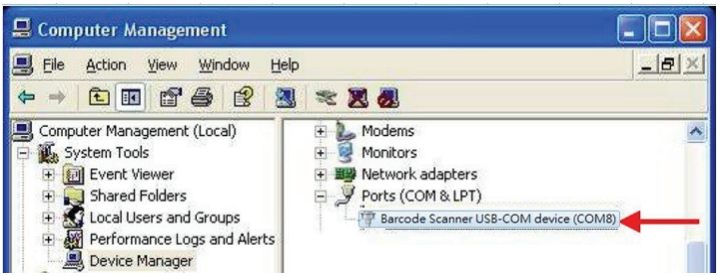
1. Execute the driver (ZEBEX VCOM Driver Installation.exe).
2. Connect the scanner USB cable to the host computer.
3. Set the interface to USB Virtual COM Port.

Set

USB Virtual COM Port
*Driver required

End

4. On the computer, check Device Manager to see if the computer successfully detects the scanner as “Barcode Scanner USB-COM device.” (The COM port number would vary depending on different hardware environment).

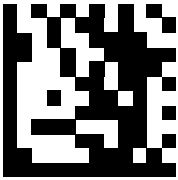


JavaPOS Setting

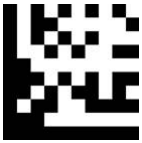
This section provides the programming barcodes for setting JavaPOS and the flow of installing JavaPOS driver.

JavaPOS

Scan the following barcodes to enable or disable JavaPOS.

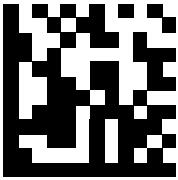


Set



JPOS Enable

JPOS Disable (Default)



End

JavaPOS Version

Our JavaPOS driver now is compatible with JavaPOS1.7.

Install the Java2 Runtime Environment

The JRE is Java's virtual machine that allows for applications to run on the host computer. To be able to run the JavaPOS application, you need a 1.7 version JRE. Ignore the following steps if you already have a JavaPOS1.7 or a later version in your host computer.

- Go to http://java.sun.com, and select this version of Java Runtime Environment.
- Install the program following the instructions.

Install the Service Object and JavaPOS files

In the "\Driver" folder, there are two files: ZbtJavapos.jar and jpos.xml. Please include ZbtJavapos.jar at your CLASSPATH and also copy the related "JPosEntry" option from the jpos.xml to your application's jpos.xml.

How to use RS232 scanner with JavaPOS Driver

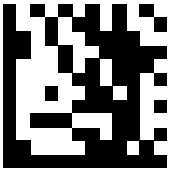
Install the Java RXTXcomm API
In the \RXTXcomm folder, there are four files: rxtxSerial.dll , rxtxParallel.dll, and RXTXcomm.jar. Please do the following steps to install the library.

1. Copy rxtxSerial.dll and rxtxParallel.dll to C:\Windows\system32.
2. Copy RXTXcomm.jar to your <JRE Install Folder>\lib directory.

Use barcodes to configure the scanner

JavaPOS configuration barcodes:

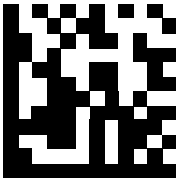
Set



RS-232

JPOS Enable

End



Running the JavaPOS Test utility

Please run the test application POStest.sh to evaluate your installation.

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How to use JavaPOS driver at your application

1. Add “ZbtJavaPos**.jar**” from the “\Driver” folder to the CLASSPATH and copy the related “JPosEntry” option from the “**jpos.xml**”.
2. Modify the jpos.xml based on your COM Port
3. Example of jpos.xml file content

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE JposEntries PUBLIC "-//JavaPOS//DTD//EN"
                                        "jpos/res/jcl.dtd">
<JposEntries>
<!--Saved by JavaPOS jpos.config/loader (JCL) version 2.2.0 on 2010/3/11    10:16-->

      <JposEntry logicalName="Z3172P">
            <creation factoryClass="com.zbt.jpos.ZbtJposServiceInstanceFactory"
serviceClass="com.zbt.jpos.ScannerService"/>
            <vendor name="" url=""/>
            <jpos category="Scanner" version="1.7"/>
            <product description="Scanners" name="Scanner" url=""/>

            <!--Other non JavaPOS required property (mostly vendor properties and bus specific
properties i.e. RS232 )-->
            <prop name="deviceType" type="String" value="2D"/>
            <prop name="deviceBus" type="String" value="RS232"/>
            <prop name="baudRate" type="String" value="115200"/>
            <prop name="parity" type="String" value="None"/>
            <prop name="portName" type="String" value=" COM1"/>
            <prop name="flowControl" type="String" value="None"/>
            <prop name="stopBits" type="String" value="1"/>
            <prop name="dataBits" type="String" value="8"/>
</JposEntry>

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE JposEntries PUBLIC "-//JavaPOS//DTD//EN"
                                        "jpos/res/jcl.dtd">
<JposEntries>


</JposEntries>
```

Note: The default baud rate : 2D scanner =115200

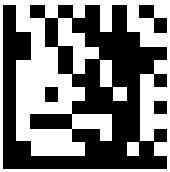
How to use USB scanner with JavaPOS Driver

Configuring the Scanner via barcodes:

- Scan the barcodes in the sequence below to configure the scanner to usb-serial mode.

JavaPOS configuration bar codes:

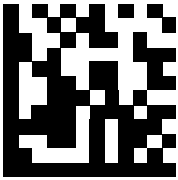
Set



USB Virtual COM Port

JPOS Enable

End



Install the Java RXTXcomm API

In the \RXTXcomm folder, there are four files: rxtxSerial.dll , rxtxParallel.dll, and RXTXcomm.jar. Please do the following steps to install the library.

1. Copy rxtxSerial.dll and rxtxParallel.dll to C:\Windows\system32
2. Copy RXTXcomm.jar to your <JRE Install Folder>\lib directory.

Running the JavaPOS Test utility

Please run the test application to evaluate your installation.

How to Use JavaPOS Driver at your application

1. In the "\Driver" folder, copy "**ZbtJavaPos.jar**" and "**jpos.xml**" to your work folder.
2. Modify the jpos.xml .
3. Example of jpos.xml file content

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE JposEntries PUBLIC "-//JavaPOS//DTD//EN"
                                        "jpos/res/jcl.dtd">
<JposEntries>
<!--Saved by JavaPOS jpos.config/loader (JCL) version 2.2.0 on 2010/3/11    10:16-->

    <JposEntry logicalName="Z3172P">
        <creation factoryClass="com.zbt.jpos.ZbtJposServiceInstanceFactory"
serviceClass="com.zbt.jpos.ScannerService"/>
        <vendor name="" url=""/>
        <jpos category="Scanner" version="1.7"/>
        <product description="Scanners" name="Scanner" url=""/>

        <!--Other non JavaPOS required property (mostly vendor properties and bus specific properties i.e.
RS232 )-->
            <prop name="deviceType" type="String" value="2D"/>
        <prop name="deviceBus" type="String" value="RS232"/>
        <prop name="baudRate" type="String" value="115200"/>
        <prop name="parity" type="String" value="None"/>
        <prop name="portName" type="String" value=" COM56"/>
        <prop name="flowControl" type="String" value="None"/>
        <prop name="stopBits" type="String" value="1"/>
        <prop name="dataBits" type="String" value="8"/>
</JposEntry>

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE JposEntries PUBLIC "-//JavaPOS//DTD//EN"
                                        "jpos/res/jcl.dtd">
<JposEntries>

</JposEntries>
```